Volume 7/6 Supplement 1 November 2016 ISSN 1879-4068

ELSEVIER

JOURNAL OF GERIATRIC ONCOLOGY

CANCER AND AGING RESEARCH

SIOG
INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY

The official journal of the International Society of Geriatric Oncology

Abstract book of the 16th Annual Conference of the International Society of Geriatric Oncology (SIOG)

Milan, Italy – November 17–19, 2016

JOURNAL OF GERIATRIC ONCOLOGY

Editorial Office

John Beckemeier
11687 Adie Road
St. Louis, MO 63043
tel 314.255.1443
e-mail: geriatriconcology@elsevier.com

JOURNAL OF GERIATRIC ONCOLOGY

SIOG 2016 Annual Conference – Abstracts

Volume 7/6, Supplement 1, November 2016

Editor-in-Chief: Arti Hurria

ELSEVIER

Amsterdam • Boston • London • New York • Oxford • Paris •
Philadelphia • San Diego • St Louis

Aims and Scope

The *Journal of Geriatric Oncology* is an international, multidisciplinary journal which is focused on advancing research in the treatment and survivorship issues of older adults with cancer, as well as literature relevant to education and policy development in geriatric oncology.

The *Journal of Geriatric Oncology* publishes original research articles, review articles, clinical trials, treatment guidelines, short communications and letters to the editor which comment on previously published work.

The *Journal of Geriatric Oncology* is the official journal of the International Society of Geriatric Oncology (SIOG).

Funding Body Agreements and Policies
Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit http://www.elsevier.com/fundingbodies.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop http://webshop.elsevier.com/languageediting/ or visit our customer support site http://support.elsevier.com for more information.

Illustration services
Elsevier's WebShop (http://webshop.elsevier.com/illustrationservices) offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

For a full and complete Guide for Authors , please go to: http://www.elsevier.com/locate/jgo

Publication information: *Journal of Geriatric Oncology* (ISSN 1879-4068) is published quarterly by Elsevier, 360 Park Avenue South, New York, NY 10010-1017, USA. Periodicals Postage Paid at New York, NY and at additional mailing offices (not valid for journal supplement). **USA POSTMASTER:** Send change of address to *Journal of Geriatric Oncology*, Elsevier Customer Service Department, 3251 Riverport Lane, Maryland Heights MO 63043, USA.

Orders, claims, and journal inquiries: Please contact the Regional Sales Office nearest you. **St. Louis:** Elsevier Customer Service Department, 3251 Riverport Lane, Maryland Heights, MO 63043, USA; phone: (800) 6542452 [toll free within the USA]; (+1) (314) 4478871 [outside the USA]; fax: (+1) (314) 4478029; e-mail: JournalsCustomerService-usa@elsevier.com. **Oxford:** Elsevier Customer Service Department, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) (1865) 843434; fax: (+44) (1865) 843970; e-mail: JournalsCustomerServiceEMEA@elsevier.com **Tokyo:** Elsevier Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg., 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: JournalsCustomerServiceJapan@elsevier.com. **Singapore:** Elsevier Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 63490222; fax: (+65) 67331510; e-mail: JournalsCustomerServiceAPAC@elsevier.com.

Author inquiries: You can track your submitted article at http://www.elsevier.com/track-submission. You can track your accepted article at http://www.elsevier.com/trackarticle. You are also welcome to contact Customer Support via http://support.elsevier.com.

Advertising information: Advertising orders and inquiries can be sent to: USA, Canada and South America: Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710, USA; phone: (+1) (212) 633 3974; Europe and ROW: Sarah Ellis, Elsevier Ltd., 32 Jamestown Road, London, NW1 7BY, UK; phone: (+44) (2074) 244538; fax (+44) (2074) 244433.

Printed in the United States of America

♾ The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)

SIOG 2016 - INVITED SPEAKER BIOGRAPHIES

Matti Aapro
Multidisciplinary Institute of Oncology, Clinique de Genolier, Switzerland
Dr. Matti Aapro, Dean of the Multidisciplinary Oncology Institute, Genolier, Switzerland, previously chaired the Medical and Radiation Department, European Institute of Oncology, Milano. He is the Executive Director of the International Society for Geriatric Oncology (SIOG). He was a Board member of EORTC. He is Past-president of MASCC, as well as on its Board of Directors for 2012-2014. He chaired the scientific and organizing committees of UICC's World Cancer Congresses 2008 in Geneva, and 2010 in Shenzhen (China). He coordinates the SPCC programme of the European School of Oncology. He is Editor-in-Chief of Critical Reviews in Oncology/Hematology, Associate Editor for Annals of Oncology and the geriatric section of the Oncologist and founding member of the Journal of Geriatric Oncology (JGO). His major interests are new drug development, breast cancer, supportive care, and cancer in the elderly. Dr. Aapro has received the 2012 ASCO B.J. Kennedy prize.

Luca Arcaini
Department of Molecular Medicine, University of Pavia, Department of Hematology Oncology, Pavia, Italy
Luca Arcaini is Associate Professor of Hematology at University of Pavia School of Medicine and is consultant hematologist at the Department of Hematology and Oncology, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy. His principal areas of investigation are non-Hodgkin lymphomas, in particular indolent lymphomas and HCV-associated lymphomas

Speaker Abstract(s): S01

Patrizio Armeni
Cergas Bocconi, Public Management (PAM), Milan, Italy
Patrizio Armeni is research fellow at CERGAS, Bocconi University and last-year PhD candidate in Business Administration and Management (Bocconi University). Patrizio's main research interests are organization (teams), social network analysis, policy impact analysis, pharmaceutical policy and management, technology and innovation management, and economic evaluation.

Lodovico Balducci
Moffitt Cancer Center, Tampa, FL, Oncologic Sciences, Tampa, FL, USA
Lodovico Balducci is Senior Member and Medical Director of Affiliates & Referring Physician Relations at H. Lee Moffitt Cancer Center & Research Institute, and Professor of Oncologic Sciences, University of South Florida College of Medicine, in Tampa, Florida. Dr. Balducci received his medical degree from Catholic University, Rome, Italy, and his residency training and fellowship at the University of Mississippi Medical Center, in Jackson, Mississippi.
Dr. Balducci has edited five textbooks on geriatric oncology and two books on geriatric hematology. Dr. Balducci has published over 250 articles in various medical journals on the subject of geriatric oncology, and five monographs on geriatric oncology. Dr. Balducci's clinical research activities include cancer and aging, management of the frail elderly, assessment of quality of life in the older cancer patient, prognostic assessment of the older cancer patient, and interactions of comorbidity and function in the older cancer patient. Dr. Balducci was a member of ASCO's Grant Selection Committee, and ASCO's Cancer & Aging Task Force and Oncology Workforce Task Force. Dr Balducci is Editor-in-Chief of Cancer Control Journal at Moffitt Cancer Center. In 2003, Dr. Balducci was selected to present the first Paul Calabresi Memorial Lecture by the International Society of Geriatric Oncology (SIOG) in Rome, Italy. In 2003, he also received the ACCC award for Outstanding Achievement in Clinical Research, and was the 2003 Physician of the Year recipient at the Moffitt Cancer Center. In 2007, he received the Medi Tavossoli Lecture Award for Innovative Research in Hematology in the Elderly and the ASCO's B.J. Kennedy Award and Lecture for Scientific Excellence. In 2009, he received the 17th Claude Jacquillat Award in Paris and was also the recipient of the 2009 Nimmo Visiting Professorship in Adelaide, Australia. In November 2014, he received the Fifth Annual Enzo Piccinini Prize in Italy.
Dr. Balducci is board certified in Medical Oncology/Hematology. He is a member of the American Geriatrics Society, the American Society of Clinical Oncology, American Association for Cancer Research, American Society of Hematology, American Society of Breast Disease, Southern Society of Clinical Investigations, Gerontological Society of America, International Society of Geriatric Oncology, and a fellow of the American College of Physicians. Dr. Balducci has lectured throughout the USA, Europe, Asia, Australia and South America.

Gouri Shankar Bhattacharyya
In Charge Department of Medical Oncology, *Medical Oncology*, *Kolkata, India*
He is also Consultant and Honorary Associate Professor, Chittaranjan National Cancer Institute, Kolkata, India (Regional Cancer Center).
He has completed his education and training in Medical Oncology from England. His line of special interest has been – Biological Response Modifiers and Tumor Microenvironment. His principal interest is in Solid Tumors – G.I., Breast and Lung, repurposing of drugs. He is a member of the Task Force for Management of Cancer at the Indian Council for Medical Research (Government of India) as well as a member of the Planning Committee of the National Cancer Control Program. He is the founder member of Indian Cooperative Oncology Network (ICON), Molecular Oncology Society, and Indian Association of Cancer Research. He is also the founder Member of ICON Biorepository as well as member for Drafting of SOPs. He is Immediate Past President of Indian Society of Medical & Pediatric Oncology.

He is an Advisory Council Member of the Breast International Group (BIG) as well as member of BIG-North American Breast Cancer Group (BIG-NABCG) and Drafting Committee Member of Consent Guidelines for Biorepository. He is the member of the American School of Clinical Oncology (ASCO), European Society for Medical Oncology (ESMO) where he is the member of ESMO Global Policy Committee, Global Cancer Task Force Member, ESMO Coordinator for ESMO Global Opioid Policy Initiative member and Member ESMO-EAPC Joint Executive Committee.
He is the Chairman of the International Society of Geriatric Oncology SIOG Publication Committee. He is also a member of the SIOG Governance Council and Member of SIOG Task Force on Bone Protection. He is Editorial Board Member of Journal of Thoracic Oncology (JTO), Journal of Geriatric Oncology, Critical Reviews in Oncology/ Hematology (CROH), Journal of Global Oncology–ASCO, Journal of Annals of Translational Medicine. He has special interest in Palliative Care and Geriatric Oncology. He has been a Reviewer for 2014 HOPA Research Grant. He is Reviewer for UICC Seeding Progress and Resources for the Cancer Community (SPARC) Grants Project. He has been awarded Certificate of recognition for Promotion and Development of Palliative Care in the World in 2013, by International Association for Hospice & Palliative Care (IAHPC). He is the Executive Council Member of International Cardi-Oncological Society (ICOS). He is the member of the Steering Committee of World Health Organization (WHO) for Oncology. He has also received the Accreditation – 2015 ESMO Designated Centre of Integrated Oncology and Palliative Care.
He is:

- Member Indian Council of Medical Research (ICMR) Task Force for Management of cancer (Govt. of India)
- Chairman Task Force (ICMR) for CLL and Low Grade cancer (Govt. of India)
- National Cancer Control Program (Govt. of India)
- Advisory Board Member to Drug Controller General of India (DCGI), (Govt. of India)
- Faculty Member to Clinical Development Services Agency (CDSA) and Department of Biotechnology (DBT) (Govt. of India)
- NCI-NIH, USA – Task Force Member for Gastro-intestinal cancer and Hepato-biliary cancer

He has published more than 200 papers and has been an Investigator for more than 50 Phase II and III Clinical Trials done including Translational Research in India.
He is holder of Orphan Drug status with FDA for Hepato-cellular carcinoma, Pancreatic Cancer and Glioma based on Investigator initiated trials.
He has been conferred with:

- Dr. Farooq Abdullah Oration Award, Jaipur, INDIA – 2014
- Fellow of Academy of European Society for the Translational Medicine (EUSTM).
- Fellow of the American Society for Pharmacology and Experimental Therapeutics (ASPET).
- Associate of Royal College of Obstetricians and Gynecologists (RCOG Associate).
- Recognition Certification for promotion of development of palliative care in the world – International Association for Hospice & Palliative Care (IAHPC).

Speaker Abstract(s): S02

Laura Biganzoli
Hospital of Prato, Department of Medical Oncology, Prato, Italy
Dr. Laura Biganzoli is the Director of the Breast Centre at the Hospital of Prato, Istituto Toscano Tumori, Prato, Italy
She earned her medical degree at the University of Pavia, Italy, and completed fellowships at the National Cancer Institute of Milan and at the Jules Bordet Institute in Brussels. For five years she worked as a senior staff member at the Medical Oncology Clinic of the Jules Bordet Institute. From 2009 to 2011 Dr Biganzoli was Visiting Senior Lecturer in the Division of Cancer Studies at the School of Medicine, King's College - London
She is board certified in medical oncology and internal medicine.
Dr. Biganzoli was the Director of the European Organization for Research and Treatment of Cancer (EORTC) Investigational Drug Branch for Breast Cancer, dedicated to the conduction of early phase II studies in advanced breast cancer, for five years and sat on the Board of Directors of the Breast International Group (BIG) from 1999 to 2003.
Dr. Biganzoli is an active member in different national and international societies, including the International Breast Cancer Study Group (IBCSG), the American Society of Clinical Oncology (ASCO), the European Society of Medical Oncology (ESMO), the International Society of Geriatric Oncology (SIOG) and the European Society of Breast Cancer Specialists (EUSOMA)
Dr. Biganzoli has been a member of the EUSOMA Executive Committee since 2011 and ESMO Faculty Member for the Elderly since 2012. She is part of the SIOG Science & Educational Committee. Dr Biganzoli is Eusoma president-elect.
Her current research focuses on breast cancer and geriatric oncology and she has extensively published in these fields.

Paolo Bossi
Head and Neck Medical Oncology, *Medical Oncology*, *Milan*, *Italy*
Paolo Bossi, MD, Medical Oncologist of Head and Neck Cancer Department at the Istituto Nazionale Tumori in Milan, Italy, is involved in all institutional research activities on head and neck cancer, from translational research (gene expression, next generation sequencing) to assessment of quality of life and value based medicine.
He has a strong commitment to supportive care, being principal investigator and co-investigator of several Italian and International trial on Head and Neck cancer, on quality of life and supportive care.

He is a Member of EORTC Head and Neck group, ESMO, AIOM, AIOCC and Secretary of NICSO (Network Italiano di Cure di Supporto in Oncologia).
He received several grants, both as principal Investigator (AIRC, Health Ministry) and as co-PI (Transcan, Swiss Bridge Award).
He is an author of 90 publications indexed on PubMed.

Speaker Abstract(s): S03

Etienne Brain
Department of Clinical Research & Medical Oncology, Institut Curie (Hôpital René Huguenin), St Cloud, France
Etienne GC Brain, MD PhD, has been working since 1998 as a medical oncologist at the Hôpital René Huguenin (Saint-Cloud, France), which is now part of the academic centre Institut Curie. He obtained both his MD and PhD from University Paris V René Descartes, the latter after leading works in preclinical and clinical pharmacology on alkylating agents and liver metabolism in Boston (Dana Farber Cancer Institute and Boston University) and Saint Cloud (Centre René Huguenin). He was the Deputy Director for Research at Centre René Huguenin from 2008-2009, until the merge with Institut Curie happened in 2010. This latter has made the "multisites institution" Institut Curie one of the largest hospital dedicated to cancer management in Europe, with special focus on breast cancer (~3,000 new cases yearly), employing 2,000 care-givers and 1,000 researchers. Etienne Brain is currently in charge of the settlement of the new Department of Clinical Research of Institut Curie in Saint-Cloud. He is the chairman of the committee for the evaluation of clinical research of the Institut Curie.

Bruno Castagneto
GIOGer (Gruppo Italiano di Oncologia Geriatrica), Medical Department, Novi Ligure, Italia
Education and training:
- Medical Doctor Degree at Genoa University, Italy.
- Specialization in Medical Oncology, Genoa University.

Professional positions and activities:
- Chief of the Department of Oncology, San Giacomo Hospital, ASL AL (Azienda Sanitaria Locale Alessandria).
- Chairman GIOGer (Gruppo Italiano di Oncologia Geriatrica).
- GMC (UK General Medical Council) member with full specialist registration (Medical Oncology).
- Founding partner and board member of the FICOG (Federation of the Italian Cooperative Oncology Groups).
- Member of the EORTC (European Organisation for Research and Treatment of Cancer) ETF (Elderly Task Force).
- Member of ASCO (American Society of Clinical Oncology).
- Member of AIOM (Associazione Italiana di Oncologia Medica).
- Co-author of the AIOM geriatric oncology guidelines.
- Responsible and referring of ASL AL multidisciplinary oncology groups.
- Scientific advisor for Novi Ligure Delegation of Italian League in Treatment and Prevention of Cancer (Lega Italiana per la Lotta contro i Tumori).

Speaker Abstract(s): S04

Kwok-Leung Cheung
Clinical Associate Professor, School of Medicine, University of Nottingham, Derby, UK
Mr Cheung qualified and trained at Queen Mary Hospital, Hong Kong. Upon completion of general surgery training, he conducted clinical and laboratory research at the University of Nottingham, UK, with a Doctor of Medicine (in the area of blood tumour markers) awarded in 2001. He was then appointed as Consultant Breast Surgeon at Nottingham University Hospitals where he served as Head of Service, Breast Services (2007–2010) and Lead Clinician for Breast Cancer (2007–2011). Mr Cheung joined the University of Nottingham as Clinical Associate Professor in 2004. He is also currently Consultant Breast Surgeon at Royal Derby Hospital.
He has obtained surgical fellowship status from Hong Kong, Edinburgh and America. Mr Cheung was selected as one of the 12 International Guest Scholars 2007 of the American College of Surgeons, as a recognition of his strong interests and commitment in teaching and research.
Mr Cheung is a member of the Faculty of Examiners for Intercollegiate MRCS and the Panel of Examiners of the Intercollegiate Specialty Board in General Surgery. Mr Cheung is also part of the National Cancer Peer Review team and an External Professional Advisor to the Parliamentary Health Service Ombudsman. He is a member of the American Society of Clinical Oncology, European Society of Breast Cancer Specialists, British Association of Cancer Surgery, Association of Breast Surgery, British Breast Group and International Society of Geriatric Oncology (SIOG) (and its UK National Representative and member of its Surgical Task Force and Science and Educational Committee). In 2015, he received the National Representative of the Year award from SIOG recognising his commitments to geriatric oncology and SIOG.
His research interests mainly focus on breast cancer, including geriatric oncology, surgery and non-operative therapies, endocrine and targeted therapies, and clinical trials. Mr Cheung has published over 100 journal articles, in addition to a number of book chapters and meeting abstracts.

Raul Cordoba
Fundacion Jimenez Diaz University Hospital, Lymphoma Unit, Department of Hematology, Madrid, Spain
Dr Raul Cordoba is Head of the Lymphoma Unit at Fundacion Jimenez Diaz University Hospital, Madrid, Spain. He obtained his Bachelor of Medicine degree from the Autonomous University of Madrid and went on to specialise in Haematology at the University Hospital La Princesa, Madrid. He first started his research in the field of lymphoid neoplasms, achieving his Master's degree in Molecular Oncology from the Spanish National Cancer Research Centre, Madrid, and his PhD from the Department of Medicine at the Autonomous University of Madrid, where he is an Assistant Professor at the Department of Medicine.
He is currently the Principal Investigator for the Haematology Programme of START Madrid-FJD, a unit dedicated exclusively to Phase I trials in oncology. He also is the President of the Lymphoma Tumor Board and member of the Institutional Review Board / Ethic Review Committee (IRB/ERC) in his institution.
Dr Cordoba is member of the Spanish Society of Hematology (SEHH), where he serves as the Vicepresident of the Spanish Group of Hematology Geriatrics. He is also member of the European Society of Hematology, where he participates in the European Lymphoma Group and the "Hematology and Aging" Working Group. Since 2014, he is the Spanish National Representative at the International Society of Geriatric Oncology (SIOG).

Romain Corre
CHU Pontchaillou Pneumology, Rennes, France
Romain Corre was resident in pneumology between 1999 and 2003 and acquired his medical license in 2003 as specialist in pneumology at the Medicine University of Caen, France. He completed in 2003/2004 a degree of specialist in thoracic oncology in cancer research center of Caen, France. In 2004–2006, he worked as hospital Assistant–Senior University Registrar in the Hospital of Rennes. Since 2006, he has worked as hospital practitioner, Department of Pneumology, in the General Hospital of Rennes, France. His main research interest is thoracic oncology and more specifically, oncogeriatry in thoracic oncology.

Speaker Abstract(s): S05

Andrea Costanzi
Desio Hospital – ASST Monza, General Sugery, Desio (MB), Italy

1986	High School Diploma, USA
1993	Degree in Medicine, University of Milano
1993–1997	Resident in General and Emergency Surgery, University of Milano
1998	Diploma in General and Emergency Surgery, University of Milano
1998–2001	NGO Volunteer and Cooperator as a Medical Doctor in Uganda
2001–2007	Physician in General and Emergency Surgery, Niguarda Hospital, Milano
2004	Postgraduate Diploma in Health System Management, University of London
2007–2008	Fellowship in Upper GI minimally Invasive Surgery, Royal Surrey County Hospital, UK
2009-present	Consultant General Surgeon, Desio Hospital, ASST Monza

Speaker Abstract(s): S56

Nienke de Glas
Department of internal medicine, Internal Medicine/Medical Oncology, Hilversum/Amsterdam, Netherlands
Nienke de Glas (1987) is a Medical Doctor and clinical epidemiologist. In 2015, she completed her PhD Cum Laude (with honors) at Leiden University Medical Center. Her research focuses on improving breast cancer care in older women. She has presented her work at several Dutch and international conferences such as the annual meetings of the International Society for Geriatric Oncology (SIOG), ECCO, and the EBCC. Currently, she is working as a resident in internal medicine at the Amsterdam Medical Center. In 2013, Nienke co-initiated the Young SIOG working group, of which she is now chair.

Jean-Pierre Droz
Centre Léon-Bérard, *Environment and Cancer Research Unit*, *Lyon*, *France*
Jean-Pierre Droz obtained his M.D. degree in 1975 at the Paris-VI University School of Medicine, and his Ph.D. at the Lyon-I Claude-Bernard University. He was formerly Chairman of the Department of Medicine at the Institut Gustave-Roussy in Villejuif and thereafter Chairman of the Department of Medical Oncology, Director of Teaching Program at the Centre Léon-Bérard in Lyon and Professor of Medical Oncology at the Claude-Bernard-Lyon1 University. Since September 2008 he is Emeritus Professor at the Claude-Bernard-Lyon1 University, Lyon-Est School of Medicine, and Scientific Consultant at the Centre Léon-Bérard. Since January 2010 he is attending physician of medical oncology at the University Hospital in Cayenne (French Guiana) and is teaching at the French Guiana and West Indies University Medical School. His major subjects of clinical research are: Genito-Urinary tumours, mainly Germ-Cell Tumours and Prostate Cancer, Geriatric Oncology and Endocrine Tumours medical treatment. He was the chairman of the Genito-Urinary Tumour Group (GETUG) of the French Comprehensive Cancer Centre Network (1994–1999). He is past-president of the SIOG (International Society of Geriatric Oncology). He served as member of the Geriatric Oncology Board and president of Rare Cancer Program Task Force of the French National Cancer Institute. He has managed

and/or participated to more than 80 clinical trials. He has published more than 300 manuscripts in international peer-reviewed journals. He has participated to more than thirty chapters in books and has edited a textbook on uncommon cancers and a textbook on GU cancers in elderly patients and a textbook on tropical hematology and Oncology. Since 2009 he is involved in the organization of oncology in the French Guiana and manages patients with cancer in Cayenne University Hospital and Hospital at Saint-Laurent du Maroni. His interest concerns prostate cancer treatment, geriatric Oncology and now the management of cancers and malignant haematological diseases in the tropical area.

Speaker Abstract(s): S06, S07

Hassan Errihani
Mohamed V University, Medical oncology, Rabat, Morocco
Hassan Errihani is professor of Medical Oncology at the Faculty of Medicine and Pharmacy of Rabat and the head of Department of Medical Oncology at the National Institute of Oncology. He is the director of the teaching and research unit of oncology and of medical oncology diploma since its creation in Morocco in 2004. Pr Hassan Errihani is a founding member of multiple learned societies of oncology in Morocco and currently the president of AMFROM (Moroccan Association for training and research in medical oncology). He is also the coordinator of several national studies in collaboration with the Foundation Lalla Salma.

Speaker Abstract(s): S08

Marilène Filbet
CHU Lyon, Medecine palliative, Lyon, France
Marilène Filbet, MD, associate professor, is the Director of the Palliative Care Unit at the University Hospital Lyon Sud, Lyon, France. She completed her training in internal medicine and lung disease at the Hopitaux de Lyon, and then was trained in pain management.
She opened the first Palliative Care Unit of this area in 1988. This unit is now located in the University Hospital of Lyon Sud (HCL, Lyon, France), with two supports teams and a research and education team, and it became a Centre of Palliative Care.
Pr Filbet teaches palliative medicine at undergraduate level at several medical schools in France. She established a postgraduate Diploma of Palliative Care at the University of Lyon. She is the national coordinator for the Medicine Palliative specialization training. She has been invited to hold numerous guest lectures at other Universities in France and abroad.
She was involved for her expertise in several French and international, groups and task forces, as the WHO group for recommendation for palliative care for older people and the group for DOLOPLUS scale validation. She was a member of the Board of Directors of the French Society of Palliative Care for nine years. She was elected on the EAPC board in 1999 and chairing the EAPC Task force for training for physician and from 2005 to 2007. Pr Filbet was the President of the Board of Directors of the European Association of Palliative Care

Speaker Abstract(s): S09

Lucia Fratino
Oncology Unit, *Aviano (PN)*, *Italy*
Education:
Degree
- 1990: Medical Doctor Degree at the Medical School of Padua University, Italy

Board certified specialities
- 1994: Board Certification in Geriatric Medicine at the Medical School of Padua University, Italy
- 2000: Board Certification in Medical Oncology at the Medical School of Padua University, Italy

Post degree training:
- 1997: European School of Oncology – Milan

Professional and Teaching Experience:
- 2006–present: Professor of Geriatric medicine, Udine University School of Medicine Nursing Degree, Udine
- 2007–present: Medical Director, Chief in Oncogeriatric Program, Centro di Riferimento Oncologico, Aviano (PN)

Research Field:
- Cancer in the elderly

Committees:
- GIOGer, Gruppo Italiano di Oncologia Geriatrica. Chairman 2009 to present.
- SIGOs, Società Italiana dei Geriatri Ospedalieri.
- AIOM, Associazione Italiana Oncologia Medica.
- ASCO, American Association of Clinical Oncology.
- SIGG, Società Italiana di Geriatria e Gerontologia.
- AIOTE, Associazione Italiana per l'Oncologia della Terza Età.

Speaker Abstract(s): S10, S11

Tamas Fulop
Université de Sherbrooke, *Medicine*, *Sherbrooke, Qc*, *Canada*
Tamas Fulop, MD, PhD, is Professor of Medicine and Geriatrics, and Senior Researcher at the Research Center on Aging, University of Sherbrooke, Québec, Canada. He is the deputy director of the Research Center on Aging and member of the Graduate Immunology Programme. He was the President of the Société Québecoise de Gériatrie from 2007–2012. He has directed the Biology Research Programme of the Research Center on Aging for more than 10 years. He obtained his MD degree at Geneva University. He received his PhD in Biochemistry and Immunology from the Hungarian Academy of Sciences and was a post-doctoral fellow at University Paris XII in Biochemistry. Dr. Fulop's NSERC and CIHR funded research since 1994 is focused on immune response changes in T cells and neutrophils and the mechanism of inflammation with aging and age-related diseases in humans: Dementia, cardiovascular diseases. More specifically his research is directed to the elucidation of the signal transduction changes in immune cells with specific focus on lipid rafts. He has authored more than 230 publications. He is recipient of the Presidential Award of the IAGG and fellow of the GSA since 2001. He served on the executive committee and participated in the organization of three IAG congresses. He served on the GSA Publications Committee and BS executive committee. He is on the editorial boards of Pathology Biology, Immunity and Aging, European Geriatric Medicine, Journal of frailty and Aging, Journal of Geriatrics and Palliative Care, Gerontology and was Section Editor of the BMC open access journal Immunity and Aging. He is the editor-in-chief of the Interdisciplinary Topics in Gerontology. He is co-director of the undergraduate geriatric teaching program.

Speaker Abstract(s): S12

Paolo Ghia
Università Vita-Salute San Raffaele, Division of Experimental Oncology, Milano, Italy
Paolo Ghia received his MD from the University of Torino, Italy, followed by a residency in Internal Medicine. He received his PhD working at the Basel Institute for Immunology, Basel, Switzerland, where he studied the development of normal human B lymphocytes. He moved to the Dana-Farber Cancer Institute, Harvard Medical School, Boston, where he studied the molecular mechanisms of the pathogenesis of chronic lymphoproliferative disorders, particularly of follicular lymphoma.
He is now working in Milano, as Associate Professor in Internal Medicine at the Università Vita-Salute San Raffaele; and Deputy Chairman of the Division of Experimental Oncology, at the San Raffaele Scientific Institute. He is Head of the Laboratory of B-Cell Neoplasia and former Scientific Coordinator of the Clinical Unit of Lymphoid Malignancies. He is now Director of the Strategic Program on CLL, where he is National Coordinator or Principal Investigator in over 20 clinical trials in CLL and related disorders, including phase 1 studies.
His research interest is the study of the molecular and cellular mechanisms acting in the natural history of Chronic Lymphocytic Leukemia (CLL), including Monoclonal B-cell Lymphocytosis (MBL). On these topics he has published over 170 manuscripts in peer-reviewed journals.
He is President of the European Research Initiative on CLL (ERIC), collaborating to the guidelines for the detection of Minimal Residual Disease (MRD) for the analysis of the mutational status of the immunoglobulin genes and of the TP53 gene mutations. He is also a member of the WHO Clinical Advisory Committee for Lymphocytic and Histiocytic Malignancies for the topic Chronic Lymphocytic Leukemia, MBL, and PLL and associate Editor for CLL at Haematologica, the official Journal of the European Hematology Association (EHA).

Speaker Abstract(s): S13

Marine Gilabert
Medical Oncology, Paoli Calmettes Institute, Marseille, France
Dr. Marine Gilabert is an associate professor and a medical oncologist from Marseille, France, Aix-Marseille University. Her medical training and Ph.D was completed at Paoli-Calmettes Institute, Marseille, France in 2011 and 2014 respectively. She received a prestigious Kate McGarrigle Fundation research fellowship which she was undertaking at Jewish General Hospital, McGill University, Montreal, Canada in 2015. Her main interests are gastrointestinal and hepatopancreatobiliary cancers. She has been significantly involved in Phase I, II and III clinical trials and is principal investigator of a numerous translational research.

Speaker Abstract(s): S14

Cesare Gridelli
"S.G. Moscati" Hospital, Medical Oncology, Avellino Italy
Cesare Gridelli, MD, is currently Chief of Division of Medical Oncology at the "S.G. Moscati" Hospital, Avellino (Italy). He has been from December 2003 to February 2016 Director of Department of Oncology/Hematology at the same institution. He earned his medical degree and residencies in Internal Medicine and then in Medical Oncology at the "Federico II" University of Naples (Italy). Since 1993 Vice-Chief of Division of Medical Oncology B, National Cancer Institute of Naples. Since 2001 Chief of Day Hospital Chemotherapy Unit at the same Institute. His areas of expertise are lung cancer and cancer in the elderly. He is deeply involved in the clinical development of new anticancer targeted

therapies. He is member of several national (AIOM, AIOT, CTPG) and international scientific societies (ASCO, ESMO, IASLC). He is President of the Italian Association of Thoracic Oncology (AIOT). He is a past member of the Foundation Council of the European Thoracic Oncology Platform (ETOP). He is member of Advisory Board of scientific journals and of several expert panels. Dr. Gridelli has been invited as speaker at international conferences and educational activities of oncology societies (ASCO, ESMO etc.). He gave 2 oral presentation and 5 talks as faculty member at the annual ASCO meetings. He is author or co-author of more than 750 papers, of which more than 370 extended papers published on international indexed journals, and several chapters of books. His papers have about 16,378 citations on international indexed journals. Dr. Gridelli has an h-index of 62. On November 2013 the American agency Expertscape (Palo Alto, California) appointed Dr. Gridelli at the first place among the top world experts on lung cancer.

Speaker Abstract(s): S15

Marije Hamaker
Diakonessenhuis, Geriatric Medicine, Utrecht, Netherlands
Marije Hamaker has been working as a clinical geriatrician working at the Diakonessenhuis in Utrecht, the Netherlands since 2010. In 2012, she defended her PhD thesis on "Decision making in geriatric oncology". She has remained active in geriatric oncology research, focussing on treatment decisions and patient-centred outcome measures in various cancer types, and additionally has set up a project regarding geriatric nephrology in 2014. She is an active member of the Dutch Geriatric Oncology Foundation, the Elderly Task Force of the EORTC as well as a member of SIOG and the Dutch Geriatrics Society.

Speaker Abstract(s): S16

Holly Holmes
University of Texas Health Science Center, Division of Geriatric and Palliative Medicine, Houston, USA
Dr. Holly Holmes is a geriatrician and is the division director for Geriatric & Palliative Medicine at the University of Texas Health Science Center at Houston McGovern Medical School. Her clinical care and research interests center on geriatric assessment and providing optimal medical and pharmacologic care for older, vulnerable adults.

Speaker Abstract(s): S18

Arti Hurria
Medical Oncology, Duarte, USA
Dr. Arti Hurria is a geriatrician and oncologist and is Director of the Cancer and Aging Research Program at City of Hope. The overall goal of Dr. Hurria's research program is to improve the care of older adults with cancer. Under Dr. Hurria's leadership, the Cancer and Aging Research Program has developed and executed over 22 geriatric oncology protocols, enrolling over 3100 participants on studies focused on cancer and aging. Dr. Hurria is principal investigator on 6 NIH-funded grants and has received research support from the Breast Cancer Research Foundation, UniHealth Foundation, and Hearst Foundation. Dr. Hurria leads national and international efforts to improve the care of older adults with cancer. She served as the President for the International Society of Geriatric Oncology from 2012 to 2014. She was a member of the Committee on "Improving the Quality of Cancer Care: Addressing the Challenges in an Aging Population" for the Institute of Medicine. Since 2010, Dr. Hurria has served as the Editor-in-Chief for the Journal of Geriatric Oncology. She was the recipient of the B.J. Kennedy Award from the American Society of Clinical Oncology, which recognizes scientific excellence in geriatric oncology. In 2016, Dr. Hurria was elected to the Board of Directors for the American Society of Clinical Oncology.

Speaker Abstract(s): S19

Ravindran Kanesvaran
National Cancer Centre Singapore, Medical Oncology, Singapore, Singapore
Dr Ravindran Kanesvaran is a Consultant in the Department of Medical Oncology of the National Cancer Centre Singapore. He is also an Assistant Professor at Duke-NUS Graduate Medical School and clinical senior lecturer at the Yong Loo Lin School of Medicine, National University of Singapore. He is actively involved in graduate medical education and is a core faculty member of the Medical Oncology Senior Residency Program and the Singhealth Internal Medicine Residency Program.He completed his medical oncology speciality training in the National Cancer Centre Singapore. After completion of that training he followed up with a fellowship in genitourinary oncology (GU) and geriatric oncology in Duke Cancer Institute in North Carolina, USA on a Healthcare Manpower Development Program (HMDP) scholarship awarded by the Ministry of Health Singapore. His research interests include GU oncology and geriatric oncology. He has published in a number of well-known peer reviewed journals including Journal of Clinical Oncology and Lancet Oncology.
He has also been awarded a number of awards including the American Society of Clinical Oncology (ASCO GU) Merit Award 2009, American Association for Cancer Research (AACR) scholar-in-training Award 2010 and European Society of Medical Oncology (ESMO) fellowship award 2012. He is currently the President of the Singapore Society of Oncology

(SSO) and the Singapore Geriatric Oncology Society. He has been appointed as European Society of Medical Oncology (ESMO) Faculty 2015-2016. He is the Honorary Treasurer, on the Scientific and Education Committee and the National Representative for Singapore in the International Society of Geriatric Oncology (SIOG). He was awarded National Representative of the Year SIOG 2014 award. He is currently the ESMO local officer for ESMO Asia 2016.

Speaker Abstract(s): S20, S21

Joseph Kattan
Chair, Hematology-Oncology, Beirut, Lebanon
Dr Joseph kattan is currently Head of the Hematology-Oncology Department at Hôtel-Dieu de France University Hospital (HDF) – Beirut, a full professor and the president of the Continuous Medical Education office at Saint Joseph University-Faculty of medicine. He is the secretary of the Cancer Research Group (CRG) in Lebanon. He is also responsible of many courses and programs in this field at the Saint Joseph University – Beirut and Paris XI University – Paris. Dr Kattan was formerly the Head of Hematology- Oncology Department of the Saint Joseph Hospital- Raymond and Aida Najjar Medical Center – Mount Lebanon for the past ten years. He is the author of more than 130 peer reviewed articles in many international journals focusing on pharmacology, drug development, genito-urinary, gastro-intestinal oncology, gynecology, intensified therapy and supportive care. Dr Kattan earned his Medical Degree in 1986, and then started his five years training in 1988 at Gustave- Roussy Institute – Villejuif. After which, He completed his specializations in Oncology (1989), Immunology (1991) and in Hematology (1993) from the University of Paris XI – Paris. Dr Kattan is member of many national and international societies (American Society of Clinical Oncology, European Society of Medical Oncology, Multinational Association of supporting care in Cancer, French Cancer Society, European Hematology Association, International society of Geriatric Oncology and Lebanese Society of Medical Oncology). He is also current or former member of the editorial board of many journals (Bulletin du Cancer, Cancer Letter, International Journal of Hematology and Oncology and the Lebanese Medical Journal).

Speaker Abstract(s): S22

Karis Kin-Fong Cheng
National University Hospital System, Nursing, Singapore, Singapore
Prof Karis Cheng is a tenured full professor at the Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine at the National University of Singapore in Singapore. Prof Cheng acquired her clinical training at Queen Mary Hospital in Hong Kong, and bone marrow transplant specialist training at the Fred Hutchison Cancer Research Center in Seattle, USA. She used to be an Honorary Advanced Practice Nurse in Oncology at Prince of Wales Hospital in Hong Kong. Prof Cheng has been the key faculty of teaching research subjects as well as providing mentorship and supervision to graduate research students. Her research interests include epidemiology and clinical management of symptoms and supportive cancer care, as well as geriatric oncology. She serves on various editorial/advisory boards of the international journals. Prof Cheng currently is the Vice-Chair of the Mucositis Study Group of the MASCC/ISOO and is one of the SIOG Nursing and Allied Interest Group Leaders.

Susan Knox
*Europa Donna -The European Breast Cancer Coalition***,** *Milan***,** *Italy*
Susan Knox is a two time breast cancer survivor and has been Executive Director of Europa Donna since 1999. She is responsible for all on-going European advocacy initiatives in the areas of information, education and lobbying including Pan European advocacy conferences, meetings and information sessions at the European Parliament and European Commission, European Breast Cancer Advocacy Training Courses, publications and websites. In 2008 she launched ED's first prevention initiative — BREAST HEALTH DAY, which takes place annually on 15 October (see website www.breasthealthday.org).
In addition, Susan represents ED on numerous other projects: BIG Scientific Committee, MINDACT and AURORA Committees, European Commission Expert Group on Cancer Control, and European Breast Cancer Conferences (EBCC). Susan also serves on the Guideline Development Group of the ECIBC (European Commission Initiative on Breast Cancer). She is a speaker on patient advocacy at various international conferences and courses and has written widely on the subject. In 2009 she was also named advocacy editor of the scientific journal "The Breast".
Prior to joining Europa Donna, Susan held various managerial positions in both the corporate and non-profit sectors working for Citibank and a non-profit long-term care facility for the aged.
Susan holds a B.A. degree from Smith College and an M.A. degree from Columbia University

Speaker Abstract(s): S23

Ludmila Koch
Department of Medical Oncology, Sao Paulo, Brazil
Medical Oncologist
Hospital Israelita Albert Einstein – Department of Medical Oncology/ Oncogeriatric Unit – Sao Paulo, Brazil
Master in Health Sciences – Aging/Body composition – 2015/2017 Hospital Israelita Albert Einstein – Sao Paulo, Brazil

Research Fellowship – Senior Adult Oncology Department – 2013/2014 Thomas Jefferson University Hospitals – Philadelphia, USA

Speaker Abstract(s): S24, S25

Lalit Krishna
*Deputy Program Director, Duke-NUS Practice Course Year 2 (Professionalism and Ethics)***,** *Assistant Professor, Duke-NUS Graduate Medical School Singapore, Assistant UG Curriculum Director (Clinical), Centre of Biomedical Ethics at NUS, Palliative Medicine, Singapore, Singapore*
Dr Lalit Krishna, MB ChB (Liverpool), FRCP Edin, FAMS, MA (Ethics), MA (Med Edu), PhD (Spore), is a Senior Consultant at the Division of Palliative Medicine, National Cancer Centre. He holds a Masters in Medical Ethics and Masters in Medical Education as well as a PhD in Medical Ethics.
Dr Lalit Krishna also holds the appointments of Assistant Professor at Duke-NUS Graduate Medical School Singapore, and Clinical Senior Lecturer at Yong Loo Lin School of Medicine, National University of Singapore. He has recently taken up the post of co-Director of Practice Course 2 at Duke NUS and Assistant UG Curriculum Director (Clinical) at the Centre of Biomedical Ethics at NUS. He is the chairman of the Clinical Ethics Committee and the Internal Audit Committee at NCCS. He is actively involved in teaching and presently undertaking a PhD in Medical Education.

Speaker Abstract(s): S26, S27

Ian Kunkler
University of Edinburgh, Oncology, Edinburgh, UK
Professor Ian Kunkler (www.iankunkler.org.uk) is Consultant and Honorary Professor in Clinical Oncology at the Edinburgh Cancer Centre, University of Edinburgh. He qualified in Medicine at Cambridge University and St Bartholomew's Hospital in London. After experience in general medicine in Nottingham, he moved to Edinburgh and trained in Clinical Oncology. He spent a year as a French Government and EEC research fellow at Institut Gustave Roussy in Paris. He was subsequently appointed consultant in Clinical Oncology in Sheffield. He returned to Edinburgh in 1992 where he is a consultant in Clinical Oncology specialising in breast cancer.
His research interests are in adjuvant trials of radiotherapy for older patients with breast cancer and the development of biosensors to optimise radiotherapy for solid hypoxic tumours. He is Chief Investigator of the BIG 2-04 MRC/EORTC SUPREMO trial, the PRIME 2 trial and co-PI of the EPSRC funded IMPACT project (www.impact.eng.ed.ac.uk) on implantable microsystems for personalised anti-cancer therapy. He has edited two editions of Walter and Miller's Textbook of Radiotherapy and published over 100 articles. He is a past President of the British Oncological Association.

Marco Ladetto
The speaker biography has not been received at the time of publication.

Speaker Abstract(s): S36

Alessandra Larocca
A. O. Città della Salute e della Scienza di Torino, P.O. Molinette, Divisione Universitaria Ematologia 1, Torino, Italy
Alessandra Larocca, MD, PhD is a Consultant physician of the Division of Hematology at the Department of Hematology-Oncology of the University Hospital Città della Salute e della Scienza, Torino, Italy.
She studied Medicine at the University of Milano (1996–2001), and completed her residency in Hematology at the same institution (2001–2005).
In 2014 she obtained her PhD in Pathology and Experimental Oncology at the University of Torino. She is coordinating and working on the design and development of clinical trials for multiple myeloma developed in the Department of Hematology. She is author and co-author of papers and books published in peer-reviewed journals. Her interest is in multiple myeloma and its treatment including new drugs, with special focus on clinical trials and treatment of elderly patients.

Speaker Abstract(s): S28

Trine Lembrecht Jørgensen
Odense University Hospital, Oncology, Odense, Denmark
Trine Lembrecht Jørgensen, MD, PhD has been involved in geriatric cancer research since 2009. She is a medical doctor training to be a clinical Oncologist and finished her PhD in 2012. She is currently training part time to be a clinical oncologist while doing postdoctoral research in the Academy of Geriatric Cancer Research, AgeCare.

Speaker Abstract(s): S29

Stuart Lichtman
Memorial Sloan Kettering Cancer Center, Commack, NY, USA
At the 2016 Annual Meeting I will become President of SIOG. I am a medical oncologist and member of the Gynecologic Oncology Disease Management Team at Memorial Sloan Kettering Cancer Center and participate in the 65+ Clinical Geriatrics Program. I primarily treat gynecologic cancers but also see solid-tumor patients with melanoma and sarcoma. My main research interest is in the treatment and evaluation of older cancer patients. I am involved in a number of research organizations including the Elderly Taskforce of the Gynecologic Oncology Group and the Cancer in the Elderly committee of the Alliance for Clinical Trials in Oncology. I have been on the Board of Directors and served as Treasurer of the International Society of Geriatric Oncology (SIOG) since 2010 and have participated in multiple taskforces (Chemotherapy, Geriatric Assessment, Renal Dysfunction, Lymphoma, and Oral Chemotherapy) and as the US National Representative and Scientific Chair of the 2011 annual meeting. I also serve on the editorial board of the Journal of Geriatric Oncology, External Advisory Board of the University of Iowa Cancer Center, Governing Board Cancer, and the Kidney International Network. As a member of the American Society of Clinical Oncology (ASCO), I have been on the Clinical Practice Committee and Scientific Program Committee and currently am in the Geriatric Oncology Special Interest Group, Modernizing Clinical Trial Eligibility Taskforce, Guidelines Committee, Education Committee, faculty of the ASCO/AACR Vail Clinical Trials Workshop and Associate Editor for Geriatric Oncology of the ASCO Post. I have been a guest editor for the Journal of Clinical Oncology on a special edition devoted to geriatric oncology in 2007 and 2014. Also in 2014, I received the ASCO BJ Kennedy Award for Scientific Excellence in Geriatric Oncology.

Laura Lozza
Fondazione IRCCS Istituto Nazionale Tumori, Radiation Oncology 1, Milano, Italy
Laura Lozza is Responsible of the Radiotherapy of Breast Tumors Unit in the Fondazione IRCCS Istituto Nazionale dei Tumori, Milano Italy.
She was born in Milan, where she lives.
After graduating from Medical school at the Università degli Studi of Milano in 1985, she was board certified in Radiology and Radiotherapy at the Università degli Studi of Milano in 1989.
Her clinical and research experience include breast tumors and adult soft tissues sarcoma radiation treatments and the palliative radiotherapy of metastatic cancer.
In 1997, 2005, 2009 and 2013 she was active collaborator in the drafting of the AIRO Standard reference for the irradiation of breast cancer.
Author and co-author of book chapters and publications in national and international journal and of papers at conferences.
Invited speaker at international conferences and courses.
Teacher at refresher courses for continuing education in collaboration with AIRO (Italian Association of Radiation Oncology), residential courses of the Italian School of Senology and European School of Oncology, teacher at Master of oncoplastic surgery, at the School of Specialization in Oncology and Postgraduate School of Physical Medicine and Rehabilitation of the University of Milan
Collaborator in the Research Project aims of the Italian Ministry of Health "Quality Indicators in Radiotherapy".
Adjunct Professor at the School of Specialization in Radiation Therapy, of the Università degli Studi of Milano since 1999.

Speaker Abstract(s): S31

Andrea Luciani
Ospedale S. Paolo, Medical Oncology, Milan, Italy
Andrea Luciani graduated in Medicine and Surgey at University of Milan. After the fellowship in medical oncology he spent some months in Senior Adult Oncology Group at Moffit Cancer Center, Florida US. When he returned to Italy he took the postdoctoral degree in Pharmacology and Metabolic disease. He is now an assistant physician in medical oncology department at S. Paolo University Hospital in Milan. He is the chairman of EORTC Cancer in the Elderly Task Force and the National Representative for Italy at International Society of Geriatric Oncology (SIOG). He has been the scientific secretary of the AIOM guidelines on elderly cancer patients from 2012 until present. His main interests are cancer in the elderly, with a special focus on lung and genitourinary cancer.

Speaker Abstract(s): S32, S33

Stefania Maggi
CNR, Medicine, Aging Branch, Padua, Italy
Dr. Maggi is a Geriatrician and Epidemiologist with expertise in both areas of Clinical Geriatrics and Epidemiology of Aging. Her research focuses on the epidemiology of aging and on the analysis of the impact that the aged population has on the health care and social systems.
She is a Board-Certified Geriatrician (University of Padua, Italy) and also obtained a Master in Public Health in Epidemiology in 1987 and completed a two-year Post-Doctoral Training in Epidemiology, both at the Johns Hopkins University, in Baltimore, MD, USA. Dr. Maggi was the Coordinator of the Program for Research on Aging of WHO, from 1990 to 1993, based at NIA, NIH, Bethesda, MD, USA.

She is currently working as Research Director at the CNR Aging Branch-Institute of Neuroscience in Padua and is the Director of the CNR Project on Aging, involving 22 multidisciplinary, research centers in Italy. Over the year, Dr. Maggi has created a large international network, leading to the implementation of cross-national research projects.
Since 2001 she is a member of the Board of Directors, American Federation for Aging (AFAR), New York, NY, US, and Secretariat General of the Mediterranean Society for Osteoporosis and other Skeletal Diseases.
Dr. Maggi has been the Academic Director and is currently the President of the European Union Geriatric Medicine Society (EUGMS).
Dr. Maggi is the author of about 300 publications in international journals of Medicine and Public Health and is Editor in Chief of Aging Clinical and Experimental Research.

Speaker Abstract(s): S34

Michele Maio
Medical Oncology and Immunotherapy, Oncology, Siena, Italy
Dr. Michele Maio, MD, PhD, is Director of the Division of Medical Oncology and Immunotherapy at the University Hospital of Siena – Department of Oncology, Lecturer in Immunology at the Medical School of Udine, and Adjunct Professor at the College of Science and Biotechnology at Temple University. Dr. Maio received his MD from the 2nd School of Medicine in Naples. He is board certified in Oncology and Hematology, and is licensed as full Professor of Oncology.
Dr. Maio's research interests include cancer immunobiology and epigenetics, as well as bioimmunotherapy of solid tumors. He has authored more than 250 publications in books, monographs, and peer-reviewed Journals including Lancet, Lancet Oncology, New England Journal of Medicine, Journal of Clinical Investigation, Human Gene Therapy, Journal of Translational Medicine, Blood, Breast Cancer Research and Treatment, Cancer Research, Cancer Immunology Immunotherapy, Journal of Clinical Oncology, and Clinical Cancer Research.
Dr. Maio serves on Editorial Boards for Seminars in Oncology, Journal of Immunotherapy, Women's Oncology Reviews, Journal of Translational Medicine, Journal of Experimental and Clinical Cancer Research, and Supportive and Palliative Cancer Care.
Dr. Maio is funding member and President of the Italian Network for Tumor Biotherapy (NIBIT) and he is President of the NIBIT Foundation.
Dr. Maio has served/serves on Advisory Boards, Steering and Scientific Committees for different Pharmaceuticals including: BMS, GSK, Roche, MSD, AZ, MedImmune, Amgen, Merck Serono, Epigen Therapeutics, Sigma-tau, Novartis, Pierre Fabre, Astex Pharmaceuticals, Pfizer.
Dr. Maio has supervised more than 20 MD and PhD theses. His preclinical and clinical research activities are supported by national and international granting bodies. Lastly, Dr. Maio is/has been Principal Investigator and national Coordinator of more than 100 phase I–III clinical trials.

Speaker Abstract(s): S35

Christos Markopoulos
Athens Medical School, Surgery – Breast Unit, Athens, Greece
Christos J. Markopoulos is Professor of Surgery at the Medical School of the National and Kapodistrian University of Athens in Greece. He is also the clinical director of the Breast Unit at 'Laiko' University Hospital of Athens and the Breast Unit at Athens Medical Centre – Private Hospital in Athens.
He graduated from Athens Medical School in 1979 and, following a 5 years training, he passed the National exams for the license of general surgery. He received his PhD degree from Athens University in 1985 and he also holds an MPhil degree in Oncology–Breast Cancer from St. George's Medical School of the University of London, UK (1988).
He specialized in Breast Cancer management in London – UK working as a Senior Registrar in Surgery at the Breast Unit of St George's Hospital and Medical School and at The Royal Marsden Hospital in London (UK) and Sutton – Surrey (1985–1988). He has also worked as a research fellow for 1 year at the Ludwing Institute for Cancer Research at Sutton, Surrey, UK.
Professor Markopoulos has published over 300 scientific papers in peer reviewed international and National medical journals with over 1,000 total IF and more than 4,000 citations by other authors. His research has been published in medical journals with high IF, including the *NEJM, Lancet, JAMA, JCO* and *BMJ*. He has also authored several books on the management of breast cancer and his book on "*Diseases of the Breast*" is the official book of the elective course of Athens Medical School. He serves as member of the editorial board and as a reviewer in multiple international medical journals.
In 2000, Prof. Markopoulos founded the "Hellenic Society of Breast Surgeons" which he chaired until 2015, been also in charge of the educational and research section. He also promoted the collaboration with the Greek breast cancer patients' advocacy groups and Europa Donna Hellas and he was awarded for his efforts to improve breast cancer management in Greece by the "society of volunteers against cancer" and the "National society of women with Breast Cancer".
Prof. Markopoulos is Vice-President of the "Division of Breast Surgery" of the European Board of Surgery in UEMS and Chairman of the examination board of the European Breast Surgery Qualification exams (EBSQ) in Breast Surgery. He is an elected member of the EC of EUSOMA since 2010 and also member of several medical associations and societies including the BASO, ABS-UK, ACBS-USA and ESSO. He is the national coordinator for various international trials, national representative in BIG and IBCSG,

Professor Markopoulos has participated in over 400 National and International congresses and meetings, giving lectures as invited speaker (>100 times in International meetings) or presenting research data (>250 oral/poster presentations), awarded on 15 occasions. He has himself organized a large number of national and international congresses, meetings and postgraduate courses on breast cancer over the last 30 years. During the last 20 consecutive years he organizes in Athens the 2-day Annual National Meeting on the Advances in Breast Cancer Care.

Christophe Massard
DITEP, Villejuif, France
General background:
Christophe Massard, MD, PhD, medical oncologist, senior consultant at Drug Development department and Department of Medical Oncology, joined the faculty in 2006. He is Head in patient Unit of DDD. He received his medical degree from PARIS XI University. He completed his residency training in Paris Hospital, followed by his fellowship in medical oncology at Gustave Roussy. Dr Massard is member of ESMO, ASCO, AACR. Dr Massard is board-certified in Medical Oncology. His research interests include early clinical trials, precision medicine, GU cancers, and circulating biomarkers.
Phase I expertise:
Recent phase I publications:
Fizazi K, Massard C, Bono P, Jones R, Kataja V, James N, Garcia JA, Protheroe A, Tammela TL, Elliott T, Mattila L, Aspegren J, Vuorela A, Langmuir P, Mustonen M; ARADES study group. Activity and safety of ODM-201 in patients with progressive metastatic castration-resistant prostate cancer (ARADES): an open-label phase 1 dose-escalation and randomised phase 2 dose expansion trial. Lancet Oncol. 2014 Aug;15(9):975-85. doi: 10.1016/S1470-2045(14)70240-2.
Paoletti X, Le Tourneau C, Verweij J, Siu LL, Seymour L, Postel-Vinay S, Collette L, Rizzo E, Ivy P, Olmos D, Massard C, Lacombe D, Kaye SB, Soria JC. Defining dose-limiting toxicity for phase 1 trials of molecularly targeted agents: results of a DLT-TARGETT international survey. Eur J Cancer. 2014 Aug;50(12):2050-6. doi: 10.1016/j.ejca.2014.04.030.
Hollebecque A, Massard C, Soria JC. Implementing precision medicine initiatives in the clinic: a new paradigm in drug development. Curr Opin Oncol. 2014 May;26(3):340-6. doi: 10.1097/CCO.0000000000000077. Review.
Loriot Y, Bianchini D, Ileana E, Sandhu S, Patrikidou A, Pezaro C, Albiges L, Attard G, Fizazi K, De Bono JS, Massard C. Antitumour activity of abiraterone acetate against metastatic castration-resistant prostate cancer progressing after docetaxel and enzalutamide (MDV3100). Ann Oncol. 2013 Jul;24(7):1807-12. doi: 10.1093/annonc/mdt136.
Massard C, Margetts J, Amellal N, Drew Y, Bahleda R, Stephens P, Armand JP, Calvert H, Soria JC, Coronado C, Kahatt C, Alfaro V, Siguero M, Fernández-Teruel C, Plummer R. Phase I study of PM00104 (Zalypsis®) administered as a 1-hour weekly infusion resting every fourth week in patients with advanced solid tumors. Invest New Drugs. 2013 Jun;31(3):623-30. doi: 10.1007/s10637-012-9843-5.

Speaker Abstract(s): S37, S38

Francesco Merli
Hematology Unit, *Oncology and Advanced Technologies*, *Denmark*, *Denmark*
I was born on the 26th December 1959 in Reggio Emilia (Italy), where I still live.
Work experience:
I graduated in 1987 in Medicine at the University of Modena, and in 1990 I achieved the specialization in Haematology at the University of Modena.
I worked as Internal Medicine physician in General Medicine Unit at the Arcispedale Santa Maria Nuova, Reggio Emilia, from January 1991 to September 1997. In 1993 I spent one year to Ampasimanjeva Hospital in Magadascar where I worked as physician and I coordinated the Medicine Unit. In 1995 I spent a training period for bone marrow autologous and allogeneic transplant at the Haematology Division II at the San Martino Hospital in Genova for two months.
From October 1997 I worked in the Division of Haematology in Reggio Emilia. In 2001 I spent a training period at the Lymphoma and Myeloma Departement to MD Anderson Cancer Center in Houston (Texas – USA) for two months.
In October 2009 I became the Head of Hematology Unit at the Arcispedale Santa Maria Nuova IRCCS in Reggio Emilia.
Scientific activities and publications:
My scientific activities are mainly focused on clinical therapeutic research on lymphomas.
In October 2002 I have been acknowledged with a "High Specialization for diagnosis and Therapy of Lymphoma" job degree.
Since 2002 I am coordinating the "Lymphoma Project" that aimes to update every healt-operator in Arcispedale Santa Maria Nuova that works in "Diagnosis and Therapy of Lymphoma" field, through foreign stages and meeting/seminars.
In 2007 the program was updated to the "Corporate Project Linfocare 2007-2011", that had as aim the clinical and biological research in Lymphoma, and that I am still coordinating.
I am founding member and member of the Directive board of Italian Lymphoma Foundation (Fondazione Italiana Linfomi_FIL ONLUS), that is a non-profit organization that coordinates and carries out scientific research projects for the treatment of lymphomas and lymphoproliferative diseases. This association works through appropriate Scientific Committees of experts concerned with evaluating proposals for clinical studies and provide guidance on treatment or on diagnostic techniques for different types of lymphoma. Currently, I coordinate the Elderly Lymphomas Scientific Commitee.
My research interests include elderly patients with lymphomas, hodgkin lymphoma and the use of FDG-PET in lymphomas. I'm involved in many clinical studies as Principal Investigator.

Regarding elderly patients with lymphoma, I have studied the role of patients frailty in association with other prognostic factor and therapy in defining patients' outcome.
Currently I collaborate in the conduct of the Elderly Project study, that is a prospective registry of elderly patients with lymphoma and I am Principal Investigator of phase II study investigating the clinical activity of chemotherapy regimen with Obinutuzumab and miniCHOP for the treatment of elderly and UNFIT patients with DLBCL.
I am author and coauthor of 82 scientific papers published on the most relevant peer-reviewed journals of oncohematology. My H-index is 24.
Other activities:
I am president of the GRADE onlus foundation (Gruppo Amici Dell'Ematologia), non profit association with the aim to support activities and staff of the Department of Hematology Arcispedale Santa Maria Nuova - IRCCS of Reggio Emilia, funding research projects and assistance for patients with haematological cancers diseases.

Speaker Abstract(s): S39

Stefania Migliuolo
Europa Donna, Milan, Italy
Classically trained as MD with a Board certificate in Pediatrics. Clinical practice as pediatric oncologist followed by ten years pharma industry experience in health marketing. Since 15 years, she moved into Healthcare communication.
She is volunteering in Europa Donna Italia, an independent non-profit organisation. Europa Donna objectives are to raise awareness in breast cancer prevention and treatment, helping women to cope with this condition across 46 countries and to represent the interests of European women regarding breast cancer to local and national authorities as well as to institutions of the European Union.

Speaker Abstract(s): S40

Olivier Mir
The speaker biography has not been received at the time of publication.

Speaker Abstract(s): S41

Nicolas Mottet
Urology department, 42025, St Etienne, France
Professor Nicolas Mottet, MD, PhD is Head of the Urology Department, University Hospital, and Professor of Surgery, University Jean Monnet, Saint-Etienne, France. He is board certified in surgery, urology and medical oncology. He is chairman of the EAU Working Group on Prostate Cancer Guidelines, board member of the Urology Group for the French Anti-Cancer Centre Federation, and member of the SIOG prostate and bladder cancer guidelines. He is the former coordinator the Testis and Penile Cancer Subgroup (French Urological Association 2000–2008). He has published over 160 peer-reviewed papers and made numerous presentations and lectures; he is member of the Editorial Board of the European Urology Journal and a reviewer of more than a dozen of high profile journals including the New England Journal of Medicine. He sits on the scientific advisory board of several multinational pharmaceutical companies. He coordinated or participated to more than 40 clinical trials and received several national grants. He is member of the AUA, AFU, ASCO, EAU, ESMO and SIOG.

Loïc Mourey
Institut Claudius Regaud, Institut Universitaire du Cancer de Toulouse-Oncopole, Medical Oncology, Toulouse, France
Dr Loïc Mourey is Medical Oncologist in the comprehensive cancer center of Toulouse, in south west of France. His main topics are genito-urinary cancers and geriatric oncology. In France, he is an active member of groups involved in geriatric Oncology: GERICO, intergroup DIALOG, SoFOG. At the regional level, he is the co-coordinator of the Midi-Pyrénées UCOG (Unité de Coordination en Onco-Gériatrie).

Speaker Abstract(s): S42

Arash Naeim
David Geffen School of Medicine, Department of Medicine, Los Angeles, CA, USA
Dr. Naeim is a Professor of Medicine in both Divisions of Hematology-Oncology and Geriatric Medicine at the UCLA David Geffen School of Medicine. He is an Assistant Vice Chancellor of Research, Associate Director for the Clinical Translational Science Institute, and Chief Medical Officer for Clinical Research for the UCLA Campus and Health System. His research interests included outcomes research, cost-effectiveness analysis, modeling of health and frailty, and clinical trial design in older cancer patients. His focus of research for the majority of his publications and research grants has been in breast cancer and cancer in the elderly. He is the UCLA Principal Investigator for the Athena Breast Health Network and NIH grant that aims to use sensor technology and analytics to reduce risk, integrate innovative technology, and advance precision medicine in older individuals needing rehabilitation.

Dr. Naeim is very involved in information technology implementation and research. He is a board certified Clinical Informaticist for the UCLA Health System, Director of Informatics for the Jonsson Comprehensive Cancer Center, and led the UCLA Campus strategic planning effort for Research Informatics on behalf of the Vice Chancellor of Research. He has implemented numerous systems on behalf of the Cancer Center and Health System. He also directs the Clinical Research Information Systems Office and the Embedded Clinical Research and Innovation Unit. He has recently expanded his involvement in health and innovation by chairing the UCLA Health Innovation Board and serving as Co-Director for the Center for SMART Health, a joint center between the David Geffen School of Medicine and the School of Engineering and Applied Science.

Speaker Abstract(s): S43

Anita O'Donovan
Trinity College Dublin, Discipline of Radiation Therapy, School of Medicine, Dublin, Ireland
Anita O'Donovan graduated from Radiation Therapy at Trinity College Dublin (TCD) in 2002, and joined the Discipline of Radiation Therapy at TCD in 2011, as Assistant Professor, having previously worked in both clinical and research positions as a radiation therapist in Saint Luke's Hospital, Dublin and Cork University Hospital. Her main research interest is geriatric oncology, more specifically geriatric assessment, education of oncology professionals, and the application of these measures in clinical practice. Anita currently sits on the TCD Ageing Theme Steering Committee, led by Professor Rose Anne Kenny, representing the theme "Cancer and Ageing". One of the main aims of this research centre is to optimise opportunities for collaborative research between different disciplines. Ageing research is a main focus of TCD's strategic plan, and is one of the major themes prioritised by the college.
Anita also has a keen interest in older patient advocacy and incorporating "service learning" principles into her teaching, promoting intergenerational solidarity and the adoption of positive attitudes towards older people by future healthcare professionals. She is also involved in educational outreach for older people through liaison with Age Action Ireland.

Speaker Abstract(s): S44

Rebecca Olin
University of California San Francisco, Department of Medicine, San Francisco, USA
Rebecca Olin is an Associate Professor of Medicine at University of California San Francisco. She received her medical degree from University of Pennsylvania in 2003. She completed internal medicine residency and hematology/oncology fellowship at the University of Pennsylvania, and also received a Masters degree in clinical epidemiology in 2009. Her research is centered broadly on the treatment of hematologic malignancies in older patients, with a focus on myeloid disorders and stem cell transplant. She is investigating the use of geriatric assessment in this population, and also participates in the development and conduct of clinical trials of novel therapeutic agents.

Speaker Abstract(s): S48

Nina Ommundsen
Oslo University Hospital, *Geriatric dept*, *Oslo*, *Norway*
MD specialising in Geriatric medicine and Internal Medicine at Oslo University Hospital. Research focus: Geriatric Assessment, frail elderly and optimisation before surgery in colorectal cancer.

Speaker Abstract(s): S45

Roberto Orecchia
University of Milan, Scientific Directorate, Milan, Italy
He was graduated from the University of Turin and in the post doc period obtained degrees in Radiotherapy, Medical Oncology and Diagnostic Imaging. Since 1994 he is Full Professor in Radiotherapy at the University of Milan and Director of the Radiology Science Department at IEO (European Institute of Oncology). Since January 2015 he is Scientific Director at the (IEO), in Milan, and at the CNAO Foundation, the first centre for hadrontherapy built in Italy, providing proton and carbon ion beams. His clinical and research activities focuse on different fields of radiation therapy and oncology, being since the beginning characterized by a strong interest for innovation. He published totally up to date more than three hundred fifty scientific papers on journals listed in the Pub-Med.

Cécile Ortholan
Department of Radiation Oncology, CHPG, Monaco
Dr Cécile Ortholan, MD, PhD is a radiation oncologist. She has been the head of the department of radiotherapy at the Princess Grace Hospital of Monaco since 2011. She has been involved in geriatric oncology for many years, with numerous publications dealing with the adaptation of radiotherapy schedules in elderly patients. She is principal investigator of the ongoing trial ELAN RT, evaluating hypo fractionated radiotherapy in elderly patients with head and neck cancer.

Speaker Abstract(s): S46

Demetris Papamichael
Medical Oncology, Nicosia, Cyprus
Demetris Papamichael is Director of Medical Oncology at the Cyprus Oncology Centre in Nicosia, a post he has held since 1999. He obtained his medical degree from Charing Cross and Westminster Medical School, University of London in 1988. Dr Papamichael trained in internal medicine and obtained his Membership of the Royal Colleges of Physicians (MRCP) in 1992. His subsequent training in medical oncology was completed at the Royal Marsden and St Bartholomew's Hospitals in London. He became a Fellow of the Royal College (FRCP) in 2002. Dr Papamichael is an American Society of Clinical Oncology (ASCO) Merit Award winner. He is an active researcher and has recently been involved in a number of clinical trials coordinated by the European Organization for Research and Treatment of Cancer and the UK Medical Research Council/National Cancer Research Institute (MRC/NCRI). In addition, he is involved in translational research projects in colorectal cancer.
Dr Papamichael's main clinical interests include gastrointestinal cancer, gynae malignacies, and cancer in the elderly. He has published his work in a number of peer-reviewed international journals. Dr Papamichael is actively involved in the teaching and organization of courses run by the European School of Oncology (ESO) and EORTC. He is a member of ASCO, the European Society of Medical Oncology (ESMO), and the International Society of Geriatric Oncology (SIOG). Recently he headed a Task Force responsible for developing recommendations for the management colorectal cancer in the elderly under the auspices of SIOG

Heather Payne
University College Hospital, London, Oncology, London, England
Heather Payne has been a Consultant in Clinical Oncology at University College Hospital, London, UK, since 1997. She trained at St Mary's Hospital, London and after qualifying, worked in general medicine in London and also in Haiti where conventional medicine was mixed with voodoo practices. Prof. Payne returned to London to train as a clinical oncologist and developed an interest in urological oncology. She now has a busy practice in a teaching hospital where she works within a multidisciplinary team. Prof. Payne is actively involved in clinical research and has pioneered a programme of high dose rate brachytherapy for prostate cancer. Her current research interests also include adjuvant hormone therapy, predictive indices for bowel toxicity with radiotherapy, chemotherapy and quality of life, and decision-making for men with prostate cancer. Prof. Payne is principal investigator in a number of international and local clinical studies. She is a trustee of the Prostate cancer Research Centre and chair of the British Uro-Oncology Group. She also serves on the Prostate Cancer Advisory Group in the UK and is the clinical lead for oncology the National Prostate Cancer Audit.

Speaker Abstract(s): S47

Fausto Roila
Medical Oncology Division, Department of Oncology, Terni, Italy
I am a medical oncologist that works as director in the Medical Oncology Division, S. Maria Hospital, Terni, Italy.
I am a member of the Board of the Multinational Association of Supportive Care in Cancer (MASCC)
Since 1981 I have dedicated myself to antiemetic research and as a leader of the Italian Group for Antiemetic Research I have published a large number of scientific articles in the most prestigious medical journals.
I have been the Subject Editor of ESMO clinical recommendations on supportive/palliative care from 2006 to 2012.
I am a member of the Consultant Committee for the Oncological Drugs of the Italian Agency of the Drugs (A.I.F.A.), of the Ethical Committee of Aziende Sanitarie of Umbria and of the Committee of Hospital Therapeutic Formulary of Umbria Region.

Speaker Abstract(s): S50

Siri Rostoft
Oslo University Hospital, Department of Geriatric Medicine, Oslo, Norway
Siri Rostoft is a medical doctor at Oslo University Hospital, Norway, specialized in internal medicine and geriatric medicine. She completed her PhD about geriatric assessment in older surgical cancer patients in 2011, and works as an assistant professor at the University of Oslo. Her main research interests in geriatric oncology are the clinical importance of geriatric assessment and interventions and frailty. She is a deputy editor for *Journal of Geriatric Oncology*.

Speaker Abstract(s): S51

Patrick Roth
University Hospital Zurich, Department of Neurology, Oslo, Norway
Dr. Patrick Roth is an Attending Physician at the Department of Neurology and the coordinating physician of the Brain Tumor Center at the University Hospital Zurich, Switzerland. He specializes in the interdisciplinary management of brain tumor patients. He is involved in various clinical trials as well as preclinical research aiming at developing novel therapeutic strategies, with a particular focus on immunotherapeutic approaches for brain tumor patients. His current research focuses are the mechanisms underlying glioma immune escape, novel approaches to enhance the immunogenicity of glioma cells, and the analysis of new compounds for anti-glioma therapy.

Speaker Abstract(s): S52

Florian Scotté
European Hospital Georges Pompidou, Paris, France
Florian Scotté is MD-PhD and medical oncologist at the European Hospital Georges Pompidou (Paris, France), and head of the SCUPP (Supportive Care in Cancer Unit Pompidou Paris).
He is member of the ESMO, MASCC (Multinational Association for Supportive Care in Cancer), the ASCO, CKIN 5cancer and the Kidney International Network) and is General Secretary of the AFSOS (French Speaking Association for Supportive Care in Cancer).
Teaching at several universities, and Coordinator of the inter-university diploma of supportive care, he is involved in training both medical and para-medical.
He is also the coordinator and co-investigator of numerous studies especially in supportive care: GTP 001, the effectiveness of a glove refrigerant preventing onycholysis, AESCO 001, the effectiveness of a liner refrigerant prevention of skin and nail toxicities, AESCO 002, the effectiveness of a cooling jacket on the hands and feet in the prevention of hand foot syndrome, but also analysis of the requirements of recombinant erythropoietin in oncology. He recently published data on supportive care status in France and new organisation in ambulatory chemotherapy administration.
He also serves on the editorial board of Elsevier Quality of Life Website and « La Lettre du Cancérologue » and coordinate « news on line » programs during international meetings on lecancer.fr website.

Speaker Abstract(s): S53, S54

Ponnandai Somasundar
Boston University, Surgery, Providence, Rhode Island, USA
Ponnandai Somasundar MD is a surgical oncologist with interest in GI cancers with an expertise in minimally invasive surgery. He is an Associate Professor of Surgery in Boston University and Associate Chief of Surgical Oncology in Roger Williams Medical Center. He is also the Director of Geriatric Oncology Program with a special interest in taking care of the elderly with cancer. He runs the geriatric oncology program in his institution. He is well published in multiple peer reviewed journals. He is a member of multiple national and international surgical organizations and actively participates in them.

Speaker Abstract(s): S55

Pierre Soubeyran
Université de Bordeaux, Medical Oncology, Bordeaux, France
Pierre Soubeyran, M.D., Ph.D., is a Medical Oncologist at Institut Bergonié, Comprehensive Cancer Center in Bordeaux, and Professor of Medical Oncology at the University of Bordeaux. He is highly involved in the development of Geriatric Oncology at both the clinical (co-coordinator of the Coordination Unit of Geriatric Oncology of Aquitaine) and research level (President of the Scientific Council of the French Society of Geriatric Oncology (SoFOG) and Coordinator of the French Geriatric Oncology Cooperative Group DIALOG). He is also involved in cancer research as Director of Research of Institut Bergonié comprehensive cancer center in Bordeaux, Director of the U1218 INSERM Cancer research unit and Director of the SIRIC, Center for Integrated Cancer Research of Bordeaux, named BRIO (Bordeaux Recherche Intégrée Oncologie).
He earned his Medical Degree from the University of Nantes in France and trained in Medical Oncology at the Institut Bergonié and University of Bordeaux. He completed a fellowship at the MD Anderson Cancer Center in Houston and later obtained his Ph.D. at the University of Bordeaux in the field of minimal residual disease in follicular lymphoma. An active researcher, Prof. Pierre Soubeyran's clinical interests include clinical and biological research on lymphoma and geriatric oncology. He is leading trials focused on these topics as part of the French LYSA lymphoma Research Group and the French Geriatric Oncology Cooperative Group DIALOG. He is a member of ESMO, ASCO, ASH, SoFOG and SIOG. He has authored and co-authored numerous articles, book chapters and monographs on various aspects of cancer treatment.

Speaker Abstract(s): S57, S58, S59

Reinhard Stauder
*Medical University Innsbruck***,** *Department of Internal Medicine V (Haematology and Oncology), Innsbruck, Austria*
Reinhard Stauder received his Doctoral Degree in Medicine in 1981 from the University of Innsbruck and in 2006 received a Master's Degree in Health Sciences from the University of Health Sciences, Medical Informatics and Technology, Hall in Tirol, Austria. From 1994–1996, he was Scientific Member at the Basel Institute for Immunology, Basel, Switzerland. RS is a specialist in Internal Medicine, a Certified Specialist in Hematology and Oncology and Associate Professor of Medicine at Innsbruck Medical University, Austria. His main clinical and scientific focus lies in Myelodysplastic Syndromes (MDS), in geriatric oncology and in anemia in the elderly. His main goal is the development of individualized treatment algorithms in elderly cancer patients.
At present RS is responsible for the geriatric oncology and MDS program of the Department of Internal Medicine V (Haematology and Oncology), Innsbruck Medical University. RS is a member of the European Leukemia Net (ELN) and is representative of Austria in the European LeukemiaNet MDS registry (EU-MDS). RS is a member of the board of the Austrian Society for Haematology and Oncology (OEGHO) as well as vice-chairman of the Austrian MDS-Plattform and chairman of the Geriatric Oncology Group of the OEGHO. RS is the National Representative for Austria in the

International Society of Geriatric Oncology (SIOG), is editorial board member of "The Journal of Geriatric Oncology" and is founder and chairman of the Austrian association "Aid in elderly cancer patients" (Verein Senioren-Krebshilfe). In addition RS is a member of the Scientific Working Groups on Hematology and Ageing of EHA and ASH.
RS is author of numerous scientific publications including more than 95 publications in peer-reviewed journals.

Speaker Abstract(s): S60, S61

Kazuo Tamura
General Medical Research Center, General Medical Research Center, Fukuoka City, Japan
Dr. Tamura was graduated from the Faculty of Medicine, Kyushu University in 1974. He finished medical internship and residency at Elmhurst General Hospital, NY in 1978 and medical oncology fellowship at Roswell Park Memorial institute in 1980. He had worked as a medical oncologist and a chief of Internal Medicine at Miyazaki Prefectural Hospital till 1997. Then he moved to Fukuoka University as a professor of Medicine (Division of Medical Oncology, Hematology and Infectious Diseases). He served as a president of the Japanese Society of Medical Oncology from 2010 to 2014. Now he is a president of Japanese Association of Supportive Care in Cancer. His major interest is cancer drug development and supportive care in cancer. He has published many scientific papers and recent works are related to chemotherapy-induced nausea and vomiting, and geriatric assessment for the elderly with non-Hodgkin lymphoma.

Speaker Abstract(s): S63

William Tew
Memorial Sloan Kettering Cancer Center, Department of Medicine, Gynecologic Medical Oncology Service, New York, USA
William Tew, MD, is an Associate Attending Physician and Clinical Director of the Gynecologic Medical Oncology Service at Memorial Sloan Kettering Cancer Center (MSKCC) in New York. He completed a biomedical engineering program at Boston University, medical school at the University of Rochester, internal medicine residency at Bellevue/NYU and medical oncology fellowship at MSKCC. As a medical oncologist, he cares for women with gynecologic cancer and is an active investigator of new therapeutics for women with ovarian cancer. In addition, Dr. Tew has a clinical research program focused on improving the care of older adults with cancer by developing geriatric assessment tools, interventions and age-specific therapeutic trials. He received a NCCN Foundation Young Investigator Grant (2011) and is an active member of the Cancer and Aging Research Group. He is an active member of ASCO, Gynecology Oncology Group (GOG Task Force for the Elderly). the International Society of Geriatric Oncology (SIOG Scientific Program 2016), and the NCCN (Senior Adult Guidelines). He serves as the associate editor of the Journal of Geriatric Oncology.

Speaker Abstract(s): S68

Clémence Thébaut
Limoges University (Lecturer Senior)/Dauphine University (Associate researcher), Paris, France
Clémence Thébaut worked for eight years for the French National Autority for Health (HAS) in the Health economics and Public health department. She is now Lecturer Senior at Limoges University and Associate researcher at Dauphine University. She is specifically working on ethical issues raised by health economic assessement.

Speaker Abstract(s): S62

Janice Tsang
The speaker biography has not been received at the time of publication.

Speaker Abstract(s): S69

Giampaolo Ugolini
University of Bologna, Department of Surgical and Medical Sciences, Bologna, Italy
Dr. Giampaolo Ugolini is Associate Professor of Surgery at University of Bologna. He was a research fellow at Massachusetts General Hospital (Harvard University), clinical and research fellow at Rhode Island Hospital (Brown Medical School). His main clinical interest is surgery of the alimentary tract for cancer and inflammatory bowel disease. He is collaborating to several research activities on colorectal cancer and on geriatric oncology with SIOG surgical taskforce.

Speaker Abstract(s): S70

Willemien van de Water
Surgery, Leiderdorp/ Leiden, Netherlands
After medical school, Willemien van de Water studied breast cancer in the elderly, as part of a collaboration between the departments of surgery and geriatrics at the Leiden University Medical Center (The Netherlands). Among others, she

worked at the Moffitt Cancer Center in Tampa, Florida (US). After obtaining her PhD in 2014, she is currently enjoying her residency in surgery. Next to the clinical challenges, geriatric oncology care and research remain one of her main interests.

Speaker Abstract(s): S71

Antonio Vigano
McGill University Health Centre, Oncology, Montreal, Canada
In 2002, Dr. Vigano joined the Supportive and Palliative Care Division at McGill as Assistant Professor. He is now Associate Professor in the Department of Oncology, Faculty of Medicine, McGill University. He has been practicing palliative care medicine for over 20 years both in Europe and in Canada. In 2005, he received both the Canadian Institutes of Health Research (CIHR) New Investigator and Fonds de la Recherche en Sante (FRSQ) Chercheur-Boursier Clinicien Career Awards. Through a Canadian Foundation for Innovation award, he founded the McGill Nutrition and Performance Laboratory (www.mnupal.mcgill.ca). His most recent activities are aimed at improving the classification, diagnosis, treatment and prevention of wasting and/or debilitating syndromes such as cachexia, sarcopenia, and lymphedema, primarily in patients suffering from cancer and/or frailty. His current research interests at MNUPAL include: validation of tools for assessing nutrition and performance in advanced cancer patients, definition of relationships between molecular, nutritional, and functional correlates of cancer cachexia, diagnosis and treatment of male hypogonadism in advanced cancer, prediction and prevention of surgical risks in elderly cancer patients, and evaluation of body composition in lymphedema.

Speaker Abstract(s): S72

Ulrich Wedding
Jena University Hospital, Palliative Care, Jena, Germany
Ulrich Wedding, MD and PhD, is Consultant for Haematology, Oncology, Palliative Care, and Geriatric Medicine at the University Hospital in Jena, Germany. He is head of the department of palliative care. He is an active clinical researcher. His clinical interests include cancer in the elderly, supportive and palliative care. He has authored or coauthored numerous articles, book chapters, and monographs with a focus on aspects of cancer treatment in elderly patients and palliative care. He is member of the editorial board of the Journal of Geriatric Oncology, and reviewer for several peer-reviewed journals. He is member of various scientific organizations including SIOG. He is past-chairman of the Task Force Cancer in the Elderly of the European Organization for Research and Treatment of Cancer (EORTC) and current chairman of the Arbeitsgruppe Geriatrische Onkologie of the Arbeitsgemeinschaft Internistische Onkologie of the German Cancer Society. He served as chairman of the Scientific Committee of the 10th International Meeting of the SIOG in Berlin in 2009.

Speaker Abstract(s): S73

Tanya Wildes
Barnes-Jewish Hospital, Division of Oncology, St. Louis, USA
Dr. Wildes is Assistant Professor of Medicine in the Division of Medical Oncology at Washington University in St Louis, Missouri, USA. She graduated from Washington University School of Medicine in 2002. She completed residency in Internal Medicine and fellowships in Hematology/Oncology and Geriatrics, all at Washington University. She currently serves as the Chair of the Science and Education Committee of SIOG. Her research focuses on geriatric assessment in older adults with multiple myeloma.

Speaker Abstract(s): S74

Hans Wildiers
Department of General Medical Oncology, University Hospitals Leuven, Leuven, Belgium
Hans Wildiers is a medical oncologist dedicated to breast cancer research and geriatric oncology. He is staff member at the department of medical oncology in the University Hospital Gasthuisberg Leuven, Belgium since 2004. He coordinates the Leuven multidisciplinary breast centre since 2015. He has been coordinator of several academic studies in the field of breast cancer and geriatric oncology, and author of more than 170 peer reviewed papers in 13 years. He has been active as Belgian national representative and executive board member of SIOG, the international society of geriatric oncology, as board member of the Belgian Society of Medical Oncology (BSMO), the Belgian Journal of Medical Oncology (BJMO), and of the Journal of Geriatric Oncology. From 2009 till 2015, he has chaired the elderly task force cancer of the elderly of the European Organization of Research and Treatment of Cancer (EORTC).

Annie Young
University of Warwick, Warwick Medical School, Coventry, UK
Annie is Professor of Nursing at Warwick Medical School, working clinically in University Hospitals Coventry and Warwickshire. Her research portfolio encompasses the management of thrombosis in cancer patients, symptomatic care including prevention of chemotherapy-associated alopecia and nausea and vomiting. Rehabilitation for cancer patients and new technologies for

monitoring side effects of cancer therapies are special interests; Annie is a member of the NCRI Supportive and Palliative Care Clinical Studies Group. She also teaches oncology nursing in sub-Saharan Africa, alongside local nurses.

Speaker Abstract(s): S75

Gilbert Zulian

Geneva University Hospitals, Readaptation and Palliative Medicine, Geneva, Switzerland

Gilbert Zulian received his medical degree from the Faculty of Medicine of the University of Geneva in Switzerland in 1981. He achieved his medical doctorate in 1985 with a thesis on Hodgkin's disease. He fulfilled his post-graduate training to obtain the FMH (Foederatio Medicorum Helveticorum) specialty in internal medicine at Geneva University Hospitals (HUG). After a clinical fellowship in cancer medicine at the Royal Marsden Hospital, he completed the FMH specialty in medical oncology and the ESMO board certification in 1994 to then confront cancer medicine with the reality of the aging of the cancer population and obtain the FMH specialty in geriatric medicine in 2002.

He thus developed a local program of geriatric oncology at HUG, perhaps best called onco-geriatrics, being involved as an external expert in the setting of the geriatric oncology program lead by the Institut National du Cancer (INCA) in France which resulted in the mapping of France with joint units of geriatric medicine and cancer medicine. But with a significant part of the cancer patient population unfortunately dying too early, despite the many treatments and the best of care they received, he turned his interests towards the development of palliative medicine. He is at present head of the division of palliative medicine and chief of the department of readaptation and palliative medicine at HUG and is a senior lecturer at the Faculty of Medicine of Geneva University in charge of palliative medicine.

He is editor-in-chief of the Revue Internationale de Soins Palliatifs and member of the editorial board of the Revue Suisse de Médecine, of the Journal of Geriatric Oncology and of the Journal d'Onco-Gériatrie. He is member of several professional societies, a founding member SIOG and of the Fédération Internationale de Soins Palliatifs, the current chairman of the ESMO Faculty group Elderly and the vice-president of the Swiss Cancer League.

His current professional interests focus on subjects related to aging, cancer, ethics and end-of-life of the human beings.

Available online at www.sciencedirect.com

ScienceDirect

SIOG 2016 – Contents

Available online at www.sciencedirect.com

ScienceDirect

SIOG 2016 – Invited Speakers Abstract Submission

S01

MARGINAL ZONE AND LYMPHOPLASMACYTIC NHL: LESS COMMON, THOUGH STILL IMPORTANT, VARIANTS IN THE ELDERLY PATIENT

Luca Arcaini

Department of Molecular Medicine, University of Pavia, Department of Hematology Oncology, Pavia, Italy

Among indolent, low-grade B-cell lymphomas, the WHO classifications comprises follicular lymphoma (FL), small lymphocytic lymphoma, marginal zone lymphoma (of MALT, nodal and splenic type) and lymphoplasmacytic lymphoma/Waldenström's macroglobulinemia. In the WHO classification three marginal zone lymphoma entities are listed: splenic B-cell marginal zone lymphoma, nodal marginal zone lymphoma, and extranodal marginal zone B-cell lymphoma of MALT type. Marginal zone B-cells have been demonstrated to play role in the immune response to T-cell-independent antigens and frequently display reactivity to self antigens. Marginal zone B-cells are involved in various infectious and autoimmune conditions and marginal zone-related neoplasms often retain the features of these cells. Many infectious agents are involved in the pathogenesis of specific types of marginal zone lymphomas (for instance Helicobacter pylori for gastric MALT lymphoma, HCV for splenic and extranodal marginal zone lymphoma, Chlamydia psittaci for MALT lymphoma of the orbit and others). Waldenstrom's macroglobulinemia (WM) is lymphoplasmacytic NHL characterized by the presence of a serum IgM monoclonal protein associated with bone marrow infiltration. An oncogenic somatic mutation in the MYD88 gene, leading to change of an aminoacid (leucine to proline) at position 265, has been identified in WM patients by whole genome sequencing. The MYD88 (L265P) mutation is only rarely found in patients with other lymphoproliferative disorders and is detectable in about 50% of patients with IgM-MGUS.

Disclosure of interest: Consultancy: Celgene, Roche, Bayer; Research funding: Gilead; Advisory Board: Roche, Celgene, Gilead, Sandoz

S02

GENERATING EVIDENCE ABOUT EFFECTIVENESS AND VALUE

Gouri Shankar Bhattacharyya

In Charge Department of Medical Oncology, Medical Oncology, Kolkata, West, India

Healthcare providers are often faced with dilemma of uncertainty when treating patients. Reliance is placed on published scientific literature in addition to their knowledge, skills, experience, patient preferences to make the decisions. Clinical practice guidelines are statements that include recommendations intended to optimize patient care that are based on systemic review of evidence and assessment of benefit and harm of alternative care – options available (effectiveness and value).

Unfortunately, most guidelines appear to be a dicta and do not take into account that a "one-size-fit-all" is not the right approach in healthcare; clinical practice guidelines must be an evaluation of quality of relevant scientific literature, evidence of efficacy and effectivity as well as harms of treatment. This enables healthcare providers the best care for a unique patient based on his/her choice.

Unfortunately, Geriatric Oncology has bigger issues and problems in view of availability of data. Most guidelines used in Geriatric Oncology or as a matter of fact in Medicine, suffer from shortcomings in development. Dubious trust in guidelines is the result of many factors including failure to represent a variety of discipline in guideline development, lack of transparency in how recommendations are derived and rated and omission of a thorough external review process. A trustworthy guideline must have the following character:

- Be based on a systematic review of the existing evidence;
- Be developed by a knowledgeable, multidisciplinary panel of experts and representatives from key affected groups;
- Consider important patient subgroups and patient preferences, as appropriate;
- Be based on an explicit and transparent process that minimizes distortions, biases, and conflicts of interest;
- Provide a clear explanation of the logical relationships between alternative care options and health outcomes,

1879-4068/Published by Elsevier Ltd.

and provide ratings of both the quality of evidence and the strength of recommendations;
- Must be tiered for resources and stratified;
- Be reconsidered and revised as appropriate when important new evidence warrants modifications of recommendations.

It also calls that guideline development groups must adhere to Conflict of Interest as well as have a summary of relevant available evidences that describe quality, quantity and consistency of aggregate evidence. The eight standards that are required for a good guidance are:
- Establishing transparency;
- Management of conflict of interest;
- Guideline development group composition;
- Clinical practice guideline–systematic review intersection;
- Establishing evidence foundations for and rating strength of recommendations;
- Articulation of recommendations;
- External review; and
- Updating.

Adoption of guidelines is of importance. Policies for implementations are required, that must be effective, with multi-faceted strategies targeting both the individual and healthcare system to promote adherence, adaptation as well as incorporation in e-health record and computer aided clinical decisions. To advance this goal, the guideline structure should be formatted with vocabulary and content, easily incorporable.

Evaluation of guidelines is important and it must be scientifically done on principles and guidelines laid down for it like using the tools – agree or magic.

Patients rely on healthcare providers for quality care, expect providers have knowledge and expertise to make health related decisions. Clinical practice guidelines can aid clinicians and patients in deciding best options of treatment. Guidelines hold the promise for quality care in medicine.

Disclosure of interest: None declared

S03

ARE PATIENT REPORTED OUTCOMES PROGRAMMES ADAPTED TO THE GERIATRIC POPULATION?

Paolo Bossi
Head and Neck Medical Oncology, Medical Oncology, Milan, Italy

Treatment or disease-related symptoms are common among cancer patients, but report manner is often inaccurate. The physician's assessment of patients' adverse events has been demonstrated to underestimate the perceived burden of toxicity.

To this aim, systematic collection of symptom information through patient-reported outcome (PRO) standardized measures has been claimed as a more accurate approach. PROs are any report coming directly from the patients, by means of questionnaires, measures of single symptoms or functional status assessment. The broader employment of PRO improves patients' quality of life and the control of their symptoms.

Moreover, the systematic assessment of PROs showed to reduce emergency room visits and ultimately led to an improvement in survival, according to recent data.

To which extent this instrument in catching patient's symptoms may be widened to an elderly patient population is a matter of debate.

There are several arguments in favor of the broader use of PROs in a geriatric population.

First, the benefit of regular PRO assessment is higher when the burden of symptoms is huge and when a prompt and appropriate management could be started. In this regard, older patients are frailer due to comorbidities and higher treatment toxicity, so the earlier recognition of any adverse event and the consequential treatment could be of benefit in this population.

Second, in a recently published trial, patients randomized to report their symptoms through an electronic system had a better quality of life, less use of emergency health services and higher survival than patients with usual care of symptom monitoring. The magnitude of benefit of routine PRO measurement through this electronic instrument was shown to give a greater benefit to computer-inexperienced, older patients.

The vulnerability of elderly patients could be the more appropriate setting in which the PRO measures could exploit their greater power of improving adverse events detection and management precision.

However, there are several drawbacks in the process of implementing PROs in the geriatric population.

PRO instruments can be lengthy and may annoy the patients, so it is necessary to accurately select the requested questionnaires and items to be self-completed.

Moreover, elderly patients with cognitive impairments may not be the right group to be selected for a continuous assessment of toxicities by means of PROs measurement. In this regard, it is necessary to minimize the missing data in such an assessment, in order to ensure a greater quality of the collected data.

The employment of PRO programs is a possible outstanding step in the evaluation of toxicity also in a geriatric population, but it needs a careful and appropriate process of instrument and patient selection.

Disclosure of interest: None declared

S04

INTRODUCTION: REPORT FROM THE ITALIAN NETWORK

Bruno Castagneto
GIOGer (Gruppo Italiano di Oncologia Geriatrica), Medical Department, Novi Ligure, Italia

As pointed out by several epidemiological studies, cancer incidence increases with age and the older population is expected to grow steadily in the incoming decades. In Italy, with regard to the population over the age of sixty years, the incidence of cancer exceeds one thousand cases per one

hundred thousand people per year; in the over 70 is more than 50%, mainly prostate for men and breast cancer for women.

As result of these data, in Italy the interest for geriatric oncology is constantly increasing. A recent survey carried out among the Italian oncologists pointed out that, although a specific care pathway for the elderly patient is available only in 10% of the Oncology Departments, approximately 95% of oncologists acknowledges the vital importance of an appropriate evaluation of the functional status for the older patient with cancer. In this sense, some experiences like those of Regione Piemonte and Regione Lombardia Local Health Units are ongoing in Italy.

As regard of the international clinical research scenario, several Italian oncologists are active members of the ETF (Elderly Task Force) of the EORTC (European Organisation for Research and Treatment of Cancer) and they actively take part in some clinical protocols carried out by this task force.

In Italy the role of geriatric oncology is recently becoming more evident, as pointed out by the involvement of GIOGer (Italian Group of Geriatric Oncology) as founding partner of the FICOG (Federation of the Italian Cooperative Oncology Groups) and by the availability of a specific chapter of geriatric oncology in the guidelines of AIOM (Italian Association of Medical Oncology).

Disclosure of interest: None declared

S05

Romain Corre
CHU Pontchaillou Pneumology, Rennes, France

The speaker abstract has not been received at the time of publication.

S06

GERIATRIC ONCOLOGY PRACTICE IN TROPICAL AREA: EXPERIENCE IN FRENCH GUIANA AND POSSIBLE RULES FOR IMPLEMENTATION IN LOW AND INTERMEDIATE INCOME COUNTRIES

Jean-Pierre Droz
Centre Léon-Bérard, Environment and Cancer Reasearch Unit, Lyon, France

Introduction: Management of cancer in tropical areas is characterized by a small proportion of elderly patients, different cancer epidemiology (virus induced cancers), advanced diseases and often low or intermediate incomes countries. Cancer patients managed at the Saint-Laurent Hospital, French Guiana, are representative of these characteristics except that the health care system is the same than in main France.

Objective: 1) To describe elderly cancer patients' management at the Saint-Laurent Hospital, French Guiana, focusing on health status screening and difficulties which were encountered. 2) To translate the possible solutions to low and intermediate income countries.

Methods: Elderly patients (pts) (age >70 years) were prospectively identified among all new pts between 01/09/2014 and 31/05/2016. Elderly pts' frailty screening was prospectively performed based on the G8 tool and assessment in health status groups based on Activity daily Living (ADL), Cumulative Illness Score Rating-Geriatrics (CISR-G) and malnutrition (weight loss). Pts and cancer characteristics were collected: age, sex, language, nationality, medical coverage, and primary tumor, extension (local-L, locally advanced-LA and metastatic-M).

Results: Twenty-three out of 111 new cancer pts (20%) were aged more than 70 years. There were 10 women and 13 men. Median age was 76 years (extremes 70–94 years). There were 14 French, 7 Surinamese, 2 Haitian pts. Language was: Sranantongo 10 pts, French 7 pts, Creole 4 pts and Hmong 2 pts. Ten patients benefited from the National Health Security, 7 of Emergency Medical Assistance, 5 of Universal Medical Coverage and one had no medical coverage. Cancer extension was: L 3 pts, LA 10 pts, M 10 pts.

G8 screening tool value was 0 to 16 and only 6 pts had a value >14. Health groups were: fit 4 pts, frail 9 pts, disabled/severe comorbidities 7 pts and too sick 3 pts. Dementia was present in 3 pts. The item "self-rated health" was difficult to assess in 15 pts, due to lack of understanding and wording (rated 0.5: "don't know"). Correlation between G8 and components of Health Status is poor. Correlation between cancer extension and G8 and health status groups is poor.

The following problems emerge from these observations: cancers are diagnosed at advanced stage, the treatment being palliative, a screening tool as G8 is difficult to apply due to cultural specificities which preclude the use of a questionnaire and Western concepts of health. Therefore clinical assessments, which can be performed by a health professional, seem more appropriate (comorbidities, very frequent in older in this setting, evaluation of ADL, measure of BMI and albumin).

Additionally in low and intermediate income countries: limitation to treatment access is important. Considering treatment the most important is the access to potent analgesics, to radiotherapy which is the best palliative treatment. Use of medical treatment is difficult due to the cost and wide difficulty to manage complications. An accurate evaluation of risk/benefit/cost may help to include patients in drug-access programs. Another important aspect of public health is to promote prevention and more immediately effective, early diagnosis. This implies a strong effort in education and a proximity health professional networking.

Conclusion: geriatric oncology has an increasing importance in low and intermediate incomes countries but must be adapted to the economy, health organization and cultural differences. Health status can be screened easily through medical assessment by well-trained health professional. Palliative treatments are the first present priority. Prevention and early diagnosis are the most important objectives to develop in the near future. This can be done through education which requires transcultural mediation to make possible the appropriation of these concepts by people of non-western cultures.

Disclosure of interest: None declared

S07
PROSTATE

Jean-Pierre Droz
Centre Léon-Bérard, Environment and Cancer Reasearch Unit, Lyon, France

Context: Prostate cancer is a disease of the senior adults, the most frequent cancer in men. It requires specific urologic and geriatric managements.

Objective: To update the 2010 and 2014 SIOG (International Society of Geriatric Oncology) guidelines on prostate cancer in senior adult patients aged more than 70 years. The 2016 updates include the health status evaluation; the treatment of localized disease; and the treatment of advanced disease, particularly new active agents in the treatment of castration refractory disease.

Methods: In 2016, a new multidisciplinary SIOG task force was formed to update the recommendations. A systematic review of articles published in 2014–2016 was performed. The search strategy was based mainly on the terms "prostate cancer", "elderly", and different key words on local treatment and drugs. The terms "castration refractory/resistant" was added as were used terms on geriatric evaluation. Each expert of the Writing Committee included proposed modifications, the material was managed by the first author, the manuscript circulated to the experts of the Review Committee which included their inputs and finally the manuscript was prepared to obtain a consensus of experts.

Results: The geriatric evaluation is based on a three step screening of health problems: 1) cognitive screening test and a global screening test, the G8; 2) if Mini-COG abnormal patients should have complete cognitive evaluation; if G8 abnormal the patient is referred to the next step: 2) a simplified geriatric evaluation based on physical dependence, comorbidities, and nutrition; 3) Patients are classified in four health status groups: fit, frail, disabled/ severe comorbidities, too sick. Geriatric intervention should reverse some problems but requires CGA. The major treatment conclusion is that fit and some frail patients are likely to benefit from the same treatments than younger, treatment adaptations are required in the other patients group.

Conclusions: Many refinements in geriatric evaluation, localized disease treatments techniques, role of surveillance and "watch and see policy", medical management of advanced disease by new drugs participate to a refined decision making process. Treatment decisions should be based on health status evaluation (mainly driven by the severity of associated comorbidities) rather than age, and also on patient preference.

Disclosure of interest: Board member: Sanofi

S08
CANCER IN MOROCCAN ELDERLY: THE FIRST MULTICENTRIC TRANSVERSAL STUDY EXPLORING THE SOCIO-DEMOGRAPHIC AND ECONOMIC PROFILE OF MOROCCAN ELDERLY CANCER PATIENTS

Hassan Errihani
Mohamed V University, Medical oncology, Rabat, Morocco

Introduction: The Moroccan population's life expectancy has increased and so is behaving the incidence of cancer in elderly. We launched the first Moroccan prospective multicentric transversal study, to explore the subgroup of Moroccan elderly cancer patients.

Material and methods: The study was conducted in 10 civil and military, Medical Oncology Departments in Morocco.

Patients were enrolled between June 15th and October 15th, 2015. The inclusion criteria were patients aged 65 years or over having a proven solid cancer at any stage. The questionnaire used in the study included four sections: General socio-demographic and economic data, daily habits, Medical history including the G8 test and the EORTC- QLQC30 questionnaire. The questionnaire was administered once for each patient included. All the patients signed an informed consent. The study was approved by the ethical committee of Rabat. A comparison will be made between the subgroups 65–70 years old and ≥71 years old. More than 150 patients were enrolled. The final results will be presented at the Congress.

Conclusion: This is the first muticentric prospective study designed to have an insight on the medical, sociodemographic and economic profile of Moroccan elderly cancer patients. This kind of studies could be considered as the first step in developing an adapted geriatric assessment in Morocco.

Disclosure of interest: None declared

S09
PALLIATIVE CARE FOR OLDER CANCER PATIENTS IN EUROPE

Marilène Filbet
CHU Lyon, Medecine palliative, Lyon, France

Most of the people who die in Europe are older than 65 years old and this number will increase in the next decade. The need for palliative care for older patients will increase equally, and that leads WHO and EAPC to propose a guide for better palliative care for older people (WHO 2004). We don't have any recommendations for older people with cancer, and this lack needs to be filled. Palliative care services are unequally developed within European countries (C. Centeno, EAPC task force), and so are the long-term services for older people. The development of the geriatric oncology will improve cancer survival, and this disease trajectory will become like the trajectory of the chronic diseases: people will have a long life expectancy. This presentation will describe the patients and family needs during the palliative stage of the cancer disease, and the services available across European countries.

Disclosure of interest: None declared

S10
ORGANIZATION MODELS OF THE CLINICAL ACTIVITY AT THE GIOGER CENTERS

Lucia Fratino
Oncology Unit, Aviano (PN), Italy

Purpose: The aim of the paper is to describe the organization of the clinical activity of Geriatric Oncology in order to see if an Italian model may exists and can be proposed elsewhere.

Methods: An activity of Geriatric Oncology is carried out in several Operative Units of Medical Oncology and Geriatrics of GIOGer centers. Activity of Geriatric Oncology is predominantly carried out based in Divisions of Medical Oncology in General Hospitals. The cooperation with Surgeons and Radiotherapist in managing older cancer patients is generally described as satisfactory. Patients are recruited in the Medical Oncology Division by GP and Geriatricians. Where Geriatricians are present there is a cooperation of Medical Oncologists with Geriatricians, mainly with selected cases discussions, but but periodically scheduled cases discussions are lacking. With only one exceptions common clinics do not exist. The Multidimensional Geriatric Evaluation (MGE) is performed almost in all Departments, but not in all consecutive cases At least four research project are founded by the Ministry of Health and some other by Pharmaceuticals.

Conclusions: It is necessary to define the interaction modalities and procedures between the Geriatric Oncology Unit and the structure dismissing the patient. Main aspects defined by the GIOGer centers are: to establish efficient communication paths; to define the relationships and synergies among the professional figures involved in the management of the patient (medical oncologist, MMG, geriatrician, nurse); to establish preferential pathways for admission and dismission (questo è inventato) from and to the acute care ward and the community assistance network for elderly patients undergoing therapy with chemotherapy related toxicities. An Operative integrating protocol between the territorial services and the National cancer institute will allow the admission of oncological patients in the home care assistance services and, for frail and more complex patients, their admission in residenze sanitarie assistenziali.

Disclosure of interest: None declared

S11
GENITOURINARY TUMORS IN THE ELDERLY PATIENTS

Lucia Fratino
Oncology Unit, Aviano (PN), Italy

Prostate cancer affects older men and is the most prevalent cancer in men over 70 years. Management of the disease in elderly men represents a major public health problem, because many patients do not receive optimal therapy as the result of treatment decisions made primarily on the basis of chronological age alone. Several population-based studies showed men aged 70–79 years had a significant fivefold increased risk of not receiving curative treatment relative to men aged 60–69 years. Older patients are also more likely to present with very advanced disease and have a greater risk of death resulting from prostate cancer, despite higher death rates from competing causes. Docetaxel chemotherapy was shown to improve overall survival (OS) and can be used safely in selected elderly patients with castration resistant prostate cancer (CRPC), although the optimal management of frail patients remains to be established. In the post-docetaxel setting, treatment options for both younger and older patients with metastatic CRPC (mCRPC) include: cabazitaxel; the androgen biosynthesis inhibitor abiraterone acetate in combination with corticosteroids; and the α-emitter radium-223 dichloride. Additionally, elderly patients are generally more frail and have a higher risk of AEs. These patients may be unable to tolerate or do not want to receive cytotoxic chemotherapies.

Disclosure of interest: None declared

S12
IS IMMUNITY COMPROMISED IN THE ELDERLY AND DOES THIS IMPACT ON CANCER IMMUNOTHERAPY?

Tamas Fulop
Université de Sherbrooke, Medicine, Sherbrooke, QC, Canada

Aging is accompanied by many changes and one of the most important affects the immune system. There are many changes in all compartments of the immune system with aging. The common actual view is that all these changes are detrimental as they underline most of the age-related diseases including cancers. Beside the immune system alterations occurring with aging there exists also a low grade inflammation originating from the life-long antigenic challenges. The innate and the adaptive immune system concomitantly or because of the inflammation become dysfunctional. These changes may be either considered detrimental or being adaptational due to a remodeling induced by the immune history. There are numerous tentative to modulate the altered immune response with aging, however there is no proof that it could be beneficial and no specific pathways were targeted. The cancer immunotherapy is more and more used even in elderly subjects and the common belief is that the “immunosenescence” is compromising its efficacy. We will discuss whether the age-related changes are really impacting on the efficacy of the immunotherapy and which could be the avenues to improve it in the elderly

Disclosure of interest: None declared

S13
CCL
Paolo Ghia
Università Vita-Salute San Raffaele, Division of Experimental Oncology, Milano, Italy

CLL has undergone an enormous change in the therapeutic approaches that are mirrored in the recent publication (and subsequent update) of the ESMO guidelines for treatment of CLL patients. From the time where only a handful of drugs were approved for CLL, we have now a full array of compounds and combinations thereof that can help to better tailor the most appropriate treatment for each of our patients. Studies showed that the combination of Fludarabine, cyclophosphamide and Rituximab is able to achieve complete remission and negativity for minimal residual disease (MRD) when used in young fit patients who, in particular those carrying mutated Immunoglobulin genes, can enjoy a disease-free status for more than a decade. Less fit, typically elderly patients with comorbidities, can now experience as well the possibility to achieve MRD negativity with the better tolerated combination of Chlorambucil and rituximab but in particular together with the novel anti-CD20 Obinutuzumab. Very recently, also the first-in-class BTK inhibitor, Ibrutinib, has been approved by EMA for the treatment of CLL patients in first line, achieving long progression-free survivals with limited non-hematological toxicity. Despite all these achievements, the majority of CLL patients still relapse after the first treatment, but they have now a number of possibilities for subsequent treatments, including Ibrutinib and the PI3K-δ inhibitor Idelalisib in combination with Rituximab both inducing rapid responses in terms of lymph nodes shrinkage and bone marrow function recovery in the relapsed/refractory setting. Similar responses can be also obtained in so-called high risk patients i.e. those carrying TP53 abnormalities.

Additional drugs are appearing on the horizon and these include the BCL2-inhibitor Venetoclax, already approved by FDA for the treatment of relapsed patients with deletion 17p, that appears to be able to induce deep responses with MRD negativity. We are not yet definitely eradicating the disease but the future lies in the combination of these drugs with the hope of finally curing CLL.

Disclosure of interest: Honoraria/advisory boards: AbbVie, Adaptive Biotechnologies, Gilead, Janssen, Roche. Research grants: GSK, Gilead, Janssen, Roche

---

S14
Marine Gilabert

The speaker abstract has not been received at the time of publication.

S15
LUNG CANCER IN THE ELDERLY PATIENTS
Cesare Gridelli
"S.G. Moscati" Hospital, Medical Oncology, Avellino Italy

The talk will report the basis of new immunotherapy in the treatment of advanced non-small-cell lung cancer specifically related to treatment of elderly patients.

Disclosure of interest: Honoraria as speaker bureau and advisory board member for Roche, BMS, MSD.

S16
GERIATRIC ASSESSMENT: NEXT BIG CHALLENGES
Marije E Hamaker
Diakonessenhuis, Geriatric Medicine, Utrecht, Netherlands

Pioneers in the field of geriatric oncology have focussed on demonstrating that geriatric impairments are prevalent in elderly patients, and often missed in a standard oncologic work-up. Prior research has shown that many of these impairments can have impact on prognosis, the course of treatment or can be amenable to interventions that improve treatment tolerance or quality of life. However, many questions still remain before geriatric assessment-driven cancer treatment becomes the standard of care. This presentation will address some of the next big challenges that need to be addressed.

Disclosure of interest: None declared

S17
Janice Tsang

The speaker abstract has not been received at the time of publication.

S18
PERSPECTIVES FROM NORTH AMERICA
Holly Holmes
University of Texas Health Science Center, Division of Geriatric and Palliative Medicine, Houston, USA

This presentation will discuss the challenges of providing high quality, patient-centered end-of-life care for older adults with cancer, with a focus on the US and the unique opportunities and challenges within the healthcare system. The focus will include the overuse of care at the end of life and the implications such care has for dying with dignity.

Disclosure of interest: None declared

S19

NORTH AMERICA

Arti Hurria
Medical Oncology, Duarte, United States of America

This plenary session will focus on geriatric oncology multidisciplinary models of care in North America. Three multidisciplinary models of geriatric oncology care will be highlighted. The first is a consultative model, in which patients are referred to a geriatric oncology clinic for a geriatric assessment and recommendations. This assessment is often performed in collaboration with a multidisciplinary team. The results of this consultation are conveyed to the treating oncologist with a summary of findings from the geriatric assessment, which can then be utilized to guide interventions. The second is a shared care model in which the geriatrician or geriatric oncologist and multidisciplinary team provide concurrent collaborative care with the primary treating oncologist across the trajectory of the patient's illness. The third is a comprehensive care model where the patient is specifically referred to a geriatric oncologist who is the treating oncologist throughout the patient's trajectory of care. Members of the multidisciplinary team are consulted and provide collaborative care. Each of these models provides a unique service; however, there are pros and cons to each approach which will be discussed during this lecture.

Disclosure of interest: Research support: Celegene, Novartis, and GSK. Consultant: Boehringer Ingelheim Pharmaceuticals, Carevive, Sanofi, and GTx, Inc.

S20

SIOG TASK FORCE FOR METASTATIC RCC IN THE ELDERLY 2016

Ravindran Kanesvaran
National Cancer Centre Singapore, Medical Oncology, Singapore, Singapore

Treatment of metastatic renal cell carcinoma (mRCC) has evolved tremendously over the past decade since the advent of targeted therapies. In line with this, SIOG had established a task force in 2008 to come up with treatment recommendations for the elderly mRCC patient, an important group that has often been overlooked in terms of recruitment into clinical trials. In that guideline which was published in a high impact journal in 2009, the task force not only analyzed the evidence regarding the state of art management in mRCC in the elderly but was also able to apply that knowledge by taking into consideration factors unique to an elderly population. These factors include physiological, pathological, pharmacological, and psychological factors that distinguish the older mRCC patients from those younger. It has been 6 years since the publication of the above position paper and the treatment landscape has changed a lot since. Since the 2009 paper a slew of new drugs like Pazopanib , Axitinib, Cabozantinib, Nivolumab, and Lenvatinib have been approved for mRCC treatment. Quality of life improvement and patient preference studies have also changed our practice patterns. We also have more data now regarding how these drugs work in the elderly population too. Hence a SIOG Task Force for treatment of mRCC in the elderly was formed to review current data and suggest treatment for this group of patients.

Disclosure of interest: Consultant/Honoraria: Novartis, Pfizer, MSD, BMS

S21

Ravindran Kanesvaran
National Cancer Centre Singapore, Medical Oncology, Singapore, Singapore

The speaker abstract has not been received at the time of publication.

S22

GERIATRIC ONCOLOGY PROJECTION IN THE MIDDLE-EAST: FINDINGS FROM LEBANON 2003–2023

Joseph Kattan
Chair, Hematology-Oncology, Beirut, Lebanon

Introduction: Age is a major non-preventable risk factor for cancer with an increase in the incidence of cancer among the elderly. In Lebanon, the increased burden of cancer linked to aging has not been consistently assessed at the national level. The purpose of this study is to provide projections of cancer incidence rates for men and women in the age groups 65–69, 70–74 and 75 years and above, from 2003 to 2023.

Material and methods: Incidence rates per 100,000 for the major cancer types were derived from the national cancer registry from 2003 to 2008 among elderly patients aged 65 years and above. The six consecutive years surveys results were used to project the incidence until 2023 using a linear model. The variation of trends whether an increase, decrease or stability was assessed by calculating the annual percent change.

Results: For males, cancer incidence rates are estimated to rise between 2003 and 2023 from 647.2 per 100 000 to 2566.4 and from 431.5 to 4661.9 in individuals aged 65–69 and 70–74 respectively; while it remained stable in patients aged 75 and above ranging from 1682.8 to 1615 between 2003 and 2023. Prostate cancer was the most diagnosed cancer in males and had his incidence increase in the 65–69 and 70–74 age groups from 158.4 to 623.3 and from 105.6 to 1110 respectively; while it decreased from 424.9 to 373.3 in patients aged 75 and above. This trend was also observed in bladder and lung cancer, the most frequent types after prostate. In females, cancer incidence is estimated to increase from 434.3 to 2025 and from 289.5 to 3141.3 between 2003 and 2023 in the subgroups 65–69 and 70–74 years respectively; however, it remained stable in the subgroup 75 and above ranging from 1078.5 per 100 000

to 1101.6. The incidence of breast cancer, the most diagnosed cancer in females, is estimated to increase from 157.2 to 570.1, from 104.8 to 773.8, and from 71.7 to 601.2 in aged groups 65–69, 70–74, 75 and above. The second most frequent type, colon cancer, had his incidence increase in individuals aged 74 and below, while it decreased in patients aged 75 and above. Lung cancer followed with a decrease in incidence rates in the subgroup 65–69, and an increase in individuals aged 70 and above.

Conclusion: As the Lebanese population ages, the incidence of cancer increases mainly in individuals aged between 65 and 74 years. The stability observed in patients aged 75 years and above could be the result of a higher mortality rate or a less frequent disease at this advanced age. Adapted and personalized therapeutic strategies are needed in the management of elderly patients; as well as the need for the establishment of new guidelines in managing this more frail population.

Disclosure of interest: None declared

S23

DAILY LIVING WITH CANCER: THE PATIENT'S VOICE

Susan Knox

Europa Donna -The European Breast Cancer Coalition, Milan, Italy

There are many myths and preconceived notions regarding breast cancer treatment for older women. Decisions about breast cancer treatment, care, and even screening should never be based on chronological age alone. I have experienced breast cancer as a relatively young woman and as an older one; I will provide some personal insight on how age impacts decision making and living with breast cancer. Patients want to get all the information appropriate to their individual situations and make decisions about treatment together with health care professionals based on both the facts and their own personal preferences and life situation. This is fundamental and is not age dependent. If age needs to be considered, it is the patient who should decide what option she wishes to pursue based on the evidence presented eg. inconvenience of radiotherapy vs mastectomy. It is the patient who needs to evaluate how much benefit is derived from more aggressive treatment when one is older vs better quality of life in later years. One size does not fit all.

Europa Donna—The European Breast Cancer Coalition advocates that all women should have access to appropriate screening, treatment, follow up, and access to clinical trials regardless of age. Age may play a role in treatment decisions but must be shared between the patient and her health care team.

Disclosure of interest: None declared

S24

LATIN AMERICA

Ludmila Koch

Department of Medical Oncology, Sao Paulo, Brazil

In less developed countries, the fact that a higher fraction of patients die from cancer demonstrates that their attempts to control cancer are much less effective – which is hardly surprising, given the remarkable disparities in resources between the lowest and highest income countries. While the number of elderly will double worldwide by the year 2050, it will almost triple in Brazil. While in European countries the aging process took place slowly and only after an enrichment of nations, in which infrastructure problems were already solved, the same did not occur here: the aging of the population is a major challenge for all of us, because we live in a country where we still have many structural problems to be solved, such as the public health system, which is insufficient, basic education of low quality. And this is reflected in the quality of life of the elderly. According Kalache, the growth of the elderly population presents a new challenge to health systems and social support networks in many less developed countries where populations are becoming old before they become wealthy. Alliance for Aging Research published in 2002, it is estimated that to care the 35 million Americans older existing at the time it would take 20,000 geriatricians in the country, which would amount to a geriatrician / inhabitant ratio old 1:5,700. In 2015, Brazil has a population aged 60 and over stands at 25 million and using as given the number of members of the Brazilian Society of Geriatric and Gerontology, we can assume that the ratio of geriatricians/elderly is 1/9,900. While the number of oncologists/inhabitant is 1,7/100,000. In summary, most less developed countries cannot afford to develop multidisciplinary geriatric oncology approach. Special provisions will have to be made in the existing health system in order to train primary care professionals in the field of geriatrics. Session will review those topics describing issues in geriatric oncology in Latin America.

Disclosure of interest: None declared

S25

GERIATRIC ONCOLOGY: THE VIEW FROM LATIN AMERICA

Ludmila Koch

Department of Medical Oncology, Sao Paulo, Brazil

Developing countries are in epidemiological and demographical transition. By 2020, 70% of all cancers will be in developing countries. By 2050, majority of Geriatric people and patients will be living in developing countries. Demographic aging in less developed countries is very much influenced by the previous explosive demographic growth. Furthermore, the growth of the elderly in these countries' populations happens in a context of poverty, large heterogeneity, and profound inequity. Between the years 2020 and 2040, these countries will show age structures approaching that of

the developed world today. In this context, it is clear that population aging of the kind that raises serious economic and social issues in the more developed countries is not such a distant in developing countries, the analysis of the situation reveals many problems that make it more difficult to care for an emerging aging population in which illiteracy, poverty, and poor social and family support prevail and lead to a poor self-care capacity. It is necessary to recognize that the care for elderly cancer patients often requires more time in scheduling, comprehensive management, strategies and organization of the multidisciplinary team resources: available resources must be organized according to the reality of the center in which multidisciplinary geriatric oncology approach is implemented.

Latin America countries need to assess the needs of the older people, in particular their very basic needs—food, health, housing, etc. In this perspective, they should define long-term strategies to partially reorient public investment efforts as well as training programs. Session will review those topics, describing administrative and financial aspects in geriatric oncology implementation in Latin America.

Disclosure of interest: None declared

S26

PERSPECTIVES FROM ASIA—END-OF-LIFE ISSUES: RESPECTING THE PATIENT'S DIGNITY AROUND THE WORLD

Lalit Krishna

Deputy Program Director, Duke-NUS Practice Course Year 2 (Professionalism and Ethics), Assistant Professor, Duke-NUS Graduate Medical School Singapore, Assistant UG Curriculum Director (Clinical), Centre of Biomedical Ethics at NUS, Palliative Medicine, Singapore, Singapore

Grounded in new data from the geriatric oncology scene in South East Asia, this 13-minute session will look at the concepts of personhood in the elderly oncology patient and the impact of psychosocial considerations upon respect for dignity.

This session hopes to offer a wider understanding of dignity from the perspective of the elderly oncology patient in South East Asia and forward a number of considerations that must be made in determining goals of care and end of life care plans.

Disclosure of interest: None declared

S27

ISSUES ON PAIN MANAGEMENT IN ELDERLY

Lalit Krishna

Deputy Program Director, Duke-NUS Practice Course Year 2 (Professionalism and Ethics), Assistant Professor, Duke-NUS Graduate Medical School Singapore, Assistant UG Curriculum Director (Clinical), Centre of Biomedical Ethics at NUS, Palliative Medicine, Singapore, Singapore

This session moves beyond simply a discourse on means of pain assessment and use of the WHO analgesic ladder to the meaning of pain in the elderly. Drawing upon local South East Asian data and experiences, this 12-minute discussion will look upon the psychosocial aspects of pain management in the elderly.

This session seeks to orientate participants to the wider impact of assessing and treating pain in the elderly

Disclosure of interest: None declared

S28

MULTIPLE MYELOMA

Alessandra Larocca

A. O. Città della Salute e della Scienza di Torino, P.O. Molinette, Divisione Universitaria Ematologia 1, Torino, Italy

Multiple myeloma (MM) is a neoplastic disease of older adults, with a higher incidence in elderly patients. The annual prevalence of MM is approximately 31 cases per 100,000 people in patients aged 65–74 years, and it increases to 46 cases per 100,000 people in patients aged ≥75 years. Furthermore, the prevalence of myeloma is likely to increase due to the extended survival and the growing life expectancy of the general population.

Much progress has been made in the past few years thanks to the introduction of new drugs. However, increases in survival were much less pronounced in patients aged 60 to 69 years, and no improvement was seen in older patients. Furthermore, the currently approved treatment regimens were tested in clinical trials with stringent inclusion criteria. Aging is associated with a high prevalence of frailty, that is, a state of increased vulnerability to stressors due to a critical decline in physiologic reserves. Elderly people may be categorized as fit or frail according to clinical, functional and cognitive criteria. The presence of frailty may complicate the management and outcome of myeloma patients. To date, the choice of treatment of myeloma patients has focused primarily on chronological age and performance status as markers of frailty. However, the elderly population is highly heterogeneous, and improved assessment strategies are needed to define the frailty profile of patients and provide them with the most adequate treatment, thus avoiding the overtreatment of frail patients and the undertreatment of fit patients. The geriatric assessment (GA) is a fundamental tool for the evaluation of cognitive and functional status. Because a full comprehensive geriatric assessment is a time-consuming procedure that is difficult to use in every day clinical practice, a simplified GA that includes Activities of daily living (ADL) scale, Instrumental ADL (IADL) scale, and the Charlson Comorbidity Index (CCI), should be adopted for elderly patients. ADL is used to screen for disability in self-care tasks and IADL to explore tasks of household management. Many prognostic indices for the elderly that incorporate age and/or comorbidity are available. The Charlson co-morbidity index is one of the most frequently used in cancer patients.

Frail patients need effective tailored treatments to better control the disease while minimizing the risk of toxicity and treatment discontinuation. The selection of therapy should be based on the risk of toxicity and the capacity of patients to tolerate treatment. Lenalidomide and bortezomib have an essential role in the treatment of frail patients. Two-drug regimens including low-dose steroid in combination with lenalidomide or bortezomib should be considered in this setting.

Disclosure of interest: Honoraria from Celgene, Janssen-Cilag, BMS

S29

STUDYING SUPPORTIVE CARE IN A NEW GERIATRIC ONCOLOGY PROGRAMME IN DENMARK

Trine Lembrecht Jørgensen
Odense University Hospital, Oncology, Odense, Denmark

In January 2014, the Academy of Geriatric Cancer Research (AgeCare) was launched, thanks to former MASCC president Professor Jørn Herrstedt. Driven by the fact that in Denmark, there is no national strategy for the management of elderly cancer patients, he gathered a research group and applied among seven other groups to be the 4th elite research center in Odense University Hospital – and was selected.

The 5-year research plan consists of seven work packages including epidemiology, biomarkers, surgery, radiotherapy, and medical cancer treatment. Further, two work packages focus on supportive care. One of these (WP 6) focuses specifically on comorbidity and geriatric assessment and the pre-therapeutic evaluation and optimization. The other (WP7) focuses on cancer disease-related complications and treatment-induced adverse effects. Rehabilitation will be another focus area.

AgeCare consists of 70 national and international researchers from different cancer-related disciplines. The international researchers include a number of well-established SIOG members.

AgeCare plans to initiate 17 PhD courses (3-year positions) and 10 post doc courses (3-year 50% positions) over the period of 2014 to 2018. As of September 2016, 8 PhD courses and 5 post doc positions have been initiated. So far, the AgeCare Group has published 30 articles in peer-reviewed scientific journals including several on supportive care [1,2] and cancer epidemiology [3]. The website www.agecare.org includes an overview of initiated studies, published papers and researchers. AgeCare welcome interested new researchers to join one or more projects.

References:

[1] Brygger L & Herrstedt J on behalf of the Academy of Geriatric Cancer Research (AgeCare). 5-Hydroxytryptamine3 receptor antagonists and cardiac side effects. Expert Opin Drug Safe. 2014;13:1407-22.

[2] Winther SB, Jørgensen TL, Pfeiffer P, Qvortrup Q on behalf of the Academy of Geriatric Cancer Research (AgeCare). Can we predict toxicity and efficacy in older patients with cancer? Older patients with colorectal cancer as an example. ESMO Open 2016;1:e000021. doi:10.1136/esmoopen-2015-000021

[3] Ewertz M, Christensen K, Engholm G, Kejs AMT, Lund L, Matzen LE et al. on behalf of the Academy of Geriatric Cancer Research (AgeCare). Trends in cancer in the elderly population in Denmark, 1980–2012. Acta Oncol. 2016;55 Suppl 1:1-6

Disclosure of interest: None declared

S30

Demetris Papamichael

The speaker abstract has not been received at the time of publication.

S31

UPDATES IN RADIOTHERAPY

Laura Lozza
Fondazione IRCCS Istituto Nazionale Tumori, Radiation Oncology 1, Milano, Italy

Radiotherapy plays an important role in the care of patients with cancer and forms part of the management of 40% of patients cured of their disease. Advances have been made in the past two decades, as improvements in engineering and computing have enabled technologies such as intensity modulated radiotherapy (IMRT), image guided radiotherapy (IGRT), and stereotactic radiotherapy (SRT) to be used in routine clinical practice

New options of radiation techniques allow the reduction of possible side effects and toxicity to healthy tissues, providing more efficient treatments in terms of radiation dose to the target and areas at risk.

Intensity modulated radiotherapy (IMRT): IMRT can create concave treatment shapes and steep dose gradients. This maximises the sparing of normal tissues, particularly if the tumour is wrapped around normal structures such as the spinal cord.

IMRT is particularly useful for head and neck cancers because of the high number of important normal tissue structures within close proximity to the tumour.

Benefits have been found in the treatment of many other treatment sites, including reduced rectal toxicity in patients with prostate cancer.

For the elderly patients the benefit of this technique comes from lower intolerance risks along the course of radiation because of the lower incidence of acute side effects and, consequently, allowing doses scaling, thus increasing the probability of tumor control.

Image guided radiotherapy (IGRT): All radiotherapy is delivered with imaging at the beginning and intermittently throughout treatment to ensure accuracy. IGRT uses imaging

(often on a daily basis) just before radiotherapy is delivered to allow positional correction if necessary so that the dose is correctly delivered to the target. This can be achieved with CT imaging or by implanting radio-opaque seeds, which allows the target to be identified using treatment x rays. This assures accurate treatment of the tumour and potentially allows smaller safety margins to be used, thereby sparing healthy tissue.

Stereotactic radiotherapy (SRT): SRT involves highly targeted treatment. It has been used for many years to treat a variety of brain lesions, using traditional fractionations such as 60 Gy in 30 fractions. More recently it has been used to treat small discrete lesions in a limited number (one to five) of higher dose fractions Stereotactic radiosurgery refers to SRT delivered in just one session. Stereotactic ablative radiotherapy (SABR), also known as stereotactic body radiotherapy, refers to precise irradiation of extracranial lesions. As a result of improvements in image guidance, it is now increasingly offered for sites including the lung, prostate, liver, and pancreas

Proton beam therapy: Proton beam therapy is an established technology that uses protons rather than photons to deliver the radiation dose. The physical properties of protons enable the dose to be deposited up to, but not beyond, a specific depth within tissue. When compared with photons, this limited range allows improved target volume coverage, with reduced doses to the normal tissue beyond. This is expected to reduce the risks of late effects, including second cancers and cardiovascular risk, which are particularly relevant when treating children and young adults.

The future of radiotherapy: The evolution of radiotherapy will continue, fuelled by improvements in imaging, computing, and engineering, combined with a greater understanding of tumour biology. Ensuring the availability of newly established techniques to patients who would benefit from them poses an important challenge, particularly in the face of economic constraints. It is hoped that more precise delivery of radiotherapy coupled with strategies to enhance tumour cell killing, such as chemoradiation, will enable more cancers to be cured with fewer side effects.

Global treatment time can also be shortened favoring those patients facing logistical and socio-economic difficulties (access to radiotherapy services, for example): several studies support “hypofractionated regimens”, rapid treatment schemes with higher daily doses and shorter total treatment time, as a viable alternative to conventional radiotherapy, generally delivered in 5–7 weeks.

Disclosure of interest: None declared

S32
FUTURE STRATEGIES AND COLLABORATIONS

Andrea Luciani
Ospedale S. Paolo, Medical Oncology, Milan, Italy

The speaker abstract has not been received at the time of publication.

S33
CGA IN ADVANCED LUNG CANCER: WHAT HAVE WE LEARNED AND WHAT IS NEXT? NON-SMALL-CELL LUNG CANCER

Andrea Luciani
Ospedale S. Paolo, Medical Oncology, Milan, Italy

Lung cancer is the leading cause of cancer death in most countries. Non-small-cell lung cancer (NSCLC) accounts for 80% to 85% of lung cancer. The median age at the diagnosis is 70 and less than 5% of patients are under 50 years old. A recent evidence of more than 1500 patients with lung cancer showed that the prognosis of patients 40 years or younger with metastatic disease is no better than that of patients older than 70 years, whereas patients in other age categories have improved prognosis compared with the oldest age group. As most patients with NSCLC are detected with locally advanced or metastatic disease they have a poor survival. In the metastatic setting guideline recommend, for patients with performance status (PS) of 0 or 1, a combination of two cytotoxic drugs with a preference of platinum combinations over non-platinum therapy. Elderly patients are candidates for monotherapy. However, in a clinical trial Carboplatin + Taxol is superior to monotherapy in older people in terms of overall survival and progression free survival but with a worse toxicity profile. As most of lung cancer patients are smokers or past smokers carrying with them some relevant cardiovascular and respiratory comorbidities, they represent a difficult population to be treated properly. The use of a geriatric assessment (CGA) is mandatory and has a pivotal role for risk assessment and tailoring treatment. It gives an estimate of the residual life expectancy and evaluates the weight of comorbidities, the social conditions and nutritional status. Early evidence showed that baseline IADLs impairment are predictive of overall survival in advanced non-small cell lung cancer. The main challenge in older patients with advanced non-small cell lung cancer is to balance the risk and the benefit of a cancer treatment. The border between the benefit and the harm in these patients is thin and PS alone cannot be exhaustive. Frequently fit patients are undertreated even if the evidence of the beneficial effect of palliative chemotherapy is well known. Equally, unfit patients are generally over treated with unacceptable toxicities, treatment related mortality and use of resources. In a recent randomized trial a CGA-guided approach seems to minimize undertreatment, by increasing the percentage of patients who received standard-of-care combination chemotherapy, as well as overtreatment, by identifying patients who may be more appropriate for best supportive care. Even if CGA-guided approach is not superior to the standard approach, it demonstrated less toxicity. The French group analyzed the impact of Quality of life at the diagnosis and found that it seems to be an important prognostic factor for overall survival.

Last and not least, the clinicians should consider early palliative care support for these patients as it has demonstrated to improve overall survival when considered at the beginning of clinical course in advanced disease.

Small-cell lung cancer (SCLC) is a highly aggressive as well as mortal disease both in younger and older patients. A recent

population based analysis showed that for limited stage small cell lung cancer selected elderly patients could tolerate chemoradiotherapy and this confers a survival benefit over chemotherapy alone. Extensive stage SCLC is managed only by palliative chemotherapy or best supportive care in non-fit older individuals.

Disclosure of interest: None declared

S34

UPDATES IN GERIATRICS

Stefania Maggi
CNR, Medicine, Aging Branch, Padua, Italy

This presentation will focus on the description of global trends in population ageing, considering that the twenty-first century will witness even more rapid ageing than did the century just past. The shift in age structure associated with population aging has a profound impact on a broad range of economic, political and social conditions (World Population Ageing 1950–2050. Population Division, DESA, United Nations). As more people live longer, retirement, pensions and other social benefits tend to extend over longer periods of time. This makes necessary for social security systems to change in order to remain effective. Increasing longevity can also result in rising medical costs and increasing demands for health services, since older people are typically more vulnerable to chronic diseases. The demographic causes of aging of the population, in terms of fertility rates and mortality rates, are generally predictable. A variety of population projections are available, prepared by UN, EU and National Statistic Institutes. What is less predictable is the interaction of these forces with social context, health status, economic changes, cultural influences and hence international migrations. Martin et al, considering data from the NHANES and the NHIS, conclude that health and disability of elderly improved during the last two decades of 20th century. At the same time, population aged 40–64 years has not shown a consistent improvement and there is some evidence of increase in disability in this age group (Martin LG, Schoeni RF, Andreski PM, 2010), therefore suggesting a potential worsening of the health status in the future cohort of older individuals.

Disclosure of interest: None declared

S35

Michele Maio

The speaker abstract has not been received at the time of publication.

S36

FOLLICULAR NHL IN THE ELDERLY: ROLE OF GERIATRIC ASSESSMENT AND THERAPY

Marco Ladetto

The speaker abstract has not been received at the time of publication.

S37

Christophe Massard
DITEP, Villejuif, France

The speaker abstract has not been received at the time of publication.

Disclosure of interest: Participation to advisory boards, speaker, or investigator for: Amgen, Astellas, Astra Zeneca, Bayer, Celgene, Genentech, Ipsen, Jansen, Lilly, Novartis, Pfizer, Roche, Sanofi, Orion

S38

Christophe Massard
DITEP, Villejuif, France

The speaker abstract has not been received at the time of publication.

Disclosure of interest: Participation to advisory boards, speaker, or investigator for: Amgen, Astellas, Astra Zeneca, Bayer, Celgene, Genentech, Ipsen, Jansen, Lilly, Novartis, Pfizer, Roche, Sanofi, Orion

S39

COMPREHENSIVE GERIATRIC ASSESSMENT AS STRATIFICATION TOOL IN ELDERLY PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES

Francesco Merli
Hematology Unit, Oncology and Advanced Technologies, Denmark

Hematological malignancies (HM) are a heterogeneous group of diseases of different incidence, prognosis and etiology.

Among them, chronic lymphocytic leukemia (CLL) and diffuse large B cell lymphoma (DLBCL) are the most frequent HM observed in elderly patients. For both CLL and DLBCL, standard therapies are available and are usually proposed to FIT patients to achieve the best quality of response, the longest Progression Free Survival in CLL and the higher cure rates in DLBCL. Standard therapies however are also associated to adverse events that are manageable in young FIT patients,

but turn treatment choice, into a challenging decision for elderly patients or for patients with comorbidities. It is then appropriate to modulate treatment intensity and to carefully define treatment objectives in the single patient.

Recently objective tools have been suggested to assess the patients status approach of elderly patients and a three group model seems appropriate to:

- FIT, those patients with no comorbidities and candidates for chemotherapy at full doses
- UNFIT, those patients with intermediate comorbities and candidates for adapted treatment
- FRAIL, those patients with severe comorbities and candidates for palliative intent.

For CLL, the most common instruments used for this are based on Eastern Cooperative Oncology Group (ECOG) Performance Status valutation, Comorbidity Index Rating Scale for Geriatrics (CIRS-G) to measure comorbidity with a cut-off of 6 and creatinine clearance with a cut-off of 70 ml/min.

Tucci et al. evaluated DLBCL patients, aged ≥65 years, with the "Comprehensive Geriatric Assessment" (CGA) prior to therapy using activity of daily living (ADL) scale with a full score 6, instrumental ADL with a full score 8, and CIRS to define patient fitness status. CGA identified age-related problems not typically identified by medical history and physical examinations in approximately half of older cancer patients. FIT patients were ≥80 years, with 5 ADL, 7–6 IADL and from 5 to 8 grade 2 comorbidities; FRAIL patients were ≥80 years, with ADL≤4, IADL≤5 and at least 1 grade 3–4 comorbidities or >8 grade 2 comorbidities. In this study, CGA has been confirmed as very efficient in identifying elderly patients with DLBCL who could benefit from a curative approach. Considering patients treated with curative intent overall, the survival of FIT patients was significantly better than the survival of non-fit patients (88% vs. 56%) (p=0.0001).

Currently, Fondazione Italiana Linfomi (FIL) is conducting a prospective study with the aim of validating the use of CGA on a large series of elderly patients with DLBCL (≥65 years) and to test a CGA based approach to the patient. So far 800 patients out of 1000 planned have been enrolled. Interestingly, preliminary data showed that 59% of patients were not FIT. Treatment with curative intent (full doses R-CHOP-like regimens) was used in 94% and 65% of FIT and UNFIT cases; surprisingly, curative intent was declared also in 38% of FRAIL cases. Six percent, 25% and 26% of FIT, UN and FR patients were treated with an attenuated R-CHOP-like immunochemotherapy regimen. Palliative regimens were used in 36% and 10% of FR and UN patients respectively. Rituximab and doxorubicin containing regimen seems to be the reference treatment for FIT, UN and also for a significant proportion of FR patients but the actual value of using this approach for non-FIT patients is not clear and will be assessed with this project.

Disclosure of interest: None declared

S40

QUALITY OF LIFE

Stefania Migliuolo
Europa Donna, Milan, Italy

Europa Donna Italia, a member of the breast cancer coalition "Europa Donna", whose members are affiliated groups from 47 countries throughout Europe, is an independent non-profit organisation that represents the interests of Italian women regarding breast cancer to local and national authorities. The movement is aimed to raise awareness on breast cancer, ranging from screening to diagnosis and therapeutic approach and to mobilise the support of Italian women in pressing for appropriate screening and optimal treatments.

The advocacy priority actions of Europa Donna Italia are:

- establishing population-based mammography screening programmes in all Italian Regions, according the European Guidelines. In view of life expectancy increase, Europa Donna Italia aims to obtain free mammography screening also for women over 70 years of age.
- implementing Breast Units in every Italian Regions, accordingly with the EU and Italian guidelines.

A Breast Unit is a fully equipped, quality assured, dedicated breast center that provides competent and comprehensive care. In a Breast Unit any patient, be she young or elder, is cured by a multidisciplinary team of breast specialists: each specialist is important to assure the most appropriate screening, diagnosis and treatment (from genetics and prevention, through treatment and patient support).

Researches have shown that Breast Units patients have shown a reduction of preventable breast cancer mortality by 18%; this result has been achieved thanks to:

- the action and support of the multidisciplinary team and its synergy;
- the reduction of treatment-related stress in cancer patients;
- the opportunity to adjust treatment according to a personalized care path.

The multidisciplinary approach — which requires the presence of a volunteer association to support the patient — is associated with a better perception of the patient's quality of life not only physically but also socially: the elderly cancer patient, who often suffers from co-morbidities, can receive special benefits from it.

The therapeutic care model of the Breast Unit is nowadays considered a model for the approach and treatment to other tumors.

Disclosure of interest: In the role of CEO of a Healthcare communication agency, I had/have relationships with the following Pharmaceutical companies, creating and managing communication projects: Novartis, Pfizer, PfizerCH, Fidia, Sanofi, Menarini, Gilead, Merckserono. In the role of volunteer for Europa Donna, in medical and scientific congresses and meetings, I exclusively represent Europa Donna organization

S41
Olivier Mir

The speaker abstract has not been received at the time of publication.

S42
Loïc Mourey

The speaker abstract has not been received at the time of publication.

Disclosure of interest: Sanofi Aventis: personal fees & non-financial support; Astellas: personal fees and non-financial support; Janssen: personal fees & non-financial support; Pfizer: personal fees and non-financial support; Novartis: personal fees & non-financial support; Ipsen: personal fees; Roche: non-financial support; GSK: grant

S43
WEARABLE AND HOME SENSORS
Arash Naeim
David Geffen School of Medicine, Department of Medicine, Los Angeles, CA, USA

As the baby boomers age and the population rapidly increases, technology will be an important component in assessment, monitoring, and treatment decision-making for older adults. This presentation will review the important research considerations in using wearable and home sensors in older cancer patients. I will highlight the UCLA's SMART Home Lab, a mock residence where researchers can test the reliability and resilience of home health sensors, as well as the integration of sensing technology in clinical translational research units for patient testing and validation. I will discuss the flexibility, adaptability and mobility of wearable and remote health systems in risk stratifying, monitoring and delivering information to patients. This presentation is in the context of UCLA's new Center for SMART (Systematic, Measurable, Actionable, Resilient and Technology-driven Health) Health, which is fostering collaboration among engineers, computer scientists, clinicians and biomedical researchers. Research teams are collaborating on mobile technology, big data analytics, screening technologies and medical robotics in order to address challenges in the way health care is delivered. I will share some of the Center's various first projects related to older cancer patients.

Disclosure of interest: Invista Health Inc. (Founder and Shareholder), a company focused on remote monitoring of older individuals

S44
THE IMPACT OF RADIATION THERAPY ON THE QUALITY OF LIFE OF OLDER PATIENTS
Anita O'Donovan
Trinity College Dublin, Discipline of Radiation Therapy, School of Medicine, Dublin, Ireland

Approximately half of all cancer patients will require radiotherapy at some point during the treatment trajectory, with the majority of these being older patients. Radiation therapy is a cancer modality that can be an excellent option for older patients due to its limited systemic toxicity. Although widely used, there have been limited radiation oncology clinical trials designed specifically for the elderly, until recent times.

Changes in modern radiotherapy delivery will also have an impact on toxicity, with hypofractionation increasingly used in specific sites. Patient treatment times can thus be shortened with distinct advantages from a logistical and socioeconomic perspective, as well as on a patient's quality of life. Newer treatment modalities potentially allow the reduction of side effects through greater use of modulated techniques and improved imaging during treatment.

Comprehensive geriatric assessment (CGA) should be performed before radiotherapy commences in order to establish baseline functioning and to pre-empt potential issues that may impact quality of life. This helps to develop a comprehensive management and care plan because it distinguishes between age-related changes and those caused by the radiotherapy itself. In this talk, I will discuss the vital role of CGA and continuous supportive care for older patients in managing the effects of radiotherapy, as well as improving quality of life.

Radiotherapy is a safe and effective treatment option for older adults. The risk of serious complications after radiation therapy is small. However, radiation therapy requires an individualised approach to ensure optimal quality of life after treatment.

Disclosure of interest: None declared

S45
PREHABILITATION BEFORE SURGERY
Nina Ommundsen
Oslo University Hospital, Geriatric Department, Oslo, Norway

Functional disability is an important predictor of outcome in older cancer patients. In the time period between diagnosis and surgery, functional capacity can be improved by a variety of means, such as optimisation of comorbidities, improved nutritional status and cardiopulmonary function. This concept of prehabilitation has been utilised in the setting of orthopaedic surgery and cardiac surgery with positive effects.

Effects have also been found in studies on older cancer patients, but there is heterogeneity both regarding patient selection and type of intervention.

Prehabilitation in oncological surgery is evolving, particularly in the field of colorectal cancer. The lecture will give a presentation of the literature on this topic.

Disclosure of interest: None declared

S46

STEREOTACTIC AND OTHER PROMISING ADVANCED RADIATION TECHNIQUES IN ELDERLY

Cécile Ortholan

Department of Radiation Oncology, CHPG, Monaco

Radiation therapy in elderly patients has some particularities: radiation oncologist often have to adapt the treatment schedule to minimize the toxicity and to decrease the number of sessions.

Stereotactic radiotherapy is a technic of radiation therapy that uses focused radiation beam, to deliver high dose in a small volume, in 1 to 5 sessions. Toxicity of such a treatment is law in trained team. In elderly patients, stereotactic radiation therapy could be indicated in small localized tumors to replace surgery, or in oligometastatic disease to replace systemic treatment.

For elderly patients with larger tumor or tumor requiring prophylactic irradiation, hypofractionated schedule could be an option. These schedules of radiotherapy deliver higher dose per fraction, in a shorter amount of time than traditional treatments. High conformational technique should be used to minimize immediate and delayed toxicity.

To date, few prospective data are available to evaluate all these techniques in elderly patients. Some randomized trials are ongoing.

Disclosure of interest: None declared

S47

PROSTATE CANCER

Heather Payne

University College Hospital, London, Oncology, London, UK

Prostate cancer is the most commonly occurring cancer and the second leading cause of cancer-related death in men in the European Union (EU) and the United States of America (USA). It has been estimated that around 1 man in 7 will be diagnosed with prostate cancer during his lifetime.

Prostate cancer is a disease that increases with age and is commonly seen in older men. It is currently estimated that over 65% of cases are diagnosed in men over the age of 65 and the average age at presentation is 70 years. The number of men living with all stages of prostate cancer will increase in the coming decades as men continue to live longer.

The treatment opportunities for all men with prostate cancer should be decided by their health status and personal choices but not by chronological age.

It is important to assess the older men carefully and especially to identify the 'vulnerable' men who with geriatric intervention are likely to be able to be offered standard therapy. The G-8 Geriatric Screening Tool is an efficient and excellent way to assess those men who may benefit from comprehensive geriatric evaluation.

In this session, I would like to concentrate on the challenges of treating men who present with or progress to advanced prostate cancer. We will consider the current therapy options of hormonal therapy and chemotherapy and the results for older men treated with these drugs in clinical trials and the special considerations we needed for us to successfully use these compounds in our everyday clinics

Disclosure of interest: Heather Payne has attended and received honoraria for advisory boards, travel expenses to medical meetings and served as a consultant for AstraZeneca, Astellas, Janssen, Sanofi Aventis, Takeda, Amgen, Ipsen, Ferring, Sandoz, Roche and Novartis

---

S48

TREATMENT OF ELDERLY PATIENTS WITH AML

Rebecca Olin

University of California San Francisco, Department of Medicine, San Francisco, USA

Clinical outcomes for older adults with AML have historically been dismal. Determination of fitness for induction chemotherapy, and in parallel fitness for stem cell transplantation, represents the crucial first step in treatment planning. This presentation will discuss emerging data regarding the utility of geriatric assessment in this setting. It will also address recent data on novel therapeutic approaches which have potential to change standard of care in this population.

Disclosure of interest: None declared

S49

Raul Cordoba

The speaker abstract has not been received at the time of publication.

S50

MASCC GUIDELINES IN FATIGUE ADAPTED TO GERIATRIC ONCOLOGY

Fausto Roila

Medical Oncology Division, Department of Oncology, Terni, Italy

Cancer-related fatigue is one of the most common and debilitating symptoms experienced by elderly cancer patients.

Often in these patients fatigue is one symptom within a cluster of other symptoms such as anemia, depression and sleep disorders that may contribute to the development of cancer-related fatigue. Moreover, the elderly are often affected by several co-morbidities (i.e., metabolic, endocrine and cardiovascular disorders) which may cause fatigue.

The pathogenesis of cancer-related fatigue is not yet well understood.

Each patient, especially if elderly, should be screened for fatigue at their initial visit and during the routine subsequent visits. Elderly patients are often reluctant to report fatigue to their clinicians, mainly because they consider fatigue as an unavoidable side effect. Therefore, health care providers should help elderly patients to disclose and describe the fatigue they are experiencing, its intensity and duration, the factors that exacerbate or relieve fatigue and its impact on functioning. An assessment tool may help patients to talk about their fatigue. Unfortunately, no instruments have been specifically developed for elderly cancer patients. The most efficient way of recording fatigue is by using a simple unidimensional severity scale such as a verbal rating scale (none, mild, moderate and severe fatigue) or a numeric rating scale (0–10 scale where 0 equals no fatigue and 10 equals the worst imaginable fatigue). The Brief Fatigue Inventory which has only nine items to measure, it is easy to use and could be studied as measurement tool in elderly cancer patients.

MASCC is now elaborating guidelines on cancer-related fatigue. Unfortunately, only few data are available on elderly cancer patients. Therefore, I will try to adapt MASCC guidelines concerning treatment of cancer-related fatigue to elderly cancer patients.

Both pharmacological and not pharmacological interventions will be presented. Education of the patient and physician regarding this topic is necessary.

About 20 randomized placebo-controlled studies on psychostimulants (methylphenidate, dexmethilphenidate, dexamphetamine, modafinil and armodafinil) have been published. No one carried out specifically in elderly cancer patients. The results of these studies are contrasting and does not permit us to drawn firm conclusions on the efficacy of psychostimulants in the control of cancer-related fatigue. The same is true for antidepressants which are efficacious for depression but not against fatigue. The only efficacious drug is dexamethasone that in a double-blind study in terminal cancer patients reduced significantly the fatigue with respect to placebo. Among the non-pharmacological treatments physical exercise and psychosocial interventions demonstrated some impact on the control of cancer-related fatigue.

Disclosure of interest: None declared

S51

COGNITIVE DYSFUNCTION: WHY DOES IT MATTER IN OLDER PATIENTS WITH CANCER?

Siri Rostoft

Oslo university Hospital, Department of Geriatric Medicine, Oslo, Norway

Aim: To highlight why cognitive dysfunction is one of the most important comorbidities to assess in older cancer patients

Background: The prevalence of cognitive dysfunction and dementia increases with higher chronological age. As the population of older patients with cancer increases, professionals dealing with such patients need to develop skills in recognizing, diagnosing, and dealing with cognitive dysfunction.

Methods: PubMed search of papers addressing cognitive dysfunction in older patients with cancer as well as personal clinical and research experience

Results: Cognitive dysfunction and dementia influences every part of the treatment trajectory for cancer patients such as understanding information about the disease and treatment options and contributing to the decision making, and compliance both with the prescribed treatment and warning signs of side effects. Additionally, both cognitive impairment and dementia impacts life expectancy. The risk of delirium during treatment is higher in patients with preexisting cognitive impairment, and preventive strategies should be put in place. In most cases, patients with cognitive impairment need extensive supervision from health personnel or caregivers during the course of the cancer treatment. If cognitive impairment goes unnoticed by the treating physician, the patient will be a higher risk of a negative outcome.

Conclusion: Doctors treating older patients with cancer need to look actively for signs of cognitive impairment because this comorbidity has immediate implications for every step of the treatment trajectory.

Disclosure of interest: None declared

S52

ARE GLIOBLASTOMA WELL TREATED IN THE ELDERLY?

Patrick Roth

University Hospital Zurich, Department of Neurology, Oslo, Norway

Approximately half of the patients diagnosed with glioblastoma are 65 years or older and the incidence for gliomas in the elderly population is rising for unknown reasons. Glioblastoma, as the most frequent and most malignant subtype, is associated with a particularly poor prognosis. Various molecular markers have gained increasing interest in the last years in patients suffering from glioma. In the elderly, most gliomas display an unfavorable molecular composition such as the absence of IDH mutations. The available treatment options include surgery, radiation therapy and alkylating chemotherapy, mainly with temozolomide.

Data presented at the ASCO meeting 2016 indicate that temozolomide-based radiochemotherapy is superior to radiotherapy alone in elderly glioblastoma patients. This survival benefit is largely restricted to patients with tumors harboring a methylation of the O6-methylguanine-DNA-methyltransferase (MGMT) promoter. In patients who are considered ineligible for combined treatment modality, post-

operative hypofractionated radiotherapy or temozolomide chemotherapy alone is an option depending on the MGMT promoter methylation status based on the results of the NOA-08 and Nordic trials. Treatment options at recurrence include, among others, the administration of nitrosoureas such as lomustine as well as the anti-angiogenic agent, bevacizumab which, however, does not prolong survival according to several phase III studies in patients with newly diagnosed or recurrent glioblastoma. Early involvement of a palliative care team might be warranted in many elderly patients because of the frequently reduced performance status and limited life expectancy. Whether elderly patients may benefit from the currently explored immunotherapeutic approaches such as vaccination or checkpoint inhibition needs further investigation within appropriate clinical trials tailored for this patient population.

Disclosure of interest: None declared

S53

DO WE NEED GUIDELINES?

Florian Scotté
European Hospital Georges Pompidou, Paris, France

Quality of life (QOL) is hard to assess for patient with or without cancer. Who Status as well as Karnofsky's scale are usually used to grade health status. It is evidence that those two scales have no impact on accurate assessment. Edmonton Scale (ESAS) is masterpiece of QOL evaluation for many teams around the world. Early global care (developed as early palliative care), proved its interest in better QOL and survival benefits notably in lung cancer.

First comment is that oncologists and caregivers, in clinical practice, poorly define QOL status.

As well as fatigue is difficult to define, because of its multidimensional cause; QOL needs didactic propositions to be exactly specified. Algorithms clearly conducted and broadcasted may enhance physician's involvement.

Second comment; hurdles of QOL evaluation are notably crucial in elderly population, more frail and likely to deteriorate during cancer disease.

Many scales exist, with a hazardous use in oncological physician population.

Pain, fatigue, nutritional status as well as anxiety, depression and cognitive disorders, should be alleviate but are bad defined and often misjudged.

Supportive treatments may alleviate suffering and enhance daily living, as well as anti-cancer treatment adaptation. Unmet needs must be retrieve and solutions for this must be developed (Patients Reported Outcome, symptom distress list, etc.).

In order to offer a multidisciplinary perspective of patient assessment and practical guidelines, oncologists, geriatric specialists, pharmacists and nurses will be included in the committee.

Patient's view and environment are often better reached by nurses, it's because we incorporated nurses involved in the guideline's topics, to define elderly and stakeholders unmet needs.

Elderly patients have often many co morbidities. In that field, a lot of drugs are used and drug-drug interaction may impact efficacy as well as safety of anticancer treatments (and their support drugs). Networks including pharmacists should be developed in such guidelines propositions.

Disclosure of interest: None declared

S54

Florian Scotté
European Hospital Georges Pompidou, Paris, France

The speaker abstract has not been received at the time of publication.

S55

UPDATES IN SURGERY

Ponnandai Somasundar
Boston University, Surgery, Providence, Rhode Island, USA

The introduction is on the physiological decline and comorbidities resulting in functional decline, improvements in better assessments to improve the surgical outcomes, improvements in techniques resulting in better outcomes such as minimally invasive surgery, better hemostasis, better postoperative care, and better understanding of the biology of the disease in the elderly.

Disclosure of interest: None declared

S56

SPECIAL CONSIDERATIONS WITH REGARD TO COLORECTAL SURGERY IN THE ELDERLY

Andrea Costanzi
Desio Hospital – ASST Monza, General Surgery, Desio (MB), Italy

Advances in colorectal surgery include multimodal treatments, minimally invasive approach, enhanced recovery, prehabilation. All items can be applied to the elderly population which constitutes the majority of the colo-rectal oncologic patients and a good part of the patients affected by benign disease. A correct pre-operative evaluation and a multidisciplinary therapeutic plan offer excellent survival prognosis and a good quality of life to elderly patients

Disclosure of interest: None declared

S57

Pierre Soubeyran
Université de Bordeaux, Medical Oncology, Bordeaux, France

The speaker abstract has not been received at the time of publication.

S58

Pierre Soubeyran
Université de Bordeaux, Medical Oncology, Bordeaux, France

The speaker abstract has not been received at the time of publication.

S59

Pierre Soubeyran
Université de Bordeaux, Medical Oncology, Bordeaux, France

The speaker abstract has not been received at the time of publication.

S60

WHO IS FIT FOR HAEMATOLOGICAL STEM CELL TRANSPLANTATION?

Reinhard Stauder
Medical University Innsbruck, Department of Internal Medicine V (Haematology and Oncology), Innsbruck, Austria

Blood cancer represents a typical disease of the elderly: median age at diagnosis is 74 years in Myelodysplastic Syndromes (MDS) and is around 70 years in frequent malignancies like acute myeloid leukemia (AML), multiple myeloma, diffuse large B-cell lymphoma (DLBCL) or chronic lymphocytic leukemia (CLL). Due to demographic changes in our societies the number of elderly blood cancer patients is increasing strongly. Geriatric assessment (GA) has been introduced in hematological malignancies and reveals a prevalence of impairments in elderly blood cancer patients in ~25–50%. Few studies have so far demonstrated the application of geriatric interventions based on GA. Several analyses have given evidence, that impairments in distinct dimensions of GA impact the clinical outcome of patients. Importantly, two studies have shown that evaluation of impairments is superior to doctor´s best choice. The prediction of chemotherapy toxicity has been elucidated so far predominantly in solid tumors. However, valid data in the evaluation of therapy tolerance in hematological malignancies are lacking so far. Several societies including SIOG and NCCN have started to integrate GA in recommendations and guidelines.

In summary, the integration of GA has revealed restrictions in a relevant proportion of patients and GA represents a relevant prognostic factor. The integration of GA in prediction of tolerance to therapy as well as the integration of GA in recommendations of international societies has just started, represents a relevant challenge for the future and offers enhanced opportunities for the individualized treatment of elderly blood cancer patients.

Disclosure of interest: None declared

S61

WHO IS FIT FOR HAEMATOLOGICAL STEM CELL TRANSPLANTATION?

Reinhard Stauder
Medical University Innsbruck, Department of Internal Medicine V (Haematology and Oncology), Innsbruck, Austria

Hematopoietic stem cell transplantation (HSCT) represents an important option in the treatment of haematological malignancies offering cure in a relevant proportion of patients. Autologous HSCT represents a mainstay in therapy of multiple myeloma, whereas allogeneic HSCT is mainly performed in myeloid malignancies (mainly in AML and MDS) and in lymphoid malignancies. So far application of HSCT was restricted to younger patients due to relevant treatment-related morbidity and mortality. Improvements in supportive care and application of reduced-intensity conditioning regimens have allowed patients in the sixth, and seventh decade to be considered for HSCT.

This presentation will review current results of HSCT in elderly blood cancer patients. Emphasis will be put on patient selection and the possible integration of geriatric assessment in pre-HSCT evaluation and decision-making.

Disclosure of interest: None declared

S62

HEALTH ECONOMICS

Clémence Thébaut
Limoges University (Lecturer Senior)/Dauphine University (Associate researcher), Paris, France

The aim of the presentation is to describe the available data about cost/effectiveness ratio in oncogeriatrics drugs, to analyse the specific methodological issues raised by the assessment of these drugs and highlight the controversies at stakes regarding the public funding given the growing size of the target population.

Disclosure of interest: None

S63

CANCER TREATMENT SYSTEM IN JAPAN AND THE BEGINNING OF PRACTICE IN GERIATRIC ONCOLOGY

Kazuo Tamura
General Medical Research Center, General Medical Research Center, Fukuoka City, Japan

Japan is one of the countries where people aged over 65 is rapidly increasing and they accounted for 26.7% of 126 million populations in 2015 and the rate will be over 30% in 2025. We are already in the aged society which leads to a large number of elderly cancer patients. It has put a heavy burden on the medical as well as Japanese society. To conquer such burden, the Cancer Control Act was implemented in 2007, and one regional cancer treatment hospital (RCTH) was established in 400,000 populations (a total of 399 hospitals). RCTHs are affiliated with a pivotal center for cancer in each prefecture (49 centers) qualified by the Ministry of Health, Labour and Welfare. The main purpose to establish such cancer treatment system is to provide an equal access to the standard cancer care by a multidisciplinary professional team throughout Japan. In each RCTH, Cancer Board is held regularly by physicians and other medical staff to discuss the complicated patients especially for the elderly who often have multiple comorbidities and functional derangement. The Cancer Control Act has also reinforced education and training of oncology in under- and post-graduate education curriculum.

Because of an overwhelming large number of the elderly patients, RCTH alone cannot manage all patients from diagnosis of cancer to the end of life. Therefore, RCTH needs to collaborate with local hospitals and/or primary care physicians who treat patients at home with nurses, care workers and attendants. For example, in Shimane prefecture located in the west-northern district of Japan, senior citizens comprised 32.6% in 0.71 million populations in 2015. Shimane University Hospital has made a 'team oncology' which has established a management system for elderly lung cancer patients. Geriatric assessments are undertaken by nurses or pharmacists on a common assessment sheet in the electric medical record (EMR). Patients' information can be reviewed among the University hospital and 31 local hospitals by using the EMR through an internet and it is also accessible to primary medical offices, pharmacies and nursing homes. They have a trial of treating the cancer patients more closely in collaboration with each other, and also will expand the system to other malignancies.

The Japan Agency for Medical Research and Development (AMED) was established in 2015 to promote and maintain an environment for integrated research and development in the field of medicine. To provide a one-stop service for research expenses, AMED consolidated budgets from 3 Ministries involving education, health and industry. Among many research themes, management of the elderly with cancer is one of the important subjects supported by AMED.

Thus, Japanese society is moving forward to cope with an increasing number of elderly cancer patients by a team in broad sense consisting of cancer professionals, other health care providers and government, and by establishing a regional medical network system further.

Disclosure of interest: None declared

S68

GYNAECOLOGICAL CANCERS

William Tew
Memorial Sloan Kettering Cancer Center, Department of Medicine, Gynecologic Medical Oncology Service, New York, USA

Ovarian cancer (OC) is the leading cause of mortality among patients with gynecologic malignancies. More than half of all OC occurs in women older than 65. Management of newly diagnosed advanced ovarian cancer (OC) typically starts with the combination of extensive debulking surgery and postoperative platinum and paclitaxel chemotherapy. Careful consideration of the chemotherapy dosing, scheduling, route, and timing (neoadjuvant or postoperative) is essential. To determine the safest and most effective treatment, one should consider a pretreatment geriatric assessment (GA) and close cooperation with the gynecologic surgeon. In this session, we will review the current guidelines and evidence of surgery and chemotherapy in the older woman with ovarian cancer and how to coordinate care within a multidisciplinary team.

Disclosure of interest: None declared

S69

Janice Tsang

The speaker abstract has not been received at the time of publication.

S70

MINIMIZING PERIOPERATIVE ADVERSE EVENTS IN THE ELDERLY

Giampaolo Ugolini
University of Bologna, Department of Surgical and Medical Sciences, Bologna, Italy

Elderly patients do not have a worse cancer survival than younger patients; however, it is well known that they are at higher risk of developing postoperative complications because they are often affected by multiple comorbidities. It has been reported that up to 80% of elderly patients might experience a surgical complication that will more often lead to permanent disability and postoperative mortality. The presentation will focus on evidence-based perioperative strategies to improve outcomes of onco-geriatric patients with a particular focus on quality of life and functional recovery after surgery.

Disclosure of interest: None declared

S71

Willemien van de Water
Surgery, Leiderdorp/ Leiden, Netherlands

The speaker abstract has not been received at the time of publication.

S72

IMPROVING NUTRITION STATUS SOONER RATHER THAN LATER

Antonio Vigano
McGill University Health Centre, Oncology, Montreal, Canada

Over 60% of all cancers diagnosed in the USA and Europe are in patients >65 years, with this number expected to rise to 70% by 2030. A study of elderly cancer patients admitted to hospital demonstrated that 71% of patients had experienced ≥10% weight loss and that almost half were underweight. While hospitalization itself can contribute to malnutrition, up to 40% elderly outpatients with cancer may also lose ≥10% of their bodyweight. It has been demonstrated that malnutrition in elderly cancer patients: 1) adversely affects quality of life, 2) is an independent negative prognostic factor, 3) is associated to poor tolerance and response to oncological treatments. For these reasons, early assessment of the nutritional status of elderly cancer patients allows for early interventions that may improve treatment outcomes and quality of life. These interventions are most effective when administered before oncological treatments begin. The abridged patient-generated subjective global assessment (aPG-SGA) is a simple, validated screening tool used to assess nutritional status. It is simple in that it is patient driven, thus reducing the burden on healthcare providers. In a one-page questionnaire, the aPG-SGA identifies four facets of malnutrition: Weight loss, changes in food intake, symptoms that negatively affect nutrition and performance status. Each of these dimensions are scored, allowing healthcare providers to quickly triage patients with the greatest need. Besides the use of aPG-SGA, pre-habilitation (i.e. nutritional, exercise and psychological interventions to optimize nutritional and functional status prior to oncological treatments), was also pioneered at the McGill University Health Centre. This presentation will highlight both research and clinical outcomes from the use of aPG-SGA and pre-habilitation in our centre.

Disclosure of interest: None declared

S73

ARE TOOLS THE RIGHT WAY TO ASSESS QUALITY OF LIFE IN ELDERLY?

Ulrich Wedding
Jena University Hospital, Palliative Care, Jena, Germany

Quality of life is (QoL) an important topic when caring for elderly patients with cancer. Advanced age per se is not associated with poorer QoL, however age associated changes, such as limitation in activities of daily living (ADL), instrumental activities of daily living (IADL), comorbidities, etc. Poorer QoL is associated with shorted survival. Measurement of QoL within clinical routine has demonstrated an improved outcome not only regarding QoL, but other clinical outcomes as well, such as less admissions to hospital or emergency department and even longer survival. Numerous tools to assess QoL in elderly cancer patients are available. Most of them are initially developed for use in clinical trials. Therefore their use in clinical routine is questionable. It is important to communicate to the patient and their relatives the direct need for them, when asking them to answer a QoL questionnaire. In addition there is a not to have to many overlap to other measurements of patient reported out, toxicity, palliative care needs, etc.

Disclosure of interest: None declared

S74

MULTIPLE MYELOMA IN THE ELDERLY

Tanya Wildes
Barnes-Jewish Hospital, Division of Oncology, St. Louis, USA

Advances in the treatment of multiple myeloma have significantly improved survival, yet challenges remain in individualizing therapy to balance effectiveness and toxicity. This presentation will detail the emerging data regarding the use of geriatric assessment to aid in treatment decisions for older adults with multiple myeloma.

Disclosure of interest: None declared

S75

TELEHEALTH – RECENT EXPERIENCES IN ONCOLOGY

Annie Young
University of Warwick, Warwick Medical School, Coventry, UK

Adaptation of telehealth systems to the individual needs and resources of elderly patients within specific frameworks of global healthcare structures, is crucial. These systems should be integrated into the workflow of the healthcare professionals as an improvement and not an add-on. Telehealth presents a huge opportunity to develop new modes of engagement with our elderly patients and their carers and achieve high quality

care. Telehealth in practice is just beginning in oncology: in a systematic review of telemedicine for patients 60 years and over, 3 oncology studies were identified out of 68 controlled interventional studies.

The aim of our study in patients having chemotherapy was to use a small, user friendly (4 buttons) device, developed for the elderly, called the Health-Buddy® to remotely monitor patient's health, during chemotherapy, in their own home. The intention was that timely intervention could help manage side effects of chemotherapy and prevent them from worsening and hence reduce NHS costs. A total of 73 patients were recruited to the study, 40 females aged 30–83 (mean age 59.4), and 33 males aged 20–80 (mean age 63). Patients had the Buddy for an average of 5 months. Out of a total of 119,315 responses in total, 1247 of these were recorded as high-risk alerts, which required healthcare advice. The most common severe symptoms encountered by patients included fatigue, pain, emotional distress and severe diarrhea. Patients had a positive experience of using the health buddy. Our study shows that the device did provide additional supportive care during chemotherapy.

Disclosure of interest: None declared

Available online at www.sciencedirect.com

ScienceDirect

SIOG 2016 – Abstract Submission – Oral Presentations

O01

RELEVANCE OF GERIATRIC ASSESSMENT IN OLDER PATIENTS WITH COLORECTAL CANCER

L. Decoster[1,*], L. Vanacker[1], C. Kenis[2], H. Prenen[2], E. Van Cutsem[2], J. Van Der Auwera[1], E. van Eetvelde[1], K. Van Puyvelde[3], J. Flamaing[2], K. Milisen[4], J. P. Lobelle[5], J. De Grève[1], H. Wildiers[2]

[1]*UZ Brussel, Jette,* [2]*UZ Leuven, Leuven,* [3]*ASZ Aalst, Aalst,* [4]*KU Leuven, Leuven,* [5]*Consultant in Statistics, Beernem, Belgium*

Introduction: With the aging of the population, the incidence of older patients with colorectal cancer (CRC) will continue to rise. Due to the heterogeneity and the lack of specific trials in this population, treatment decisions are complex. An important issue is maintenance of functional status and prevention of toxicity.

Objectives: The aim of the present study was to evaluate the relevance of geriatric assessment (GA) in older patients with CRC and to study predictive markers for functional decline and chemotherapy-related toxicity during cancer treatment.

Methods: Patients with CRC aged ≥70 years were evaluated at baseline using a GA. Results were communicated to the treating physician. At 2-3 months follow-up, activities of daily living (ADL) and instrumental activities of daily living (IADL) were reassessed and in patients receiving chemotherapy, severe chemotherapy-related toxicity was recorded. Determination of predictors of functional decline on ADL and IADL and of grade 3/4 hematological and non-hematological chemotherapy toxicity was performed separately using univariate and multivariate logistic regression.

Results: 193 patients with CRC were included with a median age of 77 years. Baseline GA was considered abnormal in 75% and revealed unknown geriatric problems in 40%. Treatment was altered compared to standard therapy in 37% based on clinical assessment by the treating physician. The GA was actively consulted by the treating physician in 78 patients (43%) and subsequently led to a directed geriatric intervention in nine patients (5%) and additional treatment change in one. At follow up (n=164), functional decline was observed in 29 patients (18%) for ADL and in 60 patients (37%) for IADL. Baseline IADL, depression, fatigue and cognition were predictors for ADL decline while no predictors for IADL decline could be identified. In the 109 patients receiving chemotherapy, stage and baseline fatigue were predictive for grade 3/4 hematological toxicity and baseline ADL, fatigue and nutrition were predictive for grade 3/4 non-hematological toxicity.

Conclusion: Although GA identified previously unknown geriatric problems in more than one third of older patients with CRC, the impact on directed interventions or treatment decisions was limited. In more than half of the patients the treating physician did not consult the GA results before the final treatment decision. Functional decline at 2-3 months occurs frequently, and baseline GA parameters may predict functional decline and chemotherapy-related toxicity. Education of physicians treating older patients with CRC remains an essential step in the further implementation of GA and subsequent interventions.

Disclosure of interest: None declared

Keywords: chemotherapy- related toxicity, colorectal cancer, functional decline, geriatric assessment, older

O02

NATIONAL PATTERNS OF CARE AND OUTCOMES OF OROPHARYNGEAL SQUAMOUS CELL CARCINOMAS IN PATIENTS OVER 70

Z. D. Horne[1,*], J. A. Vargo[1], G. K. Balasubramani[2], D. A. Clump[1], R. L. Ferris[3], D. E. Heron[1], S. Beriwal[1]

[1]*Department of Radiation Oncology, University of Pittsburgh Cancer Institute,* [2]*Department of Epidemiology, University of Pittsburgh,* [3]*Department of Head and Neck Surgery, University of Pittsburgh Cancer Institute, Pittsburgh, USA*

Introduction: Many of the randomized trials which established concurrent chemoradiation (CRT) as standard of care for locally advanced head and neck cancers excluded patients over the age of 65-70. The added benefit of concurrent chemotherapy may be mitigated by the increased risk of complications in elderly subgroups, as highlighted by the MACH meta-analysis, which showed no benefit from the

addition of chemotherapy to radiotherapy (RT) in patients older than 70. The importance of age as a surrogate for comorbidity and other treatment-influencing factors remains unclear and thus, significant controversy exists in clinical practice regarding whether elderly patients benefit from the addition of concurrent chemotherapy to RT.

Objectives: We sought to engage the National Cancer Database (NCDB) to determine treatment patterns and outcomes for patients over 70 years of age with a biopsy-proven diagnosis of SCC of the oropharynx (base of tongue, tonsil, or OPC NOS) in whom chemotherapy would typically be indicated (T3-4 or N+ disease).

Methods: The NCDB was queried for patients over 70 with a diagnosis of OPC SCC. Treatments were divided into the following categories: definitive RT and definitive chemoradiation. Multiple imputation was utilized to account for missing data. Chi-squared analysis was used to determine treatment association. Overall survival analyses were conducted with Kaplan-Meier/log-rank and Cox models.

Results: We analyzed 7,989 patients with OPC SCC at a median follow-up of 46.0 months. Median age was 75 years. Definitive RT was utilized in 19.3% and CRT was utilized in 80.7% of patients (87.5% between ages 70-75 vs 46.6% for age 86+). The use of CRT was positively influenced by: non-African American race, non-Hispanic background, private insurance, base of tongue primary, larger tumor size, younger patient age, increasing nodal burden, higher AJCC clinical stage, male gender, lower comorbidity index, later year of diagnosis, and higher grade.

Five-year overall survival for definitive RT was 21.6% and for CRT was 42.1% ($p<0.01$). CRT conferred a 40% survival advantage in multivariate analysis (HR 0.60 [95%CI 0.556-.647], $p<0.01$). On multivariate analysis, poorer survival was noted in patients with increasing comorbidity score, non-Caucasian race, earlier year of diagnosis, treatment facility in the Western United States, stage 4A/B disease, non-base of tongue/tonsillar primaries, larger primaries, distance from treatment center, and older age (all $p<0.01$).

Conclusion: National practice patterns continue to favor concurrent chemoradiotherapy, even in elderly patients with advanced OPC SCC. Despite the meta-analysis suggesting that the survival benefit of concurrent chemotherapy may be limited to those under 70 years of age, this large national registry-based analysis challenges the paradigm of omitting chemotherapy based purely on advanced age.

Disclosure of interest: None declared

Keywords: HPV, oropharynx, outcomes, patterns of care

O03

GERIATRIC ASSESSMENT AND OUTCOMES WITH CARBOPLATIN AND WEEKLY LOW-DOSE PACLITAXEL IN ELDERLY WOMEN WITH OVARIAN, PRIMARY PERITONEAL OR FALLOPIAN TUBE CANCER: A GYNECOLOGIC ONCOLOGY GROUP STUDY (GOG273)

W. Tew[1,*], H. Huang[2], V. Von Gruenigen[3], A. Hurria[4], T. Herzog[5], L. Landrum[6], R. Salani[7], S. Lele[8], M. Pearl[9], A. Alvarez Secord[10], J. Fiorica[11], T. Rizack[12], W. E. Richards[13], G. Fleming[14]

[1]Dept of Medicine, Gynecologic Medical Oncology Service, Memorial Sloan Kettering Cancer Center, NY, [2]GOG Statistics and Data Center, Buffalo, NY, [3]Summa Akron City Hospital, Akron, OH, [4]City of Hope, Duarte, CA, [5]University of Cincinnati Cancer Institute, Cincinnati, OH, [6]University of Oklahoma, OK, [7]The Ohio State University Wexner Medical Center, OH, [8]Roswell Park Cancer Institute, Buffalo, NY, [9]Stony Brook University Hospital, Stony Brook, NY, [10]Duke Cancer Center, NC, [11]Indiana University, Bloomington, [12]Women and Infants Hospital Rhode Island, RI, [13]Candler Hospital, GA, [14]University of Chicago, Chicago, IL, USA

Introduction: Older women with primary ovarian cancer are less likely to be offered standard cancer treatments, develop more toxicity and have lower survival rates.

Objectives: To better understand this outcome disparity, the Gynecologic Oncology Group (GOG) conducted a prospective cohort trial to explore whether the completion of 4 cycles of weekly low-dose paclitaxel and carboplatin chemotherapy was associated with a baseline geriatric risk score and additional patient-reported outcomes (PROs)

Methods: Eligible women were 70yrs and older regardless of performance status (PS 0-3) with newly diagnosed, pathologic-confirmed adenocarcinoma of the ovary, peritoneum, or fallopian tube. Patients (pts) were planned to receive carboplatin AUC 5 on day 1, paclitaxel 60mg/m^2 over one hour weekly on day 1 and 8 (day 15 was optional) for 4 cycles (q21 days), either after primary surgery or as neo-adjuvant chemotherapy (NACT). Dose reductions at cycle 1 were allowed per physician discretion. The completion of chemotherapy was defined as completing 4 cycles without dose reduction and/or more than 7 days treatment delay on chemotherapy administration on day 1 and day 8. A geriatric risk score (modified CARG score, Hurria et al, JCO 2011) was calculated based on pts's age, functional dependency, social activity, fall history, hearing and labs (Hb, Cr). The PROs (at baseline, pre-cycle 3, and post-cycle 4) included function: instrumental activities of daily living (IADL) and activities of daily living (ADL), quality of life (FACT-O), neurotoxicity (FACT/GOG-Ntx short scale) and social support measures.

Results: 104 evaluable pts were enrolled. Mean age was 78yrs (range: 70-92). Pts were mostly fit (PS 0/1/2/3 = 32%, 53%, 14%, 1%) with advanced stages (stage I-II = 19%; stage III-IV = 81%) who underwent primary surgery (73%) or NACT (27%). 16% pts started at reduced doses of carboplatin (AUC 4) or paclitaxel (<60mg/m^2) at cycle 1 per physician choice. About two thirds of pts (66%) completed all 4 cycles without any dose modification/delay. Adverse events attributed to dose modification were hematologic (n=10), gastrointestinal (n=3), neurotoxicity (n=2) and other toxicities (n=13). The geriatric risk score (mean GRS=6) was not associated with

the completion of 4-cycles chemotherapy without dose reduction/treatment delay (odds ratio: 1.12; 95% CI: 0.93~1.34; p=0.2). Baseline IADL dependency was associated with higher chemotoxicity (OR 0.79; p=0.02). The ADL score (p=0.042), social activity score (p=0.002), and quality of life (FACT-O) score (p=0.004) improved with chemotherapy, while neurotoxicity score worsened (p=0.011).

Conclusion: Carboplatin and low-dose weekly paclitaxel, a standard chemotherapy regimen for women with ovarian cancer, is well tolerated in this elderly population with most able to complete four cycles of treatment without dose modification/delay. Baseline IADL dependency was associated with higher chemotherapy toxicity.

Disclosure of interest: W. Tew: None declared, H. Huang: None declared, V. Von Gruenigen: None declared, A. Hurria Grant/Research Support from: Celegene; Novartis, Consultant for: GTx, Inc.; Boehringer Ingelheim Pharmaceuticals; Carevive; Sanofi, T. Herzog: None declared, L. Landrum: None declared, R. Salani: None declared, S. Lele: None declared, M. Pearl: None declared, A. Alvarez Secord: None declared, J. Fiorica: None declared, T. Rizack: None declared, W. Richards: None declared, G. Fleming: None declared

Keywords: Geriatric assessment, gynecologic cancers, ovarian cancer, quality of life

O04

TAXANE-BASED ADJUVANT TREATMENT IN ELDERLY WOMEN WITH BREAST CANCER. A POOLED ANALYSIS OF 5 RANDOMIZED TRIALS FROM THE HELLENIC ONCOLOGY RESEARCH GROUP

A. Karampeazis[1,*], S. Kallianteri[1], L. Vamvakas[1], N. Kentepozidis[1], P. Katsaounis[1], N. Vardakis[1], K. Kalbakis[1], V. Georgoulias[1]

[1]*Hellenic Oncology Research Group (HORG), Athens, Greece*

Introduction: Taxane-based adjuvant chemotherapy confers benefit to patients with high-risk early breast cancer (BC).

Objectives: To examine the safety and efficacy of taxane-containing regimens in the treatment of older women.

Methods: Data from 5 randomized trials that included a taxane-containing regimen for the adjuvant chemotherapy for BC were analyzed. We examined differences in treatment outcome and toxicity for women aged ≥65 years.

Results: Among 3026 patients, 701(23%) were ≥65 years old (median age 69; range 65-80). Surgical treatment was breast conservative for 45% of patients while 77% had node-positive and 75% had hormone receptor-positive disease. A higher number of elderly patients compared to younger patients discontinued treatment (5.7% vs 2.9%; p<0.001) mainly due to toxicity (60% vs 79%; p=0.013) whereas there was no difference regarding the treatment refusal and the disease progression. The incidence of grade 3 and 4 neutropenia (36.4% vs 29.6%; p=0.006) and thrombocytopenia (0.9% vs 0.3%; p=0.049) was higher in elderly compared to younger patients; however there was no difference in terms of febrile neutropenia (3.4% vs 2.3%; p=0.107) and non-hematological toxicity. After a median follow-up of 5 years, there was no difference in 3 years disease-free survival (DFS) (90% vs 89%; p=0.945) and 5 years overall survival (OS) (92% vs 93%; p=0.202) between older and younger patients, respectively. Within the cohort of older patients, taxane-based combinations were superior to 5-fluoruracil, epirubicin and cyclophosphamide ($FE_{75}C$) regimen in terms of 3-years DFS (93% vs 78%; p<0.001) and 5-years OS (95% vs 75%; p<0.001), respectively.

Conclusion: Taxane-based adjuvant chemotherapy offers significant benefit in elderly breast cancer patients similarly to younger patients with increased but manageable toxicity.

Disclosure of interest: None declared

Keywords: Breast cancer, elderly women, taxane-based

O05

TRANSCRIPTION FACTORS AND CHECKPOINT INHIBITOR EXPRESSION WITH AGE: NEW MARKERS OF IMMUNOSENESCENCE?

L. Dang[1], K. Willard-Gallo[2], S. Garaud[2], H. Duvillier[1], J.-N. Lodewyckx[2], C. Solinas[2], P. De Silva[2], C. Gu-Trantien[2], C. Sibille [3], D. Bron[1,*]

[1]*Hematology,* [2]*Molecular Immunology Unit,* [3]*Antatomo-pathology, Institut Jules Bordet, Brussels, Belgium*

Introduction: Aging is characterized by a progressive decline in immune surveillance that favors tumor development. One mechanism to escape immune surveillance is the upregulation of inhibitory immune checkpoint molecules, such as PD-1 and PD-L1. Another process associated with aging is genetic or epigenetic modifications of tumor suppressor genes (TSGs).

Objectives: This study examined the expression of specific checkpoint molecules (PD-1 and PD-L1) and transcription factors (BACH2 and PRDM1) in lymphocyte subpopulations, for their potential use as markers of immunosenescence.

Methods: Lymphocyte subpopulations were analyzed using multi-color flow cytometry to quantify CD3, CD4, CD5, CD8, CD16, CD19, CD25, CD27, CD45, CD45RA, CD56 and CD197 surface expression. Individual lymphocyte subpopulations (CD3+/CD4+; CD3+/CD8+ and CD19+) were isolated for subsequent molecular analyses using the MACS technology (Miltenyi), with the purity of each lymphocyte subpopulation between 95 and 99%. PD-1 (*PDCD1*), PD-L1 (*CD274*), *IL4*, *IFNG*, *BACH2* and *PRDM1* (Blimp1) mRNA transcripts were quantified in the purified subpopulations using qRT-PCR. BACH2 and PRDM1 protein expression was examined by Western blotting.

Results: Peripheral blood lymphocytes (PBL) were obtained from 40 healthy donors (HDs) aged 20 to 90 yrs, subdivided into <50 (median 36) yrs and ≥50 (median 61) yrs. PBL from 30 untreated patients with chronic lymphocytic leukemia (CLL) were comparatively analyzed. Absolute lymphocyte counts did not vary between the two groups but balance between lymphocyte subpopulations was altered. The number of naïve T cells ($CD45RA^+$) and $CD8^+$ cytotoxic T cells were significantly reduced in the older group (p=0.01 and 0.002). The CD4:CD8 ratio and effector T cell numbers increase significantly with age (p<0.0001 and 0.01, respectively).

PD-1 and PD-L1 gene expression was examined in 35 HDs [18<50yrs and 17≥50yrs] and compared to 30 CLL patients (pts) . PD-1 was significantly upregulated in $CD4^+$, $CD8^+$ T cells and $CD19^+$ B cells (p=0.015; 0.02 and 0.01, respectively) in the older HD group. PD-1 was also upregulated in the three subpopulations isolated from CLL patients (p=0.001; 0.002 and <0.001 respectively) when compared to a similar HD age group. High PD-L1 expression was correlated with increased age in HD B cells (p=0.046) with a further increase detected in leukemic B cells compared with the older HD group (p=0.001).

BACH2-deficient mice have increased numbers of IL4-producing $CD4^+$ T cells and IFNγ-producing $CD4^+$ and $CD8^+$ T cells, with BACH2 known to repress PRDM1 expression in B and T cells. We therefore examined BACH2 and PRDM1 gene expression in the HD groups finding it was significantly downregulated in $CD4^+$, naïve $CD4^+$, $CD8^+$ T cells and $CD19^+$ B cells from the older HD group (p=0.001; 0.005; 0.004 and 0.03). BACH2 expression was further reduced in $CD4^+$, $CD8^+$ T cells and $CD19^+$ B cells from CLL patients compared to HD of similar age (p=0.001; <0.001 and 0.004). In contrast, PRDM1 was significantly upregulated in $CD4^+$ and $CD8^+$ T cells (p=0.003; 0.001) from CLL pts but not in their leukemic B cells. Western blot analysis demonstrated that BACH2 and Blimp1 (*PRDM1*) protein expression in the T and B cell subpopulations was significantly correlated with transcript expression.

Conclusion: These data suggest that PD-1, PD-L1, BACH2 and PRDM1 gene expression is correlated with aging and increased immunosuppression. These effects are even more pronounced in the leukemic B-cells from CLL pts.

Disclosure of interest: None declared

Keywords: Aging, immunosenescence, tumor suppressor gene

O06

OFATUMUMAB AS FRONT-LINE TREATMENT FOR PATIENTS WITH CHRONIC LYMPHOCYTIC LEUKEMIA THAT ARE ELDERLY AND HAVE SEVERE CO-MORBIDITIES AND/OR OTHER MALIGNANCIES

C. Vitale[1], M. Ciccone[1], C. Hinojosa[1], M. J. Keating[1], N. Pemmaraju[1], W. G. Wierda[1], G. Borthakur[1], J. A. Burger[1], A. Ferrajoli[1,*]

[1]*Department of Leukemia, the University of Texas MD Anderson Cancer Center, Houston, USA*

Introduction: Chronic lymphocytic leukemia (CLL) is a disease of the elderly, and patients frequently present with multiple comorbidities, including other cancers. Although common in the real-world clinical practice, these patients are excluded from participation in clinical trials.

Objectives: We designed a phase II study to investigate the activity and toxicity of ofatumumab, a fully human type I anti-CD20 monoclonal antibody, in elderly, unfit patients with CLL.

Methods: This clinical study included patients with treatment-naïve CLL, age ≥65 years, indication for treatment according to 2008 IWCLL guidelines, ECOG performance status of 2-3 and/or Charlson comorbidity index ≥2. Patients having another malignancy or other coexisting serious medical conditions were allowed to enroll in this trial. Ofatumumab was administered intravenously weekly for the first month (300 mg on day 1 and 2,000 mg on days 8, 15, 22), then monthly (2,000 mg on day 1) for a total of 12 months. The first 8 patients received ofatumumab at 1,000 mg instead of 2,000 mg, but the trial was later amended based on reports of increased efficacy with the 2,000 mg dose.

Results: Thirty-four patients were enrolled. Median age was 73 years (range 65-87). At baseline, 18/34 (53%) patients had advanced stage disease. CLL risk profile assessment showed that 59% of the patients had unmutated IGHV, 59% were CD38 positive, 66% were ZAP70 positive, and 29% had del(11q) and/or del(17p). Ten patients (29%) had at least one other cancer diagnosis.

All 34 patients are evaluable for toxicity and survival. Thirty-two patients are evaluable for response, the remaining 2 patients discontinued treatment during the first month, one due to the development of hemophagocytic lymphohistiocytosis (HLH) and the other because of a grade (G)2 allergic reaction. Twenty-four patients achieved a response, for an overall response rate of 75%. We observed complete responses in 6 patients (19%), including 3 patients with negative minimal residual disease, and partial responses in 18 patients (56%). At a median follow up of 23 months (range 3-51 months), 20 patients (59%) remain progression-free. Thirty-two (94%) patients are alive: one patient died of infection two years after receiving ofatumumab and one patient died of complications of HLH.

Infusion-related reactions were the most common treatment-related adverse events (AEs), G1-2 in 17 patients (50%), and G3 in 1 patient (3%). Fifteen patients (44%) experienced G1-2 infectious AEs while one patient had G3 infection. No G4 infections were observed. Additional G3-4 AEs considered to be at least possibly related to the study drug were: diarrhea/nausea/vomiting (G3; 2 patients), hyperglycemia (G3; 1 patient), pulmonary embolism (G3; 1 patient).

Conclusion: Our experience indicates that single agent ofatumumab is a feasible and well tolerated therapeutic approach for treatment-naïve elderly patients with CLL. This treatment was able to obtain durable clinical response in 75% of the patients and was safely administered to patients with severe comorbidities and other cancer diagnoses.

This study was funded by the National Comprehensive Cancer Network (NCCN) Oncology Research Program.

Disclosure of interest: None declared

Keywords: Chronic lymphocytic leukemia, comorbidities, ofatumumab

O07

WHAT EVIDENCE DO WE HAVE FOR TREATING RELAPSED/ REFRACTORY AML IN PATIENTS 70 AND OLDER? A SYSTEMATIC REVIEW OF THE LITERATURE

M. Extermann[1,2,*], M. Sehovic[1], T. Rejlic[2], J. Kim[3], J. Lancet[2,4], B. Djulbegovic[2,4]

[1]*Senior Adult Oncology Program, Moffitt Cancer Center,* [2]*University of South Florida,* [3]*Biostatistics Core,* [4]*Hematology Program, Moffitt Cancer Center, Tampa, USA*

Introduction: The prognosis of acute myeloid leukemia (AML) worsens with age, and older patients treated with intensive regimens often relapse. Prognosis is particularly poor in patients over the age of 70 (70+). However, no systematic review of the evidence is available for 2nd line treatment in this age group.

Objectives: Analyze the published evidence on treating relapsed AML in patients 70+.

Methods: We conducted a systematic review of the literature on treatment of older AML patients in 1st relapse (keywords: acute myeloid leukemia, elderly, relapse, post remission, post induction), published through June 2015, including articles reporting combined data on relapsed/ refractory AML patients. We found 631 articles, of which 64 included at least 20 patients and at least 1 patient aged 70+. Studies that involved the pediatric population(49), did not include patients 70+(56), were not AML studies(81), were not relapse/refractory studies(184), had no reported outcomes of interest(161), and phase I studies(36), were excluded. Data were extracted, grouped, and summarized, using descriptive statistics where appropriate.

Results: Sixty-four articles were reviewed: 8 Phase II single-agent studies, 27 prospective and 15 retrospective cohort studies, and 14 randomized clinical trials (RCTs). Only 3 studies reported data on the 70+ population. Most of these studies used various intensive regimens. Several studies used low dose chemotherapies, targeted therapies, and hypomethylating agents.

Phase II studies reported on a population with median age ranging from 51 to 69. Rates of 2nd complete remission (CR2) were reported in 7 studies and ranged from 8 to 56%. Data on early death rates (30-day mortality) were available in 4 articles and ranged from 11 to 20%. Median overall survival (OS) was reported in 5 studies ranging from 3.2 to 12 months.

Median age in 27 prospective cohort studies ranged from 42 to 73. CR2 rates were reported in 25 studies ranging from 16 to 83%. Early death rates were available in 9 studies ranging from 1 to 21%. Median OS in 15 studies ranged from 2.5 to 14 months.

Median age in 15 retrospective studies ranged from 43 to 70. CR2 rates were available in 13 studies ranging from 10 to 88%. Early death rates were reported in 8 studies and ranged from 3.4 to 22%. Data on median OS were available in 13 studies ranging from 2 to 10.6 months.

Median age in 14 RCTs was from 46 to 73. CR2 rates ranged from 0 to 53%. Early death rates, reported in 8 studies, ranged from 5 to 25%. Median OS data were available in 10 studies and ranged from 2.4 to 11 months.

Only 3 studies reported specific data on the 70+ population. One study using novel agents (clofarabine and temsirolimus) reported data on 21 patients 70 and older, with CR2 rates of 8%. The 2nd study using intensive chemotherapy (high dose cytarabine, mitoxantrone, and L-asparaginase) reported data on 26 patients with CR2 rates of 31% and early death rates of 23%. The 3rd study using low dose chemotherapy (low dose cytarabine, aclarubicin, and G-CSF) reported data on 8 patients with CR2 rates of 50% and median OS of 10 months.

Conclusion: In the current literature, no study included only AML patients 70+ in first relapse. Very few studies reported subgroup data, and their results widely varied. Future studies should address that unmet evidence need by including more AML patients 70+ treated with 2nd line regimens and report specific subgroup results for this population.

Disclosure of interest: M. Extermann Grant/Research Support from: GTx, M. Sehovic: None declared, T. Rejlic: None declared, J. Kim: None declared, J. Lancet Grant/Research Support from: Celgene, Pfizer, Consultant for: AMGEN, Asterias Biotherapeutics, Baxalta, Boehringer Ingelheim, Celgene, Karyopharm Therapeutics, Novartis, B. Djulbegovic: None declared

Keywords: AML, relapsed AML, systematic review

O08

EARLY CASE MANAGEMENT IN THE OLDER FRENCH HEMATOLOGICAL MALIGNANCIES PATIENT RECEIVING CHEMOTHERAPY, PRELEMINARY RESULTS

J. B. Fargeas[1,*], Nicolas Signol, Marie-Agnès Picat, Diane Tilmant-Tatischeff, Julie Abraham, Marie-Pierre Gourin, Arnaud Jaccard, Dominique Bordessoule

[1]*CHU, Limoges, France*

Introduction: As haematological malignancies (HM) occurred mainly in elderly patients (PTS), geriatrics screening tool followed if necessary by a comprehensive geriatric assessment (CGA) are used in routine. If this early assessment leads to identify and manage frailty, or disabilities, it is known that case management (CM) in frailty patients could promote continuity of care, decrease hospitalization rates and preserve quality of life in other pathologies. The aim of this work is to study the benefit of a personalized follow-up managed with early CM by a geriatric team for selected high risk PTS with HM treated by chemotherapy, through clinical visits and nurse phone calls.

Objectives: to assess the effectiveness of an early CM in the follow up of selected frail patients with HM receiving chemotherapy on care organization. Minor objective :1) to describe the nature of team intervention, 2) to observe the ratio of non-planned hospitalisation and severe adverse event occurrence, 3) to report adherence to chemotherapy, 4) to assess patient satisfaction.

Methods: Prospective study on all consecutive PTS, treated by chemotherapy from February to March 2016. Criteria: 1) 70 years and older 2) proved diagnosis of HM 3) first line and relapse sequential intravenous chemotherapy 4) Frail PTS selected by a) nurse geriatric screening with GERH-7 tool b) medical comprehensive geriatric assessment according to the

SIOG recommendations. Were excluded geriatric fit patients, PTS requiring palliative care.

Early CM has consisted in a personalized telephonic follow-up with the nurse case manager at week 1 and 2 after chemotherapy and a nurse or geriatric consultation at week 3 to 4 in outpatient clinic for the second cycle of chemotherapy.

Geriatrics interventions consist in 1) modification of the home care management plan, 2) prescription of more supportive care 3) modification of chemotherapy.

Results: 22 included PTS, mean age 79 years (70 to 95 years), 68% (15/22) older than 80. Sex ratio was 0.83. Histological subtypes: lymphoma (DLCB, MCL, follicular) 36% (8), myeloma 27% (6), MDS or AML 23% (5), CLL 14% (3).

61 early case management performed: 39 phones follow up /44 planed, 5 calls without answer and 22/22 geriatric or nurse consultations. Interventions has been necessary in 19/22 as: increased nurse care in 68%, (15 PTS) among 4 of them upgrading has been necessary after second evaluation; social support 36% (8 PTS) mainly because of absence of caregiver; intensified support care in 32% (7 PTS) as nutritional intervention, specific care for grade 3 toxicity (general practitioner visit, upgrading nausea management, growth factor injection), chemotherapy dose decreasing in 14% (3 PTS) because of poor quality of life after haematologist evaluation. We observed: no interrupted or differed chemotherapy, no emergency department visits or unplanned rehospitalisation, no deaths. 95% (21/22 PTS) were satisfied of this management.

Conclusion: This early case management in malignant hematologic patients management is the first report in this selected population. Preliminary results demonstrate his easily feasibility. The real impact on chemotherapy plan, frailty management, adverse occurrence and unplanned hospitalisation need more inclusion and follow up, going on until May 2017.

Disclosure of interest: None declared

Keywords: Hematological malignancies, chemotherapy, case management

---

O09

DEPRESSION IS ASSOCIATED WITH SLEEP DISTURBANCE IN OLDER ADULTS WITH CANCER

K. P. Loh[1,*], J. Zittel[2], S. Kadambi[2], C. Pandya[1], A. Magnuson[1], M. Flannery[3], K. M. Mustian[4], W. Dale[5], S. G. Mohile[1]

[1]*Hematology/Oncology,* [2]*Medicine,* [3]*Cancer Control,* [4]*Surgery, University of Rochester/Strong Memorial Hospital, Rochester,* [5]*Geriatrics & Palliative Medicine, University of Chicago Medicine, Chicago, USA*

Introduction: Sleep disturbance is a common toxicity in elderly cancer patients. Prior studies found that sleep disturbance often co-exists with fatigue, pain and depression in the cancer population. However, the studied populations were heterogeneous including both young and old patients.

Objectives: The aim of this study was to examine the prevalence of sleep disturbance and co-existing fatigue, pain and depression, and evaluate if the presence of these symptoms were associated with sleep disturbance in older adult cancer patients. We also sought to identify socio-demographics, clinical and treatment characteristics associated with sleep disturbance in this population.

Methods: Our study cohort consisted of 408 patients with solid and hematologic malignancies who were referred to the Specialized Oncology Care & Research in the Elderly (SOCARE) clinics at the Universities of Rochester and Chicago from May 2011 to October 2015. Fatigue was self-reported (yes/no), pain was assessed using a 1-10 Likert scale (≥7 was considered positive), and depression was evaluated using the Geriatric Depression Scale (≥5 was considered positive). The primary outcome was the presence of sleep disturbance which was self-reported (yes/no). Multivariate logistic regression was used to identify variables (age, race, education level, working status, gender, cancer type, cancer stage, prior history of cancer and cancer treatments, fatigue, pain and depression) associated with sleep disturbance.

Results: The median age of the patients was 80 years (SD 7.0, range 55-97); 37% female and 78% had a high school diploma or less. Of the cancer subtypes, 21%, 15%, 23%, 5% and 3% were gastrointestinal, lung, genitourinary, breast and hematologic malignancies, respectively. Thirty-four percent of patients had advanced cancer (stage III or IV) and almost half were treated with palliative intent (48%). Sleep disturbance was self-reported in 40% of the patients, and 16%, 15% and 27% of the total sample had co-existing depression, pain and fatigue, respectively. Patients with depression, pain or fatigue were more likely to report sleep disturbance compared to patients without these symptoms: depression (53% vs. 34%, P=0.0003), pain (48% vs. 33%, P=0.009) and fatigue (49% vs. 25%, P<0.001). On multivariable analysis, female gender [Odds ratio (OR) 2.37, 95% Confidence Interval (CI) 1.15-4.89) and depression (OR 2.33, 95% CI 1.16-4.68) were independently associated with sleep disturbance.

Conclusion: In our study, 40% of older adults with cancer reported disturbed sleep, indicating that clinicians should proactively screen for sleep disturbance. Individuals with depression, pain, or fatigue reported higher rates of sleep disturbance. Notably, high risk individuals included older adults who were female and depressed. On the other hand, cancer diagnosis, stage and treatments were not associated with sleep disturbance. Future studies should explore treatments that target both depression and sleep disturbance.

Disclosure of interest: None declared

Keywords: Depression, sleep

O10

A PHASE II RCT OF THREE EXERCISE DELIVERY METHODS IN OLDER MEN WITH PROSTATE CANCER ON ANDROGEN DEPRIVATION THERAPY

S. Alibhai[1,*], D. Santa Mina[2], P. Ritvo[3], C. Sabiston[4], M. Krahn[4], G. Tomlinson[4], P. Warde[2], A. Matthew[2], S. Durbano[2], M. O'Neill[2], R. Segal[5], N. Culos-Reed[6]

[1]*Medicine,* [2]*University Health Network,* [3]*Cancer Care Ontario,* [4]*University of Toronto, Toronto,* [5]*The Ottawa Hospital Cancer Centre, Ottawa,* [6]*University of Calgary, Calgary, Canada*

Introduction: Androgen deprivation therapy (ADT) is commonly used to treat prostate cancer (PC). However, ADT is associated with significant side effects including declines in quality of life (QOL), physical function, and muscle strength. Existing evidence from multiple clinical trials demonstrates that exercise in this population is associated with improvements in many of these side effects. However, these benefits are most consistently observed with a supervised 1:1 in-centre exercise program which is not economically sustainable in a public health care setting. Alternative approaches such as supervised group and home-based programs are promising but need to be tested rigorously against 1:1 supervised exercise.

Objectives: Our primary objective in this phase II trial was to determine whether group-supervised or home-based supported programs are non-inferior to a supervised 1:1 exercise program in terms of benefits in QOL and physical fitness in men with PC on ADT. Secondary objectives include examination of long-term adherence and cost-effectiveness. Feasibility endpoints included recruitment, retention, and adherence rate, satisfaction, and outcome capture.

Methods: Men diagnosed with histologically confirmed PC, starting or continuing on ADT for at least 6 months or who remained biochemically castrate after stopping ADT were randomized (1 personal training:1 group-supervised:1 home-based). Randomization was stratified by length of ADT use (<3 months versus ≥3 months). QOL, fatigue, and fitness measures were completed every 3 months for 12 months (6 month intervention phase and 6 month follow-up phase). Participants completed 4-5 days per week of moderate-intensity, mixed modality exercise incorporating aerobic, resistance, and flexibility training. Primary outcomes were analyzed using linear mixed effects model with subject-specific random effects and group-by-time interactions.

Results: 59 participants (mean age 69.9 years) were enrolled. The recruitment rate was 28.7% and the retention rate was 71.2%. The only significant between-group difference was observed comparing the home-based approach to the 1:1 arm, with slightly worse Functional Assessment of Cancer Therapy (FACT) Prostate scores in the home-based arm (delta 4.79 points, p=0.0103). All other measures of QOL including the FACT-General and FACT-Fatigue questionnaires were similar between groups. Grip strength was also slightly worse in the home-based arm compared to the 1:1 arm (delta -3.90 kg, p=0.0044). Other fitness measures, including VO2 max, grip strength, and chair stands, were similar between groups. There were no grade 3 or higher adverse effects. Other feasibility endpoints were acceptable.

Conclusion: A group-supervised exercise program in men with PC on ADT appeared to be non-inferior when compared to the gold standard 1:1 supervised exercise program for both QOL and fitness outcomes. A home-based approach also appeared to be non-inferior for most outcomes. These results suggest that a less resource-intensive exercise program may provide similar QOL and fitness benefits and that further investigation of the efficacy and cost-effectiveness of less resource-intensive programs in a phase 3 RCT is warranted. Results and lessons learned from this trial will help to inform a phase 3 trial.

Disclosure of interest: None declared

Keywords: Androgen deprivation therapy, exercise/physical fitness, fatigue, prostate cancer, quality of life

O11

PREVALENCE AND FACTORS ASSOCIATED WITH HIGH LEVEL OF DISTRESS AMONG OLDER CANCER PATIENTS UNDERGOING SURGERY

A. Shahrokni[1,*], L. Elmquist[2], B. Korc-Grodzicki[3] and MSKCC Cancer & Aging Research Program

[1]*Medicine/Geriatrics and Oncology,* [2]*Social Work,* [3]*Medicine/Geriatrics, Memorial Sloan Kettering Cancer Center, NYC, United States*

Introduction: Older cancer patients are at increased risk of suffering high levels of distress (HLD).

Objectives: Our study aims to assess the prevalence of HLD among these patients and its association with sociodemographic and geriatric assessment (GA) factors.

Methods: Older cancer patients were screened for HLD using the Distress Thermometer (DT) as a part of geriatric preoperative evaluation in 2015 DT score ranges from 0 to 10, and those with score ≥4 were considered to have HLD. Sociodemographic (age, gender, marital status, education, and living condition) and GA variables: activities of daily living (ADL), instrumental Activities of Daily Living (ADL), patient-rated Karnofsky Performance Scale (KPS) score, history of falls in the past year, timed up and go (TUG) test, social support (Medial Outcome Study-Social Support Survey), social activity limitation (Medical Outcome Study), weight loss in the past year, depression (geriatric depression scale(GDS)-4item), and vision and hearing quality were captured. Bivariate analysis for the association between each factor and HLD was performed. Variables with statistically significant ($p<0.05$) correlation with HLD were entered into a multivariate analysis model.

Results: In total 584 patients completed DT (median age 80) and 53.1% had HLD. In bivariate analysis, being female ($p<0.001$), marital status other than married ($p=0.02$), and living alone ($p=0.006$) were associated with HLD. Among GA variables, lower KPS ($p<0.001$), lower score in ADL ($p<0.001$), and iADL ($p<0.001$), more limitation in social activities ($p<0.001$), higher depression score ($p<0.001$), poor vision ($p<0.001$), and TUG≥ 10 seconds ($p<0.001$) were associated with HLD. Multivariate analysis showed that being female (OR-2.66, $p<0.001$), living alone (OR=2.17, $p<0.013$), more limited in social activities (OR=1.23, $p<0.001$), and higher depression score (OR=1.44, $p<0.001$) were associated with HLD.

Conclusion: More than half of older cancer patients undergoing surgery experience HLD. Addressing modifiable factors associated with HLD by involving the appropriate health professional and treating depression may improve patients' distress level.

Disclosure of interest: None declared

Keywords: Distress and psycho-social issues, Geriatric assessment, Preoperative assessment, Surgery

O12

CHOOSING TO TRUST: CANCER TREATMENT DECISION MAKING FROM THE PERSPECTIVE OF OLDER ADULTS WITH COLORECTAL CANCER

F. J. Strohschein[1,2,3,*], H. Bergman[4], R. S. Schreiber[5], C. G. Loiselle[2,3]

[1]*Department of Geriatrics,* [2]*Segal Cancer Centre, Jewish General Hospital,* [3]*Ingram School of Nursing,* [4]*Department of Family Medicine, McGill University, Montreal,* [5]*School of Nursing, University of Victoria, Victoria, Canada*

Introduction: In Canada, 53% of new colorectal cancer (CRC) cases and 66% of CRC deaths occur in people 70 years and older, a situation mirrored across North America and Europe. Treatment decision making (TDM) is a significant part of the CRC trajectory, presenting patients with a choice of treatments, or the option to accept or refuse a single recommendation. For older adults, variations in health and functional status, along with exclusion from clinical trials, changes in support networks, and increased tension between quality and quantity of life, present important dilemmas for TDM. Although authors advocate for patient engagement in TDM, little is known about the process from the perspective of older adults with CRC.

Objectives: To gain in-depth understanding of TDM from the perspective of people, aged 70 years or older, with an initial pathological or clinical diagnosis suggesting primary cancer of the colon or rectum, receiving care at a university-affiliated hospital cancer centre in Montreal, Canada.

Methods: This prospective, longitudinal qualitative study is informed by grounded theory methodology. 18 participants (10 men, 8 women), aged 71 to 88 (median=81) years, were purposively sampled and followed through their initial treatment trajectories of 3.2 to 17.5 (median = 7.1) months. Interviews were conducted before treatment began and after initial treatment was completed. Between interviews, participants recorded thoughts and experiences in a written or audio diary and/or through brief phone calls/visits with the researcher. 281 audio-recorded interactions and 234 diary entries were documented and excerpts transcribed verbatim. Demographic and medical information was collected. Data collection and analysis were concurrent, guided by constant comparison. Member-checking provided additional insight and NVivo10 software facilitated the analytic process.

Results: When faced with CRC, participants were shocked by the diagnosis and felt turned inside out by the symptoms, side effects, and complications of disease and treatment. Many interpreted these threats in relation to bodily changes associated with aging, while contemplating the number of years left, and holding onto hope became an important concern. Choosing to trust was the primary way they held onto hope, aligning themselves with the health care system to receive medical care and treatment. After describing a clear decision point to step into the healthcare system and proceed towards treatment, participants experienced a strong momentum propelling them to and through medical treatment. As long as they were able to manage the momentum, they continued to trust the team and remain engaged in care. When they felt unable to manage the demands, trust was broken and they hesitated or stepped out of the momentum.

Conclusion: Trust plays a central role in TDM among older adults with CRC. The substantive theory constructed herein informs identification of personal, systemic, and socio-political factors shaping trust, and thus TDM. Interventions are needed to support the work older patients do to situate their diagnosis, proposed treatment, and current health status. Multidisciplinary collaboration is key, informing appropriate treatment recommendations and supporting older patients' ability to manage the treatment-related momentum. With further corroboration, study findings may be used to inform personalized care and illness management and mobilize appropriate health resources for older adults with cancer and their families.

Disclosure of interest: None declared

Keywords: Aged, colorectal cancers, patient acceptance of healthcare, treatment decision making

O13

LONG TERM OUTCOME IN ELDERLY SURGICAL CANCER PATIENTS

S. Stokmans[1,*], E. Rotteveel[1], H. van der Wal - Huisman[1], G. de Bock[2], A. Absalom[3], B. van Leeuwen[1] and PICNIC study group

[1]*Surgical Oncology,* [2]*Epidemiology,* [3]*Anesthesiology, University Medical Center Groningen, Groningen, Netherlands*

Introduction: The majority of cancer patients are over 64 years of age and most of them are in need of surgery. High occurrence of morbidity and mortality are of major concern in this onco-geriatric population. Therefore there is an urgent need for factors predicting these adverse events to facilitate the surgical decision-making process. It is known that certain frailty indicators can predict short term morbidity and mortality; however, predictors of long-term mortality are unclear.

Objectives: To identify if known frailty indicators (being the handgrip strength test (HGS), timed up and go test (TUG) and Groningen frailty indicator (GFI)) can predict morbidity and long-term mortality among elderly patients undergoing surgery for solid malignancies.

Methods: This is a large single-center prospective observational cohort study including patients of 65 years and older undergoing a surgical procedure for a solid malignant tumor. The timed up and go test (TUG), handgrip strength test (HGS) and Groningen Frailty Indicator (GFI) were performed preoperative, 2 weeks postoperative and 3 months postoperative. Primary endpoints were 30-day morbidity and 1 year mortality.

Results: There were 254 patients evaluated between September 2010 and May 2015. Mean duration of follow up was 38.5 months (range 12-68 months). Mean age was 72 years, 52.8% were male and the majority was treated for colorectal carcinoma (29.5%), and malignancies of skin (13%) and soft tissue (11%). Sixty-three percent of patients

underwent major (intra-thoracic or intra-abdominal) surgery. Baseline measures for TUG, HGS and GFI were 8.7 sec, 31.7 kg and 2.3 (scale 0-15) respectively; all measures are within the normal range indicating that this was a non-frail population. Nearly fifty-three percent of patients encountered a complication. Most complications were Clavien Dindo grade 1 or 2 (78.7%), five patients deceased as a result of a grade 5 complication (1.6%). Mortality after 30 days was 1.6%. Three month mortality was 2.0% and 1 year mortality was 13.8%. Univariate logistic regression showed a significant association between 1 year mortality and GFI score preoperative (p value 0.010, OR 1.28) and GFI score after 3 months (p value 0.027, OR 1.19). In multivariate logistic regression this association was not significant anymore. GFI score at discharge was not significantly associated with 1 year mortality. There weren't any significant associations between any of the frailty indicators and short-term mortality. GFI both at discharge and at 3 months postoperatively were significantly associated with 30-day morbidity (p value 0.002, OR 1.19 respectively p value 0.011, OR 1.17) in univariate regression analysis. In multivariate regression, GFI at discharge remained significant (p value 0.048, OR 1.162).

Conclusion: We found a significant relationship between 1-year mortality and GFI score both at admission and 3 months postoperatively. Interestingly, the GFI score at discharge was not associated with mortality although it did show a significant relationship with 30-day morbidity. Therefore, the Groningen frailty indicator can be used as a predictor of both morbidity and long-term mortality and surgeons should consider this factor in the surgical decision process.

Disclosure of interest: None declared

Keywords: Frailty indicators, long term mortality, surgery

O14

INCLUSION OF ELDERLY PATIENTS IN ONCOLOGY CLINICAL TRIALS

O. Le Saux[1,*], C. Falandry[2], H. K. Gan[3], B. You[4], G. Freyer[5], J. Péron[5]

[1]*Geriatric oncology,* [2]*Centre Hospitalier Lyon Sud, Pierre-Bénite, France,* [3]*Medical oncology, Austin Health, Heidelberg, Australia,* [4]*Medical oncology,* [5]*Institut de Cancérologie des Hospices Civils de Lyon, Pierre-Bénite, France*

Introduction: The creation of International Society of Geriatric Oncology (SIOG) in 2000 was an important landmark in the field of geriatric oncology as one main goal of this society is to increase the relevance of clinical trials for older patients and improve research in the field of geriatric oncology.

Objectives: We undertook a review of changes in inclusion and reporting on elderly patients between the time of its creation and ten years after.

Methods: Two researchers (OLS and JP) defined a search strategy on MEDLINE via PubMed (http://www.pubmed.gov) to identify all reports of clinical trials (phase I, phase II, and phase III trials) assessing therapies for hematological or solid tumors and dedicated to the elderly (at least using a chronological landmark to define the elderly). Another research was performed to identify all phase III clinical trials assessing therapies for hematological or solid tumors among adults in order to identify subgroup analyses of elderly patients. One researcher (OLS) performed the literature search. In case of uncertainty, another researcher (JP) reviewed the study and appropriateness for inclusion in this study was achieved by consensus. Reports were included if they were published in English between January 1st 2001 and December 31st 2004 or between January 1st 2011 and December 31st 2014.

Data extraction was completed by the same authors who carried out the initial article selection (OLS and JP). The work was split up between them and each author double checked the other's data.

Results: A total of 1084 trials were included: 366 and 718 from the first and second time period respectively. We identified 264 clinical trials including only elderly patients (or elderly patients along with unfit patients -impaired functional status or comorbidities-), over the two time periods: 27 phase I clinical trials, 193 phase II trials and 43 phase III clinical trials.

The number of clinical trials reporting specifically on elderly patients increased from 128 to 415 between the two time periods. This increase in absolute number (more than three times) was mostly related to an increased number of dedicated phase I trials and subgroup analyses of phase III RCTs.

A large proportion of phase III trials published between 2011 and 2014 reported at least one analysis dedicated to elderly patients (46.7%) versus 19.3% during the first time period. The use of subgroup analyses of elderly patients in phase III trials was the most frequent source of information. Subgroup analyses were more frequent among trials with industrial funding, trials published in high impact factor journal, intercontinental trials, and trials with large sample size. The age threshold defining the elderly subgroup increased over time.

Conclusion: Elderly patients have become a topic of interest during the past decade. However, data available is mostly extracted from subgroup analyses, which can only be regarded as preliminary evidence.

Disclosure of interest: None declared

Keywords: Clinical trials, geriatric oncology, neoplasms

O15

LARGE OUTCOME DISPARITIES BY OLDER AGE AND 21-GENE RECURRENCE SCORE (RS) RESULT IN HORMONE RECEPTOR POSITIVE (HR+) BREAST CANCER (BC)

S. Shak[1,*], V. I. Petkov[2], D. P. Miller[1], N. Howlader[2], L. Penberthy[2]

[1]*Genomic Health, Redwood City,* [2]*National Cancer Institute, Bethesda, United States*

Introduction: BC diagnoses in older patients (pts) are rising as population demographics change and life expectancy increases. There is a growing global awareness of under-treatment of BC in the elderly in general, and the TEAM study (N=9,766) reported worse outcomes for older pts with HR+ BC.

Table 1 (abstract O15)

	RS <18			RS 18-30			RS ≥31		
	N	CT (% of N)	5-y BCSM (95% CI)	N	CT (% of N)	5-y BCSM (95% CI)	N	CT (% of N)	5-y BCSM (95% CI)
All pts	21760	7%	0.4 (0.3,0.5)	15152	35%	1.4 (1.1,1.7)	3222	70%	4.5 (3.5,5.8)
<70 y	19137	8%	0.3 (0.2,0.4)	13549	37%	1.2 (0.9,1.5)	2801	72%	3.7 (2.8,4.9)
≥70 y	2623	2%	1.2 (0.6,2.2)	1603	15%	2.8 (1.9,4.2)	421	53%	11.7 (7.1,18.9)

There is limited information of the effectiveness of multi-gene assays in older breast cancer patients.

Objectives: To investigate the role of the 21-gene Recurrence Score (RS) in guiding cost-effective treatment, SEER and Genomic Health collaborated (npj Breast Cancer, 2016;2:16017) to evaluate BC-specific mortality (BCSM) by age and RS results.

Methods: Oncotype DX RS results were provided electronically to SEER, per registry linkage methods. Eligible pts were diagnosed (Jan 2004 - Dec 2011) with N0 HR+ BC, and had no prior malignancy or multiple tumors. BCSM, defined previously (*JNCI*. 2010;102:1584), was analyzed separately for pts <70 and ≥70 y. Mortality estimates were compared using a log-rank test.

Results: Of 184,190 eligible pts, 70%/30% were <70 y/≥70 y. 35,487 of 128,712 pts <70 y (28%) had RS results (median age 55 y; 29%/54% grade 1/2; 26%/54% ≤1 cm/≥1-2 cm). 4,647 of 55,478 pts ≥70 y (8%) had RS results (median age 73 y; 25%/55% grade 1/2; 20%/48% ≤1 cm/≥1-2 cm). Reported CT use and 5-y BCSM are shown in Table 1. CT use was lower for pts ≥70 y (p<0.001). Continuous RS result was associated with BCSM for pts both <70 and ≥70 y (p<0.001). As expected, 5-y other-cause mortality was higher in pts ≥70 y (11%) than in pts <70 y (4%), but was not associated with RS results (p=0.92). 5-y BCSM was worse for pts ≥70 y, particularly for those with RS ≥18 (p<0.001). For pts ≥70 y with no RS assay (50,422 pts; 4% CT use), 5-y BCSM was 5.4% (95% CI, 5.2%, 5.6%).

Conclusion: This large population-based observational study of N0 HR+ BC indicates that RS strongly predicts BCSM in pts <70 and ≥70 y, and that unacceptably high BCSM persists in US clinical practice for pts ≥70 y with an RS ≥18 (but not RS <18). Further research and actions are urgently needed to understand and address the factors behind this outcome disparity.

Disclosure of interest: S. Shak Shareholder of: Genomic Health, Employee of: Genomic Health, V. Petkov: None declared, D. Miller Shareholder of: Genomic Health, Employee of: Genomic Health, N. Howlader: None declared, L. Penberthy: None declared

Keywords: Breast cancer, elderly, multi-gene assay, prognosis

O16

PRIMARY ENDPOINTS TO ASSESS TREATMENT EFFICACY IN CLINICAL TRIALS CONDUCTED IN ELDERLY CANCER PATIENTS

F. Etchepare[1,*], C. Terret[2], F. Bonnetain[3], P. Soubeyran[4], L. Mourey[5], D. Heitz[6], E. Brain[7], A. Bellenguez[8], C. Bellera[9], S. Mathoulin-Pélissier[10]

[1]*Inserm U1219 Research Centre, Epicene Team (Epidemiology of Cancer and Environmental Exposure), Clinical Research and Clinical Epidemiology Unit, French National Cancer Institute (INCa) Integrated Cancer Research Site (SIRIC), Institut Bergonié, Comprehensive Cancer Centre, Bordeaux,* [2]*Department of Medical Oncology, Centre Léon Bérard, Regional Comprehensive Cancer Centre, Claude-Bernard Lyon-1/ Université de Lyon, Lyon,* [3]*Unité de Méthodologie et qualité de vie en oncologie, EA3181, CHU Besançon, Besançon,* [4]*French National Cancer Institute (INCa), Integrated Cancer Research Site (SIRIC), Department of Medical Oncology, INSERM U1218, Institut Bergonié, Comprehensive Cancer Centre, Université de Bordeaux, Bordeaux,* [5]*Service d'Oncologie Médicale, Institut Claudius Regaud, IUCT-O, Toulouse,* [6]*Service de Geriatrie, Hopitaux Universitaires de Strasbourg, Strasbourg,* [7]*Service d'Oncologie Médicale, Hôpital René Huguenin/ Institut Curie, Saint-Cloud,* [8]*Inserm U1219 Research Centre, Epicene Team (Epidemiology of Cancer and Environmental Exposure), Clinical Research and Clinical Epidemiology Unit, Institut Bergonié, Comprehensive Cancer Center,* [9]*Inserm U1219 Research Centre, Epicene Team (Epidemiology of Cancer and Environmental Exposure), Clinical Research and Clinical Epidemiology Unit, Institut Bergonié, Comprehensive Cancer Centre,* [10]*Inserm U1219 Research Center, Epicene Team (Epidemiology of Cancer and Environmental Exposure), Clinical Research and Clinical Epidemiology Unit, Institut Bergonié, Comprehensive Cancer Centre/Université de Bordeaux, Bordeaux, France*

Introduction: For randomized controlled trials (RCT) run in oncology, the validated and most objectively defined evaluation criterion remains overall survival (OS - delay between randomization and death), although endpoints such as progression-free survival (PFS) or disease-free survival (DFS) are more commonly used. Nowadays, the priority given to living better, and ideally also longer, challenges the relevance and accuracy of these tumor-specific endpoints to assess the benefit/risk balance of new strategies, especially in elderly patients.

Geriatric oncology experts and task forces led by the International Society of Geriatric Oncology (SIOG) and the European Organization for Research and Treatment Cancer (EORTC) have acknowledged the heterogeneity of primary endpoints used in RCT conducted in elderly cancer patients. In France, DIALOG (Dialogue Intergroupe pour la

personnALisation de la prise en charge en OncoGériatrie) has been launched in 2014, combining the cooperative group GERICO/Unicancer dedicated to clinical research in geriatric oncology and the large network of the Unités de Coordination en Oncogériatrie (UCOG). It brings together expert forces (clinicians and epidemiologists) to address issues related to design of trials in elderly cancer patients.

Objectives: Our objective was to conduct an overview of criteria used as primary endpoints in RCTs for elderly cancer patients.

Methods: French trials conducted between 1998 and 2015 were identified based on trials' registries, scientific societies and cooperative groups: Institut National du Cancer (INCa), Société Francophone d'Onco-Gériatrie (SoFOG), GERICO/Unicancer, Association de Recherche sur les CAncers dont Gynécologiques (ARCAGY-GINECO), Groupe Français de Pneumo-Cancérologie (GFPC), Fédération Francophone de Cancérologie Digestive (FFCD), GERCOR/Groupe Coopérateur Multidisciplinaire en Oncologie. Information collected included: phase of the trial (1, 2, 3), nature and target of primary and secondary endpoints. The nature of the primary endpoint was described as single or combined, including composite endpoints (e.g. PFS), co-primary endpoints (e.g. tumor response and tolerance), or co-primary and composite endpoints [e.g. OS and quality of life (QoL)]. In addition, target of the endpoint was classified as "cancer-related" (e.g. OS, tumor progression, toxicity), "geriatric" (e.g. QoL, autonomy), or "other" (e.g. feasibility of treatment, patients' adherence to treatment).

Results: Of 102 trials listed, most were phase II (n=46) or phase III (n=31). Sixty-four (62.7%), 27 (26.5%) and 20 (19.6%) trials used cancer-related, geriatric or other target criteria for primary endpoint respectively. Composite and co-primary endpoints were frequently used in 54 (59.3%) and 10 (11%) trials respectively.

Conclusion: This work illustrates the important heterogeneity of primary endpoints in RCT for elderly cancer patients, both in terms of dimension/target (tumor-centered versus patient centered) and nature (single primary endpoint, co-primary, composite). Standardization and guidelines on relevant endpoints to be used in RCT for elderly cancer- patients are needed to improve and to allow better comparative analysis across trials and to shape the design of future programs addressing innovative strategies. The ongoing international DATECAN-Elderly project is aimed at developing these recommendations.

Disclosure of interest: None declared

Keywords: Clinical trial, endpoint, geriatric

O17

FRAILTY AND SYSTEMIC INFLAMMATION-BASED GLASGOW PROGNOSTIC SCORE

M. Harneshaug[1,*], L. Kirkhus[1], J. Šaltyte-Benth[1,2,3], B. H. Grønberg[4,5], S. Bergh[1], J. E. Whist[6], S. Rostoft[7], M. S. Jordhøy[3,8]

[1]*Research Centre for Old Age Psychiatry, Innlandet Hospital TRUST, Hamar,* [2]*HØKH, Research Center, Akershus University Hospital,* [3]*Institute of Clinical Medicine, Faculty of Medicine,, University of Oslo, Oslo,* [4]*The Cancer Clininc, St. Olavs Hospital, Trondheim University hospital,* [5]*Department of Cancer Research and Molecular Medicine, NTNU, Norwegian University of Science and Technology, Trondheim,* [6]*Department of Medical Biochemistry, Innlandet Hospital TRUST, Lillehammer,* [7]*Department of Geriatric Medicine, Faculty of Medicine, University of Oslo, Oslo,* [8]*The Cancer Unit, Innlandet Hospital TRUST, Hamar, Norway*

Introduction: Ageing is associated with a chronic, low-grade inflammatory state, which also is a feature in many age-related diseases such as sarcopenia, dementia, metabolic syndrome and depression. The systemic inflammation-based Glasgow prognostic score (GPS) combines C-reactive protein (CRP) and Albumin, and has been thoroughly validated as an independent prognostic factor in a variety of cancer cohorts. However, few have investigated the relationship between GPS and frailty.

Objectives: To investigate the relationship between frailty identified by using a modified Geriatric assessment (mGA) and the GPS.

Methods: Prospective observational, multicenter study. Eligible patients were ≥ 70 years with a newly diagnosed, histologically confirmed cancer, or first relapse after previous curative treatment. CRP, albumin and mGA were assessed at inclusion. The mGA evaluated 8 different aspects: nutritional- and emotional status, physical performance, cognitive function, comorbidities, polypharmacy, falls and activities of daily living. For each aspect a cut-off value for impairment was defined, and patients with impairment in one or more aspect were categorized as frail. The GPS is scored in the following way: 0 (CRP<10mg/L, Alb≥35g/L), 1 (CRP≥10mg/L or Alb<35g/L) or 2 (CRP≥10mg/L and Alb< 35g/L).The relationship between frailty and GPS was assessed by multivariate logistic regression, adjusted for diagnosis, stage, the use of anti-inflammatory medications (NSAIDs and steroids) and Body Mass Index.

Results: From January -13 till April -15, 255 eligible patients were included. According to the mGa, 50% of the patients were frail. The most common cancer types were colorectal (n= 69, 27%), lung (n= 55, 22%) and prostate (n=47, 18%). A total of 56% (n=143) had distant metastasis, 19% (n= 48) had locally advanced disease and 25% (n= 64) localized disease, 17% used anti-inflammatory medication.

GPS 0, indicative of low risk of systemic inflammation, was seen in 64% (n=162), among whom 43% were frail. Of the 29% (n= 74) who presented with GPS 1(intermediate risk), 53% were frail. GPS 2 was only seen in 8%, however 95% of them were frail. In multivariate logistic regression analysis patients with GPS 2 had an OR of 18.45 (95% CI 2.30; 148.23) of being frail compared with the reference group GPS 0. GPS 2 predicts frailty with a specificity of 99%, but a sensitivity of only 14%.

Conclusion: Data from our cohort shows that there is a strong association between GPS 2 and frailty. Due to the low sensitivity, a GPS score alone cannot be used as a screening tool for frailty, although a GPS 2 indicates frailty with a high specificity.

Disclosure of interest: None declared

Keywords: Frailty, Glasgow prognostic score (GPS)

O18

A CLINICAL SCORE TO PREDICT THE EARLY DEATH AT 100 DAYS AFTER A COMPREHENSIVE GERIATRIC ASSESSMENT (CGA) IN ELDERLY METASTATIC CANCERS, ANALYSIS FROM A PROSPECTIVE COHORT STUDY WITH 1048 PATIENTS

R. Boulahssass[1,*], S. gonfrier[1], M. Sanchez[1], V. Mari[2], C. Rambaud[1], J. M. Ferrero[2], D. Saja[2], J. M. Turpin[1], A. Gary[1], E. Francois[2], O. Guerin[2]

[1]*Chu de Nice,UCOG Paca Est,* [2]*Centre antoine Lacassagne, Nice, France*

Introduction: Trying to predict the very early death after a CGA is difficult in elderly metastatic cancers. Last year, we presented a clinical score to predict this risk in 815 elderly cancer patients (Boulahssass et al 9511 ASCO 2015).

Objectives: The aim of this new study is the next step by developing a score to estimate the risk of early death at 100 days in metastatic cancers (MC) in order to have the collective wisdom not to overtreat this population.100 days is nearly 3 months, if patients are going to die within 3 months, it's maybe necessary to provide them best supportive care alone.

Methods: This is a multicentric and prospective cohort study approved by an ethics committee. At the baseline, a standardized CGA was performed (MMSE, MNA, Grip strength, ADL, IADL, CIRSg, Charlson, lee, PS, Gait speed, QLQc30, G8, Balducci), type and localization of metastases were collected. During the follow up of 100 days, events, treatments made and targeted geriatric interventions were collected. A multivariate logistic regression permits to select risk factors. The internal validation was performed by a bootstrap with randomized samples. Score points were assigned to each risk factor by using the β coefficient. The accuracy of the score was assessed with the mean c-statistic and the calibration with the Hosmer-Lemeshow goodness of fit test.

Results: In the cohort 312 patients had a MC with a median age of 82y. The independent predictors of death at 100 days in MC were: Age ≥ 85y (OR 2,1 p=0,03), Metastatic localizations (ML): 2ML (OR 2,4 p=0,004), ≥2 ML (OR 6,3 p=0,001),MNA <17 (OR 8,7 p<0,0001) or ≤23,5 and ≥17 (OR 5,4 p=0,002), Home confinement (OR 1,8 p=0,047), ADL <5,5 (OR 2,1 p=0,017),Cancers with global risk of early death at 100 days ≥30% (OR 2,05 p=0,016).We assigned in the score: 3 points for: MNA ≤23,5, ML≥2 and 1 point for home confinement, ADL <5,5, ML=2, age ≥85y and types of cancers at risk ≥30%.The risk of death at 100 days in MC was 4% for 0 to 2 pts, 18% for 3 to 4 pts,33% for 5 pts and 44% for 6 pts and 83% for ≥ 6 pts .

Conclusion: In daily practice, this score should help to avoid unnecessary treatment for patients with a high risk of death, especially for those with a score≥ 6.

Disclosure of interest: None declared

Keywords: Elderly cancer patients, geriatric assessment, metastasis, score

O19

AN OBSERVATIONAL STUDY OF THE INTERVENTIONS PROVIDED BY A MULTIDISCIPLINARY TEAM PROVIDING COMPREHENSIVE GERIATRIC ASSESSMENT TO OLDER ADULTS WITH UPPER GASTRO-INTESTINAL CANCERS

R. Morris[1], A. Sims[1,*], A. Smith[1]

[1]*Health Care for Older People, Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom*

Introduction: Cancer is a disease of older age. U.K Cancer registration statistics from 2014 show that 50.2% of new cancers diagnoses were made in those aged 70 and above [1]. There is a growing body of evidence that Comprehensive Geriatric Assessment (CGA) can be of value in planning the care of older people with cancer; it can identify previously undiagnosed medical conditions, predict the risk of treatment related toxicity, [2] and help predict surgical outcomes in older patients with cancer [3].

The SCOPES (Systematic Care of Older People in Elective Surgery) Oncology team delivers CGA to older adults, aged 70 and older diagnosed with Gastro-oesophageal cancers, in order to optimise their medical, psychological and functional status in advance of cancer treatments.

Objectives: To examine the difference in the number of interventions provided by the SCOPES Oncology multi-disciplinary team for patients on a curative treatment pathway, and those on a palliative treatment pathway.

Methods: Consecutive patients (≥70yrs) referred to the UGI Cancer Multi-Disciplinary Team (MDT) were invited for assessment in a multi-professional Geriatric Assessment Clinic. All patients were assessed by geriatrician, nurse, occupational therapist, physiotherapist, dietician and social worker. Planned interventions were delivered and followed-up by the CGA team. CGA team plans from 178 patients with gastric and oesophageal cancers from an 18-month period were reviewed, and the MDT actions recorded and classified.

Results: 99 patients were on a palliative care pathway (64 male, 35 female), 79 (54 male, 25 female) were on a curative pathway. Ages ranged from 66-90 years for curative patients, and 62-98 years for palliative patients.

Curative patients received on average 4.81 interventions with the highest number of interventions from the medical and nursing staff. Palliative care patients received on average 6.4 interventions with the highest number of interventions being provided by the social work members of the multidisciplinary team.

Conclusion: Comprehensive Geriatric Assessment is of value in assessing the medical, psychological and functional needs of both curative and palliative patients. The higher number of medical and nursing interventions in the curative group could be explained by the need for additional investigation and pharmaceutical rationalization required to

optimize patients in advance of surgery. Similarly the higher number of interventions from social care in the palliative patient group may reflect their need for increased social support in the face of their decline in function.

References:

[1] http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/2014#cancer-diagnoses-increase-with-age accessed June2016

[2] Wilder H, Heeren P, Puts M et al International Society of Geriatric Oncology Consensus on Geriatric Assessment in Older People With Cancer Journal of Clinical Oncology 2014 Vol 32 Number 24 p2595-2603

[3] Kristjansson S R, Spies C, Veering B.T.H et al Perioperative care of the elderly oncology patient : A report from the SIOG task force on the perioperative care of older patients with cancer. Journal of Geriatric Oncology 2012 volume 3 p147-162.

Disclosure of interest: None declared

Keywords: Comprehensive geriatric assessment, multidisciplinary team, upper GI cancer

O20

A FEASIBILITY TRIAL OF GERIATRIC ASSESSMENT AND INTEGRATED CARE PLAN FOR OLDER CANCER PATIENTS

M. Puts[1,*], S. Sattar[1], K. McWatters[1], K. Lee[1], M. Kulik[1], M. E. Macdonald[1], S. Brennenstuhl[1], R. Jang[2], E. Amir[2], M. Krzyzanowska[2], A. Joshua[2,3], J. Monette[4], D. Wan-Chow-Wah[5], S. Alibhai[6,7]

[1]Lawrence S.Bloomberg Faculty of Nursing, University of Toronto, [2]Medical Oncology, University Health Network, Toronto, Canada, [3]Medical Oncology, Kinghorn Cancer Centre, Sydney, Australia, [4]Division of Geriatric Medicine, Jewish General Hospital, [5]Division of Geriatric Medicine, McGill University Health Centre, Montreal, [6]Medicine, University Health Network, [7]Medicine, University of Toronto, Toronto, Canada

Introduction: A Feasibility Trial of Geriatric Assessment and Integrated Care Plan for Older Cancer Patients

Objectives: The majority of persons diagnosed with cancer are older adults A comprehensive geriatric assessment (CGA) can identify current health issues and recommend interventions to decrease adverse outcomes and optimize the functional status and well-being of older adults. However, there is limited and conflicting evidence regarding the effectiveness of CGA in oncology settings. Here, we explore the impact of a CGA and integrated care plan in optimizing outcomes in older patients with advanced breast (BC), gastrointestinal (GI) or genitourinary (GU) cancers using a randomized controlled trial.

Methods: A two-group parallel single-blind phase II RCT enrolled 60 patients aged 70 +, diagnosed with stage 2-4 GI, GU or BC, referred for chemotherapy or having received <6 weeks of chemotherapy at the Princess Margaret Cancer Centre, Toronto, Canada. Patients needed to be fluent in English, had a life expectancy ≥6 months, ECOG PS 0-2 and able to provide informed consent. Randomization to intervention versus control group was 1:1 and stratified by treatment intent. The intervention included a full CGA by a multidisciplinary team. Based on the CGA and discussion with the patient, tailored evidence-based interventions using a standardized intervention protocol were implemented. Participants in the intervention group were seen by the intervention team at baseline for the CGA and development of the integrated care plan; and at 3 and 6 months to assess intervention fidelity and measure outcomes. The co-primary outcomes were: 1) quality of life (QoL) (EORTC QLQ-C30); 2) modification of the cancer treatment plan. The secondary outcomes are: 1) functional status (OARS Instrumental Activities of Daily Living); and 2) feasibility of the study by tumor site.

Results: The response rate was 64%. The mean age of participants in the control group was 75.4 and in the intervention group 74.7 year. Eighty percent received chemotherapy with palliative intent in the intervention group. In both groups about 30% of participants died before the end of the 6 month follow-up. QoL declined from baseline to 3 months in both groups; however, the decline was larger in the control than the intervention group (-6.9 vs. -2.0 points), especially when considering only those remaining in the study for at least 6 months (-9.8 vs. -2.8). Modeling the data using linear regression suggests QoL is 7.1 to 9.3 points higher in the intervention group at 3 months, adjusting for baseline differences (p=.34-.38), depending on which subsample is used. The intervention had no impact on the cancer treatment plan. The proportion of those with at least one IADL was lower in the intervention than control group at 3 months, when adjusting for baseline differences in IADLs (OR_{adj}=0.40, p=0.25 95% CI 0.08-1.88).

Conclusion: This phase 2 pilot study showed that it was feasible to recruit and retain older adults for a geriatric assessment and management study. The preliminary efficacy evaluations showed that the value of GA and management on change in QoL was greater in the sub-sample of longer-term survivors/participants than in the whole sample, and functional decline may be less in the intervention group. A larger trial is warranted.

Disclosure of interest: None declared

Keywords: feasibility study, Geriatric assessment, integrated care plan, intervention study, randomized controlled trial

Available online at www.sciencedirect.com

ScienceDirect

SIOG 2016 – Abstract Submission – Poster Presentations

P001

RETROSPECTIVE STUDY EVALUATING THE EFFICACY AND SAFETY OF FULVESTRANT AS FIRST OR SECOND LINE TREATMENT OF METASTATIC BREAST CANCER PATIENTS OVER 70 YEARS OF AGE

A. I. Jagiello-Gruszfeld[1,*], I. Lemanska[1], E. Szombara[1], E. Brewczynska[1], A. Gorniak[1], A. Majstrak-Hulewska[1], Z. Nowecki[1]

[1]*Breast Cancer and Reconstructive Surgery Dept, Memorial Cancer Center and Institute, Warsaw, Poland*

Introduction: Retrospective study evaluating the efficacy and safety of fulvestrant as first or second line treatment of metastatic breast cancer patients over 70 years of age.

Objectives: We therefore performed a retrospective study to evaluate the efficacy and toxicity profiles of fulvestrant in ER pos breast cancer patients ≥ 70 years old, treated in first or second line of therapy.

Methods: We evaluated 68 consecutive, ER pos, breast cancer patients over 70 years of age, who are treated at our Clinic from 01 Mar. 2014 to 01 Jan. 2016. Treatment was continued to progression or unaccepted toxicity. The effectiveness of treatment with fulwestrant was assessed as achieving CBR (CR + PR + SD ≥24 weeks). All patients were evaluated for toxicity.

Results: 36 pts received fulvestrant as 1-st line treatment (53%), and 32 as second line (47%) The majority of patients had only a bone or bones and soft tissue metastases (62%). The mean of age was 76.2 (range: 70–93). The majority of pts (70%) previously received tamoxifen as adjuvant setting. 3 pts (5%) received AI, and 17 (25%) tamoxifen and AI during adjuvant therapy. Nausea grade 1, was observed in 2 pts (3%), In 12 pts (18%) hot flushes in grade 2 was noted. Injection site reaction grade 2 was reported in 1 pts (1.5%). CBR was reported in 58 patients (85%), 32 pts treated as first line and 26 as second line of hormonal treatment.

Conclusion: The results of our study suggest that fulvestrant is an effective and safe as the hormonal treatment in the elderly.

Disclosure of interest: None declared

Keywords: Breast cancer, fulvestrant, hormonal treatment

P002

PRACTICE MANAGEMENT FOR ELDERLY PATIENTS WITH BREAST CANCER FROM IMPLICATIONS OF A SURVEY BY THE JAPAN CLINICAL ONCOLOGY GROUP

A. Shimomura[1,*], M. Sawaki[2], K. Tamura[1], T. Mizutani[3], Y. Taki[2], F. Nagashima[4], H. Iwata[2]

[1]*Breast and Medical Oncology, National Cancer Center Hospital, Tokyo,* [2]*Breast Oncology, Aichi Cancer Center Hospital, Nagoya,* [3]*JJCOG Data Center/Operations Office, Center for Research Administration and Support, National Cancer Center,* [4]*Medical Oncology, Kyorin University School of Medicine, Tokyo, Japan*

Introduction: In practical setting there is little information about the patterns of care for elderly breast cancer patients, and a standardized strategy has not been established.

Objectives: To address the patterns of care for elderly breast cancer patients by questionnaire survey.

Methods: We collected questionnaires to investigate practice elderly breast cancer patients among 38 institutions in Japan on May 2015. The questionnaire was comprised of five parts: (1) definition of "elderly" for each treatment (surgery, radiation therapy and chemotherapy), (2) clinical standard anti-HER2 therapy in each age, (3) recommended dose of docetaxel in each age, (4) considerations about conducting future clinical trials and (5) other information about geriatric oncology concerning breast cancer.

Results: All answers were obtained within May 2015. The proportion the questionnaire response was 86.8%. Eighty years old was the most frequent upper limited age to perform surgery and radiation therapy, on the contrary, as for chemotherapy many physicians think it is difficult for over 70-75 years old as an adjuvant therapy. For HER2 positive metastatic breast cancer, 82% of physicians recommended combination therapy of DTX, trastuzumab and pertuzumab (HPD) for 65 to 70 years old as standard care, although 54% of physicians do not recommended HPD for 70 to 75 years old as a first-line standard preference. Majority of physicians recommended the doses of 75 mg/m^2 DTX for both 65-70 years old (63%) and 70-75 years old (52%), but did not for over 75 years old. Many physicians (73%) recommended 60 mg/m^2 DTX for over 75 years old as first attempt. Ninety-seven percent of physicians agree if that comprehensive

1879-4068/Published by Elsevier Ltd.

geriatric assessment tool should be used appropriately to determine the vulnerability of each elderly patient in clinical trial.

Conclusion: This is first questionnaire study in Japan about the patterns of care of elderly breast cancer patients in a large cooperative group. Physicians considered different regimen and dosage of anti-cancer drug for elderly breast cancer patients according their fragile. We are planning a prospective trial to establish a standard chemotherapy regimen focusing on elderly HER2 positive advanced or metastatic breast cancer patients, which include the use of comprehensive geriatric assessment tools.

References:

[1] Kurebayashi J, et al. Clinicopathological characteristics of breast cancer and trends in the management of breast cancer patients in Japan: Based on the Breast Cancer Registry of the Japanese Breast Cancer Society between 2004 and 2011. Breast Cancer. 2015;22:235-44.
[2] Wildiers H, et al. Management of breast cancer in elderly individuals: recommendations of the International Society of Geriatric Oncology. The Lancet Oncology. 2007;8:1101-15.
[3] Swain SM, et al. Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. N Engl J Med. 2015;372:724-34.
[4] Miles D, et al. Treatment of older patients with HER2-positive metastatic breast cancer with pertuzumab, trastuzumab, and docetaxel: subgroup analyses from a randomized, double-blind, placebo-controlled phase III trial (CLEOPATRA). Breast Cancer Res Treat. 2013;142:89-99.
[5] Ando M, et al. Efficacy of docetaxel 60 mg/m2 in patients with metastatic breast cancer according to the status of anthracycline resistance. J Clin Oncol. 2001;19:336-42.

Disclosure of interest: None declared

Keywords: HER2-positive, practice in Japanese, questionnaire survey

P003

SERUM METABOLOMIC PROFILES FOR DISCRIMINATING EARLY FROM METASTATIC DISEASE IN ELDERLY PATIENTS WITH COLORECTAL CANCER

E. Mori[1,2], A. R. A. Mislang[2,*], A. Vignoli[3], S. Di Donato[2], C. Biagioni[2], S. Vitale[1,2], C. Hart[2], D. Becheri[4], F. Del Monte[2], C. Luchinat[3], A. Di Leo[2], G. Mottino[4], L. Biganzoli[2], L. Tenori[5]
[1]*University of Siena, Siena,* [2]*Medical Oncology Department, Nuovo Ospedale-Santo Stefano Instituto Toscano Tumori, Prato,* [3]*Magnetic Resonance Center (CERM), University of Florence, Sesto Fiorentino,* [4]*Geriatric Medicine Department, Nuovo Ospedale-Santo Stefano Instituto Toscano Tumori, Prato,* [5]*Consorzio Interuniversitario Risonanze Magnetiche di Metallo Proteine (CIRMMP), Sesto Fiorentino, Italy*

Introduction: Accurate stratification of patients at high risk for relapse and may benefit from adjuvant chemotherapy following curative surgery is crucial for improving survival outcomes in early-stage colorectal cancer (CRC). Serum metabolomic profiles may act as biomarkers differentiating early from metastatic disease in the elderly. This clear distinction may substantially influence decision-making, eliminating unnecessary treatment, particularly in the elderly population who are at higher risk of toxicity.

Objectives: This study aims to identify a metabolomic "signature" that differentiates early (eCRC) from metastatic disease (mCRC) in elderly patients.

Methods: Serum samples from 103 elderly patients (aged ≥70 years) with CRC (48 mCRC and 55 eCRC with ≥5 years follow-up) were pooled from 4 previous clinical trials. These were analyzed via Proton Nuclear Magnetic Resonance (NMR) and the spectra were used to characterize the metabolic profiles of the two cohorts. Principal component analysis (PCA) and canonical analysis (CA) were applied to obtain the supervised separation of eCRC and mCRC spectra. The K-nearest neighbors (k-NN) method was applied to the PCA-CA scores, for classification. Wilcoxon signed-rank test and Benjamini & Hochberg correction method were used to compare the levels of 34 quantified metabolites between eCRC and mCRC patients.

Results: The median age was 78 years (range 70-89) for eCRC and 77 years (range 70-87) for mCRC. Out of 55 patients with eCRC, 44% received adjuvant chemotherapy and 27% (n=15) had relapsed. PCA-CA-kNN classification of NMR spectra was able to discriminate eCRC and mCRC with an accuracy of 74%. A clear distinction was noted between eCRC without relapse and mCRC. Of the 15 eCRC patients who relapsed, 9 had metabolomic profiles similar to the metastatic group. Four metabolites (2-methylbutyrate, 2-methylsuccinate, histidine and formate) were found to differ significantly ($p < 0.05$) between eCRC and mCRC metabolomic profiles.

Conclusion: NMR metabolomic profiles can discriminate early and metastatic CRC in elderly patients. As a next step, our team will work on a model to assess the likelihood of relapse, based on the degree an eCRC serum profile resembles the metastatic profiles and correlate this with clinical outcomes.

Disclosure of interest: None declared

Keywords: biomarkers, colorectal cancer, elderly, serum metabolomics

P004

OUTCOMES OF HYPO FRACTIONATED RADICAL RADIOTHERAPY IN PATIENTS WITH NON SMALL CELL LUNG CANCER (NSCLC) OVER THE AGE OF 80

A. Cree[1,*], J. Haston[1], A. McPartlin[1], L. Joseph[2], H. Sheikh[1], M. Harris[1], J. Coote[1], R. Stout[1], N. Bayman[1], L. Lee[1], C. Chan[1], C. Favre Finn[1], L. Pemberton[1]
[1]*Clinical Oncology, The Christie NHS Foundation trust, Manchester,* [2]*Clinical Oncology, Leeds Cancer Institute, Leeds, United Kingdom*

Introduction: In the UK, 27% of patients diagnosed with lung cancer are 80 years or over [1]. Around 40% of patients present with stage 1-3 disease. Many are unsuitable for surgery due to disease stage, performance status or comorbidities. In our institution these patients are treated with radical hypofractionated radiotherapy (55Gy in 20 once

daily fractions) but there is a paucity of efficacy and toxicity data in the very elderly age group especially with a hypo fractioned regieme.

Objectives: To assess the overall survival of patients with NSCLC over the age of 80, treated with radical hypo fractionated radiotherapy. The tolerability and toxicity of treatment was also analysed.

Methods: Between 2007-2013, 260 consecutive patients treated radically with radiotherapy over the age of 80 with stage 1-3 NSCLC were identified. Retrospective analysis of electronic records was performed. Demographic data, histological diagnosis, stage, performance status, acute toxicity (CTCAE v4), completion of treatment and overall survival were collected. Radiotherapy parameters including PTV (planning target volume) and V20 were available for 149 patients.

Results: Median overall survival was 18.2 months. The mean age of the patients was 84 years (range 80-94).

Table (abstract P004)

Gender	Male	149 (57%)
	Female	111 (43%)
Staging	Stage 1	121 (47%)
	Stage 2	49 (19%)
	Stage 3	71 (27%)
	Unrecorded	19 (7%)
Histological confirmation		149 (57%)
Performance status	0-1	104 (40%)
	2-3	95 (37%)
	Unknown	61 (23%)

Treatment was well tolerated, 98% of patients completed radiotherapy – discontinuation was due to intercurrent illness or increase in volume treated on cone beam imaging. Ninety-day mortality was 1.6%. The most common acute grade 2 toxicity was oesophagitis in 97 (38%) patients. One patient experienced grade 3 pneumonitis with no other grade 3 toxicity. 17 (23%) of patients with stage 3 disease received sequential chemoradiotherapy; none received concurrent chemoradiotherapy.

There was no significant in difference in overall survival between patients according to pretreatment performance status or stage, although there was a trend towards improved survival in stage 1 patients. There was a significant difference in overall survival when comparing radiotherapy volume. Median PTV was 309cc. The median overall survival was 26.9 months in patients with a PTV <300cc vs 11 months ≥=300cc ($p<0.05$.)

Conclusion: This hypo fractionated regimen is the most commonly used in the UK. This is the largest series to date evaluating unselected consecutively treated very elderly patients. It demonstrates that their survival is in line with previously published data [2] and it is well tolerated, although low grade toxicity was likely to be underreported due to retrospective data collection. A large number of patients in the cohort had stage 1 disease and the increase in access to SABR (stereotactic ablative body radiotherapy) may benefit similar patients in the future. The very elderly should not be excluded from radical radiotherapy on basis of age alone but patient selection remains vital.

References:

[1] Cancer Research UK http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/lung-cancer/incidence#heading-One (accessed 8 June 2016)

[2] P. Wisnivesky, E. Halm, M. Bonomi, C. Powell, E. Bagiella. Effectiveness of radiation therapy for elderly patients with unresected stage I and II non-small cell lung cancer. Am J Respir Crit Care Med, 181 (2010), pp. 265–269

Disclosure of interest: None declared

Keywords: Elderly, hypofractionated, lung cancer, NSCLC, radiotherapy

P005

THE BENEFIT AND TOLERABILITY OF ADJUVANT CHEMOTHERAPY IN ELDERLY STAGE III COLON CANCER PATIENTS: A 3 YEAR RETROSPECTIVE AUDIT

A. Srivastava[1,*], M. B. Jameson[1], H.-S. Lin[1], D. Turner[1]
[1]*Medical Oncology, Waikato Hospital, Hamilton, New Zealand*

Introduction: Colorectal cancer incidence in New Zealand is among the highest in the world. It is the third commonest malignancy in NZ after prostate and breast cancer, though its mortality is as high as that of the latter two cancers combined.

Objectives: The benefit of adding oxaliplatin to fluoropyrimidine in patients ≥70 years is controversial. This retrospect audit investigated usage, benefit and tolerability of adjuvant chemotherapy for colon cancer with increasing age.

Methods: Patients aged ≥60 years with stage III colon cancer referred for adjuvant chemotherapybetween 2010-2012 were identified froma tertiary hospitaloncology database. Data were collected on demographics, chemotherapy received, completion rates, toxicities, relapse and survival.

Results: 95 eligible patients were identified, 50 over 70 years old (median 76 years), 45 aged 60 to 70 years (median 66), 56% male, 82% NZ European and 5% Maori. There was no significant difference in Charlson comorbidity index, ECOG Performance status or TNM staging. Older patients were less likely ($p=0.0017$) to receive adjuvant chemotherapy (76% and 91% of those aged ≥70 and 60-70 years respectively), especially oxaliplatin containing regimens (14% and 47% of older and younger groups, respectively). Similar proportions (~75%) in each group completed ≥80% of planned chemotherapy doses with no significant difference in early discontinuation due to toxicities. Survival was poor in the older group (HR=2.90, 95% CI1.40-5.47), including who received chemotherapy (HR=3.22, 95% CI 1.42-6.88) but there was no significant difference in relapse free survival between older and younger patients.

Conclusion: Adjuvant chemotherapy was commonly offered to older adults with stage III colon cancer, although oxaliplatin was largely restricted to younger patients. While relapse free survival was similar between age groups and chemotherapy types, older patients had poorer survival despite adjuvant chemotherapy.

Disclosure of interest: None declared

Keywords: Adjuvant chemotherapy, colon cancer, elderly, survival, tolerability

P007

DIFFERING BIOLOGY OF BREAST CANCER ACCORDING TO AGE

B. M. Syed[1], A. R. Green[2], I. O. Ellis[2], K. L. Cheung[3,*]

[1]*Medical Research Centre, Liaquat University of Medical & Health Sciences, Jamshoro, Pakistan,* [2]*Pathology,* [3]*Breast Surgery, University of Nottingham, Nottingham, United Kingdom*

Introduction: Emerging evidence suggests that breast cancer in the older population tends to have more favourable biology

Objectives: This study aimed to explore a possible differing pattern of tumour biology according to age.

Methods: The study included 2,383 women with $T_{0-2}N_{0-1}M_0$ breast carcinoma managed in a single institution in Nottingham. Among these patients 575 were ≥70 years of age derived from a consecutive series. The younger (<70 years) patients (N=1808) were from a previously characterised, consecutive series. All patients were treated by primary surgery with tissue micro-arrays constructed from their surgical specimens. Indirect immunohistochemsitry was used for analysis of a panel of biomarkers.

Results: There were age-related changes in the pattern of positivity of ER, PR, HER4, E-Cadherin, Ki67, p53, CK5/6, CK7/8, CK14, CK17, CK18 and bcl2. The following patterns were observed:

1. a. A gradual rise starting at 40 years – ER, PgR, Muc1 and CK18.
2. b. A gradual decline starting at 40 years – Ki67, HER2, CK17 and E-Cadherin.
3. c. A rise at 70 years – Bcl2, CK5/6 and CK 14.
4. d. Two peaks at 40/50 years and at 70 years – CK7/8, CK19, HER4 and p53.

Conclusion: Biology of breast cancer shows a differing pattern according to age, with 40 and 70 years being key milestones. The pattern suggests <40 years as representing an aggressive phenotype, ≥70 years as favourable and between 40–70 years as the transition. Recognition of such pattern supports the use of a personalised treatment approach based on precision biological assessment.

Disclosure of interest: None declared

Keywords: Age, biology, breast cancer

P008

COMORBIDITY AND CORRELATION WITH ADJUVANT CHEMOTHERAPY OUTCOMES IN PATIENTS WITH COLORECTAL CANCER

C. Lund[1,*], D. Nielsen[2], C. Dehlendorff[3], F. Rønholt[1], J. S. Johansen[2], K. K. Vistisen[2]

[1]*Department of Medicine,* [2]*Department of Oncology, Herlev Hospital,* [3]*Danish Cancer Society Research Center, Danish Cancer Society, Copenhagen, Denmark*

Introduction: Patients with comorbidity are less frequently treated with adjuvant chemotherapy for their colorectal cancer (CRC) than healthy patients (1) due to concerns on toxicity and a possible interaction with the cancer (2,3). We wanted to investigate the influence of comorbidity on treatment outcomes.

Objectives: We wanted to investigate the influence of comorbidity on treatment outcomes.

Methods: A retrospective analyses of 529 patients treated with adjuvant chemotherapy (5-fluorouracil/capecitabine +/÷ oxaliplatin) after surgery for stage II-III CRC, from 2001 to 2012. We analyzed the occurrence of comorbidity and their correlation to toxicity with logistic regression, and to disease free survival (DFS), overall survival (OS) and CRC-mortality with Cox proportional hazard regression.

Results: Elderly patients (≥70 years, N=191) had significantly more hypertension (p=<0.01), hypercholesterolemia (p=0.04), cardiovascular diseases (p<0.01), other cancers (p<0.01) and other comorbidities (p<0.01) than younger patients (≤70 years, N=338).

Comorbidity was independently of age correlated with shorter DFS: hypertension (HR 1.36 (95% CI 1.05-1.77), p=0.02), MI (HR 2.10 (1.14-3.88), p=0.02), diabetes (HR 1.76 (1.21-2.57), p<0.01), inflammatory diseases (HR 2.12 (1.36-3.32), p<0.01) and other cancers (HR 1.72 (1.21-2.47), p=0.00). Comorbidity was also independently of age correlated with shorter OS: MI (HR 2.99 (1.66-5.38), p<0.01), diabetes (HR 1.99 (1.34-2.94), p<0.01), inflammatory diseases (HR 2.07 (1.29-3.31), p<0.01) and other cancers (HR 1.82 (1.25-2.64), p<0.01) and with higher CRC-mortality: MI (HR 3.69 (1.93-7.06), p<0.01), inflammatory diseases (HR 1.91 (1.02-3.52), p=0.04) and other cancers (HR 1.68 (1.03-2.72), p=0.04). None of the comorbidities were statistically significant correlated with severe toxicity.

Conclusion: In patients operated for stage II-III CRC and treated with adjuvant chemotherapy we found that hypertension, cardio-vascular disease, diabetes, and inflammatory diseases and other cancers were independently of age correlated with shorter DFS and OS. Earlier MI, inflammatory diseases and other cancer were also correlated with higher CRC related mortality.

References:

[1] Sanoff HK, Carpenter WR, Sturmer T et al. Effect of adjuvant chemotherapy on survival of patients with stage III colon cancer diagnosed after age 75 years. J Clin Oncol 2012;30:2624-2634.

[2] Hermosillo-Rodriguez J, Anaya DA, Sada Y, Walder A, Amspoker AB, Berger DH, Naik AD: The effect of age and comorbidity on patient-centered health outcomes in patients receiving adjuvant chemotherapy for colon cancer. J Geriatr Oncol 2013;4(2):99-106.

[3] Hu CY, Chan W, Delclos GP, Du XL: Adjuvant chemotherapy and risk of gastrointestinal, hematologic, and cardiac toxicities in elderly patients with stage III colon cancer. Am J Clin Oncol 2012;35(3):228-236.

Disclosure of interest: None declared

Keywords: Adjuvant chemotherapy, colorectal cancer, comorbidity, elderly

P009

OUTCOME AND AGE DEPENDENT DIFFERENCES IN CHOICE OF ADJUVANT CHEMOTHERAPY IN PATIENTS WITH PRIMARY COLORECTAL CANCER (THE ACCORE STUDY)

C. Lund[1,*], D. Nielsen[2], C. Dehlendorff[3], F. Rønholt[1], A. B. Christiansen[2], J. S. Johansen[2], K. K. Vistisen[2]
[1]*Department of Medicine,* [2]*Department of Oncology, Copenhagen University Hospital, Herlev,* [3]*Danish Cancer Society Research Center, Danish Cancer Society, Copenhagen, Denmark*

Introduction: Elderly patients withprimary colorectal cancer (CRC) are less frequently treated with adjuvant chemotherapy than younger patients due to concerns on toxicity and efficiency [1-3].

Objectives: We wanted to investigate how age, performance status (PS) and comorbidity influence choice of treatment and outcomes.

Methods: A retrospective single center study of 529 patients operated for stage II-III CRC and treated with adjuvant chemotherapy (5-fluorouracil/capecitabine ± oxaliplatin) in 2001-2011 at Herlev University Hospital, Denmark. Baseline characteristics, chemotherapy and outcome were analyzed with respect to age while adjusting for PS and comorbidity.

Results: Elderly patients (≥70 years) had significant more comorbidity (p<0.001) and poorer PS (p=0.001) than younger patients. Elderly were more frequently treated with single agent therapy (p=0.001) and at lower initial dose (p<0.001). There was no age-dependent difference in 3-year disease free survival (DFS) (hazard ratio (HR) 1.09, 95% confidence interval (Cl) 0.80-1.47, p=0.59), in grade 3-5 toxicity (29% vs.28%, p=0.86) or in ten-years CRC mortality (28% for both groups, HR 1.07, P=0.71). For elderly patients a reduction in chemotherapy dose intensity compared to full dose had no impact on DFS or CRC mortality. Elderly patients receiving <50% of planned cycles had shorter DFS (HR=1.78, p=0.020) and higher CRC mortality (HR=2.17,p=0.027) compared to elderly receiving all cycles. Poor PS in both younger and elderly patients was related to shorter DFS (<70: HR=1.95, p=0.002; ≥70: HR=1.60, p=0.035) and OS (<70: HR=2.28, p<0.001; ≥70: HR=2.03, p=0.002). Comorbidity in younger patients was significantly related to shorter DFS (HR 2.72, p<0.001), OS (HR 3.16, p<0.001) and higher CRC mortality (HR 2.70, p=0.001).

Conclusion: Choice of regimen, primary dose reduction, and given dose intensity in patients treated with adjuvant chemotherapy after operation for CRC were highly dependent on age. However, age had no impact on DFS and CRC mortality. Comorbidity in younger patients and PS in all patients were associated with shorter DFS and higher CRC mortality.

References:

[1] Sanoff HK, et al. Effect of adjuvant chemotherapy on survival of patients with stage III colon cancer diagnosed after age 75 years. J Clin Oncol 2012;30:2624-2634.
[2] Hermosillo-Rodriguez J, et al. The effect of age and comorbidity on patient-centered health outcomes in patients receiving adjuvant chemotherapy for colon cancer. J Geriatr Oncol 2013;4:99-106.
[3] Papamichael D, et al. Treatment of colorectal cancer in older patients: International Society of Geriatric Oncology (SIOG) consensus recommendations 2013. Ann Oncol 2014.

Disclosure of interest: None declared

Keywords: Adjuvant chemotherapy, colorectal cancer, comorbidity, elderly, performance status

P010

A PROSPECTIVE NON-INTERVENTIONAL STUDY ON THE USE OF BEVACIZUMAB AND CONVENTIONAL CHEMOTHERAPY FOR FIRST LINE ELDERLY PATIENTS WITH METASTATIC COLORECTAL CANCER (MCRC): TREATMENT DURATION AND TOXICITY

C. Kenis[1,*], L. Decoster[2], H. Wildiers[1], G. Houbiers[3], B. Naessens[4], M. De Man[5], G. Lambrecht[6], E. Monsaert[7], V. Moons[8], P. Vergauwe[9], H. Prenen[1], L. Opstaele[10], E. Van De Walle[11], E. Van Cutsem[1]
[1]*UZ Leuven, Leuven,* [2]*UZ Brussels, Brussels,* [3]*CHC Clinique St Joseph, Liege,* [4]*AZ Nikolaas, St.Niklaas,* [5]*OLV Aalst, Gent,* [6]*AZ Damiaan, Oostende,* [7]*AZ Maria Middelares, Gent,* [8]*Imeldaziekenhuis, Bonheide,* [9]*AZ Groeninge, Kortrijk,* [10]*Innosens,* [11]*Roche NV/SA, Brussels, Belgium*

Introduction: 58% of all Belgian CRC patients are ≥70 years. In randomized clinical trials, only medically fit patients are included. Choosing the most appropriate therapy in the heterogenic older population is increasingly complex. Geriatric screening and assessment (GA) allow evaluation of individual global health status and subsequently optimisation of oncological treatment decisions. This observational study aims to complement the knowledge on chemotherapy and bevacizumab usage in older patients.

Objectives: The primary objective of the current study was treatment duration of first line bevacizumab containing chemotherapy. Treatment duration of conventional chemotherapy, safety of bevacizumab in elderly and correlation of baseline geriatric screening and GA were secondary objectives.

Methods: This was a national, multicentre, prospective, non-interventional, post-authorization study. Patients ≥ 70 years with untreated mCRC, considered suitable to receive chemotherapy with or without bevacizumab were eligible for inclusion. Dosing and treatment were at the discretion of the investigator. In this observational study progression free survival (PFS) assessments were not carried out at protocol pre-specified fixed intervals and were not independently assessed.

Results: Between August 2011 and July 2013, 34 Belgian centres included a total of 252 patients in the safety population (SA). The reference population (REF) consists of 250 patients with efficacy data. Geriatric screening and GA results are presented in separate publications.

Median treatment duration, defined as the time between the first, first-line mCRC cancer treatment administration and the last, first line mCRC cancer treatment administration, in the SA population was 6.5 (5.5-7.4) months and 4.8 (3.8-5.5) months (p=0.0002) in bevacizumab containing and conventional chemotherapy respectively. Median PFS in the REF population was 9.2 (8.0-11.2) and 8.7 (6.9-9.8) months in bevacizumab and conventional chemotherapy respectively

(p=0.2132). Mean (SD) number of days between two visits was 16.55 (9.39) days and 20.83 (17.61) days for bevacizumab- and conventional chemotherapy respectively.

Table 1 (abstract P010)– Patient demographics at baseline

	Chemotherapy + bevazicumab (N=128)	Chemotherapy only (N=124)
Mean age, years	76.9	78.0
Sex		
Male	65%	58%
Female	35%	42%
Chemotherapy treatment		
CAPOX – FOLFOX	41 (32.0%)	41 (33.1%)
FOLFIRI	85 (66.4%)	46 (37.1%)
5FU/LV–CAP	2 (1.6%)	37 (29.8%)
ECOG	N=125	N=122
0	61 (48.8%)	52 (42.6%)
1	48 (38.4%)	50 (41.0%)
≥2	16 (12.8%)	20 (16.4%)
Ongoing medication at baseline		
<5	74 (57.8%)	57 (46.0%)
≥5	54 (42.2%)	67 (54.0%)

Table 2 (abstract P010) – All grade adverse events of interest to bevacizumab.

	Chemotherapy + bevazicumab (N=128)	Chemotherapy only (N=124)
Arterial thrombotic events	3 (2.3%)	2 (1.6%)
Venous thrombotic events	18 (14.1%)	9 (7.3%)
Epistaxis	21 (16.4%)	11 (8.9%)
Hypertension	17 (13.3%)	10 (8.1%)
Gastrointestinal bleeding	7 (5.5%)	5 (4.0%)
Proteinuria	6 (4.7%)	2 (1.6%)

Conclusion: In this real life setting, the observed median treatment duration of bevacizumab containing chemotherapy was comparable to data found for elderly patients included in other observational studies. In this group of elderly patients, the observed safety profile was consistent with the established safety profile of bevacizumab in prospective randomized clinical trials and observational registry studies in the global mCRC population.

Disclosure of interest: None declared

Keywords: Bevacizumab, elderly, safety, treatment duration

P011

RETROSPECTIVE STUDY OF FRENCH PHYSICIANS' PRACTICES IN CAPECITABINE PRESCRIPTION FOR OLDER PATIENTS WITH METASTATIC FIRST LINE BREAST CANCER (CAPAGE STUDY)

D. Chauvière[1,*], J. Viotti[2], Y. Chateau[2], P. Follana[3], J.-M. Ferrero[3], O. Guerin[4], E. Francois[5], V. Mari[3], R. Boulahssass[4]

[1]*Clinical research,* [2]*Biostatistic Unit,* [3]*Medical oncology, Centre Antoine Lacassagne,* [4]*UCOG Paca-est, CHU Nice,* [5]*UCOG Paca-est, Centre Antoine Lacassagne, Nice, France*

Introduction: CAPAGE is a retrospective study of French physicians' practices in capecitabine prescription for old patients (70-year-old and more) with metastatic breast cancer. In our experience, we thought originally that older patients received a lower capecitabine dose treatment than younger patient (less than 70).

Objectives: The aim of this study is to compare capecitabine doses received by old patients compared to young patients. We also study differences in toxicities profiles between those two classes of age.

Methods: We used the DPD SEIN trial database which has included 303 patients between 2008 and 2011 in 14 sites in France. For our study, we've included 291 patients : 62 patients were in the old class of age. We compared initial dose, total dose and dose intensity for the first three cycles between old and young patients. We also compared toxicities.

Results: In univariate method analysis, Age significantly influences initial dose prescription (p 0,0001), total dose (p=0,002) and dose-intensity (p=0,026). Total dose is also influenced by number of nodes at diagnostic (p=0,04) and prior endocrine therapy for metastatic disease (p=0,013). In multivariate method analysis, Age older than 70 and high performance status were associated with lower total dose. Toxicity was analysed in univariated methods analysis : no difference was. Considering only severe toxicity (grade 3-4), nauseas (p=0,030) and vomiting (p=0,007) were higher in older patients. Considering moderate and severe toxicities (grade 2-4), cutaneous toxicities were higher in older patients (p=0,0001).

Conclusion: Our study confirms that physicians prescribe systematically lower dose of capecitabine for patients older than 70. Toxicity profile confirms results found in literature. We wanted to study relation between toxicity and Arti-Hurria predictive score but there were not enough creatinine clearance data available. Only the ONCODAGE screening score could be calculated in a retrospective manner : as it was expected, no relation were found between ONCODAGE screening score and dose or toxicity. Prospective studies are needed to confirm our results and correlate Arti-Hurria score with toxicities.

Disclosure of interest: None declared

Keywords: Capecitabine, metastatic breast cancer, practices

P012

ASTER 70S OR OPTIMAL ADJUVANT TREATMENT FOR WOMEN OVER 70 WITH LUMINAL BREAST CANCER: A GERICO/UNICANCER PHASE III TRIAL

F. Coussy[1], O. Mir[2], E. Bourbouloux[3], S. Kirscher[4], O. Rigal[5], J.-M. Ferrero[6], D. Allouache[7], P. Cottu[8], G. Romieu[9], E. Blot[10], A.-M. Savoye[11], X. Durando[12], F. Duhoux[13], L. Venat-Bouvet[14], E. Malaurie[15], C. Lefeuvre[16], J.-L. Canon[17], M. Lacroix-Triki[18], F. Rollot[19], F. Hermitte[20], C. Orsini[21], C. Dubot[22], F. Bonnetain[23], E. G. C. Brain[1,*]

[1]*Medical Oncology, Institut Curie/Hôpital René Huguenin, Saint-Cloud,* [2]*Medical Oncology, Institut Gustave Roussy, Villejuif,* [3]*Medical Oncology, Institut de Cancérologie de l'Ouest ICO, Nantes,* [4]*Instituts de cancérologie d'Avignon, Avignon,* [5]*Centre Henri Becquerel, Rouen,* [6]*Centre Antoine-Lacassagne, Nice,* [7]*Centre François Baclesse, Caen,* [8]*Institut Curie - Site Paris, Paris,* [9]*Institut*

régional du Cancer Montpellier/Val d'Aurelle Centre Val d'Aurelle - Paul Lamarque, Montpellier, [10]*Centre hospitalier de Vannes, Vannes,* [11]*Institut Jean Godinot, Reims,* [12]*Centre Jean Perrin, Clermont Ferrand, France,* [13]*Cliniques universitaires Saint-Luc, Louvain, Belgium,* [14]*CHU de Limoges, Limoges,* [15]*CHI de Créteil, Créteil,* [16]*Centre Eugène Marquis, Rennes,* [17]*Grand Hopital de Charleroi (GHdC), Charleroi,* [18]*Institut Universitaire du Cancer Toulouse - Oncopole, Toulouse,* [19]*Hôpital René Huguenin/Institut Curie, Saint-Cloud,* [20]*HalioDx, Marseilles,* [21]*UNICANCER, Paris,* [22]*Institut Curie, Saint-Cloud,* [23]*CHU Besançon, Besançon, France*

Introduction: The benefit of adjuvant chemotherapy (CT) added to hormonal therapy (HT) compared with HT alone remains debated for women ≥70 with ER+ HER2- breast cancer (BC). Selection of valid indications might be improved by the use of better prognosticator.

Objectives: This trial compares the impact of both strategies on overall survival (OS) according to genomic grade (GG).

Methods: Following complete surgery, ~2,000 ER+ HER2- BC patients were to have a GG centrally performed on FFPE specimens by RT-PCR. Cases classified "high-risk" (high and equivocal GG combined) were to be randomized to HT alone *vs* CT+HT, while those classified "low-risk" (low GG) were to be followed as an observational cohort with HT only. Eligibility criteria were deliberately not stringent, allowing inclusion of patients with local relapse, bilateral or multifocal BC, or previous history of other malignancies, in order to capture the high level of heterogeneity of ageing.

OS (all deaths) is the primary endpoint. Secondary objectives include competing events, cost-effectiveness and Q-TWiST analysis, geriatric dimension, willingness and health-related quality of life including specific ELD15. Translational research will focus on prognostic biomarkers and pharmacogenetics.

Following an IDMC meeting held in September 2014, the statistical plan was amended to take into account non adherence to treatment allocated by randomization, mostly in patients assigned to CT vs those assigned HT only (20% vs 5%, global rate of non adherence 13%): sample size based on 4-year OS benefit favouring CT (87.5 *vs* 80%; HR 0.60); bilateral test α=0.05, power increased from 80 to 90% (β decreased from 0.20 to 0.10), number of patients to be randomized in 4 years increased from 700 to 1,080, with 171 events expected.

Results: From 04/12 to 05/16, 71 French and Belgium centres have included 1,989 patients aged 70-92.

GG evaluation was not performed in 60 cases: 22 tumour blocks not available, 20 consent withdrawals, 10 tumour status issues, 8 treatment choice issues.

Of 1,929 cases with GG report, 752 (39%), 411 (21.3%) and 753(39%) were low, equivocal and high GG respectively; 13 tests (0.7%) failed for technical reasons. The proportion of high-risk tumours (high & equivocal GG combined, 60%) was similar to the one observed in the general BC population (40-60%). In the high-risk group, 75 cases were not randomized: 48 patient's or medical team's choice, 21 inclusion criteria issues, 6 central pathology review discordances.

Conclusion: With 100% of target recruitment reached in 4 years as planned, we confirm the feasibility of such innovative multicentre program in a usually underserved population. While interim and primary analysis will be available only in 2018 and 2020, detailed description of the population enrolled will be presented. Prospective GG assessment might help in the future to better select adjuvant strategy in the elderly BC population and to avoid jeopardizing any benefit if stymied by uncontrolled side effects.

Disclosure of interest: None declared

Keywords: Adjuvant, genomic tool, clinical trial, chemotherapy

P013

FUNCTIONAL AND COGNITIVE IMPAIRMENT, SOCIAL ENVIRONMENT, FRAILTY AND ADVERSE HEALTH OUTCOMES IN OLDER PATIENTS WITH HEAD AND NECK CANCER, A SYSTEMATIC REVIEW

F. J. A. Van Deudekom[1,*], A. S. Schimberg[2], M. H. Kallenberg[1,3], M. Slingerland[4], L.-A. van der Velden[2,5], S. P. Mooijaart[1,6]
[1]*Gerontology and Geriatrics,* [2]*Department of Otorhinolaryngology and Head and Neck Surgery,* [3]*Department of Nephrology,* [4]*Department of Medical Oncology, Leiden University Medical Centre, Leiden,* [5]*Department of Head and Neck Surgery and Oncology, Netherlands Cancer Institute, Amsterdam,* [6]*Institute for Evidence-based Medicine in Old Age, Leiden, Netherlands*

Introduction: With the population ageing there will be an increasing number of older adults with cancer. This trend can also be observed in the patient population presenting with head and neck cancer. Older patients are very heterogenic with respect to frailty, mobility, functional capacity, and cognitive function and therefore it remains challenging to identify older patients who are at highest risk for poor clinical outcome.

Objectives: The aim of this present systematic review is to study the association of functional or cognitive impairment, social environment and frailty with adverse health outcomes in patients with head and neck cancer.

Methods: On April 28th 2016, we searched Pubmed, Embase, Web of Science and the Cochrane Library for original studies reporting on an association of functional or cognitive impairment, social environment and frailty with adverse outcomes after follow-up in head and neck cancer patients.

Results: Of 4158 identified citations, we included 31 articles which reported on 45 associations. The mean age was over 60 years in twelve studies (39%). Geriatric conditions were prevalent: between 40-50% of the included participants were functional impaired, around 50% had depressive symptoms, and around 40% did not have a partner. Functional impairment was assessed in 18 studies, two studies reported on a cognitive test, eight studies examined mood and social status was depicted by 14 studies. None of the included studies addressed frailty or objectively measured physical capacity such as hand grip strength, gait speed or balance tests. In 64% of the reported associations, a decline in functional or cognitive impairment, mood or social environment was associated with adverse outcomes.

Conclusion: Functional and cognitive impairment, depression and social isolation are highly prevalent and associate with increased risk of adverse health outcomes in

head and neck cancer patients. These measurements may guide decision-making and customize treatments. More research is needed to further improve and firmly establish clinical usability.

Disclosure of interest: None declared

Keywords: Adverse health outcomes, functional and cognitive impairment, geriatric assessment, head and neck cancer, social environment

P014

DESCRIPTIVE EPIDEMIOLOGICAL STUDY OF GERIATRIC CANCER SEEN IN TATA MEMORIAL HOSPITAL, MUMBAI

G. Balasubramaniam[1,*], S. L. Saoba[1], R. A. Badwe[2], A. K. Decruz[3]
[1]*Medical records, Biostatistics & Epidemiology, Tata Memorial Hospital,* [2]*Director, Tata Memorial Centre,* [3]*Director, Tata Memorial Hospital, Mumbai, India*

Introduction: It is well known that age is a known risk factor for cancer. Annually it is estimated that there are 0.3 million new Geriatric cancer (65 + years) diagnosed in India, contributing to about 30% of all cancer cases as per GLOBOCAN 2012. Tata Memorial Hospital (TMH), being a premier cancer institute in the country, registers substantial number of geriatric cancer cases. The present study profiles the geriatric cases seen n TMH over this period.

Objectives: 1. To study the profile of different types of Geriatric cancers registered in Tata Memorial Hospital (TMH) during 1999-2008. 2. To know the changing patterns of cancers in this population

Methods: Abstraction of information from case records of the patients registered in TMH and including only those who were diagnosed as confirmed 'cancer cases'. As per the WHO definition, the study included all cases who were aged above 65 years of age at the time of diagnosis and diagnosed at TMH during 1999-2008. These were classifeed and coded as per the ICD-O-3. All validitaion and quality checks were done prior to analysis

Results: TMH registered 30142 Geriatric cancer (17%) out of a total of 1,76,230 cancer cases. 19453 were males and 10689 were females and the sex ratio of male to female was 1.8 :1. Major cancer among males, of the lung cancers (12%) was the leading site of cancer in the geriatric group followed by Prostate cancer (7.2%), Oesophagus (7.1%), pyriform fossa (6.8%) and buccal mucosa (4.8), thus contributing to 37% of all male cancer cases, Major cancer among females were breast cancer (20.2%), cervix (16.6%), oesophagus (6.4%), buccal mucosa (4.5%), lung cancer (4%) and ovarian cancer (3.9%), thus contributing 55.6% of all female cancers.

Conclusion: The most common cancers in geriatric group are similar to the trend seen among adults in terms of the leading cancers. Though the life-span in Indians are between 60- 75 years, it is quite remarkable that about 15-20% of the cancers are seen in the geriatric group. This information will be useful to conduct a detailed study on the life-style factors in this elderly population

References:

[1] Ferlay J, Soerjomataram I, Ervik M, et al; International Agency for Research on Cancer. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11. globocan.iarc.fr.
[2] DInshaw KA, Ganesh B, Hospital-based Cancer Registry Annual Report - 2001, Tata Memorial Hospital, Mumbai, 2005.
[3] DInshaw KA, Ganesh B, Hospital-based Cancer Registry Annual Report - 2002-05, Tata Memorial Hospital, Mumbai, 2008.
[4] Badwe RA, Mohandas KM, Ganesh B, Hospital-based Cancer Registry Annual Report - 2005-06, Tata Memorial Hospital, Mumbai, 2012.
[5] Badwe RA, Decruz Ak Ganesh B, Hospital-based Cancer Registry Annual Report - 2006-08 Tata Memorial Hospital, Mumbai, 2014.

Disclosure of interest: None declared

Keywords: Epidemiology, geriatric, India, lung, Mumbai

P015

COMBINATION CHEMOTHERAPY WITH DOCETAXEL AND CARBOPLATIN FOR ELDERLY PATIENTS WITH ENDOMETRIAL CANCER

H. Yoshida[1,*], Y. Imai[1], K. Fujiwara[1]
[1]*Gynecologic Oncology, Saitama Medical University International Medical Center, Hidaka, Saitama, Japan*

Introduction: The combination of an anthracycline-based drug, a platinum-containing drug, and a taxane agent are used in endometrial cancer chemotherapy, and docetaxel and carboplatin (DC) therapy is one of the important treatment options. Approximately half of all endometrial cancer cases are diagnosed in patients older than 65 years. However few data are available concerning the tolerability and effectiveness of DC therapy in older patients.

Objectives: The objective of this study was to compare the tolerability and effectiveness of first line chemotherapy with DC therapy between patients older and younger than 65 years of age with endometrial cancer.

Methods: Chemotherapy-naive patients with endometrial cancer were enrolled into this retrospective study between April 2008 and March 2015. Patients received docetaxel at a dose of 60 mg/m^2 and carboplatin at area under the curve of 6 mg/ml/min on day 1 of a 3-week cycle. The tolerability and effectiveness of the regimen were analyzed.

Results: A total of 41 patients with endometrial cancer were enrolled into this study. Of these, 26 patients (63%) were <65 years old and 15 patients (37%) were ≥ 65. There were no significant differences with regard to Eastern Cooperative Oncology Group performance status score and disease stage between both groups. Patients older than 65 years were significantly more likely to have serous or clear cell histology and high-grade tumors compared with the younger group (P = 0.014 and 0.012, respectively). Although the number of chemotherapy cycles, cycle delays and treatment interruptions

were comparable between older and younger patients, there was a trend toward more dose reductions in the older group (P = 0.12). The incidence of hematological toxicities did not differ significantly between groups. The incidence of grade 3/4 diarrhea was significantly higher in the older group (P = 0.014) and hypersensitivity was significantly more frequent in the younger group (P = 0.035). Patients ≥65 had equivalent response rate, progression-free survival and overall survival compared with those <65.

Conclusion: This retrospective analysis indicates that DC therapy was tolerable and effective for the treatment of elderly chemotherapy-naive patients with endometrial cancer.

Disclosure of interest: None declared

Keywords: Carboplatin, docetaxel, elderly, endometrial cancer

---

P016

LONG SURVIVAL OF A METASTATIC BREAST CANCER SERIES OF ELDERLY PATIENTS IN A COMPREHENSIVE CANCER CENTER

I. Morilla[1,*], A. Stradella[1], V. Navarro[2], A. Rodriguez[1], M. Gil[1], M. Antonio[1], S. Recalde[1], S. Pernas[1]

[1]*Clinical Oncology,* [2]*Clinical Trial Unit, Instituto Catalan de Oncologia, Hospitalet de Llobregat, Spain*

Introduction: New targeted therapies and cytotoxic agents have improved overall survival (OS) in metastatic breast cancer (MBC) patients (p), but only 20% are alive at 5 years and median OS is 20m. This improvement in overall survival occurs mainly in younger p. Elderly p are underrepresented in clinical trials and because evidence is scarce in this population, they are usually under-treated. About 80% of MBC in elderly p is hormone receptor (HR)-positive and HER-2 negative. Hormonal therapy (HT) is the mainstay in the majority of theses p, but in endocrine refractory tumors or triple negative, chemotherapy (CT) is the unique option, a part from best supportive care (BSC). CT toxicities limit its use in the elderly and individualized assessment is needed.

Objectives: The aim of our study was to describe the clinical characteristics and survival of elderly p with MBC in a single cancer comprehensive center.

Methods: Ambispective analysis of elderly p, defined as ≥70 years, with MBC with active treatment or BSC at Catalan Institute of Oncology (ICO-Barcelona) between March 2014 and May 2016. Baseline patient and tumor characteristics and treatments received were collected. Median overall survival (OS) were obtained with the Kaplan-Meier method and compared with LogRank test. The association of clinic-pathological variables and outcome was studied by Cox proportional hazard analysis.

Results: Out of 80 p, 49 (61.5%) were diagnosed at de novo IV stage. Median age of MBC diagnosis was 77y (72-82). 63p (78.8%) had RH-positive: 33p (41.3%) luminal A-*like* and 30p (37.5%) luminal B-*like* (St Galen 2013 definition), 7p (11.3%) were HER2-positive and 8p (10%) triple negative (TN). Grade 1 (G1):2.5%, G2: 41.3% and G3: 23.8%. Sites of metastasis: Bone 55p (69%), lymph nodes 23p (29%), skin lesions 19p (24%), lung-pleura 19p (24%), liver 14p (17.5%) and central nervous system 2p (2.5%). 58p (73%) with HR-positive received at least one line of hormonal treatment (52% just one line and 48% ≥1 line of HT). Letrozol was the most used HT in 51p, in 19p (24%) p was the only treatment received. Tamoxifen was the most common 2nd line HT 24p (30%). 47p (59%) received chemotherapy, 22 (27.5%) were treated with one line, 9 (11.3%) two lines, 5 (6.3%) three lines and 4 (5%) four lines. Weekly paclitaxel was prescribed in 43(53%), capecitabine 40 (50%) and vinorelbine 32 (40%). 25 (31%) received chemotherapy following HT. Only 2 p (2.5%) were enrolled in a clinical trial. Median OS from initial diagnosis of BC was 183m (81-285) with a statistically significant difference according to histological subtypes: Luminal A-*like* 252m, Luminal B-*like* 164m, TN 24m and Her2 NR (p= 0.04). Overall survival after MBC diagnosis was 60.4 m: Luminal A-*like* 61m, Luminal B-*like* 43m, TN 22m, Her-2 NR (p= 0.08).

Conclusion: OS after MBC diagnosis was 60.4 m in our series of elderly p; this OS exceeds the data in the literature, as more luminal A-like tumors were included. Notably, 61.5% were diagnosed at de novo IV stage, probably because p≥70y are not included in screening programs and some are reluctant to go to the doctor. Only 2 p (2.5%) were enrolled in a clinical trial. A special effort must be made to include elderly patients in clinical trials.

Disclosure of interest: None declared

Keywords: Elderly patients, metastatic breast cancer

P017

IL-6 SECRETION REDUCTION IN ELDERLY PATIENTS UNDERGOING ELECTIVE COLORECTAL LAPAROSCOPIC SURGERY UNDER ERAS. RESULTS FROM A RANDOMIZED CLINICAL TRIAL

A. Costanzi[1,*], G. Mari[1], J. Crippa[1], A. Miranda[1], A. Rosato[1], V. Berardi[1], D. Maggioni[1]

[1]*General Surgery, Desio Hospital, Desio, Italy*

Introduction: Enhanced Recovery After Surgery program applied to colorectal laparoscopic surgery is well known to reduce hospitalization improving short terms outcomes and minimizing the Surgical Stress Response. However its effectiveness in elderly population is yet to be demonstrated.

Objectives: The primary aim of this study is to compare the level of immune and nutritional serum indexes across surgery in patients aged over 70 years old undergoing elective colorectal laparoscopic surgery within an ERAS protocol or according to a Standard of Care program.

Methods: 80 patients undergoing major colorectal laparoscopic surgery were enrolled and randomized in two groups (40 per arm) within a larger randomized trial on a general population. Cortisol, C Reactive Protein, White Blood Cell Count, Prolactin, IL-6 levels were collected preoperatively, 1, 3 and 5 days after surgery. Transferrin, Prealbumin, Albumin and Triglyceride level were collected preoperatively, 1 and 5 days after surgery. Short Term Outcomes were also prospectively assessed.

Results: IL-6 levels were lower in the EG on 1, 3, and 5 days post-operatively ($p<0.05$). IL-6 levels in the Enhanced group, differently from control group, returned to pre operative level 3 days after surgery. C-reactive protein level was lower in the Enhanced group on day 1, 3, and 5 ($p<0.05$). There was no difference in Cortisol and Prolactin levels between groups. Prealbumin serum level was higher on day 5 ($p<0.05$) compared to standard group. Postoperative outcomes in terms of return to oral nutrition, normal bowel function and HLOS were significantly improved in the ERAS group.

Conclusion: Colorectal laparoscopic surgery within an ERAS prototcol in elderly patinets affects Surgical Stress Response, decreasing IL-6 and CRP levels post-operatively and improving Prealbumin post operative synthesis.

Disclosure of interest: None declared

Keywords: Colorectal surgery, elderly patients, ERAS, immune function, laparoscopy

P018
OCTOGENARIANS WITH INOPERABLE MALIGNANT PLEURAL MESOTHELIOMA: OUTCOME OF CARBOPLATIN AND PEMETREXED CHEMOTHERAPY. A SIX YEARS CONSECUTIVE COHORT

J. B. Sørensen[1,*], J. N. Jakobsen[1]
[1]*Dept. Oncology, Finsen Centre/National University Hospital Copenhagen, Copenhagen, Denmark*

Introduction: Chemotherapy with either cisplatin or carboplatin together with pemetrexed is evaluated for use in patients younger than 75 years of age. The safety and efficacy in older patients is very little explored, and results on such treatments in patients above 80 years is hithertoo unreported.

Objectives: The purpose of the present study was to investigate outcome of carboplatin and pemetrexed in very elderly patients with inoperable malignant pleural mesothelioma (MPM) patients aged ≥ 80 years (octogenarians).

Methods: Chemotherapy naïve inoperable MPM patients aged ≥ 80 years with no upper age limit in performance status (PS) 0-2 with normal renal, bone marrow and hepatic function were included. The patients received Carboplatin AUC 5 and Pemetrexed 500 mg/m^2 day 1 every 3 weeks for maximum 6 courses without g-csf. Patients in PS 2 received treatment with 25% dose reduction.

Results: Out of a total of 510 newly diagnosed MPM patients referred to the national centre for Mesothelioma Treatment in Denmark 2010-2015 there were a total of 32 octogenarians. The patients were primarily male (75%). The median age was 81 years (80-85 years). 69% had been exposed to asbestos, 19% had PS 0, 53% had PS 1, and 28% had PS 2. The histological subtypes represented were epithelioid 47%, sarcomatoid 9%, and biphasic 44%. Median treatment duration was 4 courses corresponding to 12 weeks (range 1-6 courses). 38 patients completed 6 courses. There were no febrile leucopenia episodes, no bleeding incidents, and no toxic deaths.

Complete response was achieved in one patient (3%), Partial response in 22%, no change in 53%, and progressive disease in 28%. Median survival was 13.8 months (range 2.0-37.3+ months).1-year survival rate was 63% and 2- and 3-years survival rates 9% and 3%, respectively. 38% received 2nd line chemotherapy and 16% received palliative radiotherapy after 1th line chemotherapy.

Conclusion: Very elderly patients aged ≥ 80 years were able to receive carboplatin and pemetrexed with acceptable toxicity. Outcome is similar as that reported with this regimen in younger patients, both with respect to response rate and survival. Palliative chemotherapy is a safe and active treatment option for very elderly MPM patient above 80 years of age, however with dose reduction in PS 2 or frail cases.

References:

[1] JB Sørensen. Current concepts in chemotherapy for Malignant Pleural Mesothelioma. Clinical Respiratory Journal 2:74-79, 2008.
[2] Jakobsen JN, Sørensen JB: Review on clinical trials of targeted treatments in malignant mesothelioma. Cancer Chemotherapy and Pharmacology 68 (1):1-15, 2011
[3] Sørensen JB, Urbanska E, Langer SW, Aamdal E: Second-line oral Vinorelbine following 1st line Platinum and Pemetrexed in malignant pleural mesothelioma. European Journal of Clinical Medical Oncology 4 (4): 6-13, 2012

Disclosure of interest: None declared

Keywords: Chemotherapy, malignant pleural mesothelioma, octogenarians, prognosis, very elderly

P020
MULTIDISCIPLINARY DECISION-MAKING IN LUNG CANCER PATIENTS: AN AGED BASED COMPARISON

K. J. Schulkes[1,*], M. E. Hamaker[2], J. J. Lammers[3], M. M. van Rens[1], M. Geerts[1], L. J. van Elden[1]
[1]*Pulmonology,* [2]*Geriatric Medicine, Diakonessenhuis Utrecht,* [3]*Pulmonology, UMC Utrecht, Utrecht, Netherlands*

Introduction: With the imminent ageing of western societies and the subsequent rise in the number of older lung cancer patients, optimising decision making for this patient population is becoming increasingly urgent. A first step is to become aware of current clinical practice. We analysed treatment decisions and course of therapy for older and younger patients with lung cancer in different age categories: <65 years, 65-75 years and 75 years and older.

Objectives: We set out to determine how treatment decisions for older and younger patients with lung cancer are currently made by the multidisciplinary team (MDT), the pulmonologist (as part of the MDT) and the patient. A secondary goal was to analyse the course of treatment.

Methods: A total of 349 patients with lung cancer (median age 67.8 years), discussed at the multidisciplinary team meeting in the Diakonessenhuis Utrecht, the Netherlands, were reviewed. Multidisciplinary decision-making and subsequent clinical course were extracted from medical files.

Results: We found that 39% (n=30) of eligible patients older than 75 years of age received chemotherapy compared to 79% (n=73) of the patients aged 65-75 years and 80% (n=99)

of patients younger than 65 years. When patients did receive chemotherapy, primary and secondary treatment adaptations were effectuated in 58%: of the patients aged <65 years in 49% (n=49), for patients aged 65-75 and for both the category of 65-75 years and for older than 75 years in 66% (n=48 and n= 20) treatment adjustments needed to be made. For 44% (n=88) of all patients treated with chemotherapy unplanned hospital admissions needed to be made. The guideline recommended treatment regimen was commenced and completed without treatment adaptations in only 29% (n=85) of all patients: for the youngest patients in 40% (n=50), for the middle category in 27% (n=25) and in 13% (n=10) of the elderly. The oldest patient curatively treated with surgery was 81 years old and the oldest patient treated with chemotherapy was 86 years old. For the patients treated with chemoradiotherapy 32% (n=22) started and finished without treatment adaptations, the oldest patient treated with sequential chemoradiotherapy was 84 years of age and treated with concurrent chemoradiotherapy 74 years.

Conclusion: The decision-making process and course of treatment for lung cancer vary per age. Especially the patients between 65-75 years of age are at risk of overestimation and might be more vulnerable than initially thought. In this age category chemotherapy was as often started as in patients aged <65 years, but the guideline recommended treatment regimen could only be followed as often as in patients aged 75 years and older. Treatment of patients with pulmonary malignancies is still a challenge, evidence for the elderly is lacking and more data are therefore urgently needed.

Disclosure of interest: None declared

Keywords: Chemotherapy, decision-making, elderly, lung cancer

P021
POSTOPERATIVE COMPLICATIONS AND MORTALITY IN INDIVIDUALS AGED 70 AND OLDER UNDERGOING SURGERY FOR COLORECTAL CANCER

K. Fagard[1,*], J. Casaer[2], A. Wolthuis[3], J. Flamaing[4], K. Milisen[5], J.-P. Lobelle[6], H. Wildiers[7], C. Kenis[8]

[1]*Department of Geriatric Medicine, University Hospitals Leuven,* [2]*Faculty of Medicine, KU Leuven,* [3]*Department of Abdominal Surgery, University Hospitals Leuven,* [4]*Department of Geriatric Medicine, Department of Clinical and Experimental Medicine, University Hospitals Leuven, KU Leuven,* [5]*Department of Geriatric Medicine, Department of Public Health and Primary Care, University Hospitals Leuven, Academic Centre for Nursing and Midwifery, KU Leuven,* [6]*Consultant in Statistics, University Hospitals Leuven,* [7]*Department of General Medical Oncology, Department of Oncology, University Hospitals Leuven, KU Leuven,* [8]*Department of General Medical Oncology, Department of Geriatric Medicine, University Hospitals Leuven, Leuven, Belgium*

Introduction: Reporting of postoperative complications in older patients undergoing surgery for colorectal cancer (CRC) often focuses on mortality and surgical complications or classification into severity scores. Medical complications are less often reported in detail.

Objectives: To describe the incidence of in-hospital post-operative medical and surgical complications and mortality in individuals aged 70 and older undergoing surgery for CRC.

Methods: Older patients who had CRC surgery were identified from a prospectively collected database (2009-2015). Data were retrieved from the original database; in addition, in-hospital postoperative complications were abstracted retrospectively from the medical file. Besides listing the complications and reporting the major categories, the encountered postoperative adverse events were classified into severity grades, using the Clavien-Dindo classification system.

Results: One hundred ninety patients (mean = 78 y.) were studied. 47% of the study population (85/190) experienced one or more postoperative complications during hospital stay. 77 patients (40.5%) had medical complications and 34 patients (17.9%) had surgical complications. 30-day postoperative mortality was 1.6%. 72 patients (38%) experienced severe complications (Clavien-Dindo ≥ grade II). Infectious complications were the most common medical complications and occurred in 26.8% of the patients. Other medical complications in descending order were: neurological (12.6%), non-infectious abdominal (5.3%), cardiovascular (5.8%), non-infectious urinary (3.7%), non-infectious respiratory (2.6%) and thromboembolic (1.6%) complications. The most common surgical complications during the postoperative hospital stay were surgical site infections (SSI): 12%. The majority of these SSIs were organ/space SSI (62.2%). Anastomotic leak occurred in 3.7% of the study population. Surgical site bleeding occurred in 3.7% of patients. Re-intervention rate was 9%.

Conclusion: Our findings show that complications after surgery for colorectal cancer in patients aged 70 and over are frequent. This study provides information to clinicians regarding the in-hospital postoperative course in older patients with CRC.

Disclosure of interest: None declared

Keywords: Colorectal cancer, elderly, mortality, postoperative complications, surgery

P022
EFFICACY AND SAFETY OF ANTIANGIOGENIC THERAPIES IN ELDERLY PATIENTS WITH METASTATIC RENAL CELL CARCINOMA: A RETROSPECTIVE MULTICENTER STUDY

L. Pierard[1,*], F. Schaff-Wendling[1], A. Thiéry[2], C. Korenbaum[1], J. Gantzer[1], D. Heitz[1], B. Duclos[1], C. Borel[3], J.-E. Kurtz[1], P. Barthélémy[1]

[1]*Medical Oncology Unit, University Hospital Strasbourg,* [2]*Epidemiology and Biostatistics Department,* [3]*Medical Oncology Unit, Centre Paul Strauss, Strasbourg, France*

Introduction: Antiangiogenic agents (AA) (sorafenib, sunitinib, pazopanib) have demonstrated clinical activity in first-line treatment of metastatic renal cell carcinoma (mRCC). However, elderly patients have been underrepresented in the large randomized pivotal trials. Furthermore, side effects are common and might become an issue in elderly patients (pts).

Thus, risk benefit in elderly pts might be questionable when using AA which prolong survival, but might alter quality of life.

Objectives: The aim of our study was to describe the treatment of elderly mRCC patients with AA in routine practice compared to a younger population in order to assess whether age can influence treatment patterns, patients outcomes and to identify specific toxicity profiles.

Methods: We performed a retrospective review of all medical records of patients treated with AA for mRCC in 2 French institutions between June 2006 and 2015. Pts ≥70 y.o. were considered as elderly and pts <70 y.o. formed the control group of young pts. Recorded variables included: age, comorbidities, first to third-line therapies, treatment schedules, and survival data. We assessed toxicity data by recording toxicity-related treatment discontinuation, hematological and non-hematological grade 3-4 adverse events.

Results: A total of 170 patients were identified, median age was 65.2 y.o. (range 26.2-89.7). According to IMDC prognostic model, 27.8% patients had favorable risk, 51.3% intermediate risk and 20.9% poor risk. Both study groups were well balanced according to IMDC risk groups. Among the whole population, 60 patients were ≥70 y.o.. Elderly pts were treated with sunitinib (N=40, 66.7%), sorafenib (N=11, 18.3%) or pazopanib (N=9, 15%). First-line median progression-free survival (PFS) was shorter for pts ≥70 y.o.: 10.0 months (IC 95% [8.4-12.2]) versus 14.8 months (IC 95% [10.2-19.0]) for younger pts (p = 0.033). Median overall survival was 21.2 months (IC 95% [14.6-46.9]) for the elderly versus 41.2 months (IC 95% [35.4-57.9]) for younger pts (p = 0.016). In the elderly group, 35 pts received a second-line treatment and 11 pts a third-line treatment. The median PFS for elderly pts was 5.4 months (IC 95% [4.1-11.4]) in second-line and 4.3 months (IC 95% [2.2-NA]) in third-line. Grade 3-4 non-hematological toxicities were observed in 35/60 elderly pts (58.3%), including skin toxicity (n=9), mucositis (n=4), hypertension (n=8), fatigue (n=13), diarrhea (n=8). No difference was found between the two groups for grade 3-4 hypertension, skin toxicity and diarrhea. There were significantly more grade 3-4 cardiovascular toxicities (excluding hypertension) in the group ≥70 y.o. (p = 0.015). 21.6% of elderly pts definitively stopped treatment due to toxicity versus 9.1% in younger pts (p = 0.04). Further results on treatment schedules will be presented at the meeting.

Conclusion: This retrospective study shows that treatment with AA is feasible with good efficacy in elderly pts. Efficacy observed supports the use of AA in elderly pts. However, age appears to be a prognostic factor for patients with mRCC treated by AA. Finally, physicians should be aware of toxicity that seems to be more frequently limiting for elderly pts treated with antiangiogenic therapies.

Reference

[1] Bellmunt J, Négrier S, Escudier B, Awada A, Aapro M. The medical treatment of metastatic renal cell cancer in the elderly: Position paper of a SIOG Taskforce. Crit Rev Oncol Hematol. 2009 Jan;69(1):64–72.

Disclosure of interest: L. Pierard: None declared, F. Schaff-Wendling: None declared, A. Thiéry: None declared, C. Korenbaum: None declared, J. Gantzer: None declared, D. Heitz: None declared, B. Duclos Consultant for: Novartis, Pfizer, C. Borel: None declared, J.-E. Kurtz: None declared, P. Barthélémy Consultant for: Novartis, Pfizer

Keywords: Antiangiogenic therapies, elderly, metastatic renal cell carcinoma

P023

TOLERANCE AND EFFICACY OF FOLFIRINOX IN ELDERLY PATIENTS WITH PANCREACTIC OR COLORECTAL CANCER. A MONOCENTRIC RETROSPECTIVE STUDY ON 52 PATIENTS

J. F. Guion-Dussere[1], A. Bertaut[2], F. Ghiringhelli[1], J. Vincent[1], V. Quipourt[3,4], S. Marilier[3,4], L. Bengrine Lefevre[1,4,*]

[1]Medical oncology, [2]statistic department, Centre Georges François Leclerc, [3]geriatric department, CHU Champmaillot, [4]UCOG Bourgogne, Dijon, France

Introduction: Chemotherapy regimen proposed in metastatic colorectal cancer are discussed function of general status health and cancer prognostic criteria. Data are in favor of efficacy of Folfirinox in these pathologies for patient under 75 years old. Efficacy and tolerance are not clearly evaluated in elderly patients.

Objectives: The main objective of this retrospective study was to evaluate tolerance and efficacy of Folfirinox regimen in elderly patients diagnosed and treated for metastatic colorectal or pancreatic cancer in the French anticancer center Georges Francois Leclerc.

Methods: Patients over 70 years old treated at CGFL between January 2009 and January 2015 were included. Histologically proved pancreatic or colorectal cancers were required. Demographic, clinical data were recorded and geriatric parameters as Charlson Comorbidity index (CCI) and functional assessment. Toxicities were evaluated using the CTCAE 4.03. Treatment continued until disease progression, unacceptable toxicities or patient refusal. Primary endpoint was overall survival (OS).

Results: On the whole, 52 patients (46 men and 6 women) were treated by Folfirinox regimen, 34 for colorectal cancer and 18 for pancreatic cancer. Thirty seven patients had comorbidities, 30 took 4 or more medications, 43 were 0-1 performance status, and 32 had a CCI under 10. Most of patients had no home help at the beginning but 34 had one at 3 months. Half of patients had at least 2 metastasis sites.

Seventy five percent had a “modified” Folfirinox at beginning, which consist on a 5FU reduction (bolus or continuous infusion) and irinotecan (67%) reduction. Only 26% had an adapted regimen after beginning.

Regarding adverse events, 32% (n=42) had grade 3-4 neutropenia, 9% grade 3-4 anemia, 25% grade 3-4 diarrhea. Seven percent had grade 3-4 neuropathy and 26% of patients had a dose adjustment after the beginning.

Twenty four patients (46%) had a stable disease or partial response and 21% had progressive disease at 6 courses.

At progression 23 patients had a second line of treatment. Most patients died from cancer.

In univariate analysis and in multivariate analysis, no geriatric parameters were linked to OS (age, comorbidities, independence, CCI, medication number or OMS status). Primary tumor was the only factor linked to OS in univariate and multivariate analysis.

Median survival for elderly colorectal cancer was 43.38 months and 12.51 months for elderly pancreatic cancer.

Conclusion: Despite geriatric parameters, adapted FOLFIRINOX regimen seemed to have higher manageable toxicities than younger with a particular attention to neutropenia and diarrhea. Median survival in this metastatic pancreatic population was similar to younger, and seemed to be better in metastatic colorectal cancer than published.

mFOLFIRINOX can be administered in elderly with GCSF prophylaxis to improve survival.

References:

[1] Conroy,T et al. Folfirinox versus gemcitabine for metastatic pancreatic cancer. N Engl J Med 2011;364:1817-25.
[2] Ychou et al. METHEP 2. Abstract 3512. ASCO 2016.
[3] Papamichael D et al. Treatment of colorectal cancer in older patients : International Society of Geriatric oncology (SIOG): consensus recommendations 2013. Ann Oncol 2015.
[4] Higuera et al. Management of pancreatic cancer in the elderly. World J Gastroenterol 2016 January 14; 22(2): 764-775

Disclosure of interest: None declared

Keywords: Folfirinox regimen, pancreatic and colorectal elderly patients, survival, tolerance

---

P024

GERIATRIC ASSESSMENT AND FUNCTIONAL DECLINE IN OLDER PATIENTS WITH LUNG CANCER

L. Decoster[1,*], C. Kenis[2], D. Schallier[1], J. Vansteenkiste[2], K. Nackaerts[2], L. Vanacker[1], N. Vandewalle[1], J. Flamaing[2], J. Lobelle[3], K. Milisen[4], J. De Grève[1], H. Wildiers[2]
[1]UZ Brussel, Jette, [2]UZ Leuven, Leuven, [3]Consultant in statistics, Beernem, [4]KU Leuven, Leuven, Belgium

Introduction: Physicians treating lung cancer are confronted with an expanding heterogeneous group of older patients. Treatment of these patients is complex and focusses on improving quality of life and prolonging overall survival (OS). For this reason, maintenance of functional status (FS) is a key endpoint.

Objectives: The aim of the present study is to evaluate the role of geriatric screening and geriatric assessment (GA) as well as the evolution of FS in older patients 2-3 months after the diagnosis of lung cancer, and to identify predictors associated with functional decline and OS.

Methods: Patients ≥70 years with a new diagnosis of lung cancer in which a geriatric screening and a GA were performed, were included. At baseline, all patients underwent a uniform GA including FS measured by Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). FS of patients was reassessed by repeating ADL and IADL 2-3 months after diagnosis to define functional decline. OS was collected. Determination of predictors of functional decline on ADL and IADL and of OS was performed by univariate and multivariable logistic and Cox regression.

Results: 245 patients with lung cancer were included from October 2009 till January 2015. Median age was 76 years and the majority of patients were male (72%) and had stage IV disease (58%). Treatment consisted of surgery in 20 patients (8%), radiotherapy in 105 patients (43%) of which neoadjuvant in 1 patient, 66 curative in patients and palliative in 38 patients and chemotherapy or targeted therapy in 125 patients (51%) of which platinum doublet in 94 patients, monotherapy in 24 patients and targeted therapy in 6 patients. Forty-one patients (17%) received only best supportive care. At baseline, the screening tools G8 and Flemish version of triage risk tool (fTRST) were abnormal (i.e. ≤14 and ≥1 respectively) in respectively 91% and 83% of the patients. GA deficiencies were observed in all domains but most prominent for fatigue (82%), comorbidities (78%) and nutrition (76%). At baseline, ADL and IADL impairments were detected in 126/245 (51%) and 154/245 (63%) of patients respectively. At follow-up, ADL and IADL data were available for 145 patients. Functional decline for ADL was observed in 23% (95%CI 16,2; 29,9) and for IADL in 45% (95%CI 36,9;53,1) of patients. In multivariable analysis, radiotherapy was predictive for ADL decline 2-3 months after diagnosis. No other predictive factors for ADL or IADL were identified. At the time of analysis, 45 out of 245 patients (18%) were alive. In multivariable Cox regression, stage, gender and age were predictive for survival .

Conclusion: Older patients with lung cancer are a high risk population which frequently presents at diagnosis with deficiencies in all geriatric domains. Screening tools are abnormal in almost 90% of patients, indicating that in this subpopulation it might be indicated to perform GA in all patients. During treatment functional decline is observed in almost half of the patients, more prominently for IADL. Functional decline on ADL at 2-3 months may be predicted by radiotherapy, possibly related to the acute toxicities of this treatment. Further follow-up at later time points is warranted in order to investigate the evolution of functional decline. None of the screening tools (G8, fTRST and ECOG-PS) nor the specific domains of the GA were predictive for functional decline or survival. Further research should focus on the role of GA and interventions on evolution of quality of life.

Disclosure of interest: None declared

Keywords: Functional decline, geriatric assessment, older lung cancer

---

P025

UTILITY OF GERIATRIC ASSESSMENT IN ELDERLY PATIENTS WITH LOCALLY ADVANCED LUNG CANCER TO BE TREATED WITH CONCURRENT CHEMORADIATION

M. T. Antonio Rebollo[1,*], J. Saldaña[2], J. Linares[2], M. D. Arnaiz[2], J. C. Rufinelli[2], J. Gonzalez-Barboteo[2], V. Navarro[3], A. Navarro[4], F. Cardenal[2], E. Nadal[2]
[1]Medical Oncology, Institut Català d'Oncologia. Hospital Duran i Reynals, [2]Medical Oncology, [3]Clinical Research Unit, [4]Radiotherapy Oncology, Institut Català d'Oncologia-Hospital Duran i Reynals, Barcelona, Spain

Introduction: Because of the progressive aging of the population, the number of elderly patients with NSCLC is

increasing. Concurrent chemoradiotherapy (cCTRT) has proven to increase survival in elderly patients with unresectable stage III NSCLC, but there is no consensus on the therapeutic approach. Geriatric assessment GA is a relevant tool to classify elderly patients by their frailty profile used to identify patients who may benefit from tolerable combinations of cCTRT.

Objectives: The primary objective of this study was to evaluate the use of geriatric assessment classification and VES-13 screening tool in predicting survival and toxicity in order to help on the treatment decision-making process being able to identify patients that can take benefit from cCTRT.

Methods: Elderly patients (≥ 75 years) with stage III NSCLC underwent GA, that incorporated comorbidity, polypharmacy, functional status, geriatric syndromes, mood, social support, cognition and Vulnerable Elders Survey (VES-13). According to GA, patients were classified into fit (F) and medium fit (MF), who were deemed candidates for antitumoral treatment, and unfit (UF) patients received best supportive care. Clinical and follow-up data were prospectively collected. Median overall survival (mOS) was calculated using Kaplan-Meier method.

Results: From July 2008 to June 2015, 85 elderly patients with unresectable stage III NSCLC were identified. Most patients (88%) were males. Median age of 79.5 years (75-87) and 23 were ≥80 years. The histological subtype were: squamous cell carcinoma (58%), adenocarcinoma (22%) and not otherwise specified (20%). On the basis of GA, 37%, 48% 15% patients were classified as F, MF and UF, respectively. F and MF had significantly better mOS (21.1 and 11.6 m, respectively) as compared with UF (7.7 m, p = 0.041). Vulnerable patients based on screening-tool VES-13 had significantly shorter mOS (9.6 m vs 22.6 m, p = 0.019). In the multivariate survival analysis, GA groups and VES-13 had independent prognostic value, independly of age, gender, stage and weight loss.Some fit and vulnerable p did not receive concurrent CRT due to patient and physician decision, tumor not amenable for radiotherapy or comorbid conditions.F and MF patients receiving cCTRT (73%) had mOS of 21.1 m (95% CI 12.8–29.4). Adverse events (G3-4): neutropenia 11 (22%), anemia 2 (4.2%), thrombocytopenia 3 (6%), febrile neutropenia 4 (8%), respiratory infection 13 (24.5%), asthenia 6 (12%), anorexia 1 (2%), diarrhea 1 (2.1%), radiation pneumonitis, 7 (14%) and oesophagitis 1 (1%). Six (12%) patients died due to radiation pneumonitis. Higher VES-13 (≥ 3) was associated with shorter mOS (p=0.037) and higher risk of G3-4 toxicity (p = 0.012).

Conclusion: Geriatric assessment allows us to select patients fit enough to be treated with adapted cCTRT with similar survival benefit from standard concurrent CTRT as younger ones. The vulnerability screening tool VES-13 had independent prognostic value and was significantly associated with higher risk of toxicity. The value of the VES-13 to predict oxicity and to assess prognosis should be further studied.

Disclosure of interest: None declared

Keywords: Chemoradiotherapy, Geriatric assessment, lung cancer

P026

CLUSTERING ANALYSIS OF OESTROGEN RECEPTOR POSITIVE EARLY OPERABLE PRIMARY BREAST CANCER IN OLDER WOMEN – A STUDY BASED ON CORE NEEDLE BIOPSY

M. A. Albanghali[1], G. P. Figueredo[2], M. A. Aleskandarany [1], A. R. Green [1], E. A. Rakha [1], C. Nolan [1], M. Díez-Rodríguez[1], J. M. Garibaldi [2], I. O. Ellis[1], K. L. Cheung[1,*]

[1]*School of Medicine,* [2]*School of Computer Science, University of Nottingham, Nottingham, United Kingdom*

Introduction: Irrespective of primary treatments, core needle biopsy (CNB) is usually available from all patients with breast cancer (BC). Our group has recently developed a novel technique to construct tissue microarrays (TMAs) from CNB samples, allowing the possibility to investigate the biological profile of BC in details.

Objectives: This study aimed to delineate the different subtypes within oestrogen receptor positive (ER+) primary BCs in older women and to investigate their prognostic significance.

Methods: From a consecutive series of 1,700+ older (≥70 years) women with early operable invasive primary BCs (with clinical follow-up of 37+ years) managed in a single institution, 308 patients fulfilled these criteria: having (i) ER+ (defined by Histochemical (H) score≥1) disease; and (ii) good quality CNB samples available for TMA construction and then immunohistochemical data for a panel of 17 biomarkers (ER, PgR, Ki67, p53, EGFR, HER2, HER3, HER4, BCL2, CK5/6, CK7/8, MUC1, VEGF, PTEN, AIB1, LKB1 and BRCA1). Clustering analysis was then performed utilising unsupervised K-means and partitioning around medoids algorithms.

Results: Of these 36% (n=110) underwent primary surgery and 61% received primary endocrine therapy (PET), with 5-year breast cancer specific survival (BCSS) of 94% and 84% respectively. Utilising biomarkers expression, three clusters were identified: the well known luminal A (56%) and B (26%) clusters, and also a novel 'low ER luminal' cluster which was characterised by low ER expression and high expression of luminal cytokeratins. These clusters correlated with different survival outcomes, both overall and in association with different treatments (Table 1).

Table 1 (abstract P026)

5-year BCSS	All	Surgery	PET
Luminal A	92% [1]	88%	90%
Luminal B	87%	95% [2]	73% [2]
Low ER luminal	73% [1]	80%	70%

Comparisons: [1] p=0.001; [2] p=0.036; Else – ns.

Conclusion: Using a novel TMA construction technique, CNB provides a tantalising source for investigating tumour biology in older women with primary BC. Different subtypes, including a novel cluster, have shown correlation with clinical outcomes. This technology and the consequent findings would help further develop a personalised treatment approach for this population.

Disclosure of interest: None declared

Keywords: Breast cancer, clustering, core needle biopsy, ER positive, older women

P027

FINAL RESULTS OF GERICO 10 GETUG P03 TRIAL EVALUATING FEASIBILITY OF DOCETAXEL IN VULNERABLE OR FRAIL ELDERLY (75+) PATIENTS WITH METASTATIC CASTRATION RESISTANT PROSTATE CANCER

M. Loic[1,*], I. Latorzeff[2], N. Houede[3], J. Meunier[4], F. Priou[5], G.-M. Gwenaëlle[6], E. Carola[7], C. Orsini[8], T. Filleron[9]
[1]*Medical Oncology, Institut Claudius Regaud - IUCT-Oncopole,* [2]*Radiotherapy, Clinique Pasteur, Toulouse,* [3]*Medical Oncology, CHU, Nîmes,* [4]*Medical Oncology, CHR, Orléans,* [5]*Medical Oncology, CH Vendée, La Roche sur Yon,* [6]*Medical Oncology, Institut Paoli Calmette, Marseille,* [7]*Medical Oncology, CH, Senlis,* [8]*R&D Unicancer, Paris,* [9]*Methodologist, Institut Claudius Regaud - IUCT-Oncopole, Toulouse, France*

Introduction: Prostate cancer (PC) in the elderly is a major issue for medical community because of epidemiologic and demographic data.

Treatment of metastatic castration resistant PC (mCRPC) has evolved with new hormonal therapies but chemotherapy remains a key treatment for this disease.

Benefit of chemotherapy is independent of age in pivotal study by Tannock (cut-off:69) in a highly selected population.

But data, especially geriatric data, are lacking to determine which patient should not receive Docetaxel because off anticipated toxicity.

Objectives: Our study aims to evaluate prospectively the feasibility of a chemotherapy with Docetaxel/Prednisone administered every 3 weeks in patients 75+, evaluated by comprehensive geriatric assessment, belonging to group 2 "vulnerable" or to group 3 "frail" of the classification proposed in 2010 by the International Society of Geriatric Oncology (SIOG) [1].

Methods: Chemotherapy with Docetaxel/Prednisone was administered every 3 weeks (arm A: 60 mg/m² C1 then 70 mg/m² for subsequent cycles if tolerance is good) or weekly (arm B: 35mg/m² J1J8 with Day 1 = Day 21) in patients 75+, evaluated by comprehensive geriatric assessment, belonging to group 2 "vulnerable" or to group 3 "frail" (SIOG 2010).

Feasibility is defined as the possibility for a patient to receive 6 cycles of chemotherapy without fulfilling the criteria for withdrawal from study defined "a priori" by GERICO group:

- stop or delay chemotherapy ≥2 weeks
- necessity to reduce chemotherapy dose ≥25%
- febrile neutropenia or NCI CTC grade III non-haematological toxicity (except alopecia)
- loss of autonomy (Activity of Daily Living (ADL) decrease ≥2 points) leads to geriatric criterion

The trials is a double randomized phase II based on a Simon's optimum two stages design for each strata defined according to the SIOG criteria (α = 5%, 1-β = 90%, p0 = 0.70 and p1 = 0.90).

A pharmacokinetic/pharmacodynamic study is associated to our project, based on a method of population pharmacokinetics, trying to highlight clinical, geriatric and biological parameters as predictors of haematological tolerance. A pharmacogenetic study of PXR (pregnane X receptor or nuclear receptor NR1I2) but also other enzyme systems (such as CYP3A4 and CYP3A5) will be associated with pharmacokinetic investigations.

Results: From dec 2010 until Aug 2012 21 centers have included 66 patients, 45 and 21 in groups 2 and 3 respectively based on investigators evaluation. All allocations were reviewed by a steering committee.

Enrolment in group 3 was prematurely closed in OCT 2012 on the recommendation of a safety committee. In group 2, planned interim analysis was performed after inclusion of 30 pts. (ARM A/B n=15/15). 11pts (73,3%; 95%CI=[44,9;92,2]) in arm A and 10 pts (66,6%;95%CI [38,4;88,2] didn't meet the predefined criteria.

Conclusion: According to the criteria of our study, defined *a priori*, Docetaxel weekly or every 3 weeks is not feasible in patients 75+ with mCRPC classified in groups 2 or 3 of SIOG 2010 recommendations.

In our opinion, m CRPC pts 75+ should not receive chemotherapy without prior geriatric screening (G8) ±geriatric assessment ± geriatric intervention.

These results confirm the central role of geriatric assessment in mCRPC elderly patients.

Full geriatric description of the population and all secondary end points will be presented at the meeting.

Reference:

[1] Droz JP. BJU Int. 2010 Aug;106(4):462-9

Disclosure of interest: M. Loic Grant/Research Support from: GSK, Consultant for: Sanofi Astellas Janssen Roche Pfizer Novartis Ipsen, I. Latorzeff: None declared, N. HOUEDE: None declared, J. Meunier: None declared, F. Priou: None declared, G.-M. Gwenaëlle: None declared, E. Carola: None declared, C. Orsini: None declared, T. Filleron: None declared

Keywords: Castration resistant, Chemotherapy, frail, metastatic, prostate

---

P028

UNRESECTABLE AND METASTATIC PANCREATIC ADENOCARCINOMA IN THE ELDERLY: A 10-YEAR SINGLE-CENTER EXPERIENCE

M. Langlois[1,*], A. Beaudoin[1], F. Lemay[1]
[1]*University of Sherbrooke, Sherbrooke, Canada*

Introduction: Pancreatic adenocarcinoma is the fourth leading cause of cancer deaths in Canada and mainly affects individuals older than 60 years of age. Pancreatic cancer follows a relatively silent clinical course and is more often diagnosed at an advanced stage, thereby ruling out the possibility of cure. When faced with a diagnosis of unresectable pancreatic adenocarcinoma, patients may be offered palliative chemotherapy. Unfortunately, a paucity of data exists regarding the use, efficacy and safety profile of chemotherapeutic agents in the elderly population with pancreatic cancer. With an aging population, clinicians are bound to be faced with oncologic decisions regarding treatment of those under-represented elderly patients with pancreatic adenocarcinoma. It is therefore imperative to

study this population in order to offer adapted and proven treatment protocols and ensure adequate and optimal care.

Objectives: The objective of this study is to obtain adequate profiling of the elderly patients with pancreatic cancer to better assess factors influencing outcomes and decision-making.

Methods: This is a retrospective observational study of all patients aged older than 75 years old with a diagnosis of unresectable or metastatic pancreatic cancer at the CHUS between June 2005 and June 2015. Data was retrieved using the local patient database program Ariane.

Results: During the study period, 186 patients were included according to the entry criteria. Median age at diagnosis was 82 years old with a slight female gender predominance (52% vs 48%). Location of the primary tumor was in the head of the pancreas in 46% of cases, and evenly distributed between the pancreatic body and tail. Diagnosis was made by the general practitioners or gastroenterologists in 73.4% of cases. High blood pressure, diabetes mellitus and coronary atherosclerosis were the most frequently encountered comorbidities. Other biochemistry parameters at diagnosis suggested a more fragile population; median albumin level of 32 g/L, median creatinine value of 155 µmol/L and minor anemia (median = 11.7 g/dL). Among the 96 patients who were offered chemotherapy, only 10 accepted this treatment. ECOG status was unfortunately far from uniformly documented, although among the patients treated, all had either ECOG 0 or 1 scores. Nine received Gemcitabine as first line whereas one patient was treated with Folfirinox. Seven completed the treatment with the standard regimen dosage for each cycle. Patients received a median of 5 cycles and end of treatment was dictated by severe asthenia complicating treatment. Only 2 patients, non-responders, received second-line agents (5FU/LV) that were subsequently stopped, again for non-response.

Conclusion: Results of this unicentric observational retrospective study suggest an overall diminished clinical performance status in elderly patients diagnosed with unresectable or metastatic pancreatic cancer when compared to their younger counterparts. Due to our small sample size, it remains difficult to draw conclusions on ideal patient selection criterion and palliative treatment for advanced pancreatic cancer in the elderly. The present study does, however, underline the dire need for further studies on the matter.

References:

[1] Société Canadienne du Cancer
[2] Fondation Canadienne du cancer du pancréas
[3] Oncology Journal, 2014 Jan; 28(1):70-4.
[4] Hurria et al. The Oncologist.2015; 20 :37-44.
[5] National Comprehensive Cancer Network.

Disclosure of interest: None declared

Keywords: Pancreas, pancreatic adenocarcinoma, unresectable pancreatic adenocarcinoma

P029

THE IMPACT OF AN OSTOMY ON OLDER COLORECTAL CANCER PATIENTS: A CROSS-SECTIONAL SURVEY

N. Verweij[1], M. Hamaker[2,*], D. Zimmerman[3], T. van Loon[3], F. van den Bos[4], A. Pronk[5], I. Borel Rinkes[6], A. Schiphorst[5]
[1]*Surgery/Geriatrics,* [2]*Geriatrics, Diakonessenhuis, Utrecht,* [3]*Surgery, Tweesteden Ziekenhuis, Tilburg,* [4]*Internal medicine, Haga ziekenhuis, Den Haag,* [5]*Surgery, Diakonessenhuis,* [6]*Surgery, UMC, Utrecht, Netherlands*

Introduction: Ostomies are being placed in 35% of patients after colorectal cancer surgery. Both the overall number of ostomy carriers as well as the proportion of elderly ostomy carriers is expected to rise even further in future years due to increasing life expectancy, ageing of the population and active screening programs for colorectal malignancies.

Objectives: As decision-making regarding colorectal surgery is challenging in the older patients, it is important to have insight in the potential impact due to ostomies.

Methods: An internet-based survey was sent to all members with registered email addresses of the Dutch Ostomy Patient Association.

Results: The response rate was 49%, 932 cases were included of whom 526 were aged <70 years old ('younger respondents'), 301 were aged between 70-79 years old ('the elderly') and 105 were aged ≥80 years old ('oldest old'). Almost all respondents (99%) were living independently. Of the oldest old, 39% lived alone, compared to 14% of the elderly and 12% of the younger respondents (p=0.007). Half of the ostomates had received their ostomy between 3 and 10 years prior to the survey date. Most respondents (91%) had a colostomy.

Help or assistance for emptying or replacing the bag was required in 9% of the oldest old (versus 6% of the elderly and 2% of the younger respondents, p<0.001). Ostomy-related limitations ((instrumental) activities of daily living, day planning, performing hobbies, participating in social activities and dealing with other people) were similar in the different age groups. The oldest old respondents had more difficulties in being away from home overnight due to the ostomy (20% of the oldest old versus 11% of the elderly and 9% of the younger respondents, p=0.02).

Uncertainty and dependency due to the ostomy was experienced equally by all respondents (in 8-10% and 18-22% respectively). A reduced quality of life was experienced least in the oldest old group (24% vs 37% of the elderly and 46% of the younger respondents, p<0.001).

Experienced limitations and impact decreased as time that had passed since ostomy placement increased. Respondents who received their ostomies during the past two years, experienced most limitations compared to those who had it for 3-10 years or for ≥11 years.

The oldest old respondents who received their ostomy within the past two years needed help with emptying or changing the bags in 14%, this decreased to 10% and 3% of the respondents who had their ostomy for 3-10 years and ≥11 years respectively (p=0.28).

Conclusion: Older ostomates do not experience more limitations or psychosocial impact due to the ostomy compared to their younger counterparts. Over the years,

impact becomes less distinct. Treatment decision-making is challenging in the older colorectal cancer patients but ostomy placement should not be withheld based on age alone.

Disclosure of interest: None declared

Keywords: Impact, ostomy, survey

P030
HCC ASSOCIATED WITH HIGHEST INPATIENT POST-OPERATIVE MORTALITY AMONGST GI CANCERS: ELDERLY AGE HIGHEST PREDICTIVE RISK FACTOR

P. Somasundar[1,*], G. Cholankeril[2], A. Ahmad[1], M. Hu[3]
[1]*Surgery, Roger Williams Medical Center, Providence, USA,*
[2]*Medicine, Roger Williams Medical Center, Providence, Bahamas,*
[3]*Statistics, Brown University, Providence, USA*

Introduction: There is limited data regarding inpatient mortality and associated risk factors in post-operative gastrointestinal malignancies. Accordingly, we sought to evaluate these outcomes in GI malignancies after specific cancer-directed surgery.

Objectives: To identify mortality associated with HCC and age.

Methods: Using the Healthcare Utilization Project-National Inpatient Sample (HCUP-NIS) we evaluated age-specific inpatient mortality and associated independent risk factors after cancer-directed surgery in GI malignancies from 2004-2013. GI malignancies were categorized as 1) colon cancer 2) esophageal 3) gastric 4) hepatocellular carcinoma (HCC) 5) pancreatic 6) anorectal cancer 7) other GI cancers. All patients underwent site-specific cancer directed surgery during their hospitalization. Patients with cancer-directed surgery at more than one site were excluded. Multivariate analysis analyzing risk factors associated with mortality included demographic information (age, gender, ethnicity, insurance type) and clinical comorbidities which were controlled for severity of disease using the Elixhauser comorbidity index. All multivariate logistic and linear regression was performed using SAS statistical software 9.4.

Results: Overall from 2004-2013, 276,771 patients underwent cancer-directed surgery for GI malignancies. Although HCC (n=1,535, 0.6%) constituted the smallest proportion of hospitalizations, it was associated with highest inpatient mortality (6.4%) followed by esophageal (5.4%) and gastric cancer (4.4%) (Table). Post-operative HCC patients were significantly younger than all other post-operative GI malignancy patients (56.5 years versus 67.2 years, $p < 0.001$). In our multivariate analysis, HCC was associated with the highest likelihood for inpatient mortality (reference, colon cancer; HCC OR, 1.6; 95% CI: 1.3-2.0 $p = 0.004$). In our sub-analysis of post-operative HCC patients, we noted advancing age to be a significant predictive risk factor for mortality (reference, age < 65; 65-74, OR, 2.4; 75-84, OR, 6.3; ≥ 85, OR, 28.3; $p < 0.01$).

Conclusion: Although HCC represents a small proportion of post-operative GI malignancy, HCC represents the highest inpatient mortality particularly in the elderly. With the incidence of HCC expected to rise rapidly in the elderly, addressing this susceptible population should be prioritized.

Disclosure of interest: None declared

Keywords: Hepatocellular cancer

P031
RETROSPECTIVE CORELATION OF BIOPSY WITH PSA SCREENING VALUES OF GERIATRIC INDIVIDUALS IN A TERTIARY CARE TEACHING HOSPITAL IN INDIA

R. Unnikrishnan[1,*], S. Senan[1]
[1]*Geriatrics, Amrita Institute of Medical Sciences, Kochi, Kerala, India*

Introduction: Prostate Specific Antigen (PSA) screening is a common investigation employed across various parts of the world to screen for prostatic malignancies. Various studies done across a wide spectrum of different populations and age groups have also revealed an age specific and population specific variation in cut off of normal values of PSA - which again adds on to the dilemma whether the current cut-off values would result in false positive or false negative results.

The purpose behind this study stems from the fact that multiple papers have suggested that age specific cutoff values for PSA screening are better than the currently used standard cutoff values of 4ng/ml and the fact that different races have their own reference ranges. Similar studies have been presented for Afro-American and East Asian populations, but none whatsoever explxoring the same in the Indian Subcontinent.

Objectives: Primary Objective :To study P.S.A values of elderly individuals and postulate the possible normal values of PSA in different age groups of elderly. Secondary Objective :To co-relate the PSA values with biopsy reports, if done, thus hypothesizing the acceptable limits of PSA in the elderly male in Kerala, beyond which prostatic biopsy maybe indicated.

Methods: This is a retrospective, cross-sectional study. Data was collected on the relevant variables from the hospital records at Amrita Institute of Medical Sciences, Kochi of patients registered between Januray 2011 and 2013. Total study population included 1038 patients. Inclusion Criteria: All male patients aged more than 60 years who are presenting to the Geriatrics OPD for Comprehensive health check up.

Results: Of the 1038 patients, only 105 had elevated PSA and they were classified based on age group in the following manner. 23 of these patients who had suspicious DRE findings were subjected to prostatic biopsy, of which only 7 were reported as malignant.

Table (abstract P031)

Age groups	Sample size	Mean	Standard deviation
60-69 yrs	610	1.55	1.84
70-79 yrs	312	1.40	1.33
80+ years	28	1.20	1.06
Total	950	1.49	1.67

Conclusion: 1. Age specific reference ranges of PSA is essential in interpreting PSA of elderly and our study showed values that are similar to the expected. Interestingly, there is a fall in the mean values of PSA in higher age brackets but this is notstatistically significant.

2. The study also demonstrates that roughly 10% of the elderly population in all age subsets has PSA values over the normal. This is comparable to other studies and demonstrates that routine PSA testing puts roughly 1 in 10 patients at risk for biopsy.

3. Only 7 malignancies were picked up by the routine use of PSA testing in the study population of 1038. i.e. 6.7 per 1000. This brings us to the question of cost effectiveness of routine PSA testing, particularly when it places roughly 10% at risk for biopsy.

4. Malignancies were detected in patients with falling PSA values also, hence questioning the value of serial estimations.

5. Malignancies were also detected in patients without suspicious findings on P.R. examination.

6. On the other hand in all 3 patients who had both a rising PSA and suspicious P.R. findings, who underwent biopsy were positive for malignancy. This underscores the importance of combining the two criteria for decision making regarding biopsy.

Disclosure of interest: None declared

Keywords: Geriatric, prostate cancer, PSA

P032
A PHASE II STUDY OF THE COMBINATION OF BEVACIZUMAB WITH CYTOTOXIC CHEMOTHERAPY, AS FIRST LINE TREATMENT, IN OLDER PATIENTS WITH ADVANCED/ METASTATIC NSCLC (NON-SQUAMOUS) SELECTED BY A GERIATRIC ASSESSMENT: GIDO1201

R. Gironés[1,*], F. Aparisi[2], M. Llorente[3], B. Massuti[4], M. Martín[5], A. Blasco[6], S. Blasco[7], O. Juan[8], on behalf of GIDO and GIDO: Grup d´investigació i divulgació en oncologia

[1]*Medical Oncology Unit, Hospital Lluis Alcanyis, Xàtiva,* [2]*Medical Oncology Unit, Hospital Virgen de los Lirios, Alcoi,* [3]*Medical Oncology Unit, Hospital de Elda, Elda,* [4]*Medical Oncology Unit, Hospital General, Alicante,* [5]*Medical Oncology Unit, Hospital Doctor Peset,* [6]*Medical Oncology Unit, Hospital General, Valencia,* [7]*Medical Oncology Unit, Hospital de Sagunto, Sagunto,* [8]*Medical Oncology Unit, Hospital Politecnic i Universitari la FE, Valencia, Spain*

Introduction: Bevacizumab when added to cytotoxic chemotherapy in patients with NSCLC offers progression free survival (PFS) and overall survival (OS) benefit. Most patients with non–small-cell lung cancer (NSCLC) are elderly, and age has important implications for their management and treatment. All patients aged more than 70 years should receive an assessment of physiologic age, including mortality and toxicity prediction. Age itself does not contraindicate treatment. However, the survival benefit for bevacizumab added to chemotherapy seems limited to patients aged less than 75 years.

Objectives: The purpose of the present study was to evaluate toxicity of an adapted regiment to elderly patients selected by a geriatric assessment. We hypothesized that a less dose-regimen administered to elderly patients selected by an adapted geriatric assessment could decrease the rate of neutropenia to 20%. Although a simple size of 51 patients was needed to test this hypothesis, the study was halted after the inclusion of 26 patients due to the slow recruitment.

Methods: Chemotherapy naive NSCLC patients of non-squamous histology, ≥70 years of age were eligible for this study. Before enrolment all patients underwent geriatric assessment. Patients with significant functional impairment (ADL dependencies) or significant comorbidities (according to Charlson Comorbidity Index CCI ≥ 4), aged ≥ 85 years old and/ or geriatric syndromes were excluded. The primary end-point of the study was the overall toxicity rate. Patients were treated with a modified regimen consisting on triweekly CBDCA AUC 4 + PTX 175 mg/m^2 + B 7.5mg/kg

Results: From August 2013 until June 2015, 26 patients have been enrolled. Median age was 76 and 20 (77%) were male. 20(77%) had PS 1.

All patients had ADL independence and median IADL was 6 (3-6). Median CCI was 1 (0-4). No patient had dementia or was depressed.

Table (abstract P032) – Characteristics of patients included (n: 26)

Age median (SD)	77 (70-84)
Gender	
Male (n; %)	20 (77%)
Female (n; %)	6 (23%)
Smoking habit	
Active smoker	6 (23%)
Ex-smoker	13 (50%)
Never smoker	7 (27%)
Performancs Status ECOG	
0	6 (23%)
1	20 (77%)
IADL (Lawton) (instrumental activities daily living) (median, SD)	5 (3-6)
Comorbidity	
Charlson (median, SD)	1 (0-4)
SCSS (median, SD)	3 (0-13)
Polypharmacy (median, SD)	6 (0-14)
Patients with any toxicity	25 (96%)
Toxicity grades 3-4	12 (46%)
Haematological toxicity G 3-4	4 (15%)
Non-hameatological toxicity G 3-4	10 (38%)

Haematologic toxicity was low (4 patients grades 3-4 toxicity: 15.4%) and also non-haematological toxicity (10 patients G3-4: 38.5%).Grade 3/4 neutropenia was observed only in one patient (3.8). One fatal AE was observed due to sepsis.

At the time of this preliminary analysis, median PFS was 8.22 months (6.0-10.3) and median OS was 11.6 (8.0-15.1). 3 patients are still on treatment.

Conclusion: Bevacizumab in combination with a reduced schedule of carboplatin and paclitaxel shows some efficacy and less toxicity in elderly patients, however, in highly selected elderly population. Our conclusions were limited by the low accrual rate.

Disclosure of interest: None declared

Keywords: Bevacizumab, elderly non-small cell lung cancer, Geriatric assessment, phase II trial

P033

ARE OLDER PATIENTS PROPERLY REPRESENTED IN CLINICAL TRIALS? ANALYSIS OF THE SCREENING FAILURES REASONS IN ELDERLY NON-SMALL CELL LUNG CANCER PATIENTS (NSCLC) STAGE IV ASSESSED FOR BEVACIZUMAB THERAPY (GIDO1201 TRIAL)

R. Gironés[1,*], F. Aparisi[2], M. de Julián[3], A. Sánchez-Hernández[3], A. Blasco[4], S. Blasco[5], O. Juan[6], on behalf of GIDO and GIDO: Grup d´investigació i divulgació en oncologia

[1]*Medical Oncology Unit, Hospital Lluis Alcanyis, Xàtiva,* [2]*Medical Oncology Unit, Hospital Virgen de Los Lirios, Alcoi,* [3]*Medical Oncology Unit, Hospital Provincial, Castellón,* [4]*Medical Oncology Unit, Hospital General, Valencia,* [5]*Medical Oncology Unit, Hospital de Sagunto, Sagunto,* [6]*Medical Oncology Unit, Hospital Universitari i Politècnic, Valencia, Spain*

Introduction: GIDO 1201 is a phase II trial conducted in 10 centres in Spain that explores the toxicity of a bevacizumab added to carboplatin-paclitaxel chemotherapy in elderly patients with NSCLC. Its recruitment was lower than expected.

Objectives: In order to know the reasons why elderly patients with NSCLC are unsuitable for this chemotherapy regimen we collected all screening failures of our phase II trial GIDO 1201

Methods: The main eligibility criteria were: age ≥ 70 years, ECOG performance status (PS) 0-1, cytologically or histologically confirmed nonsquamous stage IV NSCLC; no absolute contraindication to receive bevacizumab, no mutation of EGFR or rearrangement of ALK. A basal geriatric assessment was performed and patients with score <5 in activities of daily living (ADL), < 9-12 in the Mini Mental Status exam (Folstein) or accomplishing one frailty Balducci criteria [1] (age ≥ 85 years old, dependence in 1 or more ADL ≥3, comorbidities ≥1 or geriatric syndrome) were excluded.

Results: Between August 2013 and June 2015, 277 patients were screened at 10 centres. 26 (20 male, 6 female, median age: 76 years) eligible patients were enrolled. 3 centres did not find patients who fulfilled inclusion criteria.

From 250 excluded, median age was 76 years (70-92). 203 were male (82%) and 47 (18%) female.

A main exclusion criterion was no adenocarcinoma histology (77 pts (31%) squamous, 41 (16%) small-cell lung cancer, 8 (2.8%) others). For those with adenocarcinoma histology (126 pts, 50%) were excluded because of: 54 (43%) PS ≥ 2; 22 (17,5%) EGFR mutation; 1 ALK translocation; 21 therapeutic anticoagulation due to previous comorbidity (18 pts) or thromboembolic events related to the NSCLC (3 pts); 3 refused to participate in the trial; 5 haemoptysis; 9 large vessels infiltration; 4 elder than 85 years; 7 other reasons.

Many patients had PS ≥ 2 due to uncontrolled brain metastases (14 pts)

Conclusion: In the Spanish population older than 70 years squamous histology comprises 31% of the cases, and is the main exclusion criteria for the treatment with bevacizumab. Additionally, nearly 28% patients with adenocarcinoma presented contraindication to the treatment with bevacizumab. However, the main reason why patients with adenocarcinoma were not treated with platinum-based combination therapy is PS ≥ 2 (43%).

References:

[1] Balducci L. Evidence-based management of cancer in the elderly. Cancer Control 2000;7(4):368-76.

Disclosure of interest: None declared

Keywords: Bevacizumab, elderly phase II studies, non-small cell lung cancer, screening failures

P034

SHORT-TERM CHANGES IN MOOD AS MEASURED BY COMPREHENSIVE GERIATRIC ASSESSMENT (CGA) SCORES FOLLOWING TREATMENT OF PRIMARY BREAST CANCER IN OLDER WOMEN

R. M. Parks[1,*], P. Howard[2], K. Cox[2], K.-L. Cheung[1]

[1]*School of Medicine,* [2]*School of Health Sciences, University of Nottingham, Nottingham, United Kingdom*

Introduction: Treatment decision making in the older women with primary breast cancer can be challenging. Evidence is growing for the use of a comprehensive geriatric assessment (CGA) tool to help identify patients who may be appropriate for surgery or non-surgery.

Objectives: To identify whether there are any differences between CGA performed at 6 weeks compared to 6 months post-diagnosis in patients with primary operable breast cancer.

Methods: A prospective, two-centre, pilot study was conducted evaluating a previously validated, cancer-specific CGA tool in older women with primary (stage I/II) breast cancer. CGA was conducted within 6 weeks and again at 6 months post-diagnosis. The decision of primary treatment followed consultation with the clinical team and was not guided by CGA. Total CGA scores included assessment of: activities of daily living, independent activities of daily living, performance status, comorbidity, mood, social activity and social support.

Results: At the time of analysis, 60 patients had completed CGA at both 6 weeks and 6 months post-diagnosis. 42 of these underwent surgery and 18 non-surgery (primary endocrine therapy). Average age was 80 years (range 68-92).

There was no significant difference between total scores for CGA (maximum score 263 points); higher scores indicating better outcomes) between those who had surgery compared to non-surgery, at 6 weeks or 6 months after diagnosis.

There was a significant (p=0.009) improvement in total CGA score between the two time points for the patients who underwent non-surgery; at 6 weeks non-surgery patients had an average total CGA score of 191/263, compared with 209/263 at 6 months. This was not apparent for the surgical patients. Analysis of the individual components of total CGA score (listed above) for non-surgery patients showed a significant (p=0.045) improvement in mood score alone; at 6 weeks non-surgery patients had an average mood score of 77/102, compared to 85/102 at 6 months.

Conclusion: In this small pilot study, a short-term (at 6 months) improvement in mood has been observed in patients undergoing non-surgery (primary endocrine therapy). This

may be related to the effects of treatments (endocrine therapy and/or a 'lack of' surgery). Further work is required to investigate this. The study is ongoing and is expanding into a multi-centre one.

Disclosure of interest: None declared

Keywords: Comprehensive geriatric assessment, mood assessment, older women, primary breast cancer

P035

ANDROGEN DEPRIVATION THERAPY AND THE RISK OF PARKINSONISM IN OLDER MEN WITH PROSTATE CANCER

S. M. Alibhai[1,2,*], R. Sutradhar[3], J. Rangrej[3], C. Marras[4], N. Fleshner[5], J. W. Young[1]

[1]*Medicine, University of Toronto,* [2]*Medicine, University Health Network,* [3]*Institute for Clinical Evaluative Sciences,* [4]*Neurology,* [5]*Surgery, University Health Network, Toronto, Canada*

Introduction: Case reports and anecdotal experiences suggest that some men develop parkinsonism after initiating androgen-deprivation therapy (ADT) for the treatment of prostate cancer, possibly due to neurophysiological effects of changes in testosterone and/or estrogen.

Objectives: To investigate whether ADT increases the risk of parkinsonism in men with prostate cancer.

Methods: Using linked administrative databases in Ontario, Canada, men age 40 or older with prostate cancer on continuous ADT for at least six months or who underwent bilateral orchiectomy (n=38,931) were matched 1:1 with men with prostate cancer who had never received ADT. Treated and untreated groups were range-matched on age at index date and year of diagnosis, and propensity-matched on comorbidities, medications, cardiovascular risk factors, and socioeconomic variables. A competing risks analysis was conducted where the primary outcome was time to a new diagnosis of parkinsonism, and time to death was a competing event.

Results: The cohort had a mean age of 71.9 years and was followed for a mean of 5.76 years. Under a competing risks analysis, ADT use was not associated with an increased rate of parkinsonism. Based on the results from the multivariable cause-specific hazard regression model, the adjusted relative rate of experiencing parkinsonism among ADT users compared to non-users was 0.74 (95% confidence interval (CI) 0.67–0.83, p<0.0001). The adjusted relative rate of experiencing the competing event of death among ADT users compared to non-users was 1.33 (95% CI 1.30–1.36, p<0.0001). In both sets of models increasing age was associated with an increasing risk of parkinsonism. The 5-year incidence of parkinsonism was 1.03% in ADT users versus 1.56% in non-users.

Conclusion: Contrary to our hypothesis, continuous ADT use for at least 6 months in men with prostate cancer was not associated with an increased risk of parkinsonism.

Disclosure of interest: None declared

Keywords: Androgen deprivation therapy, health services research, parkinsonism, prostate cancer, toxicity

P036

CLINICAL AND TREATMENT FACTORS ASSOCIATED WITH SURVIVAL AMONG WOMEN 70 YEARS AND OLDER WITH EPITHELIAL OVARIAN CANCER

S. E. Robertson[1,*], B. R. Khulpateea [1], Y. Xiong[1], K. O'Hara[2], M. Extermann[1], H. S. Chon[1]

[1]*Moffitt Cancer Center, Tampa, USA,* [2]*Hospital General Universitario Gregorio Maranon, Madrid, Spain*

Introduction: Ovarian cancer is commonly diagnosed in the 7th and 8th decades of life and yet elderly women are underrepresented in clinical trials that guide physicians' treatment decisions. As such, elderly patients frequently receive suboptimal treatment regimens and suffer from poorer outcomes.

Objectives: We sought to examine factors associated with differences in treatment and outcomes among older versus younger patients with epithelial ovarian cancer.

Methods: We performed a retrospective chart review of 323 patients with invasive epithelial ovarian cancer treated at a single institution between January 1, 2001 and April 1, 2014. Patients were excluded from this review if they had a prior personal history of cancer, had non-epithelial and/or borderline histology, or if medical records were not available. Clinical data obtained included disease characteristics (disease stage, tumor histology and grade), baseline performance measures (Karnofsky performance status (KPS), ECOG Performance score, CIRS-G score, and CIRS-Severity Index), treatment outcomes (surgical debulking status, type, timing and number and completeness of chemotherapy regimens given) and survival data.

Results: Seventy-one patients (21.98%) were ≥ 70 years at the time of cancer diagnosis. In a univariate analysis, study subjects 70 years and older were significantly more likely to have a tumor with serous histology, a higher CIRS-G score, a higher CIRS-Severity Index, suboptimal surgical debulking, and fewer total lines of chemotherapy given. Interestingly, ECOG performance score and KPS were not significantly different between the age groups. All variables significant to a level of p ≤ 0.1 in the univariate analysis were included in a multivariate logistic regression analysis. In the multivariate analysis, subjects ≥ 70 years were significantly more likely to have a higher CIRS-Severity Index (OR 1.31, p=0.007), suboptimal surgical debulking (OR 2.73, p = 0.03) and were less likely to complete the recommended first line adjuvant chemotherapy (OR 0.37, p=0.02). Survival analyses were performed and found no difference in overall survival between the young and elder age group (log-rank p=0.08). For the full cohort, factors independently associated with decreased overall survival (OS) in a multivariate cox proportional hazard model were higher CIRS-G score (HR 1.22, p=0.001), suboptimal surgical debulking (HR 2.36, p=0.0003) and more total lines of chemotherapy given (HR 1.10, p=0.008). Endometrioid histology was significantly associated with improved OS (HR 0.28, p=0.03).

Conclusion: We did not find a significant difference in overall survival for patients 70 years or older as compared to the younger cohort. Instead, survival was significantly influenced by patient comorbidities as assessed by the CIRS-G tool, surgical debulking status and total lines of chemotherapy

given. Our data suggest that age alone is not a significant predictor of survival for patients with ovarian cancer and should not be a reason to deviate from standard treatment recommendations in an elderly patient.

Disclosure of interest: S. Robertson: None declared, B. Khulpateea : None declared, Y. Xiong: None declared, K. O'Hara: None declared, M. Extermann Grant/Research Support from: GTx, H. S. Chon: None declared

Keywords: Comorbidity, elderly, ovarian cancer

P037

SAFETY AND EFFICACY OF LOWER DOSE WEEKLY TOPOTECAN IN ELDERLY PATIENTS WITH PLATINUM RESISTANT OVARIAN AND PERITONEAL CANCER

V. Michalaki[1,*], T. Panoskaltsis[2], G. Frangulidis[3], N. Dafnios[3], C. Papadimitriou[1]

[1]*Oncology,* [2]*Gynecology,* [3]*Surgery, Areteion Hospital University of Athens, Athens, Greece*

Introduction: Topotecan at a dose of 1.5 mg/m(2) on days 1 to 5 of a 21-day cycle is indicated in the treatment of advanced-stage ovarian cancers refractory to prior platinum-based regimen. However, many pretreated patients may be predisposed to hematologic adverse events.

Objectives: The aim of this phase II study was to assess the safety and efficacy of a weekly administration of a lower dose of topotecan in patients with recurrent ovarian or peritoneal cancer, having relapsed after platinum/taxane-based first-line chemotherapy.

Methods: Elderly patients with advanced ovarian and peritoneal cancer with progression of disease </=8 months after first-line chemotherapy were enrolled to receive topotecan (2.5 mg/m(2)) on days 1, 8 and 15 (q 28 d). The primary endpoints were dose density, response rate, and overall tolerance.

Results: Thirty-two patients were enrolled in the study and all were evaluable. Twenty-four patients (75%) had measurable disease at baseline and 8 (25%) had elevated CA125 only. In order to avoid dose delays and need for GCSF administration, the dose of topotecan was lowered to 2.5 mg/m(2). Of the 32 enrolled patients (median age, 76 years; range, 71 to 85 years), 30 patients had ovarian cancer, and 2 patients had peritoneal cancer. A median of 9 topotecan cycles was administered. Of 32 response-evaluable patients, 6 (19%) had a partial response, 14 (43%) had stable disease, and 12 (38%) had progressive disease. Median duration of response was 4.8 months. Lower dose weekly topotecan was well tolerated: 6 (18%) patients had grades 2-3 neutropenia, and 8 (25%) had grades 2-3 fatigue. No grade 4 thrombocytopenia or anemia was reported. No patient was admitted with neutropenic fever. Approximately 80% of the patients received the complete schedule of treatment, dose interruptions/delays being mainly due to moderate thrombocytopenia or neutropenia.

Conclusion: Lower dose of weekly topotecan was well tolerated in patients with platinum-resistant ovarian or peritoneal cancer at first relapse, with a favourable hematologic profile. Moreover, antitumor activity was similar to that reported for the standard dose of weekly regimen.

Disclosure of interest: None declared

Keywords: Elderly, ovarian cancer, platinum resistance

P038

DO WE KNOW WHAT OLDER WOMEN WITH BREAST CANCER WANT? DECISION MAKING PREFERENCES FOR TYPE OF TREATMENT, FOLLOW UP AND PERCEPTIONS OF COSMETIC OUTCOMES

Y. K. Jain[1], D. Tognali[2], R. Audisio[1,*]

[1]*General Surgery, St Helens and Knowlsey Teaching Hospitals NHS Trust, Prescot, United Kingdom,* [2]*General Surgery, University of Brescia, Brescia, Italy*

Introduction: Elderly patients with breast cancer make a different group who requires individualised treatment. There is a perception that older patients with breast cancer (OWBC) would chose a mastectomy over breast conserving surgery (BCS) and cosmetic outcome may not be an important endpoint among these patients. It is also disputed if OWBC can comply with adjuvant radiotherapy. The practice of follow-up is not evidence-based, especially when dealing with OWBC.

Objectives: We performed a prospective observational study on surgically treated OWBC with the aim of understanding their preference for type of treatment. We also took patients' and surgeons' views on breast cosmesis and the patients' perception of adjuvant radiotherapy and their opinion regards follow up.

Methods: We conducted a qualitative, observational cohort study of women aged over 70 years who were diagnosed with operable primary breast cancer. The face-to-face interview consisted of a semi-structured questionnaire in the following domains: patients' preference for the treatment type, patients' perception of the follow-up and perception of cosmetic outcomes. The data were recorded on Excel and analysed.

Results: 55 consecutive OWBC were interviewed (October 2014-July 2015) and 98% of patients with no cognitive impairment (51/52) were quite happy with the treatment (breast conservation surgery/mastectomy) they chose/received. Also, the majority of patients (51/52) were happy to attend for their annual follow-up at hospital. All patients treated with BCS were happy with their cosmesis. The patients' body image was perceived to be relevant as our patients commented on their cosmetic outcomes following BCS. The patients' judgment appeared to be more positive than the surgeon's scores: patients provided appreciation (good-14 patients; excellent-23 patients) which contrasts with a slightly more negative score as provided by the surgical team (poor-2 patients; fair-3 patients; good-12 patients; excellent-20 patients). The only patient who received a mastectomy and immediate reconstruction was very pleased with the result (excellent) but her surgeon scored her results as fair.

Conclusion: This prospective observational study proves how OWBC are interested in receiving BCS when possible, including adjuvant radiotherapy; they are apppreciative of the

cosmetic results achieved and they can cope very well with repeated follow-up assessments, This new evidence should be taken into account when considering OWBC for surgery.

Table (abstract P038)

Questionnaire	Response	No. of pts	%
Happy with the recommend treatment including RT?	Very likely	27	51.9
	Likely	24	46.1
	Neutral	1	1.9
	Less likely	0	-
	Unlikely	0	-
	NA (dementia)	3	NA
Was follow-up acceptable?	Very likely	30	57.7
	Likely	21	40.4
	Neutral	1	1.9
	Unlikely	0	-
	Not at all	0	-
	NA (Dementia)	3	NA
Patient's cosmetic perception	Poor	0	-
	Fair	0	-
	Good	15*	39.5
	Excellent	23	60.5
	NA (mastectomy)	16	NA
Surgeon's cosmetic perception	Poor	2	5.4
	Fair	4*	10.5
	Good	12	31.5
	Excellent	20	52.6
	NA (mastectomy)	16	NA

*1 patient had mastectomy and breast reconstruction

Reference:

[1] Eduardo Bruera et al. Treatment decisions for breast carcinoma-patient preferences and physicians' perceptions. Cancer 2002; 94:2076-80.

Disclosure of interest: None declared

Keywords: Elderly women with breast cancer, breast conservation surgery, perception

P039

ASSOCIATION OF PRE-CHEMOTHERAPY PERIPHERAL BLOOD BIOMARKERS OF AGING (IL-6, CRP AND D-DIMER) WITH CHEMOTHERAPY TOXICITY AND RELATIVE DOSE INTENSITY (RDI) IN WOMEN WITH BREAST CANCER

Y. Yuan[1,*], N. Vora[2], C. Sun[1], D. Li[1], J. Mortimer[1], G. Somlo[1], J. Waisman[1], J. Chao[1], V. Katheria[1], T. Synold[1], V. Tran[1], S. Mi[1], A. Levi[1], S. Yost[1], A. Arsenyan[1], L. Zavala[1], J. Choi[1], A. Hurria[1]

[1]*City of Hope National Cancer Center, Duarte,* [2]*Long Beach Memorial Hospital, Long Beach, USA*

Introduction: Chemotherapy (chemo) decreases the risk of relapse and mortality from breast cancer (BC); however, it comes with the risk of toxicity. Chemo efficacy depends on RDI, and patients (pts) who receive <85% RDI have poorer overall survival. Pro-inflammatory and coagulation factors serve as biomarkers of aging and functional reserve. The utility of these markers as biological risk factors for chemo toxicity in patients with BC is unknown.

Objectives: This study was performed to determine if pre-chemo IL-6, CRP and D-dimer were associated with chemo toxicity and reduced RDI in women with BC receiving (neo) adjuvant chemo.

Methods: This study enrolled women across the aging spectrum with Stage I-III BC. Prior to (neo)adjuvant chemo, peripheral blood was collected for IL-6, CRP, and D-dimer. (Neo)adjuvant chemo regimens were prescribed at the MD's discretion. Grade ≥3 toxicities defined by National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE), version 4.0, were captured. Univariate and multivariate analyses were performed to describe the association of these biomarkers with chemo toxicity and <85% RDI, controlling for relevant tumor and host factors (stage, receptor status, age and co-morbidities).

Results: 159 patients (mean age of 58.4, range 30-81) with stage I-III BC (Stage I [n=34; 21.3%], Stage II [n=88; 55.3%], and Stage III [n=37; 23.3%]) were enrolled. Eighty nine percent and 11% received adjuvant and neoadjuvant chemotherapy respectively. Chemo regimens include: doxorubicin + cyclophosphamide/paclitaxel (AC/T) (37%), docetaxel/cyclophosphamide (TC, 35%), AC/T/trastuzumab(AC-TH) (7%), docetaxel/carboplatin/trastuzumab (TCH, 7%), sequential A/T/C (5%) and other regimens (9%). At least one grade 3-5 toxicity occurred in 70 (44%) patients (93% grade 3, 6% grade 4, and 1% grade 5). Grade 3 to 5 hematological (heme) and non-heme toxicity occurred in 23% and 39%, respectively. The most common grade 3- 4 heme toxicities were anemia (38%), leucopenia (29%), and neutropenia (24%). One patient developed grade 5 toxicity (pneumonitis). The most common grade 3-4 non-heme toxicities were electrolyte abnormalities (12%), neuropathy (10%), mucositis (8%), infection (8%) and fatigue (8%). Univariate analysis revealed an association of increased pre-chemo D-dimer and grade ≥3 toxicity (p=0.02) (Table 1). Among the clinical factors, increased age and number of co-morbidities was associated with grade ≥3 toxicities (p<0.01 respectively). After controlling for age and number of comorbidities the association between elevated D-dimer and chemo toxicities remain significant (OR 2.1 [95%CI1.1-3.9]). RDI was less than 85% for 26% of pts. There were associations between RDI <85% and higher D-dimer (p<0.01) and IL-6 (p=0.02) levels pre-chemo. There was no association of CRP with chemo toxicity or RDI.

Table 1 (abstract P039) – Association of peripheral blood biomarkers of aging and Grade 3-5 chemo toxicities

	Grade ≥3 Toxicity (N=89) Median (Range)	Grade < 3 Toxicity (N=70) Median (Range)	P-Value
IL-6 (pg/ml)	1.7 (0-42.1)	1.9 (0-19.6)	0.57
D-dimer (μg/ml)	0.8 (0.1-3.3)	0.5 (0.1-2.6)	**0.02**
CRP (μg/ml)	2.6 (0.1-48.4)	3.0 (0.2-44.3)	0.57

Conclusion: Grade 3-5 toxicities are common in women with BC undergoing (neo) adjuvant chemo. A biomarker of aging, D-dimer, is associated with increased risk of chemo toxicity and RDI <85%.

Disclosure of interest: Y. Yuan: None declared, N. Vora: None declared, C. Sun: None declared, D. Li: None declared, J. Mortimer: None declared, G. Somlo: None declared, J. Waisman: None declared, J. Chao: None declared, V. Katheria: None declared, T. Synold: None declared, V. Tran: None declared, S. Mi: None declared, A. Levi: None declared, S. Yost: None declared, A. Arsenyan: None declared, L. Zavala: None

declared, J. Choi: None declared, A. Hurria Consultant for: GTX, Boehringer Ingelheim Pharmaceuticals, Carevive, Sanofi

Keywords: Breast cancer, chemotherpy, biomarkers of aging

P040

DIFFUSE LARGE B CELL LYMPHOMA: AN OVERVIEW OF THE DISEASE WITH SPECIAL FOCUS ON CIRS SCALE AND EMERGENCY VISITS IN THE ELDERLY POPULATION

C. Plaza Meneses[1], T. Arquero Portero[1], B. Zheng[1], M. Yuste Platero[1], T. Villaescusa de la Rosa[1], J. L. Lopez Lorenzo[1], M. A. Pérez Sáenz[1], E. Prieto Pareja[1], F. Lobo Samper[1], P. Llamas Sillero[1], R. Cordóba Mascuñano[1,*]
[1]*Hematology, Hospital Universitario Fundación Jiménez Díaz, Madrid, Spain*

Introduction: Lymphomas are a very prevalent disease in the elderly population. Many aggressive lymphomas are considered nowadays to be a curable disease. All patients, even those older than 60 years of age, are considered for optimal treatment with a curative intent. Diffuse Large B Cell Lymphoma (DLBCL) is the most common Non-Hodgkin Lymphoma (NHL), involving around 4% of all malignancies diagnosed. It is considered an aggressive lymphoma with 60% of curative rates after standard treatment with R-CHOP regimen. Those patients that had disease progression can be rescued with salvage treatment in 20-30% of cases. The elderly population is not considered for full standard treatment in many centers. The use of geriatric scales are starting to being used to stratify patients and offer them a more individualized treatment regimen.

Objectives: 1: Validate CIRS score in DLBCL cohort. 2: Impact of CIRS in treatment related complications (ER visits, hospitalizations, length of stay). 3: Impact of CIRS score in OS

Methods: We analyzed 41 patients homogeneously treated with R-CHOP in a single center, with 60 years of age or older at diagnosis between November 2008 and November 2015. Patients were evaluated for comorbidities with Cumulative Illness Rating Scale (CIRS), in order to try to detect the more unfit population and evaluate the average of admissions, length of stays and the impact on overall survival (OS). The CIRS scale were adjusted by removing the hematological question since all our patients were diagnosed with a hematologic malignancy. The cutoff point for CIRS score was selected using a ROC analysis.

Results: In our series, 20 (48%) were males and 21 (52%) were females. Median age at diagnosis was 73 years old (range 60-90 years). With a median follow-up of 32 months (range 0-96), the median PFS was 51 months and OS was 61 months. There were 49 ER visits recorded. 10 patients (24%) did not require an ER visit. Neutropenic fever was the most common cause of ER visit, n=18 (36%). 25 (51%) of the patients were admitted in the hospital, with an average of stay of 9.2 days (range 1-62). The ROC analysis identified a scoring of 5.5 in CIRS score to identify two different risk groups, with an AUC of 70.5% and a sensibility of 87% and a specificity of 48% (p=0.02). The low risk group (n=17), 7 (41%) patients were admitted with a mean of stay of 6.2 days of stay (range 1-16 days) the high risk group (n=24), 11 (45%) patients were admitted with a mean of stay of 10.6 days (range 1-62) with p=0.035. The CIRS scale was also used to discriminate two OS groups, the low risk showed a median OS of 77 months vs the high risk of 51 months of OS (p=0.05).

Conclusion: The OS and the PFS in our sample is similar as described in larger studies, with a great number of patients

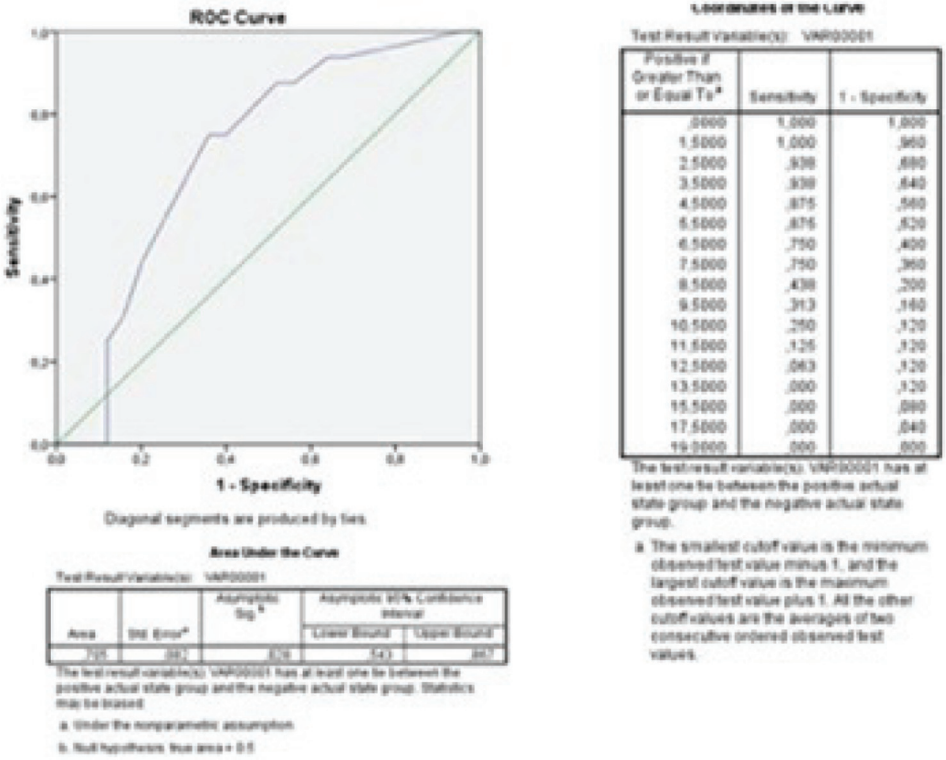


Fig. 1 (abstract P040) – ROC curve and cut-off points for CIRS and overall survival.

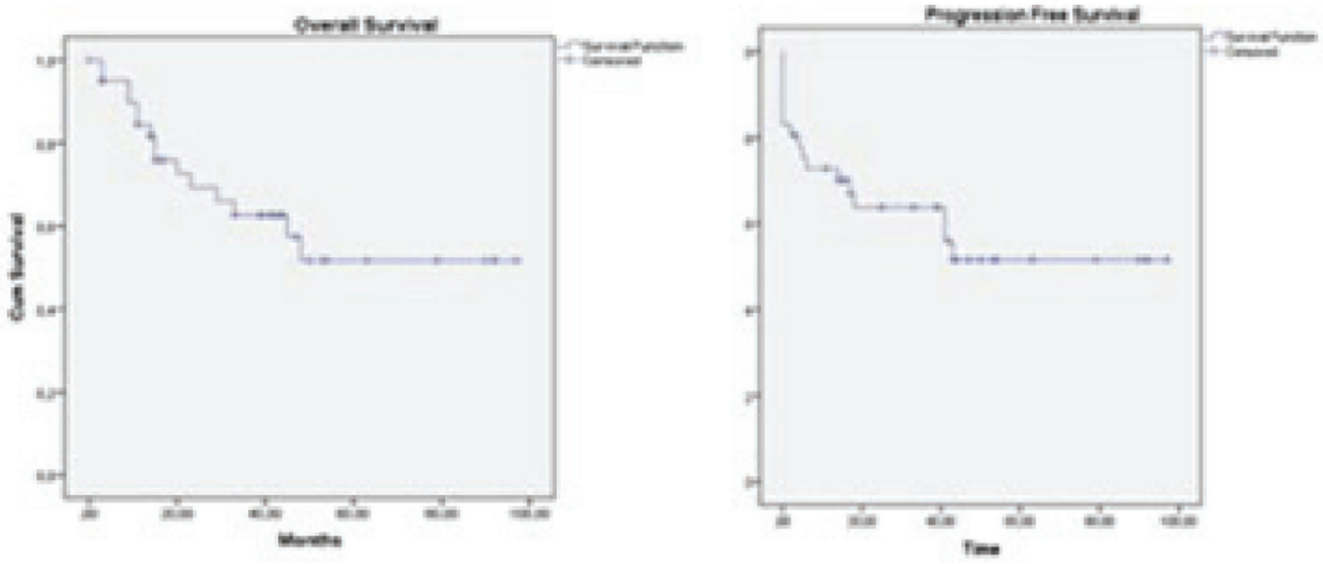


Fig. 2 (abstract P040) – OS and PFS of all series.

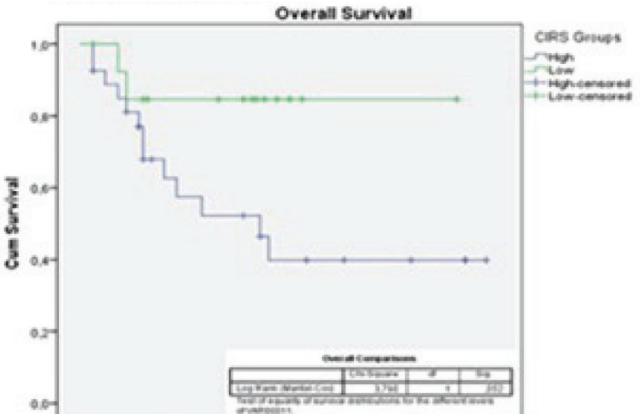


Fig. 3 (abstract P040) – OS curve according to CIRS groups.

reaching prolonged remissions. The days of admissions adjusted to the CIRS scale give us an interesting tool in order to help physicians to discriminate patients with DLBCL that will have prolonged admissions when treated with the standard of care. The CIRS scale also help separate two distinct OS curves, giving physicians a new tool to help discriminate worse prognostic patients, making them good candidates for adapted therapies.

Disclosure of interest: None declared

Keywords: Geriatric assessment, lymphoma

P041

COMPREHENSIVE GERIATRIC ASSESSMENT MAY BE USEFUL ITEM AS PREDICTIVE INDEX OF TREATMENT COMPLETION FOR ELDERLY PATIENTS WITH LYMPHOMA

M. Shibata[1,*]
[1]*Internal medicine, Kawanishi, Japan*

Introduction: In the treatment for B-cell lymphoma, a lot of reports tell us that standard CHOP-like regimen and rituximab shows good survival. However, the chemotherapy is difficult for elderly patients to complete, because it has severe adverse effects. In this point of view, if we can find the index for the assessment about tolerance in chemotherapy for elderly patients with malignant lymphoma (ML), patients can accomplish their treatment without severe adverse effects.

Objectives: In this report, we investigated the total conditions of elderly patients with ML through Comprehensive geriatric Assessment (CGA). Moreover, we examined whether our assessment is predictive or not for the patients who is treated with chemotherapy.

Methods: In this report, we examined 21 elderly patients who are newly diagnosed as having ML from Apr 2012 to Dec 2014. We adopted CGA as a measurement of elderly patients. The items in CGA are Barthel Index, geriatric depression scale (GDS-5), Hasegawa dementia scale for revised, vitality index (VI).

Results: In our assessment, 15 patients accomplished the treatment and in the others the treatment was discontinued because of their frailty. Twelve of all patients had disease of advanced stage (stage III or IV), and 6 patients of them have accomplished their treatment. In patients with advanced lymphoma, our CGA showed that the 6 patients who accomplished the treatment have better GDS-5 than the others (median 4 vs 3 p=0.0198). We did not find difference in VI, BI or Hasegawa dementia scale, and other hematological and non-hematological events among the patients.

Conclusion: CGA may be a useful item as a predictive index of treatment completion for elderly patients with ML.

Disclosure of interest: None declared

Keywords: Comprehensive geriatric assessment, lymphoma

P042

SEGA (SHORT EMERGENCY GERIATRIC ASSESSMENT) FRAILTY SCORE IN ELDERLY PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES

N. Carnel[1,*], J. Poisson, T. Guerekobaya, P. Genet, A. Andreoli, A. Al Jijakli, B. Poujol, L. Mesbah, L. Sutton, D. Chaoui
[1]*Haematology unit, Centre hospitalier Victor Dupouy, Argenteuil, France*

Introduction: Long-term remission can be achieved in elderly patients with haematological malignancies. The challenge is first to identify elderly patients illegible for a curative treatment and second to prevent complications during the treatment.

In real life, haematological treatment decision does not include Comprehensive Geriatric Assessment approach mainly because of time-consuming. SEGA score is an easy tool to detect frail patients admitted in emergency department.

Objectives: We report here a real life experience of SEGA score in elderly patients with haematological malignancies.

Methods: This study was longitudinal, prospective and mono-centric. We focused on patients aged 70 or older who received their first cycle of chemotherapy between September 1st 2014 and August 31th 2015. We recorded the multidisciplinary treatment decision taken (curative or palliative treatment). Geriatric tools recorded (G8 score, CIRS score, sheet A SEGA score, ADL, IADL) were not used during treatment decision. The first course of chemotherapy was considered as the standard dose. We analysed during the following chemotherapy courses: dose reduction, chemotherapy delaying and early discontinuation. Analysis of SEGA and other geriatric tools impact on treatment decision (curative versus palliative), chemotherapy adaptation and discontinuation was performed.

Results: During the one year period analysis, 141 patients ≥70 years old (70-95) were discussed during our weekly multidisciplinary meeting. Average age was 80. The most frequent haematological diseases were distributed as follow: NHL (32%), multiple myeloma (29%), CLL (13%) and MDS (8%). Twenty one percent of patients and 18% were assigned to Bendamustine and Bortezomib based chemotherapy, respectively. Other chemotherapy regimens included (CHOP and CHOP like treatment ± Rituximab (10%), 5-Azacytidine (8%), IMID (8%). Palliative treatment decision was taken in 12 patients. At diagnosis, the mean sheet A SEGA score was 6,9 (1-21) indicating that the subjects included were mostly not frail. CIRS mean total rate excluding haematological malignancy was 6,19 (0-18).

CIRS score and SEGA score were significantly associated with palliative treatment, p=0,045 and 0,002 respectively. Regarding patients assigned to chemotherapy, treatment was prematurely stopped in 34% of patients, dose reduction in 29% and chemotherapy was delayed in 17%. Only 20% did not experience any of these events. CIRS grade 3 or 4 and CIRS score ≥6 were strongly associated with early chemotherapy discontinuation (p=0,014 and 0,0021, respectively). In contrast no impact was observed regarding chemotherapy delaying or dose reduction. SEGA score was not associated with early discontinuation, nor dose reduction and chemotherapy delaying.

Mainly reasons for early chemotherapy discontinuation were: adverse events (60%) and disease progression (26%).

Conclusion: SEGA score as well as CIRS could be helpful in treatment choice. Palliative treatment could be the best approach in patients with CIRS score ≥10 and or SEGA score ≥12. Patients CIRS score more than 6 are at higher risk of early chemotherapy discontinuation. A special attention is required for these patients to avoid such events.

Disclosure of interest: None declared

Keywords: CIRS, comorbidity, elderly, haematological malignancy, SEGA

P043

A NEW FRAILTY SCORING IN "CLINICALLY FIT" OLDER PATIENTS WITH MALIGNANT HEMOPATHIES ADMITTED TO RECEIVE CHEMOTHERAPY

S. Dubruille[1,2], C. Kenis[3], Y. Libert[2], M. Delforge[4], J. Alexis Ruiz [1], M. Roos[5], A. Collard[5], N. Meuleman[1], M. Maerevoet[1], D. Razavi[2], H. Wildiers[3], D. Bron[1,*]
[1]*Department of Hematology,* [2]*Clinic of Psycho-Oncology, Institut Jules Bordet, Brussels,* [3]*Department of Oncology,* [4]*Department of Hematology, University Hospitals Leuven, Leuven,* [5]*Onco-geriatry Unit, Institut Jules Bordet, Brussels, Belgium*

Introduction: Patients "clinically fit" to receive chemotherapy suffering from malignant hemopathies, are an heterogeneous population covering fit and vulnerable patients. Patients with geriatric syndromes and/or irreversible comorbidities are usually excluded from high dose chemotherapy. We recently reported that neither the G8 screening tool, nor the CGA total score (≥2 impairments) significantly predict overall survival (OS) in this specific population of patients admitted for chemotherapy (1). Regarding survival, in a multivariate analysis, we found that only Mild Cognitive Impairment (MCI) (MMSE<27 and/or MoCA<26) had a predictive value for one-year OS [1]. However, a reliable "frailty score" remains urgently needed to better define the vulnerable population that does not benefit from chemotherapy.

Objectives: To determine clinical and biological parameters associated with unacceptable toxicity defined as 6 months mortality in order to avoid overtreatment in these vulnerable patients suffering from malignant hemopathies.

Methods: This prospective multicentric study was conducted in three departments of hematology in Belgian Cancer Centers. A Comprehensive Geriatric Assessment (CGA) was proposed to 251 consecutive patients (65-90yrs) with malignant hemopathies admitted to receive chemotherapy. Clinical data, biological parameters and causes of death were extracted from medical records. Chi-square test and T-student test were used to determine relationship between clinical data, biological parameters and OS. Univariate and multivariate Cox proportional hazards model were used to predict 6 months OS.

Results: One hundred and twenty patients were evaluable for all characteristics (NHL=40%, CLL=8%, MM=12%, AML=25%, MDS=4%, others=11%). Fifty percent are males. Sixty percent had a more favorable prognosis (CLL, Lymphoma or Multiple

Myeloma). An extended scoring system (range 0-5) was developed, based on items we identified as predictive factors in this analysis, ie: autonomy (IADL<5 (men) and IADL<8 (women)), nutritional status (MNA<24), cognition (MMSE <24), anemia (HB <11g/dl) and inflammation (CRP ≥2mg/l). The population was stratified into 3 groups: fit (score=0), vulnerable (score= 1 or 2) and "frail" (score= 3, 4 or 5). The 6 months OS was 100% in fit, 79% in vulnerable (hazard ratio (HR), 0.0; P=.961) and 37% in "frail" patients (HR, 0.24; P<.001). Causes of death remain disease-related in a majority of the patients (82%). The early death rate was even higher in poor prognostic diseases such as MDS and/or Acute Leukemias (6 months OS was 20% in the frail group).

Conclusion: In our selected population of patients with malignant hemopathies, "clinically fit" to receive chemotherapy, our "frailty score" predicts early deaths. This scoring detects unsuspected "frail" patients who may benefit from adapted chemotherapy or palliative care. Further prospective analyses in a larger population, are on going to refine the score according to the diseases.

Reference:

[1] Dubruille S et al. Identification of clinical parameters predictive of one-year survival using two geriatric tools in clinically fit older patients with haematological malignancies: major impact of cognition. J Geriatr Oncol, 2015, 6, 362-369.

Disclosure of interest: None declared

Keywords: Frailty score, malignant hemopathies, mild cognitive impairment, older

---

P044

EFFECT OF ADEQUATE HYPOMETHYLATING AGENT (HMA) THERAPY ON ADVERSE PROGNOSTIC FACTORS IN VERY ELDERLY PATIENTS (≥75 YRS) WITH MYELODYSPLASTIC SYNDROME (MDS)

V. Lohiya[1,*], G. Sherwood[1], U. Borate[1]

[1]*Hematology/Oncology, University of Alabama at Birmingham, Birmingham, USA*

Introduction: Very elderly MDS patients (≥75 years) have limited therapeutic options and are usually ineligible for allogeneic stem cell transplantation

Objectives: We studied the impact of available MDS therapies in very elderly MDS patients and their correlation with patient and disease characteristics as well as patient outcomes

Methods: We performed a retrospective analysis of MDS patients (≥ 75 years) from 2008 to 2014, with a minimum follow up of 12 months. We stratified patients based on therapy into two groups – HMA group (therapy with ≥1 cycle of HMA; Azacitidine or Decitabine or both) and the non-HMA group (therapy with erythropoietin stimulating agents, lenalidomide, growth factors, transfusions and other supportive measures). We analyzed demographics, ECOG performance status (PS), risk categories (IPSS /IPSS-R scoring system), blast percentage, and overall survival (OS) in this population. We analyzed group differences for all the above-mentioned parameters and the effects of variables of interest on OS.

Results: The study population included 58 patients of which 35 patients were males (60%). Median age was 78 years. Forty patients (71%) of patients had good, 6% had intermediate and 23% had poor karyotypic profiles by the IPSS scoring system. ECOG ≥2 was observed in 44% of the patients with no significant differences in both groups. Median OS for the entire study population was noted to be 15.5 months (7-34m). There were 25 patients in the HMA group and 33 patients in the non-HMA group. The blast percentage was higher in HMA group (20.5% vs 9.4%) compared to non-HMA group. More patients had a good karyotypic profile in the non-HMA group when compared to HMA group (80% vs 60%). There was a statistically significant difference between the mean IPSS and R-IPSS prognostic scores in non-HMA and HMA group (0.9 vs 1.7, p=0.010 and 3.5 vs 5.5, p=0.002) respectively. There was no significant difference in median OS between the non-HMA and HMA group (16.5 m (7-53) vs 15.5 m (5-19) p=0.278) respectively but the mean survival rates between non-HMA and HMA group were statistically different (32.81m vs 15.85m, p=0.034).. In the univariate analysis for the entire sample, higher IPSS score; R-IPSS score, and higher blast percentage were associated with increased rate of events. Moreover, rates of events were found to be lower in patients who did not receive HMA therapy (HR – 0.45, p=0.033), however in multivariable analysis, only higher blast percentage was associated with increased rate of events (HR – 1.06 p=0.025 95% CI – 1.004-1.11). Patients in the HMA group received average of 7.8 cycles

Conclusion: Our study found that very elderly patients who received adequate HMA therapy despite having high-risk disease had similar median OS compared to patients who received other therapies even with comparable PS. The comparable median OS in the high-risk group despite several adverse prognostic characteristics compared to the non-HMA group may be attributed to the use of adequate HMA therapy and its impact on disease progression. In conclusion, adequate HMA therapy may benefit even very elderly patients with high-risk disease. Our study did not evaluate the impact of quality of life, hospitalizations and number of transfusions in both groups and further studies need to be done to better characterize this aspect of the disease and its therapy

Disclosure of interest: None declared

Keywords: Hypomethylating agents, very elderly patients, MDS

P045

FALLS IN OLDER CANCER PATIENTS UNDERGOING SURGERY: PREVALENCE AND ASSOCIATION WITH GERIATRIC SYNDROMES AND LEVELS OF DISABILITY ASSESSED IN PREOPERATIVE EVALUATION

S. Fahimnia[1], A. Shahrokni[2,*], B. Korc-Grodzicki[1]

[1]*Medicine/Geriatrics,* [2]*Medicine/Geriatrics and Oncology, Memorial Sloan Kettering Cancer Center, NYC, USA*

Introduction: It is known that in general, fall is common among community-dwelling older adults. However, not much

is known about the prevalence of fall among older cancer patients presenting for preoperative evaluation, and its association with other geriatric syndromes and outcomes.

Objectives: Our study aims to assess the prevalence of fall among older cancer patients presenting for preoperative evaluation, and its association with geriatric syndromes and outcomes. We will also assess the impact of number of falls on these outcomes.

Methods: In 2015, all older cancer patients referred to Memorial Sloan Kettering Cancer Center Geriatrics service for preoperative evaluation completed comprehensive geriatric assessment. Patients were asked whether they had experienced a fall during past year and the number of falls (one vs. more than one fall) . Moreover, patients answered questions on their activities of daily living (ADL), instrumental activities of daily living (iADL), and use of assistive devices. Patients also rated their functional status using Karnofsky Performance Scale.

Results: Out of 595 patients, 152 (25.54%) reported fall in the past 12 months. Among fallers, 95 patients (62.9%) had only one time fall and 56 (37.1%) of them had more than one time falls. The prevalence of one time fall and more than one time fall was 16.01% and 9.54% of the total subjects, respectively. 54.7% of the last falls happened inside and 45.3% occurred outside home. Falls were more common in females, non-married, over 80 year old patients and the ones who lived with others. However, these differences did not reach the statistical significance. 33.6% of those with no fall had KPS of 80 or less, compared to 59.6% and 60.7% of those with one or more than on fall ($p<0.001$). 17.6% of patients with no fall were using canes while 27.4% of patients with only one time fall and 42.9% with multiple falls were using cane ($p <0.001$). The rates of inability to do shopping in patients without fall, with one-time fall, and multiple falls were 8%, 16.1% and 28.6% respectively ($p<0.001$). Only 1.4% of patients with no falls reported being limited a lot in dressing while this rate was 5.3% in one time fall group and 10.7% in patients with multiple falls ($p<0.001$). Among those with no fall, one fall, and more than one fall, the rate of significant limitation outside home was 10.1%, 21.3%, and 30.4% respectively ($p<0.001$).

Conclusion: History of fall is prevalent among older cancer patients presenting for preoperative evaluation. It is associated with geriatric syndromes and outcomes. Further studies are needed to assess the impact of fall history on surgical recovery and outcomes of older cancer patients.

Disclosure of interest: None declared

Keywords: Fall, functional status, preoperative assessment, surgery

P048

FRACTURES IN OLDER CANCER PATIENTS, A CALL FOR ACTION

B. Edwards[1,*], H. Holmes[2], P. Khalil[1], M. Sun[1], H. Valladarez[1], J. Song[3], X. Zhang[1]

[1]*Internal Medicine, University of Texas, MD Anderson Cancer Center,* [2]*Medical School, University of Texas,* [3]*Biostatistics, University of Texas, MD Anderson Cancer Center, Houston, USA*

Introduction: More than 60% of cancer patients are over the age of 65 years and are subject to aging and cancer therapy related changes. Older adults also have geriatric risk factors for fractures such as frailty, cognitive impairment (mild cognitive impairment [MCI] and dementia), and malnutrition-including vitamin D deficiency.

Objectives: Retrospective cohort study. To assess incidence of fractures, and risk factors for fractures in older cancer patients.

Methods: Patients underwent comprehensive geriatric assessments, including cognitive, functional, nutritional, physical, and comorbidity assessment. Bone density was tested and vitamin D assayed. Bone densitometry (Discovery W, Hologic Corp., Marlborough, MA) of the lumbar spine (L1-L4), total hip and femoral neck was measured. Analysis: Logistic regression

Results: We enrolled 192 patients with gastrointestinal, urologic, breast, lung and gynecologic cancers. The mean age was 74.5 ± 6.2 years. Low bone mass and/or osteoporosis were very common, seen in 80% of patients. Twenty six percent of the patients reported falls in the prior 6 months. Thirty percent of patients presented dementia, 37% mild cognitive impairment (MCI), and 39% frailty. Over the following 3 years, 13% of this cohort sustained fractures. Although BMD was similar in both genders, women were more likely to fracture than men (18% vs 7%, $p=0.02$). Vitamin D < 30 ng/ml was seen in 54% of 155 patients. In multivariate analysis, vitamin D insufficiency was identified as a risk factor for fractures (OR=9.59, 95%CI=1.26, 73.21).

Conclusion: Older cancer patients have a high incidence of fractures, higher than older patients without cancer. The proportion of men suffering fractures is higher than in men who remain cancer free. Low bone mass, osteoporosis and vitamin D insufficiency are exceedingly common. A greater awareness of this adverse event should motivate assessment, vitamin D supplementation, and pharmacologic treatment for osteoporosis to prevent fractures in older cancer patients. Prevention of fracture-related disability will afford older cancer patients a higher quality of life.

Disclosure of interest: None declared

Keywords: Fracture, geriatric assessment, geriatric risk factors

P049

NEUROCOGNITIVE PROFILE IN OLDER CANCER PATIENTS IN A GERIATRIC CLINIC

B. Edwards[1,*], H. Holmes[2], P. Khalil[1], M. Sun[1], H. Valladarez[1], J. Song[3]

[1]*Internal Medicine, University of Texas, MD Anderson Cancer Center,* [2]*Medical School, University of Texas,* [3]*Biostatistics, University of Texas, MD Anderson Cancer Center, Houston, USA*

Introduction: Older adults are especially high risk for age related disability and cancer therapy related complications. Neurotoxic effect of cancer therapy on cognitive function

has been described in women with breast cancer and an increasing number of other malignancies.

Objectives: To study neurocognitive profile in older cancer patients in a geriatric clinic

Methods: We conducted a retrospective cohort analysis, of older adult patients evaluated at the Program for Healthy Aging at MD Anderson Cancer Center from January 1, 2013 through March 31, 2015. Cognitive assessment was conducted through personal and family interview, and Montreal cognitive assessment (MoCA). Education and occupational history, history of strokes, concussions and family history of dementia and other risk factors were evaluated. Functional, physical, nutritional, medication, social support, and comorbidity assessment were conducted. Mood inventory was completed using the personal health questionnaire (PHQ-9). Imaging with computerized tomography and evaluation for potentially reversible factors were appraised.

Results: One hundred and ninety two patients underwent geriatric assessment, age range 65–90 years. Mean age 78.3 ± 6.6 years. One hundred and twenty one cases had some degree of neurocognitive deficit, with 64 patients (33.3%) presenting major neurocognitive deficit (dementia), and 57 cases, minor neurocognitive deficit (mild cognitive impairment -MCI) (29.7%). Early stage dementia was evidenced in 35 cases (54.7%), moderate stage in 24 (42.1%), and severe stage in 5 cases (7.8%). Although the prevalence of dementia was similar to population estimates, MCI prevalence (29.7%) was significantly higher comparing to MCI prevalence in the general population for aged 70-79 years (5.8%), and there was considerable underdiagnoses of cognitive impairment

Conclusion: Neurocognitive deficits (MCI and dementia) are common in older adults with solid tumors and hematologic malignancies. Identification and management of these conditions is of great relevance in the course of cancer therapy.

Disclosure of interest: None declared

Keywords: Geriatric assessment, neurocognitive deficits

P050

RESCUE GCS-F USE AS A MARKER OF SAFETY OF ANTI-CANCER TREATMENTS IN GERIATRIC PATIENTS IN REGIONAL AND RURAL SOUTH AUSTRALIA

D. M. Poprawski[1,*], M. Buxton[2]

[1]*Cancer Services, Country Health South Australia, Elizabeth Vale SA 5112,* [2]*Pharmacy, Country Health South Australia, Mt Gambier, Australia*

Introduction: South Eastern (SE) South Australia (SA) has a robust cancer service providing multidisciplinary medical oncology care with visiting oncologist, nurse practitioner, cancer care coordinator, and a team of chemotherapy nurses/pharmacists. The regional and rural (R&R) cancer service is a new concept in bringing care closer to home due to tyranny of distance, trying to overcome the inequity of cancer care access, and to drive cancer care outcome towards metropolitan outcome gold-standards [1].

Oncogeriatric care is complex in oncological services, and often is questioned as to its safety. There is an increasing body of data [2], that while the geriatric population is having a higher need for supportive care while undergoing anti-cancer therapies, this can be safely administered in an outpatient and community setting.

Febrile neutropenia is one of complications of anti-cancer treatments, sometimes requiring stimulation of stem cells to provide neutrophils via rescue doses of filgastrim (GCS-F) [3]. The need for rescue GCS-F can be seen as an indirect marker of safety of anti-cancer provision in oncogeriatric pracice.

Objectives: To review the use of GCS-F administration as rescue medication in geriatric patients undergoing anti-cancer treatments in SA's regional and rural area, when presenting with febrile neutropenia.

Methods: A retrospective clinical review of GCS-F use in SE SA took place. All GCS-F usage was recorded by Pharmacy, thus provided an easy pathway for finding patients. A period between 1 May 2015 - 30 April 2016 was reviewed by checking Pharmacy records, and casenotes for both Emergency Department and Inpatient stay.

Results: SE SA provides care to medical oncology patients, with 2015 showing a 995 clinic consultations. Between 1 May 2015 - 30 April 2016, there were 919 verified protocols for anti-cancer therapy, which included hormonal, supportive, chemotherapy/targeted and immunotherapy protocols. This includes multiple therapies for a single patient being used. 483 protocols of the 919 total were for patients who made the geriatric category of ≥65 yrs. The majority were in 2 groups: 65-69 years and 75-79 years, although all groups were represented.

Over 12 months, there were 19 occasions for GCS-F dispensing from pharmacy. This was for a total of 13 patients, of which 6 (46%) were ≥65 years, or 9 presentations for GCS-F dispensing. There were 9 (61%) medical oncology patients, and 3 (23%) were ≥65 years. Others were 3 (23%) hematology patients treated in metropolitan hospitals, 1 (7%) with probably myelodysplastic syndrome, and 2 (15%) renal patients.

Looking at the aim of this study, the GCS-F rescue therapy administered to medical oncology patients amounted to only 0.4% of total therapies given, and 0.8% of all geriatric treatments administered.

Conclusion: Geriatric population can safely receive anti-cancer treatments in regional and rural area of SA. While there is a risk of myelosuppression, the management of febrile neutropenia requiring rescue GCS-F administration is rare.

References:

[1] Fox P, Boyce A. Cancer Health Inequality Persists in Regional and Remote Australia. MJA 2014;201(8):445-6.

[2] Balducci L, Carreca I. Supportive Care in the Older Cancer Patient. Crit Rev Onol Hematol 2003;48(Suppl):S65-70.

[3] Australian Working Group. The Consensus Guidelines in Management of Febrile Neutropenia in Cancer Patients. Intern Med J 2011;41(Suppl.1):75-129.

Disclosure of interest: None declared

Keywords: Anticancer treatment, GCS-F/filgastrim, geriatric patient, safety

P051

SARCOPENIA IS ASSOCIATED WITH AN UNPLANNED READMISSION AND WORSE SURVIVAL FOLLOWING ESOPHAGECTOMY

D. Makiura[1,2,*], R. Ono[1], J. Inoue[2], Y. Sakai[3], Y. Miura[1]
[1]Kobe University Graduate School of Health Sciences, [2]Division of Rehabilitation, Kobe University Hospital, [3]Kobe University Graduate School of Medicine, Division of Rehabilitation Medicine, Kobe City, Japan

Introduction: Geriatric syndromes such as sarcopenia might adversely affect postoperative recovery. Although sarcopenia is a risk factor for postoperative pulmonary complications following esophagectomy, the long-term effects of sarcopenia remain unclear.

Objectives: This study investigated the relationship between sarcopenia and 90-day unplanned readmission and overall survival following esophagectomy.

Methods: This study was a prospective cohort study. One hundred patients with esophageal cancer who underwent esophagectomy at a single university hospital were enrolled in this study. Clinical data, 90-day unplanned readmission after discharge, and overall survival were obtained by reviewing medical records. Unplanned readmission was defined as any urgent or emergent hospitalization, excluding elective for adjuvant therapy. We assessed sarcopenia before esophagectomy. Sarcopenia was defined as low muscle mass plus low muscle strength and/or low physical performance according to the Asian consensus definition. Logistic regression analysis was performed to identify factors that contributed to 90-day unplanned readmission. Age, sex, pathological tumor stage, oral nutrition intake, postoperative complications, and sarcopenia were included in the multivariable models. Overall survival was estimated with the Kaplan-Meier method, and survival estimates were compared using the log-rank test.

Results: The mean age of the participants was 67.0 ± 7.6 years, and 33 patients (33.0%) were diagnosed with sarcopenia. The 90-day unplanned readmission rate was 23.7%. Multivariable logistic regression analysis found that the 90-day unplanned readmission rate was significantly higher in sarcopenia group than in non-sarcopenia group (40.0% versus 16.4%; odds ratio, 3.03; 95% confidence interval, 1.04-9.11; *P*=0.04). Log-rank test found that patients in sarcopenia group had worse overall survival than in non-sarcopenia group (*P*=0.03).

Conclusion: Sarcopenia may be a risk factor for 90-day unplanned readmission and worse survival following esophagectomy. These findings could help to identify patients at higher risk of long-term postoperative morbidity.

Disclosure of interest: None declared

Keywords: Esophageal cancer, esophagectomy, Sarcopenia, survival, unplanned readmission

P052

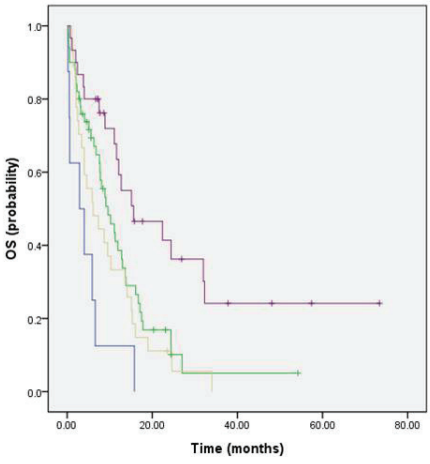
CLINICAL IMPLICATION OF BODY MASS INDEX, SKELETAL MASS INDEX AND RELATED BLOOD MARKERS IN THE ELDERLY PATIENTS WITH SOLID TUMORS

D. S. Sun[1,*], S. L. Lee[2], Y. M. Ku[2], H. S. Won[2], J. Y. Choi[2], Y. H. Ko[3]
[1]Medical Oncology, Uijeongbu St. Mary's Hospital, Uijeongbu City, [2]Uijongbu St. Mary's Hospital, Uijongbu city, [3]Uijongbu St. Mary's Hospital, Uijongbu cityl, Republic Of Korea

Introduction: The optimal body-mass index (BMI) and the effects of being either underweight or overweight on the risk of death are widely accepted and the elderly cancer patient is one of important associated populations. Being underweight in elderly associated with mortality may partly explained by the decrease in both body weight and skeletal muscle mass cause disability against acute or chronic diseases, and the immune response is often decreased in such patients. Skeletal muscle index (SMI) is one of the survival predictive markers in the patients with malignancy. BMI would be statistically correlated with SMI and clinical outcome in elderly cancer patients.

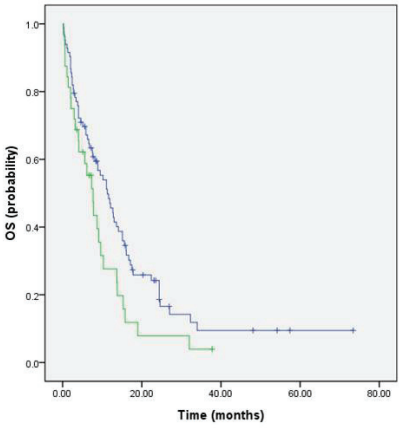
Objectives: We aimed to assess the relations of clinical outcomes with BMI and SMI in Korean elderly cancer patients, and evaluate the common blood markers could be predictive values for prognosis in this population.

Methods: Clinical data before the first cycle of chemotherapy were obtained in the patients over age 70 with inoperable or recurrent or metastatic solid tumors in the Uijeongbu St. Mary's hospital, the Catholic university of Korea. Including BMI, SMI, gender, age, performance status (PS), TNM stage, and blood values were in statistical analysis, retrospectively. CT scanner for initial cancer staging and routine diagnostic purposes were used to quantify skeletal muscle area. Two adjacent axial images within the same series, at the third lumbar vertebra, were selected for analysis of total muscle



	Patients	Events	Median OS (months)	95% CI	p-value
Group 1*	8	8	2.90	0.000-7.612	<0.001
Group 2	50	40	9.60	5.961-13.239	
Group 3	27	26	6.10	1.520-10.680	
Group 4	30	18	15.60	1.670-29.530	

Fig. 1 (abstract P052) – Overall survival in BMI.



	Patients	Events	Median OS (months)	95% CI	p-value
Sarcopenia	83	65	7.70	5.10-10.30	0.048
No sarcopenia	32	27	11.30	8.10-14.51	

Fig. 2 (abstract P052) – Overall survival in SMI.

cross-sectional area (cm^2) and averaged for each patient. Muscle area was normalized for height in meters squared (m^2) and reported as lumbar SMI (cm^2/m^2). Sarcopenia was defined as lower than first quantile of lumbar SMI.

Results: Between Oct. 2013 and Feb. 2015, 115 patients were identified. Median age was 75 (range 70-91), the median BMI was 22.8 (range 15.8-29.9), and the SMI in median value was 43.3 (range 27.9-67.5). The most common site of cancers was hepato-biliary cancer (n=20, 13.8%). BMI over 25 showed longer survival, the median overall survival (OS) was 15.6 months (95% CI 1.67-29.5, p<0.001). The patients in sarcopenia group showed significant shorter survival than group without sarcopenia (7.7 months vs 11.3 months, p=0.048). In the univariate analysis, BMI, ECOG PS, chemotherapy, Neutophil to lymphocyte (N/L) ratio, c-reactive protein were associated with survival. By multivariate analysis, the significant factors associated with survival were BMI, SMI and N/L ratio.

Conclusion: The patients in lower BMI and sarcopenia showed declined overall survival in Korean eldery cancer population. The systemic inflammatory responses are clearly implicated poor prognostic outcome in this study. Further prospective study is required to validate the use of BMI, SMI and inflammatory blood markers as prognostic indicators in elderly cancer patients with newly diagnosed with malignant diseases.

References:

[1] Jee SH, Sull JW, Park J, et al. Body-mass index and mortality in Korean men and women. N Engl J Med 2006;355:779-787.
[2] Flegal KM, Graubard BI, Williamson DF, Gail MH. Excess deaths associated with underweight, overweight, and obesity. JAMA 2005;293:1861-7.
[3] Prado CM, Lieffers JR, McCargar LJ, et al: Prevalence and clinical implications of sarcopenic obesity in patients with solid tumours of the respiratory and gastrointestinal tracts: A population based study. Lancet Oncol 2008;9:629-635.

Disclosure of interest: None declared

Keywords: BMI, eldery, sarcopenia, SMI

P053
THE BEHAVIORAL AND PSYCHOLOGICAL OUTCOMES OF CANCER SURVIVORS: RESULTS FROM THE IRISH LONGITUDINAL STUDY ON AGEING

E. Ryan[1], A. O'Donovan[1,*], R. A. Kenny[2]
[1]*Trinity College Dublin,* [2]*The Irish Longitudional Study of Aging, Dublin, Ireland*

Introduction: With half of cancer patients reaching 10 year survival and survial rate doubling over the last 40 years [1] survivorship care is set to be the next challenge for public health care systems. Cancer survivors have a higher burden of sequential illness than their non-cancer equivalent [2] including increased rates of second malignancies, osteoporosis, cardiovascular disease and diabetes [3]. Positive health behaviours in the older population can reduce the risk of comorbidities and second malignancies, thus providing a means of intervention in the management of survivorship health.

Objectives: This study aims to assess the current levels of smoking, physical activity and alcohol intake in older cancer survivors in Ireland and investigate the impact of these health behaviours on quality of life (QoL) and depression.

Methods: Results from The Irish Longitudinal Study on Ageing Wave One cohort were analysed. Smoking status, alcohol intake, physical activity, QoL and depression scores were recorded. Comparison was made between those diagnosed with cancer and non-cancer participants using multiple linear regression and multinomial regression analysis.

Results: 8,504 participants were surveyed, 522 were cancer survivors. Smoking cessation was not significantly increased in cancer survivors. (p=0.657) There was no difference in alcohol scores between groups. (p=0.344) A diagnosis of cancer was a negative predictor for physical activity (p=0.001). Depression scores tended to be higher (p=0.051) and QoL scores were lower (p=0.010) in cancer survivors. Smoking tended to increase depression (p=0.059) but didn't significantly impact QoL (p=0.195).

Table 1 (abstract P053) – Average outcome scores and significance of difference between cancer survivors and general public

	Cancer	No Cancer	P *	Unstandardised B (SE)
Average MET minute	2271.37	2980.29	**0.001	-476.237 (147.768)
Average Daily Alcohol Intake	2.3765	2.5381	0.334	0.129 (0.133)
Quality of life	43.45	44.37	0.010	-1.043 (-1.043)
Depression	6.42	5.83	0.051	0.628 (0.322)
Smoker: Never	40.20%	44.10%		
Past	42.00%	37.50%		
Current	17.80%	18.40%		

*=Adjusting for Age, gender, education and marital status
**= Adjusting for Age, gender, education, marital status and Arthritis

Conclusion: Older cancer survivors in Ireland show no improvement in behaviour compared to the general population and receive poorer QoL scores. Poor health behaviours negatively impacted depression scores. Increased promotion in positive health behaviour is required to increase the quality of life in aging cancer survivors.

Table 2 (abstract P053) – Multinomial Regression comparing prevalence of smoking between cancer survivors and the healthy public. (Adjusting for Age, gender, education and marital status)

	Odds Ratio (CI)	P
Former Smoker (Vs Never Smoker)		
Cancer	1	(0.029)
No Cancer	0.801 (.656-.977)	
Current Smoker (Vs Never Smoker)		
Cancer	1	(0.215)
No Cancer	0.849 (.656-1.099)	
Former Smoker (Vs Current Smoker)		
Cancer	1	(0.657)
No Cancer	0.943 (.729-1.221)	

CI= 95% confidence interval

References:
[1] Cancer research UK. Cancer statistics key stats, all cancers combined. London. Cancer research Uk. 2015
[2] Yabroff KR, Lawrence WF, Clauser S, et al. Burden of illness in cancer survivors: findings from a population-based national sample. J Natl Cancer Inst. 2004 Sep 1;96(17):1322-30
[3] Demark-Wahnefried W, Aziz NM, Rowland JH and Pinto BM. Riding the crest of the teachable moment: promoting long-term health after the diagnosis of cancer. J Clin Oncol. 2005 Aug 20;23(24):5814-30.

Disclosure of interest: None declared

Keywords: Cancer survivor, depression, health behaviours, quality of Life

P054
ASSESSMENT OF RENAL FUNCTION AMONG PATIENTS WITH BONE METASTASES FROM SOLID TUMORS

G. S. Bhattacharyya[1,*], H. Malhotra[2], K. Govindbabu[3], R. Singh[4], A. Vora[5], T. P. Sahoo[6]
[1]*Medical Oncology, Fortis Hospital, Anandapur, EM Bye Pass Road, Kolkata, (WB), India, Kolkata,* [2]*Medical Oncology, SMS Medical College & Hospital, Jaipur,* [3]*Medical Oncology, Kidwai Memorial Institute of Oncology, Bangalore,* [4]*Medical Oncology, HCG-SMH Cancer Centre,* [5]*Medical Oncology, MaxHospital, New Delhi,* [6]*Medical Oncology, Jawaharlal Nehru Cancer Hospital & Research Centre, Bhopal, India*

Introduction: Renal dysfunction is common in geratric patients; it is more common in elderly patients. It is common

Objectives: To examine the change in renal function among patients with bone metastases (BM) from solid tumors (ST).

Methods: A retrospective cohort study was conducted database, containing medical records oncology/hematology practice in India. The study sample included adults (age ≥ 65 years) diagnosed with a single ST and BM between 01/01/2012 through 09/30/2013. Changes in renal function from baseline (6 months prior to the BM diagnosis) over the follow-up period were assessed. The outcomes of interest include clinically-meaningful increase in serum creatinine (SeCr) [defined as 0.5 mg/dL increase in patients with normal baseline levels (<1.4 mg/dL), and 1.0 mg/dL increase in those with elevated baseline levels (≥1.4 mg/dL)], estimated glomerular filtration rate (eGFR), and chronic kidney disease (CKD) stage (1: eGFR≥90 to 5: eGFR<15). Descriptive analysis was conducted to examine baseline patient characteristics and change in renal function.

Results: A total of 380 patients met the eligibility criteria; majority of them were female (52%), India (80%), with mean age of 70 years (Standard Deviation [SD]: 12), mean SeCr of 1.0 (SD: 0.5), and mean eGFR of 77 (SD: 23) at baseline. During a median follow-up of 191 days after BM diagnosis, an average 11-point (SD: 17) reduction (relative reduction: 13%) in eGFR from baseline was observed. Clinically-meaningful increases in SeCr were observed in 10.8% of the patients overall; among 7.2% patients from elevated (n=706) and 11.3% from normal (n=5,674) baseline SeCr levels. Increases in CKD stage from baseline levels were observed in 36% of the patients.

Conclusion: Worsened renal function was observed among patients with ST and BM. Given the use of bone targeting agents in this patient population, future analysis is needed to understand the impact of those agents, such as zoledronic acid, on renal function.

Disclosure of interest: None declared

Keywords: Renal failure, bone mets, solid tumor

P055
PROPHYLACTIC USE OF FILGRASTIM TO MANAGE CHEMOTHERAPY-INDUCED NEUTROPENIA IN ELDERLY PATIENTS

I. Krakrowski[1], J.-L. Mouysset[2], D. Burlacu[3], K. Benabed[4], M. Hacini[5], A. El Weshi[6], P. Janoray[7], R. Diab[8,*], D. Badinand[9], M. Gardner[10], N. Sakek[11], E. Fabre[12], N. Jovenin[13], S. Corbinais[14], K. Laribi[15]
[1]*Institut Bergonié, Bordeaux,* [2]*Clinique Rambot Provençale, Aix en Provence,* [3]*Centre Hospitalier Henri Mondor, Aurillac,* [4]*Hopital Côte de Nacre, Caen,* [5]*CH de Chambery, Chambery,* [6]*CH du Cotentin site de Cherbourg, Cherbourg Octeville,* [7]*Institut de Cancérologie de Bourgogne, Dijon,* [8]*CHI Emile Durkheim Site Epinal, Epinal,* [9]*CHU La Timone, Marseille,* [10]*Hôpital Clinique Claude Bernard-Centre Privé de Radiothérapie, Metz,* [11]*Hôpital Nord Franche Comté Site Le Mittan, Montbeliard,* [12]*Hôpital Européen Georges Pompidou (HEGP), Assistance Publique Hôpitaux de Paris (AP-HP), Paris,* [13]*Clinique François 1er, Saint Dizier,* [14]*CH St Malo, St Malo,* [15]*CH Le Mans, Le Mans, France*

Introduction: Neutropenia, one of the most frequent dose-limiting toxicities in cancer patients, can generate serious life-threatening complications, especially in elderly patients. Neutropenic complications are not only more frequent among older patients but also more severe. In order to prevent these complications, elderly patients are often treated by less invasive chemotherapy protocols whereas the use of low dose or shorter duration chemotherapy decreases overall survival. Few studies are currently available among this specific subpopulation, justifying the need for better understanding of daily medical practices in terms of use of growth factors to prevent chemotherapy (CT)-induced neutropenia.

Objectives: The primary objective was to describe the use of Tevagrastim® in either primary or secondary prophylaxis. Descriptive statistics were used to describe tumor type and FN risk level (as defined by EORTC guidelines).

Methods: The TULIP study is a multicenter, observational, prospective cohort study. The study involved 112 French oncologists and was conducted in cancer patients aged 65 and above, undergoing CT supported by prophylactic treatment with Tevagrastim®. Patients were followed according to routine medical practice from Tevagrastim® initiation until the end of the CT or after a maximum of 6 cycles.

Results: From January 2014 to May 2015, 1119 evaluable patients were documented in the study (mean age 73.9 ± 6.2 years, 52.6% Men). The majority was suffering from solid tumor (72.9%) with ECOG 0-1 for 79.7% of them. Among patients with identified febrile neutropenia risk (n=510), 66% had a overall risk ≥20%, and 34% <20%. Through all CT cycles, no differences were observed across age categories ([65-74], [75-85] or ≥85) with regards to dose, duration of filgrastim treatment and time to first injection. For 70.1% of patients filgrastim was administered during CT first cycle and 83.5% received primary prophylaxis (PP).The median time between CT start and filgrastim administration was 4 days. The median duration of filgrastim treatment was 3 and 5 days respectively for the 7 day-cycle and 14/21/28 day-cycles. Dose reductions and CT delays were less frequent in patients receiving PP (4.8% and 7.1% respectively) than secondary prophylaxis (9.2% and 13.3% respectively). CT dose reductions frequency (5.5%) and delays (8%) due to neutropenia was also low regardless of the patient age. Less than 2% of patients (18 patients) experienced at least one adverse event related to Tevagrastim® or for which relatedness have not been reported, 9 patients (0.8%) experienced a serious adverse reaction.

Conclusion: This study in elderly patients shows no difference in therapeutic care according to age category. Tevagrastim® use was consistent with French Market Authorization terms. Few CT dose reductions and delays were observed. Safety data were consistent with the known safety profile.

Disclosure of interest: I. Krakrowski Consultant for: Teva, J.-L. Mouysset Grant/Research Support from: Teva, D. Burlacu Grant/Research Support from: Teva Santé for Tulip Study, K. Benabed Grant/Research Support from: Teva, M. Hacini Grant/Research Support from: Teva, A. El Weshi Grant/Research Support from: Teva, P. Janoray Grant/Research Support from: Teva, R. Diab Grant/Research Support from: Teva, Sandoz, Hospira, D. Badinand Grant/Research Support from: Teva, M. Gardner Grant/Research Support from: Teva, N. Sakek Grant/Research Support from: Teva, Hospira, E. Fabre Grant/Research Support from: Teva, Patient inclusion in Tulip Study, N. Jovenin Grant/Research Support from: Teva, Hospira, Leo, Sandoz, Amgen, Eisai, Consultant for: Hospira, Leo, Eisai, S. Corbinais Grant/Research Support from: Teva, K. Laribi Grant/Research Support from: Amgen, Novartis, Roche, Hospira, Janssen-Cilag, Teva, Mundi Pharma, Novartis

Keywords: Chemotherapy-induced neutropenia, elderly patients, filgrastim, primary prophylaxis, secondary prophylaxis

P056

CHEMOTHERAPY AND HEALTH CARE UTILISATION NEAR THE END OF LIFE IN PATIENTS WITH LUNG CANCER

K. J. Schulkes[1,*], I. C. van Walree[2], L. J. van Elden[1], D. ten Bokkel Huinink[3], M. E. Hamaker[2]
[1]Pulmonology, [2]Geriatric Medicine, [3]Internal Medicine, Diakonessenhuis Utrecht, Utrecht, Netherlands

Introduction: The quality of medical care delivered to cancer patients near the end of life is of significant concern. Previous studies have defined several areas suggestive of aggressive cancer treatment as potentially representing poor quality care, including use of chemotherapy very near death, use of treatment resulting in high rates of emergency room (ER) visits, hospitalization or intensive care units stays for terminal patients and underuse of hospice services. In this time of increasingly sophisticated anti-cancer treatments and subsequently mounting health care costs, judicious use of treatment options and tailor-made care will be of paramount importance.

Objectives: A first step in improving the quality of care provided at the end of life for patients diagnosed and treated for cancer, is to become aware of our own treatment practices. Therefore, the primary objective of the current analysis is to examine the use of chemotherapy in the last three months before death among lung cancer patients. Secondary outcome measures were hospital admissions, ICU admissions and ER visits in the last three months prior to death for patients with pulmonary malignancies.

Methods: Patients were selected from the hospital administration database including all patients deceased and treated with chemotherapy for lung cancer between Febuary 2011 and August 2015 at the Diakonessenhuis, Utrecht, the Netherlands. The patient characteristics, the use of chemotherapy and hospital visits were exctracted from the medical files.

Results: A total of 256 deceased patients who had been treated with chemotherapy for lung cancer (median age 65.8, range 22.3–85.6 years) were included. Of these, 180 (66%) patients were treated for NSCLC and 66 (34%) patients for SCLC. For 110 patients (43%) chemotherapy was given in the last three months prior to death (CT+) and for 146 patients (57%) no chemotherapy was administrered in the last three months prior to death (CT–). Of the CT+ patients, 32% (n=35) died in the hospital compared to 19% (n=27) of the CT– patients ($p<0.05$). For 85% (n=93) of the CT+ patients unplanned hospital admissions were made in these last three months, in comparison to 56% (n=82) of the CT– patients($p<0.05$). Visits to the ER in their last three months were made in 78% (n=86) for CT+ patients in comparison to 56% (n=84) for CT– patients ($p<0.05$).

Conclusion: 43% of the patients deceased with lung cancer and treated with chemotherapy received chemotherapeutic treatment in the last three months prior to death. Healthcare consumption in the last three months prior to death is high for all lung cancer patients. However, we found that the rate of hospital admissions, ER admissions and the chance of dying in the hospital, are all significantly higher in patients who recived chemotherapy in the last three months prior to death.

As lung cancer generally has a poor prognosis, patients need to be informed about these aspects of treatments as well. Future research should focus on optimal patient selection as well as a better recognition of the last phase of life. This could aid in optimizing the quality of dying as well as the quality of life.

Disclosure of interest: None declared

Keywords: Elderly, end of life care, lung cancer, quality of life

P057

MANAGEMENT OF ELDERLY PATIENTS SUFFERING FROM CANCER: ASSESSMENT OF PERCEIVED BURDEN AND QUALITY OF LIFE OF PRINCIPAL CARER

V. Quipourt[1,2], L. Bengrine Lefevre[2,3,*], S. Dabakuyo[4], S. Marilier[1,2], P. Manckoundia[1], P. Arveux[4], V. Germain[5]
[1]*Geriatrician, CHU DIJON,* [2]*UCOG Bourgogne,* [3]*Medical oncology,* [4]*statistician, Centre Georges François Leclerc,* [5]*General practitioner, liberal practitioner, DIJON, France*

Introduction: The cancer incidence increases with age. Anticancer treatment as chemotherapy is more discussed and must be adapted to comorbidities and geriatric assessment. Cancer is considered now as a chronic disease and lead to increased family's burden. In France, one of the objectives of 2014-2019 Cancer Plan is to consider needs of family or near carers.

Objectives: The main objective was to evaluate the perceived burden and the quality of life (QoL) at 3 and 6 months of the principal carer (PC) of cancer patients aged 70 and over and assessed a geriatric oncology consultation.

Methods: The Geriatric Oncology Coordination Unit in Burgundy performed a multicenter prospective study conducted over a 9 months period with a follow-up at 3 and 6 months. Each patient referred to a geriatric oncology consultation for geriatric assessment designed a PC, who was included in the study after signing consent.

Two questionnaires were proposed at inclusion, 3 and 6 months: the medical Outcomes study 12-item Short Form health Survey (SF 12) and the Zarit Burden Interview (ZBI). The PCs were divided into 4 classes according to the ZBI score: low charge (score ≤20), light charge (between 21 and 40), moderate charge (between 41 and 60) and severe charge (≥60).

Quantitative variables were described using means and standard deviation. Qualitative variables were analyzed by variance. The major determinants of QoL were identified using mixed models of analysis of variance (ANOVA). Statistical analyses were performed by SAS 9.4 software.

Results: Ninety six PC were included. The mean age was 64±15, 55.2% were female and 48.9% were a child. Sixty four and six percents of PC were present during the geriatric consultation. The Zarit Scale showed that 45.8% of PCs felt a low charge, 29.2% a mild charge and 8.3% a moderate to severe charge. The ZBI scores were 20.1±14.5, 19.6±14.8 and 19.9±15.5 points at inclusion, 3 and 6 months. The QoL was significantly decreased by at least 5 points for "emotional damage" and "physical pain" dimensions. Regarding the emotional dimension in multivariate analysis: age of the PCs (<70 years p=0.005), a low perceived burden (p<0.0001) and the PCs of patients with an ADL score≥5 (p=0.01) remained significantly and independently associated with QoL of the PCs. For physical pain dimension, in multivariate analysis, only the low perceived burden (p<0.001) and no hormonotherapy treatment (p<0.0001) were significantly associated with PCs QoL.

The mean age of patients was 81±5.2 and 76.5% were female. Fifty nine and two percents had formalized help and 55% lived with their spouse/partner or child. The mean ADL and IADL score were 5.4±0.9 and 5.9±2.4. The MMSE score was normal in 62.6% of patients, but showed light alteration in 19.8% of cases, moderate alteration in 13.2% and severe alteration in 4.4%. During the follow-up, 2 patients were institutionalized and 17 died from cancer.

Conclusion: This prospective study was an original work of the perceived burden of PCs in France. Cancer treatment seemed not to affect the PC's QoL. The main determinants were inherent to PC's factors (age and perceived burden) and the patient's functional independence. Others studies are needed to propose appropriate support to preserve PC's QoL.

References:

[1] Zarit S. Relatives of the impaired elderly: correlates of feelings of burden. Gerontologist 1980;20:649-655.
[2] Mazzotti E et al. Predictors of mood disorders in cancer patients' caregivers. Support Care Cancer 2013;21:643-647.

Disclosure of interest: None declared

Keywords: Burden, elderly cancer patients, principal carer, quality of life

P058

NEUTROPHIL ENGRAFTMENT AND GRAFT-VERSUS-HOST DISEASE IN ELDERLY PATIENTS UNDERGOING HEMATOPOIETIC STEM CELL TRANSPLANTATION: IMPORTANCE OF BODY COMPOSITION ASSESSMENT AND GERIATRIC

L. Koch[1,*], R. J. Garcia Filho[1], N. Hamerschlak[1], A. D. A. e Castro[1], C. C. da Silva[1], A. Tachibana[1], C. Prado[2], A. Z. Pereira[1]
[1]*Department of Medical Oncology, Hospital Israelita Albert Einstein, Sao Paulo, Brazil,* [2]*Department of Nutrition, Food and Exercise Sciences, University of Alberta, Edmonton, Canada*

Introduction: It is well established that the loss of muscle mass is the biggest change that occurs with aging and may lead to decline of muscle strength and functionality. In 1989, Irwin Rosenberg proposed the term "sarcopenia" to describe this decline in muscle mass is related to aging. Patients with hematologic malignancies are usually well nourished before undergoing the hematopoietic stem cell transplantation (HSCT). However, changes in body composition after HSCT have been the subject of studies. After HSCT, complications such as infections and graft-versus-host disease (GVHD) might affect the weight and body composition. Immunosuppressive therapy and corticosteroids also alter skeletal muscle

metabolism. Thus, treatment and complications after HSCT exert large negative effects on lean muscle mass, especially in elderly patients.

Objectives: The aim of this study is to determine whether measures of body composition predict outcomes after HSCT within the context of an older population.

Methods: We performed a retrospective longitudinal study through review of medical records of 48 patients ≥ 60 years undergoing HSCT at Hospital Israelita Albert Einstein, from 2013 to 2015, with tomography scans (CTs) in their clinical course within 60 days before or 15 days after HSCT. Body composition data were analyzed in CTs in T4 level by Sliceomatic® program. Descriptive statistics were calculated by SSPS program for age, body mass index, hand grip and corporal composition parameters.

Results: Of the 48 patients evaluated, 24 were male. The median age was 67 years (±4.2). In relation to underlying disease, it was observed that 35.4% had a diagnosis of multiple myeloma, 18.8% of myelodysplastic syndrome, 14.6% of lymphoma, 10.4% of myeloid leukemia acute and 10.8% between the diagnoses a lower proportion as amyloidosis, cutaneous lymphoma and lymphocytic lymphoma. Regarding the type of HSCT, 50% was autologous, 45.8% was allogeneic and 4.2% was haplodidentical. In relation to body mass index (BMI), 45.8% of patients were in the normal range, 21% overweight and 5% considered underweight. The Hand Grip median was 29 kgf (±9.2). Of the 48 patients evaluated, neutrophil engraftment had a median of 13 days (±4.3); 17 patients had acute GVHD, 9 Grade I-II and 8 with Grade III-IV. 60.4% of patients are alive, of the 19 deaths, 10 were not related to relapse. CTs evaluation found an average muscle area of 151cm^2 (±41) and subcutaneous adipose tissue of 230.5 cm^2 (±78). The only positive correlation was found between neutrophil engraftment and subcutaneous adipose tissue ($r=0.8$, $p<0.05$).

Conclusion: This study has limitations due to the small number of patients. However, we conclude that the reduction of toxicity related to HSCT through the analysis of body composition by CT scans is an emerging area of research, feasible, reliable and no charge to the patient, since CT scans are part of the clinical routine of these patients. Identify a reversible pre-transplant condition that is associated with worse outcomes may allow intervention measures such as greater nutritional support and exercise to improve pre-transplant. In our older patient cohort undergoing HSCT had a strong correlation between neutrophil engraftment and subcutaneous adipose tissue. The assessment of body composition for this group of patients may provide data associated with prognosis changing nutritional and geriatric practice for better results.

Disclosure of interest: None declared

Keywords: Body composition, elderly patients, hematopoietic stem cell transplantation, sarcopenia

P059

EFFICACY AND SAFETY OF ROLAPITANT IN THE PREVENTION OF CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING IN PATIENTS AGED <65 VERSUS ≥65 YEARS RECEIVING MULTIPLE CYCLES OF EMETOGENIC CHEMOTHERAPY

M. Aapro[1,*], D. Powers[2], S. Arora[2]
[1]*IMO Clinique de Genolier, Genolier, Switzerland,* [2]*Tesaro, Inc., Waltham, MA, USA*

Introduction: Although older patients (pts) may have less chemotherapy-induced nausea and vomiting (CINV) than younger pts, they may have more health complications. Thus, preventative treatments with a good safety profile are needed.

Objectives: To evaluate the efficacy and safety of the long-acting NK-1 antagonist (RA) rolapitant added to 5-HT$_3$ RA and dexamethasone over multiple cycles according to pt age (<65 vs ≥65 years).

Methods: In 3 similarly-designed, randomized, placebo-controlled phase 3 trials (n=1201 rolapitant and n=1201 control), pts received a single oral dose of 180 mg rolapitant or placebo before receiving highly or moderately emetogenic chemotherapy. All pts received an oral 5-HT$_3$ RA + dexamethasone (active control). Pts who completed cycle 1 could continue the same antiemetic treatment in subsequent cycles. Endpoints for cycle 1 of chemotherapy included complete response (CR; no emesis and no use of rescue medication), no emesis, and no nausea (maximum visual analogue scale [VAS] <5 mm), in the overall (0–120 h), acute (≤24 h), and delayed (≥24–120 h) phases. On days 6-8 of each subsequent chemotherapy cycle, pts self-reported the incidence of emesis and nausea interfering with normal daily life. Treatment-emergent adverse events (TEAEs) were recorded in all pts and compared between rolapitant and control arms. Data from the 3 pooled trials were analyzed according to pt age.

Results: CR was significantly higher with rolapitant in both age groups in all phases ($P<0.05$; table). Rates of no nausea were significantly higher with rolapitant in both age groups in the overall (<65: 45.5% vs 39.2%, $P=0.007$; ≥65: 57.3% vs 48.8%, $P=0.031$) and delayed phase (<65: 49.1% vs 42.3%, $P=0.004$; ≥65: 59.2% vs 50.6%; $P=0.028$). Although less pts were available for follow up in each subsequent cycle, rolapitant continued to provide significant additional protection against CINV and this effect reached statistical significance ($P<0.05$) for no emesis in cycles 2, 3, 5, 6 for pts <65 years and in cycles 2, 4, 5 for pts ≥65 years. The incidence of TEAEs across all cycles was similar in the rolapitant and active control arms in both age groups, but was higher in pts ≥65 years in both treatment arms.

Conclusion: Pts <65 years had a lower incidence of CR in the rolapitant and control arms across all phases than pts ≥65 years. The trend towards higher incidence of CINV in pts <65 is consistent with previously published reports establishing age as a pt-related risk factor. In pts aged <65 and ≥65 years who received multiple cycles of emetogenic chemotherapy rolapitant improved CINV control when added to 5-HT$_3$ RA and dexamethasone therapy, and was safe and well-tolerated. This supports the benefit of rolapitant as an antiemetic and reinforces the need to target both the serotonin and substance P pathways for durable prevention of CINV in both age groups.

Table (abstract P059) – Pooled Population from Rolapitant Phase 3 Trials

	<65 y			≥65 y		
CR, %	Rolapitant (n=892)	Control (n=863)	P-value	Rolapitant (n=309)	Control (n=338)	P-value
Delayed phase (≥24–120 h)	70.7	60.4	<0.001	73.1	62.4	0.004
Acute phase (≤24 h)	81.8	77.4	0.021	88.3	82.0	0.023
Overall phase (0–120 h)	67.7	57.5	<0.001	71.5	59.8	0.002

Disclosure of interest: M. Aapro Consultant for: Tesaro, Inc., Speakers bureau: Tesaro, Inc., D. Powers Shareholder of: Tesaro, Inc., Employee of: Tesaro, Inc., S. Arora Shareholder of: Tesaro, Inc., Employee of: Tesaro, Inc.

Keywords: Chemotherapy, nausea and vomiting, neurokinin-1, rolapitant

P060

POTENTIALLY INAPPROPRIATE MEDICATION USE IN ELDERLY BREAST AND COLORECTAL CANCER PATIENTS

M. Karuturi[1,*], S. S. Giordano[2], H. Holmes[3], M. Johnson[4], X. Lei[2]
[1]Breast Medical Oncology, [2]Health Services Research, MD Anderson Cancer Center, [3]Geriatric and Palliative Medicine, University of Texas Health Science Center at Houston, [4]University of Houston College of Pharmacy, Houston, USA

Introduction: Screening for potentially inappropriate medication (PIM) use is recommended in elderly cancer patients receiving chemotherapy. However, few studies have examined the patterns and impact of PIM use in this population.

Objectives: To determine predictors of PIM use and its impact on outcomes in breast and colorectal cancer patients receiving chemotherapy.

Methods: We used data from the Surveillance, Epidemiology and End Results database linked to Medicare claims. Our cohort included patients 66 years and older with a diagnosis of Stage II/III breast and colorectal cancer receiving adjuvant chemotherapy for a cancer diagnosis made between 7/1/2007 and 12/31/2009. We used STOPP criteria modified for use with administrative data to define baseline PIM used as a dichotomous variable in the 4 months prior to diagnosis. Outcome measures included ER visits, hospitalization, death within 6 months of diagnosis, and a composite outcome of any of these. We used Chi-square or Fisher's exact test to determine associations of PIMs with covariates and outcomes, multivariable logistic regression to determine predictors of baseline PIM use, and finally a Cox proportional hazards (PH) model analysis.

Results: FInal analysis included 1595 breast and 1528 colorectal cancer patients. The frequency of baseline PIM by STOPP criteria was 31.5% and 30.9% in the breast and colorectal cohorts respectively. In the breast cohort, associations with baseline PIM in the multivariable analysis included higher comorbidity and more baseline medications. Associations with baseline PIM in the colorectal cancer cohort included older age at diagnosis, higher comorbidity, and more baseline medications. In the multivariable Cox PH model for the breast cancer cohort for the composite outcome in a 3 mos time period from first chemotherapy, associations included stage, comorbidity, baseline medications and baseline ER visits/hospitalization. In the multivariable Cox PH model for the colorectal cohort, age, gender, race, comorbidity and baseline ER/hospitalization were significant predictors of the composite outcome (Table 1). Baseline PIM via STOPP was not associated with any of the separate or composite outcomes in either cohort, aside from an association with hospitalization in breast cancer patients (HR 1.28, 95% CI=1.02-1.61, p=0.032).

Table 1 (abstract P060) – Cox PH Model for time-to-event (adjusted for year of diagnosis, poverty, education, number of care providers, chemotherapy regimen, baseline PIM, and baseline ER/hospitalization)

	HR	95% CI
Breast		
Baseline PIM via STOPP criteria (yes v. no)	1.07	0.89-1.29
Stage III v. II	1.33	1.13-1.57
Charlson 2+ v. 0	1.46	1.15-1.85
5-10 v. 0-4 baseline medications	1.27	1-1.61
11+ v. 0-4 baseline medications	1.75	1.34-2.28
Colorectal		
Baseline PIM via STOPP criteria (yes v. no)	1.11	0.94-1.33
Age 70-75 v 66-70	1.27	1.03-1.55
other v. non-Hispanic white race	0.59	0.44-0.8
Female v. male	1.37	1.18-1.6

Conclusion: Screening for PIM is recommended as a preventative measure in older cancer patients receiving chemotherapy. However, in our analysis, we found no association between pre-chemotherapy PIM use defined by STOPP and outcomes. We did find that high medication number was associated with the composite outcome in the breast cancer cohort. Limitations of the study are the modification of STOPP criteria required for application to claims-based data, and those inherent to a retrospective study.

Disclosure of interest: None declared

Keywords: Geriatric assessment, polypharmacy

P061

POTENTIAL DRUG INTERACTIONS IN OLDER PATIENTS WITH CANCER: THE ELCAPA COHORT SURVEY (ELCAPA-15)

G. Beinse[1], D. Reitter[2], L. Segaux[3], M. Carvahlo-Verlinde[2], C. Tournigand[4], T. Cudennec[5], E. Paillaud[1,*], F. Canouï-Poitrine[3], P. Caillet[1] on behalf of ELCAPA Study Group
[1]Department of Internal and Geriatric Medicine, [2]Department of Pharmacy, [3]Department of Public Health and Clinical Research Unit (URC-Mondor), [4]Department of Medical Oncology, APHP - Hôpital Henri MONDOR, [5]Department of Geriatrics, AP-HP, Hôpital Ambroise Paré, Créteil, France

Introduction: Because of the increasing number of comorbidities with age leading to polypharmacy, older cancer patients are at higher risk of adverse events related to drug-

interactions in the daily medications, but also between daily medications and chemotherapy drugs.

Objectives: To identify Potential Drugs Interactions (PDI) in the daily medications, PDI between daily medications and chemotherapy, Potential Clinical Outcomes (PCO) related to major PDI.

Methods: From 2007 to 2014, all consecutive cancer patients aged 70 years or older, referred for geriatric assessment were included in the prospective ELCAPA cohort survey. For the present study patients receiving chemotherapy were analyzed. PDI were analyzed using Lexicomp Online® (Lexi-Comp, Inc., Hudson, USA) software and completed with the Theriaque® website for French medications. Collected PCO were those relevant in geriatrics. PDI and PCO were classified according to importance (A: no interactions known, B: no action needed; C: monitor therapy; D: consider therapy modification; X: avoid combination). Factors associated with PDI of grades C, D or X were analyzed using ordered multivariate logistic regression dependent variable being the PDI in three categories, PDI of grade A or B (reference), versus C, versus D or X.

Results: The study included 442 patients (median age: 77 years; Q1: 74.5 - Q3: 81; 48.7% of women). Most frequently tumor site were colorectal (20.9%), followed by urological tracts (19%), breast (12.4%); 22.9% had metastasis. The median number of drugs per patients per day was 6 [3-8], the median comorbidities index CIRS-G was 12 [9-16]. At least 1 PDI per patient was identified in the daily medications in 70.6% of patients (median 4 [2-7]), and between daily medications and chemotherapy drugs in 33.9% (median 2 [1-3]). Overall, 171 patients had PDI of grade C (38.7%) and 166 of grade D or X (37.6%); 1918 grade C, D or X PDI were identified (83.8% of C and 16.2% of D or X), 1578 (71.5%) in the daily medications and 340 (28.5%) between daily medications and chemotherapy. Considering drug-interactions in daily medications, main PCO were hypotensive risk (31.7% of all PDI), psychotropic effects (16.4%), glycemic disorders (11%), hemostasis deregulation (7.9%), fluid disorders (7.4%), and QT prolongation (3.6%). Considering drug-interactions between daily medications and chemotherapy, main PCO were risk of renal, cardiovascular, hemostasis deregulation, or neurogenic impairment (17.6%), over-exposition to chemotherapy (11.7%) or under-exposition (8%). After adjustment for age, tumor site and metastasis, factors independently associated with PDI were increase number of daily medications (adjusted OR $(ORa)_{1\text{-medication increase}}$=1.74; CI95%[1.43-2.11] for grade C; ORa=1.95; 95% CI [1.56-2.43] for grade D-X), hypertension (ORa=4.10; 95% CI [1.84-9.17] for grade C) and overweight/obesity (ORa=2.55; 95% CI [1.12-5.82] for grade C).

Conclusion: PDI were frequent in older cancer patients. This highlights the need of monitoring the iatrogenic risk, especially for hypotension risk, psychotropic side-effects, glycemic and hemostatis regulation mainly in patients with polypharmacy, hypertension, and overweight, with integrated team involving geriatricians, pharmacists, and oncologists.

Disclosure of interest: None declared

Keywords: Cancer, chemotherapy, drug interaction, older patients, polypharmacy

P063

APPLICATION OF ADEPT (A PROCESS FOR DECISION-MAKING AFTER PILOT AND FEASIBILITY TRIALS) TO A PILOT GERIATRIC ONCOLOGY PROGRAMME IN RADIATION THERAPY

A. O'Donovan[1,*], C. Gillham[2], C. Cunningham[3], P. Thirion[2], M. Cunningham[2], N. ElBeltagi[2], M. Leech[1]

[1]*Radiation Therapy, Trinity College Dublin,* [2]*Saint Luke's Radiation Oncology Network,* [3]*Saint James's Hospital, Dublin, Ireland*

Introduction: Under-representation of older patients in clinical trials is a known problem in oncology. The reasons for such under-representation are largely unknown. Older patients present with more complex issues than younger patients, and this may affect clinical trial participation/adherence. These issues need to be taken into consideration in trial design.

Medical Research Council (MRC) guidelines on complex intervention evaluation advise a phased approach to the implementation of complex interventions in medicine [1]. This includes feasibility studies and pilot trials,with the aim of optimising aspects of study design for consideration during a larger scale implementation of in the future. This is may succeed in more effectively "geriatricizing" trial design.

Objectives: The aims of this feasibility study and two-arm, randomized pilot trial (n=30) were:

1) To determine the feasibility of conducting an RCT of the effectiveness of incorporating geriatric assessment (GA) in older patients undergoing radiotherapy The assessments used have been previously reported [2].

2) To develop and test methods for a main trial (including eligibility, recruitment, consent, randomization, adherence to the intervention and participant retention), using the ADePT framework as guidance [4].

We also reflect upon the implications of our findings for the development of a more definitive trial.

Methods: We used the systematic approach on how to categorize feasibility and pilot studies as outlined by Shanyinde et al [3], whose list of methodological issues were used to evaluate the extent to which each issue was addressed in the current study.

Subsequently, the ADePT guidelines developed by Bugge et al [4] to support recommendations for clinical practice in moving from feasibility study to full trial were applied.

Pilot trial data and patient characteristics were analysed using simple descriptive statistics.

Results: The results of applying the methodological issues identified by Shanyinde et al. (5), as an analytic framework to the current study findings will be presented under each of the 14 items summarised in the accompanying Figure 1.

Conclusion: This pilot study of GA in radiation therapy has had little impact on patient treatment decisions. However, a number of functional, cognitive and other issues were identified that were previously unknown. A number of issues with recruitment and retention were identified, which will help refine future trials. Adapting this framework will help researchers in making best use of the findings from their feasibility and pilot work to inform subsequent decisions regarding a follow-on trial, with incorporation of more age-appropriate design features and endpoints.

Methodological issues	Findings
1. Did the feasibility/pilot study allow a sample size calculation for the main trial?	Not achieved/recommended from pilot work
2. What factors influenced eligibility and what proportion of those approached were eligible?	Ineligibility for randomization was mainly due to competing trials and participant refusal
3. Was recruitment successful?	Recruitment was challenging. Issues due to timing, centre, clinician, and participant were identified
4. Did eligible participants consent?	Low conversion to consent
5. Were participants successfully randomized and did randomisation yield equality in groups?	Randomisation procedures worked well
6. Were blinding procedures adequate?	Blinding of participants and the research team was possible only at baseline assessment, as randomisation to the study arm was conducted after this
7. Did participants adhere to the intervention?	Adherence to baseline assessment was high. However, there was poor adherence to followup appointments that did not coincide with medical appointments
8. Was the intervention acceptable to the participants?	One participant refused cognitive assessment, due to a previous bad experience. However, the majority of patients reported no issues with the assessment
9. Was it possible to calculate intervention costs and duration?	Aspects of feasibility e.g. self-completion and time to complete assessment were calculated and judged to be reasonable
10. Were outcome assessments completed?	The most appropriate outcomes to use were decided beforehand based on previous work. Both trial arms were comparable at baseline with regard to demographic and outcome variables. Rate of completion was lower at followup however.
11. Were outcomes measured those that were the most appropriate outcomes?	Outcome measures used did assess main areas of interest. However, some could be omitted in future research e.g. impact on treatment decisions (negligible) and aspects of the EORTC QLQ-C30 which were more fully addressed through GA.
12. Was retention to the study good?	Once recruited, retention was good
13. Were the logistics of running a multicentre trial assessed?	This was not assessed for logistical reasons
14. Did all components of the protocol work together?	Components had strong synergy

Fig. 1 (abstract P063)

References:

[1] Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ (Clinical research ed). 2008;337.

[2] O'Donovan A, Mohile SG, Leech M. Expert consensus panel guidelines on geriatric assessment in oncology. Eur J Cancer Care 24(4):574-89.

[3] Shanyinde M, Pickering RM, Weatherall M. Questions asked and answered in pilot and feasibility randomized controlled trials. BMC Medical Research Methodology. 2011;11(1):1-11.

[4] Bugge C, Williams B, Hagen S, Logan J, Glazener C, Pringle S, et al. A process for Decision-making after Pilot and feasibility Trials (ADePT): development following a feasibility study of a complex intervention for pelvic organ prolapse. Trials. 2013;14(1):1-13.

Disclosure of interest: None declared

Keywords: Clinical trials for elderly cancer patients, geriatric assessment, pilot study, radiotherapy

P064

RADICAL RADIOTHERAPY IN PATIENTS AGED OVER 80: A SINGLE UK CENTRE EXPERIENCE

A. Cree[1,*], A. Lewis[2], R. Cowan[1]

[1]*Clinical Oncology, The Christie NHS Foundation trust,* [2]*Medical Oncology, The Christie NHS Foundation, Manchester, United Kingdom*

Introduction: The Christie NHS Foundation Trust is a large cancer centre in the North West of England serving a population of 3.2 million. Around 450 patients a day are treated in the radiotherapy department using modern techniques including SABR. Over 10% of these patients are aged above 80. At present there is no formal geriatric oncology service and 'The Christie Cancer Care in Later Life Group' has formed to focus on this area. We are collecting baseline data to guide development.

Objectives: To profile patients over the age of 80 treated with radical or adjuvant radiotherapy at our institution in one month.

Methods: 82 patient treated between 1st to 31st January 2016 were identified using electronic notes. Data recorded included demographics, performance status, radiotherapy details, acute toxicity (CTCAE v4) and survival.

Results: Radiotherapy was well tolerated with 81 (98%) of patients completing the course of treatment.

The sites of adjuvant radiotherapy were breast 13 (62%), skin 5 (24%), sarcoma 2 (10%) and head and neck 1 (5%). Radical radiotherapy sites are summarised in the diagram. Two patients received sequential radiotherapy for synchronous lung and head and neck primaries.

Table 1 (abstract P064) – Patient demographics

Gender	Male	38 (46%)
	Female	44 (54%)
Treatment intent	Adjuvant	21 (26%)
	Radical	61 (74%)
Performance status	0-1	50(61%)
	2-3	32 (39%)
Age (years)	80-85	37 (45%)
	85-90	33 (40%)
	≥90	5 (6%)

Table 2 (abstract P064) – Deaths within 100 days of completion of radiotherapy

Time from end of treatment (days)	Radiotherapy treatment site	Related	Description
7	Lung	Possible	Pneumonia (no reported acute toxicity)
11	Lung/Head and Neck	Yes	Toxicity related
18	Head and Neck/Lung	Possible	Sudden cardiac death (cardiac dose?)
97	Pituitary adenoma	Unknown	Unknown (no acute toxicity)
100	Vulva	No	Progressive disease

The mean number of fractions was 17 (range 1-30). In one case (adjuvant breast) the fractionation was reduced from

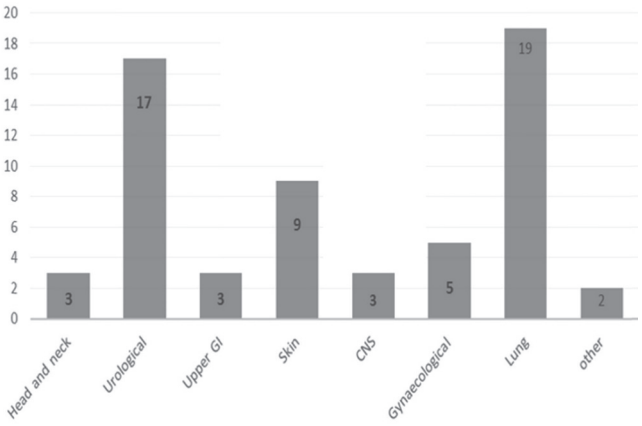


Fig. 1 (abstract P064) – Radical radiotherapy by disease site.

standard.Two patients were treated with brachytherapy (one in combination with external beam radiotherapy.) Six patient were treated with stereotactic radiotherapy. Two patients received concurrent chemotherapy (upper GI and rectal.)

41 (50%) of patients experienced grade 2 toxicity, and 8 (10%) of patients experiencing grade 3 toxicity including oesophagitis, mucositis, cystitis and pneumonitis. 6 (7%) of patients required admission during treatment; two due to disease, one due to intercurrent illness and three due to radiotherapy side effects.

Ninety day mortality was 4% (3) with a further two deaths within one hundred days (with a median follow up of one hundred and twenty six days.)

Conclusion: A significant number of patients over 80 years are being treated with radiotherapy in our institution and numbers appear to be increasing compared to previous studies [1]. The ninety day mortality was low suggesting that treatment was tolerable and patient selection was good. Rates of low grade toxicity were quite high (mainly representing skin toxicity) and may be underestimated due to retrospective data collection. There may also be significant effects on older patients which are not recorded using standard toxicity criteria such as loss of muscle mass or general deconditioning.

Patients with lung cancer appeared to have increased mortality compared to other disease sites although this may be due to the small numbers in the series. This will be a focus for further study.

Reference:

[1] Zachariah B, Balducci L, Venkattaramanabalaji GV, et al. Radiotherapy for cancer patients aged 80 and Older: a study of effectiveness and side-effects. Int J Rad Onc Biol Phys. 1997;39:1125–9.

Disclosure of interest: None declared

Keywords: Elderly, radiotherapy

P065
HIDDEN PREOPERATIVE GERIATRICS SYNDROMES IN PATIENTS WITH AMERICAN SOCIETY OF ANESTHESIOLOGISTS CLASS III

A. Shahrokni[1,*], B. M. Vishnevsky[2], B. Korc_Grodzicki[3]
[1]*Medicine/Geriatrics and Oncology, Memorial Sloan Kettering Cancer Center,* [2]*Medicine, Weill Cornell Medical College,* [3]*Medicine/Geriatrics, Memorial Sloan Kettering Cancer Center, NYC, USA*

Introduction: American Society of Anesthesiologists (ASA) is a 5-category physical status classification system for the assessment of patient's functional status before surgery. Most of the time, ASA is the only physical status classification for older cancer patients undergoing surgery.

Objectives: Our study aims to correlate data on older cancer patient's function obtained through geriatric assessment (GA) with the distribution of preoperative ASA classification and explore the hidden geriatric syndromes within the most common ASA category.

Methods: All older cancer patients presenting to Memorial Sloan Kettering-Geriatrics clinics for preoperative evaluation completed GA in 2015. Functional status was assessed by patient-rated Karnofsky Performance Scale (p-KPS), Activities of Daily Living, instrumental Activities of Daily Living, falls in the past year, use of assistive devices, Timed Up and Go (TUG), and vision and hearing quality. ASA classification was obtained from the anesthesiologist's note in the medical chart.

Results: In total 588 patients were evaluated. Among those, 496 (84.4%) were classified as ASA class III (patient with severe systemic disease) while ASA class II (patient with mild systemic disease) and IV (patient with severe systemic disease that is constant threat to life) were 7.8% each. Class III patients had median age of 80. They were 49.6% female, 53% married, and 31.1% were living alone. Most common type of cancers were genitourinary (27%), head and neck (14.1%), and colorectal (12.3%). Evaluation of patient's functional status using GA showed that patients classified as ASA class III had p-KPS ranging from 40 to 100 (median 90). Most common iADL dependencies were the need for transportation (31.8%) and cleaning their homes (33.5%). Most common ADL dependencies were walking outside home (35.3%) and controlling urine/bowel movement (31.5%). At least 25% of these patients experienced one fall. Cane and walker were used by 20.4% and 10.5%, respectively. TUG was ≥20 seconds in 9.2%. Poor vision and hearing were present in 5% and 14.7% of patients.

Conclusion: Significant majority of older cancer patients undergoing surgery for the treatment of their cancer were classified as ASA Physical Status class III. Patients in this category had very heterogeneous levels of function. Performing GA in this group may lead to a more accurate surgical risk assessment. It also improves detection of geriatrics syndromes which can be managed by syndrome-specific interventions in the preoperative setting.

Disclosure of interest: None declared

Keywords: American Society of Anesthesiologists Functional Status, functional assessment, geriatric assessment, surgery

P066

THE USE OF DOSE-DENSE WEEKLY PACLITAXEL (WP) CHEMOTHERAPY IN GERIATRIC PATIENTS WITH GYNAECOLOGICAL CANCERS

A. Pericao[1,*], F. El-Khouly[1], M. McCormack[1], R. Kristeleit[1], J. Ledermann[1], R. Miller[1]

[1]*University College London Hospital, London, United Kingdom*

Introduction: Gynaecological cancers are the 4th leading cause of cancer deaths in females, with over 5000 cases diagnosed in those ≥ 65 years annually in the UK. WP chemotherapy is often used for the treatment of advanced disease aiming to improve quality of life and control symptoms. The expectation is that shortage of interval of doses will be more effective on killing tumor-cells and prolong survival. However, concerns over toxicity and comorbidities may restrict use in the elderly.

Objectives: We sought to examine the tolerance and outcome of elderly patients (pts) treated with dose-dense WP for gynaecological malignancies over a five-year period at a single institution.

Methods: Clinical records of pts ≥ 65, treated with WP over a 5-year period were reviewed. Details regarding chemotherapy toxicity, duration of treatment, response to chemotherapy and co-morbidities were recorded.

Results: 79 women ≥ 65 years (median 72, range 65-86) treated with WP (80 mg/m 2 days 1,8,15 q21 days) were identified. 73, (89%) and 6 (11%) received WP for ovarian and endometrial cancer respectively. Median number of cycles received was 4 (range 1-6) with 72% of patients receiving full dose with every cycle. 23 pts (29%) required a dose reduction (DR), 7 pts (9%) were DR from cycle 1 due to concerns over age or poor ECOG performance status. The remainder underwent subsequent DRs, commonly for neuropathy (14%) and fatigue (3%). WP was discontinued due to toxicity in 3 (3.8%) and medical co-morbidities in 1. 46% of pts had at ≥1 significant co-morbidity, most commonly hypertension 30 (37.9%) and hypercholestorolaemia 11 (22.78%). Partial or complete response, stable disease and progressive disease were observed in 38.0%, 20.0% and 42.2% of evaluable (n=71) pts respectively.

Conclusion: WP was well tolerated in pts ≥ 65 years. Response rates are comparable to that seen in the general gynaecological population.

References:

[1] Kumar S, Mahdi H, Bryant C, Shah JP, Garg G, Munkarah A. Clinical trials and progress with paclitaxel in ovarian cancer. International Journal of Women's Health. 2010;2:411-427. doi:10.2147/IJWH.S7012.

[2] John K. Chan, M.D., Mark F. Brady, Ph.D., Richard T. Penson, M.D., Helen Huang, M.S., Michael J. Birrer, M.D., Ph.D., Joan L. Walker, M.D., Paul A. DiSilvestro, M.D., Stephen C. Rubin, M.D., Lainie P. Martin, M.D., Susan A. Davidson, M.D., Warner K. Huh, M.D., David M. O'Malley, M.D., Matthew P. Boente, M.D., Helen Michael, M.D., and Bradley J. Monk, M.D. Weekly vs. Every-3-Week Paclitaxel and Carboplatin for Ovarian Cancer. The New England Journal of Medicine. 2016; 374:738-748. DOI: 10.1056/NEJMoa1505067.

[3] Fung-Kee-Fung M, Oliver T, Elit L, Oza A, Hirte HW, Bryson P. Optimal chemotherapy treatment for women with recurrent ovarian cancer. Current Oncology. 2007;14(5):195-208.

[4] Högberg T1, Glimelius B, Nygren P; SBU-group. Swedish Council of Technology Assessment in Health Care. A systematic overview of chemotherapy effects in ovarian cancer. Acta Oncol. 2001;40(2-3):340-60.

[5] Wiseman LR1, Spencer CM. Paclitaxel. An update of its use in the treatment of metastatic breast cancer and ovarian and other gynaecological cancers. Drugs Aging. 1998 Apr;12(4):305-34.

Disclosure of interest: None declared

Keywords: Dose-dense weekly, endometrial cancer, ovarian cancer, paclitaxel

P067

THE EFFECT OF AGE ON PATIENT REPORTED OUTCOMES FOLLOWING RADICAL PROSTATE RADIOTHERAPY

A. Nuhoglu Savas[1,*], L. Sellers[2], A. Al-Abdullah[2], R. Ramiswami[3], R. Davda[2], A. V. Mitra[2], H. Payne[2]

[1]*Department of Medical Physics and Biomedical Engineering, University College London,* [2]*Department of Oncology, University College London Hospital,* [3]*Department of Oncology, Charing Cross Hospital, London, United Kingdom*

Introduction: Patient reported outcomes of older men receiving radical radiotherapy to the prostate is increasingly important as the age of the general population rises and more older men are diagnosed with and treated for prostate cancer. A significant number of older men with high-risk prostate cancer do not receive radical treatment. Potential explanations for the apparent under treatment of older men may be beliefs that older men are at increased risk of death from co-morbidities and concerns regarding treatment related toxicity.

Reports on the impact of age on toxicity following radical prostate radiotherapy are conflicting. Collection of patient reported outcome measures (PROMs) including the Expanded Prostate Cancer Index Composite for Clinical Practice (EPIC-CP)

Table 1 (abstract P067)

	Total EPIC		Urinary Domain		Bowel Symptom Score		Hormonal/Vitality Score	
All	17.2(±17.738)		4.46(±8.369)		2.15(±6.232)		4.2(±7.173)	
<70	16.95 (±17.502)	p=0.67	4.34 (8.153)	p=0.12	2.08(±6.154)	p=0.88	4.12(±7.056)	p=0.31
70-74	17.49(±17.385)		4.38 (±8.134)		2.15 (±6.311)		4.36(±7.134)	
≥75	17.28 (±17.698)		4.39(±8.310)		2.11(±6.193)		4.44 (±7.173)	

No statistically significant difference was detected in total EPIC-CP total score or urinary, bowel or hormonal scores between the different age ranges.

can be collected during routine follow up and help determine the impact of treatment toxicity on patients' reported quality of life following radical treatment for prostate cancer.

The purpose of this study was to explore the effect of age on patient reported quality of life following radical prostate radiotherapy using the EPIC-CP tool.

Objectives: The purpose of this study is to explore the effect of age on late (≥3 months post radiotherapy) patient reported quality of life following radical prostate radiotherapy using the EPIC-CP.

Methods: All men who received radical prostate radiotherapy with intensity-modulated radiation therapy (IMRT) for localized prostate cancer between 2011 and 2015 at University College London Hospital were identified. Baseline demographics, disease specific parameters and treatment details were collected. EPIC-CP questionnaires were distributed to all men on this database attending follow up at University College London Hospital between January and May 2016. The EPIC-CP was self-administered and assessed urinary and bowel symptoms and erectile function. Urinary, bowel and sexual function domains and overall EPIC-CP score were analyzed according to age.

Results: One hundred and three complete questionnaires were analysed; 3 patients had incomplete questionnaires and were excluded. All patients had completed radiotherapy at least 3 months previously. The median age was 70 (50-85). The majority of patients (83/100) had high risk disease according to D'Amico risk stratification. Radiotherapy treatment was as follows: external beam radiotherapy to prostate and seminal vesicles 83/100; external beam radiotherapy to prostate, seminal vesicles and pelvic lymph nodes with HDR brachytherapy boost 22/100; prostate bed 17/100.

The mean overall and domain specific EPIC-CP scores for all patients and age specific subgroups are presented in Table 1.

Conclusion: In our patient population we found no statistically significant difference in patient reported toxicity outcomes according to age following radical prostate radiotherapy. This may indicate reasonable tolerance of prostate radiotherapy in the elderly. To investigate further we recommend ongoing prospective collection of quality of life data at baseline and at follow up intervals after radiotherapy.

Disclosure of interest: A. Nuhoglu Savas: None declared, L. Sellers: None declared, A. Al-Abdullah: None declared, R. Ramiswami: None declared, R. Davda Grant/Research Support from: Astellas, Jansen and Takeda, Paid Instructor for: Astellas, A. Mitra: None declared, H. Payne Grant/Research Support from: received honoraria for advisory boards or lectures or travel expenses to attend medical meetings from Janssen, Astellas, Sanofi, Sandoz, Astra Zeneca, Takeda, Ipsen, Bayer and Ferring

Keywords: EPIC-CP, patient reported outcomes, prostate, bladder, kidney, genitourinary cancers, radiotherapy

P068

HOW TO ADDRESS THE HETEROGENEITY IN THE DESIGN OF PHASE II CLINICAL TRIALS IN GERIATRIC ONCOLOGY?

B. Cabarrou[1,*], E. Leconte[2], L. Mourey[3], P. Sfumato[4], L. Balardy[5], C. Bellera[6,7], J.-P. Delord[3], J.-M. Boher[4], T. Filleron[1]

[1]Department of Biostatistics, Insititut Claudius Regaud - IUCT-O, [2]TSE-R, Université Toulouse 1 Capitole, [3]Department of Oncology, Insititut Claudius Regaud - IUCT-O, Toulouse, [4]Department of Biostatistics, Institut Paoli Calmettes, Marseille, [5]Department of Oncology, CHU, Toulouse, [6]Elderly and Cancer Platform - French League Against Cancer, [7]Department of Biostatistics, Institut Bergonié - Comprehensive Cancer Center, Bordeaux, France

Introduction: With the overall aging population and the increased incidence of cancer, incidence of cancer in ≥75 years patients is greater than 30%. However, this heterogeneous population is often excluded from clinical trials and the lack of prospective data makes difficult the management of these patients. Many publications highlight the importance to conduct clinical trials in this population (Pallis, 2011). As classical single-arm phase II designs (Fleming, 1982; Simon, 1989) do not take into account the heterogeneity, elderly specific phase II clinical trials are very uncommon and generally conducted in specific groups defined by geriatric criteria which increases the number of patients to be included and thus reduces the feasibility. Several designs have been proposed in the literature to address the patients' heterogeneity in phase II trials for target therapy. In practice, these adaptive designs remain unknown from the clinicians and are rarely applied in geriatric oncology.

Objectives: The main objective of this work is to present phase II clinical trials designs that take into account the heterogeneity of the population and to make recommendations on the methodology to be used in phase II clinical trials in geriatric oncology.

Methods: Alternative methods have been proposed in the literature to deal with stratification in phase II clinical trials and identification of the best target population will be presented and compared to classical designs (one study in each specific subset of patients). Characteristics of adaptive and classical designs will be illustrated through theoretical or real examples of elderly specific phase II clinical trials.

Results: Depending on the hypotheses of the study, the use of adaptive designs could reduce the sample size compared to classical designs. For example, assume an elderly specific clinical trial designed as two parallel single-arm phase II studies, one including patients with G8≤14 and the other including patients with G8≥14. Uninterested feasibility rate is fixed at 20% in each group and desired feasibility rates are fixed at 35% and 45% in G8≤14 and G8≥14 groups, respectively. Using a two-stage optimal Simon design for each group with α=2.5% (overall α=5%) and power=85%, a maximum of 129 patients have to be included. Under the same hypotheses, a maximum of 103 patients have to be included using the adaptive design proposed by Parashar (Parashar, 2016) which allow the possibility to enrol patients of both groups (G8≤14 or G8≥14) in the same study. Stopping rules at interim and final analysis are presented in Figure 1.

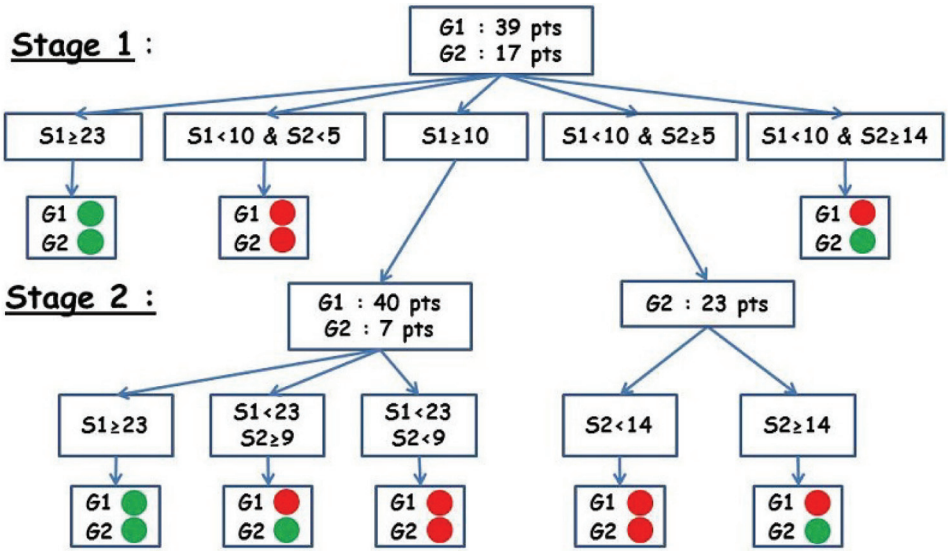


Fig. 1 (abstract P068) – Stopping rules of Parashar design / G1 : G8≤14 /G2 : G8≥14 / S1(S2): number of success in G1(G2).

Conclusion: To improve the efficiency of clinical research in geriatric oncology, it is essential to conduct elderly specific phase II clinical trials using appropriate methodologies by taking into account the heterogeneity of this population. The use of these adaptive phase II designs permits to reduce the sample size. Recruitment duration, that is a major cause of early stopping in elderly specific clinical trials, can also be shortened. The use of sequential adaptive designs allows the possibility to select a subpopulation that could benefit (or not) from the experimental treatment at the end of the first or the second stage. From a scientific point of view, this would permit to conclude the efficacy or the feasibility of the experimental treatment in a subgroup of interest. From an ethical point of view, this would limit the exposure time of particular subgroup of patients to inadequate treatments.

Disclosure of interest: None declared

Keywords: Design, elderly, heterogeneity, Phase II clinical trial

P070

HOME-BASED PREHABILITATION AND REHABILITATION TO OPTIMIZE PHYSICAL FITNESS AND TREATMENT OUTCOMES IN PATIENTS WITH NON-SMALL CELL LUNG CANCER : A SYSTEMATIC REVIEW

E. J. Driessen[1,*], M. E. Peeters[2], B. C. Bongers[3], H. A. Maas[4], G. P. Bootsma[5], N. L. van Meeteren[6], M. L. Janssen-Heijnen[1]
[1]*Epidemiology, VieCuri Medical Centre, Venlo,* [2]*Physical Therapy, Knooppunt Centre for Health, Baarlo,* [3]*Epidemiology, CAPHRI School for Public Health and Primary Care, Maastricht University, Maastricht,* [4]*Geriatric Medicine, Elisabeth-TweeSteden Hospital, Tilburg,* [5]*Pulmonology, Zuyderland Medical Centre, Heerlen,* [6]*Topsector Life Sciences and Health, Health Holland, The Hague, Netherlands*

Introduction: Patients with non-small cell lung cancer (NSCLC) are often old, vulnerable and at risk for complications. Standard curative treatments lead to adverse events in ≥50% of patients and frequently require hospitalization. Prehabilitation (therapeutic exercise training before treatment) and rehabilitation (training during and after treatment) bare the potential to optimize physical fitness through increasing the physiological reserve, leading to better treatment tolerance and even survival. However, training may be limited due to multimorbidity, physical limitations and accessability to services. Personalized training in a home-based setting might overcome these barriers and enhance motivation and adherence, especially for vulnerable and older patients. However, a systematic overview regarding feasibility and effectiveness of home-based (p)rehabilitation for NSCLC patients is currently lacking.

Objectives: To determine the feasibility and effectiveness of home-based (p)rehabilitation in NSCLC patients by evaluating physical fitness, adherence and treatment tolerance in a systematic review.

Methods: The PRISMA and Cochrane guidelines were followed. Studies were included from databases PubMed, Medline, Embase and PEDro (January 2000-April 2016). Two reviewers independently searched and selected studies based on PICO (NSCLC, (p)rehabilitation, home-based, physical fitness), full text and by reference tracking. Data regarding study characteristics, outcomes, methodological quality (Cochrane risk of bias tool) and therapeutic validity (CONTENT scale) were independently assessed as well. Interobserver agreement was assessed with Cohens' Kappa.

Results: Eleven studies were included (437 NSCLC patients, mean age 59-72 years). Nine of ten rehabilitation studies (90%) and one prehabilitation study, consisting of aerobic and strength exercises, described (significantly) improved physical fitness (28-65 meter improved 6-minute walking distance [5.2-43%]). Three studies (27%) assessed home-based training alone and eight (73%) combined home-based, intramural and/or extramural training. Only 6 studies (55%) had home-based supervision and 4 (36%) were personalized. Exercise compliance varied strongly (8.7-125%) as well as dropout (0-65%). Treatment tolerance was described in 6 studies (55%) and was not significantly lower for controls. Methodological

quality was low in 5 studies due to selection, performance and detection bias, and only one (9%) had high quality. Therapeutic validity was low in 5 studies (45%), mainly because of lacking eligibility criteria for therapist or setting, or personalized training. Interobserver agreement for methodological quality and therapeutic validity were good (0.80 and 0.76, respectively). Sample sizes were relatively small (5-141 patients), only one studie examined prehabilitation, treatment tolerance was often not reported and methodological biases were common. A meta-analysis was not feasible due to heterogeneity of patients, outcomes and interventions.

Conclusion: Home-based rehabilitation appears to improve physical fitness in NSCLC patients. Although limited, evidence seems quite consistent and feasible. Home-based prehabilitation studies for NSCLC patients are scarce. Prospective studies including larger patient samples are needed to determine the feasibility and effectiveness of home-based (p) rehabilitation on treatment tolerance, which ultimately could lead to improved survival and quality of life.

Disclosure of interest: None declared

Keywords: Home-based, Non-small cell lung cancer, physical fitness, prehabilitation, rehabilitation

P071

ECHOCARDIOGRAPHIC EVALUATION OF CARDIOTOXIC DRUGS IN GERIATRIC CANCER PATIENTS: BEYOND EJECTION FRACTION

G. Sokol[1,*], L. Loftus[2], J. Ayub[3], L. Cantilena[1]
[1]*Clinical Pharmacology, Uniformed Services University of the Health Sciences, Bethesda,* [2]*Breast Program, Moffitt Cancer Center, Tampa,* [3]*Florida Cancer Specialists, Hudson, USA*

Introduction: Many cancer patients are elderly and as such often have a cardiovascular co-morbidity. Cytotoxic, targeted, antiangiogenic agents, and monoclonal antibodies can affect the cardiovascular system. Drug-associated cardiotoxicity (CVTox) is commonly defined as cardiomyopathy reflected by left ventricular ejection fraction (EF) <50% on echocardiogram (EC). Guidelines do not include other EC abnormalities that may have clinical import.

Objectives: This study determined the incidence of EC abnormalities in addition to reduced EF on echocardiograms of cancer patients receiving chemotherapy (CHrx) and explored potential clinical implications.

Methods: 50 patients, 36 F and 14 M, 65-97 years old, mean age 70 years, median age 71 years, randomly selected from a university affiliated practice from 2013-2016, who received CHrx and underwent EC for evaluation were studied for potential CHrx-induced CVTox. Tumor types included 25 breast, 4 lung, 7 gastrointestinal, 3 gynecologic, and 9 hematologic malignancies. 76 ECs were reviewed for EC abnormalities including EF, valvular dysfunction, systolic or diastolic dysfunction, pericardial disease, atrial and ventricular hypertrophy or dysfunction, and outflow hypertension. 27/50 patients received anthracyclines or trastuzumab while all other patients received CHrx agents reported to have potential CVTox. Observational statistics were applied.

Results: 46/50 patients had normal EFs. 9/50 patients had no EC abnormalities. The remaining findings included 5 with mild to severe pericardial effusions, 16 diastolic dysfunction, 15 valvular dysfunction, 12 cardiac chamber hypertrophy, and 4 elevated outflow hypertension ranging from mild to significant. Despite the findings of significant EC abnormalities apart from EF, only detection of EF resulted in a change in the CHrx regimen.

Conclusion: CHrx, radiation therapy, targeted therapies, and other oncologic agents can injure the cardiovascular system by impairing heart function as well as enhancing hemodynamic flow, thrombotic events, and conduction changes. The definition for EC defined, drug-induced CVTox should include clinical EC factors in addition to reduced EF that may have bearing on drug dosing. Oncologists and pharmacists must be cognizant of the multitude of EC adversities that may occur besides EF. Further research will be necessary to enhance guidelines based on factors other than EF.

Disclosure of interest: None declared

Keywords: Cardiotoxic drugs, echocardiogram, ejection fraction

P072

PROSPECTIVE COHORT STUDY FROM THE EORTC (1221-ETF) ON THE OCCURRENCE OF CANCER EVENTS IN BELGIAN NURSING HOME RESIDENTS (NHR)

H. Wildiers[1,*], M. Elseviers[2], M. Mauer[3], J. Dewolf[4], E. Bastiaens[5], S. Hatse[6], M. Hamaker[7], F. Buntinx[8], J. Delepeleire[9], G. Uytterschaut[10], K. Tryfonidis[5], M. Janssen-Hejinen[11]
on behalf of EORTC Elderly Task Force
[1]*General Medical Oncology, University Hospitals Leuven, Leuven,* [2]*Centre for Research and Innovation in Care (CRIC), Faculty of Medicine, Antwerp,* [3]*EORTC- Headquarters, Brussels,* [4]*Drug Research Unit Ghent, Ghent University Hospital, Ghent,* [5]*EORTC headquarters, Brussels,* [6]*Laboratory of Experimental Oncology (LEO), KULeuven, Leuven, Belgium,* [7]*Department of Geriatric Medicine, Diakonessenhuis, Utrecht, Netherlands,* [8]*Department of General Practice, Universities of Leuven and Maastricht,* [9]*Departement of General Practice KU Leuven and University Psychiatric Hospital, KULeuven, leuven,* [10]*Armonea, Mechelen, Belgium,* [11]*Department of Clinical Epidemiology, VieCuri Medical Centre, Venlo, Netherlands*

Introduction: Despite cancer incidence increases with age and more elderly becoming NHR, there is very little, and only retrospective, information available regarding diagnostic and therapeutic approaches and cancer outcomes in NHR.

Objectives: In order to fill this knowledge gap, and allow better care for NHR with cancer, the EORTC elderly task force designed a large scale prospective study on diagnostic and therapeutic decisions for cancer events in NHR.

Methods: The study was set up in 39 nursing homes from the Armonea network in Belgium, covering 4262 nursing home beds. The primary goal was to describe cancer events, referral patterns and motives for non-referral to advanced oncological

care, anticancer treatments and outcome (functional, QoL, cancer, survival) in NHR. Eligibility criteria were patients with a new cancer event (new cancer or progressive disease of a previously known cancer) where a diagnostic/treatment decision has to be/has been taken ; and patients with strong clinical suspicion (physician's judgement) of a new cancer event (new cancer or progressive disease), but where the decision is made not to take further diagnostic or therapeutic steps. Eligible patients were recruited during a period of 1 year in these 39 nursing homes. After training each site's local staff, identified eligible patients were included after informed consent, and relevant data, including a questionnaire for the nursing home physician, were collected at baseline. Cancer evolution, geriatric assessment, QoL, and advance care planning were evaluated at least every 3 months up to 2 years.

Results: The study was open from 3-2015 till 3-2016 in 37 nursing homes (and 2 pilot nursing homes started and stopped 6 months earlier). In only 9 NHR, a cancer event was recorded during this period. Median age was 87y (72-92), 3 male/6 female. Further details on cancer type, diagnostic and therapeutic approach and outcome will be reported at the meeting.

Conclusion: Clinically relevant cancer events (requiring diagnostic or therapeutic action) occur at a much lower frequency in NHR than expected from cancer incidence data in the general population. The prospective design with intense involvement from the key responsibles in each nursing home, makes significant underreporting of cancer events unlikely.

Disclosure of interest: None declared

Keywords: Nursing home

P073
CLINICAL BENEFIT RATE AND PARTICIPATION OF PATIENTS WITH ADVANCED CANCER ON PHASE I CLINICAL TRIALS: A COMPARATIVE ANALYSIS OF SENIOR ADULTS AGED 65 YEARS AND ABOVE VERSUS MIDDLE AGE AND AYA PATIENTS

I. M. Subbiah[1,*], C. Tang[1], A. Rao[1], V. Subbiah[1], R. Kurzrock[2], D. Karp[1], D. S. Hong[1]

[1]*University OF Texas MD Anderson Cancer Center, Houston,* [2]*University of California San Diego Moores Cancer Center, San Diego, USA*

Introduction: Senior adults aged 65 years and above with advanced cancers remain underrepresented in cancer clinical trials particularly early phase clinical trials of novel therapeutics.

Objectives: To assess the participation and clinical response of senior adults on phase I treatment, we analyzed the characteristics of such patients treated on phase I trials with an emphasis on comparison between middle age and adolescent/young adults (AYA) patients.

Methods: A prospectively maintained database was queried to identify 1489 consecutive patients treated on phase I trials between December 2004 and July 2013. The patients were separated into 3 age-based cohorts: AYA (15-39y), middle age (40-64y), elderly (65+y) and analyzed for clinical characteristics and response outcomes as defined by each clinical trial per RECIST. The clinical benefit (defined as a response of stable disease of 6 months or longer, partial response, or complete response, per RECIST) was determined for each cohort. We calculated the odds ratios of achieving a favorable clinical benefit for the 3 age cohorts, and for elderly and AYA in comparison to the middle age.

Results: Of 1489 treated patients, 278 were elderly (18%, median age 68.9y), 220 AYA (15%, median age 32.6y), 991 middle age (67%, median age 53.8y). The median number of prior therapies was 3 in all three age groups and the most common malignancies were gastrointestinal (n=438, 29%), gynecologic (n=234, 16%), and thoracic/head/neck (n=216, 15%). There was no standarized assessment of performance status and frailty beyond the ECOG PS. Median time on trial did not vary significantly between the 3 age cohorts (3 months in elderly, 3.5 months in middle age, 3.3 months in AYA). The odds ratio of achieving clinical benefit in elderly vs middle age is 1.10, p 0.19 (two-tailed), p 0.09 (one-tailed). Similarly, the odds ratio of achieving clinical benefit in AYA vs middle age is 0.85, p 0.31 (proportions z-test, two tailed), p 0.15 (one-tailed). No significant differences were found in the odds ratio of response between the elderly, AYA and middle age cohorts.

Conclusion: Elderly patients accounted for less than 20% of patients on phase I clinical trials but those who participated were just as likely to achieve a clinical benefit as the AYA and middle age patients. Participation in phase I therapy may offer a reasonable therapeutic option for elderly patients with advanced cancers.

Disclosure of interest: None declared

Keywords: Clinical trial participation, phase I clinical trial

P074
EPIDURAL BASED ANESTHESIA FOR FRAIL ELDERLY PATIENTS IN BREAST CANCER SURGERY: METHOD OF CHOICE?

J. Wallage[1,2,*], H. Harbers[2], I. den Hoed[3], H. Maas[4], R. van Ieperen[2], G. J. Noordergraaf[2]

[1]*Anesthesiology, Pain and Palliative Care, RadboudUMC, Nijmegen,* [2]*Anesthesiology, Pain Management & Resuscitation,* [3]*Department of Surgery,* [4]*Department of Geriatric Medicine, Elisabeth Tweesteden Hospital, Tilburg, Netherlands*

Introduction: Choosing the optimal anesthetic technique for breast cancer surgery for a frail elderly patient is an increasingly common challenge. General anesthesia with its disadvantages is one of the items to consider in the decision making process of whether to operate or not. We describe our experience with epidural based anesthesia in breast cancer surgery as an alternative to general anesthesia.

Objectives: To evaluate the epidural based anesthesia for breast cancer surgery in elderly patients.

Methods: We performed a single center cohort study in breast cancer surgery under thoracic epidural anesthesia. Data were retrospectively derived from medical records and PDMS Metavision™ in the Elisatbeth-Tweesteden hospital,

a 1200 bed teaching hospital in the Netherlands. Data on epidural and surgical techniques, ASA (American Society of Anesthesiologists) and ISAR-HP (Identification of Seniors at Risk) scores, epidural failure, need for perioperative vasopressors, length of stay and complications were evaluated.

Results: Our study included 27 patients undergoing 29 operations, for breast cancer under thoracic epidural anesthesia between 8-2013 and 11-2015. The mean age was 85 years [range: 70-94]. Eight patients underwent a mastectomy, 20 a lumpectomy and 1 reoperation was performed because of a post-operative breast hematoma. Three patients had an ASA-score of I (11%), 10 (37%) of II, 13 (48%) of III and 1 (4%) of IV. The mean ISAR-HP score was 3.3. In 67% a preoperative consultation by a geriatrician was performed.

The epidural catheter was placed between T_{3-4} to T_{6-7}, epidural anesthesia typically required 10 ml of ropivacaine 0.75%. In 3 patients (10%) the epidural access failed; 2 patients received a paravertebral block, in the other case surgery was performed under sedation in combination with local infiltration by the surgeon with ropivacaine 0.2%.

Most patients developed some degree of hypotension due to sympathetic block, caused by the epidural analgesia. More than 80% of patients received intravenous vasopressors norepinephrine or phenylephrine, hemodynamics remained stable with this treatment. In our retrospective study no patients had clinically relevant hypotension. 58% received light sedation with propofol or midazolam.

After surgery, the epidural catheter was removed in the recovery room and pain was treated with minor oral analgesics. The median stay in the hospital was 1 night [0-13]. In 2 of 25 patients (8%) delirium was diagnosed. Two patients developed a hematoma after surgery requiring reoperation, one patient received epidural anesthesia again. In the other case, the hematoma developed after a warfarine-derivate was starting due to newly diagnosed atrial fibrillation and myocardial ischemia 2 days after surgery. She was not exposed to hypotension during the primary breast surgery.

Conclusion: Thoracic epidural based anesthesia is feasible and should be considered as a potentially optimal method for breast cancer surgery in the frail elderly patient. Hence, epidural anesthesia may give treatment options for patients who do not prefer general anesthesia or previously were excluded from surgery.

Disclosure of interest: None declared

Keywords: Breast surgery, complications, epidural anesthesia, vasopressors

P075

MAY THERAPEUTIC DRUG MONITORING OF 5FU DECREASE TOXICITY IN ELDERLY? A RETROSPECTIVE STUDY

L. Bengrine Lefevre[1,2,*], V. Quipourt[2,3], J. Vincent[1], A. Cueff[4,5], L. Marceau[5], M. Deveaux[5], S. Marilier[2,3], F. Ghiringhelli[1,6], A. Schmitt[5,7]

[1]Medical oncology, Centre Georges François Leclerc, [2]UCOG Bourgogne, [3]Geriatric department, CHU Champmaillot, [4]statistic department, Centre Georges François Leclerc, [5]EA 4184, Burgundy University, [6]UMR 866, INSERM, [7]Pharmacy department, Centre Georges François Leclerc, Dijon, France

Introduction: The clinical benefit of the use of 5FU in monotherapy, doublet or triplet (with oxaliplatin and/or irinotecan) is now recognized in patients with colorectal or pancreatic cancer. However, in order to limit its toxicity, in elderly, doses are frequently reduced by clinicians in an empirical manner (i.e., without pharmacological rationale).

Objectives: The objective of this study was to confirm that therapeutic dose monitoring (TDM) of 5FU, based on Gamelin et al. Methodology would help to decrease toxicity in elderly.

Methods: At Georges Francois Leclerc center in France, all colorectal and pancreatic cancer patients (adjuvant or metastatic disease) benefit of a 5FU concentration measurement during the 46h infusion of the first cycle. The aim is to rationally adapt the dose for the next cycles in addition to side effects observed or described by the patient. Exposures (Area Under the Curve, AUC) were derived from those concentrations and compared to the therapeutic window (i.e., 18 mg.h/L <AUC <28 mg.h/L). A lower or higher AUC than expected gives the opportunity to the clinicians to adapt 5FU dose according to a special algorithm. In this study, we retrospectively analyzed dose adaptations for patients above 70 years old, from April 1st 2014 to February 1st 2016.

Results: Seventy-two patients (28 males and 44 females) were included. Chemotherapy regimens were mainly FOLFOX (34 patients) or FOLFIRI (14 patients). Most of patients are treated on first line in metastatic disease. Forty percent of the AUC were within the target AUC during the first cycle. Dose adaptation for 60% of patient is needed. Target AUC was obtained for 65.85% of patient without increasing clinical toxicities. Six patients experienced a grade 3 or higher toxicity during the first cycle (i.e., 2 patients with grade 3 or 4 diarrhea, 1 patient with grade 3 neutropenia, 2 patients with grade 3 mucositis and 1 patient with grade 4 neutropenia and mucositis). After dose adaptation, only 2 patients experienced grade 3 neutropenia.

Conclusion: Therapeutic dose monitoring of 5FU may help clinicians to optimize dose adaptation in elderly patients for reduced toxicities. In particular, dose may be increased without inflating toxicity for patient with no observed toxicity on first cycle and could be rationally decreased in patient with toxicity. Others studies are needed to correlate this adjustement to chemotherapy efficacy.

References:

[1] Gamelin et al. Individual Fluorouracil Dose Adjustment Based on Pharmacocinetic Follow-up Compared With Conventional Dosage: Results of a Multicenter Randomized Trial of Patients with metastatic Colorectal Cancer. J of Clin Oncol 2008; 13: 2099-2105.

[2] Goldberg et al. Pooled Analysis of Safety and Efficacy of Oxaliplatin Plus Fluorouracil/Leucovorin Administered Bimonthly in Elderly Patients With Colorectal Cancer. J Clin Oncol 2006; 24:4085-4091.
[3] Aparicio et al. Geriatric Factors Predict Chemotherapy Feasibility: Ancillary Results of FFCD 2001-02 Phase III Study in First-Line Chemotherapy for Metastatic Colorectal Cancer in Elderly Patients. J Clin Oncol 2013; 31:1464-1470.
Disclosure of interest: None declared

Keywords: 5FU, chemotherapy toxicities, colorectal and pancreatic cancer, elderly, therapeutic dose monitoring

P076

OLDER PATIENTS RECEIVING CHEMOTHERAPY: CHARACTERISING THE POPULATION

F. Holt[1], M. Denholm[1,*], J. Hampton[2], P. Corrie[3]
[1]*Department of Oncology and Department of Medicine for the Elderly,* [2]*Department of Medicine for the Elderly,* [3]*Department of Oncology, Cambridge University Hospitals NHS Foundation Trust, Cambridge, United Kingdom*

Introduction: Due to an ageing population, increasing numbers of older patients are being referred for cancer chemotherapy. The proportion of patients over the age of 75 entering clinical trials is tiny so little is known about the true risks and benefits of treating older people.

Objectives: We undertook a review of our local chemotherapy dataset, in order to benchmark our current practice and consider future requirements of an oncogeriatric service.

Methods: The electronic medical records of patients over 75 years old receiving chemotherapy at Cambridge University Hospital NHS Foundation Trust between October 2014 and October 2015 were reviewed. The following patient characteristics were determined: age, sex, ECOG performance status (PS), cancer diagnosis, treatment intent, number of medications, updated Charlson Co-morbidity Index (CCI), independence with personal activities of daily living (PADL).

Results: 311 patients receiving chemotherapy had an average age of 80 years, range: 75-95 years, 53% were male. 161 (52%) patients had a solid tumour diagnosis, 150 (47%) had a haematological malignancy. 274 (88%), were treated with non-curative/palliative intent, 37 (12%) with curative intent. PS was recorded in 139 (45%) cases and the split was 0 (21%), 1 (62%), 2 (14%), 3 (3%). 208 (67%) patients were independent with PADL. The average number of medications taken was 5. The average CCI was 1.8.

Conclusion: The majority of older patients receiving chemotherapy were being treated with palliative intent. ECOG PS was not available for over half of patients, which may reflect poor documentation, or difficulty categorising older people using this scale. One third of patients were not independent with PADL, while polypharmacy and the CCI of 1.8 are all triggers for justifying comprehensive geriatric assessment in at least some of these patients. This review supports the need for better tools to assess older patients receiving chemotherapy and closer integration of oncology and geriatric services in the future.

Disclosure of interest: None declared

Keywords: Chemotherapy

P077

SALVAGE SURGERY OF NON-SMALL CELL LUNG CANCER IN ELDERLY PATIENTS WITH PREVIOUS WEDGE RESECTION OR LOBECTOMY

A. Tortoriello[1], A. J. Blair[1], C. E. B. Iniguez[1], M. T. Jaklitsch[1,*]
[1]*Brigham & Women's Hospital, Boston, USA*

Introduction: In younger patients, lobectomy offers greater survival than limited resection for early stage lung cancer [1]. This benefit is not evident after age 71, but without clear rationale [2].

Objectives: To assess the following differences between elderly patients treated with lobectomy versus limited resection: 1) disease free and overall survival, 2) recurrence rates, and 3) risk factors contributing to a difference in survival.

Methods: A total of 4,015 patients underwent lung cancer surgery by a single surgeon between 1998 and 2010. 164 patients were ≥65 years of age, underwent lobectomy or limited resection with histology revealing early stage NSCLC. Patients were grouped in two categories: patients that underwent a limited resection (n=74; 45%) and patients that underwent a lobectomy (n=90; 55%). 18 patients underwent resection and had a recurrence, five of whom initially underwent a lobectomy, the other 13 underwent a limited resection. Perioperative risk factors included in the analysis were: age at surgery, cancer stage, FEV1, histology, tumor size, and whether the cancer had invaded the pleura. Log-rank tests and Cox regression models were used for survival analysis.

Results: A total of 84 (51%) men and 80 (49%) women (mean age 75) with stage I (76%) or stage II NSCLC were analyzed. There was a significant difference in disease free survival between the two groups (p=0.0008). Of the five patients who underwent an initial lobectomy, the mean time until recurrence was 1849 days ± 1135 (5.0 years), whereas time to recurrence for limited resection was 583 days ± 301 (1.6 years). Despite a difference in recurrence rate, there was no significant difference in 5-year survival between the groups (p=0.23), likely due to salvage surgery. Specifically, two of five (40%) of patients with lung recurrence after lobectomy had salvage surgery without recurrence, and seven of 13 (54%) of recurrences after limited resection were salvaged. Age and FEV1 were predictors of survival for those who underwent limited resection and stage II disease was a predictor for lobectomy. There were four deaths within 30 days (2.4% 30-day mortality) and two deaths within 90 days (3.7% 90-day mortality). Five of the six deaths within the first 90 days were recovering from lobectomy (5.6% 90-day mortality following lobectomy). The death after wedge resection occurred on the 80th day (no 30-day mortality and 1.5% 90-day mortality for wedge).

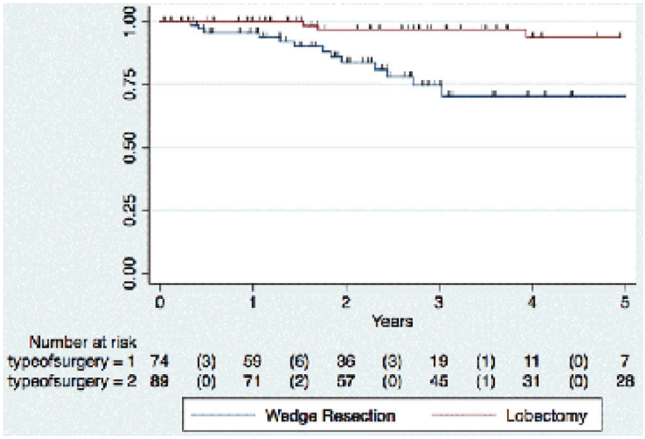


Fig. 1 (abstract P077) – Disease-free survival.

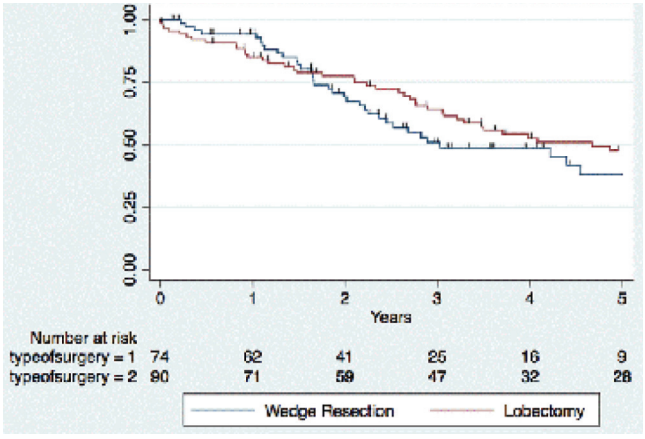


Fig. 2 (abstract P077) – Overall survival by type of surgery.

Conclusion: There is a significant difference in disease free survival and time to recurrence between elderly patients who undergo a limited resection compared to a lobectomy, but no statistical difference in 5-year survival between the groups. The benefit of limited resection in preserving lung function and reducing post-operative recovery has been counterbalanced by risk of recurrence. Salvage surgery can still cure about half of the patients with recurrence.

References:

[1] Ginsberg RJ, Rubinstein LV. Randomized trial of lobectomy versus limited resection for T1 N0 non-small cell lung cancer. Lung Cancer Study Group. *Ann Thorac Surg*. 1995 Sep;60(3):615-22

[2] Mery CM, Pappas AN, Bueno R, Colson YL, Linden P, Sugarbaker DJ, Jaklitsch MT Similar long-term survival of elderly patients with non-small cell lung cancer treated with lobectomy or wedge resection within the surveillance, epidemiology, and end results database. Chest. 2005;128(1):237.

Disclosure of interest: None declared

Keywords: Elderly, local recurrence, lung cancer, recurrence, salvage surgery

P078

EPITOP-01: ELDERLY CANCER PATIENTS, SAFETY AND QUALITY OF LIFE UNDER IMMUNOTHERAPIES: A PHASE IV TRIAL

R. Sabatier[1], C. Zemmour[2], S. Durand[3], F. Goldwasser[4], F. Rousseau[1,*] and Société Francophone d'Oncocogériatrie

[1]Medical Oncology, [2]Biostatistics, [3]Pharmacy, Institut Paoli Calmettes, Marseille, [4]Medical Oncology, Hopital Cochin, Assistance Publique Hôpitaux de Paris, Paris, France

Introduction: Immunotherapies such as PD1/PD-L1 or CTLA-4 inhibitors have been hugely developed in the last years in many cancers. Most of published prospective data related to immunotherapy have been focused on young patients with only 5 to 10% of patients above 75 years. We propose here to develop the first clinical study focused on the impact of immunotherapies in the elderly population.

Objectives: Our co-primary objectives will be to assess the safety and quality of life under treatment. Secondary objectives will be evaluations of geriatric data modifications under treatment, efficacy, and correlation between toxicity and efficacy. Another secondary objective will be the comparison between patients and clinicians symptom reporting. We will also conduct an ancillary pharmacokinetics analysis to explore PDL1 inhibitors antibodies residual concentration impact.

Methods: This phase 4, multi-centre, single arm, open-label study will evaluate the safety and efficacy of immune checkpoint inhibitors-based therapies in elderly patients with advanced or metastatic solid tumours. To answer to primary objectives, 300 patients are awaited. Subjects who consent to participate will be enrolled if they meet the all the following criteria: proven diagnosis of solid tumour, treatment with an immune checkpoint inhibitor, age equal or over 70 years old, and patients not included in another clinical trial assessing immunotherapy efficacy. All patients receiving at least one dose of treatment will be evaluable for safety, quality of life, geriatric assessments, and efficacy data. Safety will be evaluated using CTCAE V4 criteria for both clinical and biological toxicities. Quality of life will be evaluated using the EORTC QLQ-ELD14 questionnaire. Comprehensive geriatric evaluations (including G8, ADL, IADL, GDS15, MNA, MMSE, modified Charlson's score, Fried frailty criteria, maximal grip strength, and one-legged stance test) will be performed at inclusion. Additional optimized geriatric assessments (ADL, IADL, GDS15, maximal grip strength, and one-legged stance) will be done every 2 months until treatment discontinuation. Efficacy (Progression –free survival and overall survival) will be assessed using clinical and radiological (RECIST 1.1) criteria every 2 months. CTCAE v4 questionnaires will be completed by clinicians before every treatment cycle. Patients will also complete a language adapted questionnaire (Basch E, Lancet Oncol 2006). For all symptoms, both patients and clinicians answers will be compared. Finally, residual PDL1 inhibitor antibodies concentration before the second and fourth treatment administration will be assessed. These results will be compared to sarcopenia evaluation (using CT-scan) and glomerular filtration rate measurement (using blood creatinine and Cystatin C).

EPITOP-01 Flow-chart	Inclusion : d0	C1[d]	C2	C3	C4[e]	C5[e]	then every treatment cycles	then every 2 months untill treatment discontinuation
Physical examination including PS	X		X	X	X	X	X	
Adverse events			X	X	X	X	X	
Concomitant treatments	X	X	X	X	X	X	X	
Oncodage questionnaire (G8)	X							
Comprehensive geriatric assessment [a]	X							
Optimized geriatric assessment[b]						X		X
EORTC QLQ-ELD14 questionnaire	X	X	X	X	X	X		X
Radiological evaluations (RECIST 1.1)	X				X	X		
Blood tests[c]	X		X	X	X	X	X	
TSH	X			X		X		X
PDL1 inhibitors antibodies evaluation[f]	X	X	X		X			
Sarcopenia evaluation and Cystatin C assessment[f]	X							

[a] ADL, IADL, GDS15, MNA, MMSE, modified Charlson score, Fried frailty criteria, maximal grip strength, one-legged stance test

[b] ADL, IADL, GDS15, maximal grip strength, one-legged stance test

[c] Hemogram, liver function assessment, electrolytes, blood creatinine with glomerular filtration rate, albumin

[d] To be done only if screening performed more than 14 days before treatment initiation

[e] Optimized geriatric assessment and radiological evaluation will be performed 2 months after treatment initiation, *i.e.* before C5 for therapies administrated every 14 days and before C4 for therapies administrated every 21 days

[f] This ancillary analysis will be done for 100 patients. Additional PDL inhibitor antibodies assessment will laso be performed at treatment discontinuation

Fig. 1 (abstract P078) – EPITOP-01 Flowchart.

Results: Awaited study duration is 36 months including 24 months for inclusion and 1 year of follow-up after inclusion of the last patient.

Conclusion: Developing this program with real world data, outside usual randomized clinical trials, will avoid the selection bias of including only well-fit patients. By focusing on toxicities, quality of life, and geriatric assessments, we aim to evaluate the impact of these therapies on elderly patients' daily life. As an exploratory objective we will also assess the unknown pharmacokinetics specificities of immune checkpoint inhibitors in this population, and thus aim to improve treatment doses and administration schedules of these therapies for the elderly population.

Disclosure of interest: None declared

Keywords: Solid tumours, immunotherapy, phase iv, quality of life, safety

---

P079

PREDICTORS OF POSTOPERATIVE COMPLICATIONS IN ELDERLY PATIENTS AGED 80 YEARS OR OLDER UNDERGOING CANCER SURGERY

T. Karnakis[1,*], L. A. Gil Junior[2], A. L. Kanaji[1], M. D. C. Sitta[3], M. C. B. Pereira[3], W. Jacob Filho[3]

[1]Geriatrics, [2]ICESP, [3]Geriatrics, University of São Paulo, São Paulo, Brazil

Introduction: The growing number of older people with cancer in daily practice demands a reflection of how to optimize the perioperative period of these.This subject was discussed in recent reviews, in which it was observed that the overall survival of these patients independent of age, and other factors such as functionality,estimate better perioperative morbidity and mortality

Objectives: Estimate predictors of postoperative complications in elderly patients aged 80 years or older undergoing cancer surgery, as well, factors associated with mortality, prolonged hospital stay and hospital readmissions.

Methods: A retrospective study analysis medical records of Geriatrics Clinic patients with 80 years or older who were evaluated for surgical risk between 2013 and 2014 at Cancer o Institute of São Paulo (ICESP). As independent variables were used the values on the scales of Katz and Lawton, MET (Equivalent Rate Metabolic), Mini Nutritional Assessment and size estimation of surgery. While, as covariates were chosen age, gender, comorbidities, number of medications, creatinine clearance (Cockroft-Gault formula) and serum hemoglobin. Statistical analysis proposed was to compare the groups with and without postoperative complications in bivariate analysis with Fisher's exact test for categorical variables and Student's t test for interval variables

Results: 154 patientes were included. Mean age was 84.8 years (SD 3.71) and females accounted for 50.6%. As for outcomes, there were 36 cases (23%) with postoperative complication. The number of deaths was 11 patients in the 30 days after surgery and 15 patients, 10 of postoperative complication group, readmitted in 30 days period after surgery. The average hospital stay was 5.7 days (median 2.7), and the group presented complications in the postoperative period the average time was 13.2 days (median 6.9). The bivariate analysis showed that surgery classification and functional classification by Lawton scale was associated with the risk of postoperative morbidity in this study

Conclusion: Geriatric assessment of surgical risk in cancer context provides data to assist in preoperative decision. Other elements of geriatric assessment should be studied in this specific population in order to better define a valuation

model, which contributes less morbidity and mortality within 30 days after oncologic procedure

References:
[1] Pope D, Ramesh H, Gennari R, Corsini G, Maffezzini M, Hoekstra HJ, Mobarak D, Sunouchi K, Stotter A, West C, Audisio RA. Pre-operative assessment of cancer in the elderly (PACE): a comprehensive assessment of underlying characteristics of elderly cancer patients prior to elective surgery. Surg Oncol. 2006 Dec;15(4):189-97.
[2] Kristjansson SR, Farinella E, Gaskell S, Audisio RA. Surgical risk and post-operative complications in older unfit cancer patients. Cancer Treat Rev. 2009 Oct;35(6):499-502. Epub 2009 May 10.
[3] Audisio RA, Ramesh H, Longo WE, Zbar AP, Pope D. Preoperative assessment of surgical risk in oncogeriatric patients. Oncologist. 2005 Apr;10(4):262-8.
Disclosure of interest: None declared

Keywords: Elderly, oncologic surgery, geriatric assessment, preoperative, surgical risk

P080
TREATMENT OF CHEMO-RESISTANT CANCERS IN THE ELDERLY POPULATION: ROLE OF MOLECULAR TUMOR PROFILING

M. Ghosn[1], T. Ibrahim[1], A. Ahmadie[1], A. Saroufim[1], C. Hanna[1], F. el Karak[1], F. Farhat[1], J. Kattan[1,*]
[1]*Hematology Oncology, Faculty of Medicine Saint Joseph University, Beirut, Lebanon*

Introduction: Treatment of chemo-resistant cancers in elderly patients is challenging especially in subjects with good performance status. With the progress of biomedical engineering, extensive molecular profiling (MP) of cancer cells has become easily feasible and widely available. Theoretically it could guide therapy in tumors refractory to several lines of chemotherapy.

Objectives: We aim to test the efficacy of MP in individualizing cancer treatment in patients aged more than 65 years old after exhaustion of all recommended therapy lines.

Methods: This is a descriptive retrospective single center study. Patients diagnosed with a refractory solid cancer at Hôtel Dieu De France teaching hospital of the Saint Joseph University were referred to Caris Life Science for MP in the last 3 years. Testing (including NGS, IHC and in situ hybridization) were performed on formalin-fixed paraffin-embedded tumor samples.

Results: 46 patients were included among whom 48% females, with a median age of 70.5 years old (std. dev. 5.6). Lung cancer was the most common primary (26%) followed by breast, ovarian and colorectal cancers (10.9% for each). Adenocarcinoma was the most common histologic subtype (60.9%). Platinium based drugs were the most commonly used chemotherapy prior to MP followed by gemcitabine and fluorouracil. The majority of tumor samples (71.5%) sent for MP were from recent biopsies performed after a median of 2 therapy lines. On MP, the median number of potentially beneficial drugs was 17 (23.5% not used before) whereas the median number of drugs lacking benefit was 16 (37.5% not used before). Targeted, hormonal and oral therapies with a potential benefit were present in 2, 5 and 8 patients respectively. TP53 was the most commonly mutated gene. After a median follow up of 6.2 months, MP based therapy was effective in controlling the disease in 65.2% (CR in 3 patients-6.5%, PR in 7 patients-15.2% and SD in 20 patients-43.5%). Average duration of response was equal to 4 months

Conclusion: MP could be effective in finding adequate and effective anti-cancer agents in elderly patients even after exhaustion of recommended cytotoxic, hormonal or targeted therapy. It would also prevent the use of pointless toxic drugs if used early in the course of disease.

References:
[1] Von Hoff DD et al. JCO. 2010;28:4877-83.
[2] Jameson GS et al. Breast Cancer Res Treat. 2014;147:579-88.
[3] Epelbaum R et al. BioMed Res Intl. 2015
[4] Ross JS. Biomarkers Med. 2011;5:277-9.
Disclosure of interest: None declared

Keywords: Chemo-resistant cancer, molecular profiling

P081
USING BIG DATA IN ONCOLOGY TO PROSPECTIVELY IMPACT CLINICAL PATIENT CARE: A PROOF OF CONCEPT STUDY

V. Dougoud-Chauvin[1,*], J. J. Lee[1], E. S. Santos[2], V. L. Williams[1], N. M. Battisti[1], K. M. Ghia[1], M. Sehovic[1], W. Kramer[2], C. Croft[1], J. Kim[1], L. Balducci[1], J. A. Kish[1], M. Extermann[1]
[1]*H. Lee Moffitt Cancer Center and Research Institute, Tampa,*
[2]*Eugene M. & Christine E. Lynn Cancer Institute, Boca Raton, USA*

Introduction: Best oncology practice typically involves use of evidence obtained from clinical trials. However, older cancer patients are underrepresented in such trials. In fact, systematic cohort reviews have shown that a significant number of older cancer patients would not have matched study eligibility criteria, limiting the external validity of the guidelines based on these trials. Big Data such as Total Cancer Care (TCC™) offers a unique opportunity to expand the base of evidence on how to treat such patients.

Objectives: The first aim was to check the availability of similar patients in the TCC™ database and to assess the impact of such a consultation on the treatment plan. The second aim was to obtain workload and staff/technical requirements data for a randomized study as well as evaluation of time constraints.

Methods: After preliminary work showed the availability of matching patients for clinical scenarios, we prospectively tested the intervention with one community cancer center, the Lynn Cancer Institute (LCI) in Boca Raton, Florida. Patients aged 70 and older seen at LCI with a documented malignancy were eligible. The first step was to conduct an oncogeriatric screening using the Senior Adult Oncology Program questionnaire version 2.0 (SAOP2). If positive for

any geriatric issue, a short form Comprehensive Geriatric Assessment was administered. The information was sent via email to the Oncogeriatric Information Team (OGIT) at Moffitt, as well as the oncologist's pre-consultation treatment plan (pre-OGIT email). The OGIT consisted of one clinical research coordinator and three medical oncologists (Drs. Dougoud, Lee, and Battisti) working under the supervision of Dr.Extermann, as visiting international scholars. OGIT preformatted a request using the TCC™ data warehouse front end tool (TransMed) to retrieve similar patient cases by age, disease site, histology and stage. A data concierge from the Data Collaborative Services Core extracted the patients'cohort created from TCC™ and provided the list to the OGIT within 24 hours. Additional information was retrieved from Electronic Medical Records and data about matching patients were summarized in a report containing only de-identified information. Relevant literature was included in the report and reviewed by a Senior Member of the SAOP. Two weeks after the treatment decision, a post-consultation email was sent to the oncologist to assess the final treatment plan and the utility of such a consultation.

Results: 31 patients have been included. 10 (32.3%) were new, the others (67.7%) were established patients. The SAOP2 screening was postivie in 87.1%. The time from reception of the pre-OGIT email to the sending of the report took on average 2.2 working days (median 2 days, range 1-5). For all patients except 1, the time was within 3 working days. The OGIT consult influenced treatment in 38.7% of cases (N=12), modified it in 19.4% (N=6) and was perceived as "somewhat" to "very useful" in 84% of the cases (N=26).

Conclusion: This study establishes a proof of concept as to the feasibility of real time use of Big Data for clinical practice. The geriatric screening and the consultation report influenced treatment in 38.7% of cases and modified it in 19.4%. This compares very well with oncogeriatric literature which reports impact rates of 20-50% for geriatric screenings/consultations. However, additional steps are still needed to make this consultation a financially and clinically viable proposition for large scale use.

Disclosure of interest: None declared

Keywords: Big data, cancer in the elderly, electronic consultation, personalized medicine, total cancer care

P082
GERIATRIC ONCOLOGY NEEDS ASSESSMENT OF GENITOURINARY CANCER SITE GROUP: THE GERIATRIC ONCOLOGY DEMONSTRATION PROJECT

A. Loucks[1,*], R. Jin[1], P. Savage[2], G. Rodin[3], M. Puts[4], S. Alibhai[5]
[1]*Nursing Geriatric Oncology,* [2]*Director of Professional Practice,* [3]*Director of Supportive Care, Princess Margaret Cancer Centre,* [4]*Nursing Geriatric Oncology, University of Toronto,* [5]*Geriatric Oncologist, Princess Margaret Cancer Centre, Toronto, Canada*

Introduction: Recognizing that almost 20% of patients at a large academic cancer centre were age 75+, and another 20% were 65-74 years old, institutional support was obtained to design and introduce a Geriatric Oncology (GO) Clinic at the Princess Margaret Cancer Centre in Toronto, Canada. However, published descriptions of GO clinics rarely report results of a needs assessment.

Objectives: To conduct a needs assessment in a Genitourinary (GU) Cancer Clinic that would validate the need for a GO clinic for this group of patients. The assessment would also help refine the goals of a GO clinic and identify knowledge shortfalls and education opportunities for the healthcare team.

Methods: A multistep needs assessment of the GU Cancer Site nurses and physicians was conducted to identify the learning needs and attitudes towards older adults with cancer. The first step was a thematic analysis of interviews conducted with self-nominated GU physician site champions (n=5) from Medical, Radiation, and Surgical Oncology to assess their support for the GO Clinic and establish the GO clinical goals to meet the needs of their patient population. Secondly, the GU specialized Oncology nurses' (n=7) knowledge of and attitudes towards older adults with cancer was assessed using an adapted version of the NICHE Geriatric Institutional Assessment Profile (GIAP) survey. Lastly, physicians regularly attending the GU Tumour Board (n=16) completed a knowledge and attitudes survey developed specifically for Oncologists.

Results: The needs assessment identified GO learning needs and resources for the entire GU Cancer Care Team. Champions were strongly supportive of a GO clinic and empowering point of care nurses to identify and assess vulnerable and complex older patients with cancer. Nurses reported having a lack of training, resources, and time to adequately care for vulnerable older adults. The majority of physicians reported that the GO clinic would be most helpful in supporting older adults during cancer treatment and, to a lesser extent, with treatment decision making (Table 1). The physicians identified a number of educational and resource needs to assist with (a) making treatment decisions, and (b) managing older adults with cancer,(Table 1).

Table 1 (abstract P082) – GU Oncologist Comfort Level in Assessing or Managing Older Adults

Comfort/Confidence Level reported:	Agree or Strongly Agree %	Neither agree or disagree %	Disagree or Strongly disagree %
Understanding of age-related physiologic changes on efficacy and toxicity of cancer treatment in the older adult	50	25	25
Managing older adults with multiple comorbidities	31	38	31
Understanding risks associated with polypharmacy in the context of cancer treatment for the older adult	19	31	50
Managing older adults with cancer who have cognitive impairment.	19	37	44
Managing older adults with cancer who have a recent history of falls.	13	25	62
I know what services to access at [the hospital] to optimize the care of older adults with cancer.	25	37.5	37.5
I know what services to access in the community to optimize the care of older adults with cancer.	6	25	69

Conclusion: The needs assessment uncovered rich information about the challenges and unique needs of the GU cancer care team and potential value of a GO clinic to optimally care for older adults with cancer.

Disclosure of interest: None declared

Keywords: Genitourinary cancer disease site, geriatric oncology needs assessment, knowledge and attitudes, oncologist, oncology nurses

P083

PRE-OPERATIVE ASSESSMENT AND POST-OPERATIVE OUTCOMES OF ELDERLY WOMEN WITH GYNECOLOGIC CANCERS, PRIMARY ANALYSIS OF NRG CC-002

A. Ahmed[1,*], W. Deng[2], W. Tew[3], D. Bender[4], R. Littell[5], A. DeNittis[6], M. Edelson[7], M. Morgan[8], J. Carlson[9], L. Small[10], A. Fleury[11], S. Modesitt[12], A. Olawaiye[13], A. Evans[14], G. Fleming[15] and NRG Oncology

[1]*OBGYN, Gynecologic Oncology, Rush University Medical Center, Chicago,* [2]*GOG, Buffalo,* [3]*Memorial Sloan Kettering, new york,* [4]*University of Iowa, Iowa City,* [5]*Kaiser Permanente, San Francisco,* [6]*Mainline, Wynnewood,* [7]*Abington Jefferson Health, Abington,* [8]*University of Pennsylvania, Philidelphia,* [9]*Cancer Center Research for the Ozarks, Springfield,* [10]*Maine Medical Partners, Scarborough,* [11]*Women's Caner Center of Nevada, Las Vegas,* [12]*University of Virginia, Charlottesville,* [13]*University of Pittsburgh, Pittsburgh,* [14]*Marshfield Clinic, Marshfield,* [15]*University of Chicago, Chicago, USA*

Introduction: CC-002 is a prospective cooperative group study conducted by the National Clinical Trials Network (NCTN) group NRG Oncology to evaluate whether a pre-operative GA-GYN score derived from a predictive model utilizing components of an abbreviated geriatric assessment (GA) will be associated with major post-operative complications in elderly women with suspected ovarian, fallopian tube, primary peritoneal or advanced stage papillary serous uterine (GYN) carcinoma undergoing primary open cytoreductive surgery.

Objectives: The primary objective in this study is to evaluate whether a pre-operative GA-GYN score derived from a predictive model utilizing components of an abbreviated geriatric assessment (GA) will be associated with major post-operative complications in elderly women with suspected ovarian, fallopian tube, primary peritoneal or advanced stage papillary serous uterine (GYN) carcinoma undergoing primary open cytoreductive surgery.

Methods: Patients age 70 years or older with suspected ovarian, fallopian tube, primary peritoneal or advanced stage papillary serous uterine carcinoma undergoing evaluation for surgery were eligible to enroll. Prior to cytoreductive surgery, patients completed an abbreviated geriatric assessment consisting of reliable assessment measures that are primarily self-administered. The assessment includes measures of functional status, comorbidity, psychological state, social support, social activity, and nutrition. This geriatric assessment tool has been validated and used in other cooperative group studies (Hurria et al, JCO, 2011). Patients were followed for six weeks post-operatively or until start of chemotherapy. Post-operative complications were defined as the occurrence of an event listed in The American College of Surgeons' National Surgical Quality Improvement Program. Events were recorded as a yes/no occurrence, or meeting severity criteria of grade 3 or higher using CTCAE version 4.0.

Results: 190 patients were enrolled from February 2015 to November 2015. Of 190 patients, 116 patients planned to have primary open cytoreductive surgery, 38 patients planned to have neoadjuvant chemotherapy followed by interval cytoreductive surgery, 36 patients did not have surgery. Of the 116 patients, 105 patients had primary open cytoreductive surgery and will be included in the primary analysis. 81% of the 105 patients were ages 70-79 years of age; the majority had a performance status of 0 or 1 and was of white race. In the 105 patients, 5 patients had pending post-operative events, 30 protocol-defined post-operative events were reported including two death events during the 6-week post-operative follow up period, and 11% were re-admitted to the hospital within 30 days of surgery. The data for the primary objective, the association between the score from the predictive model and post-operative complications, is maturing.

Conclusion: We hypothesize that a patient with higher pre-operative GA-GYN score is more likely to have major post-operative complications. Currently the data for the primary objective is maturing and will be ready for presentation in the near future.

Disclosure of interest: None declared

Keywords: Cytoreductive surgery, geriatric assessment, gynecologic cancer

P084

PREDICTION OF FUNCTIONAL DECLINE AND 1 YEAR SURVIVAL IN ELDERLY CANCER PATIENTS USING COMPREHENSIVE GERIATRIC ASSESSMENT

A. L. Kanaji[1,*], W. Jacob Filho[1], T. Karnakis[1], L. A. Gil Jr[1], T. C. A. Rotta[1]

[1]*Geriatrics, ICESP, São Paulo, Brazil*

Introduction: Older patients with cancer comprise a heterogeneous group of patients. Chronological age should not be the cornerstone to cancer treatment decision since co morbidities; functionality, cognition and physiological reserve vary among this population. There are few studies that evaluate the comprehensive geriatric assessment (CGA) efficacy in predicting functional decline and survival in the elderly patients with cancer.

Objectives: To determine the 1 year functional decline and survival in elderly cancer patients followed in a geriatric outpatient clinic.

Methods: We analyzed baseline record data from patients aged ≥ 60 years with active solid tumors enrolled in a geriatric outpatient clinic from July 2013 until June 2014. Primary outcome was functional decline in 1 year, defined as a loss of at least 1 of de basic activities of daily living. Secondary outcome was survival in 1 year. Phone calls were made to verify the

outcomes. Sample size was estimated in 180 assuming a 20% follow up loss, 15% incident functional decline, Alfa error=0.05 and Beta error=0.20. Statistical analysis:Fisher exact test to categorical variables and t-Student or Mann-Whitney to interval variables. To determine the factors associated with functional decline Stepwise backward logistic regression model was used and the survival analysis was made with Cox Proportional-Hazard Regression with forced entry.

Results: 286 patients were enrolled and 60 were excluded. Mean age was 81 years (SD 6.46). Gastrointestinal cancer was the most prevalent (n=56) followed by breast cancer (n=53). 74.8% underwent surgery, 38.7% chemotherapy and 31.9% radiotherapy. Of the 226 patients, 147 survived and 22 had missing data. Among the 147 survivors, 38 developed functional decline.

In the functional decline analysis (n=147) mean Mini-Mental Exam Score was 21.03 (SD 6.29), hang grip strength was 26.01kg/m^2 (SD 7.62) and gait speed 0.49m/s. As an independent variable, patients that underwent chemotherapy had a 4-fold risk of functional decline (OR=4.29 CI95% 1.31-14.06). Advanced age was associated with increased functional decline (12% risk increase for each additional year). Analyzing the CGA variables through regression models, none of them was associated with functional decline.

In the survival analysis (n=226) the median follow-up was 357 days and survival was 73.7%. After adjustments for oncologic, social and demographics variables, none of the CGA variables were associated with survival.

Conclusion: In this sample, the addition CGA did not enhance the prediction of 1 year functional decline and survival. Limitations of the study that might have contributed are the excessive amount of missing data (n=125) for the primary outcome, which reduced the power of the study. The functional decline was analyzed only on the survivor group, tumor site was not included in the multivariate analysis and functional variables (basic and instrumental activities of daily living and Karnofsky Performance Scale) were not considered on the regression models in order to avoid multicollinearity.

References:

[1] Puts MT. Ann Oncol. 2014 Feb;25 (2):307-15.
[2] Balducci L, Yates J. Oncology (Williston Park) 2000;14:221-227.
[3] Hurria A, Browner IS, Cohen HJ, et al. S J Natl Compr Cancer Netw 2012;10(2):162-209.

Disclosure of interest: None declared

Keywords: Functional decline, geriatric oncology, survival

P085

CLINICAL RELEVANCE OF ONCOLOGICAL DIAGNOSIS IN FRAIL ELDERLY PATIENTS

A. Luciani[1,*], C. Careri[2], S. Caldiera[2], M. Violati[2], D. Ferrari[2], P. Foa[1]

[1]*Medical Oncology,* [2]*Ospedale S. Paolo, Milano, Italy*

Introduction: Older patients admitted to the hospital with an suspect of neoplasm often undergo radiological as well as bioptic examinations in order to have a cancer diagnosis. Some of them are referred to an oncological department to receive cancer treatment. However there is a large amount of patients that do not receive cancer treatment because of their clinical status and/or their age.

Objectives: The aim of this study is to evaluate the prevalence of elderly patients that received an oncological management after a cancer diagnosis in medicine departments

Methods: We examined clinical charts of patients with more than 70 years old admitted to the medicine departments of our hospital with a suspicious of cancer. The patients had to have a principal or secondary new cancer diagnosis at the discharge from the hospital. For all patients we collected the number and type of comorbidities, number of medications. Data on type of diagnostic exams, the diagnosis of cancer and the subsequent destination of the patients were recorded. A multiple regression analysis was computed in order to evaluate which clinical elements were significantly associated with oncological consultations and treatment.

Results: 838 patients with more than 70 years old (mean 79, 70-100 SD 6.2) were evaluated. 451 (54% were male), and 461 (55%) with a metastatic disease. The patients were taken a mean number of drugs of 7.35 (0-19, SD 3.34) and were affected by a 4.67 (0-15 SD .15) mean of comorbidities. In 481 (49.9%) of patients the suspected diagnosis at admission to the hospital was oncological. 367 (44%) of patients had a complete cancer diagnostic test while 86% had cancer as principal diagnosis at the day of the discharge from the hospital. Only 35% (293 pz) were referred to an oncological department. Multiple regression analyses showe how number of comorbidities (p 0.004), complete oncological exams (p 000.1), sex male (p 0.0001) and metastatic disease (p 0.001) were the parameters associated with an oncological treatment or management after hospital stay.

Conclusion: Our study showed how only a small proportion of elderly patients that had a cancer diagnosis received an oncological management thereafter. This picture is mainly due to comorbidities and metastatic disease status. Based on our results there are a lot of patients thata receicved complete tests but they donot receiv any cancer treatment. This could be due to the general health status of the patients and comorbididties and this overdiagnosis produces anxiety on patients and his family. A better multidisciplinary approach as well as the condivision of clinical goals with the patients and his/her family could produce less costs and a better tailored clinical aproach based on clinical and socio

Disclosure of interest: None declared

Keywords: Elderly, frailty, inpatients

P086

EVALUATION OF PATIENT PERCEPTIONS OF TEAM BASED CARE IN A GERIATRIC ONCOLOGY MULTIDISCIPLINARY INTERPROFESSIONAL CLINIC

A. E. Chapman[1,*], K. Swartz[2], L. Collins[2], S. Sicks[3]
[1]*Department of Medical Oncology,* [2]*Family and Community Medicine,* [3]*Jefferson Center for Interprofessional Education, Thomas Jefferson University, Philadelphia, USA*

Introduction: The Senior Adult Oncology Clinic (SAOC) at Thomas Jefferson University's Kimmel Cancer Center, utilizes an interprofessional team approach to provide comprehensive geriatric oncology assessments and treatment plans for older patients with cancer. The importance of team-based healthcare delivery is well documented, however, experts agree that there is a need for more tools to assess the skills required to be a high-functioning team and a need for the impact of collaborative practice on patient reported outcomes and satisfaction.

Objectives: Our objective was to measure the effectiveness of our interprofessional team on the patient experience and assess how the team functioned to provide a comprehensive treatment plan.

Methods: Upon completion of a SAOC visit, patients were asked to participate in a short voluntary survey to assess team performance. The Jefferson Teamwork Observation Guide (JTOG) is a validated survey used with learners that has been adapted to elicit patient perspectives of five domains of interprofessional collaborative practice, including communication (C), values/ethics (V/E), teamwork (T), and roles/responsibilities (R) and patient-centeredness (PC). The Patient JTOG includes eight competency–based Likert Scale questions as well as one open-ended question. The survey was administered on secure mobile tablets by trained research assistants (RAs) who were not part of the healthcare team. The study received exempt approval by our Institutional Review Board.

Results: A total of 13 patients completed the survey. Seven respondents were female, and six were male. Seven identified as Caucasian, four as African American and two as other. One hundred percent responded "Strongly Agree" to a global question about the importance of teamwork in patient care (mean 4.0). Overall satisfaction with the SAOC team was 3.92 out of 4.0. For the eight questions relating to each of the five collaborative practice competencies noted above, the team received an average score ranging from 3.69 to 3.77 out of 4.0, for a global score of 29.66 (out of 32 possible), placing this team in the highest quartile of teams surveyed at our institution to date (n=407). In addition, all 13 respondents completed the open-ended qualitative comments with 12 out of the 13 being positive with multiple references to effective listening and communication, team coordination, and patient-centered care.

Conclusion: Thomas Jefferson University's SAOC has been providing coordinated interprofessional geriatric oncology assessments since 2010. Our Center is fairly unique in our model of team-based consultation and care plan development. Using this patient JTOG survey, we were able to document the perception of our patients in our team's ability to provide high quality team-based, patient centered care. Based on these early results, our high functioning interprofessional consultative team model may serve as a model for replication for geriatric oncology care delivery at other institutions.Introduction: There is increasing emphasis on inter professional teamwork in healthcare. The Jefferson Teamwork Observation Tool (JTOG) has been developed to evaluate the skills and effectiveness of inter professional teams. The Senior Adult Oncology Clinic (SAOC) at Thomas Jefferson University's Kimmel Cancer Center was established in 2010 to provide Inter professional geriatric oncology consultation. We used the JTOG to evaluate the SAOC team skill and effectiveness.

Disclosure of interest: None declared

Keywords: Interprofessional, multidisciplinary, patient centered care

---

P087

A CHALLENGE IN ONCOGERIATRICS: IS ROCKWOOD FRAILTY INDEX AN ACCURATE TOOL TO PREDICT CLINICAL OUTCOMES?

A. Mazzeo[1,*], F. Monacelli[2], P. Odetti[2], C. Russo[2], S. Sambuceti[2], M. Canepa[2], T. Granello[2], A. Nencioni[2], R. Murialdo[3], A. Ballestrero[3], S. Scabini[4], E. Romairone[4], F. De Cian[5], F. Boccardo[6]
[1]*Department of Internal Medicine and Medical Specialties Section of Geriatric Medicine,* [2]*Department of Internal Medicine and Medical Specialties Section of Geriatric Medicine,* [3]*Department of Internal Medicine and Medical Specialties Section of Internal Oncological Medicine,* [4]*Oncological surgery and implantable system surgery,* [5]*Academic Surgery Department of Surgical Science and Integrated Diagnostics,* [6]*Department of Internal Medicine and Medical Specialties Section of Clinical Oncology, I.R.C.C.S. San Martino-IST Genova, Genova, Italy*

Introduction: Comprehensive geriatric assessment (CGA) is the gold standard for elderly assessment in oncology to predict chemotherapy tolerance and the main clinical outcomes (survival, functional status and quality of life). CGA is also able to stratify elderly patients according to their biological condition (frail, pre-frail, fit). However, the method is of specialist expertise and it is still poorly incorporated into routine clinical practice. So far, other assessment tools did not show adequate specificity and predictive accuracy.

Objectives: We aimed at comparing different evaluation scales to assess the best predicting oncogeriatric tool.

Methods: First visit included ECOG PS, CGA, Rockwood 40 item IF, Short Form Health Survey-36 (quality of life). Patients were assessed after 1 month for mortality, after three and six months for chemotherapy toxicity and after 12 months for quality of life, functional status, and overall mortality.

Results: One hundred and forty seven consecutive patients (78 females, 69 males), with solid tumour, mean age of 78 +-1.0 years, were enrolled from May 2015 in an Italian hospital. Respectively, 24% of patients by ECOG PS, and 61% of patients by CGA were frail. Interestingly, by IF, 58 pts were frail (39%), 77 pre-frail (52%) and 11 were fit. Our study originally showed a

significant positive correlation between Rockwood FI and the gold standard (CGA) (n= 147; R=+0.74, p<0.0001).

CGA unmasked several clinical problems in 108 out of 147 examined oncogeriatric patients, such as nutritional deficit (39%) and mood disorders(46%), followed by a significant percentage of post surgical delirium (8%). To date, the overall mortality was of11% (17/147 patients). The 30-day mortality after surgery was of 4% (2/50 pts).

Conclusion: The study results indicate a significant correlation between CGA and Rockwood IF and address a different predictive accuracy of IF in stratifying the pre frail patients' category. The larger enrolment and follow up of the study will allow to identifying the best predicting tool in oncogeriatrics, improving as well the clinical assessment and management of the pre frail oncogeriatric patients.

Disclosure of interest: None declared

Keywords: Accurate tool, clinical outcomes, frailty, geriatric assessment, rockwood frailty index

P088

THE ONCOLOGICAL MULTIDIMENSIONAL PROGNOSTIC INDEX (ONCO-MPI) HELPS PREDICTING BENEFITS OF TREATMENT FOR PATIENTS WITH ADVANCED COLORECTAL CANCER: A PROSPECTIVE SINGLE CENTER STUDY

A. Brunello[1,*], S. Lonardi[1], F. Bergamo[1], R. Intini[1], L. V. Rumanò[1], S. Ahcene-Djaballah[1], P. Fiduccia [2], A. Lettiero[1], G. Tierno[1], A. Pilotto [3], V. Zagonel[1]

[1]*Medical Oncology 1 Unit,* [2]*Clinical Trials and Biostatistics Unit, Istituto Oncologico Veneto, Padova,* [3]*Geriatric Care, Orthogeriatrics and Rehabilitation, Frailty Area, Galliera Hospital, Genova, Italy*

Introduction: Comprehensive geriatric assessment (CGA) helps identifying pts who could benefit more from oncological treatment. Items of domains explored in the CGA are heterogeneous, depending on type of assessment, which make it difficult to integrate results in the decision-making process. Our group recently developed a CGA-based Onco-MPI, a numeric score which predicts accurately the probability of 1 year mortality in older cancer pts [1].

Objectives: The aim of this study is to describe the role of Onco-MPI in pts selection for oncological treatment.

Methods: Pts aged 70 years or older with a diagnosis of colorectal cancer (CRC) were assessed with a full CGA. Data of the single CGA items were used to calculate Onco-MPI scores, which were registered but not made available to treating oncologists. Vital status was recorded as of December 31st 2015. Overall survival was estimated with Kaplan-Meier method.

Results: Five hundred and nine pts aged ≥70 were evaluated, median age 77 years (range 70 - 93), 304 (59.7%) male, 202 (39.7%) with advanced stage disease. Globally, 120 pts (25.3%) were low-risk, 179 pts (37.7%) intermediate-risk and 176 (37%) high-risk, according to Onco-MPI. Survival analysis was conducted for 475 pts (34 excluded because of missing data). Pts' characteristics are described in Table 1. Onco-MPI confirmed to be a highly accurate predictive tool for one-year mortality in older CRC pts (log-rank p<0,001). For pts with stage IV CRC (N=202, 39.7%), there was a significant impact of treatment in pts with intermediate risk onco-MPI (N=56 pts, p 0,01), with pts undergoing oncological treatment showing better survival. In pts with high-risk Onco-MPI (N=137) no significant impact of oncological treatment on survival was seen.

Table 1 (abstract P088) – Characteristics of patients

No. of patients (n (%))	509 (100)
BMI (median (range))	24 (14 - 54)
ADL (mean ± SD)	5,65 ± 0,84
IADL (mean ± SD)	6,78 ± 1,67
PS (mean ± SD)	0,6 ± 0,73
No. of comorbidities (mean ± SD)	1,49 ± 1,43
MMSE (≥=24)	394 (77,4)
No. of drugs (mean ± SD)	3,52 ± 2,58
Caregiver (Yes)	495 (97,2)

Conclusion: Older pts with advanced CRC and intermediate-risk Onco-MPI may benefit from oncological treatment, whereas pts with high risk Onco-MPI did not show a benefit from chemotherapy. Onco-MPI may serve as a useful tool to integrate decision-making for older pts with advanced colorectal cancer.

Reference:

[1] Brunello A, Fontana A, Zafferri V, et al. Development of an oncological-multidimensional prognostic index (Onco-MPI) for mortality prediction in older cancer patients. J Cancer Res Clin Oncol. 2016 May;142(5):1069-77.

Disclosure of interest: None declared

Keywords: Chemotherapy, colorectal cancer, geriatric assessment, onco-MPI, treatment

P091

FUNCTIONAL DECLINE IN OLDER PATIENTS WITH CANCER RECEIVING CHEMOTHERAPY: A MULTICENTER PROSPECTIVE STUDY

C. Kenis[1,*], L. Decoster[2], J. Bastin[3], H. Bode[3], K. Van Puyvelde[4], J. De Grève[2], G. Conings[2], K. Fagard[5], J. Flamaing[6], K. Milisen[7], J.-P. Lobelle[8], H. Wildiers[9]

[1]*General Medical Oncology and Geriatric Medicine, University Hospitals Leuven, Leuven,* [2]*Medical Oncology, Oncologisch centrum, Universitair Ziekenhuis Brussel, Vrije Universiteit Brussel, Brussels,* [3]*General Medical Oncology, University Hospitals Leuven, Leuven,* [4]*Frailty in Aging (FRIA) Research Group & Gerontology Department, Vrije Universiteit Brussel, Brussels,* [5]*Geriatric Medicine, University Hospitals Leuven,* [6]*Geriatric Medicine & Clinical an Experimental Medicine,* [7]*Geriatric Medicine & Public Health and Primary Care, Academic Centre for Nursing and Midwifery, University Hospitals Leuven & KU Leuven, Leuven,* [8]*Consultant in Statistics, Beernem,* [9]*General Medical Oncology & Oncology, University Hospitals Leuven & KU Leuven, Leuven, Belgium*

Introduction: Maintenance of functional status (FS) is a key issue for older persons, certainly for those diagnosed with cancer. Repeated assessment of FS over time gives treating physicians the opportunity to identify functional

decline, which is a major threat for older persons in general with increased risk for hospital and nursing home admission and mortality. Functional decline is becoming an important health care focus for older patients in general during cancer treatment and more specific for older patients receiving chemotherapy.

Objectives: This study aims to evaluate the evolution of functional status (FS) 2 to 3 months after initiation of chemotherapy, to identify predictors associated with functional decline during chemotherapy treatment and to investigate the prognostic value of decline for overall survival (OS).

Methods: Patients ≥70years with a malignant tumor were included when chemotherapy was initiated. All patients underwent a geriatric assessment (GA) including FS measured by Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). FS of patients was followed by repeating ADL and IADL to define functional decline.

Results: From 10/2009 till 07/2011, 439 patients were included. At follow-up, ADL and IADL data were available for 387 patients. Functional decline for ADL and IADL was observed in 19.9% and 41.3% of the patients respectively. In multivariable logistic regression analysis, baseline predictors for ADL decline are abnormal nutritional status (OR: 2.02) and IADL dependency (OR: 1.76). Time-point of assessment (disease progression/relapse vs new diagnosis) (OR: 0.59) is the only determinant of decline in IADL. Functional decline in ADL is strongly prognostic for OS (logrank p-value <0.0001; Wilcoxon p-value <0.0001) with HR 2.34 and functional decline in IADL is also prognostic for OS but less prominent with HR 1.25.

Conclusion: Functional decline occurs in about a third of older patients with cancer receiving chemotherapy and can be predicted by GA components. It strongly predicts survival, the most prominent for ADL. These predictors can be used to identify older persons with cancer receiving chemotherapy eligible for interventions to prevent functional decline.

Disclosure of interest: None declared

Keywords: Cancer, functional decline, geriatric assessment, older person, overall survival

---

P092

SCREENING FOR MULTIDIMENSIONAL HEALTH PROBLEMS IN OLDER PATIENTS WITH CANCER: EFFECT OF VARYING GOLD STANDARD DEFINITIONS ON THE DIAGNOSTIC PERFORMANCE OF THE G8 AND MODIFIED G8 SCREENING TOOLS

C. M. Martinez-Tapia[1,*], M. Laurent[1,2], E. Paillaud[1,2], J.-L. Lagrange[3], M. Allain[4], A. Chahwakilian[5], P. Boudou-Rouquette[6], S. Bastuji-Garin[1,4,7], E. Audureau[1,7] and the ELCAPA Study Group

[1]EA 7376 CEpiA (Clinical Epidemiology and Ageing Unit), Université Paris Est, [2]Internal Medicine and Geriatric Department, [3]Department of Medical Oncology, [4]Clinical Research Unit, Henri-Mondor Hospital, Assistance Publique-Hôpitaux de Paris, Créteil, [5]Oncogeriatrics, Geriatric Department, Broca Hospital, Hôpitaux Universitaires Paris Centre, Assistance Publique-Hôpitaux de Paris, [6]Department of Medical Oncology, Cochin hospital, Hôpitaux Universitaires Paris Centre, Assistance Publique-Hôpitaux de Paris, Paris, [7]Public Health Department, Henri-Mondor Hospital, Assistance Publique-Hôpitaux de Paris, Créteil, France

Introduction: Multidimensional geriatric assessment (GA) is recommended by the SIOG for detecting health problems in older patients with cancer and tailoring treatment decisions accordingly, but is time- and resource-consuming. Screening tools have been developed to help identifying patients warranting a complete GA, but there is no unequivocal definition of what constitutes this population and what the reference gold standard should be. A pragmatic definition based on ≥1 abnormal test at the GA has been widely used, but this approach is hampered by a lack of standardization in GA components across studies. This definition also does not capture important aspects of the reality of clinical practice in geriatric oncology, such as actual treatment decisions based on GA findings, expert-based clinical classifications and/or broader approaches to frailty. No previous study has examined the variability of diagnostic performance of screening tools under multiple clinically relevant reference definitions.

Objectives: To measure and compare the effect of using varying gold standard definitions on the diagnostic performance of two screening tools specifically developed for older patients with cancer, the G8 and modified G8[1].

Methods: We used a prospective cohort of ≥70 year-old patients with cancer referred to geriatricians for GA (ELCAPA cohort). Areas under the Receiver Operating Characteristic (AUROC) curves were calculated to compare the diagnostic performance of both tools against the following reference standards: a) detection of ≥1 or b) 2 impaired components of the GA; c) prescription of ≥1 clinically significant intervention by the geriatrician; d) identification of a vulnerable profile as defined by a latent class approach or e) by expert-based classifications from Balducci and f) Droz.

Results: 1136 patients were included for the present analysis (median age, 80 years; 52% men; 44% metastatic cancer; 48% ECOG-PS 0-1). AUROC were equal or higher than 0.80 for both tools and all definitions tested. Comparing the two instruments, AUROC were significantly higher in favor of the modified G8 to predict 4 out of the 6 definitions tested: GA≥1 impairment (modified G8: 0.93 [95% CI 0.91–0.95] vs. original G8: 0.90 [0.87–0.92]; p=0.0029), GA≥2 impairments (0.90 [0.88–0.92] vs. 0.87 [0.88–0.92]; p=0.0006), ≥1 significant intervention prescribed (0.85 [0.81–0.89] vs. 0.81 [0.77–0.86]; p=0.0056) and unfit patient according to Droz's classification (0.88 [0.86–0.91] vs. 0.83 [0.81–0.86]; p<0.0001). No significant difference was found for latent class typology and Balducci's classification. Sensitivities based on optimal cutoffs were of similar magnitude for both tools, whereas most specificities were higher for the modified G8.

Conclusion: Our findings demonstrate the robustness of the original and modified G8 to modifications of the reference gold standard, with evidence of a better diagnostic performance of the modified G8 for detecting a variety of health profiles evocative of vulnerability. These results further support the clinical value of these instruments for detecting

older patients with cancer warranting a complete geriatric assessment.

Reference:

[1] Martinez-Tapia C, Canoui-Poitrine F, Bastuji-Garin S, et al. Optimizing the G8 Screening Tool for Older Patients With Cancer: Diagnostic Performance and Validation of a Six-Item Version. Oncologist 2016; 21(2): 188-95.

Disclosure of interest: None declared

Keywords: Geriatric assessment, gold standard, screening tools, vulnerability

P093

A RANDOMIZED CONTROLLED TRIAL OF GERIATRIC ASSESSMENT GUIDED MULTIDISCIPLINARY INTERVENTIONS: THE FIRST YEAR EXPERIENCE

D. Li[1,*], C. Kelly[1], M. Trent[1], M. Fakih[1], M. Koczywas[1], M. Cristea[1], S. Pal[1], V. Chung[1], J. Mortimer[1], Y. Yuan[1], P. Burhenn[1], V. Katheria[1], D. Rivera[1], G. Varatkar[1], K. Yu[1], S. Hite[1], D. Mitani[1], B. Ferrell[1], A. Hurria[1]

[1]*City of Hope, Duarte, USA*

Introduction: Geriatric assessment (GA) can predict chemotherapy toxicity and identify potential interventions in older adults with cancer. The National Comprehensive Cancer Network and the International Society for Geriatric Oncology currently recommends incorporating the use of GA and GA-guided interventions in the care of older cancer patients.

Objectives: The overall goal of this study is to determine the effect of GA-guided multidisciplinary interventions in the care of older adults with cancer beginning a new chemotherapy regimen. In this abstract we describe the first year experience of this randomized controlled trial.

Methods: In this randomized controlled trial, 600 patients age ≥65 with a diagnosis of solid tumor malignancy will be randomized to GA intervention or standard of care in a 2:1 randomization. All patients complete a GA (Hurria et al. Journal of Clinical Oncology 2016) prior to initiation of a new chemotherapy regimen and a Cancer and Aging Research Group (CARG) chemotherapy toxicity score is generated. Patients randomized to the GA intervention arm have their assessment results reviewed and summarized to form an intervention plan. The results of the GA and intervention recommendations are reviewed by a multidisciplinary team. These recommendations are provided to the oncologist and patient and then implemented by the study nurse. Patients with a chemotherapy toxicity risk score ≥50% are co-managed with the study nurse who has geriatric oncology expertise. Patients randomized to the standard of care arm also complete a GA, which is provided to their treating oncologist and nurse for review. Grade 3-5 treatment-related toxicity (NCI CTCAE v4.0), dose reductions or delays, emergency room visits and unplanned hospitalizations are captured during treatment.

Results: The study began in August 2015 and 21 physicians throughout the Department of Medical Oncology enrolled patients to the study. Out of 173 potentially eligible patients, 136 (79%) have enrolled. Participants had a median age of 72 (range 65-92) with gastrointestinal (28%), breast (22%), lung (21%), genitourinary (17%), gynecological (7%), and other types (5%) of malignancies. A majority of patients had stage IV disease (84%). A CARG chemotherapy toxicity score was generated for all patients: 30% low risk (N=40), 43% medium risk (N=59), and 27% high risk (N=37). Based on GA results, referrals to members of a multidisciplinary team were recommended to 122/136 (90%) patients. A total of 395 referrals to the following members of the multidisciplinary team were made: 20% nutrition (N=78), 17% occupational therapy (N=67), 17% physical therapy (N=67), 16% social work (N=63), 15% pharmacy (N=60), 5% chaplain (N=19), 1% neurology (N=6), and 9% other (N=35).

Conclusion: A high proportion of eligible patients enrolled onto this prospective randomized controlled trial. Based on GA results, referrals to members of the multidisciplinary team were common. The large number of referrals indicates the high level of medical burden among older adults with cancer. The utility of a GA-guided multidisciplinary intervention to decrease hospitalizations and toxicity will be determined upon completion of this randomized controlled trial.

Disclosure of interest: D. Li: None declared, C. Kelly: None declared, M. Trent: None declared, M. Fakih: None declared, M. Koczywas: None declared, M. Cristea: None declared, S. Pal: None declared, V. Chung Speakers bureau: Celgene, J. Mortimer: None declared, Y. Yuan: None declared, P. Burhenn: None declared, V. Katheria: None declared, D. Rivera: None declared, G. Varatkar: None declared, K. Yu: None declared, S. Hite: None declared, D. Mitani: None declared, B. Ferrell: None declared, A. Hurria Grant/Research Support from: Celgene, Novartis, GSK, Consultant for: Boehringer Ingelheim Pharmaceuticals, Carevive, Sanofi, GTx Inc.

Keywords: Chemotherapy, geriatric assessment, multidisciplinary interventions

P095

EVALUATION OF THE G8, VES-13 AND FRIED FRAILTY CRITERIA AS SCREENING TOOLS FOR MULTIDIMENSIONAL HEALTH PROBLEMS IN PATIENTS ENROLLED IN A PHASE II TRIAL OF GERIATRIC ASSESSMENT AND MANAGEMENT FOR OLDER ADULTS WITH CANCER

D. W. Yokom[1,*], S. Alibhai[2,3], M. Puts[4]

[1]*Division of Medical Oncology,* [2]*Department of Medicine, University of Toronto,* [3]*Department of Medicine, University Health Network,* [4]*Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Canada*

Introduction: Screening tools are important aides for oncologists to quickly identify older adults with cancer who are at increased risk of toxicity, functional decline and death and who could benefit from a comprehensive geriatric assessment (CGA). These screening tools have not previously been described for prediction of CGA-based interventions.

Objectives: To assess the performance of the G8, VES-13, and modified Fried Frailty Criteria (FFC) as screening tools for an abnormal CGA or CGA-based medical interventions.

Methods: Patients were randomized to either usual care or geriatric intervention. Patients randomized to the geriatric intervention received a multidisciplinary assessment which included the G8 and VES-13 screening tools. Modified FFC were calculated based on self-reported low physical activity, self-reported exhaustion, unintentional weight loss ≥4.5kg in the last 6 months, low grip strength (≤16kg for females and ≤26kg for males) and gait speed ≤1m/s on a 4m walk test. G8, VES-13 and modified FFC were considered abnormal for a score ≤14, ≥3 and ≥3, respectively.

Patients received a CGA which evaluated 8 domains: comorbidities, polypharmacy, IADLs, mobility and falls, nutrition, cognition, mood and social isolation. CGA-based geriatric interventions were defined as modifications to oncologic treatments, management of comorbidities or referral to an allied health specialist (e.g. physiotherapy, social work, dietician, etc).

SPSS v23 was used to calculate sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) and 95% confidence intervals (CI) for both an abnormal CGA and a CGA-based medical intervention.

Results: Thirty patients were randomized to the geriatric intervention arm. Two patients were not able to complete a CGA. For the 28 patients analyzed, 22 (79%) had at least 2 abnormal domains on the CGA. CGA-based interventions occurred in 23 (82%) patients: 18 had modification to management of comorbidities and 15 were referred to an allied health specialist. It was not feasible to modify oncologic management during this trial based on the CGA as all patients were accrued after starting treatment. The sensitivity, specificity, PPV and NPV for each screening tool is shown in Table 1.

Table 1 (abstract P095)

	≥2 abnormal CGA domains			≥1 CGA-based intervention		
	G8	VES-13	FFC	G8	VES-13	FFC
Sensitivity	0.727	0.455	0.409	0.609	0.304	0.348
Specificity	0.833	1.00	1.00	0.400	0.400	0.800
PPV	0.941	1.00	1.00	0.824	0.700	0.889
NPV	0.454	0.333	0.316	0.189	0.111	0.211

Conclusion: As previously described, the G8 is more sensitive than the VES-13 or FFC while VES-13 and FFC are more specific for detection of patients who may have an abnormal CGA. If instead of considering these tools as predicting an abnormal CGA but rather for predicting whether an intervention will occur based on the CGA, the G8 continues to be the most sensitive tool although the sensitivity declines substantially for each. The FFC has the highest specificity and PPV for predicting a CGA-based intervention. The NPV remains poor for all 3 measures.

Disclosure of interest: None declared

Keywords: Fried frailty criteria, G8, geriatric assessment, screening tools, VES-13

P096
EFFECTIVENESS OF THE FLEMISH VERSION OF TRIAGE RISK SCREENING TOOL IN DETECTING FRAILTY IN ELDERLY PATIENTS UNDERGOING EMERGENCY SURGERY: A PILOT STUDY

D. Zattoni[1,*], M. Cervellera[1], P. Calogero[2], C. Galetti[2], A. Garutti[2], M. L. Bacchi Reggiani[3], V. Tonini[1]

[1]*Emergency Surgery,* [2]*Geriatrics,* [3]*Cardiology, Policlinico S. Orsola-Malpighi, Bologna, Italy*

Introduction: Individual frailty is the most important risk factor for postoperative complications. So far, no frailty-screening tool has been made available in the emergency surgical setting where a rapid assessment is highly needed.

Objectives: The aim of this study is to verify if the Flemish version of the Triage Risk Screening Tool (fTRST) is adequate to predict postoperative outcomes in a group of elderly patients undergoing emergency abdominal surgery.

Methods: Consecutive patients, 70-year and older, requiring emergency abdominal surgery were prospectively enrolled from December 2015 to March 2016. The fTRST was performed on admission. Demographic, surgical and perioperative data were collected in a dedicated database. Thirty-day postoperative mortality, complications and functional outcomes were recorded.

Results: 79 patients (41 female) were enrolled. The majority of the population was 80 years and older (54.4%). 'Major' abdominal surgery was performed in 42 cases (53%), while 26 (33%) and 12 (14%) patients underwent 'intermediate' or 'minor' procedures.

The postoperative 30-day mortality was 20.2% (16/79) but the majority of them (56%) occurred during the first postoperative week. 14 were recorded after major surgery (87.5%). Logistic regression analysis showed a significant correlation between 30-day mortality and fTRST≥2, ASA≥4, Charlson Age adjusted Comorbidity Index (CACI) ≥7 and 'major' surgery. Patients' age was not statistically relevant. (Table 1)

Postoperative morbidity rate was 59.5%. Non-fatal major complications (Clavien-Dindo 3-4) occurred in 5% of cases, while 68% patients in this group experienced two or more complications. No significant relationship was shown between morbidity rate and fTRST or any other risk factor.

Of the 63 patients who survived surgery, 17% (11/63) developed severe functional loss (loss of walking capacity/

Table 1 (abstract P096) – Logistic regression of 30 days mortality

	Sensibility (95% CI)	Specificity (95% CI)	PPV (95% CI)	NPV (95% CI)	OR (95% CI)	AUC	*R2*	*p*
fTRST≥2	93.7% (70%≥100%)	41.3% (29%≥54%)	28.85% (17%≥43%)	96.3% (81%≥100%)	10.5 (1.31-84.8)	0.675	0.11	0.027*
ASA≥4	69% (41%≥89%)	83% (71%≥91%)	50% (28%≥72%)	91% (81%≥97%)	10.4 (3.01-35.98)	0.756	0.1913	<0.001*
CACI≥7	75% (48%≥93%)	71% (59%≥82%)	40% (23%≥59%)	92% (80%≥98%)	7.5 (2.13-26.35)	0.81	0.1448	0.002*
Major surgery	88% (62%≥98%)	88% (62%≥98%)	33% (20%≥50%)	95% (82%≥99%)	8.75 (1.83- 41.75)	0.715	0.1330	0.007*

ADL≤2). Scoring 2 or 3 at fTRST was highly related (7/11 patients) to functional decay. The regression model showed a significant relationship between severe functional decline and ≥7 day-length of stay (OR 10.07), institutionalization (OR 55) and age ≥ 85 year (OR 5.97). During interview, 48% of patients described a subjective functional loss mostly attributed to fatigue, causing lack of mobility, and anorexia.

Flemish-TRST≥2 significantly predicted the need for postoperative ICU admission (p=0.009), prolonged length of stay (p=0.022) and need for long-term institutionalization (p=0.063).

Conclusion: Assessing frailty is mandatory in order to identify the most appropriate treatment and to optimize the postoperative management. Using the fTRST routinely is feasible, also in this setting. Our pilot study, despite size limitation, showed that fTRST score ≥2 is effectively predicting higher risk of 30-day mortality. A significant relationship with postoperative complications and functional loss was not proven, but this is probably related to the small sample analyzed.

Disclosure of interest: None declared

Keywords: Emergency surgery, frailty screening tool, geriatric assessment

---

P097

DESCRIPTIVE ANALYSIS OF THE ONCOGERIATRIC COHORT OF PICARDY (COPAGE): CORRELATION BETWEEN G8 AND THE BALDUCCI SCORE

E. Carola[1,*], R. Fournier[2], G. Bonnet[2], A. Chebah[3], D. Assouan[4], S. Hannat[5], F. Woerth[6], B. Chauffert[4] and UCOG de Picardie
[1]*Medical Oncology, GHPSO, Senlis,* [2]*CHU, Amiens,* [3]*oncologie médicale, GHPSO, Senlis,* [4]*oncologie médicale,* [5]*gériatrie, CHU, Amiens,* [6]*Gériatrie, GHPSO, Senlis, France*

Introduction: In Picardy, oncologists and geriatricians work in strong partnership with the help of the coordination oncogeriatric Unit (UCOG). Since 2008, 2650 old patients with cancer have been assessed and followed up at the oncogeriatric consultation constituting the basis of the oncogeriatric Picardy cohort COPAGE. The currently use of multi thematic software for health geriatric networks (LOGIRESO) allows us to record in real time during the consultation, all the items of the standardized multidimensional comprehensive geriatric assessment (CGA). This application leads to the Balducci Score. Moreover G8, the screening tool usually used in France, has been also collected in this application.

Objectives: To analyze a cohort of elderly patients with cancer and to check the correlation between G8 and the Balducci score.

Methods: This is a multicentric cohort study. A descriptive analysis of the population was conducted at the baseline, and the correlation between G8 and the score of Balducci has been analysed with the test of person.

Results: This study focuses on 490 of 2650 patients for whom data are available on LOGIRESO. This cohort is formed of 47.7% men and 53.3% women, with a mean age of 81.9±5.6 years. 63.2% of patients live alone and 58.8% have a caregiver. 46.5% of patients present dependence for activities of daily living, 61% for the instrumental activities of daily living. The Body mass index averages 26.14±4.96 kg/m2. 92% of patients have a get up and go test ≥4. Half of patients have a test of the 5 words of Dubois ≥10, whereas the test of the clock is rated ≤6 in 65%. 45,5% of patients have a mini mental status under 24. The mini geriatric depression scale was ≥1 in 23%. The most frequent cancers are colorectal 20.28%, breast 16%, followed by gastro-intestinal (non colorectal) cancer 10% and prostate cancer 8.3%. The most of the patients (90%) have G8 ≤14. In Balducci score, patients are in proportion of 17% with a harmonious aging (fit), vulnerable 31.6%, frail 41.3% and 10% taking on palliative care. As expected, a significant correlation was found between the score of Balducci and the G8 (p<0.0001).

Conclusion: The use of standardized tools in specific medical software allowed improving the centralization of data and a better knowledge of elderly patients with cancer in our area. This study tends to confirm G8 is a good test to screen frailty.

References:

[1] Balducci L, Extermann M. Management of cancer in the older person: a practical approach. The Oncologist 2000;5:224-237.
[2] Soubeyran P, Bellera C. Screening for vulnerability in older cancer patients: the ONCODAGE Prospective Multicenter Cohort Study 11 déc. 2014. PLoS ONE 2014;9(12):e115060.

Disclosure of interest: None declared

Keywords: Elderly cancer patients cohort, geriatric assessment, multithematic software, G8, Balducci Score

---

P098

STUDY PROTOCOL: GERIATRIC SCREENING TOOLS AND THE OUTCOME OF TREATMENT IN ONCOGERIATRIC PATIENTS

E. H. Van Den Hout[1,*], F. J. van Deudekom[2], G. J. de Klerk[3], K. J. Kalisvaart[4]
[1]*Intern Medicine, Spaarne Gasthuis, Haarlem,* [2]*Geriatric Medicine, Medisch Centrum Slotervaart, Amsterdam,* [3]*Intern Medicine, Oncology,* [4]*Geriatric Medicine, Spaarne Gasthuis, Haarlem, Netherlands*

Introduction: Guidelines recommend comprehensive geriatric assessment (CGA) in relationship to the elder patient to improve the detection of frailty and guide the oncologist on treatment decision-making. However, CGA is a time-consuming process. A two-step approach by using a screening tool has been proposed in order to distinguish which patients could benefit from the CGA.

Objectives: Firstly, we set out to determine how to decide which patients will benefit from CGA and should be selected. Secondly, we want to find a relation between the outcome for cancer treatment (e.g.toxicity, mortality) with the outcome of the screening tools and the decision of the oncologist.

Methods: Patients 70 years and older, who are planning to start chemotherapy, as seen by an oncologist, are screened

for frailty by G8, GFI and CGA. Independent from the outcome decision for treatment by the oncologist or the outcome of the frailty screening, all patients undergo CGA by a blinded geriatrician. The outcome of CGA: no risk, intermediate risk or high risk is blind for the oncologist, unless there is acute danger for the patient when treatment should start. Goal is to gain 120 patients in two years. The follow-up of patients is six months to register treatment toxicity (laboratory results), admission to hospital, dosis reduction and treatment discontinuation. The outcomes of the screening assessment tools will be validated against CGA and the decision for treatment based on the oncologist experience. Outcome of treatment will be weighted against the outcome of the screening tools and CGA.

Results: Since we are still including patients, no results can be shown yet. However it is possible to point out some difficulties in the progression of the study. First, the inclusion by the oncologist group. In general the oncologist are participating in a lot of (treatment) trials and they need to be reminded to include our specific group of patients. Especially the part of the patients who decided not to start chemotherapy, the reason not to participate can be twofold. First, these patients may not see the need for yet more diagnostics and spending more time in hospital and second, they might be more frail, and may be biased for other reasons (such as family experience, general practioner attitude). In this part our oncology nurses are playing an important role, they are alert and have time to inform patients about the screening. Besides, the geriatricians need to be flexible to do all the screenings on the day of the oncologist's visit and to do the screening in the same way to prevent missing values. Another major factor during this study period was a huge merger between our and another hospital resulting in the move of our oncology department to the other hospital location, resulting in more logistic problems.

Conclusion: When starting research, it is very important to realize what extra burden it will bring on all the participants: patients and docters. There is always the realization that the motivation of all the participants takes a lot of time and effort and that both parties need to be prepared for unexpected events to occur, while simultaneously be ready to react to these. Furthermore, there is a real need to have all the logistics close together, to emphasize for patients that screening and CGA is part of the diagnostic process and for oncologists that geriatric screening is not something to be overlooked.

Disclosure of interest: None declared

Keywords: CGA, chemotherapy, frailty, geriatric assessment

P099

PERFORMANCE OF FOUR FRAILTY CLASSIFICATIONS IN OLDER PATIENTS WITH CANCER: PROSPECTIVE ELCAPA COHORT STUDY

E. Ferrat[1,*], E. Paillaud[1], P. Caillet[1], M. laurent[1], C. Tournigand[2], J.-L. Langrange[3], J. P. Droz[4], L. Balducci[5], E. Audureau[1], F. Canoui-Poitrine[1], S. Bastuji-Garin[1] on behalf of the ELCAPA Study Group

[1]*CEPIA EA7376,* [2]*Département oncologie médicale, APHP Henri-Mondor,* [3]*Département de radiothérapie, APHP Henri-Mondor, Créteil,* [4]*Claude-Bernard-Lyon-1 University and Department of Medical Oncology, Centre Léon-Bérard, Lyon, France,* [5]*H Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA*

Introduction: Frailty classifications of older patients with cancer have been developed to assist physicians in selecting cancer treatments and geriatric interventions. They have not been compared, and neither has their performance in predicting outcomes been assessed.

Objectives: Our objectives were to assess agreement among four classifications and to compare their predictive performance in a large cohort of in- and outpatients with various cancers.

Methods: We prospectively included 1021 patients aged ≥70 years who had solid or hematologic malignancies and underwent a geriatric assessment in one of two French teaching hospitals between 2007 and 2012. Among them, 763 were assessed using four classifications, namely, Balducci, SIOG 1, SIOG 2, and a latent class typology (LCT). Agreement was assessed using the kappa (k) statistic. Outcomes were 1-year mortality and 6-month unscheduled admissions.

Results: For classification into three categories (fit, vulnerable, and frail) or two categories (fit vs. vulnerable/frail or fit/vulnerable vs. frail), agreement among the four classifications ranged from very poor (k≤0.20) to good (k≤0.60). Agreement was best between SIOG 1 and LCT and between SIOG 1 and Balducci. All four classifications had good discrimination for 1-year mortality (C-index ≥0.70); discrimination was best with SIOG 1. For 6-month unscheduled admissions, discrimination was good with all four classifications (C-index ≥0.70).

Conclusion: These four frailty classifications have good prognostic performance among elderly in- and outpatients with various cancers. They may be used by physicians to guide decisions about cancer treatments and geriatric interventions and/or to stratify older patients with cancer in clinical trials.

Disclosure of interest: None declared

Keywords: Cancer, elderly, Geriatric assessment, nursing/allied health & socio-economic issues, mortality

P100

A PILOT STUDY OF AN ACCELERATOR EQUIPPED SMARTPHONE TO MONITOR OLDER ADULTS WITH CANCER RECEIVING CHEMOTHERAPY IN MEXICO

E. Soto-Perez-De-Celis[1,*], M. P. Rojo-Castillo[1], Y. Chavarri-Guerra[2], A. P. Navarrete-Reyes[1], J. R. Waisman[3], J. A. Avila-Funes[1], Á. Aguayo[2], A. Hurria[4]

[1]*Department of Geriatrics,* [2]*Department of Hemato-Oncology, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico,* [3]*Department of Medical Oncology & Therapeutics Research,* [4]*Cancer and Aging Research Program, City of Hope, Duarte, USA*

Introduction: Older adults with cancer in developing countries face challenges accessing healthcare due to a lack of personnel and infrastructure. There are no standard triage mechanisms to report toxicities, and adverse events can go unnoticed for considerable amounts of time. We hypothesize that functional decline (defined as a decrease in the number of daily steps) may be a novel method for the timely detection of toxicity in older adults receiving chemotherapy in a resource-constrained country.

Objectives: 1) To determine if it is feasible and acceptable to monitor the number of daily steps of older adults with cancer receiving chemotherapy using a smartphone; 2) To explore if a decline in the number of daily steps is associated with toxicity.

Methods: Patients aged ≥65 starting a first line chemotherapy regimen for any solid tumor underwent a geriatric assessment and were given an accelerometer-equipped smartphone with a cloud-based pedometer application (Google Fit). Baseline daily steps were recorded pre-chemotherapy and then monitored daily for the first cycle. If a ≥15% decline from baseline was identified, the patient was called by a physician and the presence of toxicity was assessed. Interventions, such as prescribing over-the-counter medications or advice to get medical attention were instituted accordingly. With a sample size of 40 patients, the intervention would be considered feasible if ≥75% of subjects recorded steps for at least 75% of planned days, and acceptable if ≥70% of subjects considered the device easy to use utilizing a Visual Analog Scale. The study received research ethics approval.

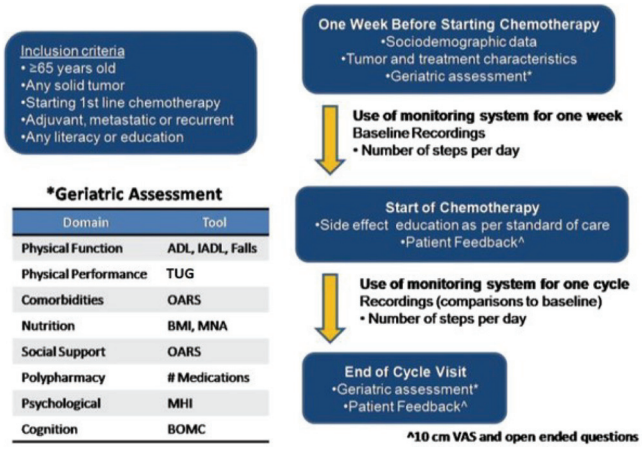


Fig. 1 (abstract P100) – Study design.

Results: Forty patients (median age 73 [range 65-89]; 57% [N=23] female) were accrued between September 2015 and April 2016. Seventy percent (N=28) had stage III or IV disease with 45% (N=18) GI, 23% (N=9) breast, and 32% (N=13) other malignancies. The median distance from the patients' home to our hospital was 23 km (range 1.9-1232); 63% (N=25) lived alone or with another older adult; and 60% (N=24) had less than a high-school education. Fifty-seven percent (N=23) were dependent in one or more IADLs; mean Timed Up and Go was 12 seconds (SD 3); 35% (N=14) reported falls in the previous 6 months; and 37% (N=15) and 32% (N=13) had hearing and visual impairment respectively. Mean pre-treatment daily steps were 3111 (range 208-7720, SD 1731), and median follow-up was 21 days (range 2-28). Although only 23% (N=9) had previously used a smartphone, most (93%) patients used the device appropriately and recorded steps, and 85% found it easy to use. All patients had at least one day with a ≥15% decline in the number of steps (median 10 days; range 1-18). The median number of calls per patient was 11 (range 1-25), which led to the identification of 159 grade ≥2 toxicities in 31 patients (73% [N=116] grade 2 and 27% [N=43] grade 3), most commonly fatigue (26%) and diarrhea (15%). In an exploratory analysis, we found that 46% of toxicities (n=57) led to interventions. Of the 28% (N=11) of patients needing urgent medical attention or hospitalization, most (N=10) were detected by a decrease in the number of steps.

Conclusion: Using smartphones to monitor the number of daily steps of older adults with cancer receiving chemotherapy in a resource-constrained setting is feasible and acceptable. A decrease in the number of daily steps was common and helped to identify chemotherapy toxicity. Further studies assessing this novel monitoring strategy in older adults with cancer are needed.

Disclosure of interest: E. Soto-Perez-De-Celis: None declared, M. P. Rojo-Castillo: None declared, Y. Chavarri-Guerra Grant/Research Support from: Roche, Pfizer, A. P. Navarrete-Reyes: None declared, J. Waisman: None declared, J. A. Avila-Funes: None declared, Á. Aguayo: None declared, A. Hurria Grant/Research Support from: Celgene, Novartis, GSK, Consultant for: Seattle Genetics, OptumHealth Care Solutions, Inc., GTx, Inc., Boehringer Ingelheim Pharmaceuticals, Carevive (formerly On Q Health), Sanofi

Keywords: Developing countries, mobile applications, monitoring, ambulatory, remote sensing technology, toxicity

P101

IMPLEMENTATION OF A GERIATRIC ONCOLOGY UNIT TO HELP OLDER CANCER PATIENTS WITH DECISION-MAKING

E. Bustamante Maldonado[1,*], M. Domènech Santasusana[2], A. Baraldés Farré[1]

[1]*Internal Medicine,* [2]*Oncology, Althaia Manresa-Barcelona, Manresa, Spain*

Introduction: The increase in life expectancy has resulted in an increase of certain diseases, and improvements in treatments have also led to the prevalence of some

pathologies. These include neoplasms in patients over 65 that account for 60% of new cancer cases and 70% of related deaths in Western Europe and the United States.

Geriatric Oncology is a discipline that embraces 3 key aspects of our demographic and health needs: the ageing of the population, the rising incidence of cancer in older patients and the complexity of cancer management in the elderly.

Objectives: A retrospective assessment of the results obtained in the first year after the implementation of a Geriatric Oncology Unit (June 2014 to October 2015).

Methods: The model of Geriatric Oncology at Fundació Althaia is one of integration that includes the collaboration of a physician in internal medicine specially trained in geriatrics in the committees for tumours .

Patients over 80 years are assessed in a specific consulting room (within 4 days), where they undergo a comprehensive geriatric assessment (CGA). Depending on the CGA results, patients are assigned to one of the following 4 groups:

Type 1: Competent, "fit" for oncospecific treatment. Candidates for standard treatment.

Type 2: Vulnerable. Candidates for oncospecific treatment with geriatric intervention.

Type 3: Fragile. Candidates for tailor-made treatment.

Type 4: Terminal. Candidate for symptomatic treatment.

Results: Assessment of the results of the oncogeriatric intervention in patients from the committee for urological tumours. Twenty-three patients were assessed, 15 of which presented infiltrating gallbladder tumours (13 stage T2-4N0M0, 2 BCG refractory in situ carcinoma), 4 prostate neoplasms (located tumour-high risk, candidates for radical RT), 4 renal tumours (stage T3 N0-1 M0-1, candidates for radical nephrectomy) . All patients were candidates for radical treatment. Mean age was 79.7 years. The classification after CGA was: 47.8% of patients fit, 17.4% vulnerable, 26.1% fragile and 8.7% terminal illness. Treatment plan was not changed pre- or post- CGA in 43.4% of patients. However, intensity of treatment was adjusted in 56.6%.

Conclusion: The introduction of a geriatric oncology assessment in committees for tumours has lead to an improvement in the selection of patients over the age of 80 candidates for radical surgical treatment.

Disclosure of interest: None declared

Keywords: Geriatric assessment

P102

TRANS SECTORAL CARE OF GERIATRIC CANCER PATIENTS BASED ON COMPREHENSIVE GERIATRIC ASSESSMENT AND PATIENT-REPORTED QUALITY OF LIFE

H. Schmidt[1,*], S. Boese[1], K. Lampe[2], K. Jordan[3], E. Fiedler[4], U. Mueller-Werdan[5], D. Vordermark[2]

[1]Institute of Health and Nursing Sciences, Martin Luther University Halle-Wittenberg, [2]Department of Radiation Oncology, [3]Department of Hematology and Oncology, [4]Department of Dermatology, University Hospital Halle Saale, Halle (Saale), [5]Protestant Geriatric Centre, Charite - Universitätsmedizin Berlin, Berlin, Germany

Introduction: For elderly cancer patients the maintenance of independence, functionality and health related quality of life (HRQOL) is of great importance. Treatment decisions and transsectoral care are often complicated by the number and severity of comorbidities reduced physical and cognitive functioning and the organization of care at home. Therefore, the identification of relevant risk factors by comprehensive geriatric assessment (CGA) is recommended prior to cancer specific therapy.

Objectives: Aiming to maintain HRQOL of geriatric cancer patients we developed an interdisciplinary care program based on comprehensive geriatric assessment (CGA) and patient reported HRQOL comprising tailored supportive measures and telephone based counselling during 6 months aftercare.

Methods: Pilot testing of the intervention took place in three centres at the University Hospital Halle Saale to examine feasibility, acceptance and potential benefit. Oncologic patients ≥70 years with at least one comorbidity and/or one functional impairment, receiving curative or palliative care were eligible. Primary endpoint is HRQOL (EORTC QLQ-C30, ELD14), measured at admission and 6 month-follow-up. Secondary endpoints are symptom burden, unscheduled readmissions and overall survival.

Results: Out of n=226 eligible patients n=100 participated (44%), mean age: 76.3 years (SD 4.8), 47% female. On average participants had 5 comorbidities (SD 2.8, min. 0, max. 15) and took 8 medications (SD 3.6, min. 0, max. 15). Follow-up will be completed by July 2016. Individualized supportive care was triggered by summarized individual results that were presented to the treating physicians (e.g. malnutrition, reduced HRQOL, reduced physical functioning, high symptom-intensity and depression). Preliminary analyses for the primary endpoint global HRQOL (n=46) showed clinical relevant improvement of HRQOL (≥10 pts.) for 35%, no change for 41% and worsening for 24%. Concurrent with worsening of global HRQOL we found a deterioration of physical function, mobility and fatigue (EORTC QLQ C30). Comparisons of professional and patients' self-assessments including HRQOL and subgroup analyses describing correlations of risk profiles with HRQOL and survival will be presented.

Conclusion: First results show feasibility and potential usefulness of the combination of CGA and HRQOL to complement standard assessments and to decide on individualized therapeutic measures. The nurse led telephone based aftercare was well accepted.

Disclosure of interest: H. Schmidt: None declared, S. Boese: None declared, K. Lampe: None declared, K. Jordan Consultant

for: MSO, Merck, TEVA, E. Fiedler: None declared, U. Mueller-Werdan: None declared, D. Vordermark Consultant for: Roche, Boehringer, Sqibb

Keywords: elderly cancer patients, geriatric assessment, HRQOL, transsectoral care

P103

EVALUATION OF TWO ONCO-GERIATRIC SCORE SYSTEMS FOR PREDICTION OF THERAPY-ASSOCIATED TOXICITY IN ELDERLY CANCER PATIENTS

I. Ortland[1,*], M. T. Mendel[1], M. Kowar[2], Y.-D. Ko[3], A. H. Jacobs[2], U. Jaehde[1]

[1]*Institute of Pharmacy, Clinical Pharmacy, University of Bonn,* [2]*Department of Geriatrics and Neurology,* [3]*Department of Oncology and Hematology, Johanniter Hospital Bonn, Bonn, Germany*

Introduction: Decisions on the treatment of elderly cancer patients are particularly challenging due to high inter-individual variability of co-morbidity and frailty, as well as age-associated physiological alterations. Therefore, a tool for supporting and guiding individual onco-geriatric benefit-risk assessments could be valuable in the treatment of these patients. Two promising score systems for predicting chemotherapy-associated toxicity in elderly cancer patients were recently developed. However, they have not been broadly used in clinical routine so far.

Objectives: We aim at profoundly assessing both published onco-geriatric score systems for future clinical use. First, our goal was to assess the feasibility and potential of the two score systems in a pilot study. Our next step will be the comparison of both scores regarding their predictive performance of therapy risks.

Methods: The two possible tools for toxicity prediction in elderly cancer patients are the CARG score (Cancer and Ageing Research Group [1]) and the CRASH score (Chemotherapy Risk Assessment Scale for High-Age Patients [2]). They combine different geriatric and oncological parameters (for instance functional abilities or treatment modalities) and stratify patients into different risk categories regarding chemotherapy-related toxicity. In the pilot study we recruited cancer patients ≥ 70 years and performed the CARG and CRASH score before starting systemic cancer treatment. The feasibility and potential of the two score systems were assessed by comparing the score results with each other as well as the physicians' therapy decisions with the score results. Furthermore, the necessary time for patient interviews was evaluated and patient-reported symptoms were analyzed for toxicity evaluation (PRO-CTCAE [3]).

Results: In the pilot study we recruited 20 elderly cancer patients. The results of both scores differed from the physician's assessment by predicting a higher chemotherapy-associated toxicity (CRASH Combined Score 10% vs CARG 15% vs Physicians 90% of patients in the low toxicity risk prediction category). Moreover, the results revealed a discrepancy in risk predictions between the two score systems. Additionally, the analysis indicated that the interview of the CARG score can be performed much faster than the one of the CRASH score (mean 3.3 min vs 27.1 min). The correlation between patient-reported toxicity and the scores' or physicians' predictions remains to be further analyzed on a larger scale.

Conclusion: The pilot study indicates the feasibility and potential of an onco-geriatric assessment to improve cancer therapy in the elderly. However, the results also clearly demonstrate the importance of further evaluating which one of the score systems predicts chemotherapy-associated toxicity better. In the future, the score with higher predictive performance may be implemented in clinical routine for improving onco-geriatric therapy decisions or may serve as a stratification tool in clinical studies.

References:

[1] Hurria A et al. Predicting chemotherapy toxicity in older adults with cancer: a prospective multicenter study. J Clin Oncol 2011; 29:3457-65.

[2] Extermann M et al. Predicting the risk of chemotherapy toxicity in older patients: the Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) Score. Cancer 2012; 118:3377-86.

[3] Basch E et al. Use of patient-reported outcomes to improve the predictive accuracy of clinician-reported adverse events. J Natl Cancer Inst 2011; 103:1808-1810.

Disclosure of interest: None declared

Keywords: Chemotherapy toxicity, Geriatric assessment

P104

FOUR MODELS OF FRAILTY IN COLORECTAL CANCER PATIENTS QUALIFIED FOR ELECTIVE SURGERY

J. Kenig[1,*], A. Papier[1], P. Walega[1], O. Urszula[1], W. Nowak[1]

[1]*3rd Department of General Surgery, Jagiellonian University Medical College, Krakow, Poland*

Introduction: There are many definitions of frailty in the literature. At present, there are two principal models of it: the phenotype model described by Fried et al. (PF) and the models based on the Geriatric Assessment (GA) such as: the Cumulative Deficit Model (CDM), the Pre-operative Assessment of Cancer in the Elderly (PACE) dedicated to surgical patients and the Balducci-criteria. However, the best assessment model is still debatable.

Objectives: Therefore, the aim of this prospective study was to compare four models of frailty, in the same population of surgical patients with colorectal cancer and to evaluate its accuracy in predicting postoperative 30-day outcome.

Methods: Between January 2013 and December 2015, consecutive patients over 70 years of age with colorectal cancer requiring elective surgery under general anesthesia were enrolled into the study, which was conducted at a tertiary referral hospital. Patients who had peritoneal carcinomatosis and only explorative laparoscopy/laparotomy were excluded from further analysis. Two patients refused to participate in the study. Four patients were excluded due to incomplete data.

The GA included a wide variety of validated tools that evaluate functional, mobility, cognitive, nutritional, co-morbidity, polypharmacy, and psychosocial domains. All patients had also additional questions and physical measurements to be classified according to Fried frailty criteria, PACE and Balducci-criteria.

Results: The study sample comprised 94 elective patients (35 were female and 59 were male) with histologically confirmed colon cancer (43.6%) and rectal cancer (56.4%). The median age was 83 (70-93) years. The clinical cancer stage was localized in 63.8%, locally advanced in 24.5% and with distant metastasis in 11.7% of patients. Three patients were classified as American Society of Anesthesiologists (ASA) 1, 66 patients as ASA 2 and 24 patients as ASA 3.

All patients were discharge home and the median length of postoperative stay was 8 (3-148) days. There were three readmissions, all within 30-day assessment period. The 30-day mortality was 6.4%. The 30-day morbidity was 48% (including 29.8% major morbidities).

The prevalence of frailty as diagnosed by the Fried, CDM, PACE and Balducii-criteria were 34%, 50%, 46.8% and 69.1%, respectively. The results of the univariate and multivariate logistic regression analysis showed that the frailty status diagnosed based on CDM, PACE and Fried frailty criteria turned to be independent risk factors of 30-day mortality (Odds Ratio: 2.84 (1.2-8.3) p=0.04; 1.3 (1.1-2.2) p=0.04; 2.63 (1.1-6.1) p=0.02, respectively) and of overall postoperative complications (Odds Ratio: 3.56 (1.4-11.2) p=0.02; 1.4 (1.1-2.5) p=0.03; 2.3 (1.3-1.7) p=0.01; 1.5 (0.5-4.7) p=0.46) adjusted by age, sex and stage of the cancer. Balducci frailty criteria did not reached statistical significance, predicting 30-day mortality and morbidity (OR 1.1 (0.4-2.6) p=0.87; 1.5 (0.5-4.7) p=0.46, respectively). It was not possible to build a model for the major complications because of an insufficient number of patients in this subgroup (major complications were observed only among frail patients).

Conclusion: Among four studied frailty models, the Cumulative Deficit Model based on Geriatric Assessment has the highest predictive possibility of 30-day postoperative mortality and morbidity in patients with colorectal cancer qualified for an elective surgery under general anaesthesia.

Disclosure of interest: None declared

Keywords: Colorectal cancer, frailty, geriatric assessment, surgery

P105
IMPLEMENTATION OF THE G8 SCREENING TOOLS IN A PUBLIC HOSPITAL IN FRENCH GUIANA

J.-L. Joachim[1], E. Basset[1], S. Briolant[2], B. Cenciu[1], P. Couppié[1], J.-P. Droz[3,4,*]

[1]Medicine, [2]Geriatrics, Cayenne Hospital, [3]Oncoguyane Cancer Network, Cayenne, French Guiana, [4]Environment and Cancer Research Unit, Centre Léon-Bérard, Lyon, France

Introduction: Frailty screening has been implemented by the French Cancer Institute. A question was its application in overseas territories characterized by multiculturality.

Objectives: To evaluate the feasibility of frailty screening by G8 tool in elderly cancer patients and possible limits.

Methods: A prospective 8 months survey of cancer patients aged ≥ 70 years who were scheduled to receive G8 screening. In patients with G8 < 15/17, a simplified geriatric evaluation (SGE) was proposed. The G8 tool was administered by a trained nurse of the outpatient clinic. The SGE was performed by a geriatrician.

Results: From 01/09/2015 to 30/04/2016, 130 patients ≥70 years were followed for cancer in the outpatient clinic, 60 patients (46%) had a G8 screening of which 57 were abnormal. One patient refused to participate. Six patients have died of cancer progression. Eleven patients had SGE, 3 had further follow-up. Patients characteristics: there were 30 men and 30 women; median age was 76 years (extremes: 70–90); cancer types were: lung (10), hemopathies (9), breast (8), colorectal (8), (5), unknown (5), gastric (4), anus (3), uterus (2), prostate (2), and ovary, esophagus, liver, pancreas, one each.

The small number of G8 procedures was due to organizational problems (only one trained nurse). But there were also difficulties to obtain all the G8 items: loss of appetite was biased by the treatment; weight loss during the last 3 months was difficult to measure in these patients who don't follow their weight; number of medications did not take in account traditional medicine intakes; in these patients "feeling of their health status" was biased by cultural perception of health, of disease and of cancer, by belief and by comparison to their previous heath status.

Conclusion: G8 screening requires sufficient trained health professionals and good organization. It is difficult to apply in the setting of little medicalized and few educated populations. it may be impacted by the cultural perception of heath and illness. All these limits are found in tropical areas and in intermediate and low incomes countries.

Disclosure of interest: None declared

Keywords: G8 tool, implementation, tropical area

P106
FUNCTIONAL DEPENDANCY IS PREDICTIVE FOR NUTRITIONAL STATUS IN ELDERY PATIENTS WITH HEMATOLOGIC MALIGNANCIES

J. Hajder[1,*], N. Stanisavljevic[1], D. Marisavljevic[1,2], O. Markovic[1,3], R. Zivkovic[1]

[1]Hematology, KBC Bezanijska kosa, Belgrade, Serbia, [2]Hematology, Medical faculty, [3]Hematology, Medical faculty, Belgrade, Serbia

Introduction: Malnutrition is common in population older than 65. The Mini Nutritional Assessment (MNA) short-form is both a screening and assessment tool which has been validated for determination of nutritional status.To evaluate the prevalence of malnutrition using MNA short-form in elderly patients with newly diagnosed hematologic malignancies and its association to functional activity.

Objectives: To evaluate the prevalence of malnutrition using MNA short-form in elderly patients with newly diag-

nosed hematologic malignancies and its association to functional activity.

Methods: The study included 108 patients aged ≥65 during the period 2013-2015 year with newly diagnosed hematologic malignancies. Patients were classified as without malnutrition, malnourished or at risk for malnutrition according to MNA score (0-7, 8-11, 12-14, respectively). Functional activity was assessed using scores for activities of daily living (ADL), and instrumental activities of daily living (IADL).

Results: There were 50 (46%) patients diagnosed with chronic lymphoproliferative disease, 14 (12%) with chronic myeloproliferative disease, 16 (14.8%) with multiple myeloma, 16 (14.8%) with myelodysplastic syndrome and 8 (7.4%) with acute leucaemia. Normal nutritional status was present in 61 (56.5%), at the risk of malnutrition were 33 (30.6%) patients and malnourished were 14 (13%) patients. MNE correlated to ECOG (ro 4.44, p<0.001), ADL (ro 4.38, p<0,001) and IADL (ro 6.05, p<0.001). IADL shown predictive for malnutrition (p=0.003).

Conclusion: Nutritional status is poorer in patients with worse general condition. Functional dependence estimated with IADL is predictive for nutrition status using short-form MNA in older patients with newly diagnosed hematologic malignancy.

Disclosure of interest: None declared

Keywords: Elderly, hematology malignacies, malnutrition

P107

COMPARING TRADITIONAL PERFORMANCE STATUS ASSESSMENT WITH MOBILE HEALTH ACTIVITY DATA AS A MEASURE OF FUNCTION

J. Shen[1,*], K. Vander Wall[1], A. Petruse[1], J. Trent[1], R. Ramezani[1], M. Sarrafzadeh[1], A. Naeim[1]
[1]*University of California, Los Angeles, Los Angeles, USA*

Introduction: Traditional performance status (PS) assessments such as those delineated by the Eastern Cooperative Oncology Group (ECOG) are commonly used in oncology practices to decide on candidacy for treatment as well as to monitor tolerance to therapy. Previous research has demonstrated that ECOG PS can be augmented by additional assessment of performance in older individuals. Mobile health technology is rapidly evolving and the use of wearable sensors is an innovative approach to assessing functional and physical performance.

Objectives: This initial cohort study aims to compare traditional ECOG PS assessments by oncology physicians to patient activity data collected remotely using a wearable mobile health device.

Methods: Patients seen in our comprehensive oncology center are offered to participate in a one week study to collect remote activity data. Target enrollment is 100 individuals, who are age 60 or older with an oncologic diagnosis. Physician-assessed ECOG PS was extracted from pre-treatment consultation. Patients were asked to wear a mobile health device for a continuous 7-day period. Commercial smartwatches were used with a specially designed application using data analytics modeled specifically for older individuals. The smartwatches monitored cumulative steps taken in addition to positional data. Step count data was used to stratify patient activity into minimally active (less than 10000 steps), very active (greater than 35000 steps), and intermediate groups. Positional data was grouped into sitting/laying or standing/walking as a percentage of time that the individual wore the smartwatch. Patients were also asked to complete a post-watch survey to determine level of adherence, barriers to use, and overall impression of remote health monitoring.

Results: Preliminary interim analysis was performed on 31 patients with an oncologic diagnosis who provided informed consent for this study. Mean age of participants was 71.9 (range 60-91). Mean steps taken by subjects over the 7-day study period was 35804 (range 2401-111040). Total step count was found to be closely representative of physician-assessed ECOG PS by chi-square analysis (p = 0.016). Positional data showed a trend towards significance when correlated to physician-assessed ECOG PS by chi-square analysis (p = 0.068). Post-watch survey responses revealed that most participants felt the smartwatch was easy to use. 83% of respondents indicated they would be willing to wear a mobile health monitoring device again. The most commonly cited barrier to adherence was limitations on device battery life.

Conclusion: Activity data from wearable sensors correlated with ECOG PS, but also showed variance amongst each ECOG PS level. This suggests the potential that remote activity monitoring can be used to better augment and enhance geriatric assessment screening models. The limitation of this approach is the variability between individuals and the extent each individual wears their smartwatch. Patient perspectives reflected the ease of using a smartwatch and overall positive experience. Future studies will aim to further correlate mobile health data with alternate pre-treatment baseline assessments, interactive smartwatch questionnaires, and patient outcomes.

Disclosure of interest: J. Shen: None declared, K. Vander Wall: None declared, A. Petruse: None declared, J. Trent: None declared, R. Ramezani: None declared, M. Sarrafzadeh Shareholder of: WANDA Inc, A. Naeim Shareholder of: INVISTA Health Corp

Keywords: Assessment, geriatric, mobile, oncology, technology

---

P108

QUALITY OF LIFE AND EARLY MORTALITY IN OLDER CANCER PATIENTS

J. T. D. O. L. Sales[1,*], M. J. G. Mello[1], L. C. S. Thuler[1], A. Bergmann[1], M. Rebelllo[1], C. R. Ximenes[1]
[1]*Oncology, IMIP, recife, Brazil*

Introduction: Aging is a major risk factor for cancer. Living longer is a valuable achievement, but the magnitude of this achievement depends largely on how we live this period. Health-related Quality of life is an important aspect to be studied in the elderly population with cancer, not as only the

end-point outcome, but also as a predictive factor of survival and guiding the best care to be offered.

Objectives: assess multidimensional baseline HRQOL and its relationship to early mortality in elderly patients with cancer.

As exposure was considered the quality of life at time of diagnosis through of questionnaire EORTC QLQ C30

Methods: a total 346 elderly incident cancer patient (≥ 60 years) were observed between February and December 2015 in prospective cohort .At the time of enrollment, quality of life was assessed and collected compressive geriatric assessment(CGA),socio-demographic and clinical variables. It was followed for a period of six months. As exposure was considered the quality of life at time of diagnosis through of questionnaire EORTC QLQ C30. It was considered outcome, early death occurred in the first six months after admission to the institution.Descriptive analysis the mean and standard deviation was performed for continuous variables, and absolute and relative frequencies for categorical variables. The Kaplan-Meier method was used to estimate the overall survival time and the respective confidence interval of 95%. Student's t test was use and its statistical significance was obtained by analysis of variance. It was then performs the univariate logistic regression (gross) and multiple (adjusted for clinical staging and age).

Results: 346 elderly cancer patients, who had at the time of assessment of quality of life, mean age of 71.13 years (SD 7.41). The majority were males (50.9%), Prostate cancer were more frequent (29.4%). They were mostly patients with advanced stage (III and IV) at nutritional risk (52.6%).Patients were followed on average for 128 days (SD 54.37). During this period, there were 39 deaths (11.3%), with a mean of 165 days overall survival (95% CI 161.25 to 170.02). The mean of the quality of life domains measured by the EORTC-C30 according to the occurrence of early death, they were a significant diferencebeteween mean (P<0.001) all domains,except the scales of symptoms, diarrhea and financial hardship. After adjusting for stage and age over all quality of life was observed reduction in risk of early death than 3%.

Conclusion: For all function ranges and overall quality of life was observed worse scores of quality of life among those who had aearly deathoutcome. The scales of symptoms, diarrhea and financial hardship were the ones that showed no statistically significant association with death.Inicial QOL can also be a good early predictor of mortality risk in cancer elderly patients.

Disclosure of interest: None declared

Keywords: Aging, mortality, QLQ C30, quality of life

P109

THE USE A COMPREHENSIVE GERIATRIC ASSESSMENT TO SEARCH FOR FACTORS ASSOCIATED WITH HIGHER RISK OF SHORT-TERM OUTCOMES

J. T. D. O. L. Sales[1,*], M. J. G. Mello[1], R. Travassos[1], D. Sales[1], Z. Cavalcanti[1], M. Rebello[1], R. Cavalcanti[1], A. Bergman [2], L. C. S. Thuler[1]

[1]*Oncology, IMIP, Recife,* [2]*Oncology, INCA, Rio de Janeiro, Brazil*

Introduction: In the coming years, by 2030, over 70% of cancer incident cases occur in elderly patients who have others problems: cultural, social, health - such as more comorbidities, high risk of malnutrition and cognitive problems. Recognize predictors for the occurrence of short-term outcomes are essential for decision-making and better planning of comprehensive treatment to be offered.

Objectives: The purpose of our study was to use comprehensive geriatric assessment to search for factors associated with higher risk of short-term outcomes.

Methods: Prospective observational cohort study was performed in consecutive elderly patients (aged 60 years or older) with confirmed diagnosis of malignancy requiring healthcare specialized in oncology centre. It were collected at baseline social – demographics data, quality of life index EORTC QL30 and collected blood tests. It was performed a comprehensive geriatric assessment (CGA) including the Mini-Mental State Exam, Timed Get Up and Go (GUG), International Physical Activity Questionnaire (IPAQ), Activities of Daily Living (ADL), Mini Nutritional Assessment (MNA), Mini Nutritional–Short Form Assessment (MNA-SF), Geriatric Depression Scale (GDS15), Charlson comorbidities index (CCI), Timed Up and go Test (TUG), International Physical Activity Questionnaire (IPAQ) and polypharmacy. Short outcomes studied were first health-care associated infection, hospitalization and death with the first six months of treatment. Univariate and multivariate analyses were performed using Cox proportional hazards methods to identify significant predictor factors to short-term outcomes.

Results: A total of 358 patients were enrolled**,** median age was 71.3 years (range, 60 to 91), 193 (53.9%) were at risk of malnutrition according SF–MNA, 101(28.2%) had one or more comorbidities, 80 (22.3%) used five or more drugs daily. Patients were followed for an average of 128 days (SD±54.37). During this period, 90 (25.1%) patients had a first healthcare-associated infection, 120 (33.5%) were hospitalized and 47 (11.3%) were early deaths. In our model, high malnutrional risk (SF-MNA) was a independent predictor of occurrence to short-term outcomes: first healthcare infection (HR=1.85, 95% CI 1.148-2.974 p<0.001), hospitalization (HR=1.82, 95% CI 1.818-2.795 p< 0.001) and death (HR=3.80, 95% CI 1.63-8.89 p = 0.002)

Conclusion: In older cancer patients a low MNA-SF score in admission predicted short-term outcomes. The MNA-SF is a simple tool, relatively easy for a health professional to administer, and could have a best place in routine for the assessment of elderly cancer patients and can help to see what oncologists do not see.

References:

[1] Siegel RL, Miller KD, Jemal A. Cancer statistics, 2016. CA Cancer J Clin.2016;66:7-30.

[2] Wildiers H, Heeren P, Puts M, Topinkova E, JanssenHeijnen ML, Extermann M, et al. Internacional Society of Geriatric Oncology Consensus on Geriatirc Assessment in Older Patients With Cancer. J Clin Oncol 2014;32(24):2595-603.
[3] Guigoz Y. The Mini-Nutritional Assessment (MNA®) Review of the Literature - What does it tell us? J Nutr Health Aging 2006; 10:466-487.
[4] Kaiser MJ, Bauer JM, Ramsch C, et al. Validation of the Mini Nutritional Assessment Short-Form (MNA®-SF): A practical tool for identification of nutritional status. J Nutr Health Aging 2009; 13:782-788.

Disclosure of interest: None declared

Keywords: Cancer, comprehensive geriatric assessment, early mortality, short-term outcome

P110

VALUE OF GERIATRIC SCREENING AND ASSESSMENT IN PREDICTING POSTOPERATIVE COMPLICATIONS IN PATIENTS OLDER THAN 70 YEARS UNDERGOING SURGERY FOR COLORECTAL CANCER

K. Fagard[1,*], J. Casaer[2], A. Wolthuis[3], J. Flamaing[4], K. Milisen[5], J.-P. Lobelle[6], H. Wildiers[7], C. Kenis[8]
[1]*Department of Geriatric Medicine, University Hospitals Leuven,* [2]*Faculty of Medicine, KU Leuven,* [3]*Department of Abdominal Surgery, University Hospitals Leuven,* [4]*Department of Geriatric Medicine, Department of Clinical and Experimental Medicine, University Hospitals Leuven, KU Leuven,* [5]*Department of Geriatric Medicine, Department of Public Health and Primary Care, University Hospitals Leuven, Academic Centre for Nursing and Midwifery KU Leuven, Leuven,* [6]*Consultant in Statistics, University Hospitals Leuven, Beernem,* [7]*Department of General Medical Oncology, Department of Oncology, University Hospitals Leuven, KU Leuven,* [8]*Department of General Medical Oncology, Department of Geriatric Medicine, University Hospitals Leuven, Leuven, Belgium*

Introduction: Nowadays there is a growing consensus that it is important to assess frailty in older patients undergoing surgery.

Objectives: To examine the association between the results of geriatric screening and geriatric assessment (GA) and the risk of 30-day postoperative complications in older patients undergoing surgery for colorectal cancer (CRC).

Methods: Patients ≥70 years old, operated on for CRC, were identified from a prospectively collected database (2009-2015). All patients underwent screening with 2 geriatric screening tools (G8 and the Flemish version of the Triage Risk Screening Tool). The G8-positive patients (scoring ≤ 14/17) received a GA, including living situation, activities of daily living (ADL), instrumental activities of daily living (IADL), falls, fatigue, cognition, depression, nutrition, comorbidities and polypharmacy. Postoperative complications that occurred within 30 days of surgery were retrospectively collected from the medical records and classified into severity grades by the Clavien-Dindo grading system. The primary endpoint is the occurrence of Clavien-Dindo grade II and above complications. Logistic regression analyses were used for identifying predictive variables for complications Clavien Dindo ≥ grade II.

Results: One hundred ninety patients (mean = 78 y.), were included, of whom 115 G8-positive patients received a GA. The 30-day morbidity rate was 50%, 83.0% of the complications were Clavien-Dindo ≥ II, and 3 patients died. In univariate logistic regressions on 190 patients, the following variables were associated with Clavien-Dindo ≥ II complications with p(wald)<0.05: age, type of tumor, surgical approach, type of surgery, ECOG-PS score and G8. In the 115 G8 frail patients, ADL was the only predictive significant (p<0.05) GA variable. In multivariable logistic regression analysis, age and surgical approach were independent predictors of Clavien-Dindo ≥ II complications in the whole group, while ADL was the only predictor in the G8 frail group.

Conclusion: Our findings suggest that geriatric screening and assessment can be of added value to identify an increased risk of complications after surgery for colorectal cancer in older patients.

Disclosure of interest: None declared

Keywords: Colorectal cancer, elderly, geriatric assessment, geriatric screening, postoperative complications

P111

FRAILTY AND SURVIVAL IN OLD PATIENTS WITH CANCER; CLINICAL JUDGMENT AND SYSTEMATIC GERIATRIC ASSESSMENTS

L. Kirkhus[1,*], J. Šaltyte Benth [1,2,3], S. Rostoft[4], B. H. Grønberg[5,6], M. J. Hjermstad[7,8], G. Selbæk[1,9], T. Bruun Wyller[3,4], M. Harneshaug[1], M. S. Jordhøy[3,10]
[1]*The Centre for Old Age Psychiatry Research, Innlandet Hospital Trust, Hamar,* [2]*HØKH Research Centre, Akershus University Hospital,* [3]*Institute of Clinical Medicine, Faculty of Medicine, University of Oslo,* [4]*Department of Geriatric Medicine, Oslo University Hospital, Oslo,* [5]*The Cancer Clinic, St. Olavs Hospital - Trondheim University Hospital,* [6]*Department of Cancer Research and Molecular Medicine, NTNU, Norwegian University of Science and Technology, Trondheim,* [7]*Regional Advisory Unit for Palliative Care, Department of Oncology, Oslo University Hospital, Oslo,* [8]*European Palliative Care Research Centre, Department of Cancer Research and Molecular Medicine, NTNU, Norwegian University of Science and Technology, Trondheim,* [9]*Norwegian Advisory Unit on Ageing and Health, Vestfold Hospital Trust, Tønsberg,* [10]*The Cancer Unit, Innlandet Hospital Trust, Hamar, Norway*

Introduction: Assessing frailty in older cancer patients and thereby estimating an individual's vulnerability to changes in health status is highly relevant for planning of treatment. Many oncologists are not familiar with the concept and do not assess frailty in their patients.

Objectives: To compare the oncologists' categorization of frailty based on their clinical judgment with a systematic frailty categorization based on a modified geriatric assessment (mGA). To investigate if any of these frailty categorizations were associated with reduced overall survival (OS).

Methods: A prospective observational, multicentre study including patients ≥ 70 years with a newly diagnosed, histologically confirmed cancer or first relapse after previous curative treatment. At inclusion, the mGA was performed partly by trained nurses and partly using self-report questionnaires. The assessment included eight domains; nutrition (Patient-Generated Subjective Global Assessment), comorbidity (Physical Health Section, Older Americans' Resources and Services comorbidity scale), regular medications, falls the past six months, activities of daily living, physical (Timed Up and Go), cognitive (Mini Mental State Examination) and emotional function (Geriatric Depression Scale-15). For each domain, a cut-off value for impaired function was defined. Patients were categorized as frail if at least one domain was registered as impaired. All other patients were categorized as non-frail. Blinded for the mGA categorization and without any specific instructions, the oncologists were asked to categorize patients as fit, intermediate or frail. The intermediate (n=89) and frail (n=15) category was merged into one category named "suspected frail". The agreement between mGA frail and "suspected frail" was assessed by Kappa statistics. The association of frailty and "suspected frailty" with OS was investigated by bi- and multivariate Cox regression analyses adjusting for age, sex, cancer diagnosis, ECOG Performance Status, stage and treatment.

Results: This abstract presents baseline data. Between January 2013 and April 2015, 307 patients were enrolled at 8 hospitals. Of these, 288 patients (94%) completed all baseline questionnaires and thus the mGA, 286 patients had frailty rated by the oncologists. Median age was 77 (70-95) years, 160 patients (56%) had distant metastasis, most common cancer diagnoses were colorectal (n=83, 29%), lung (n=59, 21%) and prostate (n=56, 19%). In all, 140/288 (49%) patients were categorized as mGA-frail, 104/286 (36%) patients were "suspected frail". The overall agreement between the two frailty categorizations was 65%, Kappa measurement value was 0.30 (95% CI 0.19; 0.41), representing fair agreement. The median follow up time for survival was 16.9 months; 45% of patients were alive at date of censoring. In bivariate Cox regression analyses being frail according to both the mGA (HR 1.86 (95% CI 1.36; 2.56)) and the oncologists' clinical judgment (HR 1.94 (95% CI 1.41; 2.66)) was significantly associated with reduced OS (p<.01). In the multivariate models, only mGA frailty was significantly associated with reduced OS with a HR of 1.61 (95% CI 1.14; 2.27) (p<.01).

Conclusion: A systematic mGA identified more patients as frail than the oncologists' subjective clinical judgment. Frailty categorized by the modified geriatric assessment was an independent negative prognostic factor and provides important, additional prognostic information for oncologists.

Disclosure of interest: None declared

Keywords: Frailty, geriatric assessment

P112

A PROSPECTIVE NON-INTERVENTIONAL STUDY ON THE USE OF BEVACIZUMAB AND CONVENTIONAL CHEMOTHERAPY FOR FIRST-LINE TREATMENT OF METASTATIC COLORECTAL (MCRC) PATIENTS: SCREENING AND GERIATRIC ASSESSMENT (GA)

L. Decoster[1,*], C. Kenis[2], G. Houbiers[3], B. Naessens[4], M. De Man[5], G. Lambrecht[6], V. Moons[7], E. Monsaert[8], P. Vergauwe[9], H. Prenen[2], E. Van Cutsem[2], E. Beutels[10], D. Frijns[11], H. Wildiers[2]

[1]UZ Brussels, Brussels, [2]UZ Leuven, Leuven, [3]Gastroenterology and Digestive Oncology, CHC Clinique St Joseph, Liege, [4]AZ Nikolaas, St.Niklaas, [5]OLV Aalst, Gent, [6]AZ Damiaan, Oostende, [7]Imeldaziekenhuis, Bonheide, [8]AZ Maria Middelares, Gent, [9]AZ Groeninge, Kortrijk, [10]Innosens, [11]Roche NV/SA, Brussels, Belgium

Introduction: In Belgium, the average age at diagnosis of CRC is 70.1 years for men and 71.6 years for women. Few elderly with cancer are included in clinical trials and aging is a heterogeneous process. Therefore, choosing the most appropriate therapy and weighing the risks and benefits of chemotherapy in older cancer patients is challenging. Geriatric screening and GA allow evaluation of individual global health status and treatment optimisation. This observational study aims to complement the knowledge on chemotherapy and bevacizumab usage in elderly with mCRC in current practice in Belgium and evaluates the impact of baseline geriatric screening and GA on treatment duration (TD), progression free survival (PFS) and severe toxicity.

Objectives: Primary objective was TD of first-line bevacizumab-containing chemotherapy. Secondary objectives were TD of conventional chemotherapy, safety of bevacizumab in elderly and correlation of baseline geriatric screening and GA.

Methods: 252 patients ≥ 70 years with mCRC receiving chemotherapy with/without bevacizumab were included in the study. Geriatric screening with G8 and Flemish Triage Risk Screening Tool (fTRST), Eastern Cooperative Oncology Group (ECOG), as well as GA including activities of daily living (ADL), instrumental activities of daily living (IADL), Mini-Mental State Examination (MMSE), Geriatric Depression Scale (GDS-15), Mini Nutritional Assessment (MNA), Charlson Comorbidity Index (CCI), and Mobility-Tiredness Test (Mob-T) was performed in all patients at baseline. Logrank tests (for TD and PFS), Wilcoxon or Student t-tests (for severe toxicity) and multivariate analyses were used for correlations with the different screening and GA components. A subgroup analysis excluding patients with ECOG ≥ 2 at baseline was also performed.

Results: In the total safety population, median TD (95% CI) was 5.5 (5.1-6.2) months. The only baseline parameters significantly associated with TD in univariate analysis were ECOG ≥ 1, which was only 14.6% of patients, and MNA (p=0.0006 and p=0.0162, respectively), while G8 showed a trend (p=0.0607). Significant correlations were observed for PFS versus ECOG (p<0.0001), MNA (p=0.0001) and G8 (p=0.0208) and for severe toxicity versus ECOG (p<0.0001) and G8 (p=0.005). Both TD and PFS were significantly associated with G8 (p=0.0093 and p=0.0002, respectively) when lowering the G8 cut-off to 12 (i.e. median value). fTRST did not show

a significant correlation. Significant correlations for ECOG versus TD and PFS (p=0.0047 and p<0.0001, respectively) and for MNA versus PFS (p=0.0007) were observed in multivariate analysis. Subgroup analysis excluding ECOG ≥ 2 patients no longer showed significant correlations for ECOG; only MNA and G8 (cut-off 12) were significantly associated with TD (p=0.0481 and p=0.0165, respectively) and with PFS (p=0.0012 and p=0.0017, respectively), while G8 was correlated with severe treatment toxicity (p=0.018).

Conclusion: In this real-life study in older mCRC patients, ECOG is a strong predictive marker for TD, PFS and severe toxicity, mainly driven by a subpopulation of patients with ECOG ≥ 2. MNA and G8 are predictive markers for TD and PFS (and toxicity for G8) in the large group of patients with ECOG ≤ 1.

Disclosure of interest: None declared

Keywords: Bevacizumab, ECOG, Elderly, fTRST, geriatric assessment

---

P113

CANCER SURVIVORSHIP AND AGING – IS IT SO DIFFERENT FOR ELDERLY AND YOUNG?

M. Bernardo[1,*], S. Ouakinin[2], S. Eusébio[3], L. Ribeiro[1], O. Nunes[1], J. Silva[4]

[1]Hemato-oncology, Hospital CUF infante santo, [2]Psychiatry, [3]Psychology /Psychiatry, Fac Medicine Univ Lisboa, [4]Radiotherapy, Hospital CUF descobertas, Lisboa, Portugal

Introduction: Over the last decades the huge raise of cancer survivors reflects significant improvement on diagnosis and treatment of several cancers, as well as the best care of multiple other diseases. The aging of population contributes to significant numbers of older patients (on 2030 the number of people who are older than 65 is expected to double as compared to 2000). Cancer incidence globally raises with age, and older patients have special and potentially unmet needs, so it is important to understand if the comorbidities are different in elderly and young patients

Objectives: To compare the incidence and evaluate the differences of comorbidities on a population of cancer survivors (more than 10 years after diagnosis), stratifying patients by age. Data on Quality of Life and distress will be included on a subset of patients.

Methods: Using a retrospective design, in a sample of 198 patients with more than 10 years of cancer survival, we analysed medical and psychiatric comorbidities. Data obtained from medical records included social and demographic data, the characterization of tumor type and treatment approach, the presence of second malignancies and comorbidities such as diabetes, cardiovascular diseases, arterial hypertension, lung, renal, hematologic, osteo-articular/ osteoporosis, neurologic and psychiatric diseases, as well as obesity, pre and pos-diagnosis and treatment of the malignancy. In a sub sample of patients, distress levels and Quality of Life were evaluated. Statistical analysis was performed using Statistical Package for Social Sciences- SPSS V23.

Results: In the whole sample age is less or equal to 50 years in 21 subjects, between 51 and 69 years in 95 patients, and 70 years or more in 82 patients; 63,6% of them are females. The most frequent diagnosis in patients aged 70 or more are colorectal cancer (48,8%), breast cancer (23,2%), lymphoma (6,1%) and lung cancer (4,9%). Using a non-parametric test (Kruskal Wallis) to compare the distribution of comorbidities in the 3 groups, we found significant differences between groups for arterial hypertension (p<0.001) and for psychiatric diseases (p<0.03). All comorbidities increased with age except for psychiatric diseases, which decreases with age, and for obesity, more frequent in patients between 51 and 69 years.

Conclusion: Even though the retrospective nature of this study, it shows few significant differences in medical profiles in younger and older patients. We highlight the need to consider particular health aspects in older populations, being aware of their expected and increasing needs in support and psychosocial dimensions.

References:

[1] Mao J, Armstrong K, Bowman M et al. Symptom burden among cancer survivors: Impact of age and comorbidityJABFM Sept-Oct 2007;40:5.434-43.
[2] Earle CC, Ganz PA. Cancer survivorship care: don't let the perfect be enemy of the good. J Clin Oncol. 2012;30:3764-68.
[3] Ligibel J. Lifestyle factors in cancer survivorship. J Clin Oncol 2012;30:3697-704.
[4] Siegel R, DeSantis C, Virgo k, et al. Cancer treatment and survivorship statistics, 2012. CA Cancer J Clin 2012;62:220-41.
[5] Moslehi J. The cardiovascular perils of cancer survivorship. N Engl J Med 2013;368:1055-56.
[6] Brennan ME, Gormally JF, Butow P, et al. Survivorship care plans in cancer: a systematic review of care plan outcomes. Br J Cancer 2014; 111:1899-1908.
[7] National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Survivorship (version I.2015)

Disclosure of interest: None declared

Keywords: Cancer survivorship elderly comorbidities distress

P114

EVALUATION OF THE IMPACT OF COMPREHENSIVE GERIATRIC ASSESSMENT (CGA) IN OLDER PATIENTS WITH KIDNEY CANCER

M. Sanchez[1], R. Boulahssass[2,*], S. Gonfrier[1], D. Saja[1], C. Rambaud[1], J. M. Turpin[1], F. Leborgne[1], E. Clais[1], E. Francois[3], O. Guerin[1]

[1]UCOG, CHU, [2]UCOG, [3]UCOG, Centre Antoine Lacassagne, Nice, France

Introduction: In the future, life expectancy and incidence of cancer will increase, and also incidence of kidney cancer will increase in patients over 75 years old. The treatment of kidney cancer is surgery. We observe in this population several comorbidities which increase the risk of surgical morbidity and could lead to only best supportive care.

Objectives: The aim of this work is to determine the impact of CGA in treatment decisions and also in guided geriatric interventions.

Methods: This is an observational and prospective cohort study approved by an ethics committee. A complete CGA has been done. Treatments made, final therapeutic decisions and geriatric interventions have been collected during the follow-up.

Results: The study included 58 patients, 31 men and 27 women. The mean age was 83y. 39 patients were dependent for ADL. 38 patients were Balducci 3. 25 patients were metastatic. There were 13 patients with clear renal cell carcinoma; half of patients had no histology. The most common predisposing factors were hypertension (n=39), and chronic kidney disease (n=24). 32 patients of the 58 enrolled patients were symptomatic. The geriatric interventions the most often proposed were : the nutritional management (n=48), physiotherapy (n=34) and prevention of delirium (n=23). 25 patients approved the care plan, 22 opinions are not known. 21 patients undergo the standard treatment (33%), 37 patients have a modification of the care plan (67%). CGA influence the modification of the therapeutic decision in over 43% (n=23) of cases, and for the most of them it was best supportive care, active surveillance or ablative therapies. Of 22 operated patients, there were 16 extended radical nephrectomies, 4 partial nephrectomies and 2 radical nephrectomies. 4 arterial embolization and 1 radiofrequency ablation were conducted. 4 patients received inhibitors of VEGF receptors and 2 patients received mTOR inhibitors. The 3 factors influencing the modification treatment are geriatric factors from the CGA: decline of autonomy, a decreased gait speed, and a home confinement.

Conclusion: There is a major selection of patients by urologists, explaining why the effect of geriatric assessment is increasingly important in the treatment of elderly patients with kidney cancer. There is still a difference between the recommended standard treatment and those applied after multidisciplinary consultation. Reasons that lead to the modification of treatment were the existence of geriatric syndromes and not the anesthetic evaluation. The French Association of Urology recommends to have an early CGA for patient over 70y.

Disclosure of interest: None declared

Keywords: Elderly cancer patient, geriatric assessment, kidney cancer, renal cell carcinoma

---

P115

SENIOR TORONTO ONCOLOGY PANEL – RESEARCH PARTICIPATION FOR OLDER ADULTS WITH CANCER AND FAMILY MEMBERS/CAREGIVERS

M. Puts[1,*], S. Sattar[1], T. Fossat[1], M. Fitch[1], T. Hsu[2], E. Szumacher[3], D. Stephens[4], G. Macdonald[1], D. Macdonald[4], B. Liu[5,6], L. Jeffs[7,8], J. Jones[9,10], K. McGilton[8,11], S. Alibhai[12,13]

[1]Lawrence S.Bloomberg Faculty of Nursing, University of Toronto, Toronto, [2]Medical Oncology, The Ottawa Hospital Cancer Centre, Ottawa, [3]Radiation Oncology, Sunnybrook Health Sciences Centre, [4]not applicable, not applicable, [5]Division of Geriatric Medicine, Sunnybrook Health Sciences Centre, [6]Division of Geriatric Medicine, University of Toronto, [7]Nursing Research, St. Michael's hospital, [8]Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, [9]ELLICSR, University Health Network, [10]Psychiatry, University of Toronto, [11]Toronto Rehabilitation Institute, [12]Medicine, University Health Network, [13]Medicine, University of Toronto, Toronto, Canada

Introduction: Older adults are frequently underrepresented in clinical cancer research. More patient engagement in research may lead to more relevant data to help improve health outcomes.

Objectives: The objectives of this study were: 1) to understand the research priorities of older adults with cancer and their caregivers; 2) to examine how to engage this population in research; and 3) to examine how to support older adults and their caregivers in becoming co-researchers.

Methods: Public meetings and focus groups were conducted to explore research priorities and to discuss their support needs in order to be able to participate as research team members. Older adults aged 60 years and over diagnosed with cancer in the previous ten years and their family members/caregivers were recruited through newspaper ads, flyers in hospital waiting rooms and email ads sent by our partners (charitable foundations, support groups, CARP chapters) to their members. The focus groups were held in local libraries from December 2015-April 2016. The focus groups were audio recorded and transcribed verbatim. The data was analysed using thematic analysis. At the end of each public meeting and focus group attendees were asked to complete a brief survey to obtain their health and sociodemographic characteristics. They were also asked if they were willing to be included in the participant pool so that for future studies they can be contacted.

Results: Three public meetings and seven focus groups with older adults and caregivers were conducted. Over 55 older adults and caregivers attended a public meeting and 60 older adults and caregivers attended a focus group. The research priorities were previously presented at the SIOG meeting in 2015. The majority of the older adults and their caregivers had never participated in research before but were very interested in becoming a research team member and being involved in all steps of research if this could benefit them or other patients and caregivers. the following factors were identified by patients and caregivers to facilitate older adults' participation on research teams: flexibility in time and location, accessibility to computer technology, transportation support, material translation, short training sessions, having opportunities for peer support. The older adults as research team members preferred to have meetings with the other members of the research team face-to-to face to facilitate social connections.

Conclusion: Our study showed that older adults are very willing to participate and be part of a research team. The social aspect of being on a team is important should be considered.

Disclosure of interest: None declared

Keywords: Focus group, older adult as research team member, participant pool, patient engagement in research, public meetings

P116

CHEMOTHERAPY TREATMENT DECISION-MAKING EXPERIENCES OF OLDER ADULTS WITH CANCER, THEIR FAMILY MEMBERS, CANCER SPECIALISTS AND FAMILY PHYSICIANS: A MIXED METHODS STUDY

M. Puts[1,*], S. Sattar[1], K. McWatters[1], K. Lee[1], M. Kulik[1], M. E. Macdonald[1], R. Jang[2], E. Amir[2], M. Krzyzanowska[2], N. Leighl[2], M. Fitch[1], A. Joshua[2,3], P. Warde[4], A. Tourangeau[1], S. Alibhai[5,6]

[1]Nursing, University of Toronto, [2]Medical Oncology, University Health Network, Toronto, Canada, [3]Medical Oncology, Kinghorn Cancer Centre, Sydney, Australia, [4]Radiation Oncology, [5]Medicine, University Health Network, [6]Medicine, University of Toronto, Toronto, Canada

Introduction: Although comorbidities, frailty, and functional impairment are common in older adults with cancer, little is known about how these factors are considered during the treatment decision-making process by OAs, their families, and health care providers.

Objectives: The aims of this study were to examine the treatment decision making process from the perspectives of older adults and their family members, cancer specialists and family physicians, as well to explore how comorbidity, frailty, and functional status influenced the decision-making process.

Methods: A mixed methods multi-perspective longitudinal study using semi-structured interviews and surveys with 29 older adults aged ≥ 70 years with advanced prostate, breast, colorectal, or lung cancer, 24 of their family members, 13 oncologists, and 15 family physicians was conducted. The sample was stratified on age (70-79 and 80+). All interviews were analyzed using thematic analysis.

Results: There was no difference in the treatment decision-making experience based on age. Most older adultss felt that they should have the final say in the treatment decision, but strongly valued their oncologists' opinion. "Trust in my oncologist" and "chemotherapy as the last resort to prolong life" were the most important reasons to accept treatment. Families indicated a need to improve communication between them, the patient and the specialist, particularly around goals of treatment. Comorbidity and potential side-effects did not play a major role in the treatment decision-making for patients, families, or oncologists. Family physicians reported no involvement in decisions but desired to be more involved.

Conclusion: This first study using multiple perspectives showed neither frailty nor comorbidity played a role in the treatment decision-making process. Efforts to improve communication was identified as an opportunity that may enhance quality of care.

Disclosure of interest: None declared

Keywords: Chemotherapy, communication, frailty, functional status, treatment decisions

P117

DEVELOPING A NATIONAL AGENDA ON CANCER AND AGING: THE CANADIAN NETWORK ON AGING AND CANCER (CNAC)

M. Puts[1,*], T. Hsu[2], E. Szumacher[3], S. Sattar[1], S. Toubasi[1], C. Rosario[4], C. Mariano[5], E. Brain[6], S. Mohile[7], H. Muss[8], W. Duggleby[9], D. Wan-Chow-Wah[10], C. Wong[11], M. Trudeau[12], S. Alibhai[4,13]

[1]Nursing, University of Toronto, Toronto, [2]Medical Oncology, The Ottawa Hospital Cancer Centre, Ottawa, [3]Radiation Oncology, Sunnybrook Health Sciences Centre, [4]Medicine, University of Toronto, Toronto, [5]Medical Oncology, Royal Columbian Hospital, Vancouver, Canada, [6]Medical Oncology, Institut Curie, Paris, France, [7]Medical Oncology, University of Rochester Medical Center, Rochester, [8]Medical Oncology, School of Medicine UNC-Chapel Hill, Chapel Hill, USA, [9]Nursing, Uiversity of Alberta, Edmonton, [10]Division of Geriatric Medicine, McGill University Health Centre, Montreal, [11]Geriatric Medicine, St. Michael's Hospital, [12]Medical Oncology, Sunnybrook Health Sciences Centre, [13]Medicine, University Health Network, Toronto, Canada

Introduction: The Canadian population is aging and the risk of developing cancer increases with age. Several countries have formed collaborative networks that champion research for improvement of clinical outcomes, however, none exists in Canada. A meeting of leaders in geriatrics and oncology was convened to develop a national research agenda as well as establish a national collaborative network of researchers and clinicians interested in cancer and aging to expand the evidence base for older adults with cancer in Canada.

Objectives: *Objectives of the first Cancer and Aging Network meeting were:*

1. To review the present landscape of research in the area of cancer and aging
2. To identify issues of high research priority within the field of cancer and aging
3. To identify current barriers to geriatric oncology research and develop and implement potential solutions
4. To develop a collaborative multidisciplinary research network between investigators across Canada who are interested in fostering research and improving health outcomes for older adults with cancer
5. To learn from successful efforts in other countries to stimulate the geriatric oncology research agenda.

Methods: Researchers and clinicians across Canada interested in cancer and aging, as well as leaders from key cancer, geriatric, and funding organizations in Canada were invited to attend the inaugural Canadian Network on Aging and Cancer held in Toronto on April 27, 2016. International leaders from the Cancer and Aging Research Group and the International Society of Geriatric Oncology (SIOG) were also invited.

Results: 60 clinicians, researchers and trainees attended, including physicians (medical oncologists, radiation oncologists, geriatricians, hematology-oncologists), nurses, and pharmacists. Canadian clinical, educational, and research accomplishments and ongoing endeavours within the field of cancer and aging were reviewed. Participants agreed that Canada should have a national collaborative network focused

on improving geriatric oncology education, clinical care and research. Key/top short-term priorities for each of those three areas were identified.

The top 3 priorities for education were:
- Defining core competencies for geriatric oncology
- Increasing awareness about geriatric oncology in all clinical and educational settings
- Creating international professional networking, communicate via email and video conferencing

The top 3 priorities for clinical care were:
- Integrating geriatric oncology within the oncology setting
- Identifying existing health care providers with an interest in geriatric oncology to help facilitate development of geriatric oncology clinics and services
- Implementing a screening tool systematically for all 70+ to identify those patients who may benefit the most from a referral to geriatric oncology

The top 3 research priorities were:
- Demonstrating the value of geriatric assessment and management on patient and cancer outcomes
- Integrating geriatric assessment and management in all clinical cancer trials
- Designing trials to facilitate recruitment of frail older persons

Conclusion: There is a growing interest in geriatric oncology in Canada. We plan to conduct surveys to further understand the needs of health care providers and researchers in each of these three areas in Canada and facilitate establishing a national geriatric oncology network. This is strongly supported by SIOG, stressing the need for better international collaboration.

Disclosure of interest: None declared

Keywords: Clinical care priorities, education priorities, multidisciplinary network, National network, research priorities

---

P118

EVALUATION OF DIAGNOSTIC PATHWAYS FOR OLDER PEOPLE WITH SUSPECTED CANCER: AN ANALYSIS OF A RAPID ACCESS GERIATRIC ASSESSMENT SERVICE

M. Denholm[1,*], F. Holt[1], P. Corrie[2], J. Hampton[3]
[1]*Department of Oncology and Department of Medicine for the Elderly,* [2]*Department of Oncology,* [3]*Department of Medicine for the Elderly, Cambridge University Hospitals NHS Foundation Trust, Cambridge, United Kingdom*

Introduction: The evolution of oncogeriatrics as an important new area bridging geriatric medicine and oncology has raised the need for tailored comprehensive geriatric assessment (CGA) of increasing numbers of older patients presenting with cancer in order to better assess their health, frailty and social circumstances and optimise their subsequent management. Addenbrooke's hospital established a Rapid Access DME Assessment/Review service (RADAR) as part of the trust's admission avoidance strategy, enabling GPs to obtain urgent assessment of unwell older patients the same or the next working day.

Objectives: In order to assess our local oncogeriatric requirements, we aimed to evaluate the RADAR service for its use as a diagnostic pathway for suspected cancer in the elderly.

Methods: We reviewed written information supplied in 528 GP referrals to RADAR between November 2014-2015 and identified those with explicit concern regarding suspected cancer, no explicit mention of cancer but presence of 'red flag' symptoms, and those with no concern about cancer. The suspected cancer referrals were analysed in further detail, recording variables including patient age, sex, Charlson co-morbidity index and drug history. Investigation and treatment outcomes were determined for those patients subsequently diagnosed with cancer.

Results: 53 (10%) of 528 RADAR referrals by GPs explicitly raised concern about cancer. 21 (40%) of these patients were confirmed to have cancer, 15 (28%) of whom were new cancer diagnoses. These patients were taking an average of 5 medications, and had an average Charlson co-morbidity index of 2, identifying them as suitable candidates for comprehensive geriatric assessment. A further 94 (18%) referrals were identified as having red flag symptoms suspicious for cancer.

Conclusion: Up to 1 in 4 patients referred to RADAR had symptoms concerning for cancer and also had indicators of frailty, suggesting they may therefore benefit from comprehensive geriatric assessment in parallel with their cancer care. This review supports a role for formal oncogeriatric pathways between primary and secondary care.

Disclosure of interest: None declared

Keywords: Geriatric assessment

P119

IMPACT OF GERIATRIC ASSESSMENT ON THE MANAGEMENT OF OLDER ADULTS WITH HEAD AND NECK CANCER: A PILOT STUDY

M. Neve[1,*]
[1]*Radiation Oncology, Waikato Hospital, Hamilton, New Zealand*

Introduction: Management of cancer is increasingly complex in older adults. Comprehensive geriatric assessment (CGA) has been shown to better discriminate which patients can tolerate aggressive cancer treatment, but has major resource implications. In this pilot study we assessed the utility of incorporating a screening tool to identify older patients with potentially-curable head and neck cancer who may benefit from CGA prior to a decision on definitive management.

Objectives: To assess the utility of the G8 screening tool and CGA for older adults with head and neck cancer who undergo curative intent treatment

Methods: Patients aged 65 years or older with a potentially-curable primary malignancy of the head and neck region were presented at the Head and Neck multidisciplinary team (MDT) meeting. The Geriatric 8 (G8) questionnaire was administered

prior to the MDT, at which clinicians, blinded to the G8 result, made a recommendation on appropriate treatment, including referral for CGA if considered advisable. Patients considered vulnerable (G8 score ≤14) were also to be referred for CGA. Subsequent treatment and outcomes were recorded.

Results: Over 6 months, 35 patients were recruited, median age 74 (range 65-93). Seventeen (49%) patients were assessed as vulnerable by the G8 score, including 7 (20%) whom the MDT referred for CGA. Seven with G8 scores <14 did not receive a CGA. Thirty (85.7%) underwent curative-intent treatment, including 6 of 7 who had CGA. Of 10 vulnerable patients who did not have CGA, 60% received curative-intent treatment. Mean length of post-operative stay was 12.2 vs. 6.5 days in patients deemed vulnerable or fit by G8 scores, respectively (p=0.46); completion rate of radical radiotherapy was 75% vs. 100% in each group, respectively (p=0.13). Mean post-operative length of stay in vulnerable patients who underwent a CGA was 6.2 days vs. 17.3 days in those who were not referred (p=0.79).

Conclusion: The G8 tool identified twice the number of patients as vulnerable compared to the MDT. There was a trend towards longer post-operative stay and lower radiotherapy completion rates in patients deemed vulnerable by G8 scores.

Disclosure of interest: None declared

Keywords: G8, comprehensive geriatric assessment, head and neck cancer

---

P120

ALTERATION OF DOMAINS IN COMPREHENSIVE GERIATRIC ASSESSMENTS AND SURVIVAL IN A FRENCH MULTICENTER COHORT OF ELDERLY PATIENTS WITH CANCER

M. Frasca[1,2,*], P. Soubeyran[3,4,5,6], C. Bellera[1,7], M. Rainfray[1,2], S. Mathoulin-Pelissier[1,4,7] and French ONCODAGE group

[1]Inserm U1219 Research Center, Epicene Team (Epidemiology of Cancer and Environmental Exposure), [2]CHU Bordeaux, [3]INSERM U1218 Research Unit, [4]Bordeaux University, [5]French National Cancer Institute (INCa) Integrated Cancer Research Site (SIRIC), Institut Bergonié, [6]Department of Medical Oncology, Institut Bergonié, Comprehensive Cancer Center, [7]Clinical Research and Clinical Epidemiology Unit, Institut Bergonié, Comprehensive Cancer Centre, Bordeaux, France

Introduction: More than 200,000 elderly patients are treated for cancer every year in France. Major risks faced by these patients include death and institutionalization. Frailty, a group of disorders related to age, is predictive of these risks. Frail elderly patients are usually detected by a comprehensive geriatric assessment (CGA) that evaluates several domains including nutritional status, autonomy, mobility, cognitive and psychological status, and comorbidities.

Objectives: This work aimed at estimating the association between altered domains of CGA at cancer diagnosis and overall survival (OS) of elderly patients with cancer. The secondary objective was to estimate the association with institutionalization at five years.

Methods: From 2008 to 2010, cancer patients were consecutively included in a multicenter study (ONCODAGE) at diagnosis. Twenty-three French centers participated. CGA were performed at baseline and included seven questionnaires: mini nutritional assessment (MNA), activities of daily living (ADL), instrumental ADL (IADL), timed get up and go (TUG), mini-mental state examination (MMSE), geriatric depression scale 15 (GDS-15) and cumulative illness rating scale (CIRS-G). Survival and data on living place were collected at five years. Sample baseline characteristics were described. Median survival was estimated using Kaplan-Meier survival curves. Relative risk of death was estimated for each CGA's domain using seven multivariate Cox models (one per questionnaire). For institutionalization, logistic models were used. Each time, adjustment factors were selected using directed acyclic graphs.

Results: A total of 1264 patients were analyzed for OS (mean age: 78 years, women: 70%, breast cancer: 55%, altered autonomy: 42%, altered nutritional status: 41%). Median follow-up was 5.2 years and 446 patients died during the study period. Institutionalization was evaluated in 366 patients (mean age: 76 years, women: 80%, breast cancer: 72%, altered autonomy: 25%, altered nutritional status: 26%). All CGA domains, if altered, were associated with a decreased OS. For several domains, these effects were only statistically significant during a certain period or for some patient categories. Altered nutritional status was associated with decreased OS at one and three years (HR=2.97, p<0.01 and HR=2.24, p<0.01, respectively) but not at five years. Altered autonomy and mobility were associated with a lower survival for younger patients, and women when assessed by IADL (ADL, IADL, TUG: HR=1.54, p<0.01; HR=1.46, p=0.02; HR=2.19, p<0.01, respectively). Altered cognitive status and a decreased OS were only associated for the most educated patients (primary, secondary and graduated degrees: HR=1.84, p<0.01; HR=2.67, p=0.01; HR=3.89, p=0.03, respectively). Psychological status and more than four comorbidities were associated for all patients (GDS-15: HR=1.38, p<0.01; CIRS-G: HR=1.64, p<0.01). Only altered autonomy assessed by IADL and cognitive status were associated with more institutionalizations (OR=8.90, p<0.01; OR=6.30, p=0.02, respectively).

Conclusion: These results confirm the interest of CGA for elderly people with cancer. Altered domains of CGA were associated with a decreased five-year OS. Awareness of the importance of these factors depending on patients' characteristics can help provide appropriate supportive cares.

Disclosure of interest: None declared

Keywords: Cancer, comprehensive geriatric assessment, elderly patient, institutionalization, survival

P121
PREHABILITATION AND REHABILITATION IN ONCOGERIATRICS: ADAPTATION TO DISEASE AND ACCOMPANIMENT OF PATIENTS' TRAJECTORIES

O. Le Saux[1,*], C. Falandry[1]
[1]*Geriatric oncology, Centre Hospitalier Lyon Sud, Pierre-Bénite, France*

Introduction: Many oncological situations induce complex medical and surgical procedures, which may reveal or decompensate a geriatric underlying vulnerability. The current developments of outpatient treatment or postoperative rapid rehabilitation strategies do not take into account this geriatric vulnerability. A new healthcare organization is therefore needed in order to develop geriatric rehabilitation.

Objectives: Our pilot project named PROADAPT (Prehabilitation and Rehabilitation in Oncogeriatrics: Adaptation to Disease and Accompaniment of Patients' Trajectories) aims at developing and evaluating a rehabilitation program integrating interventions to prevent geriatric deconditioning. This program includes four interventions: (1) a nutritional management (2) a physical rehabilitation pre- (prehabilitation) and post-treatment (rehabilitation) (3) the prevention of iatrogeny and (4) a hospital-home transition.

Methods: To develop this program, the first step was to evaluate available scientific data. Four working groups (one per intervention) consisting of several health professionnals (nurses, nutritionists, pharmacists, geriatricians, oncologists and surgeons) were formed. We will present the work of the third group. The search strategy was performed using Pubmed on April 2016 using Mesh terms ("Medication Reconciliation"[Mesh] OR "Drug-Related Side Effects and Adverse Reactions/prevention and control"[Mesh] OR "Medication Errors/prevention and control"[Mesh]) AND ("Aged"[Mesh] OR "Aged, 80 and over"[Mesh] OR "Neoplasms"[Mesh]) and limits: "Humans" AND "English".

Results: A total of 1490 articles were found and analyzed by five physicians (three geriatricians, one oncologist and one pharmacist). To prevent iatrogeny, elements retrieved in literature with varying levels of evidence were: comprehensive geriatric assessment to assess risk factors, pharmacists' interventions [1], medication reconciliation, medication review [2], therapeutic education programs, outpatient care transitions programs, computerized physician order entry, electronic medication administration record. Medication review included a multistep process: avoid and be vigilant of high risk drugs, discontinue potentially inappropriate drugs, consider drugs as a cause of any new symptom and avoid trating side effects with another drug, avoid drug-drug or drug-disease interaction, adjust dosing based on age, creatinine clearance and hepatic function, address non-adherence, search for duplications or deficiencies in medications, try to simplify the medication schedule and search for non pharmacologic alternatives.

Conclusion: Using available scientific data, the four groups are currently developing clinical practice guidelines. These guidelines will enable the construction and implementation at a regional level of a healthcare system program in geriatric oncology in order to prevent geriatric decontioning for elderly cancer patients at high risk of frailty undergoing complex medical or surgical procedures.

References:

[1] Gillespie U, Alassaad A, Henrohn D, Garmo H, Hammarlund-Udenaes M, Toss H, et al. A comprehensive pharmacist intervention to reduce morbidity in patients 80 years or older: a randomized controlled trial. Arch Intern Med. 2009;169(9):894-900. doi:10.1001/archinternmed.2009.71.
[2] Christensen M, Lundh A. Medication review in hospitalized patients to reduce morbidity and mortality. Cochrane Database Syst Rev. 2016;2:CD008986. doi:10.1002/14651858.CD008986.pub3.

Disclosure of interest: None declared

Keywords: Frailty, iatrogeny, nutrition, rehabilitation, surgery

P122
EDUCATING 400 NURSES IN GERIATRIC ONCOLOGY ACROSS THE US (FUNDED BY THE NATIONAL INSTITUTE OF HEALTH #R25CA183723-01A1)

P. S. Burhenn[1,*], C. Okamoto[2], D. Economou[3], R. Yang[1], C. Sun[4], A. Hurria[5]
[1]*Geriatric Oncology,* [2]*Professional Practice and Education,* [3]*Nursing Research and Education,* [4]*Outcomes Research,* [5]*Cancer and Aging Research Program, City of Hope National Medical Center, Duarte, USA*

Introduction: Oncology nurses play a key role in the healthcare team that interfaces with older patients with cancer; however, they receive very little education in evidence-based geriatric practice thus creating a critical gap in the overall knowledge of how to care for older adults with cancer. The Institute of Medicine report "Retooling for an Aging America" identified a critical need to increase the geriatric education of nurses. We responded by applying for an NIH R25 grant "Geriatric Oncology: Educating Nurses to Improve Quality Care" which was awarded to educate 400 oncology nurses in geriatrics.

Objectives: The objectives of the R25 grant are: 1) To develop and implement a national curriculum in geriatric oncology for oncology nurses; and 2) To evaluate the effectiveness of this curriculum by pre and post knowledge testing, course evaluations, and evaluation of knowledge integration.

Methods: The overall 5-year strategy of the program is to conduct 3-day geriatric oncology courses once per year for four years (total number trained – 400 nurses). The curriculum which includes both didactic and interactive sessions was built around the principles of geriatric assessment. Expert faculty in geriatric oncology will develop and deliver the content. The key domains that are covered include: physiological changes in aging, comorbidity, functional changes, cognition and mental status, nutrition, social support, polypharmacy, and geriatric syndromes. The program also addresses empowering nurses, working with leadership to implement change, the interdisciplinary team, caregiver support, and utilizing community resources. The participants will be competitively chosen in 3-person teams from each institution based on

letters of support from their administrators and initial goals. Each participant team will develop a plan to integrate this knowledge into their institution when they return home from the conference. Nurses' knowledge will be measured by pre- and post-course tests developed by expert faculty. Course evaluations will be conducted by participants and faculty. Team evaluations will occur at 6, 12, and 18 months post conference to measure goal achievement.

Results: One-hundred oncology nurses will attend the first course in July 2016, results of this novel program to be presented at SIOG 2016 include: baseline demographics, previous experience levels in geriatrics, and geriatric knowledge pre- and post-course. Detailed course evaluation results will be presented. The participants set goals to apply the new knowledge in the workplace. Preliminary goals suggest 3 main themes: patient evaluation, staff education, and developing geriatric oncology teams. Faculty will evaluate the course content and based on post course evaluations will recommend improvements for following courses.

Conclusion: We are launching a national curriculum in geriatric oncology for oncology nurses, which could potentially be portable to other settings and other countries. We will assess the effectiveness of this curriculum by determining knowledge gained, plans implemented, and thorough course evaluation.

References:

[1] Institute of Medicine. (2008). Retooling for an Aging America: Building the Health Care Workforce. (2008, April 11). Washington, D.C.: The National Academies Press.

[2] Institute of Medicine. (2010). The Future of Nursing: Focus on Education. (2010, October). National Academy of Sciences.

Disclosure of interest: None declared

Keywords: Geriatric assessment, oncology nursing

P123

FACTORS INFLUENCING TREATMENT DECISIONS MADE BY OLDER WOMEN WITH PRIMARY BREAST CANCER

P. Howard[1,*], K. L. Cheung[2], K. Cox[1]

[1]School of Health Science, [2]School of Medicine, University of Nottingham, Nottingham, United Kingdom

Introduction: Although surgery remains the recommended treatment for older women with primary breast cancer, primary endocrine therapy (PET) offers a viable alternative in terms of clinical outcome for oestrogen receptor positive breast cancer. Choice of treatment is influenced by both healthcare professional (HCP) preference and patient choice. However it is currently unknown what factors influence and facilitate older women's breast cancer treatment decisions.

Objectives: To prospectively explore factors that influence the treatment decisions of this population, in order to increase understanding and inform HCPs to provide decision making support for this group.

Methods: A longitudinal, qualitative study was conducted. Semi-structured interviews were undertaken in older women with primary breast cancer (stage I/II) who had been offered either PET or surgical treatment. Data collection took place at the time of diagnosis and six months after treatment. Women's experience of diagnosis and what factors they considered when deciding treatment were explored. Second generational Grounded Theory and descriptive statistics were utilised to analyse the data.

Results: Interviews with 31 women (aged 70-92 years) were analysed. 15 women chose mastectomy, 10 decided upon breast conserving surgery and 6 selected PET.

The following themes emerged at diagnosis and at six months post treatment:

- Breast cancer is not such a big deal in older age: compared to other traumatic life events, other health experiences and co-morbidities. Although most women did not feel ready to die there was an acceptance of mortality.
- Appraising the options & evidence: Older women considered their ability to cope with treatment in relation to co-morbidities, life stage and resources available. Wishing to be involved in treatment decision making, older women relied on the HCP to provide information as well as drawing upon other people's cancer experiences, providing a frame of reference for decision making. Reflecting on their treatment decisions these women considered that they had made the right choice and did not regret the treatment they had selected.
- Balancing the risks and benefits of treatment: Women carefully weighed up the risk of premature mortality from cancer against the need to preserve physical and social functioning, minimising the impact of treatment. Only treatment t taking unnecessary risks that may threaten independence and minimised the risk of becoming a burden on others during or after treatment. It was important that the impact of treatment was minimal allowing the return to normal living as quickly as possible, as an older person, life was limited.

Conclusion: Older women with primary breast cancer wish to be involved in treatment decision making. These women considered multiple physical and psychosocial factors when deciding treatment. There is opportunity to develop decision making interventions to assist older women to appraise their treatment options and consider the risks of breast cancer treatment to make an individualistic choice.

Disclosure of interest: None declared

Keywords: Primary breast cancer, older women, treatment decision making

---

P124

CHEMOTHERAPY PRESCRIBING FOR OLDER ADULTS WITH CANCER: A SURVEY OF AUSTRALIAN ONCOLOGISTS

E. Moth[1], B. E. Kiely[1], V. Naganathan[2], A. Martin[3], P. Blinman[1,*]

[1]Concord Cancer Centre, [2]Centre for Education and Research on Ageing, Concord Repatriation General Hospital, Concord, [3]NHMRC Clinical Trials Centre, University of Sydney, Sydney, Australia

Introduction: Older adults with cancer consistently cite their oncologist's recommendation as a reason for having chemotherapy.

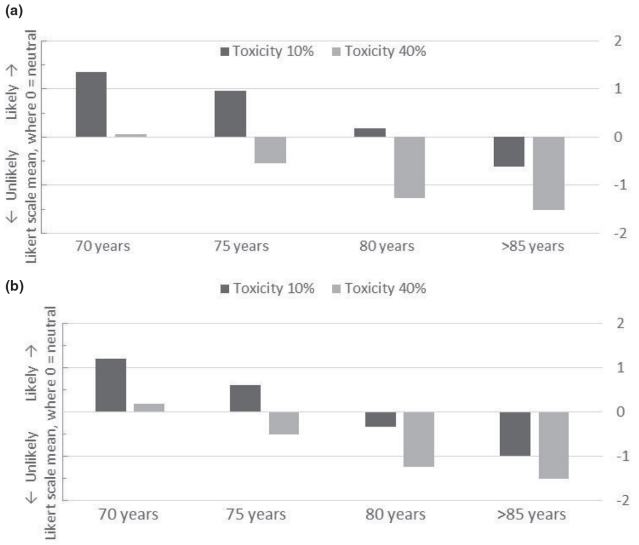


Fig. 1 (abstract P124) – (a) Likelihood of prescribing palliative chemotherapy according to age and toxicity. (b) Likelihood of prescribing adjuvant chemotherapy according to age and toxicity.

Objectives: We sought to determine factors influencing oncologists' chemotherapy decisions for older adults, methods of clinical assessment, and the effect of age and toxicity on recommendations for chemotherapy.

Methods: Consultant and trainee medical oncology members of the Medical Oncology Group of Australia (MOGA) were invited to complete an online survey in February to May 2016.

Results: 69 (74%) consultants and 24 (26%) trainees completed the survey. 51 (55%) respondents were female, and most (72, 77%) worked mainly in public practice where patients aged ≥65yrs made up more than half of the practice (54, 60%). Oncologists most frequently defined an "older patient with cancer" as ≥75yrs (45, 49%). The highest ranked 3 factors influencing decisions about (i) palliative chemotherapy were performance status, patient preference, and quality-of-life, and (ii) adjuvant chemotherapy were survival benefit with treatment, performance status, and life expectancy in the absence of cancer. Almost half of oncologists (37, 45%) agreed with an age limit for adjuvant chemotherapy, most (22, 56%) nominating ≥85yrs; fewer (18, 22%) agreed with an age limit for palliative chemotherapy. Oncologists assess older patients by history and examination (100%), performance status (99%), social supports (98%), functional status (96%), medications (93%), cognition (88%), psychological state (70%), and nutrition (64%). Only 23 (25%) routinely use formal measures to assess at least one of these domains, and a minority routinely use geriatric screening tools (14%) or a geriatric assessment (5%). Oncologists were less likely to prescribe palliative and adjuvant chemotherapy as age and rates of severe toxicity increased (Figure 1).

Conclusion: Factors influencing oncologists' decisions about chemotherapy for older adults differed according to treatment intent. Oncologists assess most geriatric domains, but rarely formally. Oncologists were less likely to prescribe chemotherapy as age and toxicity increased.

Disclosure of interest: None declared

Keywords: Chemotherapy, decision-making, elderly, prescribing

P125
ESTIMATING THE RISK OF SEVERE CHEMOTHERAPY TOXICITY IN ADULTS ≥65 YEARS: COMPARING THE CARG SCORE WITH ONCOLOGISTS' ESTIMATES OF TOXICITY

E. Moth[1], B. E. Kiely[1], P. Beale[1], M. R. Stockler[1], P. Grimison[2], N. Stefanic[3], A. Martin[2], V. Naganathan[4], P. Blinman[1,*]
[1]*Concord Cancer Centre, Concord Repatriation General Hospital, Concord,* [2]*Medical Oncology, The Chris O'Brien Lifehouse,* [3]*University of Sydney, Sydney,* [4]*Centre for Education and Research on Ageing, Concord Repatriation General Hospital, Concord, Australia*

Introduction: The validated CARG Toxicity Score [1,2] estimates the risk of severe chemotherapy toxicity in older adults as low (score 0-5, 30% risk), intermediate (score 6-9, 52% risk) and high (score 10-23, 83% risk).

Objectives: We sought to compare the risk of severe (G3-5) chemotherapy toxicity estimated using the CARG Score with that estimated by the oncologist.

Methods: The CARG Toxicity Score (0-23) was calculated for patients ≥65yrs prior to starting chemotherapy for a solid organ cancer (any stage). Treating oncologists independently estimated the probability of severe chemotherapy toxicity (0-100%) for each patient. This abstract reports the first 70 patients of a larger prospective study comparing the utility of the CARG Score with Oncologists' assessments in predicting chemotherapy toxicity.

Results: Between September 2015 and June 2016, 70 patients from 10 oncologists completed baseline assessments. The median age was 72.5 years (range 65 to 86 years). Most patients were male (47, 67%), having palliative chemotherapy (47, 67%) for stage IV cancer (43, 62%). The most common tumour types were colorectal (29, 42%) and lung (8, 12%). The median CARG Score was 8 (range 0 to 17), with 14 patients (20%) classified as low-risk, 40 (58%) as intermediate-risk, and 15 (22%) at high-risk of severe toxicity using the CARG Score. The median estimate for severe toxicity by oncologists was 40% (range 10-80%) with 30 patients (43%) having a risk estimate of ≤30% and no patients having a risk estimate of ≥80%. The median estimate by oncologists did not differ by CARG Score risk group (Table 1). Estimated risk of severe

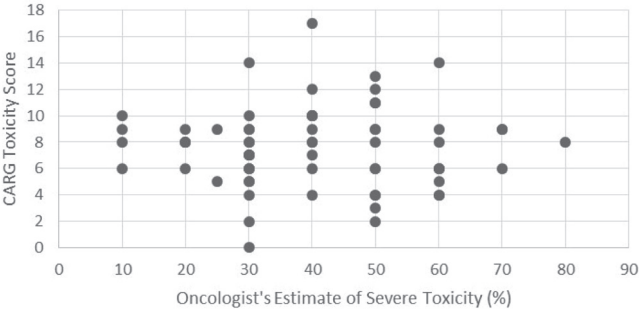


Fig. 1 (abstract P125) – CARG toxicity score by oncologist's estimate of severe toxicity.

toxicity from the CARG Score and oncologists were not correlated (r=0.0031) (Figure 1).

Table 1 (abstract P125) – Oncologist's estimate by CARG Score risk group

CARG Score Risk Group	Number of patients	Oncologist estimate of severe toxicity (median and range)	Rate of severe toxicity expected (Hurria et al (2011))
Low (score 0 to 5)	14	40% (25 to 60%)	30%
Intermediate (score 6 to 9)	40	40% (10 to 80%)	52%
High (score 10 to 19)	15	40% (10 to 60%)	83%

Conclusion: Oncologists' estimates of severe chemotherapy-related toxicity differed from the risk as estimated by the CARG Score. Actual rates of severe toxicity are awaited to determine which method is more accurate at estimating risk.

References:

[1] Hurria A, Mohile S, Gajra A, Klepin H, Muss H, Chapman A, et al. Validation of a Prediction Tool for Chemotherapy Toxicity in Older Adults With Cancer. J Clin Oncol. 2016.

[2] Hurria A, Togawa K, Mohile SG, Owusu C, Klepin HD, Gross CP, et al. Predicting chemotherapy toxicity in older adults with cancer: a prospective multicenter study. J Clin Oncol. 2011;29(25):3457-65.

Disclosure of interest: None declared

Keywords: Chemotherapy toxicity, elderly, Geriatric assessment, prediction models

P126

IMPACT OF A WEEKLY MULTIDISCIPLINARY GERIATRIC ONCOLOGY MEETING ON THERAPEUTIC MANAGEMENT OF OLDER PATIENTS WITH CANCER

R. Moor[1,*], P. Cornette[2], V. Verschaeve[3], G. Debugne[4], Y. Humblet[5], I. Gilard[2], I. Clement Corral[6], P. Betomvuko[6], R. Poletto[7], N. Nols[8], F. Blancke[9], F. Cornélis[5]

[1]Geriatric Oncology, [2]Geriatrics, Cliniques Universitaires Saint-Luc, Bruxelles, [3]Medical Oncology, Grand Hôpital de Charleroi, Charleroi, [4]Geriatrics, Centre Hospitalier de Mouscron, Mouscron, [5]Medical Oncology, Cliniques Universitaires Saint-Luc, Bruxelles, [6]Geriatrics, [7]Geriatric Oncology, Grand Hôpital de Charleroi, Charleroi, [8]Hematology, [9]Geriatric Oncology, Centre Hospitalier de Mouscron, Mouscron, Belgium

Introduction: Close collaboration between oncologists and geriatricians is recommended for optimal care of older patients with cancer. For this purpose, we created a weekly Multidisciplinary Geriatric Oncology Meeting (MGOM).

Objectives: The aim of this study was to assess the impact of a weekly MGOM on therapeutic management of older patients with cancer.

Methods: Multicenter (N=3) observational study including patients ≥70y with cancer for whom anticancer therapy was considered. Patients with a G8 score ≤ 14 underwent a multidimensional Geriatric Assessment (GA). Each patient with GA was discussed at a weekly MGOM gathering at least a geriatrician, an oncologist and a GO care coordinator. A personalized Geriatric Oncology (GO) care plan (including opinion on the proposed anticancer therapy and recommended geriatric interventions) was addressed to treating physicians. Implementation of the care plan was actively coordinated. Three months after MGOM a follow-up was performed. At each step of this pathway data were prospectively collected and statistical analysis was performed.

Results: From March 2013 until February 2015, 1310 patients were screened. G8 score was ≤ 14 in 895 (68.3%) of them. Among these patients mean age was 81.4±6.0 years, 56.6% were female, 88.5% lived at home and 55.0% had professional help/care at home at baseline. Cancer was newly diagnosed in 83.5% and stage-IV disease in 35.4% of patients. Chemotherapy was the most frequently proposed treatment (43.8% of patients). Patients took on average 6.4±3.6 different drugs per day. Mean ADL- and IADL-scores were 9.2±4.5 (Katz scale, /24) and 4.6±2.6 (Lawton scale, /8) respectively. Two fifths (39.3%) of patients experienced at least one fall during the past year. Mean Timed Up and Go was 16.6±9.5 seconds. MMSE and GDS-15 scores were abnormal in 13.8% and 28.2% of patients respectively. Malnutrition or risk of malnutrition was present in 84.9% of patients. Mean ZBI-12 score was 9.7±7.7. Geriatric problems were detected in 97.8% of patients by GA. On average 2.9±1.3 geriatric advices per patient were given. MGOM suggested a modification of the treatment proposition in 18.0% of patients. At follow-up, 85.0% of patients had at least one suggested advice implemented. The mean number of implemented advices per patient was 2.4±1.2. Only in 2.1% of patients, MGOM's opinion on anticancer therapy was not followed by the patient's treating cancer specialist.

Conclusion: The organization of a weekly MGOM is feasible and facilitates the close collaboration between oncologists and geriatricians. In a population of old and frail cancer patients, MGOM leads to a personalized GO care plan with a high level of implemented geriatric advices. This care plan suggested adaptation of cancer therapy in nearly a fifth of patients. We noticed a high level of acceptance of the opinions formulated in MGOM.

Disclosure of interest: None declared

Keywords: Cancer, geriatric advices, geriatric assessment, multidisciplinary meeting

P127

DOES THE VULNERABLE ELDERS SURVEY (VES-13) CORRELATE WITH THE PRESENCE OF GERIATRIC ISSUES AND SYNDROMES IN OLDER ADULTS WITH GENITOURINARY CANCER?

R. Jin[1,*], A. Loucks[1], M. Puts[2], P. Savage[1], T. Stuart-McEwan[1], S. Alibhai[1]

[1]Princess Margaret Cancer Centre, [2]University of Toronto, Toronto, Canada

Introduction: The VES-13 is a screening tool which is effective in identifying vulnerable patients which may not

be apparent to clinicians. Patients scoring 3 or greater are considered to be at higher risk for adverse outcomes (Lillian et al., J Am Geriatr Soc, 2006) and may benefit from a referral to the Geriatric Oncology (GO) clinic. Most patients seen in genitourinary (GU) oncology clinics are older adults, but data are limited on the performance of the VES-13 in identifying older GU patients with geriatric issues or syndromes.

Objectives: To examine whether the VES-13 score differentiates among new older GU cancer patients with or without geriatric issues and syndromes.

Methods: The VES-13 screening was implemented in July 2015 for all new patients with a GU cancer diagnosis who are 75 years of age or older. Independent of VES-13 score, patients could be referred to the GO clinic for assessment based on age (75+) and medical complexity or clinician concern. Patients were stratified into those with low or high VES-13 scores and abnormalities in Comprehensive Geriatric Assessment (CGA) domains (cognitive impairment, comorbidities, functional impairment, falls risk, medication issues, social vulnerability, malnutrition, and depression) were collected prospectively. Descriptive statistics were used to describe the VES-13 scores and CGA results.

Results: From July 2015-May 2016, 53 patients completed the VES-13 in the GO clinic. 15/53 (28%) scored low (0-2) and 38/53 (72%) scored high (≥3). High VES-13 scores were associated with a greater proportion of abnormalities in every CGA domain (Table 1). Of these 53 patients, 2 patients with a low VES-13 score and 3 patients with a high VES-13 score had their existing oncologic treatment plans changed after being assessed in the GO clinic, whereas 0 patients and 4 patients with a low and high VES-13 score without existing treatment plans, respectively, had their plans finalized after the GO clinic.

Table 1 (abstract P127) – Performance of the VES-13 in predicting abnormalities in geriatric domains and presence of geriatric syndromes

Domain	VES-13 Low score (0-2) N=15	VES-13 High score (3-10) N=38
Physical Frailty (SPPB/Grip)	6 (40.0%)	37 (97.4%)
Cognitive Impairment (Mini-Cog)	4 (26.7%)	20 (52.6%)
Comorbidities (Charlson Index)	6 (40.0%)	21 (55.3%)
Functional Impairment (OARS IADLs)	3 (20.0%)	37 (97.4%)
Falls Risk	4 (26.7%)	31 (81.6%)
Medication issues	9 (60.0%)	31 (81.6%)
Social Vulnerability	1 (6.7%)	12 (31.6%)
Malnutrition	3 (20.0%)	12 (31.6%)
Depression (PHQ-9)	1 (6.7%)	11 (28.9%)

Conclusion: In summary, the VES-13 was useful in selecting patients with more deficits in every CGA domain. However, many patients with low VES-13 scores still benefitted from being assessed by the GO clinic. In situations with limited resources, the VES-13 may help identify patients who would benefit most from a geriatric oncology assessment.

Disclosure of interest: None declared

Keywords: Geriatric syndromes, VES-13, vulnerable older adults

P128

FEASIBILITY OF INTRODUCING VULNERABILITY SCREENING IN AN AMBULATORY CANCER CLINIC

R. Jin[1,*], A. Loucks[1], M. Puts[2], P. Savage[1], T. Stuart-McEwan[1], S. Alibhai[1]

[1]*Princess Margaret Cancer Centre,* [2]*University of Toronto, Toronto, Canada*

Introduction: The aging of the cancer population and limited geriatric oncology expertise mean that it is not possible to have every older cancer patient assessed by specialized teams. Vulnerable older adults that score 3 or higher on the Vulnerable Elders Survey (VES-13) have 4 times the risk for death or functional decline over the next 2 years than those that score 0-2 (Saliba D, J Am Geriatr Soc, 2001). Incorporating vulnerability screening to identify those in greatest need in ambulatory oncology clinics has been advocated, but the feasibility of widespread implementation in a large cancer centre has not been explored.

Objectives: To evaluate the feasibility of establishing a vulnerability screening process at the Princess Margaret Cancer Centre, Toronto, Canada to help identify older adults with cancer who would benefit from a specialized evaluation in a newly established geriatric oncology (GO) clinic.

Methods: Based on earlier planning and needs assessments, we began with the genitourinary (GU) oncology site. In July 2015, the GU nurses and oncologists agreed to have new patients, 75 years of age and older, complete the VES-13 independently and return the completed survey to the nurses to calculate the final score. VES-13 scores ≥3 indicated the need for further evaluation and possible referral to the GO clinic. Over a 9-month period, few VES-13 forms were completed and no referrals were received based on abnormal VES-13 criteria. Nurses reported an inability to conduct vulnerability screening in new older adult patients due to intensity of existing workload. Using a rapid design quality improvement perspective, we enlisted the help of the Information Technology group for a one-month period (April 25th-May 20th, 2016) to embed the VES-13 tool into an already existing patient-friendly electronic interface used for symptom screening (DART) to create the Geri-DART. We examined acceptability, completeness, and performance of the VES-13.

Results: From April 25th-May 20th, 199 GU patients aged 75 or older completed the Geri-DART. 60 patients (30%) had a high VES-13 score and 11 reported having had 2 or more falls in the past 12 months. Completeness of the Geri-DART was 97%. The average Geri-DART completion time compared to pre-VES-13 DART remained identical: the average time was 5.62 mins. In semi-structured interviews with patients acceptability of the Geri-DART was excellent. Of the 60 high VES-13 scoring patients, based on further chart-based screening by GO nurses, 30 were not eligible for GO clinic referral for reasons such as palliative status and patient moving. Of the remaining 30 patients, 5 have been booked for assessment, 8 refused, and the remaining are in progress.

Conclusion: The Geri-DART appears to be feasible to implement in the GU site. Thirty percent of patients age 75 or older were vulnerable and half of these were appropriate

to be seen in the GO clinic for detailed assessment. Further study will determine whether such an approach can be implemented in other cancer sites at our institution and whether the screening process can be refined further.

Disclosure of interest: None declared

Keywords: VES-13

P129

THE EFFECT OF COMPREHENSIVE GERIATRIC ASSESSMENT ON TREATMENT DECISIONS AND MORTALITY AMONGST OLDER PATIENTS TREATED FOR UPPER GASTROINTESTINAL CANCER

R. Morris[1,*], J. Pattinson[1], A. Sims[1], J. Brown[1], A. Cowley[1], T. Masud[1]

[1]*Health Care for Older People, Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom*

Introduction: Surgery remains the prime treatment modality for successful treatment of upper gastro-intestinal (UGI) cancer but the complex influences of advancing age, multiple co-morbidities and frailty are often inadequately accounted for in Multi-Disciplinary Team (MDT) decision-making. Comprehensive Geriatric Assessment (CGA) in cancer treatment is gaining prominence as a potential way of informing such decisions and improving outcomes amongst older patients.

Objectives: This prospective cohort study in older adults with Upper Gastro-intestinal (UGI) Cancer aimed to examine the effect of CGA on Cancer Multi-Disciplinary Team (MDT) decision-making and key outcomes.

Methods: Consecutive patients (≥70yrs) referred to the UGI Cancer MDT were invited for assessment in a multi-professional Geriatric Assessment Clinic. All patients were assessed by geriatrician, nurse, occupational therapist, physio-therapist, dietician and social worker. Planned interventions were delivered and followed-up by the CGA team. Treatment modality, surgical length of stay (los), unscheduled acute care episodes and deaths were recorded and compared with a historical control cohort.

Results: 139 CGA patients (65.5% male) were compared with 140 (63.6% male) controls. Age, co-morbidities and cancer diagnoses were similar in both groups. Significantly more patients in the CGA group (38.1%) received potentially curative surgical treatment than in the control group (21.4%) (Chi-square=9.309; p=0.002). In those not treated surgically, a greater proportion of the CGA group received palliative treatment (39.5%) compared to controls (27.3%) (Chi-Square=3.300; p=0.069). There was no significant difference in total use of acute care between the two groups. Six-Month mortality was significantly lower in the CGA group (28.1% vs 45.0%, Chi-square=8.632; p=0.003).

Conclusion: CGA in UGI cancer assessment increases the proportion of older patients receiving potentially curative surgical treatment and active palliation. Six-month survival was significantly greater in the CGA group. There was no apparent cost in terms of increased overall use of acute care.

Disclosure of interest: None declared

Keywords: Comprehensive geriatric assessment, mortality, treatment decisions

P130

MULTIMORBIDITY AND HEALTH OUTCOMES IN OLDER ADULTS: A FOCUS ON CANCER SURVIVORS

D. F. Warner[1], N. K. Schiltz[2], K. C. Stange[3], C. W. Given[4], C. Owusu[5], N. A. Berger[5], S. M. Koroukian[2,*]

[1]*Sociology, University of Nebraska, Lincoln,* [2]*Epidemiology and Biostatistics,* [3]*Department of Family Medicine and Community Health, Case Western Reserve University, Cleveland,* [4]*Department of Family Medicine, Michigan State University, East Lansing,* [5]*Hematology/Oncology, University Hospitals of Cleveland, Cleveland, USA*

Introduction: In the U.S., nearly 14.5 million individuals with a history of cancer were alive as of January 1, 2014; 86% were 50 years of age or older [1]. Similar to the general population, older cancer survivors (CS) are likely to present with multimorbidity (MM), defined here as the co-occurrence of chronic conditions, functional limitations, and geriatric syndromes. Yet, little is known about CS' MM profile, and whether the association between CS and poor health outcomes is due to differential MM.

Objectives: This study has two objectives: 1) to characterize CS' MM profile; and 2) to evaluate the independent association between CS status and health outcomes, including self-rated fair/poor health, worse health in 2 years, and 2-year mortality. We hypothesize that adjusting for MM and potential confounders, CS status remains associated with worse health outcomes.

Methods: We used the 2010-2012 U.S. Health and Retirement Study (HRS), a biennial survey of adults 50 years of age or older. The HRS includes rich self-reported data on socio-demographics; chronic conditions, including cancer and years since diagnosis; functional limitations (e.g., limitations in mobility, strength), and geriatric syndromes (e.g., poor cognitive functioning, severe pain). We constructed a composite measure, MM0-MM3, reflecting the occurrence/co-occurrence of chronic conditions (excluding cancer), functional limitations, and geriatric syndromes, with MM0 indicating none of these conditions, and MM3 indicating the co-occurrence of chronic conditions, functional limitations and geriatric syndromes. Our main independent variable was CS status, indicating the individual reported a (non-skin) cancer diagnosis ≥2 years prior to the interview. In addition to descriptive analyses, we conducted multivariable logistic regression analyses to evaluate the association between CS status and health outcomes, after adjusting for potential confounders. We also examined whether the effect of CS differed by years since diagnosis.

Results: Our study population included 15,808 older adults; 11.8% were CS. The median age was 70.1 and 63.8 years among CS and CFIs, respectively; 55.1% were women; and 21.3% were non-white. Thirty one percent of CS and 21.1% of CFIs presented

with MM3. More CS than CFIs reported fair/poor health (32.9% and 22.0%). Similarly, 2-year worse health and 2-year mortality were higher in CS than in CFIs (28.5% vs. 20.5%, and 6.6% vs. 2.7%, respectively). All comparisons were significant at $p < 0.02$. Adjusting for MM and other confounders, CS was associated with a greater likelihood to report fair/poor health (adjusted Odds Ratio 1.7 (95% confidence interval: 1.5, 2.0), and worse health in 2 years (1.2 (1.1, 1.4)). Similarly, CS were more likely to die in the 2 years following interview (1.5 (1.2, 2.0)). The effect of CS appears to decline with years since diagnosis for fair/poor health and 2-year mortality, but CS view their health as worse than CFIs regardless of years since diagnosis.

Conclusion: CS status is associated with greater MM and with worse health outcomes, even after adjusting for potential confounders. Given the increase in CS and their improved life expectancy, it is important to determine whether CS perceive worse self-reported due to their past challenges, or whether it reflects unmeasured conditions, such as fatigue. Remedial measures can be taken accordingly to improve their health status.

Reference:

[1] DeSantis CE, et al. Cancer Treatment and Survivorship Statistics, 2014. CA Cancer J Clin, 2014; 64:252-271.

Disclosure of interest: D. Warner: None declared, N. Schiltz: None declared, K. Stange: None declared, C. Given: None declared, C. Owusu: None declared, N. Berger: None declared, S. Koroukian Grant/Research Support from: Agency for Healthcare Research and Quality (R21 HS02113)

Keywords: Multimorbidity, survivorship

P131

TRAJECTORIES OF FUNCTIONAL LIMITATIONS AND HEALTH STATUS BY CANCER SURVIVOR STATUS: DOES THE GAP CLOSE WITH LONGER SURVIVORSHIP?

D. F. Warner[1], N. K. Scihltz[2], K. C. Stange[3], C. Given[4], C. Owusu[5], N. A. Berger[6], S. M. Koroukian[2,*]

[1]*Sociology, University of Nebraska, Lincoln,* [2]*Epidemiology and Biostatistics,* [3]*Family Medicine and Community Health, Case Western Reserve University, Cleveland,* [4]*Family Medicine, Michigan State University, East Lansing,* [5]*Hematology/ Oncology,* [6]*Hematology/Oncology, University Hospitals of Cleveland/Case Medical Center, Cleveland, USA*

Introduction: Advances in early cancer detection and treatment have yielded significant improvements in survivorship, as attested by the increasing population of cancer survivors (CS). As of January 1, 2014, there were 14.5 million cancer survivors, and 86% were 50 years of age or older [1]. As they grow older, CS will experience an increased likelihood to develop other co-occurring chronic conditions and/or geriatric syndromes, similar to cancer-free individuals (CFIs). Given that cancer treatment may be associated with depletion of health reserves, it is likely that CS will experience more functional limitations and poorer self-rated health (F/H) outcomes, especially during the active treatment period and shortly thereafter.

Objectives: We examine the differential in F/H outcomes between CS and CFIs over time, as individuals recover from the toxic treatment effects.

Methods: We use self-reported data on 50 to 85 year olds from the nationally-representative 1992-2012 Health and Retirement Study (HRS), a biennial panel of older adults age 50 and over. Our focal independent variables are CS status and years since cancer diagnosis. Our outcomes are functional limitations (a count of 12 mobility, lower body and upper body impairments) and self-rated health status (0="excellent" to 5="poor"). Controls include socio-demographics, household income, health insurance coverage, health behaviors (e.g., smoking, alcohol use), non-cancer chronic conditions (e.g., hypertension, diabetes), geriatric syndromes (e.g., poor cognitive functioning, sensory impairment), the number of follow-up interviews, and whether the respondent died during the panel. In addition to descriptive analysis, we estimated multivariate random coefficient growth curve models to examine intra-individual change in F/H outcomes for CS and CFIs over time, adjusting for potential confounders.

Results: Our study population included 23,053 individuals contributing 116,734 observations. 12.1% were CS, 55.5% were women, and 26.7% were non-white. The median follow up period was 14 years. While older adults report more functional limitations and poorer self-rated health with age, CS had slightly more limitations (intercept (b)=.61, 95% CI (.41,.82)) and rated their health poorer than similarly aged CFIs (Adjusted odds ratio=2.56 (2.05, 3.19)), adjusting for potential confounders. While the gap between CS' and CFIs' trajectories reduced over time, it persisted even 10 years after cancer diagnosis. Although CS had more (non-cancer) chronic conditions and geriatric syndromes than CFIs, these did not explain the gaps in F/H outcomes. CS' greater functional limitations also did not explain their poorer self-rated health.

Conclusion: CS status is associated with functional limitations and poorer self-rated health, even after adjusting for confounders. Although the effects of cancer on health outcomes are greatest in the period immediately after diagnosis, CS continue to have worse health outcomes even 10 years after diagnosis. The gap in F/H outcomes for CS and CFIs is not due to differences in co-occurring chronic conditions or geriatric syndromes, nor is it due to differences in sociodemographic or other characteristics. These results suggest that cancer survivorship is associated with long-lasting negative health consequences. Further studies are needed to examine explanatory factors.

Reference:

[1] DeSantis CE et al. Cancer Treatment and Survivorship Statistics, 2014. CA Cancer J Clin, 2014; 64: 252-271.

Disclosure of interest: D. Warner: None declared, N. Scihltz: None declared, K. Stange: None declared, C. Given: None declared, C. Owusu: None declared, N. Berger: None declared, S. Koroukian Grant/Research Support from: Agency for Healthcare Research and Quality R21 HS023113

Keywords: Functional limitations, health trajectory, survivorship

P132

BARRIERS TO GOOD MEDICATION TAKING BEHAVIOUR IN METASTATIC PROSTATE CANCER PATIENTS RECEIVING ORAL ANTI-ANDROGEN THERAPY

S. Ahrari[1,2,*], K. Farr[1], L. Buddo[1,3], A. Thawer[1], A. Giotis[1], M. Puts[4], C. De Angelis[1,2]

[1]*Pharmacy, Sunnybrook Odette Cancer Centre,* [2]*Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto,* [3]*Pharmacy, University of Waterloo, Waterloo,* [4]*Lawrence S Bloomberg Faculty of Nursing, University of Toronto, Toronto, Canada*

Introduction: Oral anti-cancer medication adherence is of increasing concern.The metastatic castrate resistant prostate cancer population (mCRPC) is generally older, with multiple co-morbidities and medications. These increase barriers to medication adherence.

Objectives: To better understand adherence barriers adherence in mCRPC and identify counseling strategies that mitigate them.

Methods: This prospective, exploratory mixed-methods study included men with mCRPC starting abiraterone or enzalutamide. After medication counseling, participants completed validated questionnaires and medication lists, then were interviewed at 24 hours and 1 month about their medications.

Questionnaires and demographics was summarized using descriptive statistics.Semi-structured interviews were analyzed for underlying themes of effective counseling.

Results: We evaluated 12 patient responses. Most understood their medications and had good health literacy and cognitive function. Median age was 77, with three co-morbidities, seven chronic medications, and strong caregiver support at home. In addition, most patients had positive beliefs about medications and good baseline adherence. Despite positive characteristics, there was an identified gap in medication counseling efficacy.

First, participants stressed the benefit of having drug information repeated by multiple providers. In addition, good medication adherence was associated with tailored counselling, wherein providers discussed good medication taking behaviours in the context of individual daily life.

Second, most participants recalled general side effects and safe handling instructions, but did not recall specific side effects or management strategies. This is an important consideration when assessing medication understanding.

Finally, participants had mixed responses regarding drug information sheets. Usage varied, although participants appreciated pharmacists highlighting important points as it provided visual cues that guided drug education sessions.

Conclusion: In order to maximize the benefit of medication counseling, health providers should mark information sheets with important points to tailor education. Tailoring improves information recall and improves medication adherence. In addition, breaking counseling sessions into topic-based chunks improves the flow of counseling and provides time for patients to absorb information, thus improving confidence. Regardless of how confident providers are in a patient's ability to understand their treatment, there are clear barriers that need to be overcome in order to ensure safe and efficacious use of oral anti-cancer agents.

References:

[1] Canadian Cancer Society.Toronto.Prostate cancer statistics;2014.

[2] D'amato S. Improving Patient Adherence with Oral Chemotherapy. Oncology Issues. Jul/Aug 2008, 42-5.

[3] Gebbia V et al.Adherence, compliance and persistence to oral antineoplastic therapy. Expert Opin Drug Saf. 2012;11(S1):S49-59.

[4] Sandelowski M. Sample size in qualitative research. Res Nurs Health. 1995 April; 18(2):179-183.

[5] Mathes, T et al. Adherence enhancing interventions for oral anti-cancer agents: A systematic review. Cancer Treat Rev.2013;40(1):102-8.

[6] Ritchie J, Lewis J. Qualitative Research Practice: A Guide for Social Science Students and Researchers. London, UK: SAGE Publications; 2003. Chapter 4, Designing and Selecting Samples. p.77-108.

[7] Thorne S et al. Interpretive Description: A Noncategorical Qualitative Alternative for Developing Nursing Knowledge. Res Nurs Health.1997;20(2):169-77.

Disclosure of interest: S. Ahrari: None declared, K. Farr: None declared, L. Buddo: None declared, A. Thawer: None declared, A. Giotis: None declared, M. Puts: None declared, C. De Angelis Grant/Research Support from: Astellas Canada

Keywords: Anti-androgen therapy, medication adherence, oral anti-cancer medication, patient counseling, prostate, bladder, kidney, genitourinary cancers

---

P133

THE DEVELOPMENT OF DISTRESS IN OLDER PATIENTS WITH CANCER IN THE MID-LONG TERM

S. Dauphin[1,*], T. De Burghgraeve[1], F. Buntinx[1,2], M. van den Akker[1,2]

[1]*Department of General Practice, KU Leuven, Leuven, Belgium,* [2]*Department of Family Medicine, Maastricht University, Maastricht, Netherlands*

Introduction: Older patients with cancer suffer from a variety of psychosocial problems and distress is one of them. However, we know little about the evolution of distress over time (up to three years after diagnosis) and the influence of baseline characteristics on levels of distress.

Objectives: To describe the evolution of distress over time (up to three years after diagnosis) and examine the influence of baseline characteristics on levels of distress.

Methods: The KLIMOP study is an ongoing prospective Flemish - Dutch cohort study. The cohort consists of older patients with cancer (≥ 70 years) and 2 control groups: middle-aged patients with cancer (50-69 years) and older people without cancer (≥ 70 years). Through the use of a questionnaire we gathered data from the validated Distress Barometer. Data was collected shortly after diagnosis (baseline, N = 1496) and three years (preliminary data) after baseline. The data is analyzed with SPSS 23 using logistic regression.

Results: Results will be presented during the SIOG 2016 Annual Conference. The development of distress among older patients and middle-aged patients with cancer and older people without cancer from the time of diagnosis until three years after diagnosis will be described. Differences over time and between groups will be tested. Preliminary results show that older patients with cancer experience a continuing steady decline in distress levels from the moment of diagnosis until after one year. However, at three years after baseline levels of distress increase and become higher than in the two control groups. We will examine baseline characteristics to see if they shed light on this unexpected increase of levels of distress in the mid-long term.

Conclusion: The results will provide insight into the development of distress over time in older patients with cancer and the people from the control groups. Additionally, we will learn more about characteristics that influence rising distress levels for older patients with cancer. The results will expand our knowledge regarding prevention of psychosocial problems such as distress in the mid-long term.

Disclosure of interest: None declared

Keywords: Cancer survivors, cohort study, distress and psycho-social issues

P134
THE UK GERIATRIC ONCOLOGY EXPERT REFERENCE GROUP (ERG) CONSENSUS ON CGA SCREENING

T. Kalsi[1,2,*], D. Harari[1,2] and The UK Geriatric Oncology Expert Reference Group

[1]*Department of Ageing & Health, Guys & St Thomas' NHS Foundation Trust,* [2]*Division of Health and Social Care Research, Kings College London, London, United Kingdom*

Introduction: Studies evaluating how to effectively deliver CGA screening tools in older cancer patients across a range of real-time healthcare systems are lacking. Whether these tools are acceptable, widely adopted, used as intended, cost effective or sustainable at a national level is largely unknown.

Objectives: To use a validated process to reach the first UK consensus on a relevant and potentially implementable CGA screening tool to be tested throughout NHS cancer services.

Methods: The UK Geriatric Oncology Expert Reference Group (ERG) in association with Macmillan Cancer Support used the nominal group technique (validated consensus development method). The ERG were front line clinicians including oncologists, geriatricians, nurses, surgeons and trainees. A group of older cancer patients were also included in the process. First consensus round used an anonymised online survey where agreement to a number of statements was ranked from 1 (strong disagreement) to 9 (strong agreement), with invitation to add free comment. The content of the statements included were based on existing evidence plus feedback from a nationwide UK survey of current assessment methods and what providers would want to use for older people with cancer. Second round was a face to face group meeting with presentation of first round responses and detailed discussions of each statement at the end of which consensus was reached.

Results: There was a clear preference towards a pragmatic and practical tool that was brief and included clinically relevant questions rather than using published tools (e.g. G8, Edmondton Frailty Scale, Charlson Comorbidity Index). The consensus CGA screening tool includes some clinician completed CGA tasks and a patient questionnaire (Table 1).

Table 1 (abstract P134)

Clinician Completed Items
Comorbidities from GP records (yes/no)
Cardiac, respiratory, liver, chronic kidney, neurological disease
Diabetes
Hypertension
Thrombosis
Dementia
Depression/anxiety/mental health
Deafness
Medication list from GP
Abbreviated mental test score (validated 10 item tool)
Weight/BMI
Patient Completed Questionnaire (yes/no/don't know)
Recent weight loss and/or poor appetite
Memory loss or confusion
Depression, anxiety or any mental health problem
Hearing difficulty
Urinary incontinence
Faecal incontinence
Falls from standing height
Difficulty standing/walking/use of walking aid
Problems with public transport, shopping, using telephone, climbing stairs
Live alone
Is there someone to help out if needed
Carers
Caregiver for others

Conclusion: The UK Geriatric Oncology ERG have reached consensus on a pragmatic CGA screening tool to be pilot tested in a nationwide real-life feasibility test.

Disclosure of interest: None declared

Keywords: Consensus, geriatric assessment, screening

P135
UK ASSESSMENT METHODS AND SERVICES FOR OLDER PEOPLE WITH CANCER: A NATIONAL SURVEY

T. Kalsi[1,2,*], D. Harari[1,2]

[1]*Department of Ageing & Health, Guys & St Thomas' NHS Foundation Trust,* [2]*Division of Health and Social Care Research, Kings College London, London, United Kingdom*

Introduction: The UK Independent Taskforce report "Achieving World-Class Cancer Outcomes: A Strategy For England 2015-2020" [1] calls for improved assessment methods for older people in the UK and increased collaborative working with geriatricians. However, to improve practice, it is essential to first describe current practice to identify where the gaps are and how to best address them. It is not know what assessment methods for older people are currently employed

in cancer services across the UK, nor the prevalence of existing dedicated geriatrics services for cancer patients, nor whether urgent access to relevant professionals is available.

Objectives: To identify current assessment methods used for older people in UK cancer services and to identify current access to relevant services.

Methods: Online survey (Survey Monkey) of oncologists, geriatricians, oncology nurses, surgeons, allied health care professionals and others distributed via a number of UK professional societies including the Association of Cancer Physicians, Royal College of Radiologists, British Geriatrics Society, UK Oncology Nursing Society and others. Respondents were asked a number of questions regarding current assessment methods for older people and access to geriatricians and other relevant services.

Results: 640 health care professionals responded to the survey between January to April 2016. Current assessment methods were largely history taking (98%) and using performance status (90%). Published scoring tools were not frequently used (34%). Most respondents reported they would not consider using many of the common validated tools to apply to clinical practice including the G8, frailty and comorbidity scores. Only 14% often/always had geriatricians involved in the assessment of an older people in cancer services. Few had urgent access available to key professionals including only 25% having urgent access to geriatrician, 25% urgent access to social workers, 27% urgent access to psychological support, 16% urgent access old age psychiatry input and 17% urgent access to specialist nurses in older people. Although 15% reported to have some dedicated geriatrics services for cancer patients, many of these services were reported to be funded by temporary charity funding questioning whether some of these services will be sustained. 70% of respondents had interest in further developing services linking older patients in cancer services to geriatricians.

Conclusion: Traditional methods of clinical assessment were favoured to completing tools. This may suggest that any tool applied to the UK should be brief and focus around clinical history to have clinician buy-in to use it. Urgent geriatrician access is sparse therefore models of care to deliver improved assessments and CGA interventions must involve up-skilling cancer services.

Reference:

[1] Independent Cancer Taskforce (2015) Achieving World-Class Cancer Outcomes A Strategy For England 2015-2020 Report. Available at: https://www.cancerresearchuk.org/sites/default/files/achieving_world-class_cancer_outcomes_-_a_strategy_for_england_2015-2020.pdf (last accessed 14th June 2016)

Disclosure of interest: None declared

Keywords: Access to services, geriatric assessment, survey

P136

ONCOLOGICAL SURGERY IN AGED 80 OR MORE: PREDICTORS OF FUNCTIONAL DECLINE AND MORTALITY IN ONE YEAR

L. A. Gil-Jr[1], T. Karnakis[1,*], A. L. Kanaji[1], B. A. Martins[1], J. C. Oliveira[2], M. D. C. Sitta[3], W. Jacob-Filho[3]

[1]*Geriatrics,* [2]*Internal Medicine, Cancer Institute of Sao Paulo,* [3]*Geriatrics, University of Sao Paulo, Sao Paulo, Brazil*

Introduction: Surgical treatment is the main treatment for solid tumors. However, there is enough evidence that the geriatric population does not receive the potentially curative treatment when compared to younger population. It is still necessary to assess the impact of Global Geriatric Assessment on the ability to predict perioperative complications, morbidity and mortality in a cancer population over 80 years.

Objectives: To analyze predictors of functional decline and mortality in 12 months in octogenarians with solid tumors undergoing cancer surgery, at Cancer Institute of São Paulo, in the year 2013 through the components of the Global Geriatric Assessment (CGA).

Methods: Prospective cohort study of patients undergoing non-emergency cancer surgery and evaluated the preoperative period for Perioperative service in the São Paulo State Cancer Institute.

Results: 492 patients were evaluated in the Surgical Risk Geriatrics Clinic from January 2013 to May 2014. Of these 81 patients did not undergo any surgery within 3 months following the evaluation and 153 operated outside the period of interest of the study (June-13 to May-14). Remaining 258 patients were properly screened for eligibility criteria. 60 patient were excluded (15 local anesthesia, 16 incomplete records and 29 for other reason). Of the 198 patients evaluated, only one refused to participate in the research being deleted before collecting other information.

Mean age was 83.8 (±3.5)and 57,9% were male. Most common cancers were urinary tract with 23.9%, followed by gastrointestinal (16.2%), skin (14.7%) and breast (14.2%). 10.7% were metastatic cancer.

Survival analysis using as outcome the time to death in days demonstrate that variables that were independently correlated to the time to death were IADL with HR = 0.82 (95% CI = 0.74, 0.92) p = 0.001 and MMSE with HR=12:24 (95% CI=0:06;0.92), p = 0:04.

Table 1 (abstract P136)

Logistic Regression	Functional Decline		
MMSE	OR=0,14	IC 0,025–0,86	p=0,034
Lawton (IADL)	OR=0,73	IC 0,63-0,86	p< 0,001
Charlson	OR = 2,04	IC 1,01-4,2	p=0,044
Male	OR = 0,073	IC 0,01-0,5	p=0,043
	Mortality		
MMSE	OR 0,049	IC 0,005-0,48	p=0,01
Lawton	OR 0,68	IC 0,54-0,87	p=0,002

Conclusion: Consistently with previous findings for perioperative complications and mortality we found strong correlation of functional loss and mortality in a year, with

preoperative impairment of IADL, cognitive impairment (assessed by MMSE) and gripstrengh test used in fragility assessment in several studies. Charlson also were predictive of greater functional loss.

We conclude that the CGA are valuable tool in predicting functional loss at 1 year and mortality related to cancer surgery in elderly over 80 years. Although randomized clinical trials are needed to demonstrate the impact of this intervention in surgical outcomes in medium and long term.

References:

[1] Duron JJ, et al. Risk factors for mortality in major digestive surgery in the elderly: a multicenter prospective study. Ann Surg 2011;254(2):375-82.

[2] Liu JJ, Extermann M. Comprehensive geriatric assessment and its clinical impact in oncology. Clin Geriatr Med 2012;28(1):19-31.

[3] Pope D, Ramesh H, Gennari R, Corsini G, Maffezzini M, Hoekstra HJ, Mobarak D, Sunouchi K, Stotter A, West C, Audisio RA. Pre-operative assessment of cancer in the elderly (PACE): a comprehensive assessment of underlying characteristics of elderly cancer patients prior to elective surgery. Surg Oncol 2006;15(4):189-97.

[4] Megan A. Feng et al. Geriatric assessment in surgical oncology: A systematic review. J Surg Res 2015;193(1):265-72.

Disclosure of interest: None declared

Keywords: Geriatric assessment, perioperative, surgery

P137
THE LONGITUDINAL USE OF GERIATRIC ASSESSMENT IN AN ONCOLOGY CENTER IN BRAZIL: A PILOT STUDY IN PATIENTS WITH BREAST CANCER

T. Karnakis[1,*], R. Kaliks[2], A. Del Giglio[3], W. Jacob Filho[4]

[1]Geriatrics, ICESP, [2]Oncology, [3]Albert Eisntein Hospital, [4]Geriatrics, University of São Paulo, São Paulo, Brazil

Introduction: The Cancer and aging are integrally related and show an inexorable rise in developed and developing countries. In Brazil, breast cancer is the most common in women with increased incidence and mortality in the elderly population. The Comprehensive Geriatric Assessment (CGA) is an instrument used with insurance by geriatricians to stratify elderly between different levels of weaknesses and aims to determine the disabilities for an individual plan of care.

Objectives: To evaluate the usefulness of CGA and its applicability as longitudinal monitoring instrument in older women with breast cancer in Brazil.

Methods: Cohort study, prospective in elderly women with ≥ 60 years, originated from the public health system, newly diagnosed breast cancer and they would start cancer treatment. The patients were followed for two years and evaluated by the parameters of CGA : Charlson Comorbidity Index (CCI); Activities of Daily Living (ADL); Instrumental Activities of Daily (IADL); Mini Mental State Evaluation (MMSE); Geriatric Depression Scale (GDS); Mini Nutritional Assessment (MAN) and Edmonton Symptom Assessment Scale. The CGA occurred every four months in the first year and after 2 years of diagnosis

Results: 20 elderly women with average age of 70.2 (±7.03), received a total of 97 GA in the course of two years. CGA identified new weaknesses in 90% of cases, with expansion of the clinical conduct, and 45% of patients had cancer treatment modified after the evaluation. As monitoring instrument, there was a downward trend in the number of new diagnoses after each AGA conducted over two years

Conclusion: This study validates the importance of using the AGA in the elderly population with breast cancer in Brazil to identify weaknesses and suggest changes in cancer treatment plan. New studies in various cancers and longer follow-up are needed to assess the impact of AGA in the elderly undergoing cancer treatment.

References:

[1] Puts MT, Santos B, Hardt J, Monette J, Atenafu EG, Girre V et al. An update on a systematic review of the use of geriatric assessment for older adults in oncology. Ann Oncol 2014;25(2): 307–315.

[2] Terret C, Zuliam G, Naiem A, Albrand G. Multidisciplinary approach to geriatric oncology patient. J Clin Oncol. 2007; 25(14):1876-1881.

Disclosure of interest: None declared

Keywords: Breast cancer, geriatric assessment, elderly patients

P138
ASSESSMENT OF OLDER PATIENTS WITH CANCER: EDMONTON FRAIL SCALE (EFS) AS A PREDICTOR OF ADVERSE OUTCOMES IN OLDER PATIENTS UNDERGOING RADIOTHERAPY

T. Ryan[1], L. Keenan[1,*], M. O'Brien[2], O. McCardle[1]

[1]Radiation Oncology, SLRON, [2]Geriatrics, Beaumont Hospital, Dublin, Ireland

Introduction: In recent years, geriatric oncologists have been investigating the usefulness of a comprehensive geriatric assessment (CGA) tool to assess an elderly patient's suitability for treatment. The CGA is an extensive multi-disciplinary assessment tool, taking an hour per patient to complete, impractical in a busy oncological setting. Shorter assessment tools have been proposed to assess older patients' suitability for treatment, such as the Edmonton-Frail-Score (EFS). The EFS is a brief, valid, reliable, bedside screening test that can be completed by a lay researcher and aims to measure frailty. It includes all the main areas of a CGA (cognitive status, social well being, physical fitness, co-morbidities, level of independence, nutritional status.)

Objectives: A prospective single arm observational study which examining the EFS as a predictor of adverse events in older patients undergoing RT in Ireland. It aims to determine the incidence of adverse events in older patients undergoing RT (treatment toxicity, unplanned admissions, break in RT treatment.)

Methods: Patients were over 70 years of age with a diagnosis of cancer, deemed fit for radical RT after assessment by Consultant radiation oncologist. Pre-treatment, the EFS questionnaire was carried out with each patient. Post-treatment, the incidence and severity (CTCAE V3.0 grading) of all adverse events were recorded.

Results: From January 2013 to August 2015, 67 patients took part in the study, 63 eligible for inclusion. Aged 70–95yrs, (Mean= 75.8).

Primary oncological diagnosis: prostate (34%/n=21), breast (22%/n=14), (14%/ n=9), upper GI (8%/n=5), lung (6%/n=4), rectal (5%/n=3), gynaecological (3%/n=2). Non metastatic disease (96.8%/n=61).

EFS scores ranged from 0-9, (mean=4). 'Not frail' (70%/n=44), 'Vulnerable' (19%/n=12) and 'Mild frailty' (11%/n=7) categories. No patients in the mod-severe frailty categories.

Patient outcomes: multiple (2+) Grade 1 or 2 toxicities seen in 76% (n=48). Grade 3 or 4 toxicities recorded in 29% (n=18). Multiple grade 3 or 4 toxicities in4.7% (n=3). Unplanned breaks in treatment were necessary in 3%/n=2. 22%/n=14 were admitted for treatment. By target site patients with upper GI, lung, gynaecological or malignancies had a high rate of toxicity/admission.

There was no statistical correlation between EFS score and the presence of Grade 3/4 toxicities/admission. Medium positive correlation between age and EFS existed, with older age associated with a higher EFS (rho=.41, n= 63, p.001). Medium positive correlation between grade 3/4 toxicity and RT dose, with higher RT dose associated with grade 3+ toxicity (rho=.35, n= 63, p.005)

Conclusion: This study showed that neither EFS score, age nor ECOG performance status were predictive of RT toxicity. There was no greater incidence of breaks in treatment or admissions in the older or frailer groups. However, there was a higher rate of toxicity/admission in certain target sites than would be expected in the general population. This study was limited by its small study size and also that patients referred were of good performance status. Whilst no statistically significant correlation could be found between frailty and RT toxicities, this study does highlight the potential for further investigation in specific radiotherapy sites in the older population.

Disclosure of interest: None declared

Keywords: Edmonton Frail Scale, geriatric assessment

P139

TRAINING MEDICAL ONCOLOGISTS TO ADDRESS THE NEEDS OF AGING CANCER PATIENTS

T. Hsu[1,*], W. Dale[2], A. Gajra[3], H. M. Holmes[4], E. R. Kessler[5], R. Maggiore[6], A. Magnuson[7], I. Parker[8], A. Hurria[9]

[1]*The Ottawa Hospital Cancer Centre, Ottawa, Canada,* [2]*University of Chicago Medical Center, Chicago,* [3]*Upstate Cancer Center, Syracuse,* [4]*University of Texas Health Science Center at Houston, Houston,* [5]*University of Colorado School of Medicine, Aurora,* [6]*Oregon Health and Science University, Portland,* [7]*University of Rochester Medical Center, Rochester,* [8]*ElderCare Mediation Solutions, La Jolla,* [9]*City of Hope National Comprehensive Cancer Center, Duarte, USA*

Introduction: Older adults comprise 60% of newly diagnosed cancer cases and 70% of all cancer deaths. There are insufficient geriatricians to care for all older adults. Therefore all oncologists need a basic knowledge of geriatric issues to better meet the needs of older cancer patients. Unfortunately, up to 2/3 of oncology trainees report never receiving training on the needs of older patients with cancer and there is no formal consensus about what geriatric oncology competencies a medical oncology trainee should possess.

Objectives: The objective of this study was to identify a minimal set of competencies medical oncology trainees should possess in geriatric oncology.

Methods: A modified Delphi survey of experts in geriatric oncology and oncology medical education in North America was conducted. Geriatric oncology experts were identified through the Cancer and Aging Research Group membership. Program directors of North American oncology training programs were contacted. Snowball sampling was used to identify further oncology education experts. Invitations to potential experts continued until 15-20 experts from each category agreed to participate.

Potential geriatric oncology competencies were identified through a review of existing studies and of the American Society of Clinical Oncology and European Society of Medical Oncology core oncology curriculum. Experts were asked to categorize when the proposed competencies should be attained: on completion of internal medicine training, oncology training, or geriatric oncology training. Results were fed back to the experts who were asked to re-classify the competencies in subsequent rounds. Consensus was obtained if 2/3 of the experts agreed on the stage of training at which the competency should be attained.

Results: Thirty-three experts in geriatric oncology (n=18) and oncology education (n=15) participated in the Delphi. Respondents were trained in oncology (73%) and geriatrics (36%), or both (19%); 52% were in practice for 5-10 years and 26% for ≥20 years. Most respondents (55%) spend <5 h/week involved in oncology education while 23% spend 5-10 h/week.

An initial list of 46 potential competencies were identified by the investigators spanning 6 domains (aging and cancer interface; prescribing systemic therapies in older adults; geriatric assessment; geriatric oncology knowledge base; geriatric syndromes; psychosocial needs and survivorship). Respondents suggested 22 additional competencies, which were incorporated the Delphi. Following two rounds of ranking, 46% (n=36) of proposed competencies were ranked as appropriate for oncology trainees to obtain. Strongest consensus (≥90% agreement) was for the following competencies:

- Describe biological and psychosocial changes that occur with aging and their implications regarding cancer and cancer care
- Recognize the heterogeneity of aging in older adults with cancer
- Describe factors that may impact an older person's preferences with respect to cancer therapy

- Identify risk factors for chemotherapy toxicity in older adults with cancer and manage treatment accordingly

A final round of the Delphi is being conducted to confirm the consistency of these findings and the final list of geriatric oncology competencies will be presented.

Conclusion: Experts in both geriatric oncology and oncology education agreed upon a set of geriatric oncology competencies that are appropriate for oncology trainees. These results will form the groundwork for the development of a geriatric oncology curriculum for medical oncology trainees and oncologists.

Disclosure of interest: None declared

Keywords: Competencies, Delphi consensus, education, medical oncology

---

P140

GERIATRIC RESEARCH POLICY OF THE JAPAN CLINICAL ONCOLOGY GROUP

T. Mizutani[1,*], K. Nakamura[1], A. Ogawa[2], T. Hmaguchi[1], H. Fukuda[1], F. Nagashima[3]

[1]National Cancer Center, Tokyo, [2]National Cancer Center Hospital East, Chiba, [3]Kyorin University School of Medicine, Tokyo, Japan

Introduction: The goal of the Japan Clinical Oncology Group (JCOG) is to establish better standard treatments for various cancer types and has thus conducted several pivotal randomized controlled trials. Due to the rapidly increasing ageing population in Japan, clinical research focused on elderly cancer patients is urgently needed. We have therefore organized the Geriatric Study Committee (GSC) in JCOG to develop a geriatric research policy.

Objectives: The missions of the GSC are as follows (1) to define the subject selection policy of geriatric research in JCOG trials; (2) to establish the standard endpoints and methodological schemes for geriatric research and (3) to determine the standard tools of geriatric assessment (GA).

Methods: Therefore, the GCS have held quarterly meetings since 2014 with members from each disease/modality-oriented JCOG subgroup. The policy (in Japanese) developed by the GCS has been extensively reviewed by Executive Committee members of the JCOG and was activated in May 2016.

Results: (1) We defined the subject selection policy of geriatric research by treatment tolerance and chronological age. We categorized elderly cancer patients into three conceptual groups: 'fit elderly cancer patients' who can undergo standard treatments as for younger patients; 'frail elderly patients' for whom best supportive care or palliative care is indicated and 'vulnerable elderly patients'; those between 'fit elderly patients' and 'frail elderly patients'. Our main target for geriatric research is the group of 'vulnerable elderly patients'.

(2) The endpoints of geriatric research should include some GA components, such as physical and cognitive function, in addition to survival data. From this viewpoint, 'co-primary endpoints' or 'composite endpoints' incorporating GA into the decision rule is often applicable. Furthermore, we classified typical study designs for the elderly adopted in JCOG into (i) a randomized controlled trial to establish standard treatments specifically for elderly cancer patients, (ii) a single arm trial to extrapolate the results of pivotal trials for the younger population to elderly cancer patients and (iii) an observational study for the broader population to explore predictive factors for survival, functional impairment, or QOL decline.

(3) We determined recommended GA tools from the viewpoint of simplicity and discriminative power. G8, a geriatric screening tool, is to be used in all JCOG geriatric research. Instrumental activities of daily living (IADL), Charlson comorbidity index (CCI), MINI-COG and the social situation are also strongly recommended. Other appropriate tools can be applied depending on the purpose of each disease/modality-oriented study.

Conclusion: This JCOG Geriatric Research Policy identified various issues, which commonly occur in geriatric research. We expect that this policy would serve as a practical framework in planning future geriatric research.

Disclosure of interest: None declared

Keywords: Geriatric research, policy

P141

COUPLES COPING WITH CANCER IN THE PLATINUM STAGE OF LIFE: OLDEST-OLD AND THEIR SPOUSAL CAREGIVERS

G. Goldzweig[1], E. Andritsch[2], R. Pfeffer[3], L. Baider[3], Y. Rottenberg[4,*]

[1]School of Behavioral Sciences, Tel-Aviv-Yaffo Academic College, Tel-aviv, Israel, [2]Division of Clinical Oncology, The medical University of Graz, Graz, Austria, [3]Assuta Medical Center, Oncology Institute, Tel-aviv, [4]Hadassah - Hebrew University Medical Center, Jerusalem, Israel

Introduction: The share of the oldest-old (age 86 years old and above) in the population is estimated to grow rapidly in the next decades. Yet not much is known about this population's adaptation to cancer.

Objectives: The objective of the current study is to describe the psychological reaction of the oldest-old and their spousal caregivers to cancer.

Methods: Participants were 45 cancer patients, aged 86 years old or above and their spousal caregivers. Participants completed standardized questionnaires for depression (5-item GDS), distress (Distress Thermometer), hope (Snyder's Hope Scale) and social support (CPASS).

Results: Patients reported extremely high levels of distress and low levels of hope. Patients reported high levels of hope in regard to feeling no pain and to dying without pain but low levels of hope in regard to staying alive. Spouses reported significantly lower levels of distress and higher levels of hope. Patient distress measures were positively correlated with caregiver levels of hope. There was a significant negative correlation between caregiver levels of distress and social support from friends.

Conclusion: The oldest-old patients turn their attention inward; they expect to stay at home with their families and to suffer no pain. Spousal caregivers on the other hand, find meaning in taking care of the patient and hold onto hope for both themselves and the patient. Health care providers should regard both the patients and their spousal caregivers as the basic unit of care, each with a different focus of care.

Disclosure of interest: None declared

Keywords: Cancer, oldest-old, spouses, caregivers, hope, distress

---

P142

THE ROLE OF THE SOCIAL WORKER IN A COMPREHENSIVE GERIATRIC ASSESSMENT CLINIC FOR OLDER PEOPLE WITH UPPER GASTROINTESTINAL CANCER

R. Morris[1], Y. Raza[2,*], P. McKay[3], H. Jones[4]

[1]*Health Care for Older People, Nottingham University Hospitals NHS Trust,* [2]*Adult Access Service,* [3]*South Nottinghamshire and Public Protection, Nottinghamshire County Council,* [4]*Adult Social Services, Nottingham City Council, Nottingham, United Kingdom*

Introduction: Older people faced with a cancer diagnosis endure the multiplicative effects of pre-existing co-morbidities and the physical, psychological and functional effects of their malignancy. In upper gastrointestinal (UGI) cancer these factors are compounded by a generally poor prognosis and relatively late presentation. These factors suggest the inclusion of social work in any comprehensive geriatric assessment (CGA) is likely to be important if such patients are to successfully negotiate the assault of a cancer diagnosis on every aspect of their existence and ability to function.

Objectives: The aim of this work was to qualitatively evaluate the scope and potential impact of social work interventions in the context of an integrated multidisciplinary CGA team dealing with elders undergoing treatment for UGI cancer.

Methods: Consecutive patients (≥70yrs) referred to the UGI Cancer Multi-Disciplinary Team (MDT) were invited for assessment in a multi-professional Geriatric Assessment Clinic. All patients were assessed by geriatrician, nurse, occupational therapist, physiotherapist, dietician and social worker. Planned interventions were delivered and followed-up by the CGA team. The role of the social worker was evaluated through direct observation by independent senior social services colleagues and by interview of CGA team colleagues.

Results: The inclusion of social care assessment within a multi-professional CGA team has been observed to confer a number of benefits to both patients and the health and social care system in general:

- Rapid access to assessments earlier in the cancer treatment pathway
- More concise, accurate and detailed social care assessments adopting a person centred approach to the assessment (team-working and case-management)
- Early access to information regarding available resources and services for patients, carers and families offering increased choice and control through a direct payments or a personal budget
- Early relief of financial anxieties through comprehensive review and access to benefits
- Better targeted support to carers and families that are outcome focused maximising people's independence.
- Less duplication of assessments (single point of access saves time and money)
- Effective communication and integration with multiple community-based resources
- A more personalised service facilitated by CGA team case-management
- Enhanced collaborative working with Health resulting in a more efficient understanding of roles and responsibilities
- More accurate anticipation of needs over the course of treatment
- More effective and better integrated delivery of 'end of life' care planning
- Timely and properly supported transfer of care following acute hospital treatment

Conclusion: There are clear benefits to patients, carers and families deriving from the appropriate integration of social care workers within CGA teams facilitating the management of older cancer patients. There are further efficiencies in such schemes accruing to the wider health and social care system.

Disclosure of interest: None declared

Keywords: Comprehensive geriatric assessment, social care, upper GI cancer

---

P143

FUNCTIONAL STATUS, QUALITY OF LIFE, AND UNMET NEEDS IN OLDER PATIENTS WITH LUNG CANCER

K. K.-F. Cheng[1,*], S. Y. Loh[2], C. K. Toh[2], Z. Huang[1]

[1]*National University of Singapore,* [2]*National Cancer Centre Singapore, Singapore, Singapore*

Introduction: The majority of lung cancer patients are diagnosed at advanced stage with poor prognosis. Literature has indicated that many patients with lung cancer report high level of unmet needs, and poor level of quality of life (QoL) in compared with patients with other types of cancer [1,2].

Objectives: The aim of this study was to examine the relationship of functional status, QoL and supportive care needs in lung cancer patients who were 50 years old or above.

Methods: 103 patients diagnosed with either stage 3 (12.6%) or 4 (87.4%) lung cancer completed the Lawton IADL scale, EORTC-C30 and EORTC-Lung Cancer specific module (QLQ-LC13), Supportive Care Needs Survey Short-Form (SCNS-SF34). Eastern Cooperation Oncology Group scale for performance status (ECOG PS), Charlson Comorbidity Index (CCI), and Common Terminology Criteria for Adverse Events (CTCAE) version 3.0 were collected as part of clinical routine assessment.

Results: The mean age was 64.5 years (SD 7.7, range 50 to 82). Two-third (76%) of patients who were aged 50 to 70 years. More than half of patients were male (64%), received chemotherapy (64%) and within the first year of cancer diagnosis (65%). The ECOG PS score was 3 to 4 for less than half of patients (44%), and CCI score was 2 to 3 for one-third of them (29%). The reported highest level of QoL was cognitive functioning (mean 86.4, SD 20.3), while the worst QoL was role functioning (mean 63.6, SD 24.7). Coughing (mean 43, SD 25) was the worst symptom followed by insomnia (mean 34.6, SD 28.7), financial difficulties (mean 34, SD 28) and fatigue (mean 32.8, SD 23.6). Patients who had low ECOG PS score (≥2) reported statistically significant lower levels of QoL in all of the functional scales and global health status as well as higher level of symptom scales as measured by EORTC-C30 and QLQ-LC13 than those with high ECOG PS score (0–1) ($p < 0.05$). In addition, patients who were IADL dependent (IADL score <8) had statistically significant lower levels of QoL in all of the functional scales and global health status as well as high level of symptom scales than those who were IADL independent (IADL score ≥<8) ($p < 0.01$). Physical and daily living needs (mean 38.0, SD 20.9) and psychological needs (mean 34.6, SD 20.7) were the most common domains of unmet needs. There were statistically significant negative relationships between psychological needs and all of the functional scales and global health status of QoL ($r = –0.351$ to $–0.661$, $p < 0.001$), and physical and daily living needs and all of the functional scales and global health status of QoL ($r = –0.376$ to $–0.645$, $p < 0.001$)

Conclusion: Our results suggest that role functioning and coughing and insomnia are common QoL issue and symptoms, and physical/daily living needs and psychological needs are common domains of unmet needs in older patients with lung cancer. The levels of QoL in various domains are related with functional status and unmet needs of patients.

References:

[1] Baker, F., Denniston, M., Haffer, S. C., & Liberatos, P. Change in health-related quality of life of newly diagnosed cancer patients, cancer survivors, and controls. Cancer 2009;115(13):3024-3033. doi: 10.1002/cncr.24330

[2] Li, J., & Girgis, A. Supportive care needs: are patients with lung cancer a neglected population? Psycho-Oncology 2006;15(6):509-516.

Disclosure of Interest: None declared

Keywords: Functional status, lung cancer, quality of life, supportive care needs

---

P144

DIALOG TASK FORCE FOR DEFINITION OF A GERIATRIC MINIMUM DATA SET FOR CLINICAL ONCOLOGY RESEARCH

E. Paillaud[1,2,*], P. Caillet[3], T. Cudennec[4], F. Pamoukdjian[5], V. Fossey-Diaz[6], E. Liuu[7], G. Albrand[8], R. Boulahssess[9], A. L. Couderc[10], C. Mertens[11], F. Retornaz[12], L. Balardy[13], F. Rollot-Trad[14], L. De Decker[15], T. Aparicio[16], C. Terret[17], H. Le Caer[18], E. Carola[19], H. Cure[20], S. Culine[21], L. Mourey[22], E. Brain[23], P. Soubeyran[24] and DIALOG

[1]Unité de Coordination en OncoGeriatrie Paris Sud, APHP, [2]Departement de Médecine interne et Gériatrie, [3]Unité de Coordination en OncoGeriatrie Paris Sud, Groupe Hospitalier Mondor, Creteil, [4]Unité de Coordination en Oncogériatrie Paris Ouest, Geriatric Department, Ambroise Paré Hospital, APHP, Boulogne Billancourt, [5]Unité de Coordination en Oncogériatrie Paris Saint-Denis, Geriatric Department, Avicenne Hospital, APHP, Bobigny, [6]Unité de Coordination en Oncogériatrie Paris Nord, Geriatric department, Bretonneau hospital, APHP, Paris, [7]Unité de Coordination en Oncogériatrie Poitou-Charentes, Geriatric department, Poitiers University Hospital (CHU), Poitiers, [8]Unité de Coordination en Oncogériatrie Rhône-Auvergne-Guyane, Geriatric department, Lyon Civil Hospices, Antoine Charial Hospital, Francheville, [9]Unité de Coordination en Oncogériatrie PACA EST, Department of Gerontology, Nice University Hospital (CHU), Cimiez Hospital, Nice, [10]Internal Medicine, Geriatric and Therapeutic Unit, Sainte Marguerite Hospital (CHU), Marseille, [11]Unité de Coordination en Oncogériatrie Aquitaine, Department of Clinical Gerontology, Bordeaux Universitary Hospital (CHU), Bordeaux, [12]Pôle Gériatrique, Centre gérontologique départemental, Marseille, [13]Unité de Coordination en Oncogériatrie Midi-Pyrenées, Department of Internal Medicine and Clinical Gerontology, Centre Hospitalier Universitaire Purpan-Casselardit, Toulouse, [14]Unité de coordination en Oncogeriatrie Paris Ouest, Institut Curie, Paris, [15]Unité de coordination en Oncogeriatrie Pays de la Loire, Department of Geriatrics, Nantes University hospital, Nantes, [16]Gastroenterology and Digestive Oncology Department, Avicenne Hospital, APHP, Bobigny, [17]Unité de Coordination en Oncogériatrie Rhône-Auvergne-Guyane, Department of Medical Oncology, Centre Léon Bérard, Lyon, [18]Service de Pneumologie, Centre Hospitalier de Draguignan, Draguignan, [19]Unité de Coordination en Oncogériatrie Picardie, Department of Medical Oncology, GH public du sud de l'Oise, Creil-Senlis, [20]Unité de Coordination en Oncogériatrie Rhone-Alpes Annecy-Grenoble, Department of Medical Oncology, Centre Hospitalier Universitaire Grenoble-Alpes, Grenoble, [21]Unité de Coordination en Oncogériatrie Paris Nord, Department of Medical Oncology, Saint-Louis hospital, AP-HP, Paris, [22]Department of oncology, Institut Claudias Regaud, Toulouse, [23]Department of Medical Oncology, Institu Curie Hopital Rene Huguenin, Saint Cloud, [24]Unité de coordination en Oncogeriatrie Aquitaine, department of Medical Oncology, Institut Bergonié, Bordeaux, France

Introduction: The evidence-based added value of geriatric assessment (GA) in clinical oncology remains poor, partly due to limited specific clinical research and lack of data homogenization. A minimum set of geriatric data at baseline would allow comparing results across reports. Both the Unités de Coordination en Oncogériatrie (under the umbrella of the French Society of Geriatric Oncology) and the Unicancer GERICO cooperative group (dedicated to clinical research in geriatric oncology) joined their efforts into an intergroup called DIALOG. DIALOG launched a task force in order to develop a consensual geriatric minimum data set (MDS) for research purposes.

Objectives: To reach a consensus on a minimum set of geriatric data to be incorporated in clinical trials covering the elderly cancer population and allowing stratification according to geriatric risk profile.

Methods: Following an adapted formal consensus method, a panel of 7 pairs of geriatricians from 14 geriatric

oncology clinics has been constituted. Seven domains of GA were selected. Based on the SIOG, EORTC and NCCN recommendations on GA, the geriatrician experts had to: 1) list the tools available by domain; 2) determine the most commonly used tools; 3) search studies assessing sensitivity and specificity of these tools; 4) compare the tools available from the practical standpoint; 5) select the literature supporting the tools selection; 6) reach an agreement to recommend the tools to be used. After debate, the geriatrician's panel reached a consensus statement on a first version of the MDS. In a second time, this MDS was presented and debated with the DIALOG group leading to a second version, with a feedback to the geriatrician's panel and a vote. This vote had led to the third version. The third version was submitted for expertise to a panel of oncologists. Then a final consensual version was proposed.

Results: Tools chosen for each domain were: 1) social assessment: living alone or support request in order to stay at home; 2) functional autonomy: Activities of Daily Living (ADL) and short-IADL; 3) mobility: walking speed or timed get up and go test (TGUG); 4) nutrition: Mini Nutritional Assessment-short form (MNA-SF), weight loss at 3 months and Body Mass Index (BMI); 5) cognitive assessment: Dubois's 5 words and clock drawing test or Mini-Cog; 6) thymic status: mini- Geriatric Depression Scale (mini-GDS); 7) comorbidity: updated Charlson.

Conclusion: DIALOG intergroup reached an agreement for a short geriatric MDS to be incorporated in future clinical trials for the elderly. This initiative still needs prospective evaluation.

Disclosure of Interest: None declared

Keywords: Clinical trials for elderly cancer patients, geriatric assessment, mini Data Set