The elderly, multi-morbid cancer patient – when use geriatricians

Matti S. Aapro
Genolier Cancer Center
Switzerland

The role of SIOG

International Society of Geriatric Oncology

IMPROVING THE EVIDENCE-BASE
FOR TREATING OLDER ADULTS WITH CANCER

Work of SIOG and its members

Matti S. Aapro
Genolier Cancer Center
Switzerland

COI

Dr Aapro is a consultant for

Amgen, BMS, Celgene, GSK, Helsinn, Hospira, JnJ Novartis, Merck, Merck Serono, Pfizer, Pierre Fabre, Roche, Sandoz, Teva, Vifor

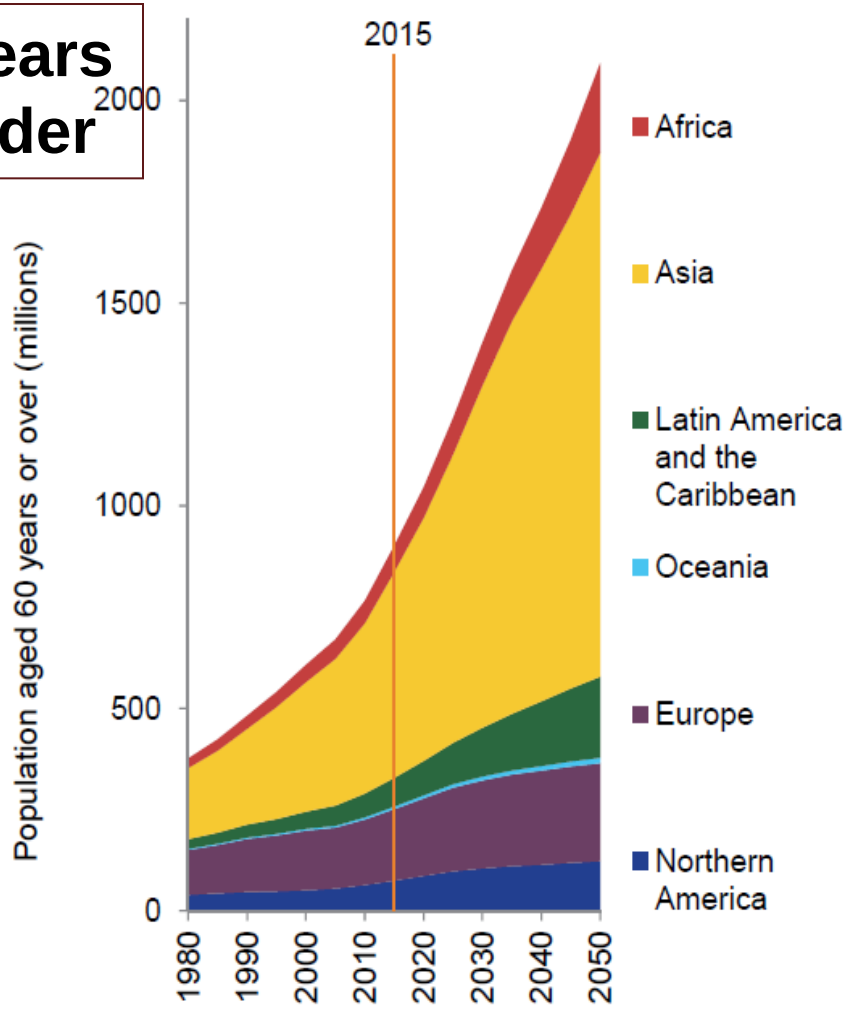
and has received honoraria for lectures at symposia of

Amgen, Bayer Schering, Cephalon, GSK, Helsinn, Hospira, Ipsen, JnJ OrthoBiotech, Kyowa Hakko Kirin, Merck, Merck Serono, Novartis, Pfizer, Pierre Fabre, Roche, Sandoz, Sanofi, Taiho, Teva, Vifor

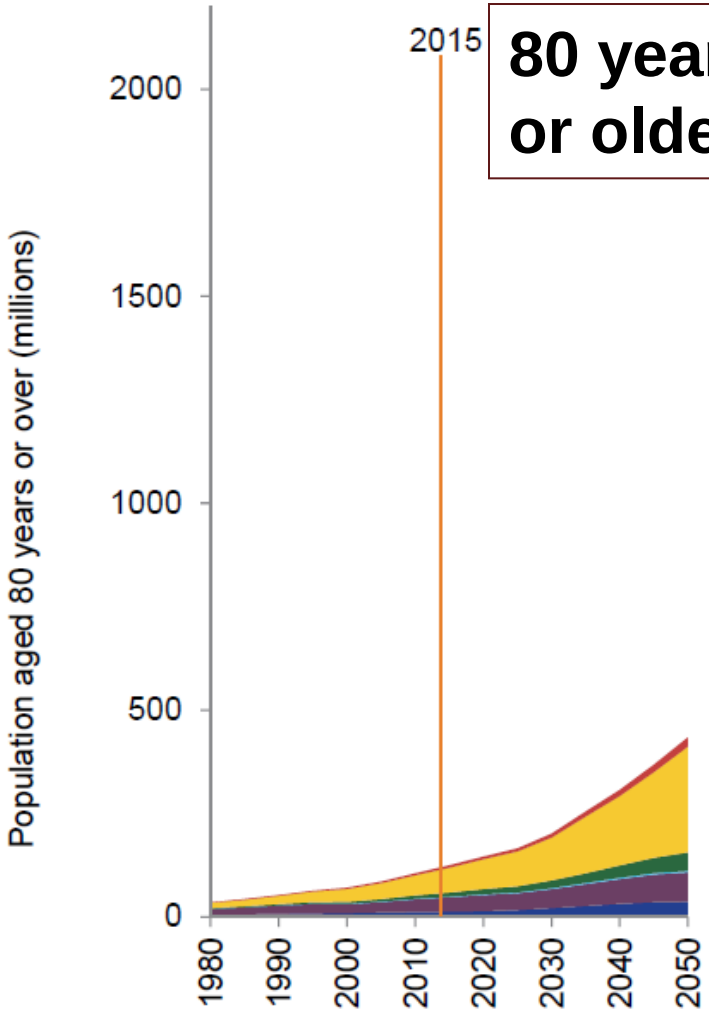
No responsibility accepted for involuntary errors or omissions.
The list may be incomplete, and does not reflect consultancy for NGOs, Universities, Governmental agencies, and others

The worldwide population is aging

60 years or older

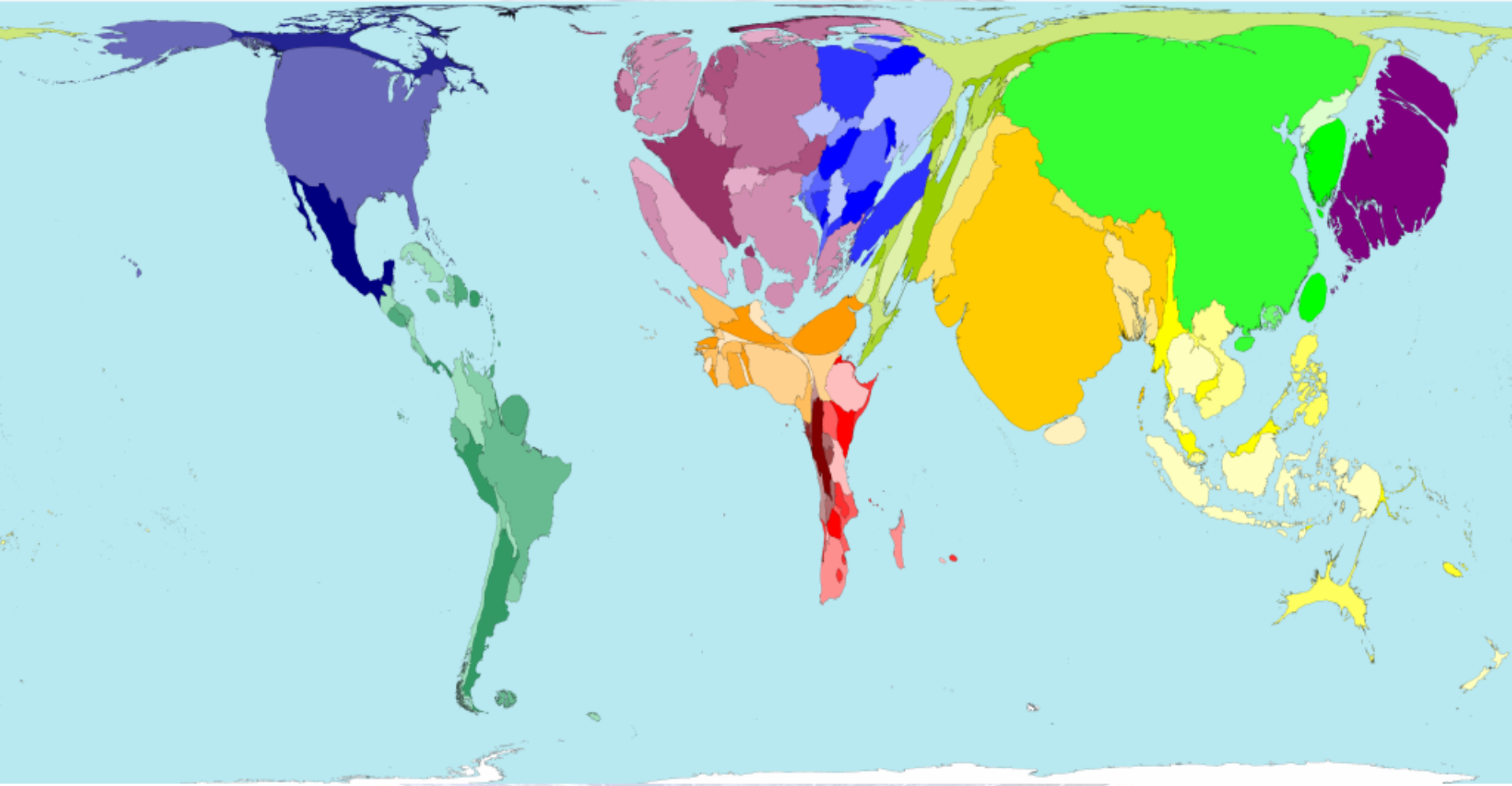


80 years or older



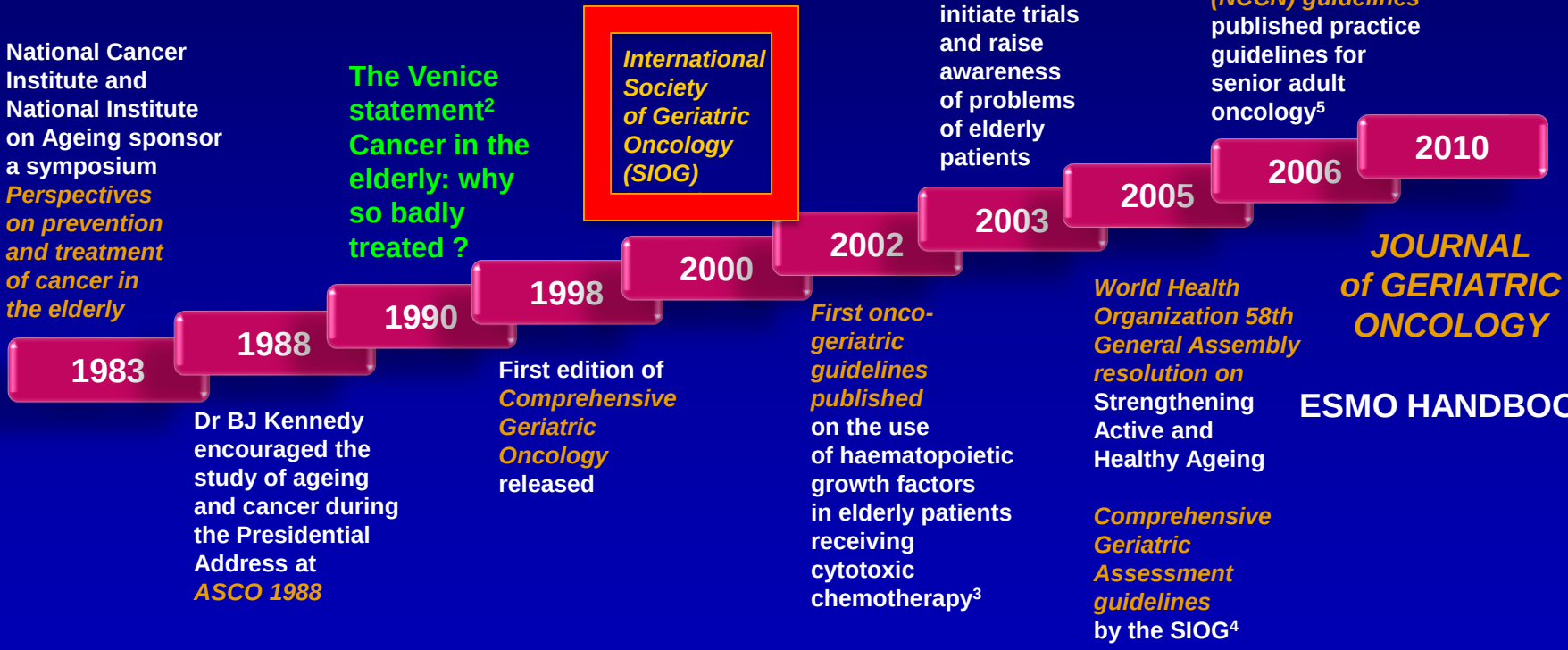
United Nations. Department of Economic and Social Affairs, Population Division (2015). *World Population Ageing 2015* (ST/ESA/SER.A/390)

WHERE ARE THE ELDERLY



R. Audisio EORTC EGAM 2007

Short history of cancer treatment in older patients[1]



1. Aapro M. J Geriatric Oncol 2010;1:2–3; 2. Fentiman IS, et al. Lancet 1990;335:1020–2
3. Balducci L. NCCN Clinical Practice Guidelines in Oncology Senior Adult Oncology November 1, 2006
4. Bokemeyer C, et al. Onkologie 2002;25:32–9
5. Extermann M, et al. Crit Rev Oncol Hematol 2005;55:241–52

Growing interest has led to the formation of a geriatric oncology society, member of UICCand ECCO

European School of Oncology

GIOGer

EUGMS

Société Internationale d'Oncologie Gériatrique

ESMO GOOD SCIENCE BETTER MEDICINE BEST PRACTICE European Society for Medical Oncology

AACR

EUROPEAN ONCOLOGY NURSING SOCIETY

FNCLCC

GEPOG

GeriONNE

SIOG/ISGO

President: S. Lichtman (USA)
President-elect: H. Wildiers (BE)
Past President: E. Brain (FR)
Treasurer: R. Kanesvaran (SIN)

EORTC

ASCO American Society of Clinical Oncology *Making a world of difference in cancer care*

EHA EUROPEAN HEMATOLOGY ASSOCIATION

www.siog.org

ASH

Medical treatment of cancer: some specific issues for the older patient

- renal clearance: SIOG guidelines
- anemia: EORTC, ESMO and other guidelines
- febrile neutropenia: EORTC, ESMO and other guidelines
- issues in palliation (confusional status with morphine),

ELSEVIER

Critical Reviews in Oncology/Hematology 73 (2010) 176–183

CRITICAL REVIEWS IN Oncology Hematology
Incorporating Geriatric Oncology

www.elsevier.com/locate/critrevonc

The management of cancer pain in the elderly

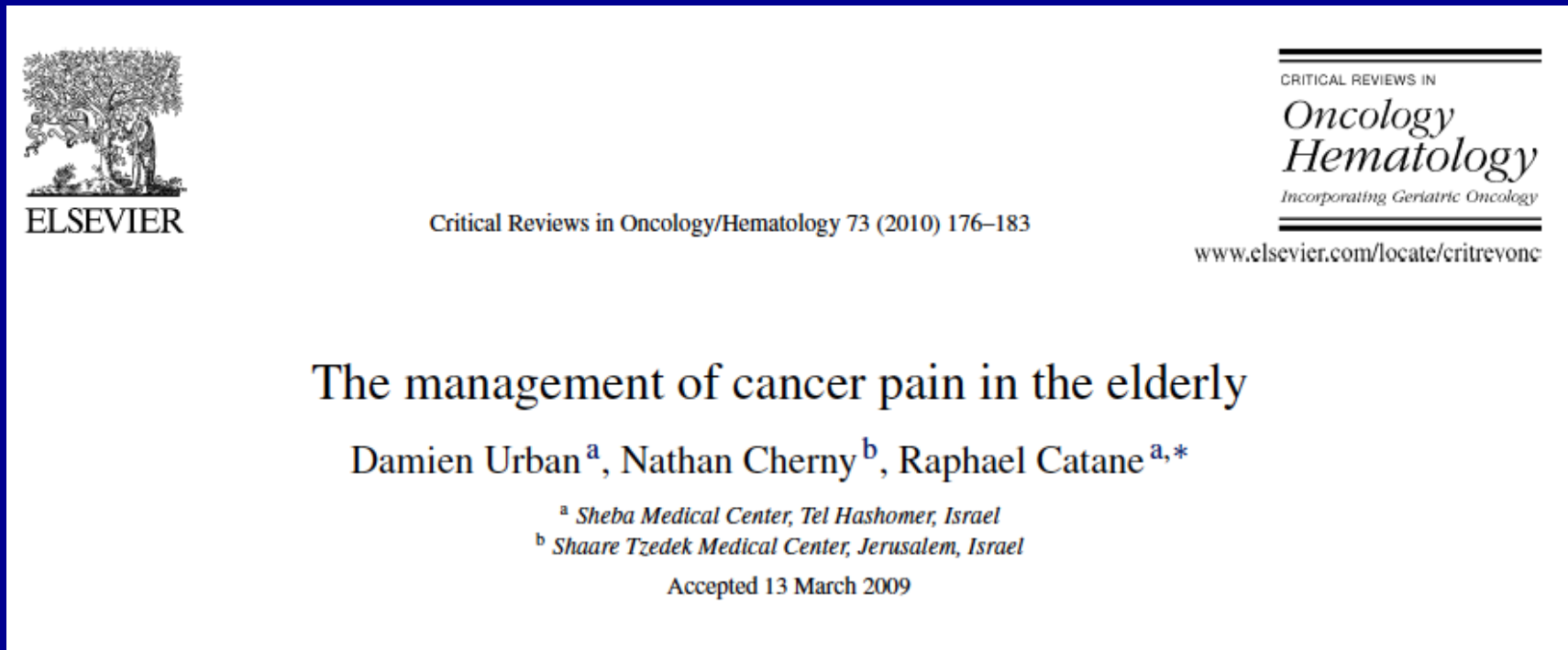
Damien Urban [a], Nathan Cherny [b], Raphael Catane [a,*]

[a] *Sheba Medical Center, Tel Hashomer, Israel*
[b] *Shaare Tzedek Medical Center, Jerusalem, Israel*

Accepted 13 March 2009

Medical treatment of cancer: some specific issues for the older patient

- renal clearance: SIOG guidelines
- anemia: EORTC,ESMO and other guidelines
- febrile neutropenia: EORTC, ESMO and other guidelines
- issues in palliation (confusional status with morphine),



ELSEVIER

Critical Reviews in Oncology/Hematology 73 (2010) 176–183

CRITICAL REVIEWS IN Oncology Hematology
Incorporating Geriatric Oncology

www.elsevier.com/locate/critrevonc

The management of cancer pain in the elderly

Damien Urban [a], Nathan Cherny [b], Raphael Catane [a,*]

[a] *Sheba Medical Center, Tel Hashomer, Israel*
[b] *Shaare Tzedek Medical Center, Jerusalem, Israel*

Accepted 13 March 2009

EUROPEAN JOURNAL OF CANCER 43 (2007) 14–34

ELSEVIER

available at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejconline.com

Position Paper

International Society of Geriatric Oncology (SIOG) recommendations for the adjustment of dosing in elderly cancer patients with renal insufficiency

Stuart M. Lichtman[a], *Hans Wildiers*[b], *Vincent Launay-Vacher*[c], *Christopher Steer*[d], *Etienne Chatelut*[e], *Matti Aapro*[f,*]

Medical treatment of cancer: some specific issues fo the older patient

- renal clearance: SIOG guidelines
- anemia: EORTC guidelines
- febrile neutropenia: EORTC guidelines
- issues in palliation (confusional status with morphine),
- diabetes as a complicating factor:……
- bone health (prostate and breast cancer treatment):
  SIOG guidelines published
- risk benefit assessment: Hurria / Extermann
- issues with "targeted" agents….and « immunotherapy »…

Medical treatment of cancer: some specific issues fo the older patient

- renal clearance: SIOG guidelines
- anemia: EORTC guidelines
- febrile neutropenia: EORTC guidelines
- issues in palliation (confusional status with morphine),
- diabetes as a complicating factor:……
- bone health (prostate and breast cancer treatment): SIOG guidelines published
- risk benefit assessment: Hurria / Extermann
- issues with "targeted" agents….and « immunotherapy »…

Accepted Manuscript

General and Supportive Care

Bone health in the elderly cancer patient: a SIOG Position Paper

J.J. Body, E. Terpos, B. Tombal, P. Hadji, A. Arif, A. Young, M. Aapro, R. Coleman

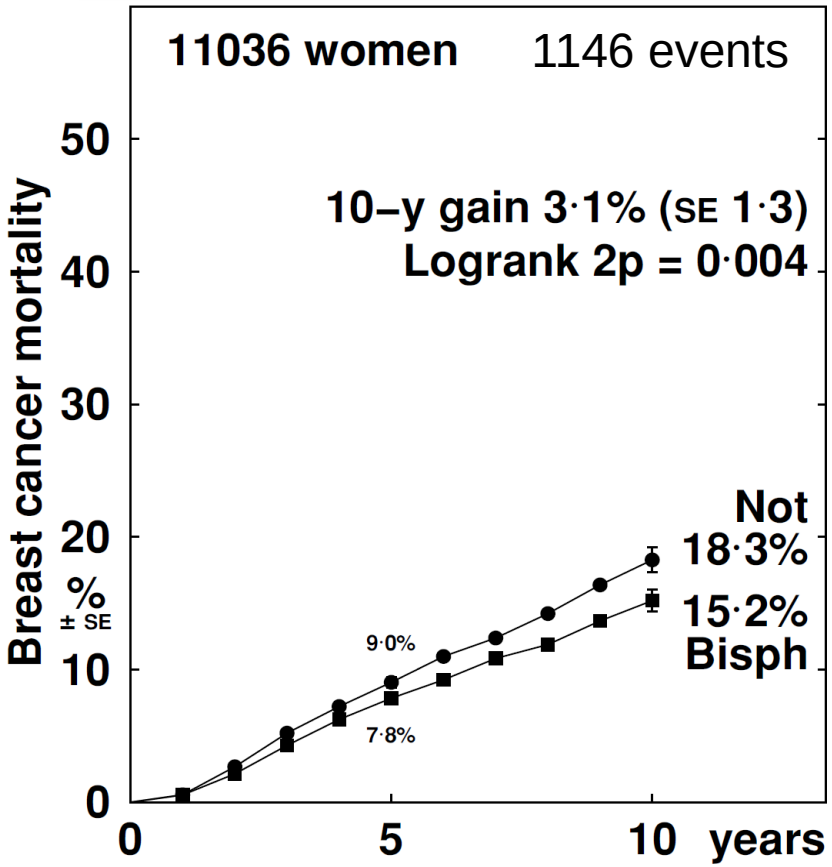
PII: S0305-7372(16)30104-9
DOI: http://dx.doi.org/10.1016/j.ctrv.2016.10.004
Reference: YCTRV 1560

To appear in: *Cancer Treatment Reviews Cancer Treatment Reviews*

Received Date: 17 October 2016
Accepted Date: 19 October 2016

Mortality In Post-menopausal Women

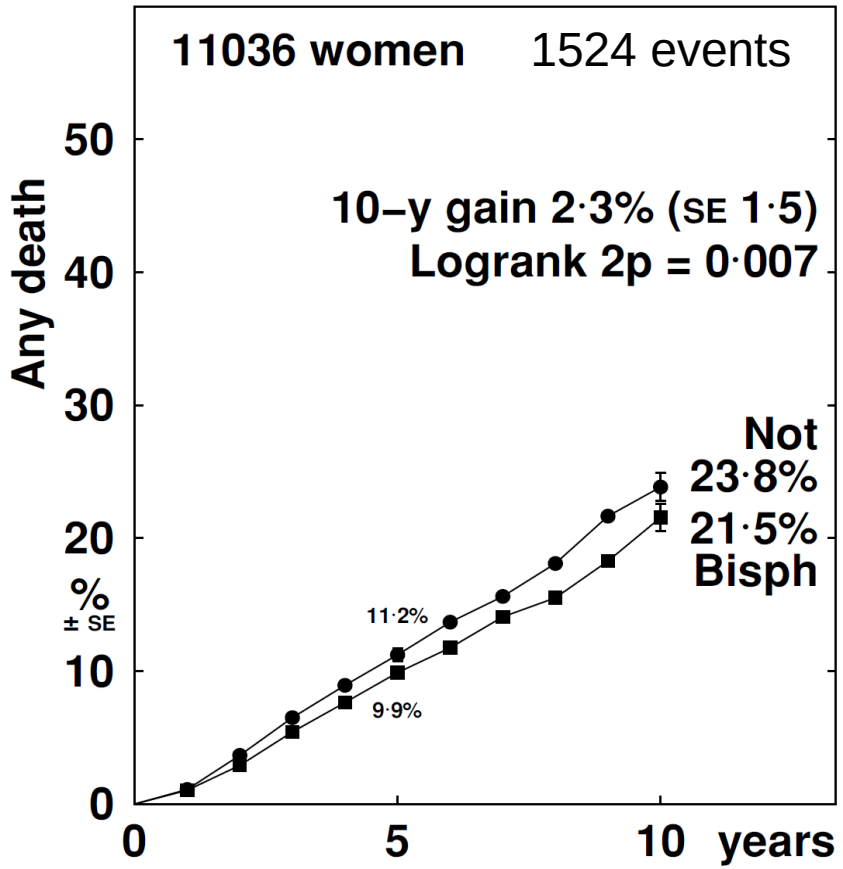
Breast cancer mortality



Death rates (% / year: total rate – rate in women without recurrence) & logrank analyses

Allocation	Years 0 – 4	Years 5 – 9	Year 10+
Bisph	1·64 SE 0·08	1·60 SE 0·14	1·30 SE 0·49
Not	1·83 SE 0·09	2·04 SE 0·16	2·73 SE 0·73
Rate ratio, from (O–E) / V	0·86 SE 0·07 −26·4 / 173·1	0·78 SE 0·11 −16·3 / 65·0	0·52 SE 0·38 −2·4 / 3·6

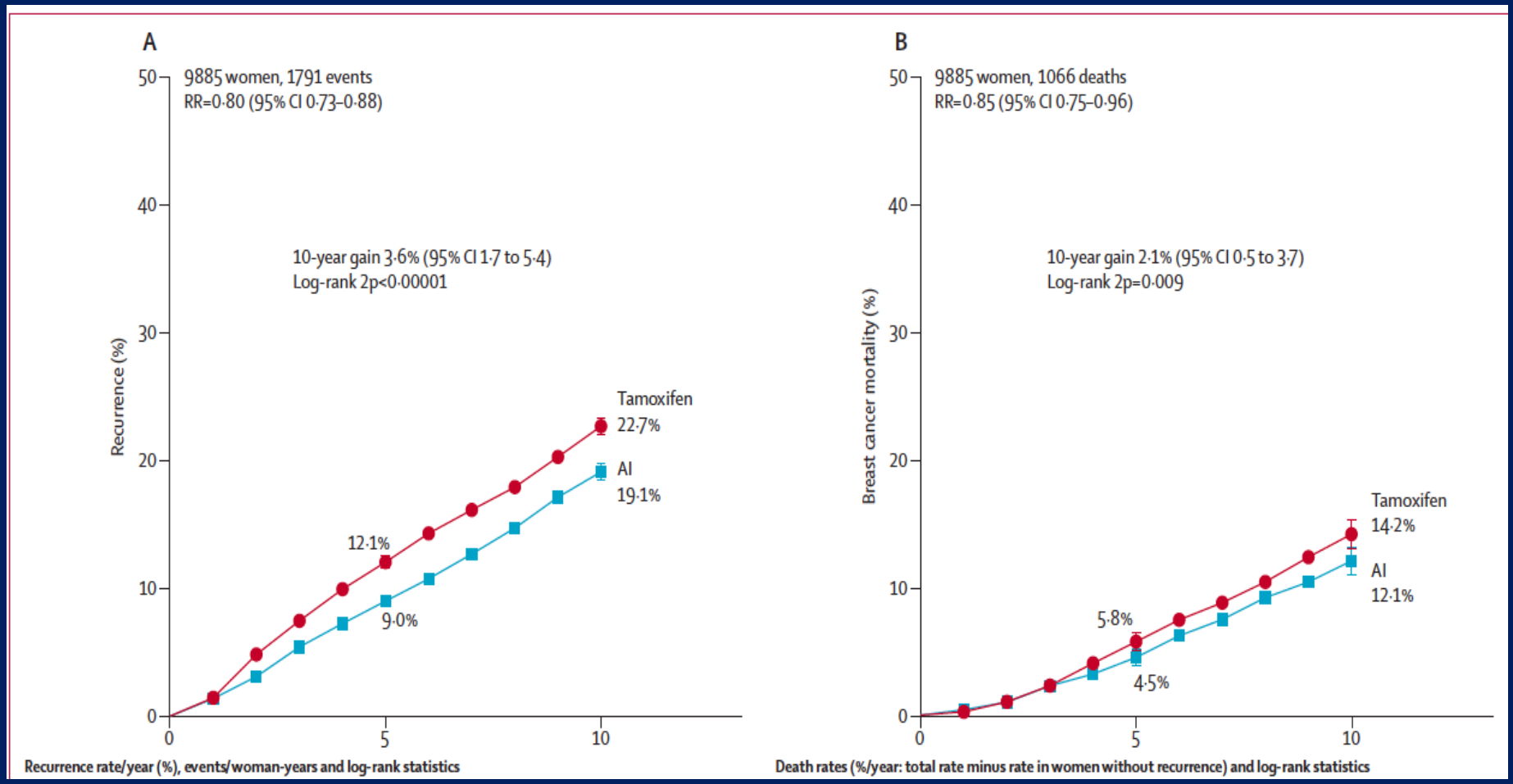
All cause mortality



Death rates (% / year) and logrank analyses

Allocation	Years 0 – 4	Years 5 – 9	Year 10+
Bisph	2·07 (510 / 24627)	2·40 (201 / 8380)	3·71 (20 / 539)
Not	2·32 (534 / 23006)	2·88 (236 / 8189)	4·48 (23 / 513)
Rate ratio, from (O–E) / V	0·87 SE 0·06 −31·3 / 224·4	0·84 SE 0·09 −17·2 / 95·6	0·94 SE 0·34 −0·5 / 8·0

Adjuvant AIs reduce the rate relapse and improve breast cancer survival in **post-menopausal patients compared to tamoxifen**



EBCTCG Lancet 2015

Medical treatment of cancer: some specific issues fo the older patient

- renal clearance: SIOG guidelines
- anemia: EORTC guidelines
- febrile neutropenia: EORTC guidelines
- issues in palliation (confusional status with morphine),
- diabetes as a complicating factor:……
- bone health (prostate and breast cancer treatment): SIOG guidelines almost final
- risk benefit assessment: Hurria / Extermann
- issues with "targeted" agents….and « immunotherapy »…

THE MISUNDERSTANDING:

CGA ASSESSES HEALTH STATUS

BUT

HEALTH STATUS (FITNESS) IS NOT FULLY PREDICTIVE OF TOLERANCE TO TREATMENT

Assessing the Older Patient for Cancer Treatment

- Fitness does not mean you can all do the same exercise, does it?

Shown by Audisio, SIOG 2003

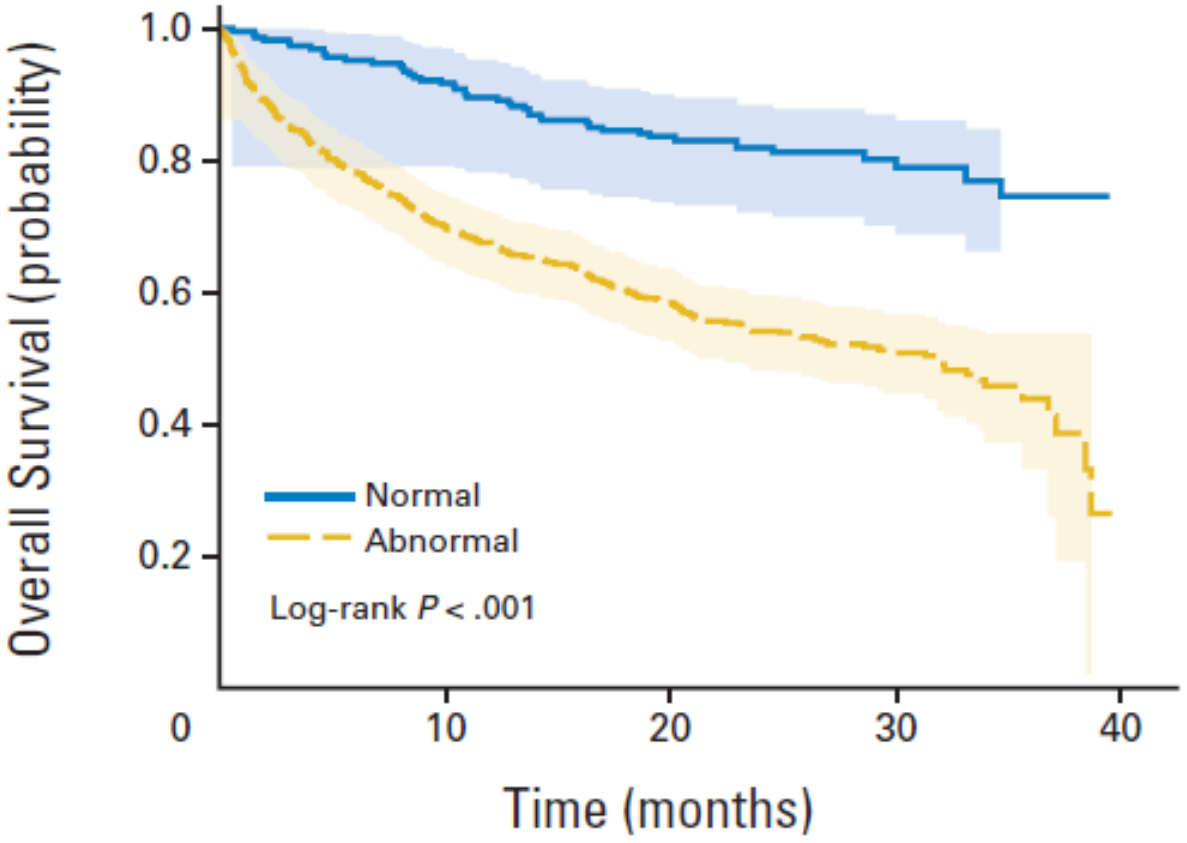
G-8 geriatric screening tool

Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?	0 = severe decrease 1 = moderate decrease 3 = no decrease
Weight loss during the last 3 months?	0 = > 3kg; 1 = 2 = betwe 3 = n
Mobility?	0 or ot go out;
Neuropsychological problems?	dementia /depression d dementia no psychological problems
BMI (weight in kg/height i	0 = BMI <19; 1 = BMI 19 to <21 2 = BMI 21 to <23; 3 = BMI ≥ 23
Takes more th ay?	0 = yes; 1 = no
In com the same age, how does alth status?	0 = not as good; 0.5 = does not know; 1 = as good; 2 = better
Age	0 = >85 yr; 1 = 80-85 yr; 2 = <80 yr
Total scor	**0-17 (** 14 or less indicates need of CGA **)**

A fast test
median 4.4 min for completion

Bellara CA et al. Annals Oncol 2012; 23: 2166

Strong prognostic value of G8 for OS



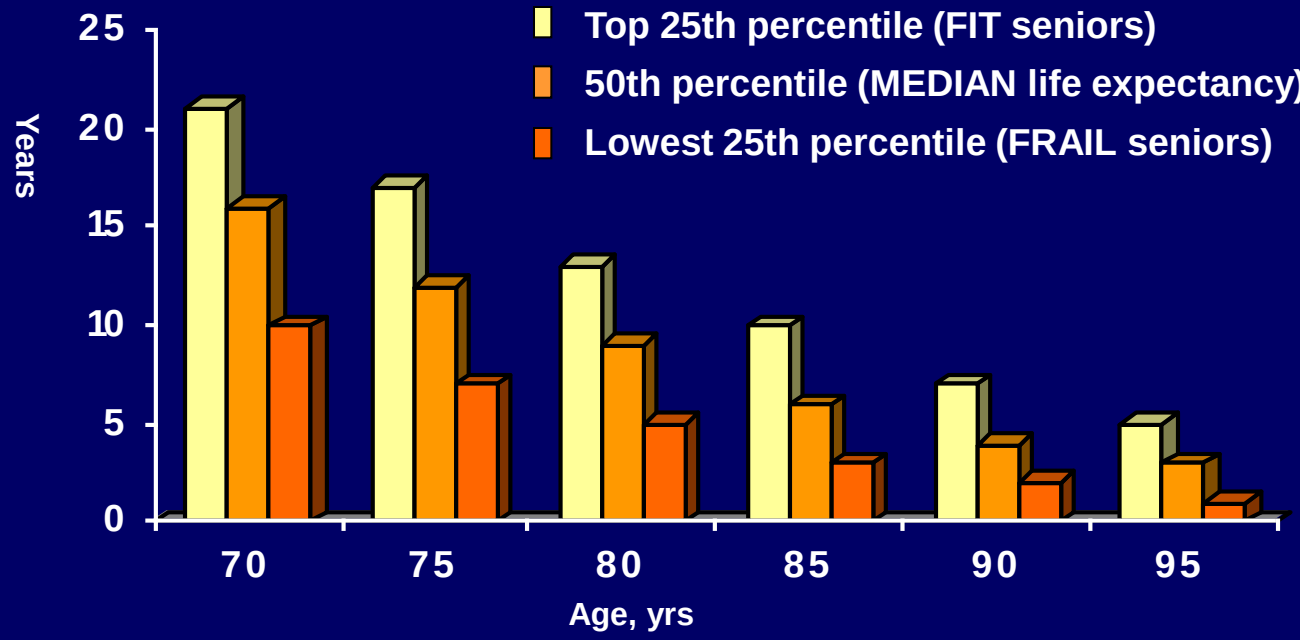
Prospective non interventional study in 937 patients aged 70 or older

Kenis C et al, J Clin Oncol 2014; 32: 19-26

Life expectancy in senior adults: a large variability reflecting health status variability

General health and functional status are poorly represented by chronological age alone, but may be captured in a multidomain comprehensive geriatric assessment (CGA)

Health status groups



Life expectancy for elderly women based on heath status

CGA DOMAINS
Cognition
Comorbidity
Emotional conditions
Function
Geriatric syndromes
Nutrition
Pharmacy
Socioeconomic conditions

Walters et al. JAMA 2001

Annals of Oncology 25: 1492–1499, 2014
doi:10.1093/annonc/mdu085
Published online 25 February 2014

Early recognition of malnutrition and cachexia in the cancer patient: a position paper of a European School of Oncology Task Force

M. Aapro[1], J. Arends[2], F. Bozzetti[3], K. Fearon[4*], S. M. Grunberg[5,†], J. Herrstedt[6], J. Hopkinson[7], N. Jacquelin-Ravel[1], A. Jatoi[8], S. Kaasa[9] & F. Strasser[10]

[1]Clinique de Genolier, Genolier, Switzerland; [2]Tumor Biology Center, Albert Ludwig's University, Freiburg, Germany; [3]Department of Medicine and Surgery, University of Milan, Milan, Italy; [4]School of Clinical Sciences and Community Health, University of Edinburgh, Royal Infirmary, Edinburgh, UK; [5]Hematology/Oncology Division, University of Vermont College of Medicine, Burlington, VT, USA; [6]Department of Oncology, Odense University Hospital, Odense, Denmark; [7]School of Healthcare Sciences, Cardiff University, Cardiff, UK; [8]Department of Oncology, Mayo Clinic, Rochester, MN, USA; [9]Faculty of Medicine, Norwegian University of Science and Technology, Trondheim, Norway; [10]Department of Internal Medicine, Kantonsspital, St Gallen, Switzerland

SIOG
INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY

GERIATRIC ONCOLOGY ADVANCED COURSE
TREVISO, ITALY
JUNE 29-JULY 2, 2016

UNIVERSITÀ CATTOLICA del Sacro Cuore

Prediction and Possible Reduction of Toxicity of Chemotherapy in Older Patients?

Arti Hurria, MD
Director, Cancer and Aging Research Program
City of Hope
Duarte, CA, USA

Are we able to predict toxicity?

Original Article

Predicting the Risk of Chemotherapy Toxicity in Older Patients: The Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) Score

Martine Extermann, MD[1]; Ivette Boler, ARNP[1]; Richard R. Reich, PhD[1,2]; Gary H. Lyman, MD[3]; Richard H. Brown, MD[4]; Joseph DeFelice, MD[5†]; Richard M. Levine, MD[6]; Eric T. Lubiner, MD[7]; Pablo Reyes, MD[8]; Frederic J. Schreiber III, MD[9]; and Lodovico Balducci, MD[1]

Cancer 2012

Predictors of Toxicity From Cancer Therapy

Laboratory	Clinical
• Hemoglobin • Albumin • LDH • Creatinine clearance	• ECOG PS • Diastolic blood pressure • Mini-Mental Examination • Self-rated Health • Mini-Nutritional Assessment • CIRS-G Comorbidity • IADL

IADL, Instrumental Activities of Daily Living.

Extermann M, et al. *Cancer.* 2012;118(13):3377-3386.

Are we able to predict toxicity?

Published Ahead of Print on August 1, 2011 as 10.1200/JCO.2011.34.7625
The latest version is at http://jco.ascopubs.org/cgi/doi/10.1200/JCO.2011.34.7625

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Predicting Chemotherapy Toxicity in Older Adults With Cancer: A Prospective Multicenter Study

Arti Hurria, Kayo Togawa, Supriya G. Mohile, Cynthia Owusu, Heidi D. Klepin, Cary P. Gross, Stuart M. Lichtman, Ajeet Gajra, Smita Bhatia, Vani Katheria, Shira Klapper, Kurt Hansen, Rupal Ramani, Mark Lachs, F. Lennie Wong, and William P. Tew

Arti Hurria, Kayo Togawa, Smita Bhatia, Rupal Ramani, and F. Lennie Wong, City of Hope Comprehensive Cancer Center and Beckman Research Insti-

ABSTRACT

Predictive Model for Toxicity From Chemotherapy

Risk Factors for Grade 3-5 Toxicity	OR (95% CI)	Score
Age > 73	1.2 (1.2-2.7)	2
GI/GU cancer	2.2 (1.4-3.3)	3
Standard dose	2.1 (1.3-3.5)	3
Polychemotherapy	1.8 (1.1-2.7)	2
Hemoglobin (male: <11, female: <10)	2.2 (1.1-4.3)	3
Creatinine clearance <34	2.5 (1.2-5.6)	3
1 or more falls in last 6 months	2.3 (1.3-3.9)	3
Hearing impairment (fair or worse)	1.6 (1.0-2.6)	2
Limited in walking 1 block	1.8 (1.1-3.1)	2
Assistance required in medication intake	1.4 (0.6-3.1)	1
Decreased social activity	1.3 (0.9-2.0)	1

A validation study

Validation of a Prediction Tool for Chemotherapy Toxicity in Older Adults With Cancer

Arti Hurria, Supriya Mohile, Ajeet Gajra, Heidi Klepin, Hyman Muss, Andrew Chapman, Tao Feng, David Smith, Can-Lan Sun, Nienke De Glas, Harvey Jay Cohen, Vani Katheria, Caroline Doan, Laura Zavala, Abrahm Levi, Chie Akiba and William P. Tew

Author Affiliations

But we have to consider
who the patient is

...and what does he/she want

Jeanne-Marie…
“Can’t be serious?”

“Senior patients” will accept chemotherapy

- Outpatient population (n=320):
  - from France and USA
  - aged 70–95 years (29% aged 80 years and older)
  - with and without cancer
  - interviewed via anonymous questionnaires

- French patients without cancer were less willing (34%) to accept strong chemotherapy than:
  - American patients without cancer (73.8%)*
  - French or American cancer patients (77.8 and 70.5%, respectively)*

- This was also true for the moderate chemotherapy (67.9 vs 100%, 95.2 and 88.5%, respectively; p<0.001)

*p<0.001 for each comparison

Extermann M, et al. J Clin Oncol 2003;21:3214-9

Société Internationale d'Oncologie Gériatrique

review

Annals of Oncology 18: 633–638, 2007
doi:10.1093/annonc/mdl178
Published online 6 October 2006

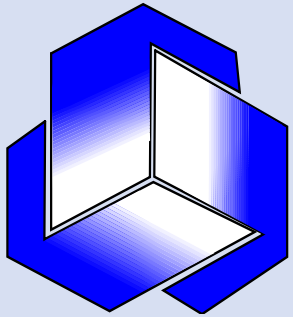
The illness trajectory of elderly cancer patients across cultures: SIOG position paper

A. Surbone[1]*, M. Kagawa-Singer[2], C. Terret[3] & L. Baider[4]
On behalf of the SIOG Task Force on Cultural Competence in the Elderly[†]

[1]*European School of Oncology, Milan, Italy and New York University, New York, USA;* [2]*UCLA School of Public Health and Asian American Studies Department, Los Angeles, USA;* [3]*Centre Léon Bérard, Lyon, France;* [4]*Hadassah University Medical Center, Jerusalem, Israel*

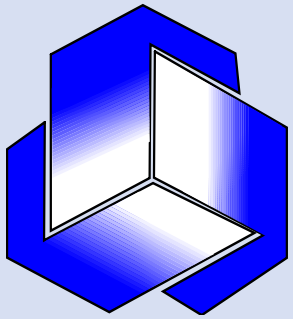
Received 12 May 2006; accepted 26 June 2006

[†]Task Force Members: L. Baider, Israel; O. Brawley, US; M. Kagawa-Singer, US; M. Mori, Japan; B. Stein, Australia; A. Surbone, Italy; C. Terret, France; M. Zereu, Brasil



We cannot “simply” apply principles of clinical studies validated in younger patients

EORTC workshop on clinical trial methodology in older individuals with a diagnosis of solid tumors
A.G. Pallis, A. Ring, C. Fortpied, B. Penninckx, M.C. Van Nes, U. Wedding, G. von Minckwitz, C.D. Johnson, L. Wyld, A. Timmer, F. Bonnetain, L. Repetto, M. Aapro, A. Luciani, H.Wildiers
On behalf of the EORTC Elderly Task Force
Annals Oncology, 2011



Wildiers H, et al

End Points and Trial Design in Geriatric Oncology Research:

A Joint European Organisation for Research and Treatment of Cancer-Alliance for Clinical Trials in Oncology-International Society of Geriatric Oncology Position Article.

J Clin Oncol. 2013

SO WHEN DO I CALL THE « GERIATRICIAN » ???

Mini-Cog

Screening for cognitive impairment

Borson et al. J Am Geriatr Soc 2003;51:1451-4

Step 1: Three Word Registration

Look directly at person and say, "Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now." If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

The following and other word lists have been used in one or more clinical studies.[1-3] For repeated administrations, use of an alternative word list is recommended.

Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Banana	Leader	Village	River	Captain	Daughter
Sunrise	Season	Kitchen	Nation	Garden	Heaven
Chair	Table	Baby	Finger	Picture	Mountain

Step 2: Clock Drawing

Say: "Next, I want you to draw a clock for me. First, put in all of the numbers where they go." When that is completed, say: "Now, set the hands to 10 past 11."

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

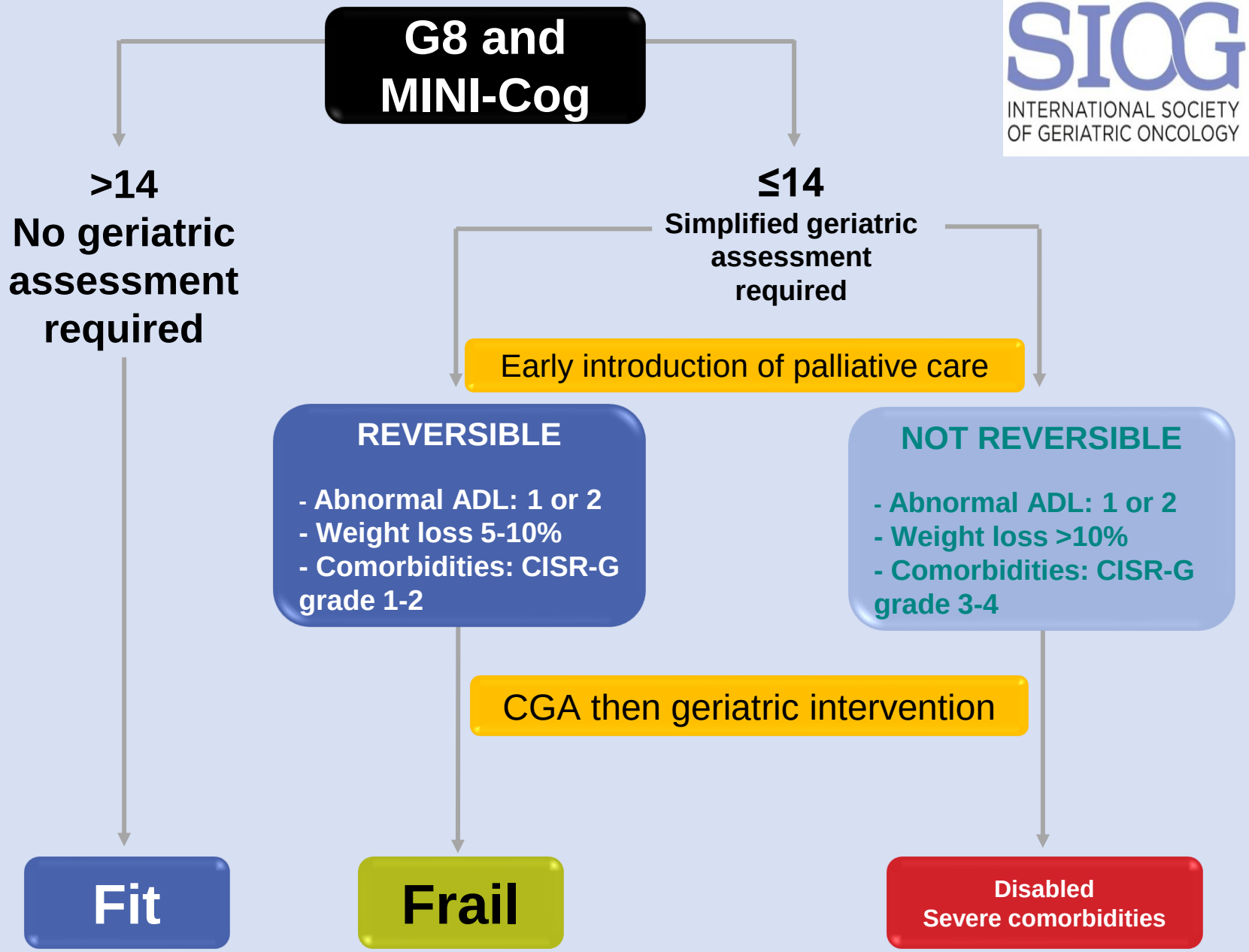
Step 3: Three Word Recall

Ask the person to recall the three words you stated in Step 1. Say: "What were the three words I asked you to remember?" Record the word list version number and the person's answers below.

Word List Version: _____ Person's Answers: _____ _____ _____

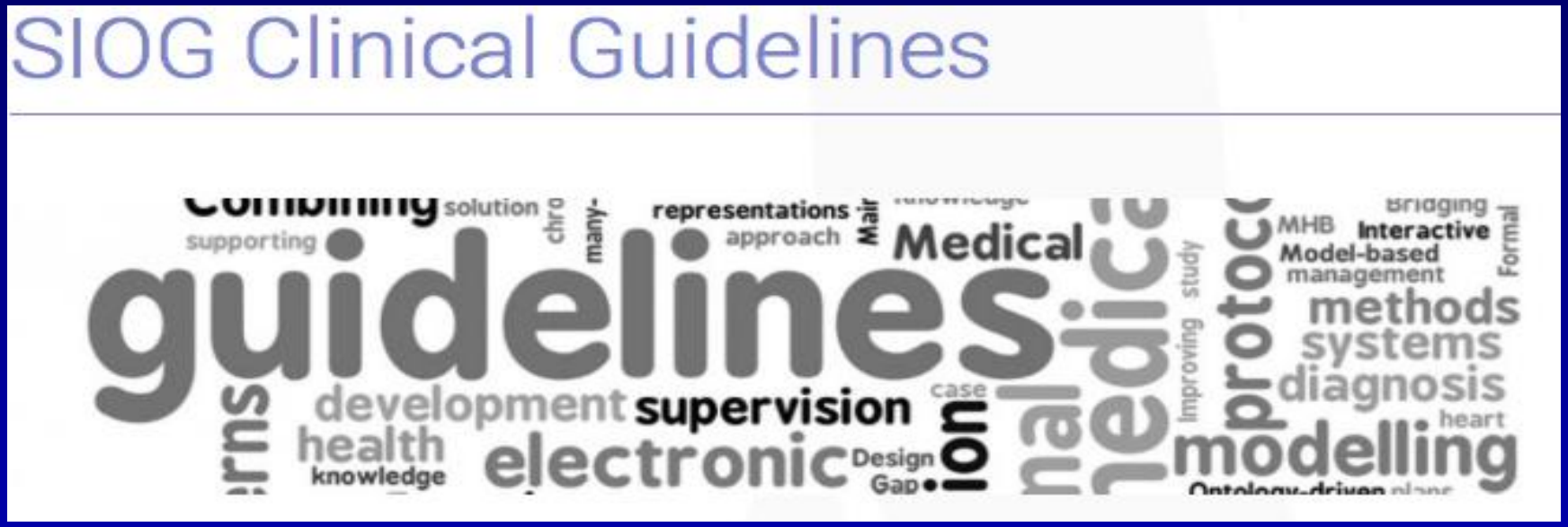
Scoring

Word Recall: _____ (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock Draw: _____ (0 or 2 points)	Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points.
Total Score: _____ (0-5 points)	Total score = Word Recall score + Clock Draw score. A cut point of <3 on the Mini-Cog™ has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.



Droz et al 2017

SIOG GUIDELINES
(please go to www.SIOG.org)



SIOG Guidelines since 2014 JSMO (please go to www.SIOG.org)

- **Diffuse large B-cell lymphoma in the elderly: Impact of prognosis, comorbidities, geriatric assessment, and supportive care on clinical practice. An International Society of Geriatric Oncology (SIOG) Expert Position Paper.**
- **Morrison VA, Hamlin P, Soubeyran P, Stauder R, Wadhwa P, Aapro M, Lichtman S. J Geriatr Oncol. 2015 Mar;6(2):141-52.**

- **Approach to therapy of diffuse large B-cell lymphoma in the elderly: the International Society of Geriatric Oncology (SIOG) expert position commentary.**
- **Morrison VA, Hamlin P, Soubeyran P, Stauder R, Wadhwa P, Aapro M, Lichtman SM. Ann Oncol. 2015 Jun;26(6):1058-68.**

SIOG Guidelines since 2014 JSMO (please go to www.SIOG.org)

- **Screening tools for multidimensional health problems warranting a geriatric assessment in older cancer patients: an update on SIOG recommendations.**
- **L. Decoster, K. Van Puyvelde, S. Mohile, U. Wedding, U. Basso, G. Colloca, S. Rostoft, J. Overcash, H. Wildiers, C. Steer, G. Kimmick, R. Kanesvaran, A. Luciani, C. Terret, A. Hurria, C. Kenis, R. Audisio & M. Extermann. Ann Oncol. 2015 Feb;26(2):288-300.**

- **Oral single-agent chemotherapy in older patients with solid tumours: A position paper from the International Society of Geriatric Oncology (SIOG).**
- **L. Biganzoli, S. Lichtman , J.-P. Michel , D. Papamichael , E. Quoix , C. Walko , M. Aapro. European Journal of Cancer 2015 Nov;51(17):2491-500.**

SIOG Guidelines since 2014 JSMO (please go to www.SIOG.org)

- **The assessment and management of older cancer patients: A SIOG surgical task force survey on surgeons' attitudes**
- **Ghignone F, van Leeuwen BL, Montroni I, Huisman MG, Somasundar P, Cheung KL, Audisio RA, Ugolini G; International Society of Geriatric Oncology (SIOG) Surgical Task Force. Eur J Surg Oncol. 2015 Dec 17.**

- **Taxanes in the treatment of breast cancer: Have we better defined their role in older patients? A position paper from a SIOG Task Force**
- **L. Biganzoli, M. Aapro, Sibylle Loibl, Hans Wildiers, Etienne Brain. Cancer Treatment Reviews February 2016 Volume 43, Pages 19–26**

SIOG Guidelines since 2014 JSMO (please go to www.SIOG.org)

- **Management of chronic lymphocytic leukaemia in the elderly: position paper of a SIOG Task Force**

  – **Stauder R, Eichhorst B, Hamaker M, Kaplanov K, Morrison V, Österborg A, Poddubnaya I, Woyach JA, Shanafelt T, Smolej L, Ysebaert L, Goede V. Ann Oncol. 2016 Nov 1. [Epub ahead of print]**

SIOG Guidelines since 2014 JSMO (please go to www.SIOG.org)

- **Management of Prostate Cancer in Elderly Patients: Recommendations of a Task Force of the International Society of Geriatric Oncology**
  - **Jean-Pierre Droz, Gilles Albrand, Silke Gillessen, Simon Hughes, Nicolas Mottet, Stéphane Oudard, Heather Payne, Martine Puts, Gilbert Zulian, Lodovico Balducci, Matti Aapro. European Urology Available online 11 January 2017**
- **Bone health in the elderly cancer patient: a SIOG Position Paper**
  - **J.J. Body, E. Terpos, B. Tombal, P. Hadji, A. Arif, A. Young, M. Aapro, R. Coleman. Cancer Treatment Reviews Available online 27 October 2016 In Press**

The future SIOG guidelines (please follow www.SIOG.org)

- For 2017 and following : multiple myeloma, biosimilars, lung cancer (update), nursing, nutrition, bladder cancer, cardiotoxicity (update), targeted agents, anti Her-2 agents,, immunotherapy, compliance/adherence….

SIOG take home messages

- Elderly patients breast cancer patients should be offered the same loco-regional and systemic treatment as younger patients, whenever possible
- Life expectancy, treatment tolerance, potential risks vs. expected absolute benefits, should be considered in all management decisions and geriatric assessments help in better defining these variables
- Patient preference and possible barriers (logistic, social, etc) to treatment administration should also be considered

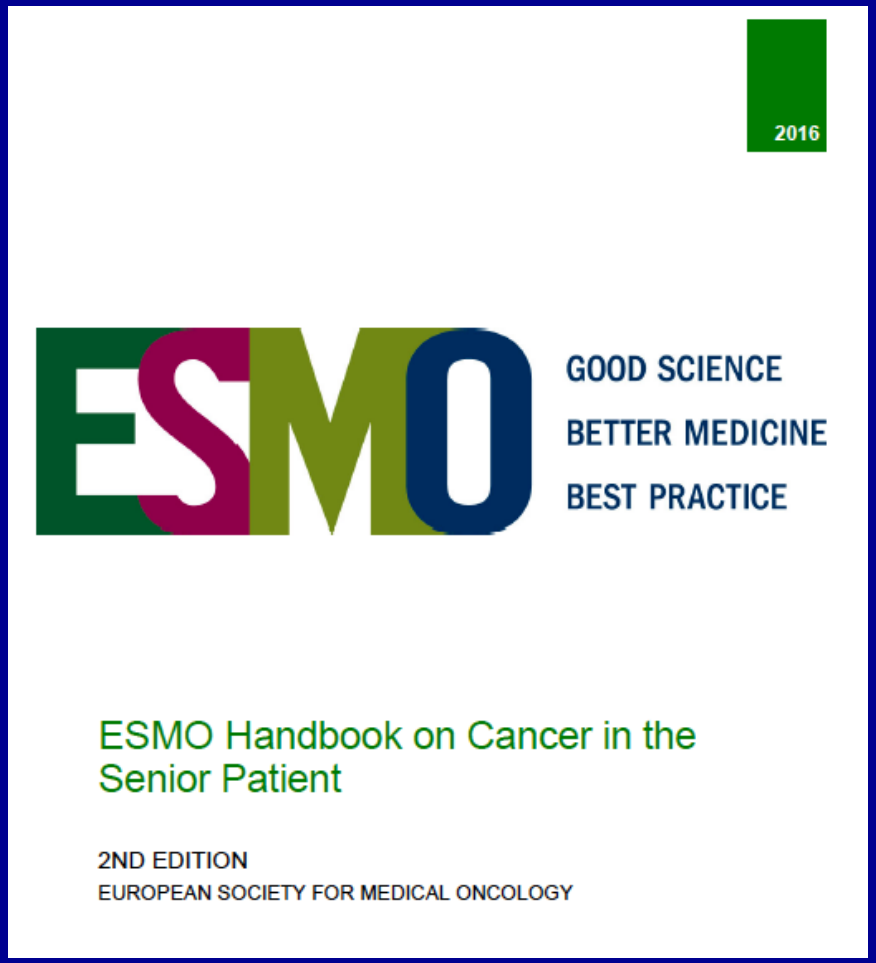
SIOG
INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY

Some final reflections

- Decisions on treatment have to take into consideration the patient's quality of life
- Decisions on treatment have to take into consideration her decision to live longer or to have a better quality of life, perhaps dying earlier
- Chronological age should not be the basis for treatment decisions
- Decisions on treatment never should never be made for economic reasons
- Individual assessment of each patient is necessary; patient /doctor communication is key to making the right decision for each patient.

From Roswitha Britz at ECCO 2015

An important resource



SIOG

INTERNATIONAL SOCIETY
OF GERIATRIC ONCOLOGY

2017

WARSAW
POLAND
9-11 NOV.




"From research to practice: incorporating geriatric oncology into patient care"

Matti Aapro
Genolier Cancer Centre (Switzerland)

GENOLIER
Clinique

THANK YOU DANKE MERCI