







Never too old – the important role of exercise in older adults with caner

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Faculty Disclosure

No, nothing to disclose
Yes, please specify:

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Example: company XYZ	х		х		х			

Disclosures – Reinhard Stauder MD, MSc

Research Support/P.I.	Celgene, Novartis, Teva
Employee	0
Consultant	0
Major Stockholder	0
Honoraria	Celgene, Novartis, Teva, Janssen-Cilag
Scientific Advisory Board	Celgene

- Introduction
- □ Relevance of haematological malignancies in elderly
- Possible contributions of geriatric oncology in supportive care
 - Geriatric assessment
 - Exercise
 - Patient-reported outcomes (PROs)
- Summary

Definition of supportive care in caner

Supportive care is the prevention and management of the symptoms and side effects of cancer and its treatment across the cancer continuum from diagnosis to the end of life.

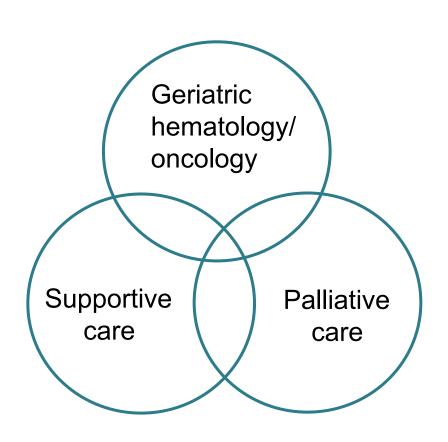
It includes support for patients, their families, and their caregivers.

Supportive care improves both quality of care and quality of life.

http://www.mascc.org/

Activities of MASCC in supportive care

- Antiemetics (MASCC guidelines....)
- Mucositis guidelines MASCC
- Oral medication MASCC Oral Agent Teaching Tool (MOATT)
- Pain medication Pain Management Center
- MASCC Neutropenia, Infection & Myelosuppression Study Group
- Growth factors; Calculate by QxMD (Free) Calculate the MASCC Febrile Neutropenia score
- Nutrition
- Communication challenges in geriatric oncology: perspectives of patients, family caregivers, and healthcare professionals...
- Cancer-associated VTE





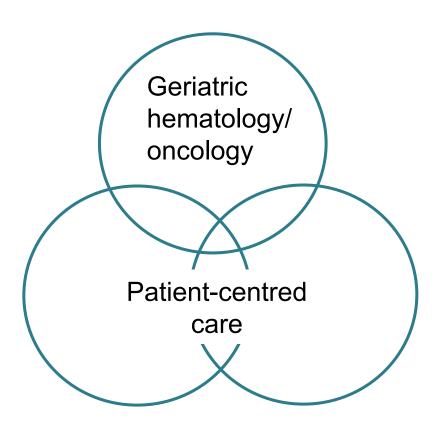
SPECIAL ARTICLE

European Society for Medical Oncology (ESMO) position paper on supportive and palliative care

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K. Jordan<sup>1*</sup>, M. Aapro<sup>2</sup>, S. Kaasa<sup>3,4,5</sup>, C. I. Ripamonti<sup>6</sup>, F. Scotté<sup>7</sup>, F. Strasser<sup>8</sup>, A. Young<sup>9</sup>, E. Bruera<sup>10</sup>, J. Herrstedt<sup>11,12</sup>, D. Keefe<sup>13</sup>, B. Laird<sup>14,15</sup>, D. Walsh<sup>16</sup>, J. Y. Douillard<sup>17</sup> & A. Cervantes<sup>18</sup>
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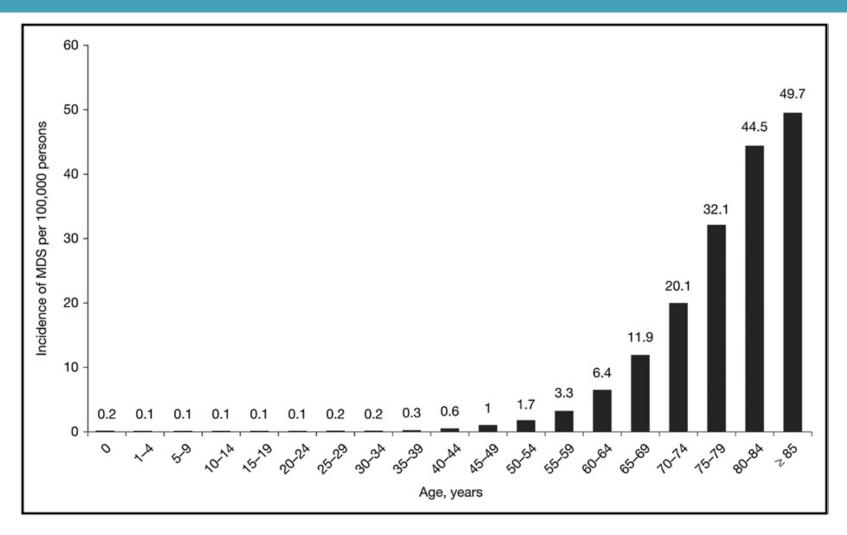
KEY POINTS

- Patient-centred care approach
- Patient-centred care interventions
- Timely patient-centred interventions
- End-of-life care
- Multidisciplinary teams (MDT)
- Integrating healthcare resources
- Need for specific training in <u>patient-centred care</u>



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Epidemiology of Myelodysplastic Syndromes (MDS) NCI SEER*Stat Database



^{*} Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI)

Haematological cancer is a typical disease of elderly

Cancer type / Median age at diagnosis (~yrs)

	Myelo	dysi	olastic :	syndromes	75
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Acute my	veloid	leukemia	70

Multiple myelom	a 70
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- Diffuse large B-cell NHL
- Chronic lymphocytic leukemia 70

- Elderly represent the majority in blood cancer patients
- Demographic changes will result in a pronounced increase

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Relevance of geriatric assessment

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- identify geriatric interventions that can improve treatment tolerability and compliance

Which treatment?







Chronological (passport) age ≠ Biological age



Fit patient



Vulnerable/Frail patient

By courtesy of Hamaker M

Geriatric Assessment

Dimension	Score								
Performance Status	WHO & Karnofsky Performance Status								
Functional activities	Acitivities of daily living (ADL) (Barthel Index) Instrumental acitivities of daily living (iADL) Objective physical capacity: Timed Up & Go (TUG), Gait-speed, Six-minutes walk test (6-MWT), Chair-rising test, Handgrip								
Comorbidities	Charlson comorbidity index (CCI), ACE-27 Cumulative illness rating scale for geriatricians (CIRS-G) Haematopoietic cell transplantation comorbidity index (HCT-CI)								
QoL (Health-related quality of life)	Geriatric depression scale (GDS) Funct. Assessment of Cancer Therapy General Scale (FACT-G) EORTC Qol C30; Nottingham Health Profile Short Form 36 (SDF36), EuroQol Fragebogen (EQ-5D)								
Cognition	Mini Mental Status Examination (MMS); Montreal Cognitive Assessment (MoCA); Demtec (Demenz-Detektions) Test								
Social support	Fragebogen zur sozialen Unterstützung (FSOZU)								
Nutritional status	Body mass index (BMI); Mini nutritional assessment (MNA)								
Screening	G8, VES-13 (vulnerable elderly survey 13), PPT (physical performance test), Fried, Groningen frailty indicator, Lachs Screening								

	Total	OS Univariate	OS Multivariate	
	n=108	analysis	analysis	Preva
Median age (range)	78.2 (67.1-98.9)			rele
Female	47%			reie
Diagnosis				impai
Myelodysplastic syndromes	25 (23%)			
Acute myeloid leukaemia	31 (29%)	**	**	haer
Myeloproliferative neoplasms	5 (5%)			
Non-Hodgkin lymphoma – indolent	13 (12%)			mali
Non-Hodgkin lymphoma — aggressive	31 (29%)			
Multiple myeloma	3 (3%)			
Comorbidity				
Median total CIRS-G score (range)	6.5 (0-20			
WHO performance status ≥2	47%	0.06	0.10	
Geriatric impairments				
ADL	20%			
IADL	45%			
Mobility	24%	0.08	*	
Cognition	17%			
Social support	21%			
Mood	24%			
Polypharmacy	65%			
Nutritional status	45%	**	**	ŀ
G8	61%	**	**	Ar
Impaired geriatric assessment		0.05		

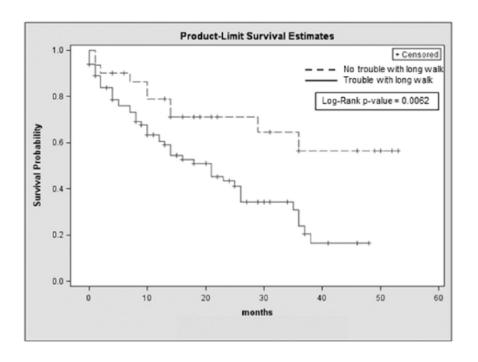
Prevalance and relevance of impairments in haematologic malignancies

*, p<0.05 **, p<0.01

Hamaker M. et al, Ann Hematol, 2014

Ability to take a long walk predicts OS

- 114 MDS patients, 65+ yrs, retrospective analysis
- Self-reported physical function was more predictive than physician rated performance status.
 - Univariate and OS: p=0.0062
 - Best predictors for OS in multivariate: Low serum albumin (HR = 2.3), therapy-related MDS (HR= 2.1), IPSS-score (HR=1.7), east to take a long walk (HR=0.44)



Fega et al., JGO 2015

Prognostic factors for mortality

Hematological malignancies in the elderly

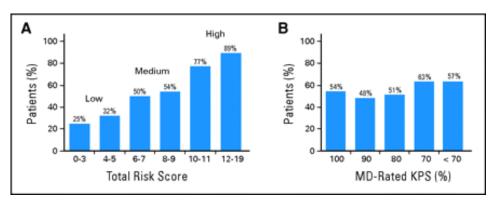
	ematological manghancies in the elderry																					
		Stu	dy		Results univariate analyses							F	Results multivariate analyses									
	Author	Year of publication	Number of patients	Type of malignancy	Age	Performance status	Comorbidity	ADL	IADL	Cognition	Mood	Objective physical capacity	Nutritional status	Age	Performance status	Comorbidity	ADL	IADL	Cognition	Mood	Objective physical capacity	Nutritional status
	Klepin	2013 (2011)	74	AML	_	_	_	-	-	+	-	+		_	-	-	-	-	+	-	+	
	Deschler	2013	195	AML/MDS	_	+	+	+	+	+	_ *	+		_	+	+	+	_	_	_ *	-	
Haematological malignancies only	Corsetti	2011	21	AML/RAEB					_													
natolo	Tucci	2009	84	DLBCL																		
Haen	Soubeyran	2011	32	Non-Hodgkin lymphoma				+	+	+	+											
_	Winkelmann	2011	143	Non-Hodgkin lymphoma	+	+	+	+	+					_	_	+	-	+				
	Rollot-Trad	2008	54	Various	+	+		+	+	+			(+)	_	_		_	_	_			(+)
s cies	Soubeyran	2012	348	Various	_	+	_	_	_	+	_	+	+	_	_	_	_	_	_	_	+	+
Various malignancies	Wedding	2007	427	Various	+	+	+	-	+					+	+	+	-	-				
	Wildes	2013	65	Various	+	_	-	-	-	-	-	+	(—)	_	_	-	-	-	-	-	+	(–)
	Proportion of studies with a significant association (%)					71	50	50	55	83	20	100	67	14	29	50	14	14	20	0	75	67

Based on a systematic Medline and Embase search, June 21st 2013

Hamaker M. et al, Leuk Res, 2014

Predictive model for chemotherapy toxicity (CARG score)

- Predicting chemotherapy toxicity grade
 3-5 (CTC) in older cancer patients
 (n=500)
- Prospective multicenter study

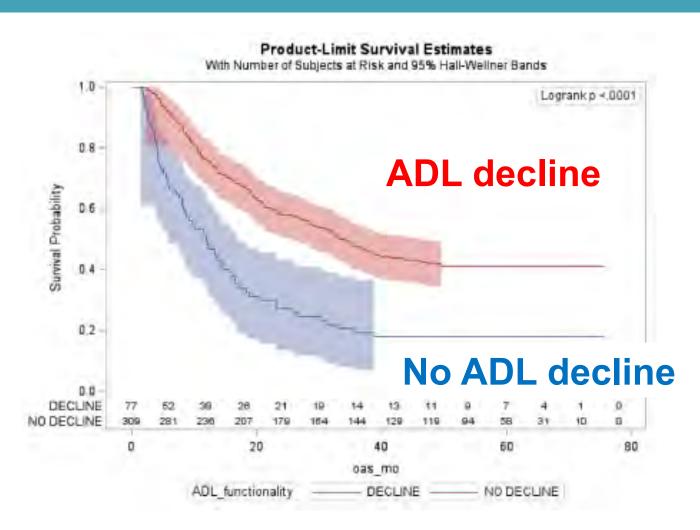


Ability of (A) risk score versus (B) physician-rated Karnofsky performance status (KPS) to predict chemotherapy toxicity.

Risk factors (Odds ratio)

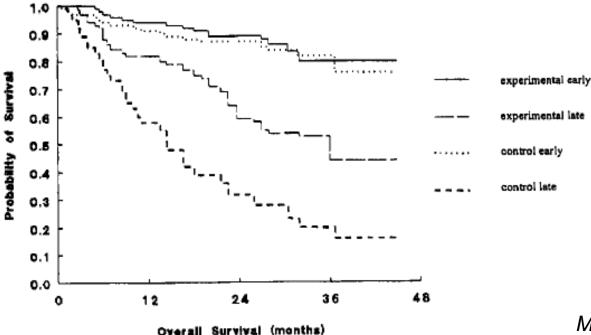
- $\square \quad \mathsf{Age} \geq 72\mathsf{yrs} \ (1.85)$
- □ Hb <11 (m), <10 (f) (2.31)
- Creatinine clearance <34ml/min (2.46)</p>
- No. of falls (1 or more) in last 6 months
 (2.47)
- IADL: taking medications with some help or unable (1.5)
- IADL: walking one block: somewhat limited or limited a lot (1.71)

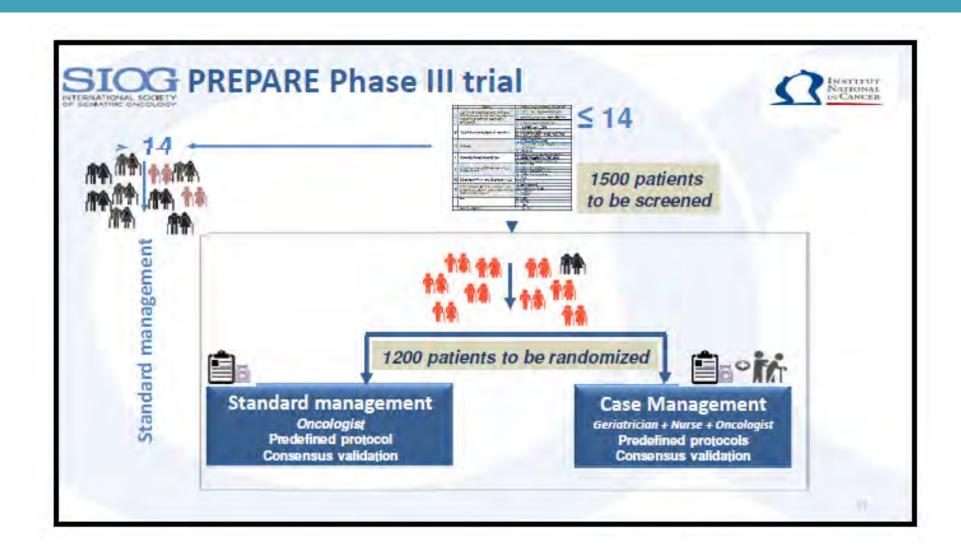
Functional decline is associated with shortened overall survival



Does case-management improve outcome?

- Case management & interventions improve outcome in elderly post-surgical cancer patients
- (Hematological) cancer?





Relevance of geriatric assessment

Geriatric assessment helps oncologists to

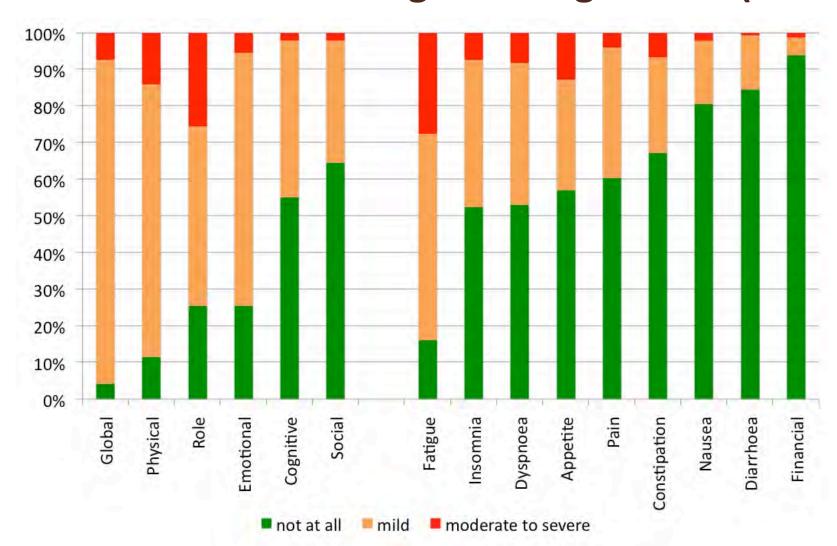
- understand the overall health status of the patient +
- identify previously unknown health problems +
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Patient reported outcomes (PROs) - Definition

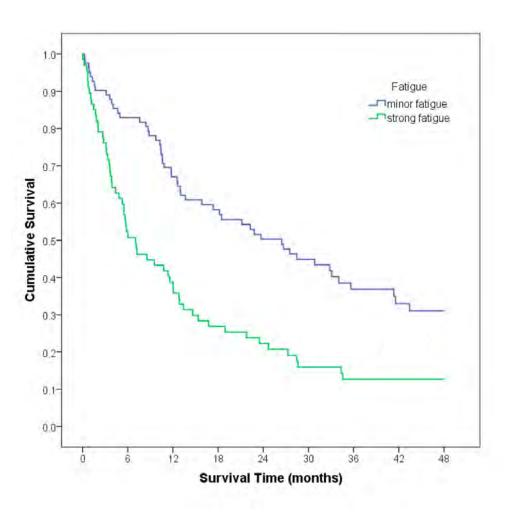
- Any report of the status of a patient's health condition that comes directly from the patient, without interpretation of the patient's response by a clinician or anyone else (FDA).
- Standardised, validated questionnaires that are completed by patients to measure their perceptions of their own functional status and wellbeing (BMJ).

Prevalence of symptoms & impairments in functional domains in EORTC QLQ-C30 in hematological malignancies (n= 149)



Hofer F et al., Ann Hematol, in press

Fatigue is associated with unfavourable OS in hematological malignancies



median 26.4 vs 7.0 months p < 0.001

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Where to go?

Where we've been

- we know a lot, but need to know more
- we are great at predicting
- we have to intervene and prove the benefit



As our population ages, we need to consider

- Collaboration with other medical fields struggling with similar issues
- Integrate PROs and how to elicit patient preferences
- Caring for caregivers
- Importance of social support



Scientific Meeting on Aging and Hematology

CME Accredited

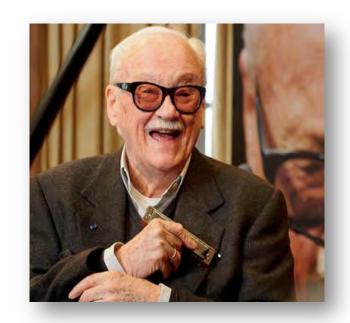
October 12-14, 2018

Warsaw, Poland Chair: D Bron

Organised by EHA & the EHA

Scientific Working Group on Aging

and Hematology



https://ehaweb.org/meetings/swg-aging/



ASH Annual Meeting Friday Scientific Workshop

Hematology and Aging:
Highlighting Novel Science and Developing a Research
Agenda

December 2017



INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY

2018

AMSTERDAM THE NETHERLANDS 16-18 NOV.

18th SIOG Annual Conference, Amsterdam - The Netherlands

"Geriatric oncology - becoming mainstream cancer care"









Abstract submission deadline: JUNE 8, 2018 Early registration deadline: JUNE 19, 2018

Find out more at www.siog.org