

Geriatrisches Screening bei älteren Patientinnen und Patienten: digital oder original?

Prof. Dr. Ulrich Wedding

ulrich.wedding@med.uni-jena.de

Offenlegung potentieller Interessenskonflikte

1. Anstellungsverhältnis oder Führungsposition:

**Univ.-Klinikum Jena, Vizepräsident Landesärztekammer Thüringen (LÄKT),
Vorsitzender der Akademie für ärztliche Fort- und Weiterbildung der LÄKT
Vorsitzender des Vorstands der Hospiz- und Palliativ-Stiftung Jena**

2. Beratungstätigkeit:

Scholarship in Interdisciplinary Oncology (SIO) unterstützt von Medac

3. Aktienbesitz:

Bayer, Glaxo-Smith-Kline, Siemens

4. Honorare:

Novartis, Roche, Janssen-Cilag, Amgen, Kyowa Kirin

5. Finanzierung wissenschaftlicher Untersuchungen:

-

6. Gutachtertätigkeit:

Belgische Krebsgesellschaft, French Cancer Lige, Dutch Cancer Society, Deutsche Krebshilfe

7. Andere finanzielle Beziehungen:

keine

Struktur

Screening bei alten Patienten mit Krebserkrankungen

- a) was ist Ziel des Screenings?
- b) wer empfiehlt es?
- c) wird es durchgeführt ?
- d) wie - digital oder original?
- e) oder noch ganz anders?

Reduktion der Zahl der Patienten, die eine aufwändigere / belastendere / risikoreichere Untersuchung erhalten

z.B.: Screening von Patienten im Alter von 65 Jahren und älter mit Krebserkrankung vor einer onkologischen Therapie -> nur Patienten mit auffälligem Screening erhalten ein aufwändigeres Geriatrisches Assessment

Voraussetzungen:

nur ein Teil der Patienten ist im Screening auffällig,

das Assessment bringt zusätzliche relevante Informationen,

Assessment basierte Therapieentscheidungen / Interventionen verbessern Lebenslänge und / oder Lebensqualität (PRO)

- Prognostische Information
- Grundlage für differenzierte Therapieentscheidung
- Verlaufsparemeter
- Patient-reported-outcome

CAVE: Screening-Instrumente können das ggf. –
dann sind sie aber nicht als Screening-Instrumente genutzt

Screening older cancer patients: first evaluation of the G-8 geriatric screening tool

C. A. Bellera^{1,2*}, M. Rainfray^{3,4}, S. Mathoulin-Pélissier^{1,2,5}, C. Mertens^{4,6}, F. Delva¹, M. Fonck⁶ & P. L. Soubeyran⁶

- **364 patients diagnosed with NHL 30%, Colon 28%, Lung Stomach 10%, Lung 10%, Pancreas 6%, Prostate 6%, ...**
- **1st line treatment with chemotherapy,**
- **> 70 yrs (range 70-**
- **Functional Status: ADL, IADL**
- **Cognitive Function: MMSE**
- **Depression: Geriatric Depression Scale (GDS)**
- **Nutrition: MNA**
- **Mobility: Get-up-Go**
- **Comorbidity: CIRS-G**

Annals of Oncology Advance Access published July 19, 2014

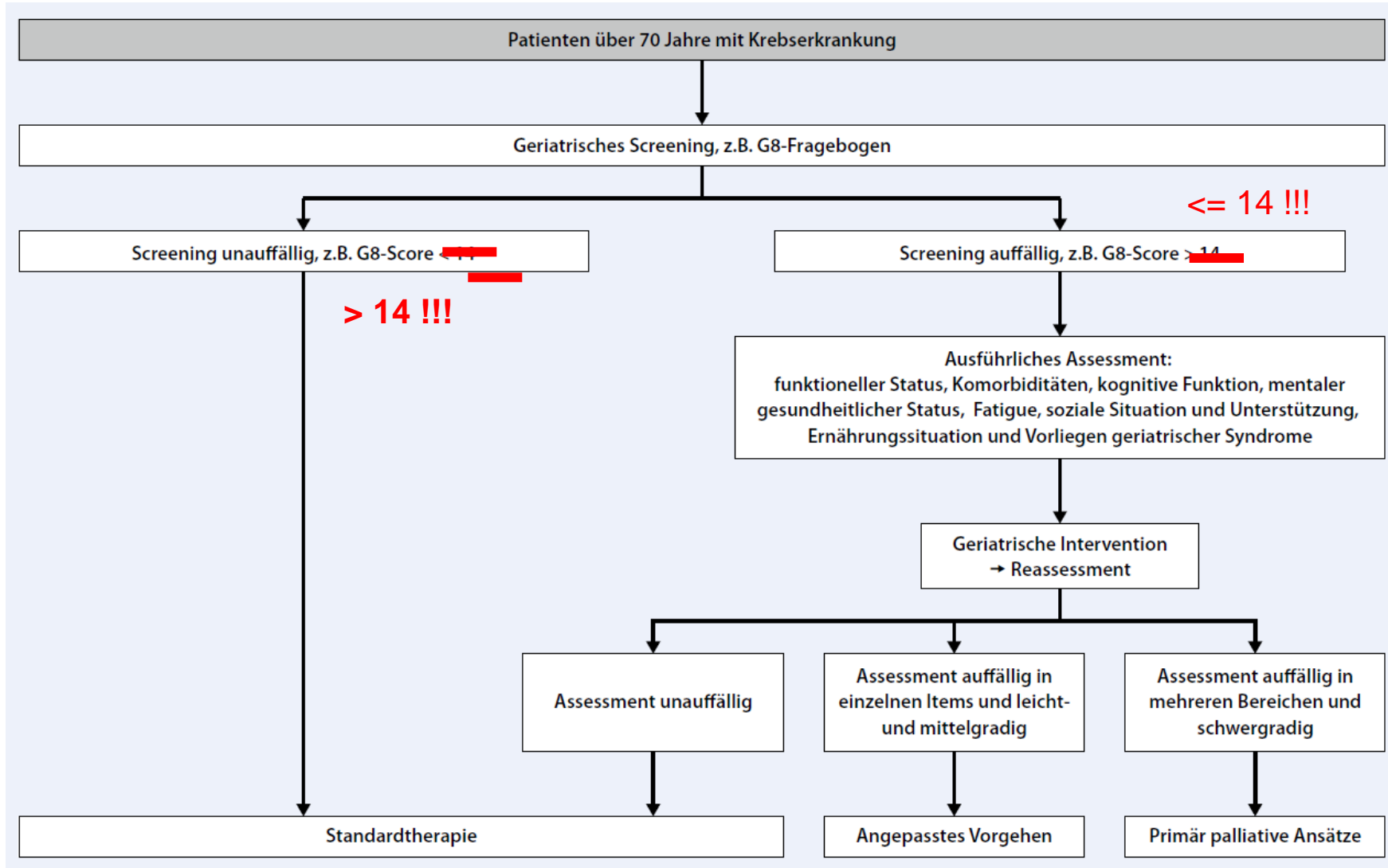
review

Annals of Oncology 00: 1–12, 2014
doi:10.1093/annonc/mdu210

Screening tools for multidimensional health problems warranting a geriatric assessment in older cancer patients: an update on SIOG recommendations[†]

L. Decoster^{1*}, K. Van Puyvelde², S. Mohile³, U. Wedding⁴, U. Basso⁵, G. Colloca⁶, S. Rostoft⁷, J. Overcash⁸, H. Wildiers⁹, C. Steer¹⁰, G. Kimmick¹¹, R. Kanavaras¹², A. Luciani¹³, C. Terret¹⁴, A. Hurria¹⁵, C. Kenis¹⁶, R. Audisio¹⁷ & M. Extermann¹⁸

- **Screening Instruments can not replace a geriatric assessment**
- **In a busy clinical they help to identify patients without need of a full geriatric assessment**
- **Nutritional questions have a major part in screening tools, especially the G8 questionnaire**



AG Geriatrische Onkologie der DGHO / DGG / AIO

TABELLE
Entitätsübergreifender Assessmentvorschlag der AG Geriatrische Onkologie für Patienten mit maligner Erkrankung

Stufe 1:	Stufe 2:				Stufe 3:
Screening	Basisassessment – wenn Screening auffällig				Wenn geriatrische Intervention erfolgen sollen
Instrument	Domäne	Instrumente	Prädiktion von Toxizität	Prädiktion von Überleben	Instrumente
G8 Screening	Selbsthilfefähigkeit	ADL/IADL Score	+	+	ADL / IADL
	Mobilität	Timed-up-and-go-Test Handkrafttest	?	+	SPPB 4mWT Chair Rise Test 6-Minuten-Gehtest Tinetti I/II
	Ernährung	Fragen aus G8 Screening	+	+	MNA
	Kognition	MMSE Mini-Cog	+ ?	+ +	MoCa Demtect
	Depression	2-Fragen Test nach Whooley GDS-5	? ?	? +	GDS-15 PhQ-9
	Polypharmazie	Frage aus G8 Screening	?	+	pharmakologischer Review
	Komorbiditäten	CCI CIRS-G-Score	+	+	CCI CIRS-G-Score

Integration ins Tumorboard
Kolb, Bokemeyer, Wedding
Dt. Ärzteblatt 2020



ASCO Special Articles

Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy: ASCO Guideline Update

William Dale, MD, PhD¹ ; Heidi D. Klepin, MD, MS² ; Grant R. Williams, MD, MSPH³ ; Shabbir M.H. Alibhai, MD⁴ ; Cristiane Bergerot, PhD⁵ ; Karlynn Brintzenhofeszoc, PhD, MSW⁶ ; Judith O. Hopkins, MD⁷; Minaxi P. Jhaver, MD⁸ ; Vani Katheria, MS⁹ ; Kah Poh Loh, MBBCh BAO, MS¹⁰ ; Lisa M. Lowenstein, PhD¹¹ ; June M. McKoy, MD, MPH, JD, MBA¹² ; Vanita Noronha, MD¹³ ; Tanyanika Phillips, MD¹⁴; Ashley E. Rosko, MD¹⁵ ; Tracy Ruegg, PhD, ANP¹⁶ ; Melody K. Schiaffino, PhD¹⁷; John F. Simmons Jr, MD¹⁸ ; Ishwaria Subbiah, MD¹⁹ ; William P. Tew, MD²⁰ ; Tracy L. Webb, PA-C²¹ ; Mary Whitehead, BFA²²; Mark R. Somerfield, PhD²³ ; and Supriya G. Mohile, MD, MS¹⁰

ABSTRACT

- PURPOSE** To update the ASCO guideline (2018) on the practical assessment and management of age-associated vulnerabilities in older patients undergoing systemic cancer therapy.
- METHODS** An Expert Panel conducted a systematic review to identify relevant randomized clinical trials (RCTs), systematic reviews, and meta-analyses from January 2016 to December 2022.
- RESULTS** A total of 26 publications met eligibility criteria and form the evidentiary basis for the update.

THE BOTTOM LINE

Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy: ASCO Guideline Update

Overarching Guideline Purpose

To improve outcomes for older adults with cancer through recommendations for:

- (1) use of validated geriatric assessment (GA) tools and GA-guided interventions, and
- (2) management of common age-associated conditions identified through GA that may impact the care of those undergoing chemotherapy and other treatments.

Target Population

Older adults (65+ years old) with cancer.







Target Audience

Oncologists (medical, radiation, and surgical), geriatricians, palliative medicine specialists, primary care physicians, advanced practice providers, pharmacists, oncology nurses, social workers, physical therapists, occupational therapists, nutritionists, dieticians, patients, and caregivers.



ASCO Special Articles

Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy: ASCO Guideline Questions and Answers

Grant R. Williams, MD, MSPH¹ ; Judith O. Hopkins, MD² ; Heidi D. Klepin, MD, MS³ ; Lisa M. Lowenstein, PhD⁴ ; Amy Mackenzie, MD, FACP⁵; Supriya G. Mohile, MD⁶; Mark R. Somerfield, PhD⁷ ; and William Dale, MD, PhD⁸ 

Recommendation	Type	Evidence Quality	Strength
<p>1.1. All patients with cancer age 65 years and older with geriatric assessment (GA)-identified impairments should have GA-guided management included in their care plan. GA-guided management includes using GA results to inform cancer treatment decision making as well as addressing impairments through appropriate interventions, counseling, and/or referrals.</p>	EB	H	S
<p>2.1. A geriatric assessment should include high priority aging-related domains known to be associated with outcomes in older patients with cancer to include measurement of physical and cognitive function, emotional health, comorbid conditions, polypharmacy, nutrition, and social support.</p>	EB	H	S
<p>2.2. The Panel recommends the Practical Geriatric Assessment (PGA) as one option for this purpose. See the PGA tool.</p>	IC	M	W

FIG 1. Updated recommendations from the 2023 practical assessment and management of vulnerabilities in older patients receiving systemic cancer therapy ASCO guideline. EB, evidence based; GA, geriatric assessment; I, intermediate; IC, informal consensus; M, moderate; S, strong; W, weak.

ASCO: Krebs + 65+ + med. Systemtherapie -> GA -> falls Einschränkungen -> GA-basiertes Management – kein Screening

Schlüsselempfehlung der neuen ASCO-Leitlinie

Alle onkologischen Patienten ≥ 65 Jahre, die eine medikamentöse Systemtherapie erhalten, sollen ein geriatrisches Assessment (GA) und – falls Einschränkungen vorliegen – ein in den Behandlungsplan zu integrierendes GA-basiertes Management (GAM) erhalten. Das GAM beinhaltet, GA-basierte Entscheidungen zur onkologischen Therapie zu treffen sowie GA-getriggerte Interventionen, Beratungen oder Überweisungen zu veranlassen [17].



REVIEW

Adequate assessment yields appropriate care—the role of geriatric assessment and management in older adults with cancer: a position paper from the ESMO/SIOG Cancer in the Elderly Working Group

K. P. Loh^{1*}, G. Liposits², S. P. Arora³, N. R. Neuendorff⁴, F. Gomes^{5,6}, J. L. Krok-Schoen^{7,8}, T. Amaral⁹, E. Mariamidze^{10,11}, L. Biganzoli¹², E. Brain¹³, C. Baldini^{14,15}, N. M. L. Battisti¹⁶, M. Frélaud¹⁷, R. Kanavaras¹⁸, A. R. A. Mislavsky^{19,20}, D. Papamichael²¹, C. Steer^{22,23,24†} & S. Rostoft^{25,26†}

Taken together, the ESMO/SIOG Cancer in the Elderly Working Group proposes the following recommendations:

1. GAM should be implemented in patients aged ≥ 70 years (and ≥ 65 years when possible) being considered for cancer-directed treatments, especially systemic treatments.
2. GAM should be carried out as early as possible before treatment initiation, and when possible, before finalization of the treatment plan.
3. In settings where GAM cannot be carried out for all patients, use validated **screening** tools to identify those who are likely to benefit from subsequent GAM.¹⁸
4. Models of GAM delivery needs to be tailored to the availability of local resources, settings (e.g. academic cancer centers versus community oncology practices), and staff (e.g. geriatricians or geriatric oncologists, and other allied health care professionals).
5. Utilize the Cancer and Aging Research Group (CARG) or Chemotherapy Risk Assessment Scale for High-Age Patients (CRASH) tools to estimate chemotherapy toxicity in older patients with cancer.

Table 4. Models of care for geriatric assessment and management based on local resources

Settings	Proposed approaches for geriatric assessment and management	Models of care
High resource (geriatric oncologist or geriatrician and oncologist are available)	<ul style="list-style-type: none"> • Comprehensive multidisciplinary clinic where patients undergo geriatric assessment and management • Chemotherapy toxicity tools 	<ul style="list-style-type: none"> • Traditional gold standard model • Shared-care model
Intermediate resource (geriatrician and oncologist are available)	<ul style="list-style-type: none"> • Validated screening tools (e.g. Geriatric-8, Vulnerable Elders Survey-13, Senior Adult Supplement Screening Questionnaire) or abbreviated geriatric assessment • Geriatric assessment and management based on pre-defined intervention plan or evaluation in a comprehensive multidisciplinary clinic if positive screening • Chemotherapy toxicity tools by the geriatricians or oncology teams 	<ul style="list-style-type: none"> • Shared-care model • Two-step consultative model
Low resource (oncologist is available)	<ul style="list-style-type: none"> • Validated screening tools • Selected validated geriatric assessment tool that may or may not be based on screening tools • Pre-defined geriatric intervention plan (i.e. carried out in the community setting) • Chemotherapy toxicity tools 	

Onkologie Empfehlung 1

3.2.1	Empfehlung	
Empfehlungsgrad B ↑	Bei älteren onkologischen Patient*innen <u>sollte</u> ein geriatrisches Screening mittels G8-Fragebogen vorgenommen werden, um Patient*innen zu identifizieren, die von einem CGA vor Einleitung einer systemischen Krebstherapie profitieren können.	
Evidenz	Disalvo et al 2023; Hamaker et al 2012	
Vertrauenswürdigkeit der Evidenz nach GRADE: ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig ⊕⊖⊖⊖ sehr niedrig	Höhere Komplettierungsrate der Chemotherapie Geringere Abbruchrate der Chemotherapie Häufigere primäre Dosisreduktion Seltener sekundäre Dosisreduktion Niedrigere Toxizität nach G8-Screening Keine Verzögerung der Chemotherapie Höhere Lebensqualität Reduktion der Krankheitslast Hohe Sensitivität zur Vorhersage von Frailty	
Konsensstärke: 100 % (starker Konsens)		



ELSEVIER

Contents lists available at ScienceDirect

Journal of Geriatric Oncology



A systematic review on the association of the G8 with geriatric assessment, prognosis and course of treatment in older patients with cancer☆



Inez Charlotte van Walree ^{a,*}, Ellen Scheepers ^a, Lieke van Huis-Tanja ^a, Marielle H. Emmelot-Vonk ^b, Carine Bellera ^c, Pierre Soubeyran ^d, Marije E. Hamaker ^e

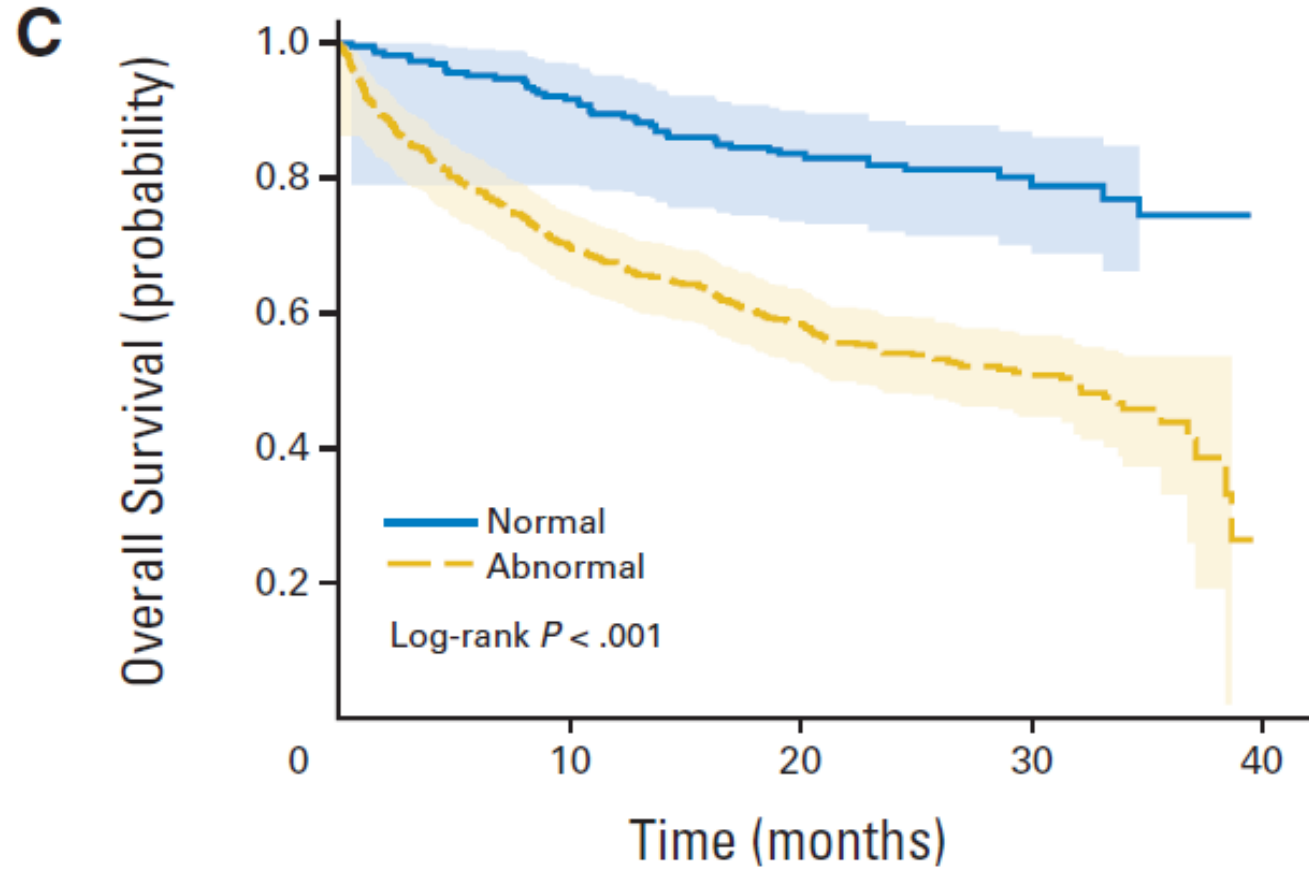
Systematischer Review

n=53 Artikel aus 45 Studien

Zahl der Patienten:
27 - 1425

unterschiedliche Settings

Publication			Study method		Patients					Outcome			
Author	Publication year (s)	Abstract (A) or full text (F)	Study population	Patient selection	Treatment	Number of patients ^a	% male	Age in years (median, range)	% impaired according to G8	Comparison with GA	Survival	Course of treatment	Patient-centred outcomes
Agemi [19]	2015	A	Lung cancer	All patients aged ≥70 years candidate for oncological treatment	Various	101	81	79 (70–95)	82		X	X	
Aparicio [20]	2018	F	Metastatic colorectal cancer	Untreated patients aged ≥75 years who completed geriatric questionnaires	CT (± TT)	96	55	80 (75–91)	81		X	X	
Aydin [21]	2016	A	Acute myeloid leukemia	Consecutive, newly diagnosed referrals aged >60 years	CT	69	?	?	?		X		
Baitar [22,23]	2013	F	Various cancer types	Age ≥ 65 years, newly diagnosed cancer or recurrent disease	Various	170	54	77 (66–97)	76	X		X	
Bellera [9,27]	2012	F	Various cancer types	Patients aged ≥70 years scheduled to receive first-line chemotherapy	CT	339	59	77 (70–99)	82	X			X
Bonomo [24]	2015	A	Head and neck cancer	Age ≥ 65 years, unsuitable for curatively intended concurrent CTR or high-dose RT by clinical judgement	RT	36	58	78 (65–91)	100		X		
Bononi [25]	2017	F	Various cancer types	Unelected outpatients aged >70 years	Various	530	50	?	69		X		
Bouhassass [26]	2013	F	Various cancer types	Consecutive patients aged >70 years, outpatient or hospitalized	Various	1050	40	82 (70–100)	86		X		
Cvetkovic [28]	2018	A	Indolent B-cell lymphoma	Consecutive patients aged ≥65 years fulfilling criteria for treatment	CT	89	51	75 (65–88)	?		X		
Decoster [29]	2017	F	Colorectal cancer	Age ≥ 70 years, newly diagnosed cancer or cancer progression/relapse	Various	193	62	77 (70–89)	?			X	X
Decoster [30]	2018	F	Metastatic colorectal cancer	Age ≥ 70 years, suitable for first-line chemotherapy	CT	248	62	77 (69–91)	81		X	X	
Denewet [31]	2016	F	Various cancer types	Age ≥ 70 years with new cancer diagnosis or disease progression	Various	205	53	79 (70–93)	86		X		
Dimopoulos [32]	2016	A	Multipel myeloma	Consecutive, unselected patients aged >65 years	TT	144	55	76 (66–92)	?		X		
Dubruille [33,34]	2012	F	Haematological cancers	Consecutive, inpatients aged ≥65 years, fit enough for chemotherapy	CT	90	57	74 (65–89)	72	X	X	X	
Fagard [35]	2015	A	Colorectal cancer	Patients aged ≥70 years planned for surgery	Surgery	190	55	77 (70–97)	61			X	
Gangopadhyay [36]	2017	F	Various cancer types	Patients aged >65 years who completed CTR	CTR	219	42	78 (65–89)	?			X	
Hamaker [37]	2018	F	Haematological cancers	Consecutive, newly diagnosed patients aged ≥67 years	Various	108	53	78 (67–99)	61	X	X		
Hentschel [38]	2016	F	Various cancer types	Consecutive patients aged ≥63 years referred to a tertiary cancer centre	Various	63	62	73 (63–93)	75	X			
Holmes [39]	2014	F	Haematological cancers	Patients eligible for allo-HCT aged ≥60 years	allo-HCT	50	70	65 (60–73)	56	X			
Kaibori [40]	2016	F	Hepatocellular carcinoma	Consecutive patients scheduled for liver resection aged ≥70 years	Surgery	71	73	77 (70–89)	55		X	X	
Kenig [41]	2015	F	Solid abdominal tumors	Consecutive patients ≥65 years in need of surgery under general anesthesia	Surgery	135	47	75 (65–92)	85	X			
Kenis [12,42]	2014	F	Various cancer types	Patients aged ≥70 years at diagnosis or at disease progression/relapse	Various	937	37	76 (70–95)	74	X	X		X
Kim [43]	2017	A	Various cancer types	Patients receiving first-line chemotherapy aged ≥70 years	CT	301	?	75 (70–93)	88	X			
Martinez-Tapia [44,45]	2017	F	Various cancer types	Consecutive newly diagnosed in- and outpatients aged ≥70 years	Various	1333	52	80 (IQR 76–84)	84	X	X		



No. at risk	0	10	20	30	40		
Normal	240	219	202	177	126	67	22
Abnormal	697	517	420	324	208	104	23

G8 Assoziation mit Therapieassoziierten Toxizitäten und Überleben

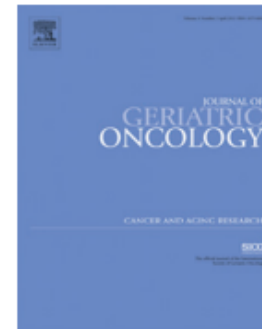
Associations between the original G8 and treatment-related toxicity or complications and between the original G8 and survival.

Publication Author	Study design				Outcome		
	Study population	Type of cancer treatment	n=	Me(di)anp Follow-up	Toxicity or complications	Survival	Comparison of survival frail vs fit ^a
Aydin [21]	Acute myeloid leukemia	CT	85	?		+ / + +	
Cvetkovic [28]	Indolent B-cell lymphoma	CT	89	?		+ / + +	
Decoster [30]	Metastatic colorectal cancer	CT	252	2-3 months	+ / - -	+ / - -	PFS 8.7 vs 11.4 months
Dubruille [34]	Haematological cancers	CT	90	?	-	-	
Stokoe [18]	Various cancer types	CT	165	?	+		
Aparicio [20]	Metastatic colorectal cancer	CT (± TT)	102	20.4 months		-	
Wildiers [66]	Metastatic breast cancer	CT (± HT)	80	20.7 months		+ / + +	6-month OS 88% vs 100% 12-month OS 67% vs 100%
Baitar [23]	Various cancer types	CT or CRT	85	1 month	- / - -		
Gangopadhyay [36]	Various cancer types	CRT	219	?	+ / + +		
Bonomo [24]	Head and neck cancer	RT	37	13 months		+ / - -	
Runzer-Colmenares [56]	Various cancer types	RT	181	10.2 months	+ / + +		
Middelburg [47]	Various cancer types	RT or CRT	409	?	+ / - -		
Pottel [54]	Head and neck cancer	RT or CRT	100	?		+ / + +	36-month OS 36% vs 70%
Fagard [35]	Colorectal cancer	Surgery	190	?	+ / - -		
Kaibori [40]	Hepatocellular carcinoma	Surgery	71	> 6 months after hepatectomy	+ / + +	-	
Matsushita [46]	High-risk prostate cancer	Surgery	41	?	+ / + +		
Silvestri [58,59]	Kidney cancer	Surgery	162	40.6 months	+	-	
Souwer [61]	Colorectal cancer	Surgery	139	At least 6 months	-	-	1-month OS 96% vs 96% 6-month OS 94% vs 96%
Dimopoulos [32]	Multipel myeloma	TT	144	?		+ / + +	
Stauder [62]	Haematological cancers	?	64	?		+	
Takahashi [63]	Various cancer types	?	264	?		+ / + +	Median OS 10.7 vs 25.6 months
Agemi [19]	Lung cancer	Various	101	?	-	+ / + +	
Bononi [25]	Various cancer types	Various	530	?		+ / + +	
Bouhassass [26]	Various cancer types	Various	1050	3.3 months		+ / - -	
Decoster [29]	Colorectal cancer	Various	193	2-3 months	- / - -		
Denewet [31]	Various cancer types	Various	205	?		+ / + +	
Hamaker [37]	Haematological cancers	Various	108	33.6 months		+ / + +	12-month OS 36% vs 88% ^b
Kenis [12]	Various cancer types	Various	937	19 months		+ / + +	OS at 20 months ≈ 60% vs 90% ^c
Martinez-Tapia [45]	Various cancer types	Various	1333	26.5 months		+ / + +	Median OS 13.1 vs 76 months
Molina-Garrido [48]	Various cancer types	Various	202	7.2 months		? / - -	
Schulkes [57]	Lung cancer	Various	142	16.1 months		+ / + +	12-month OS 46% vs 79%
Soubeyran [11]	Various cancer types	Various	1167	12.4 months		+ / + +	



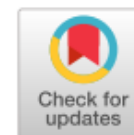
Contents lists available at ScienceDirect

Journal of Geriatric Oncology



Development of a self-reported version of the G8 screening tool ☆

Inez Charlotte van Walree ^{a,*}, Ariel M. Vondeling ^a, Geraldine R. Vink ^{b,g}, Lieke H. van Huis-Tanja ^c,
Marielle H. Emmelot-Vonk ^d, Carine Bellera ^{e,h}, Pierre Soubeyran ^f, Marije E. Hamaker ^a



Appendix A. Original G8

Items	Possible responses (score)
1. Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing, or swallowing difficulties?	0 = severe decrease in food intake 1 = moderate decrease in food intake 2 = no decrease in food intake
2. Weight loss during the last 3 months?	0 = weight loss >3 kg 1 = does not know 2 = weight loss between 1 and 3 kg 3 = no weight loss
3. Mobility?	0 = bed or chair bound 1 = able to get out of bed/chair but does not go out 2 = goes out
4. Neuropsychological problems?	0 = severe dementia or depression 1 = mild dementia 2 = no psychological problems
5. Body mass index (BMI)? (weight in kilograms)/(height in square metres)	0 = BMI <19 1 = BMI 19 to <21 2 = BMI 21 to <23 3 = BMI ≥23
6. Takes more than three prescription drugs per day?	0 = yes 1 = no
7. In comparison with other people of the same age, how does the patient consider his/her health status?	0.0 = not as good 0.5 = does not know 1.0 = as good 2.0 = better
8. Age	0 ≥ 85 1 = 80–85 2 ≤ 80
Total score 0–17	Cut-off ≤14: potentially frail

Appendix B. Self-reported G8

Items	Possible responses (score)
1. This question is about the past 3 months. Did you start eating less during that period?	<input type="checkbox"/> I did not eat less <input type="checkbox"/> I started to eat a little less <input type="checkbox"/> I started to eat much less
2. How much weight have you lost in the last 3 months?	<input type="checkbox"/> I did not lose weight <input type="checkbox"/> I lost between 0 and 2 kg <input type="checkbox"/> I lost 3 kg or more <input type="checkbox"/> I do not know if I have lost weight
3. How well are you moving?	<input type="checkbox"/> I go out independently <input type="checkbox"/> I can get out of my bed or chair myself but I do not go outside myself <input type="checkbox"/> I cannot get out of my bed or chair myself
4. Do you have psychological (mental) problems? Explanation: examples of psychological problems are depression or forgetfulness	<input type="checkbox"/> I do not have psychological problems <input type="checkbox"/> I am a bit forgetful or depressed <input type="checkbox"/> I am seriously forgetful or depressed
5. Do you take any medication?	<input type="checkbox"/> No <input type="checkbox"/> Yes, one to three <input type="checkbox"/> Yes, more than three
6. Do you think you are healthier or less healthy than most people your age?	<input type="checkbox"/> I am less healthy <input type="checkbox"/> I am as healthy <input type="checkbox"/> I am healthier <input type="checkbox"/> I do not know
7. How old are you?	<input type="checkbox"/> I am not yet 80 years old <input type="checkbox"/> I am 80 to 85 years old <input type="checkbox"/> I am 86 years or older
8. How tall are you? centimetre
9. How much do you weigh? kilograms



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Geriatric Oncology

journal homepage: www.elsevier.com/locate/jgo

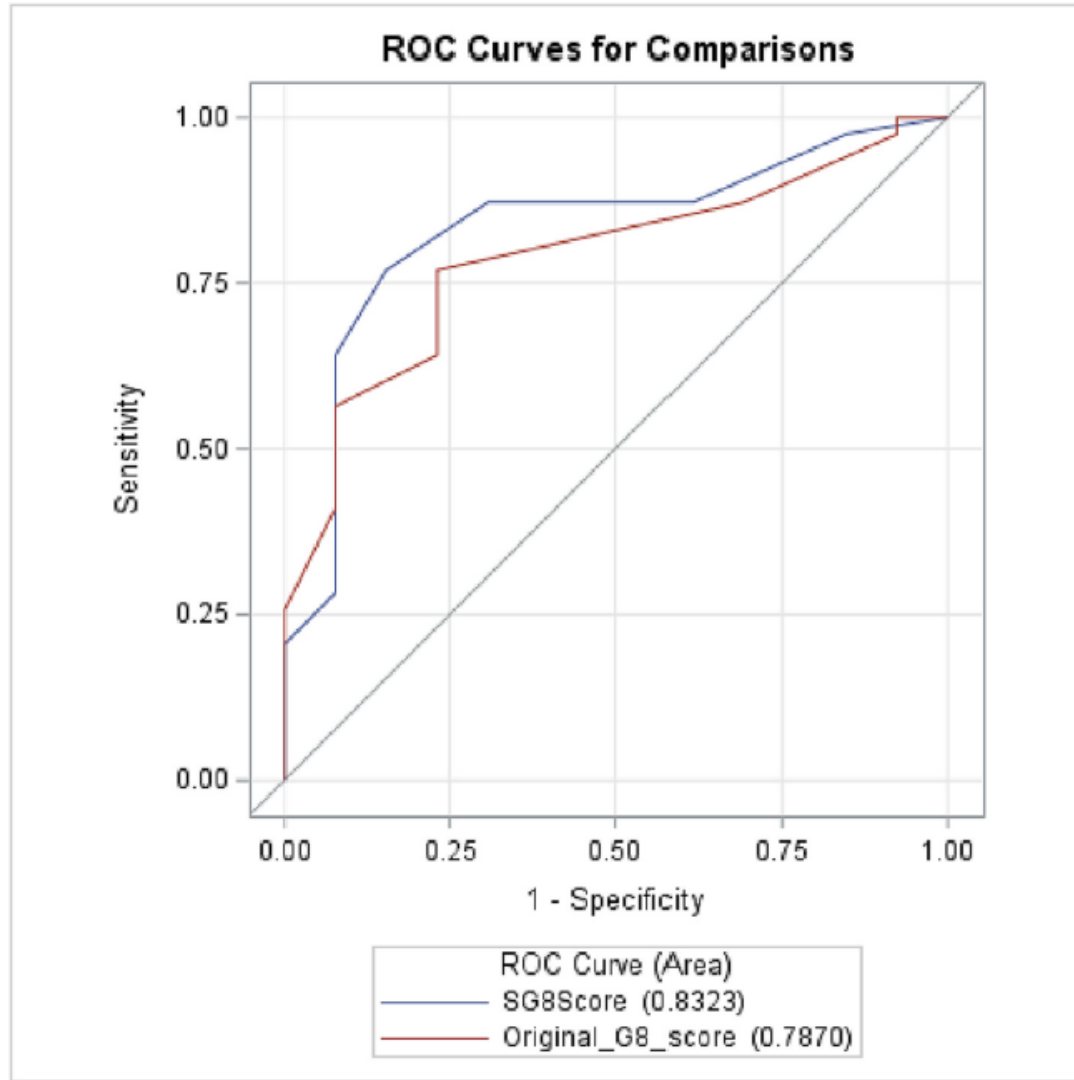


Research Paper

Validity of a self-administered G8 screening test for older patients with cancer

Joseph Chon ^a, Narhari Timilshina ^b, Fahad AlMugbel ^b, Rana Jin ^c, Susie Monginot ^c, Isabel Tejero ^b, Henriette Breunis ^b, Shabbir M.H. Alibhai ^{b,d,*}





The Youden's index, sensitivity, and specificity was calculated for the first 10 cut-offs of the S-G8 compared to the CGA.

Cut-off	Sensitivity	Specificity	Youden's Index
14	0.77	0.85	0.62
13	0.64	0.92	0.56
15	0.87	0.69	0.56
12	0.41	0.92	0.33
16	0.87	0.38	0.26
11	0.28	0.92	0.21
10	0.18	1.00	0.18
9	0.13	1.00	0.13



Practical Geriatric Assessment

To be completed by the patient or caregiver

Patient Name:	Patient DOB:	Date Being Completed:
---------------	--------------	-----------------------

1 | How many times have you fallen in the last 6 months? _____

2 | Does your health limit you in walking one block?

- Not limited at all
- Limited a little
- Limited a lot

3 | Does your health now limit you in climbing one flight of stairs?

- Not limited at all
- Limited a little
- Limited a lot

4 | Can you get to places out of walking distance...

- Without help (drive your own car, or travel alone on buses or taxis);
- With some help (need someone to help you or go with you when traveling); or
- Are you unable to travel unless emergency arrangements are made for a specialized vehicle like an ambulance?

5 | Can you go shopping for groceries or clothes (assuming you have transportation)...

- Without help (taking care of all shopping needs yourself, assuming you had transportation);
- With some help (need someone to go with you on shopping trips); or
- Are you completely unable to do any shopping?

6 | Can you prepare your own meals...

- Without help (plan and cook all meals yourself);
- With some help (can prepare somethings but unable to cook full meals yourself); or
- Are you completely unable to prepare any meals?

7 | Can you do your housework...

- Without help (can clean floors, etc.);
- With some help (can do light housework but need help with heavy work); or
- Are you completely unable to do any housework?

8 | Can you take your own medicines...

- Without help (in the right doses at the right time);
- With some help (able to take medicine if someone prepares it for you and/or reminds you); or
- Are you completely unable to take your medicines?

9 | Can you handle your own money...

- Without help (write checks, pay bills, etc.);
- With some help (manage day-to-day buying but need help with managing your checkbook and paying your bills); or
- Are you completely unable to handle money?

10 | Can you get in and out of bed...

- Without any help or aids;
- With some help (either from a person or with the aid of some device); or
- Are you totally dependent on someone else to lift you?

11 | Can you dress and undress yourself...

- Without any help (able to pick out clothes, dress and undress yourself);
- With some help; or
- Are you completely unable to dress and undress yourself?

12 | Can you take a bath or shower...

- Without help;
- With some help (need help getting in and out of the tub or need special attachments); or
- Are you completely unable to bathe yourself?

13 | During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

ALL OF THE TIME	MOST OF THE TIME	SOME OF THE TIME	A LITTLE OF THE TIME	NONE OF THE TIME
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14 | How is your eyesight (with glasses or contacts)?

EXCELLENT	GOOD	FAIR	POOR	TOTALLY BLIND
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15 | How is your hearing (with a hearing aid, if needed)?

EXCELLENT	GOOD	FAIR	POOR	TOTALLY DEAF
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16 | Are you basically satisfied with your life?

Yes No

Do you often get bored?

Yes No

Do you often feel helpless?

Yes No

Do you prefer to stay at home rather than going out and doing new things?

Yes No

Do you feel pretty worthless the way you are now?

Yes No

17 KINDS OF SUPPORT Do you have...	NONE OF THE TIME	A LITTLE OF THE TIME	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME
Someone to help if you were confined to bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to take you to the doctor if needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to prepare your meals if you are unable to do it yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to help with daily chores if you were sick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to have a good time with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to turn to for suggestions about how to deal with a personal problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone who understands your problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Someone to love and make you feel wanted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18 IN THE PAST 7 DAYS...	NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS
I felt fearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I found it hard to focus on anything other than my anxiety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My worries overwhelmed me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I felt uneasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19 | Your Health: Do you have any of the following illnesses at the present time?
If you fill in "yes," please tell us how much the illness interferes with your activities:

ILLNESS	NO	YES	IF "YES" INTERFERES WITH ACTIVITIES	NOT AT ALL	SOMEWHAT	A GREAT DEAL
Other cancers or leukemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arthritis or rheumatism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glaucoma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emphysema or chronic bronchitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heart disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circulation trouble in arms or legs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stomach or intestinal disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic liver or kidney disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stroke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Practical Geriatric Assessment

To be completed by provider

Patient Name:	Patient DOB:	Date Being Completed:
---------------	--------------	-----------------------

Nutrition

How much weight have you lost in the past 3 months?

- No weight loss /less than 1 kg (2.2 lbs)
- Greater than 3 kg (6.6 lbs)
- Between 1 and 3 kg (2.2 and 6.6 lbs)
- Do not know the amount

Gait Speed

"Now I am going to observe how you normally walk. If you use a cane or other walking aid and you feel you need it to walk a short distance, then you may use it."

- ▶ "This is our walking course. I want you to walk to the other end of the course at your usual speed, just as if you were walking down the street to go to the store."
- ▶ Demonstrate the walk for the participant.
- ▶ "Walk all the way past the other end of the tape before you stop. I will walk with you. Do you feel this would be safe?"
- ▶ Have the participant stand with both feet touching the starting line.
- ▶ "When I want you to start, I will say: "Ready, begin."" When the participant acknowledges this instruction say: "Ready, begin."
- ▶ Press the start/stop button to start the stopwatch as the participant begins walking.
- ▶ Walk behind and to the side of the participant.
- ▶ Stop timing when one of the participant's feet is completely across the end line.

Time for Gait Speed Test (sec) TIME FOR 4 METERS ____ . ____ sec

Mini-Cog

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 to step 2.

Version 1: Banana, Sunrise, Chair

Version 2: Leader, Season, Table

Version 3: Village, Kitchen, Baby

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." 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 stated in step 1> Say: "What were the three words I asked you to remember?"

SCORING

Word Recall ____ (0-3 points) **Clock Draw ____ (0 or 2 points)** **Total Score: ____ (0 to 5 points)**

1 POINT FOR EACH WORD RECALLED 2 POINTS FOR NORMAL CLOCK, 0 IF ABNORMAL

Chemo-Toxicity

The patient's chemo-toxicity can be calculated using the Cancer and Aging Research Group's [Chemo-Toxicity Calculator](http://mycarg.org) at mycarg.org. The patient's responses to questions 1, 2, 8, 13, and 15 should be used for corresponding questions in the calculator.

RESEARCH



Systematic symptom screening in patients with advanced cancer treated in certified oncology centers: results of the prospective multicenter German KeSBa project

Friederike Braulke¹ · Servet Para² · Bernd Alt-Epping³ · Mitra Tewes⁴ · Markus Bäumer⁵ · Birgit Haberland⁶ · Regine Mayer-Steinacker⁷ · Anne Hopprich⁸ · Maike de Wit⁹ · Michaela Grabe¹⁰ · Sophia Bender-Säbelkampf¹¹ · Caroline Weßling¹² · Christoph Aulmann¹³ · Christina Gerlach³ · Pascale Regincos¹⁴ · Ferdinand Fischer¹⁵ · Soraya Haarmann¹⁶ · Tatjana Huys¹⁷ · Sabine Drygas¹⁸ · Anett Rambau¹⁹ · Alexander Kiani²⁰ · Astrid Schnabel²¹ · Christoph Buhl²² · Stefanie Seipke²³ · Sonja Hiemer²⁴ · Silke Polata²⁵ · Maximilian Meßmann²⁶ · Anna Hansmeier²⁷ · Louiza Anastasiadou²⁸ · Anne Letsch²⁹ · Daniel Wecht³⁰ · Matthias Hellberg-Naegele³¹ · Utz Krug²² · Ulrich Wedding³²  · Birgitt van Oorschot²

29 Onkologische Zentren, 2963 Patienten

Although the participating centers were mainly well-established certified OCs with various organ-specific cancer centers highly experienced in different kinds of screening programs, and 45% of them part of a CCC supported by the DKH, 86% of all centers used a paper-based questionnaire and needed additional administrative staff for screening and documentation because of lacking digital infrastructure. This was found to be a time-consuming and staff intensive process and might be a barrier for systematic routine screening (Graupner et al. 2022; Roch et al. 2021). Only two centers were able to screen via tablets or APPs in a sense of real-time patient-reported outcome measurement (PROM)



App-Entwicklung der AG Geriatriische
Onkologie mit Roche

Online Verfügbar 2013

Inzwischen nicht mehr im App-Store

<https://appadvice.com/app/geriapp/599769925>

Wo geht die Reise hin?

- G8 wird Teil eines onkologischen Basisscreenings für Patienten 70+
- Digitalisierung ermöglicht intelligentes adaptives Testen
- Nutzung vorhandener Daten anderer Devices
- Kombination von Screening, Assessment und Patient-reported-Outcome-Daten

Onkologisches Basisscreening

Auflistung empfohlener Screenings unter Berücksichtigung der Querschnittsleitlinien sowie der sonstigen Vorgaben des Erhebungsbogens:

- *Screening auf psychosoziale Belastungen (vgl. Kap. 1.4)*
- *Symptomscreening mittels validierter Instrumente (z.B. MIDOS/IPOS (vgl. Kap. 9))*
- *Bedarfserfassung sozialrechtliche Beratung (vgl. Kap. 1.5)*
- *Screening auf Mangelernährung (z.B. NRS, vgl. Kap. 1.9)*
- *Screening auf geriatrische Risiken für alle Patient*innen > 70 Jahre (z.B. G8)*
- *Bewegungstherapeutisches Screening bzgl. Einschränkungen von Bewegung und Mobilität*
- *Erfassung der Angehörigenbelastung bei nicht heilbar erkrankten Krebspatient*innen*

Fazit

- Screening sinnvoll
- von Patienten selbst auszufüllen
- besser analog als nicht
- besser digital als analog
- Weit entfernt vom Einsatz in der Routine
- Original oder digital ist eine passagere Frage