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State of the art

Primary prevention of cancer-associated venous thrombosis: Rationale and challenges in clinical practice

Ismail Elalamy^{a,b,c,*}, Alain Cohen-Solal^d, Olivier Hanon^e, Mariana Mirabel^f, Patrick Mismetti^g, Jean-Philippe Spano^h



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Review

Management of cancer-associated thromboembolism in vulnerable population

Silvy Laporte^{a,l,*}, Ygal Benhamou^{b,l}, Laurent Bertoletti^{c,l}, Corinne Frère^d, Olivier Hanon^e, Francis Couturaud^{f,l}, Farès Moustafa^{g,l}, Patrick Mismetti^{h,l}, Olivier Sanchez^{i,j,l,1}, Isabelle Mahé^{i,k,l,1}, for the INNOVTE CAT Working Group²





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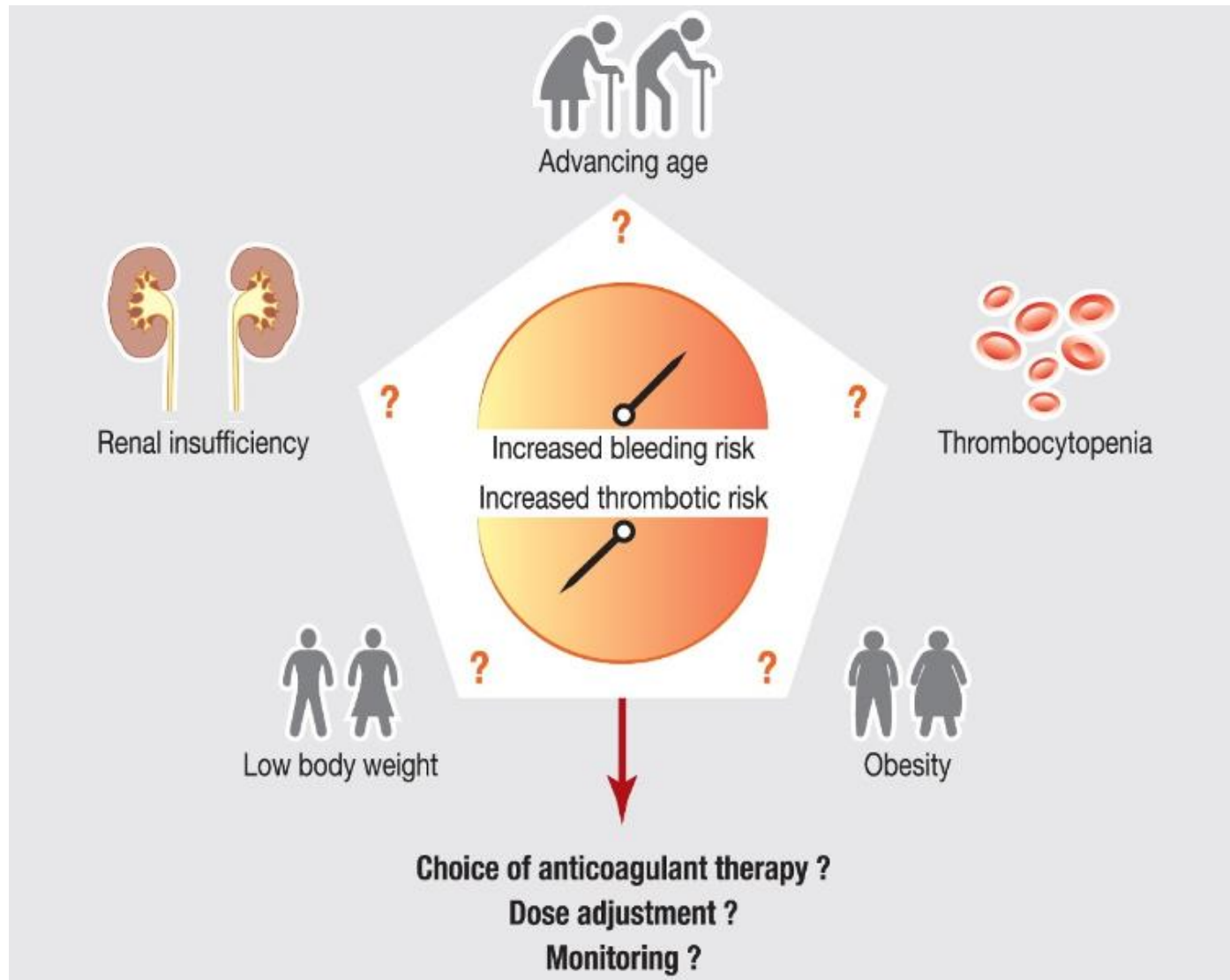
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Review

Management of cancer-associated thromboembolism in vulnerable population

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Utilisation du G8 puis si nécessaire EGA pour identifier les fragilités la Règle des 6C proposée pour gérer chaque composante de la fragilité et minimiser le risque hémorragique

Règle 6C

6 Cs checklist: features to be taken into account in older patients receiving therapeutic anticoagulant therapy.

Geriatric features	Evaluation	Management	Anticoagulant treatment	Treatment proposal ^a
Cachexia (malnutrition)	Weight loss > 5% in 1 month or > 10% en 6 months OR Albuminaemia < 35 g/L	Dietary advice Oral nutritional supplements (energy intake of 30 to 40 kcal/kg/d, protein intake: 1.2 to 1.5 g/kg/day)	If hypoalbuminaemia is present, bleeding risk may be increased during DXI treatment	Prefer LMWH throughout malnutrition period
Cognition (neuro-cognitive disorders)	MMSE < 24/30 Memory impairment screen (forgetting a word after 10 minutes in spite of prompting) [33,34]	Pill organiser Home nurse visits		If adherence is an issue, LMWH administered by a nurse at the patient's home may be of interest
Coming a cropper (falls)	Risk of falls in case of Standing on one foot < 10 sec Timed up and go test > 20 sec Five times sit to stand test > 15 sec	Physiotherapy Vitamin D Mobility aids Home improvement Remote assistance	Falls are not a contraindication to anticoagulants	No impact on medication choice
Comedication	Check for drug interactions	Medication reconciliation Shared medication audit	Beware interactions between chemotherapy and DXIs No risk of interaction with LMWHs	Prefer LMWH
Comorbidities	Charlson Comorbidity Index [35]	Treatment of comorbidities		No impact on medication choice
Creatinine clearance	Cockcroft formula	Monitoring every 3 months or following acute illness such as infection, dehydration or acute heart failure	If C_{Cr} < 15 mL/min, DXIs and LMWH are both contra-indicated	Prefer LMWH if C_{Cr} 15–30 mL/min

C_{Cr} : creatinine clearance; DXI: direct-acting oral factor Xa inhibitors; LMWH: low-molecular weight heparin; MMSE: Mini-mental state examination.

^a Low level of evidence.



Perspective

Immunotherapy and Radiotherapy for Older Patients with Locally Advanced Non-Metastatic Non-Small-Cell Lung Cancer Who Are Not Candidates for or Decline Surgery and Chemotherapy: A Practical Proposal by the International Geriatric Radiotherapy Group

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Published: 9 September 2024

Table 3. Efficacy and tolerance of immunotherapy in older patients with NSCLC.

Study	ICI	Age	Survival	Toxicity	Comments
Lee et al. [28]	atezolizumab	70 or older	24% (ICI) 12% (C)	16% gr. 3–4 33% gr. 3–4	well-designed randomized study
Ron et al. [29]	nivolumab	70 or older	NS	8% gr. 3–4	small number of patients ($n = 38$) retrospective study subgroup analysis
Grosjean et al. [30]	pembrolizumab	70 or older	12.7% (<70) 12.4% (70+)	26% gr. 3–4 26% gr. 3–4	retrospective study subgroup analysis
Imai et al. [31]	pembrolizumab	75 or older	74% disease control	15% gr. 3–4 4% gr. 5	retrospective study small number of patients ($n = 47$) short follow up (median: 10 months)
Gomes et al. [32]	various	70 or older	NS	12.9% gr. 3–5 (<70) 18.6% gr. 3–5 (70+)	prospective longitudinal study small number of patients ($n = 140$)
Wu et al. [33]	various	65 or older	improved survival for younger (<65) and older (65+) patients	NS	meta-analysis of 11,157 Tumor heterogeneity as all tumors types were included
Marur et al. [34]	various	65 or older	14.5 months (<65) 14.2 months (65+)	47% gr. 3–4 (<65) 49% gr. 3–4 (65+)	retrospective study
Corbaux et al. [35]	various	70 or older	no survival difference based on age	11% gr. 3–4 (<70) 12% gr. 3–4 (70+)	retrospective study tumor heterogeneity as all tumor types were included

ICI: immune checkpoint inhibitor; C: chemotherapy; NS: not specified, gr: grade.

cutanée

Table 4. Clinical studies outlining the benefits of immunotherapy and radiotherapy for NSCLC.

Study	ICI	Survival Benefit	Comments
Chang et al. [45]	nivolumab	77% (SBRT + ICI) 53% (SBRT)	Randomized study Small number of patients ($n = 156$)
Li et al. [46]	sintilimab	30 months (RT + ICI) 16 months (RT)	Retrospective study
Geng et al. [49]	various	Improved survival and progression-free survival of immunotherapy and radiotherapy compared to either therapy alone	Meta-analysis Only two randomized trials among the 20 studies selected Small number of patients ($n = 2027$)

ICI: immune checkpoint inhibitor; SBRT: stereotactic body radiotherapy; RT: radiotherapy.

PD-L1 est présent sur les cellules NSCLC dans environ 20 à 30 % des cas

Conclusion

Table 6. Proposed protocol combining immunotherapy and hypofractionated radiotherapy for older patients with locally advanced non-small cell lung cancer.

PD-L1 < 1	60 Gy in 3 Gy /fraction followed by 8 cycles of immunotherapy every three weeks [24–27,55]
PD-L1 = 1 or more	4 cycles of immunotherapy first followed by 60 Gy in 3 Gy /fraction. Immunotherapy will resume after radiotherapy for four cycles unless excessive toxicity observed during the induction phase [17,39–42,55].

PD-L1: programmed death ligand 1.

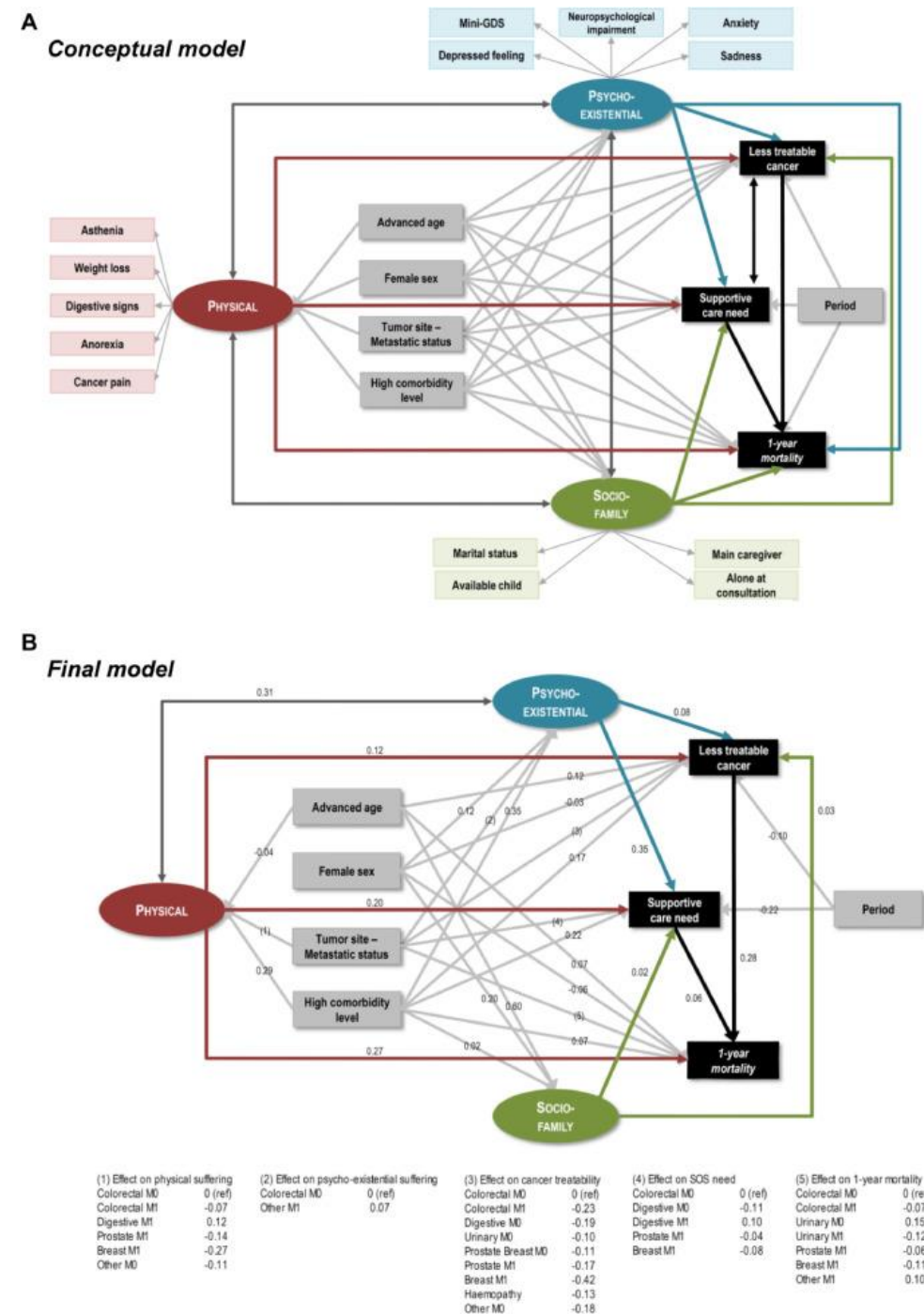


Original Article

Serious Health-Related Suffering Impairs Treatments and Survival in Older Patients With Cancer

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Philippe Caillet MD³, Marie Laurent MD, PhD³, Etienne Brain MD, PhD⁶,
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Florence Canoui-Poitrine MD, PhD^{3,4}

4 824 patients : âge moyen : $82,2 \pm 4$ ans ; femmes : 56 % ; principaux sites cancéreux : sein (22,3 %), colorectal (15,2 %), prostate (8,5 %) et poumon (6,8 %) ; cancer métastatique (46 %).



Résultats

- La souffrance physique avait des effets péjoratifs directs sur la traitabilité du cancer et la survie (coefficient standardisé [CS] = 0,12 [$P < 0,001$], CS = 0,27 [$P < 0,001$], respectivement).
- Les souffrances psycho-existentielles et socio-familiales avaient des effets péjoratifs indirects sur la survie via une diminution de la traitabilité du cancer (CS = 0,08 [$P < 0,001$], CS = 0,03 [$P < 0,001$], respectivement).
- La dimension psycho-existentielle avait le principal effet direct sur les besoins en soins de soutien (SC = 0,35 [$P < 0,001$]) et était corrélée à la souffrance physique.



Systematic Review

The effect of comprehensive geriatric assessment on care received, treatment completion, toxicity, cancer-related and geriatric assessment outcomes, and quality of life for older adults receiving systemic anti-cancer treatment: A systematic review

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Effectiveness of geriatric assessment and management in older cancer patients: a systematic review and meta-analysis

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Mohammed Rashidul Anwar, MBBS, MSc, Shant Torkom Yeretian, MD, MPH, Ana Patricia Ayala, MSt, Emma Matosyan, Henriette Breunis, CCRP, Kathryn Bote, RN, MScN, Martine Puts, RN, PhD, Mohammed Hassan Habib, HBSc, Qixuan Li, MSc, Yeva Sahakyan, MD, MPH, MSc ... [Show more](#)

JNCI: Journal of the National Cancer Institute, Volume 115, Issue 12, December 2023, Pages 1483–1496, <https://doi.org/10.1093/jnci/djad200>

Published: 20 September 2023 **Article history** ▼

Effet protecteur sur toxicité
Résultats contradictoires sur les autres paramètres

[J Clin Oncol](#). 2023 Feb 1; 41(4): 847–858.

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Published online 2022 Dec 6. doi: [10.1200/JCO.22.01007](https://doi.org/10.1200/JCO.22.01007)

PMID: [36473126](https://pubmed.ncbi.nlm.nih.gov/36473126/)

Impact of Geriatric Assessment and Management on Quality of Life, Unplanned Hospitalizations, Toxicity, and Survival for Older Adults With Cancer: The Randomized 5C Trial

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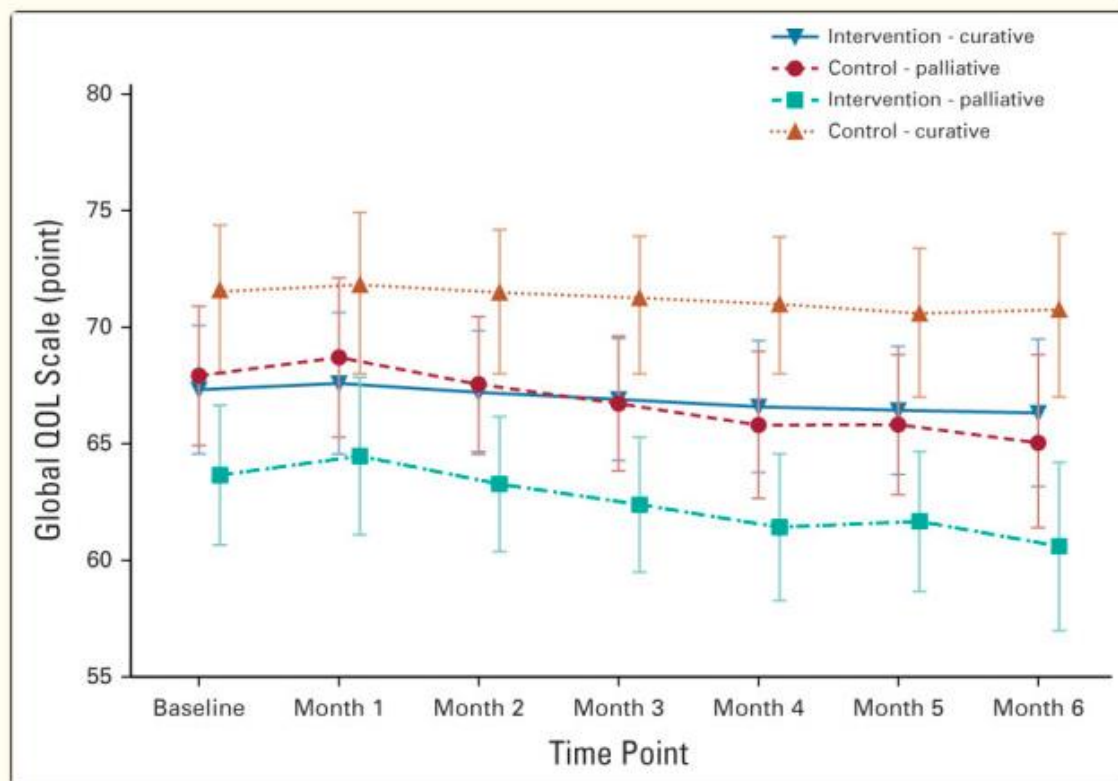


FIG 3.

EORTC QLQ C30 global health subscale QOL over time. Model predicted QOL stratified by curative versus palliative on the basis of our latent growth curve modeling, no difference by treatment arm ($P > .05$). EORTC QLQ C30, European Organisation of Research and Treatment of Cancer Quality of Life Questionnaire core version 30 items; QOL, quality of life.

378 patients randomisés

L'étude n'a montré aucun effet de l'évaluation et le soin gériatrique sur la qualité de vie, la survie globale, la modification des plans de traitement, la toxicité du traitement, les hospitalisations non programmées ou les visites aux urgences.

Evaluation couts/efficacité d'une EGA

Cost-Utility Analysis of Geriatric Assessment and Management in Older Adults With Cancer: Economic Evaluation Within 5C Trial

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[Back to table of contents](#)
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TABLE 1. Baseline Characteristics of Study Population

Characteristic	Full Sample		Palliative Intent		Curative Intent	
	GAM (N = 173)	Usual Care (N = 177)	GAM (n = 78)	Usual Care (n = 82)	GAM (n = 95)	Usual Care (n = 95)
Age, years, mean (SD)	75.7 (4.7)	76 (5.1)	76.9 (5.3)	76.6 (5.5)	74.7 (4)	75.4 (4.8)
Female, No. (%)	71 (41)	70 (39.8)	26 (33.3)	28 (34.6)	45 (47.4)	42 (44.2)
Married/partnered, No. (%)	106 (61.3)	106 (59.9)	48 (61.5)	49 (59.8)	58 (61.1)	57 (60)
Live at home, No. (%)	168 (97.1)	172 (97.2)	73 (93.6)	78 (95.1)	95 (100)	94 (98.9)
Live alone, No. (%)	50 (28.9)	55 (31.1)	20 (25.6)	27 (32.9)	30 (31.6)	28 (29.5)
<13 years of education, No. (%)	58 (33.7)	60 (34.1)	22 (28.6)	27 (32.9)	36 (37.9)	33 (35.1)
Curative/adjuvant intent, No. (%)	95 (54.9)	95 (53.7)	—	—	95 (100)	95 (100)
Cancer site, No. (%)						
Thoracic	41 (23.7)	43 (24.3)	24 (30.8)	20 (24.4)	17 (17.9)	23 (24.2)
Gastrointestinal	42 (24.3)	38 (21.5)	18 (23.1)	14 (17.1)	24 (25.3)	24 (25.3)
Genitourinary	33 (19.1)	41 (23.2)	16 (20.5)	28 (34.1)	17 (17.9)	13 (13.7)
Breast	18 (10.4)	17 (9.6)	5 (6.4)	3 (3.7)	13 (13.7)	14 (14.7)
Lymphoma	16 (9.2)	17 (9.6)	4 (5.1)	6 (7.3)	12 (12.6)	11 (11.6)
Gynecologic	13 (7.5)	14 (7.9)	5 (6.4)	7 (8.5)	8 (8.4)	7 (7.4)
Other	10 (5.8)	7 (4)	6 (7.7)	4 (4.9)	4 (4.2)	3 (3.2)
GB $\pm$ 14°, No. (%)	115 (66.9)	116 (65.5)	58 (75.3)	60 (73.2)	57 (60)	56 (58.9)
One or more other chronic health problems, No. (%)	100 (57.8)	101 (57.1)	50 (64.1)	48 (58.5)	50 (52.6)	53 (55.8)
One or more ADL impairments, No. (%)	85 (49.1)	82 (46.3)	42 (53.8)	39 (47.6)	43 (45.3)	43 (45.3)
Upfront dose reduced/undecided treatment, No. (%)	55 (32)	63 (35.6)	25 (32.5)	30 (37)	30 (31.6)	33 (34.7)
Any dose reduction, No. (%)	91 (52.6)	89 (50.3)	44 (56.4)	46 (56.1)	47 (49.5)	43 (45.3)
Global QoL score, mean (SD)	65 (23.3)	67.7 (23.1)	60.3 (24.9)	64.3 (24.7)	68.9 (21.1)	70.5 (21.3)
EQ-5D utility score, mean (SD)	0.830 (0.146)	0.846 (0.144)	0.793 (0.179)	0.835 (0.154)	0.860 (0.104)	0.855 (0.135)

Abbreviations: EQ-5D, EuroQol five dimension; G8, Geriatric 8; GAM, geriatric assessment and management; IADL, impairment in activities of daily living; QoL, quality of life; SD, standard deviation. G8 is a screening tool with eight questions; G8 score ≤ 14 indicates impairment and identifies individuals in whom more detailed geriatric assessment is indicated.

Cost-Utility Analysis of Geriatric Assessment and Management in Older Adults With Cancer: Economic Evaluation Within 5C Trial

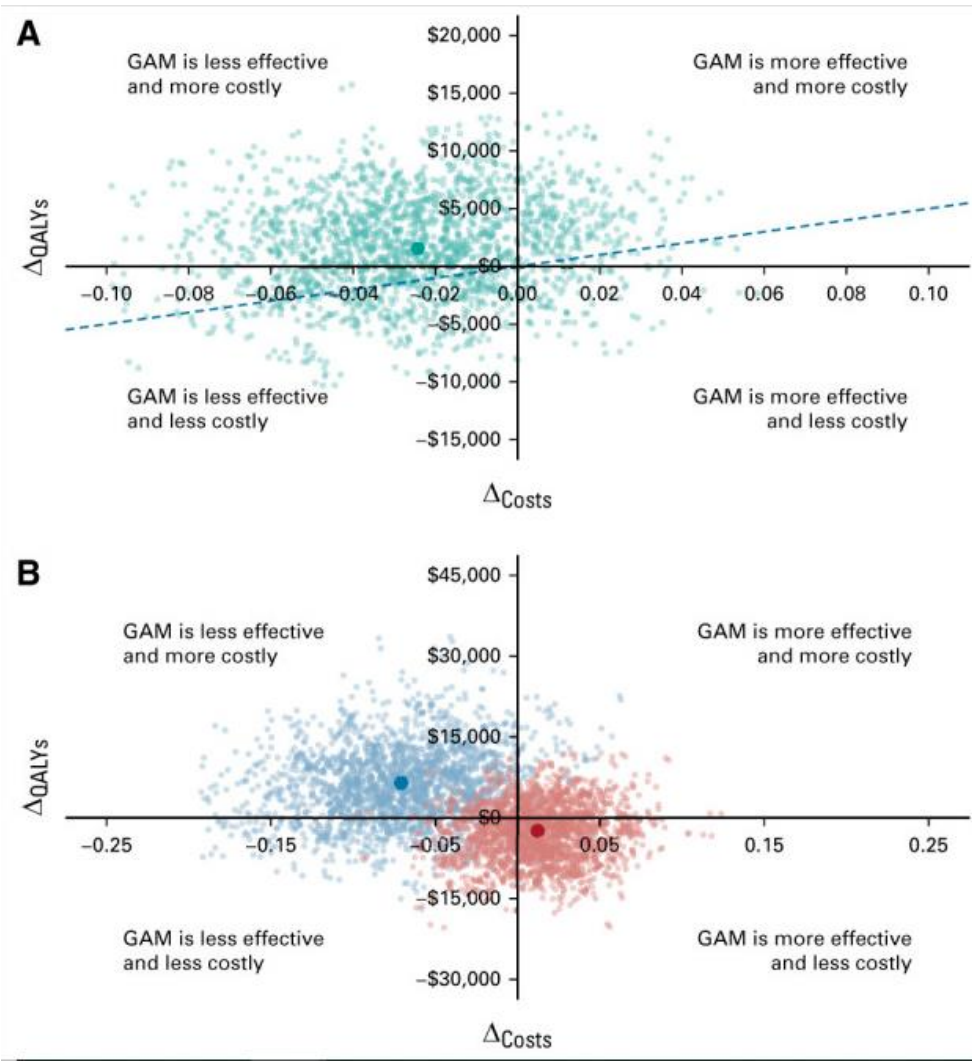
Yeva Sahakyan, MSc, MD, MPH,¹ Qixuan Li, MSc,² Shabbir M.H. Alibhai, MSc, MD, FRCP, ^{3,4,5} Martine Puts, RN, PhD,⁶ Shant T. Yeretzyan, MD, MPH,⁷ Mohammed R. Anwar, MBBS, MSc,^{5,8} Sarah Brennenstuhl, PhD,⁶ Bianca McLean, MD,⁹ Fay Strohshchein, RN, PhD,^{10,11} George Tomlinson, PhD,^{2,5,8} Aria Wills, BSc,⁶ and Lusine Abrahamyan, MD, PhD^{1,5,8}

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Evaluation couts/efficacité d'une EGA

Plan coût-efficacité pour l'échantillon complet (A) et par (B) intention de traitement. Le graphique montre la différence de coûts (axe des y) et la différence de QALY (axe des x) entre la MAG et les soins habituels pour 20 000 échantillons bootstrap. Les petits points bleu sarcelle, bleu et rouge représentent respectivement les valeurs bootstrap pour l'échantillon complet, pour l'intention de traitement palliatif et pour l'intention de traitement curatif, tandis que les cercles gras des mêmes couleurs représentent les estimations moyennes correspondantes. La ligne pointillée bleue représente le seuil de 50 000 \$ par QALY. Les interventions sont jugées rentables si elles sont inférieures aux seuils de rentabilité. Par exemple, pour l'échantillon complet au seuil de 50 000 \$, la GAM est considérée comme rentable dans 25 % des simulations par rapport aux soins habituels (puisque 25 % des échantillons bootstrapés [points bleu sarcelle] sont situés en dessous du seuil de 50 000 \$). GAM, évaluation et prise en charge gériatriques ; ΔCoûts, différence de coûts ; ΔQALY, différence d'années de vie ajustées en fonction de la qualité.

Première analyse coût-utilité de l'EGA dans le cancer. La GAM était rentable pour les patients atteints d'un cancer traités à des fins curatives mais non palliatives.



Review

➤ [ESMO Open](#). 2024 Aug;9(8):103657. doi: 10.1016/j.esmoop.2024.103657.

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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

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E Mariamidze⁸, L Biganzoli⁹, E Brain¹⁰, C Baldini¹¹, N M L Battisti¹², M Frélaut¹³,
R Kanesvaran¹⁴, A R A Mislán¹⁵, D Papamichael¹⁶, C Steer¹⁷, S Rostoft¹⁸

1. L'évaluation et la prise en charge gériatrique doit être mis en œuvre chez les patients âgés de ≥ 70 ans (et ≥ 65 ans si possible) chez lesquels des traitements dirigés contre le cancer, en particulier des **traitements systémiques**, sont envisagés.
2. L'évaluation et la prise en charge gériatrique doit être réalisé **le plus tôt possible** avant le début du traitement et, si possible, **avant la finalisation du plan de traitement**.
3. Dans les contextes où l'évaluation et la prise en charge gériatrique ne peuvent pas être réalisées pour tous les patients, **utiliser des outils de dépistage validés** pour identifier ceux qui sont susceptibles de bénéficier d'une évaluation et la prise en charge gériatrique ultérieure.
4. Les modèles de prestation de l'évaluation et la prise en charge gériatrique doivent être adaptés à la disponibilité des ressources locales, des environnements et du personnel.
5. Utilisez les outils du Cancer and Aging Research Group (CARG) ou de l'échelle d'évaluation des risques de chimiothérapie pour les patients d'âge élevé (CRASH) pour estimer la toxicité de la chimiothérapie chez les patients plus âgés atteints de cancer.

Merci