

VENDREDI 4 OCTOBRE 2024
IBIS PARIS 17 CLICHY BATIGNOLLES, 75017 Paris



17E COLLOQUE DU CANCÉROPÔLE IDF

VIEILLISSEMENT ET CANCERS :

DE LA RECHERCHE FONDAMENTALE
À LA RECHERCHE TRANSLATIONNELLE
ET APPLICATIONS CLINIQUES POUR L'AVENIR

Quoi de neuf en onco-gériatrie ?

Philippe Caillet

Unité d'onco-gériatrie – HEGP / Corentin Celton

Paris

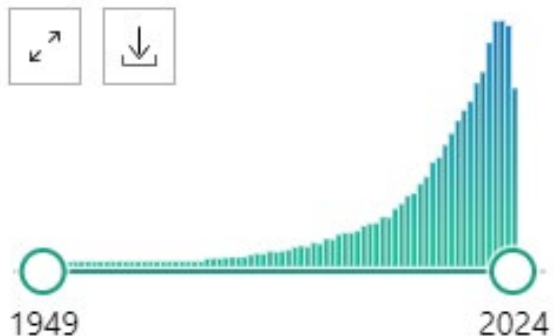


Conflits d'intérêts

Intérêts financiers	-
Liens durables ou permanents	-
Interventions ponctuelles	Pfizer®
Intérêts indirects	-

PubMed – « Older cancer patients »

RESULTS BY YEAR



3572 articles parus à la date du 22/09/2024

- ((older patients[Title/Abstract]) OR (elderly patients[Title/Abstract])) AND (cancer[Title/Abstract]) + Last year

⇒ **1337 articles**

- Filters applied:
 - Clinical Trial, Meta-Analysis, Randomized Controlled Trial, Review, Systematic Review
 - Last 1 year
 - Human
 - 65y or older

⇒ **233 articles**

- Évaluation pré-thérapeutique
- Toxicité des traitements
- Les outils connectés



Practical assessment and management of vulnerabilities in older patients receiving systemic cancer therapy: ASCO guideline update

Dale W et al. J Clin Oncol 2023 sept; 41(26): 4293-312



- Révision des recommandations ASCO 2018 (Mohile SG et al. J Clin Oncol 2018; 36(22): 2326-2347)
- Janvier 2016 à décembre 2022
- **Revue systématique des :**
 - Études randomisées contrôlées
 - Revues systématiques
 - Méta-analyses

TABLE 1. Complete List of Recommendations From 2018 ASCO Guideline and From the 2023 Guideline Update

Recommendation	Type; Evidence Quality; Strength of Recommendation
Recommendation 1.1. (Updated) All patients with cancer age 65 years and over with GA-identified impairments should have GAM included in their care plan. GAM includes using GA results to (1) inform cancer treatment decision-making and (2) address impairments through appropriate interventions, counseling, and/or referrals. Amendment 1.1a. This includes older adults receiving systemic therapy, including chemotherapy, targeted therapy, or immunotherapy	Type: Evidence based, benefits outweigh harms Evidence quality: High Strength of recommendation: Strong
Recommendation 2.1. (Updated) A GA should include high priority aging-related domains known to be associated with outcomes in older patients with cancer to include assessment of physical and cognitive function, emotional health, comorbid conditions, polypharmacy, nutrition, and social support	Type: Evidence based, benefits outweigh harms Evidence quality: High Strength of recommendation: Strong
Recommendation 2.2. (Updated) The Panel recommends the PGA as one option for this purpose. See the content-files/practice-guidelines/PGA-tool-at-ht	Type: Informal consensus
Recommendation 2.3. (Updated) The Panel recommends that clinicians use one of the following tools to assess patients' functional status, including age, sex, and comorbidities (eg, ADL, IADL, LE, and cognitive function) to help guide treatment decisions (eg, surgery, chemotherapy, targeted therapy, immunotherapy, and radiation therapy). a. The Expert Panel recommends that clinicians use the PG-ADL tool to assess patients' functional status. b. Several instruments are available to assess patients' functional status, including the PG-ADL tool, the PG-IADL tool, the PG-LE tool, and the PG-COG tool. Clinicians should choose the tool that is most appropriate for their practice and the needs of their patients.	Evidence quality: Moderate Strength of recommendation: Moderate
Recommendation 2.4. (Updated) The Panel recommends that clinicians apply the results of GA to develop an integrated and individualized plan for patients that informs treatment selection by helping to estimate risks for adverse outcomes and to identify nononcologic problems that may be amenable to intervention	Evidence quality: Moderate Strength of recommendation: Moderate
Recommendation 2.5. (Updated) The Panel recommends that clinicians apply the results of GA to develop an integrated and individualized plan for patients that informs treatment selection by helping to estimate risks for adverse outcomes and to identify nononcologic problems that may be amenable to intervention	Evidence quality: Moderate Strength of recommendation: Moderate

Intérêt de l'EGA et de la prise en charge gériatrique dans le plan de soins et la décision thérapeutique

- Quel impact de l'EGA et des interventions gériatriques spécifiques pour améliorer la survie ?
- Quels outils pour prédire les effets secondaires des traitements et comment mieux les gérer ?

Intérêt des scores de prédiction de la mortalité pour estimer l'espérance de vie

MAIS quel impact sur le devenir et la décision thérapeutique ?

Mettre en place des interventions gériatriques pour améliorer les problèmes non oncologiques

MAIS quel impact des interventions ?

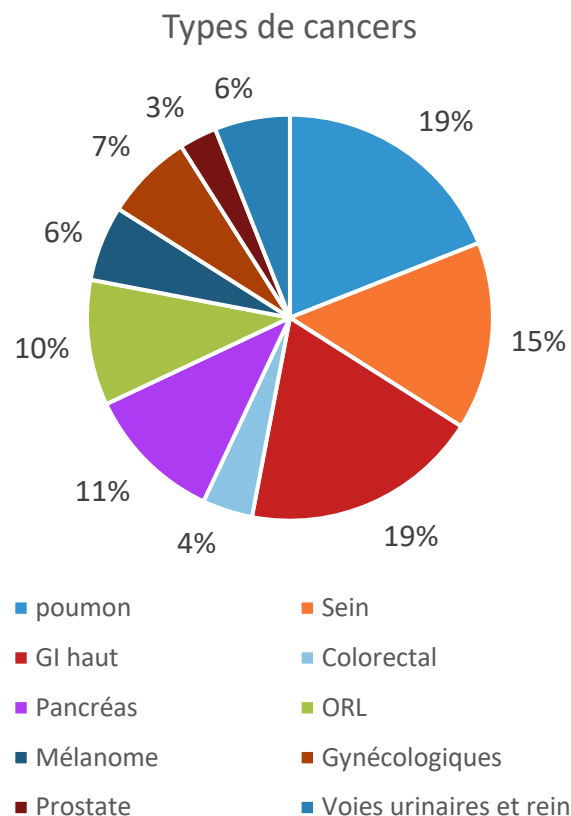


Effect of comprehensive geriatric assessment on hospitalizations in older adults with frailty initiating curatively intended oncologic treatment: The PROGNOSIS-RCT study

Weber Giger AK et al. J Geriatr Oncol 2024 Sept; 15(7): 101821



- 173 patients ≥ 70 ans
- Femmes 51,5%
- Score G8 ≤ 14
- Cancers solides
- **Traitement curatif**



2 bras :

- **Contrôle (n = 91)**
- **Interventionnel (n = 87) selon EGA**

Aucune différence entre les deux groupes quant aux types de cancers, traitements reçus et paramètres gériatriques

1. Évaluer l'impact de l'EGA sur les hospitalisations non programmées dans les 6 mois

2. Critères secondaires :

- durée de séjour
- lieu de sortie
- contacts téléphoniques non programmés
- modifications du traitement
- observance thérapeutique
- toxicité (hospitalisations pour toxicité)

Comprehensive geriatric assessment domains, screening tools, and possible interventions.

Domain	Tool	Potential interventions
 Comorbidity	Medical review and Physical examination* CIRS-G CCI	• Additional diagnostics • Consultation by non-geriatric specialists • Treatment optimization • The oncologic specialist was notified of health issues influencing cancer treatment
 Psychosocial status	GDS (≥ 6) Interview of relative/caregiver	• Initiating medical therapy • Referral to and advice on non-medical therapy, including psychotherapy • Notifying caregivers and primary physician of potential needs
 Weight loss and nutrition	MNA-SF (≤ 11) Weight loss ($> 5\%$ of total body weight)	• Treatment of underlying non-oncologic causes • Advice on nutritional interventions • Prescription of nutritional supplements • Monitoring weight and follow-up as needed • Referral dietician (in-hospital or community-based)
 Cognition	Mini-Cog (< 3) Interview of caregiver or relative	• Referral to further assessments including relevant imaging, cognition-focused medical history, and further testing of cognition • Referral to dementia clinic • Initiation of community-based health care services, if indicated
 Medications and polypharmacy	START/STOPP criteria a Review of prescription medications (≥ 5) Daily medications	• Deprescription of inappropriate medications (STOPP tool guided) • Initiating or optimizing (non-oncologic) medical treatment (START tool guided)
 Physical performance	HGST** 30s-CST**	• Assessment by physical therapist specializing in cancer rehabilitation • Referral to community-based physical exercise and rehabilitation
 Functional status and social support	ADL (< 6) iADL (< 8)	• Adjustment or initiation of community-based health care services • Referral to a community-based occupational therapist • Involvement of relatives/caregivers in care

Table 4

Hospitalization rates and between-group rate ratios.

Population	N	Intervention	Control	Rate ratio	95% CI	P
Intention-to-treat	173	1.32	1.81	0.74	0.45–1.23	0.25
Per-protocol ¹	162	1.18	1.81	0.64	0.37–1.10	0.10
Study population	173	1.32	1.81	0.74	0.45–1.23	0.25
Control group	173	1.32	1.81	0.74	0.45–1.23	0.25
Treatment group	173	1.32	1.81	0.74	0.45–1.23	0.25
Treatment non-adherence due to toxicity			30 (36%)	28 (31%)		0.48
Treatment modifications						
Radiotherapy			2 (2%)	3 (3%)		0.65
Systemic treatment ¹			37 (45%)	39 (43%)		0.87

Étude négative

- Aucune différence sur le taux d'hospitalisations non programmées
- Aucune différence concernant :
 - l'adhésion au traitement
 - l'hospitalisation pour toxicité
 - la complétion du traitement

Malgré tout, dans le groupe intervention :

- meilleure adhésion aux interventions
- l'augmentation de l'adhésion aux interventions pourrait améliorer le devenir (analyse per-protocole)



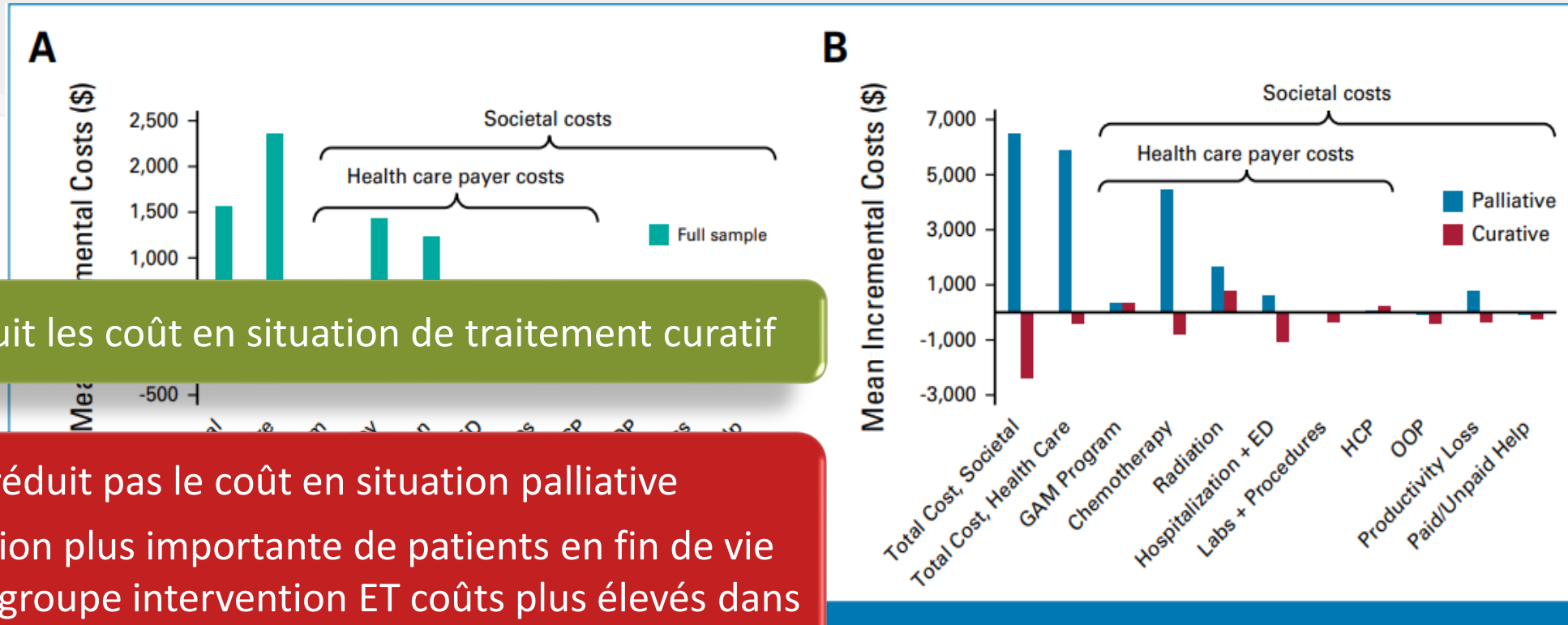
Cost-utility analysis of geriatric assessment and management in older adults with cancer: Economic evaluation within 5C Trial

Sahakyan Y et al. J Clin Oncol. 2024 Jan 1;42(1): 59-69



	GAM N = 173	Soins usuels N = 177
Âge	75,7 ± 4,7	76 ± 5,1
Femmes	71 (41)	70 (39,8)
À domicile	168 (97,1)	172 (97,2)
Seul à domicile	50 (28,9)	55 (31,1)
Ttt curatif	95 (54,9)	95 (53,7)
G8 ≤ 14	115 (66,9)	116 (65,5)
≥ 1 pb chrnq	100 (57,8)	101 (57,1)
≥ 1 IADL altéré	85 (49,1)	82 (56,3)
Réduction de dose d’emblée	55 (32)	63 (35,6)
Réduction de dose	91 (52,6%)	89 (50,3%)
Score QoL global	65 ± 23,3	67,7 ± 23,1

Types de cancer	GAM N = 173	Usual care N = 177
Thoracique	41 (23,7)	43 (24,3)
Gastrointestinal	42 (24,3)	38 (21,5)
Génito-urinaire	33 (19,1)	41 (23,2)
Sein	18 (10,4)	17 (9,6)
Lymphome	16 (9,2)	17 (9,6)
Gynécologique	13 (7,5)	14 (7,9)
Autre	10 (5,8)	7 (4)



GAM réduit les coût en situation de traitement curatif

GAM ne réduit pas le coût en situation palliative

- Proportion plus importante de patients en fin de vie dans le groupe intervention ET coûts plus élevés dans le dernier moi de vie
- Plus de cancer de mauvais pronostic dans le groupe intervention

Costs, defined as the differences in cost between GAM and usual care stratified by treatment intent. Costs were rounded to the nearest \$100. The y-axis represents the mean incremental costs. The x-axis represents the cost components. The legend indicates Palliative (blue) and Curative (red) groups. The categories are Total Cost, Societal; Total Cost, Health Care; GAM Program; Chemotherapy; Radiation; Hospitalization + ED; Labs + Procedures; HCP; OOP; Productivity Loss; and Paid/Unpaid Help. Error bars were intentionally omitted from the plot to enhance visualization. Including error bars would have widened the y-axis range, making it difficult to visualize the differences in incremental costs between the categories. The 95% CIs of plotted incremental costs are available in [Table 2](#) and the Data Supplement (Tables S6 and S7). ED, emergency department; GAM, geriatric assessment and management; HCP, health care provider; OOP, out-of-pocket.



Comparison of the prognostic value of eight nutrition-related tools in older patients with cancer: A prospective study

Valter R et al. J Nutr Health Aging 2024 Apr; 28(4): 100188

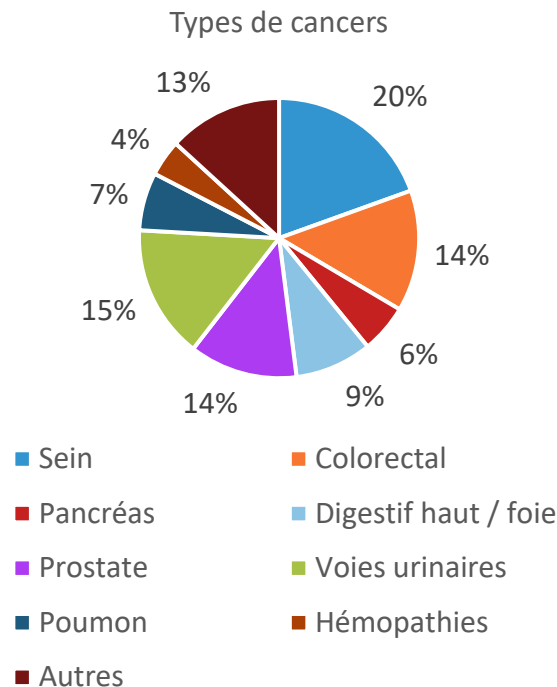


Évaluer et comparer la capacité de 8 outils liés à la nutrition à prédire la mortalité à 1 an chez les patients âgés atteints de cancer

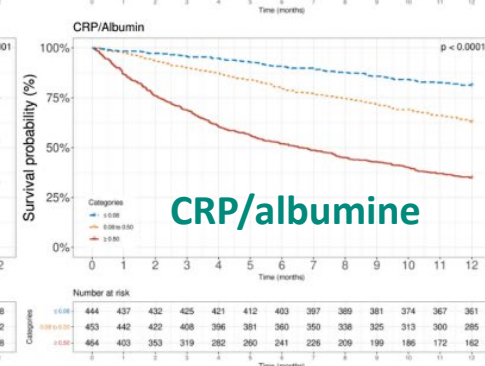
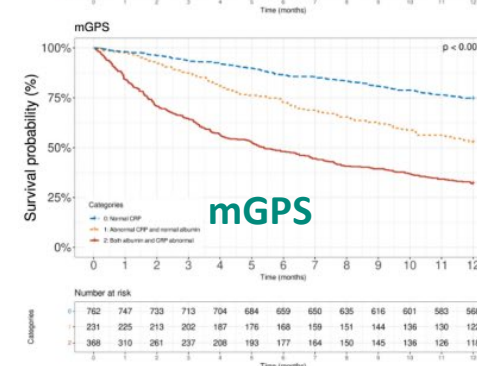
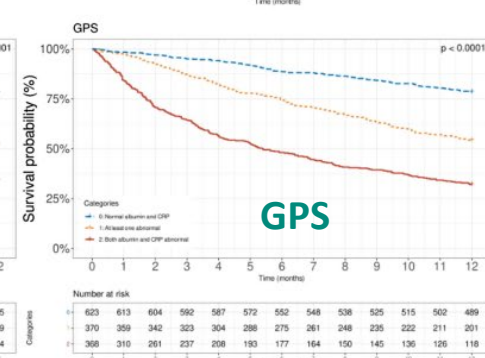
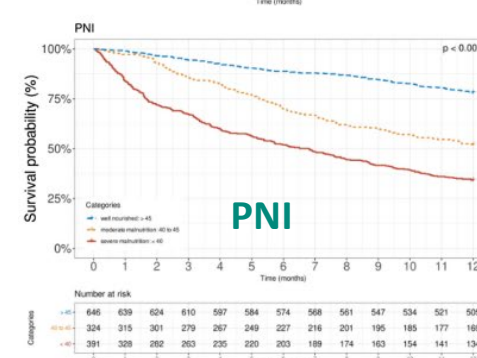
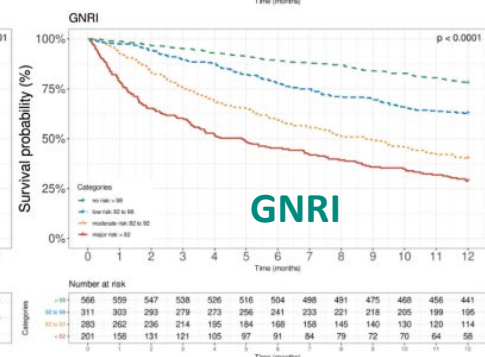
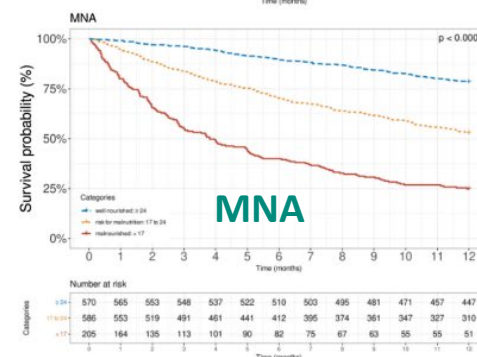
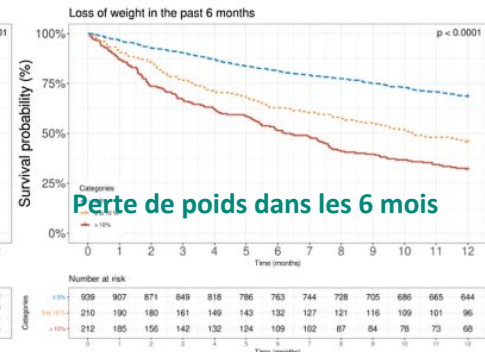
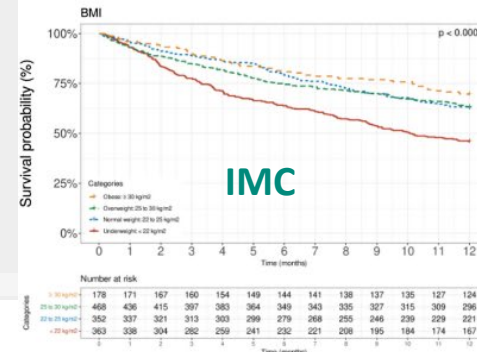
- IMC
- perte de poids à M6
- MNA (mini nutritional assessment)
- GNRI (geriatric nutritional risk index)
- PNI (prognostic nutritional index)
- GPS (Glasgow prognostic score)
- GPS modifié
- CRP/albuminémie ratio



- 1361 sujets
- Âge médian : 81 ans (77-85)
- Suivi médian : 4,6 ans (2,5-2,5)



- Mortalité à 1 an : 40,6%
- Délai médian de mortalité : 1,5 ans



Nutrition-related tools	Survivors (N= 808)		Deceased (N = 553)			
	No. of Patients	%	No. of Patients	%		
Body mass index (kg/m ²), ref: 22 to <25	221	27	131	24	Ref. 1.00	<0.001
< 22	167	21	196	35	1.71 [1.37–2.13]	<0.001
25 to <30	206	27	172	31	1.02 [0.81–1.28]	0.9
≥30					1.08 [0.81–1.42]	0.14
Weight loss in the previous 6 months, ref: ≤5%						<0.001
5 to 10%					2.62 [1.81–3.81]	<0.001
>10%					3.81 [2.62–5.41]	<0.001
Mini Nutritional Assessment, ref: ≥17						<0.001
<17					8.37 [5.41–13.2]	<0.001
17 to 24	310	38	276	50	2.66 [2.15–3.29]	<0.001
Geriatric Nutritional Risk Index, ref: >98	441	55	125	23	Ref. 1.00	<0.001
<82	58	7	143	26	5.65 [4.44–7.19]	<0.001
82 to 92	114	14	169	31	3.72 [2.95–4.70]	<0.001
92 to 98	187	23	216	39	1.88 [1.46–2.43]	<0.001
Prognostic Nutritional Index, ref: >40						<0.001
<40					1.00 [0.81–1.23]	<0.001
40 to 45					1.00 [0.81–1.23]	<0.001
Glasgow Prognostic Nutritional Index, ref: 1						<0.001
1					1.00 [0.81–1.23]	<0.001
2					1.00 [0.81–1.23]	<0.001
modified Glasgow Prognostic Nutritional Index, ref: 1						<0.001
1					1.00 [0.81–1.23]	<0.001
2	118	15	250	45	4.26 [3.53–5.15]	<0.001
C-reactive protein/albumin ratio, ref: ≤0.08	361	45	83	15	Ref. 1.00	<0.001
0.08–0.50	162	20	302	55	2.21 [1.70–2.87]	<0.001
>0.50	285	35	168	30	5.41 [4.24–6.91]	<0.001

Les 8 facteurs de dénutrition sont des facteurs indépendants de décès à 1 an

Le poids pronostique de l'état nutritionnel / de la dénutrition devrait systématiquement être pris en compte dans les études concernant des patients âgés atteints de cancer



Impact of dementia in colorectal cancer patients: United States population-based cohort study

Suenghataiphorn T et al. Korean J Gastroenterol 2024 Jul; 84(1): 17-23



- **Lien entre TNC et pronostic du cancer colorectal ?**
- Patients hospitalisés en 2020 pour cancer colorectal
- 33.335 hospitalisations sujets > 60 ans
- Age moyen 75,2 ans
- 54% d'hommes

Table 1. Baseline Characteristics for Elderly Colorectal Patients, Stratified by the Presence of Dementia

Factors	Dementia absent (%)	Dementia presented (%)	p-value
Co-morbidities			
Hypertension	43.16	45.55	0.26
Hyperlipidemia	40.82	50.09	<0.01*
Diabetes mellitus	12.51	12.39	0.93
Coronary artery disease	20.76	25.48	<0.01*
Obesity	11.81	5.93	<0.01*
Chronic kidney disease	16.97	24.08	<0.01*
End stage renal disease	1.44	1.57	0.80
COPD	12.68	12.22	0.74
Tobacco usage	0.75	0.35	0.27
COVID-19	0.87	1.92	0.03*
Depression	7.99	14.49	<0.01*
Delirium	1.44	7.33	<0.01*
Alzheimer disease	<0.01	16.40	<0.01*
Colectomy procedure	47.59	43.98	0.10
Chemotherapy usage	5.40	1.92	<0.01*
Radiotherapy usage	4.30	2.79	0.08
Distant metastasis	44.24	34.73	<0.01*

Table 2. Outcomes for Elderly Colorectal Patients, Stratified by the presence of Dementia, with Propensity Score Matching

Outcome	Dementia absent	Dementia presented	aOR (95% CI) Multivariate	p-value
Number of hospitalizations	8,664	2,150		
Inpatient mortality			0.92)	0.03*
Mean length of stay (days)			7, 0.72)	0.94
Mean total hospital cost (USD)			66.11, -440.93)	0.02*
Acute kidney injury			1.10)	0.23
Acute respiratory failure			0.89)	0.01*
Shock			1.53)	0.55
Sepsis			1.89)	0.65
Mechanical ventilation			0.67)	<0.01*
Palliative usage			2.23)	0.72
Coagulopathy			0.88 (0.88, 1.45)	0.30
Mental status change	6.41%	12.79%	1.97 (1.37, 2.84)	<0.01*

Chez les patients atteints de TNC :

Moins de mortalité intra-hospitalière
coût d'hospitalisation
détresse respiratoire aigue
recours à la ventilation mécanique

Plus d'aggravation du déclin cognitif

Moindre intensité thérapeutique chez les patients âgés atteints de cancer du côlon ET de troubles cognitifs ?



Prognostic impact of neurocognitive disorders in older patients with cancer: the ELCAPA prospective cohort study

Conti C et al. J Nutr Health Aging 2024 May; 28(5): 100215



- **2784 patients**
- 70 ans – **âge médian 82 ans** (78-86)
- Cancers solides (sein, colorectal et prostate)
- 51% M+
- EGA entre janvier 2007 et décembre 2017
- Suivi jusqu'en décembre 2018

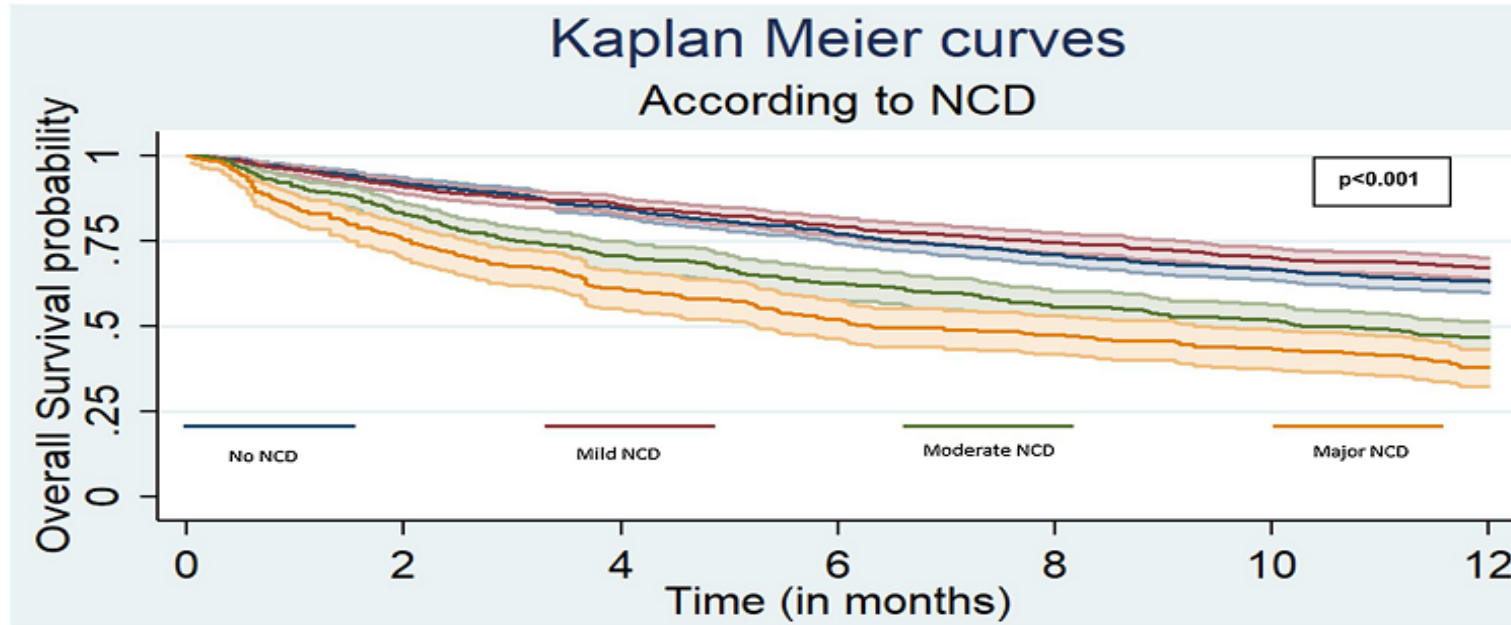
Déclin cognitif :

• Aucun	36%
• Léger (MCI)	34%
• Modéré	18%
• Sévère	12%

Classification of cognitive disorders using MMSE, iADL and memory complaint.

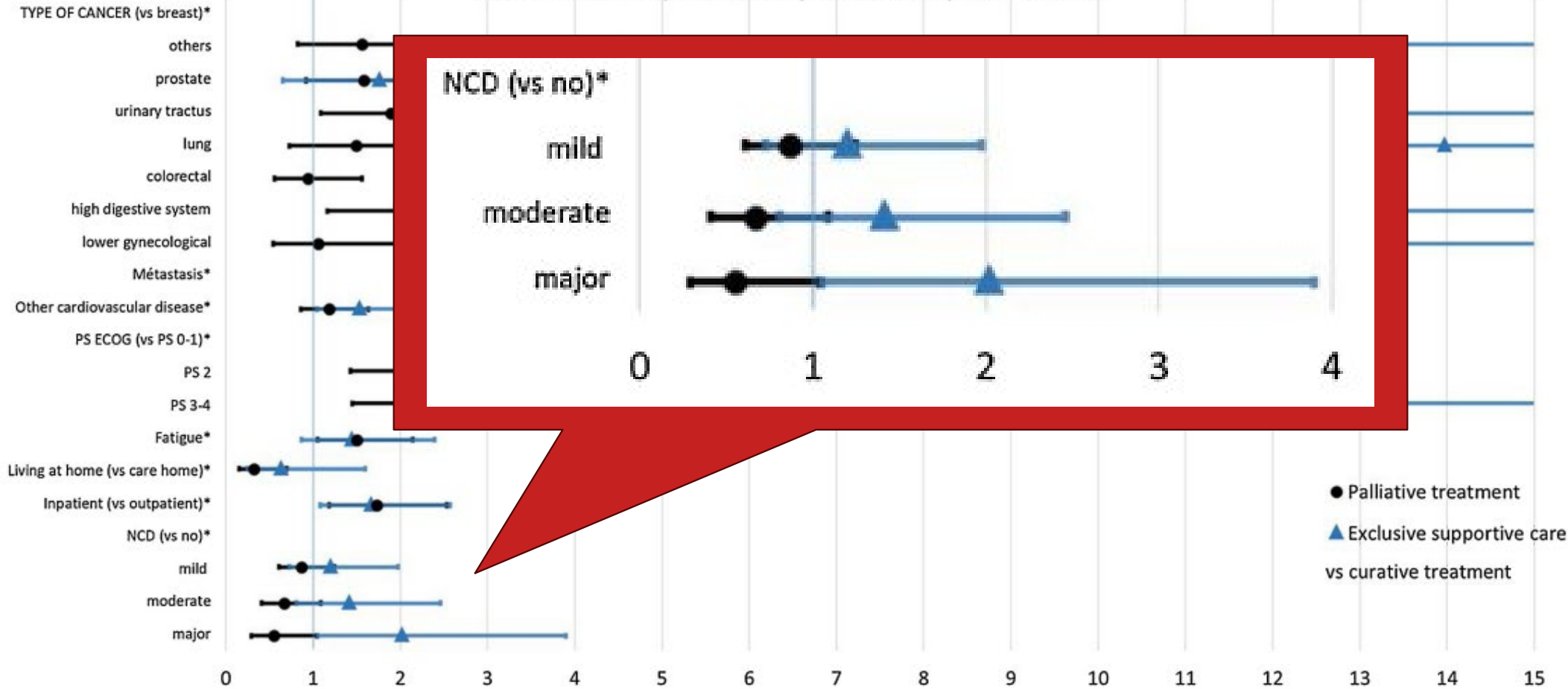
	Covariate construction with data		
	MMSE	Memory complaint	iADL score
No NCD	≥ 26 &	No &	0–4
Mild NCD	25–21 or	Yes	& 4/4
Moderate NCD	25–21 or	Yes	& $\leq 3/4$
Major NCD	≤ 20	Yes or no	& $\leq 3/4$

- **Survie à 1 an des patients avec déclin cognitif ?**
- **Impact du déclin cognitif dans la prise de décision thérapeutique ?**



Le déclin cognitif majeur est facteur indépendant de décès
x 1,54 (1,19-1,98 ; $p < 0,001$)

Multivariate analysis according to the therapeutic decision





Suenghataiphorn T et al.
Korean J Gastroenterol 2024 Jul; 84(1): 17-23

Quel impact des troubles cognitifs sur la
décision / stratégie thérapeutique ?



Conti C et al.
J Nutr Health Aging 2024 May; 28(5): 100215

La valeur pronostique / prédictive des troubles cognitifs devrait être
mieux prise en compte dans les études en onco-gériatrie

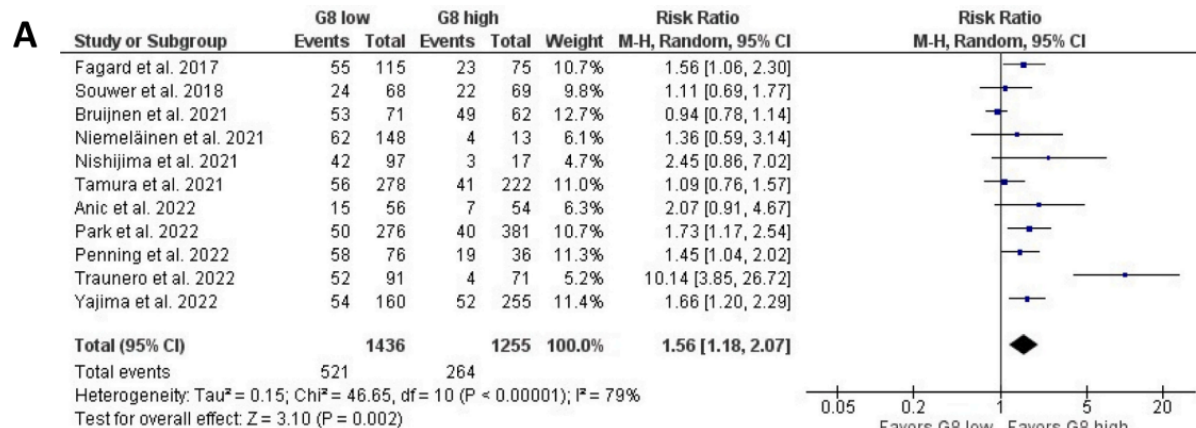
- Évaluation pré-thérapeutique
- **Toxicité des traitements**
- Les outils connectés

Predictive value of the G8 screening tool for postoperative complications in older adults undergoing cancer surgery: A systematic review and meta-analysis

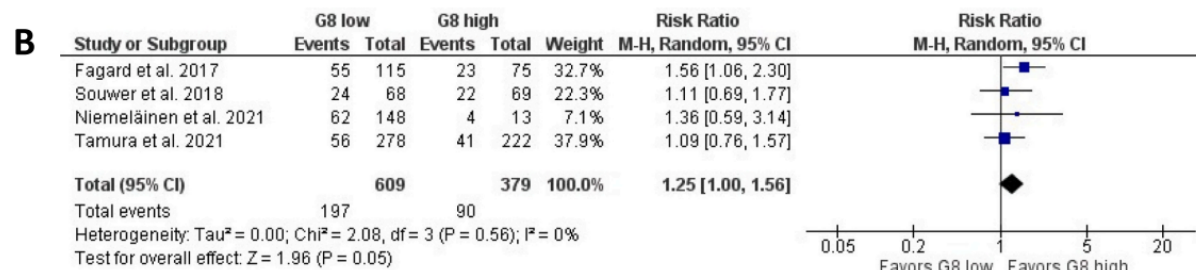
Horiuchi K et al. J Geriatr Oncol 2024 Apr; 15(3): 101656

11 études

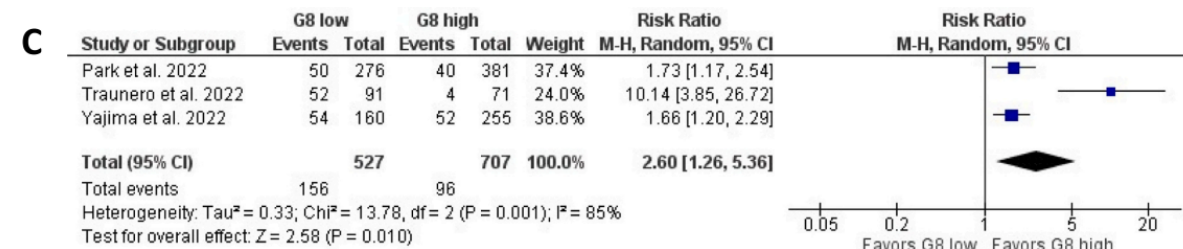
Toutes les études



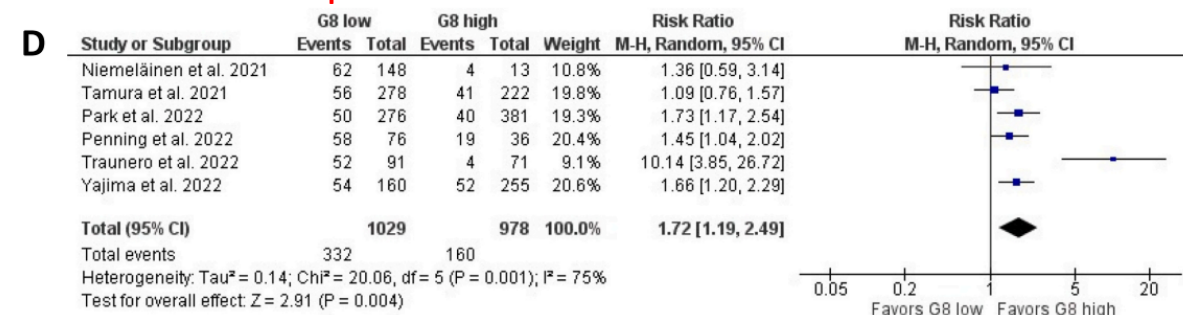
Cancers du colon

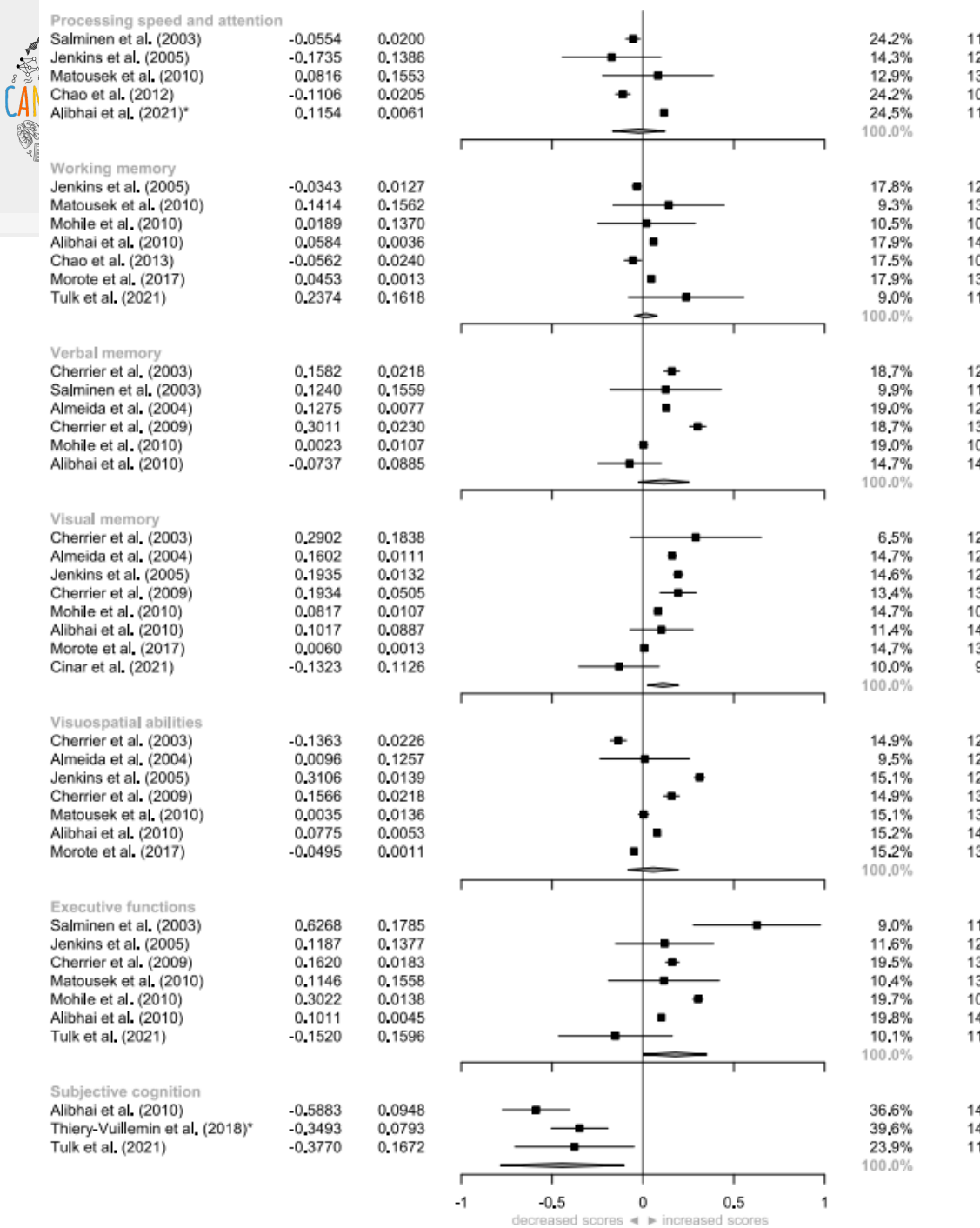


Cancers urologiques



Complications selon Clavien-Dindo ≥ 1





Does hormone therapy impact cognition in patients with prostate cancer? A systematic review and meta-analysis

Boué A et al. Cancer 2024; 130:2120–2138

- Revue systématique : 20 études (1440 pts)
- 1^{ère} méta-analyse (15 études ; 1093 pts) évaluant l'impact de la déprivation androgénique et des hormonothérapies de nouvelle génération sur la cognition

• Ages des Pts : 65 ± ND à 76,2 ± 4,2 ans

⇒ Aucun déclin cognitif objectif sous HT

⇒ Déclin cognitif subjectif sous HT et HTNG (p = 0,03)

Rassurant ?

- Âge < 80 ans
- Durées de suivi : 6 à 12 mois (18 études)
24 mois (1 étude)
36 mois (1 étude)



Predictors of three-month mortality and severe chemotherapy-related adverse events in patients aged 70 years and older with metastatic non-small-cell lung cancer: A secondary analysis of ESOGIA-GFPC-GECP 08-02 study

Gendarme S et al. J Geriatr Oncol 2024; 15, 101506

- N = 493 pts
- CBNPC métastatiques
- Âge médian 77 (74-80)
- Hommes : 74,2%
- PS 0-1 : 81,1%

Facteurs associé à la mortalité à 3 mois

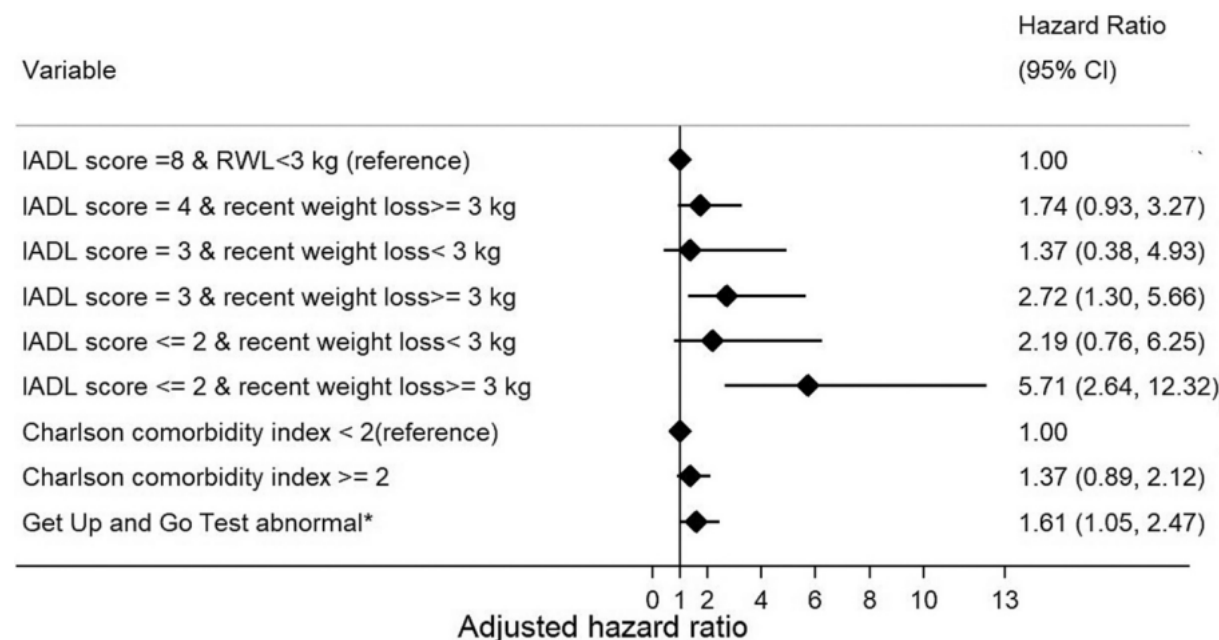


Table 3

Multivariate Cox analysis for the prediction of 3-months mortality (models with anemia)

Variables	Model OS-1 (with IADL) ^a			Model OS-2 (with TGUG) ^a			Model OS-3 (with PS) ^a		
	aHR	95% CI	p	aHR	95% CI	p	aHR	95% CI	p
Female sex (ref)	2.03	1.13–3.67	0.018	2.31	1.25–4.28	0.008	2.25	1.24–4.09	0.008
ECOG PS									
0 (ref)	–	–	–	–	–	–	1.00	–	–
1	–	–	–	–	–	–	1.90	1.00–3.63	0.051
≥2	–	–	–	–	–	–	3.07	1.51–6.26	0.002
Normal GUGT (ref)	–	–	–	1.61	1.05–2.47	0.028	–	–	–
IADL = 4 & RWL <3 kg (ref)	1.00	–	–	–	–	–	–	–	–
IADL = 4 & RWL ≥3 kg	1.74	0.93–3.27	0.085	–	–	–	–	–	–
IADL = 3 & RWL <3 kg	1.37	0.38–4.93	0.627	–	–	–	–	–	–
IADL = 3 & RWL ≥3 kg	2.72	1.30–5.66	0.008	–	–	–	–	–	–
IADL ≤2 & RWL <3 kg	2.19	0.76–6.25	0.144	–	–	–	–	–	–
IADL ≤2 & RWL ≥3 kg	5.71	2.65–12.30	< 0.001	–	–	–	–	–	–
RWL ≥3 kg vs <3 kg	–	–	–	2.06	1.26–3.37	0.004	1.89	1.17–3.07	0.009
CCI ≥2 vs 0–1	1.37	0.89–2.12	0.154	1.36	0.88–2.11	0.164	1.28	0.83–1.98	0.260
Anemia ^b (yes vs no), n = 496	1.89	1.18–3.04	0.008	2.01	1.26–3.19	0.003	1.98	1.25–3.15	0.004
No. of chemotherapy cycles (continuous–tdv)	0.28	0.23–0.35	<0.001	0.26	0.21–0.32	<0.001	0.28	0.23–0.35	<0.001
Harrell'C statistic		0.874			0.862			0.875	
Bootstrapped ¹ Harrell'C statistic		0.874 [0.840–0.895]			0.845 [0.803–0.872]			0.862 [0.826–0.884]	
Brier Score		0.0114			0.0140			0.0139	
		[0.0076–0.0151]			[0.0096–0.00184]			[0.0095–0.0182]	

Abbreviations: aHR, Adjusted Hazard Ratio; CI, confidence interval; ECOG PS, Eastern Cooperative Oncology Group performance status; GUGT, Get up and Go Test; HR: hazard ratio; IADL, Instrumental Activities of Daily Living; RWL: recent weight loss; CCI: Charlson Comorbidity Index; tdv, time-dependent variable.

^a All Cox models were adjusted for treatment and center, and included randomization arm as a strata.

^b Anemia: <12 g/dL for women and < 13 g/dL for men.

¹ bias-corrected bootstrap estimates.

Table 4
Multivariate analysis of clinical factors associated with grade 3, 4, or 5 (versus 0, 1, or 2) chemotherapy-induced toxicities in 437 patients given such therapy.

Variables	Model T1			Model T2		
	OR ^a	95% CI	p	OR ^a	95% CI	p
IADL score ≤ 3 vs 4	1.79	0.99–3.24	0.053	–	–	–
Charlson Comorbidity Index score, ≥ 2 vs 0–1	1.94	1.06–3.56	0.033	1.88	1.03–3.44	0.04
Falls during last year, yes vs no	–	–	–	2.09	0.93–4.70	0.076
No. of chemotherapy cycles, 4 vs <4	0.55	0.35–0.88	0.012	0.54	0.34–0.85	0.008
AUROC	0.631 [0.56–0.67]			0.642 [0.58–0.68]		
Brier Score	0.1905			0.1902		
Hosmer–Lemeshow goodness-of-fit	$p = 0.90$			$p = 0.45$		

Abbreviations: AUROC, area under the receiver operating characteristics curve; CI, confidence interval; IADL, Instrumental Activities of Daily Living; OR, odds ratio.
^a All logistic-regression models were adjusted for treatment and center, and stratified by randomization arm.

Facteur indépendant associés à la toxicité grade ≥ 3 de la CT :

- Score de Charlson ≥ 2
- Nombre de cycles de CT ≥ 4

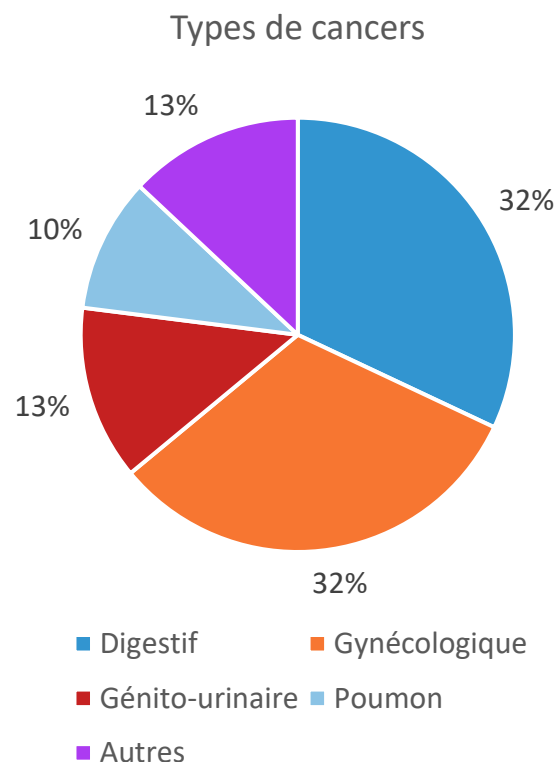
Tendance : score IADL $\leq 3/4$
 chutes dans l’année passée

Prediction of moderate and severe toxicities of chemotherapy in older patients with cancer: a propensity weighted analysis of ELCAPA cohort

Benderra MA et al. Oncologist 2024 Jul; oyae157

- 837 patients
- Âge médian : 81 ans (77-84)
- Femmes : 59%
- Métastases : 58%
- Mono-CT : 32%
- CT en combinaison : 64%
- DM : 4%

- **Paramètres gériatriques :**
 - ADL ≤ 5 : 13%
 - IADL < 7 : 38%
 - Chute dans l'année passée : 20%
 - CIRS-G > 12 : 26%
 - ≥ 5 médicaments : 60%
 - Altération cognitive : 16%
 - Sd dépressif : 17%
 - Seul à domicile : 42%



1. Identifier les facteurs associés à la survenue des toxicités modérées et sévères

2. Rechercher les facteurs de risque

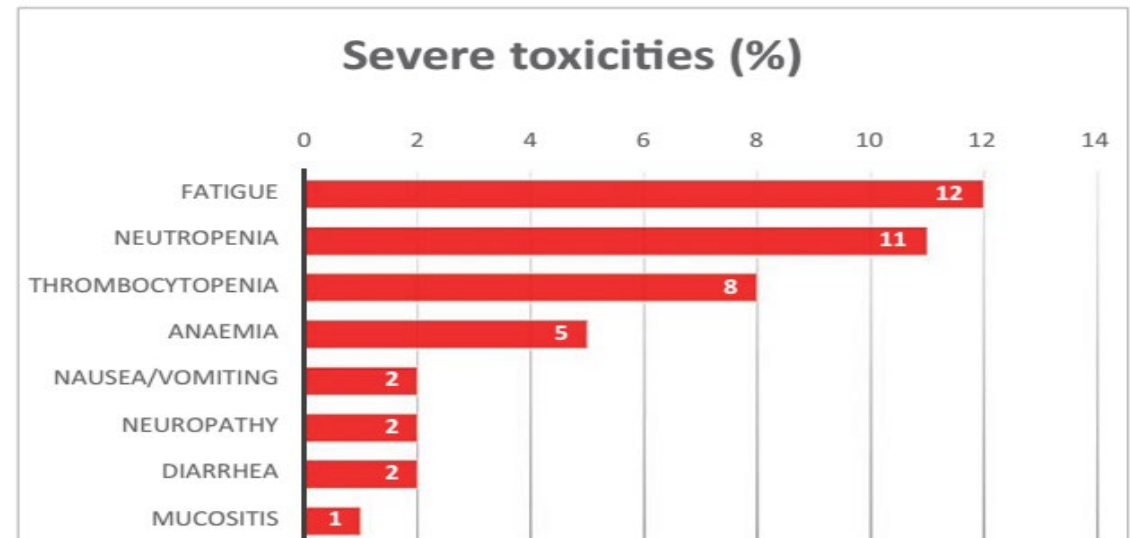
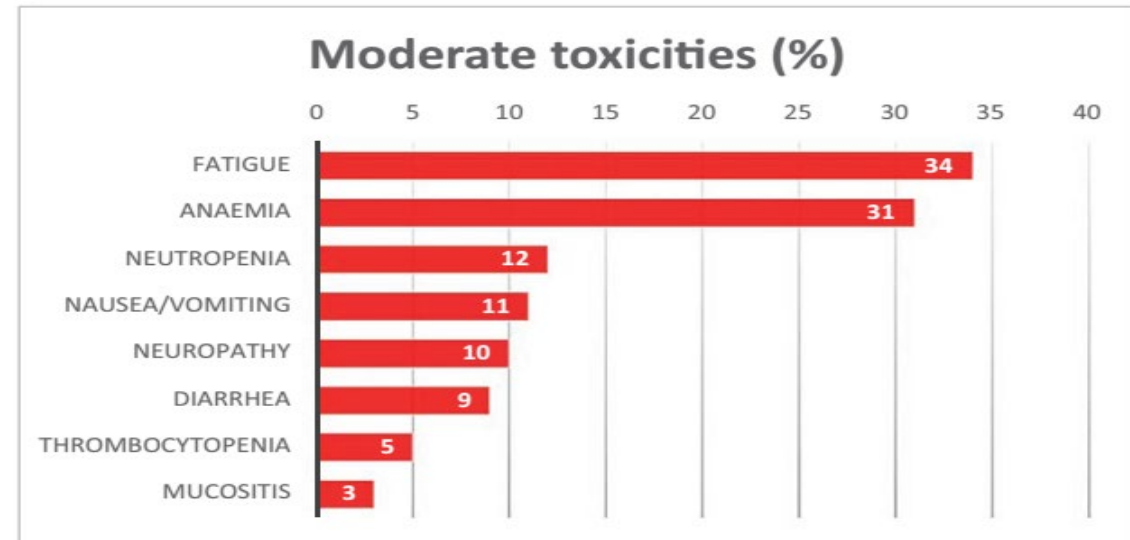
- de toxicité
- liés à l'indication du traitement

Toxicité

- modérée ou grave : 74% (n = 618)
- sévère : 33% (279 / 618)
 - 30% sans métastase
 - 35% avec métastases

Arrêt de la CT pour toxicité : 10%

- grade 3-4 : 61%
- grade 2 : 27%
- grade 0-1 : 12%



Facteurs associés à la toxicité de la chimiothérapie

Variable&c	Univariate analysis					
	Moderate toxicities			Severe toxicities		
	OR	95%CI	P	OR	95%CI	P
Female sex	0.82	0.58-1.16	.26	0.70	0.49-1.00	.05
>80 years of age	0.78	0.55-1.09	.15	1.04	0.72-1.49	.85
Metastatic status	1.09	0.77-1.54	.62	1.32	0.92-1.89	.13
ECOG-PS > 1	1.40	0.98-2.00	.07	1.70	1.17-2.46	.005
Polychemotherapy	1.43	1.00-2.04	.05	1.06	0.73-1.53	.76
Hemoglobin < 10 g/dl	1.72	0.98-3.02	.06	2.98	1.72-5.17	<.001
Creatine clearance rate < 30 mL/minute	1.30	0.48-3.52	.61	2.53	0.99-6.44	.05
Albuminemia < 35 g/L	1.16	0.78-1.72	.47	1.90	1.27-2.84	.002
6-month weight loss	1.41	0.92-2.16	.12	1.38	0.88-2.15	.16
CIRS-G > 12	1.40	0.93-2.11	.10	1.69	1.12-2.57	.01
ADL < 6	1.17	0.69-1.97	.56	1.19	0.69-2.05	.53
IADL < 7	1.23	0.86-1.76	.25	1.40	0.97-2.03	.07
TUG < 20 s	0.72	0.43-1.23	.23	0.59	0.34-1.00	.05
Cognitive impairment	0.93	0.57-1.51	.76	1.38	0.85-2.22	.19
BMI						
<22 vs 22-25 kg/m²	0.87	0.56-1.36	.55	0.94	0.59-1.49	.41
>25 vs 22-25 kg/m²	1.19	0.79-1.80	.41	1.07	0.70-1.65	.75
Gynaecological cancer*	0.99	0.65-1.50	.95	0.75	0.48-1.17	.21
GU cancer*	1.26	0.69-2.32	.45	1.75	0.96-3.19	.07
Lung cancer*	1.68	0.86-3.29	.13	1.45	0.72-2.91	.30
Other cancer*	0.75	0.44-1.28	.13	0.65	0.37-1.14	.13

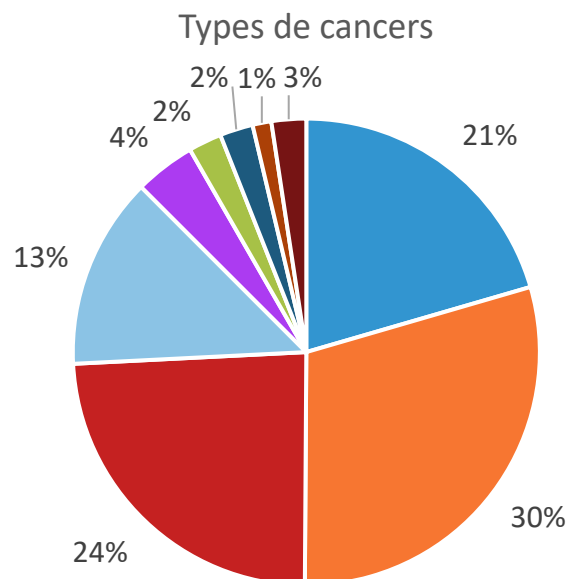
Facteurs associés à la toxicité de la chimiothérapie

Variable&c	Univariate analysis						Multivariate analysis					
	Moderate toxicities			Severe toxicities			Moderate toxicities		P	Severe toxicities		P
	OR	95%CI	P	OR	95%CI	P	OR	95%CI		OR	95%CI	
Female sex	0.82	0.58-1.16	.26	0.70	0.49-1.00	.05	0.99	0.53-1.83	.97	1.02	0.54-1.95	.94
>80 years of age	0.78	0.55-1.09	.15	1.04	0.72-1.49	.85	0.87	0.54-1.41	.57	1.17	0.70-1.94	.55
Metastatic status	1.09	0.77-1.54	.62	1.32	0.92-1.89	.13	0.93	0.57-1.53	.79	0.80	0.48-1.33	.38
ECOG-PS > 1	1.40	0.98-2.00	.07	1.70	1.17-2.46	.005	1.68	0.97-1.45	.39	1.13	0.64-2.00	.68
Polychemotherapy	1.43	1.00-2.04	.05	1.06	0.73-1.53	.76	1.32	0.80-2.19	.28	1.08	0.64-1.82	.76
Hemoglobin < 10 g/dl	1.72	0.98-3.02	.06	2.98	1.72-5.17	<.001	1.94	0.82-4.59	.13	2.76	1.19-6.42	.02
Creatine clearance rate < 30 mL/minute	1.30	0.48-3.52	.61	2.53	0.99-6.44	.05	0.82	0.20-3.27	.77	1.73	0.50-6.00	.38
Albuminemia < 35 g/L	1.16	0.78-1.72	.47	1.90	1.27-2.84	.002	0.92	0.53-1.59	.75	1.43	0.81-2.50	.21
6-month weight loss	1.41	0.92-2.16	.12	1.38	0.88-2.15	.16	1.16	0.66-2.05	.61	0.97	0.53-1.76	.92
CIRS-G > 12	1.40	0.93-2.11	.10	1.69	1.12-2.57	.01	1.07	0.60-1.93	.82	1.52	0.85-2.74	.16
ADL < 6	1.17	0.69-1.97	.56	1.19	0.69-2.05	.53						
IADL < 7	1.23	0.86-1.76	.25	1.40	0.97-2.03	.07						
TUG < 20 s	0.72	0.43-1.23	.23	0.59	0.34-1.00	.05	0.75	0.38-1.45	.39	0.90	0.45-1.82	.77
Cognitive impairment	0.93	0.57-1.51	.76	1.38	0.85-2.22	.19	0.64	0.33-1.21	.17	1.00	0.53-1.88	.99
BMI												
<22 vs 22-25 kg/m²	0.87	0.56-1.36	.55	0.94	0.59-1.49	.41						
>25 vs 22-25 kg/m²	1.19	0.79-1.80	.41	1.07	0.70-1.65	.75						
Gynaecological cancer*	0.99	0.65-1.50	.95	0.75	0.48-1.17	.21	1.45	0.74-2.81	.28	1.39	0.69-2.78	.35
GU cancer*	1.26	0.69-2.32	.45	1.75	0.96-3.19	.07	1.22	0.51-2.89	.66	2.47	1.06-5.72	.04
Lung cancer*	1.68	0.86-3.29	.13	1.45	0.72-2.91	.30	3.10	1.13-8.52	.03	2.72	0.93-7.97	.07
Other cancer*	0.75	0.44-1.28	.13	0.65	0.37-1.14	.13	1.15	0.53-2.49	.72	0.92	0.41-2.08	.84

- Évaluation pré-thérapeutique
- Toxicité des traitements
- **Les outils connectés**

FASTOCH: Feasibility of electronic patient-reported outcomes in older patients with cancer—A multicenter prospective study

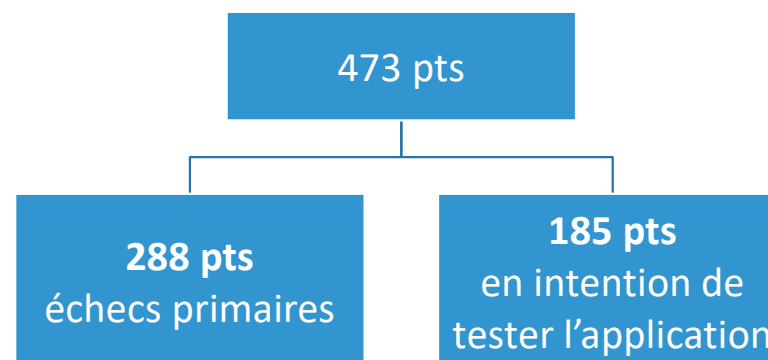
Cancel M et al. J Clin Oncol 2024; 42: 2713-22



■ Hémopathies ■ C. digestifs
 ■ C. gynécologiques ■ C. urologiques
 ■ C. pulmonaires ■ C. cutanés
 ■ C. ORL ■ Sarcomes
 ■ Autres cancers

- Pts ≥ 75 ans : 79 ans, Q1-Q3 (77-82)
- 492 sélectionnés $\Rightarrow$ **473 inclus**
- Femmes : 52,9%
- À domicile : 97,2%

$\Rightarrow$ Évaluer la faisabilité du recueil des PRO grâce à une application connectée (via ordinateur, smartphone ou tablette)



Facteurs	N = 473	ITT population (n = 185)	Échec primaire (n = 288)	Univariée P	Multivariée P
Âge ≥ 80 ans	210	72 (38,9)	138 (47,9)	0,055	0,094
Niveau socioéconomique bas	307	101 (54,6)	206 (71,5)	0,002	0,009
Score G8		13,5 (12-15)	12 (10,5-14)	< 0,001	
G8 - mobilité réduite	96	36 (19,5)	88 (30,6)	0,28	0,812
G8 – trouble neuropsych	86	20 (10,8)	66 (22,9)	0,003	0,201
G8 – santé subjective	224 (mauvaise, NSP) 249 (aussi bonne, meilleure)	64 (34,6) 121 (65,4)	160 (55,6) 128 (6,6)	< 0,001	0,002

- **Taux de faisabilité limité à 26 %** de la surveillance à distance des ePRO (obstacles technologiques)
- Parmi les patients qui avaient accès à Internet, la plupart d’entre eux utilisaient effectivement des ePRO (66%)
- Facteurs potentiellement associés à une participation active : meilleure santé subjective (< 0,001) ; traitement ambulatoire (tendance : 0,094)

CONCLUSION

- Les bénéfices des interventions gériatriques restent difficiles à démontrer dans la recherche en onco-gériatrie.
(hétérogénéité : patients / cancers / traitements / interventions)
- Les difficultés et le moment de la mise en œuvre des interventions gériatriques peuvent expliquer des résultats négatifs.
- Difficulté de recueil des variables d'intérêt via les nouvelles technologies chez les patients âgés atteints de cancer ???
- La valeur pronostique et prédictive des paramètres gériatriques associés aux événements indésirables reste constante dans les études

⇒ **nécessité d'inclure une EGA minimale dans les études onco-gériatriques +++**

G-CODE

Paillaud E et al. Eur J Cancer 2018; 103: 61-8

European Journal of Cancer 103 (2018) 61–68



Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejancer.com



Original Research

Multidisciplinary development of the Geriatric Core Dataset for clinical research in older patients with cancer: A French initiative with international survey



E. Paillaud ^{a,b,*}, P. Soubeyran ^{c,d}, P. Caillet ^{a,b,1}, T. Cudennec ^{e,1},
E. Brain ^f, C. Terret ^g, F. Etchepare ^h, L. Mourey ⁱ, T. Aparicio ^j,
F. Pamoukdjian ^{b,k}, R.A. Audisio ^l, S. Rostoft ^m, A. Hurria ⁿ,
C. Bellera ^{h,o}, S. Mathoulin-Pélissier ^{h,o} for the G-CODE collaborators²

