Formation continue:

Mon patient âgé a un cancer

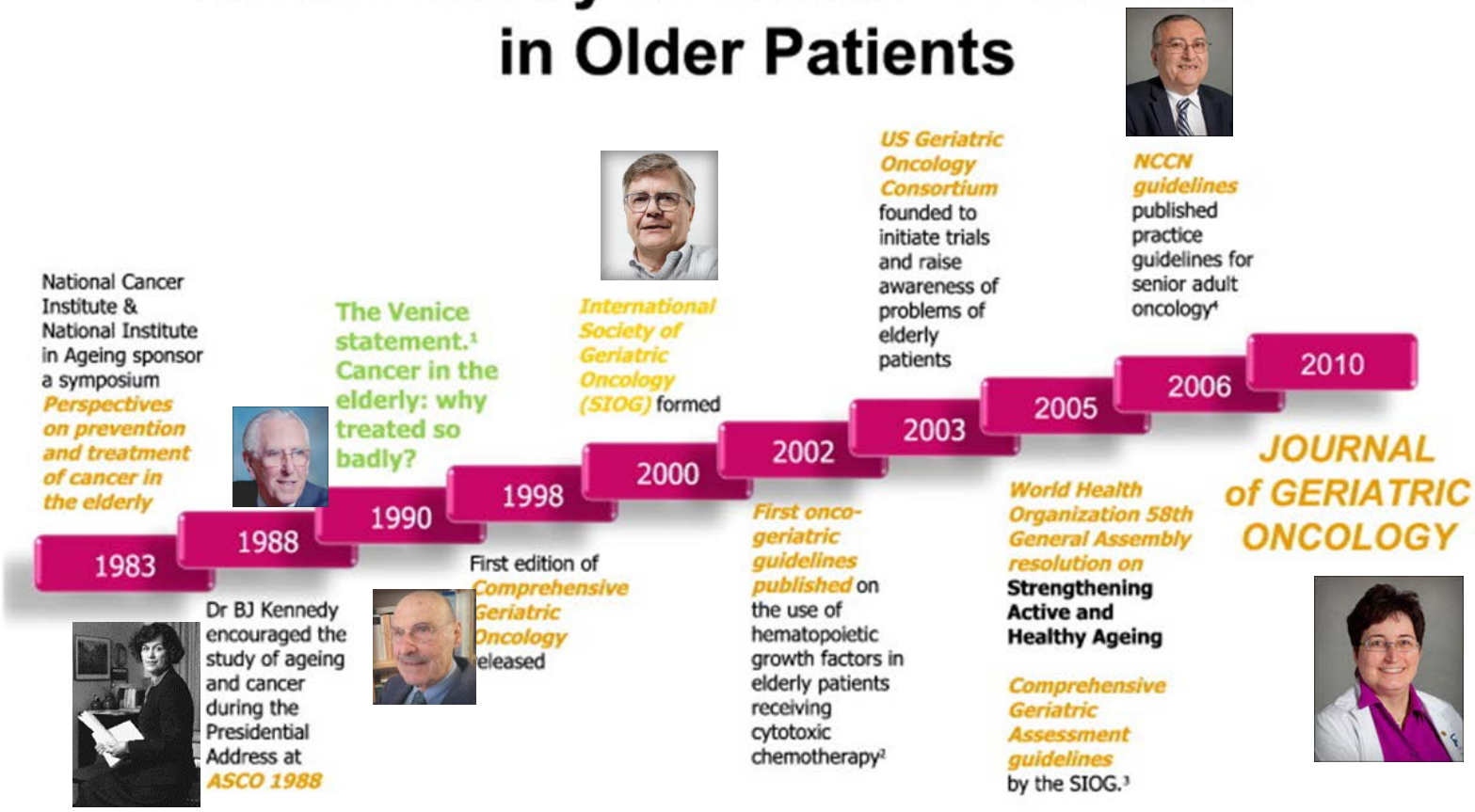
Les plus-values de l'évaluation en oncologie (et hémato oncologie)

Plan:

- Historique de l’oncogériatrie
- Evaluation oncogériatrique: pourquoi et comment?
- Effets/résultats
- Perspectives

Historique…

Short History of Cancer Treatment in Older Patients



1. Fentiman IS *et al. Lancet* 1990;335:1020-1022.
2. Bokemeyer C *et al.* Onkologie 2002; 25: 32–39.
3. Extermann M *et al.* Crit Rev Oncol Hematol 2005; 55: 241–252.
4. Balducci L. NCCN clinical practice guidelines in oncology. Senior Adult Oncology November 1, 2006.

Historique…

2012
Puts et al publish the first systematic review of geriatric assessment in older adults in oncology.

2014
National Comprehensive Cancer Network (NCCN) presents Clinical Practice Guidelines in Oncology: Senior Adult Oncology.

2018
ASCO Guideline for Geriatric Oncology published in the Journal of Clinical Oncology.

2018
The oncology community mourns the tragic loss of pioneer in geriatric oncology, **Arti Hurria, MD**, killed in a car accident in November 2018. Dr. Hurria was with the City of Hope in Duarte, California.

2020
SIOG celebrates 20 years of excellence in geriatric oncology. Marking the 20th anniversary of SIOG, the Pont du Mont Blanc in Geneva, Switzerland, was decorated with SIOG flags.

Pourquoi? Disparités:

Disparités: âge biologique et âge chronologique

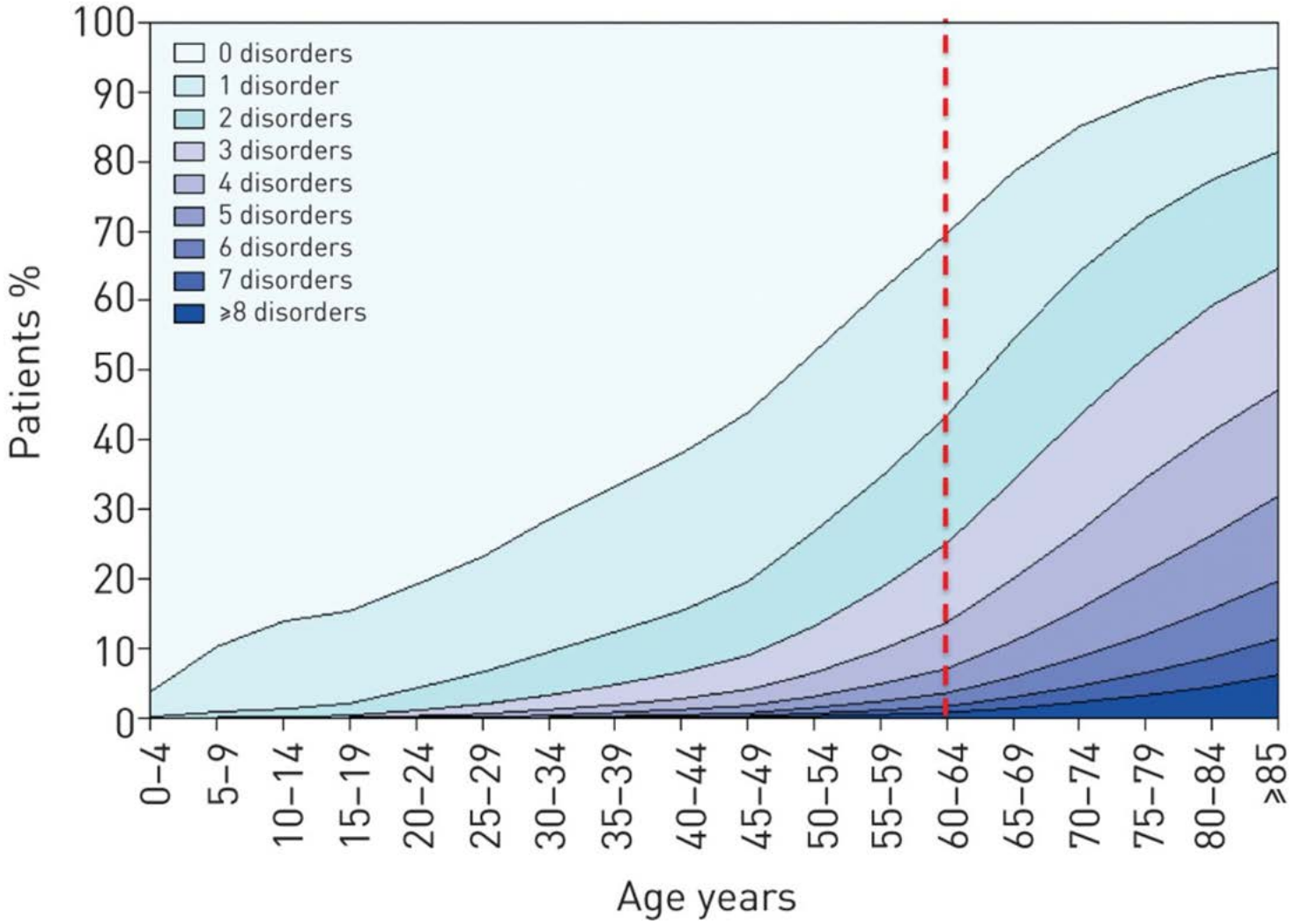
M. P.F.
17.12.1936

Patient Robuste:
espérance vie encore environ 10 ans

M. A.B
02.03.1937

Patient dépendant: espérance de vie environ 1-2 ans

Disparités: comorbidités



Nombre de comorbidités par groupe d'âge

European Respiratory Journal 2014 44: 1055-1068

Comment évaluer et prendre en charge un patient âgé avec un cancer?

Comment faire la différence?

« Primum non nocere »

QUI a le plus de probabilité de bénéficier d'un traitement de son cancer

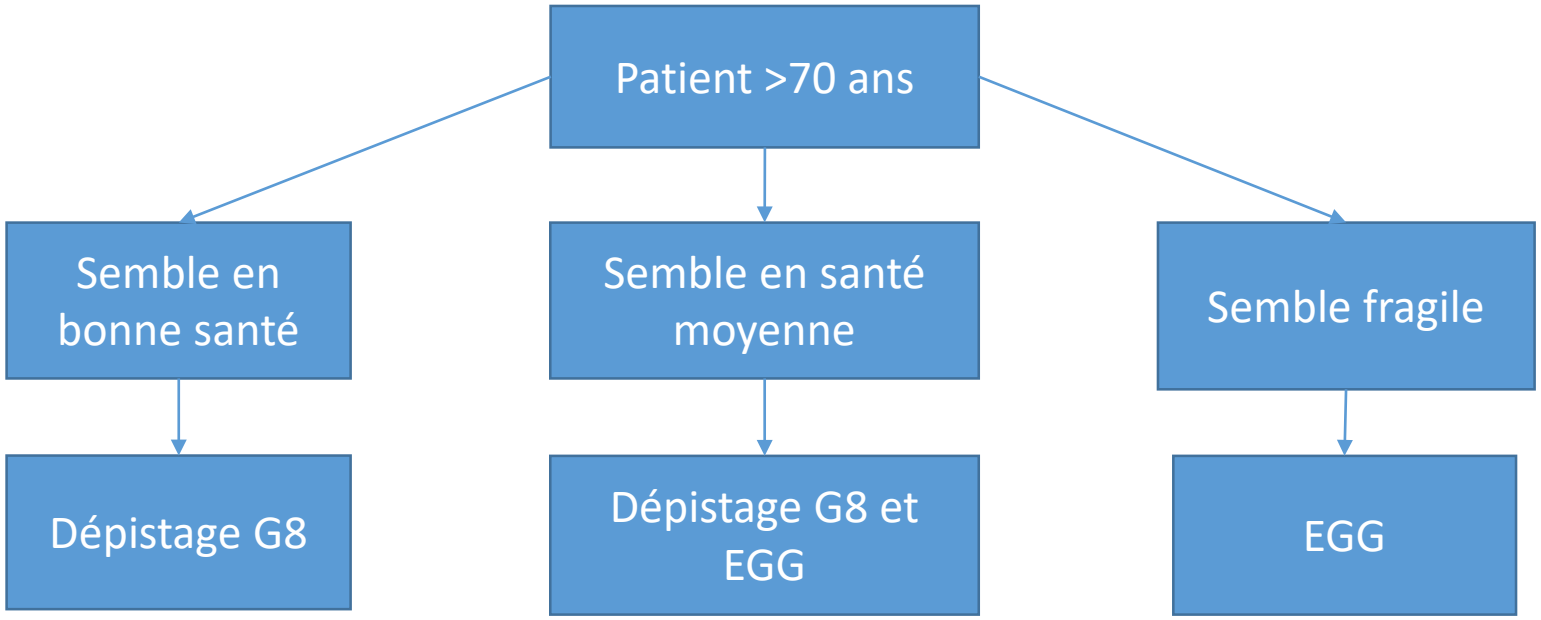
QUI a le moins de risque de subir les effets secondaires d'un traitement

QUI est robuste?

QUI est vulnérable?

QUI est fragile?

Stratégie: dépistage



EGG: évaluation gériatrique globale

Dépistage: Echelle G8

- 8 questions
- Prend 5-10 minutes
- Anormal si ≤ 14

- Sensibilité: 89.6 %
- Spécificité: 60.4%

Etiquette patient

Echelle G8

Items	Réponses possibles (items)
Le patient présente-t-il une perte d'appétit ? A-t-il mangé moins, ces 3 derniers mois, par manque d'appétit, problèmes digestifs, difficultés de mastication ou de déglutition	0 : anorexie sévère 1 : anorexie modérée 2 : pas d'anorexie
Perte récente de poids (< 3 mois)	0 : perte de poids > 3 Kg 1 : ne sait pas 2 perte de poids entre 1 et 3 kg 3 : pas de perte de poids
Motricité	0 : du lit au fauteuil 1 : autonome à l'intérieur 2 : sort du domicile
Problèmes neuropsychologiques	0 : démence ou dépression sévère 1 : démence ou dépression modérée 2 : pas de problème psychologique
Indice de masse corporelle (IMC)	0 : IMC < 18,5 1 : 18,5 ≤ IMC < 21 2 : 21 ≤ IMC < 23 3 : IMC ≥ 23
Prend plus de 3 médicaments	0 : oui 1 : non
Le patient se sent-il en meilleure ou moins bonne santé que la plupart des personnes de son âge ?	0 : moins bonne 0,5 : ne sait pas 1 : aussi bonne 2 : meilleure
Age (ans)	0 : > 85 1 : 80 – 85 2 : < 80
Total	0 - 17

Caractéristiques du test G8 :
Population évaluée : **1425 patients** (sur 1668 inclus) de plus de 70 ans, âge moyen de la population : 78 ans, PS entre 0 et 1 pour 75% des patients inclus, 70% sont des femmes, plus de la moitié (53,7%) avec cancer du sein et près dans près de la moitié des cas (49,6%) la maladie n'était pas métastatique.
Temps moyen de remplissage du test (IDE ou Oncologue) : **4,4 mn (+/- 2,9 mn)**
Se : 76,6% (74,0 –79,0) – Spe : 64,4% (58,6 –70,0)
VPP : 89,6% (87,6 –91,5) – VPN : 40,7% (36,1– 45,4)

Interprétation : **un total ≤ 14** fait considérer le patient comme **vulnérable** et conduit à demander une évaluation gériatrique complète

Date de réalisation : _____ Score obtenu : _____

Demande évaluation gériatrique complète : OUI ☐ NON ☐

Avec le Dr _____ le _____ à _____

Réf : Soubeyran et al. in ASCO 2011, abstract n°9001

VOLUME 36 · NUMBER 22 · AUGUST 1, 2018

JOURNAL OF CLINICAL ONCOLOGY

ASCO SPECIAL ARTICLE

Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Chemotherapy: ASCO Guideline for Geriatric Oncology

Supriya G. Mohile, William Dale, Mark R. Somerfield, Mara A. Schonberg, Cynthia M. Boyd, Peggy S. Burhenn, Beverly Canin, Harvey Jay Cohen, Holly M. Holmes, Judith O. Hopkins, Michelle C. Janelsins, Alok A. Khorana, Heidi D. Klepin, Stuart M. Lichtman, Karen M. Mustian, William P. Tew, and Arti Hurria

Comment prendre en charge un patient âgé avec un cancer: EVALUATION

Box 2: Summary of a Minimum Data Set for Practical Assessment of Vulnerabilities in Older Patients With Cancer

See Table 1 for more details and rationale.

1. Predict chemotherapy toxicity (if clinically applicable): Cancer and Aging Research Group or Chemotherapy Risk Assessment Scale for High-Age Patients tools
2. Estimate (noncancer) life expectancy (if clinically applicable): ePrognosis
3. Functional assessment: instrumental activities of daily living
4. Comorbidity assessment: medical record review or validated tool
5. Screening for falls, one question: how many falls or falls with an injury have you had in the previous 6 months (or since your last visit)?
6. Screening for depression: Geriatric Depression Scale or other validated tool
7. Screening for cognitive impairment: Mini-Cog or Blessed Orientation-Memory-Concentration test
8. Screening for malnutrition: weight loss/body mass index

J Clin Oncol 2018 36:2326-2347 Practical assessment and management of vulnerabilities in older patients receiving chemotherapy: ASCO Guideline for geriatric oncology

Evaluation gériatrique:

- Evaluation multidimensionnelle:
  - Les comorbidités *(Charlson)*
  - L'espérance de vie *(E-Prognosis)*
  - L'état fonctionnel *(AVQ base et AVQ instrumentales)*
  - La cognition *(Mini Cog ou MOCA)*
  - L'état nutritionnel *(MNA)*
  - Les Troubles de la Marche et de l'Equilibre *(Score Tinetti, TUG, nombre de chutes,*
  - Les troubles thymiques *(MiniGDS)*
  - La médication
  - Le contexte socio-économique
  - Les désirs et volontés du patient *(directives anticipées)*
  - La capacité de discernement

Table 1. Recommended Geriatric Oncology Tools

Assessment of the Below GA Domains Recommended for All Patients Aged 65+	Recommended Tool and Score Signifying Impairment	Evidence to Support Recommendation	Administration Characteristics	Considerations and Other Evaluation Options
Function	IADLs: dependence on any task signifies impairment.	Large prospective studies of older patients with cancer show that IADLs predict chemotherapy toxicity, mortality, hospitalizations, and functional decline. Advocated by experts in Delphi consensus panels.	PRO; < 5 minutes	Consider ADLs. Any ADL deficit is used for characterization of frailty. Consider objective measure of physical performance such as SPPB, TUG, or gait speed.
Falls	Single item: "How many falls have you had over the last 6 months (or since the last visit)?" One or more recent falls.	Falls are common in older adults with cancer and can lead to serious injury. Falls have been associated with chemotherapy toxicity. Assessment for falls is recommended by geriatric oncology expert panels and the American Geriatrics Society for all older adults.	PRO; < 1 minute	
Comorbidity	Robust review of chronic medical conditions and medications through routine history: three or more chronic health problems or one or more serious health problems.	Comorbidity is associated with poorer survival, chemotherapy toxicity, mortality, and hospitalizations.	Part of routine history	Consider validated tools such as CIRS-G or Charlson. History, CIRS-G, and CARS comorbidity recommended by experts.
Cognition	Mini-Cog: an abnormal test is defined by zero words recalled OR one to two words recalled + abnormal clock-drawing test. This screening test for cognitive impairment and abnormal scores requires further follow-up and decision-making capacity assessment. OR BOMC test: a score of 6 or greater identifies patients who have moderate deficits, and a cut point of 11 or greater identifies patients with severe cognitive impairment.	Growing data show that cognitive impairment is associated with poorer survival in older patients with cancer and increased chemotherapy toxicity risk. Mini-Cog has been shown to have high sensitivity and specificity for identifying cognitive impairment when compared with longer tools. BOMC scale is practical and is included in the cancer-specific GA developed by Hurria et al.[9]	Administered; ≤ 5 minutes	Multiple tools are available for cognitive assessment. The MMSE has more robust data for prediction of outcomes in older patients with cancer and has been shown to predict chemotherapy toxicity; it is included in the CRASH tool developed by Extermann et al.[17] The MOCA is also used by geriatricians. Both MMSE and MOCA are considerably longer than Mini-Cog and BOMC.
Depression	GDS 15 item: a score of > 5 suggests depression and requires follow-up.	Depression has been associated with unexpected hospitalizations, treatment tolerance, mortality, and functional decline in older adults with cancer receiving chemotherapy; these studies primarily assessed depression with the GDS.	PRO; ≤ 5 minutes	GDS recommended also by ASCO guidelines for depression. The Patient Health Questionnaire-9 is an alternative and is also recommended by ASCO guidelines for depression. The mental health inventory is an option and has been associated with outcomes in older patients with breast cancer.
Nutrition	Unintentional weight loss; > 10% weight loss from baseline weight); BMI < 21 kg/m^2.	Poor nutrition is associated with mortality in older patients with cancer.	PRO; < 1 minute	Consider G8 and MNA as alternatives; both are associated with mortality in older patients with cancer.

(continued on following page)

=Evaluation Gériatrique Globale (EGG:CGA)

J Clin Oncol 2018 36:2326-2347 Practical assessment and management of vulnerabilities in older patients receiving chemotherapy: ASCO Guideline for geriatric oncology

SPECIAL SERIES: CARING FOR OLDER ADULTS WITH CANCER

Geriatric Assessment and Management in Canc

Siri Rostoft, MD, PhD[1,2]; Anita O'Donovan, PhD[3]; Pierre Soubeyran, MD, PhD[4]; Shabbir M. H. Alibhai, MD, MSc[5,6]; and Marije E. Hamaker, MD, PhD[7]

review

TABLE 1. Geriatric Assessment Domains, Tools, and Proposed Interventions

Domain	Assessment Tool Examples	Evidence	Intervention and Examples
Functional status	ADLs (ie, transferring and eating) IADLs (ie, managing finances, cooking, and driving)	Association with chemotherapy toxicity, hospital admissions, functional decline, and mortality[4,39,46,55]	Aids such as motorized wheelchair Meals on Wheels Physiotherapy Occupational therapy
Objective physical performance	4 m gait speed, TUG; SPPB; grip strength; sarcopenia	Prediction of mortality, treatment-related complications, and functional decline[56-58]	Structured exercise Assistive devices
Falls	No. falls in previous 6 months	Related to chemotherapy toxicity, postoperative complications, and functional decline[24,59]	Falls prevention program
Cognitive function	MMSE, MoCA, Mini-Cog, and BOMC	Assessment of capacity for consent or treatment adherence and cognitive decline associated with treatment. Association with poorer overall survival, chemotherapy toxicity, and delirium[22,43,60]	Support during treatment trajectory Delirium prevention program Treatment reminders, eg, text messages for daily radiation therapy appointments
Mood (depression)	GDS, HADS, and PHQ2/9	Assessment of psychologic adjustment to treatment. Association with postoperative complications, treatment tolerance, functional decline, and mortality[45,46,55,61]	Cognitive-behavioral therapy Medical therapy Counseling
Nutritional status	MNA, BMI, and weight loss combined	Association with mortality, likelihood of treatment completion, and healthcare consumption[62,63]	Dietary counseling
Comorbidity	CIRS-G, CCI, and OARS comorbidity	Assessment of competing causes of mortality, survival, treatment tolerance, and hospital admissions[61,64]	Referral to organ specialist
Polypharmacy	List of medications, STOPP-START, and Beers criteria	Postoperative complications, chemotherapy toxicity, functional decline, and mortality[65]	Geriatrician or clinical pharmacist review of medications
Social support	Focused questions regarding social support, MOS-SSS, and MPSSS	Association with cancer progression, chemotherapy toxicity, poorer survival, and treatment adherence[66]	Home nursing Transportation assistance Buddy support schemes Referral to community or cancer support groups

Rostoft et al DOI: 10.1200/JCO.21.00089 Journal of Clinical Oncology

Evaluation: Comorbidités

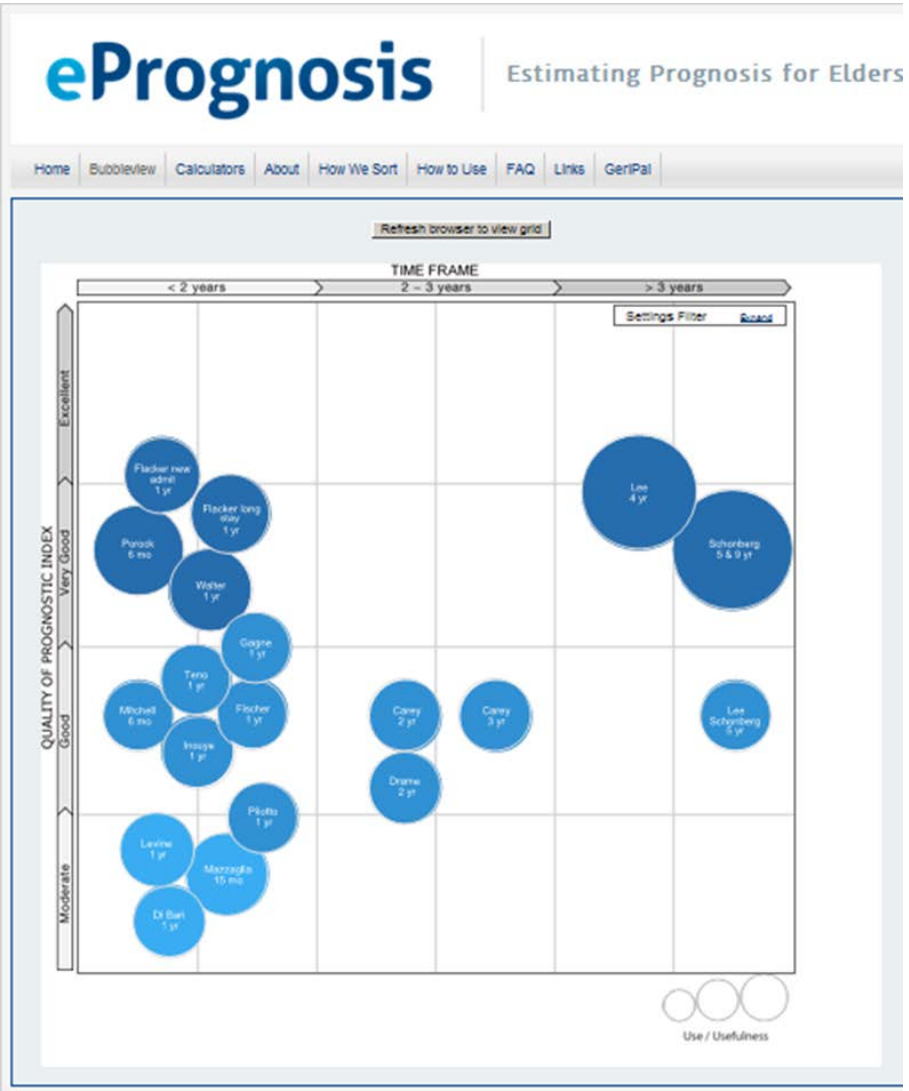
Charlson risk index

Condition	Assigned weights for diseases
Myocardial infarct	1
Heart failure	1
Peripheral vascular disease	1
Cerebrovascular disease	1
Dementia	1
Chronic pulmonary disease	1
Connective tissue disease	1
Ulcer disease	1
Mild liver disease	1
Diabetes	1
Hemiplegia	2
Moderate or severe renal disease	2
Diabetes with end organ damage	2
Any tumor	2
Leukemia	2
Lymphoma	2
Moderate or severe liver disease	3
Metastatic solid tumor	6
AIDS	6
Weighted comorbidity classes	
Low	0 points
Medium	1 to 2 points
High	3 to 4 points
Very high	≥5 points

Adapted from: Charlson ME, Pompei P, Ales KL, et al. J Chron Dis 1987; 40:373.

Evaluation de l'Espérance de vie: e-prognosis

https://eprognosis.ucsf.edu/



Evaluation des risques de toxicité des chimiothérapies:

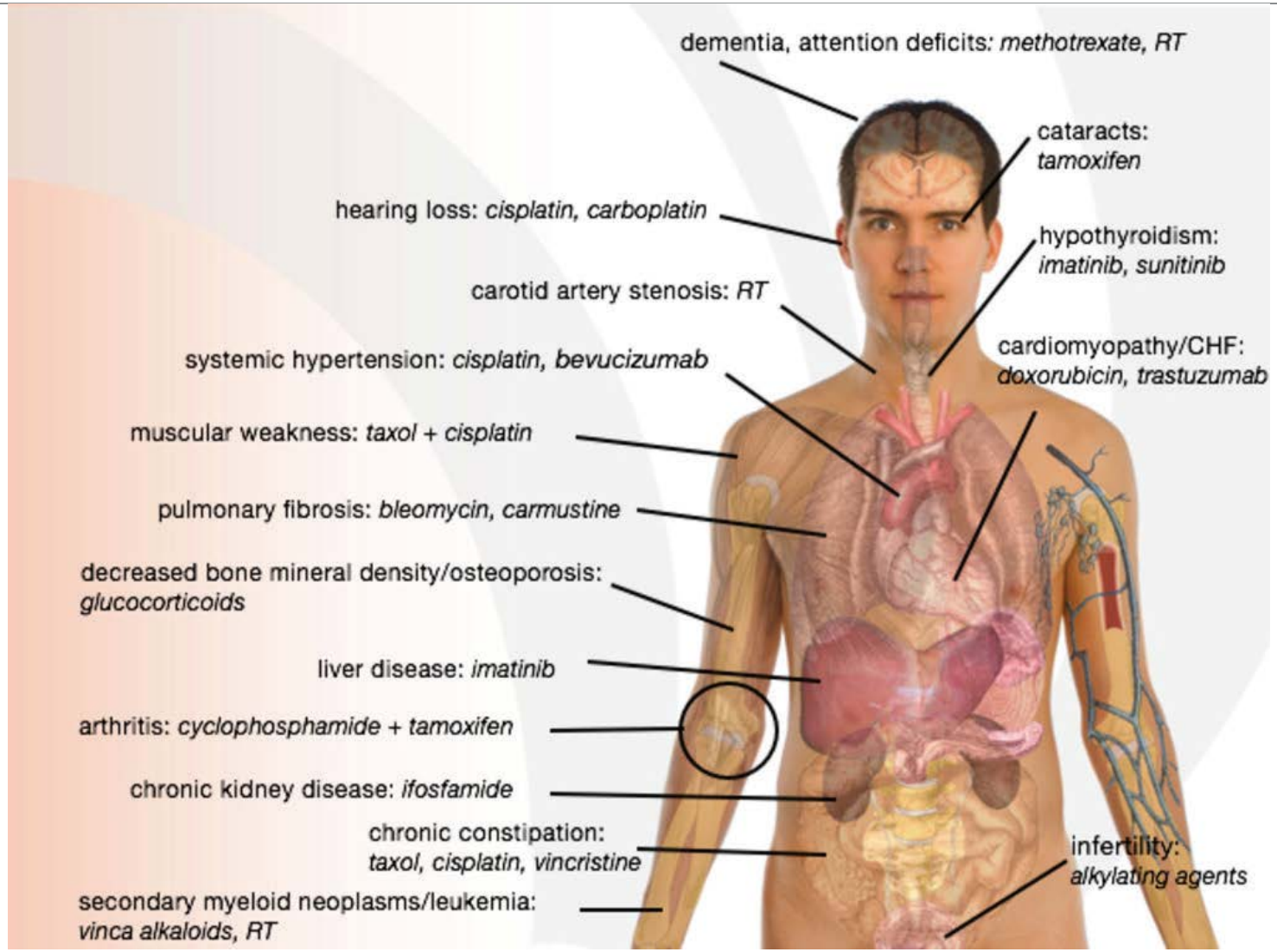
- CRASH score:

https://moffitt.org/for-healthcare-providers/clinical-programs-and-services/senior-adult-oncology-program/senior-adult-oncology-program-tools

- CARG score:

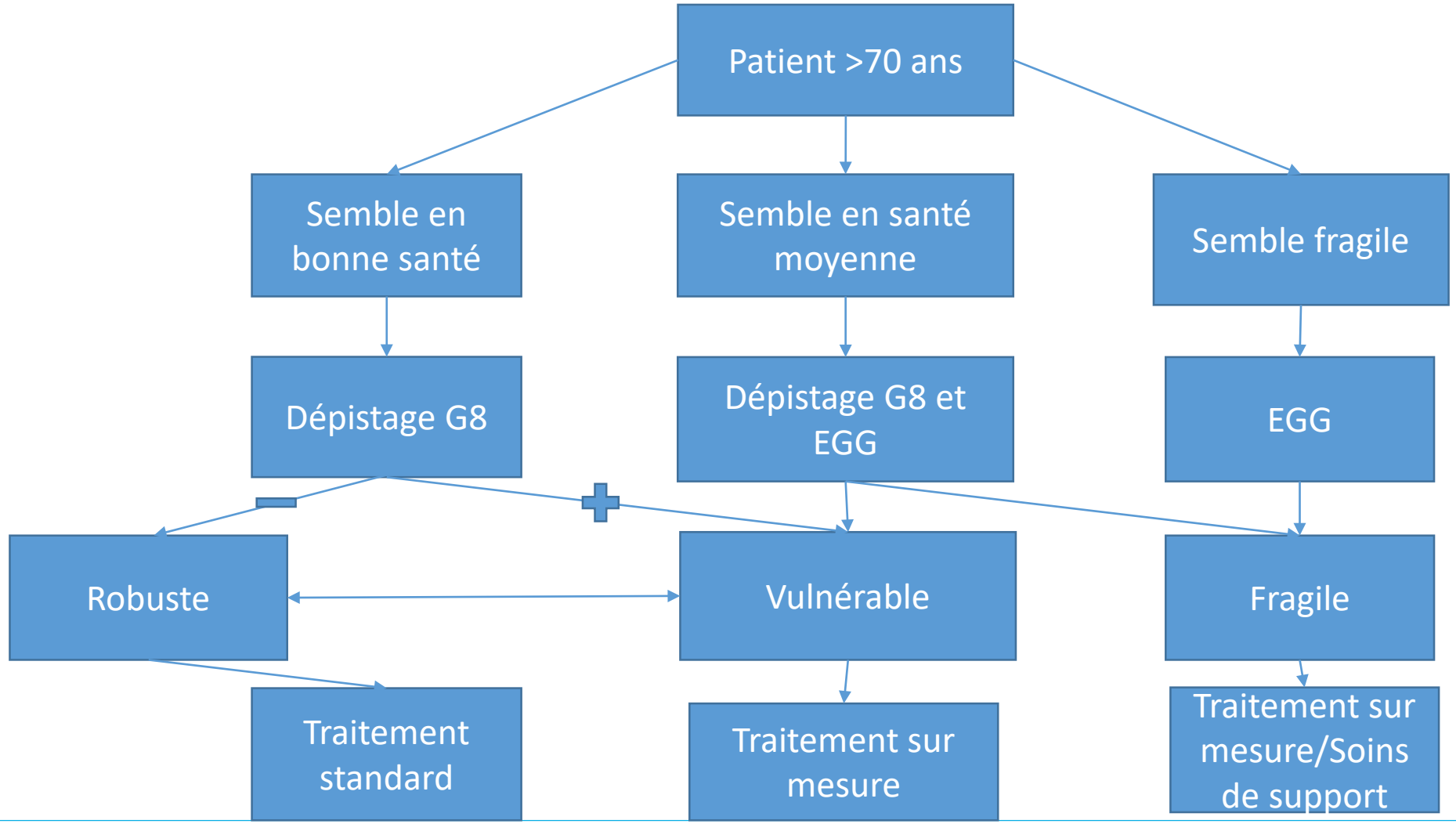
http://www.mycarg.org/Chemo_Toxicity_Calculator

Effets liés à l'âge des différents traitements oncologiques



Biology of premature ageing in survivors of cancer Cupit-Link MC et al ESMO

Stratégie:



Algorithme utilisé pour la prise de décision du Moffitt Cancer Center *Balducci et al. Cancer Control 2007, Vol 14*

Effets de l'évaluation oncogériatrique:

- Identification de syndromes gériatriques dans 51, 2% des cas
  - Surtout dénutrition et atteinte fonctionnelle

- Changement de la prise en charge dans 21% des patients
  - Intensification de traitement (10%)
  - Réduction d'intensité de traitement (86%)
  - Délai dans le traitement afin d'effectuer une prise en charge gériatrique

- Prédictif de mortalité:
  - Médicaments>3
  - Dénutrition
  - Dépendance AVQi

- Prédictif toxicité chimiothérapie:
  - CARG: chutes, aide pour prise médicaments, périmètre de marche et audition
  - CRASH: tox hémato:AVQ, tb auditifs

J Clin Oncol 2018 36:2326-2347 Practical assessment and management of vulnerabilities in older patients receiving chemotherapy: ASCO Guideline for geriatric oncology

CGA in the decision making process in elderly patients with cancer JClinOncol 2011; 29(27): 3636-3642

Effets dénutrition sur survie:

VOLUME 33 · NUMBER 1 · JANUARY 1 2015
JOURNAL OF CLINICAL ONCOLOGY ORIGINAL REPORT

Diagnostic Criteria for the Classification of Cancer-Associated Weight Loss

Lisa Martin, Pierre Senesse, Ioannis Gioulbasanis, Sami Antoun, Federico Bozzetti, Chris Deans, [illegible]esen, R. Thomas Jagoe, Martin Chasen, Kent Lundholm, Ingvar Bosaeus, [illegible]ckie E. Baracos

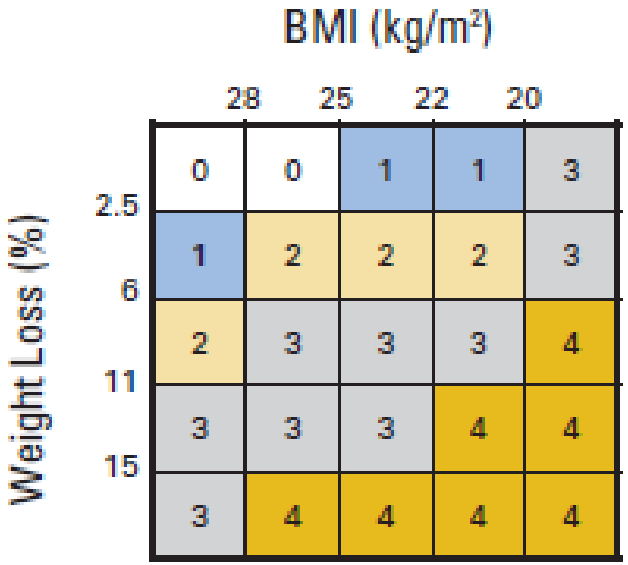


Fig 2 Grading scheme (grades 0-4) to predict overall survival in patients with advanced cancer. The grading scheme is based on groupings of BMI and weight loss showing distinct median survival (0:best 21 months, 4: worst prognosis 4.3 months)p <0.001: adjusted for age,sex, disease site,stage and performance status)

Effets de l'évaluation oncogériatrique:

Etude	n	Type d'étude	Effets EGG
GAIN 2020 *Li et al* *Cancer*	600	RCT >65 ans EGG avec interventions Tous types de tumeurs, stades Evaluation avant thérapie	Diminution incidence toxicité sévère (50 vs 60%, p=.02) Augmentation des directives anticipées (24vs 10% p<.01
GAP-70 2020 *Mohile et al* *JCO*	718	RCT >70 ans EGG avec propositions d'interventions Tumeurs solides incurables ou lymphomes Avant ttt	Diminution toxicité sévère du traitement (50vs 71% p<.01) Pas d'effet sur survie
INTEGERATE 2020 *Soo et al* *JCO*	154	RCT>70 ans EGG avec interventions comanagées (O+G) Tumeurs solides et lymphomes Candidats pour ttt systémique	Qualité de vie meilleure à 6 mois Moins d'hospitalisations (-41%) Moins de séjours aux urgences (-39%)
Qian et al 2020 *JCO*	160	RCT >65 ans EGG avec interventions gér Préopératoire pour cancer GI, tous stades et EG	Diminution durée séjour (8.2 vs 7.3 j p=.02) Diminution transferts SI (32vs13% p=.05 Pas de différence dans intention to treat

Quels Effets/résultats?

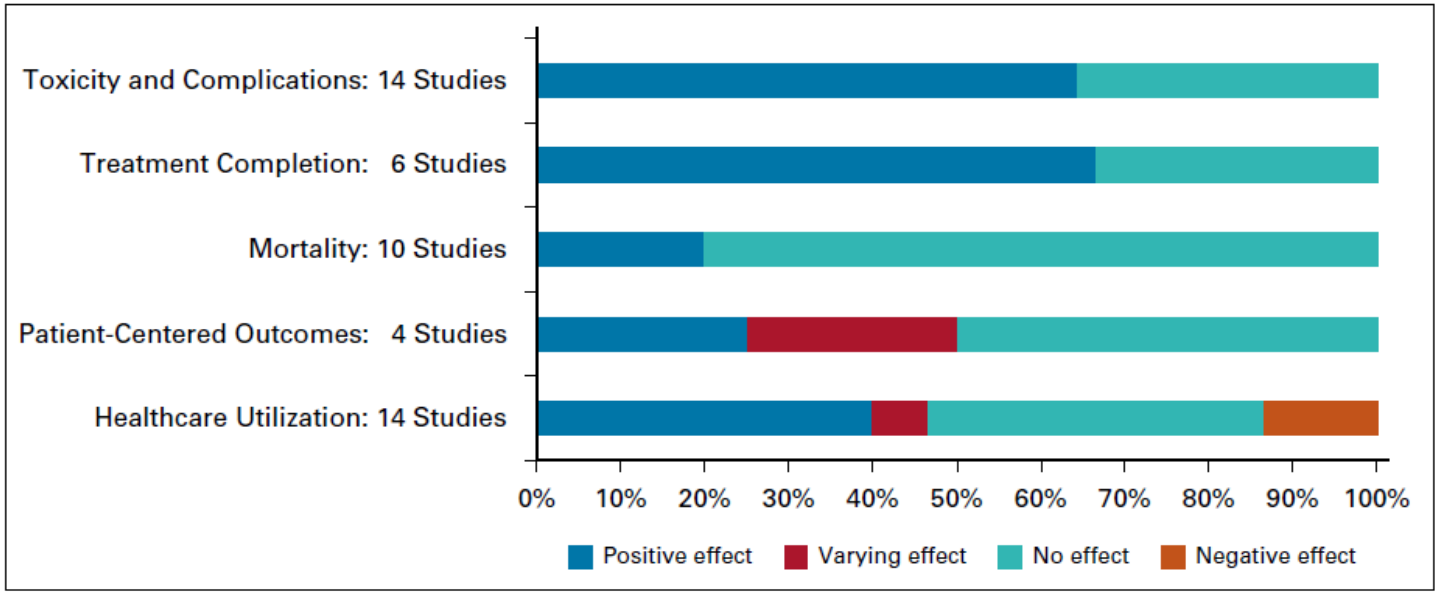


FIG 1. Effect of geriatric evaluation on course of treatment and different treatment outcomes—toxicity and complications, treatment completion, mortality, patient-centered outcomes, and healthcare utilization. Details per study in Table 2 and the Data Supplement.

Principes chimiothérapies chez la personne âgée:

Ajuster la dose

- Tenir compte pharmacocinétique et pharmacodynamique chez la personne âgée
- Attention aux interactions

Ajuster le type de traitement aux comorbidités

- Ex: doxorubicine, bléomycine…

Traitement rapide des complications

- Facteurs de croissance en prophylaxie pour patients > 70 ans avec régime modérément toxiques (CHOP, AC; FEC…) et pour induction ou consolidation AML
- Viser une hémoglobine > 12g/dL
- Traitement agressif mucosités et diarrhées

Parameter changes	Clinical consequences
Absorption: decreased	Oral chemotherapy (e.g., capecitabine) might be less effective in elderly.
Volume of distribution: decreased	Serum concentrations and toxicity of several chemotherapeutics might increase (e.g., cisplatin, taxanes, etoposide, irinotecan).
Hepatic metabolism: decreased	Not well known, may affect serum concentrations of chemotherapeutics eliminated by hepatic metabolism (e.g., taxanes, cyclophosphamide, anthracyclines).
Renal excretion: decreased	Dosing should be adapted to present recommendations to avoid excessive serum concentrations and toxicity from renally excreted chemotherapeutics (e.g., carboplatin, topotecan, methotrexate).

Source: Courtesy of Elsevier.

NCNN Panel for management of the older cancer patient L. Balducci

EHC Ensemble Hospitalier de la Côte

Perspectives:

HORIZON 2020

Streamlined Geriatric and Oncological evaluation based on IC Technology for holistic patient-oriented healthcare management for older multimorbid patients

GerOnTe

Fiche descriptive | Résultats

Objectif

Population is aging and the number of complex multimorbid patients to manage will increase sharply. Disease-centred approach is not appropriate to manage these patients. Change to a patient-centred approach will simplify care pathways, secure management and treatment decision making and decrease healthcare costs. It will be a real breakthrough for daily practice with multiple impacts that must be quantified. GERONTE multimorbid patient-centred system proposes:

1) Coordination of management by a patient-tailored, interdisciplinary health professional consortium (HPC), including hospital- and home-based professionals, with a case manager;
2) Timely registration of symptoms and patient-reported outcomes at home through a web-based app for anticipation of avoidable adverse events;
3) Proposal of self-management guidelines according to intrinsic capacity evaluation by geriatrician for patient-driven improvement of independent living;
4) Structured collection of data from electronic health record into a dashboard made available to HPC members as well as patient and caregiver, thanks to its capacity to securely interoperate with all electronic health records including software managing medical data.

The whole approach will be co-designed with patients, informal care givers and health professionals.

Informations projet

GERONTE

N° de convention de subvention: 945218

Date de début
1 Avril 2021

Date de fin
31 Mars 2026

Financé au titre de
H2020-EU.3.1.4.

Budget total
€ 5 998 759

Contribution de l'UE
€ 5 998 759

Coordonné par
UNIVERSITE DE BORDEAUX

France

Conclusion:

- Les patients âgés atteints de cancer sont un défi à prendre en charge
- L'évaluation gériatrique se transforme en évaluation et intervention, en favorisant la résilience du patient
- Cette prise en charge met le patient et non la maladie au centre
- La collaboration avec tous les corps de métiers et le médecin traitant sont primordiaux

TEAM WORK

Consultation onco/hémato gériatrique

EHC Ensemble Hospitalier de la Côte

CONSULTATION D'ONCOGÉRIATRIE

POUR QUI ?

La consultation d'oncogériatrie est ouverte aux patient·e·s seniors de plus de 70 ans avec une maladie oncologique ou hémato-oncologique.

COMMENT PRENDRE RENDEZ-VOUS ?

La consultation est ouverte sur rendez-vous (mercredi matin de 8h à 12h). Veuillez svp nous contacter par téléphone ou par mail pour fixer votre rendez-vous

Dre Nicole Doser
Médecin cheffe
Médecine interne et gériatrie

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Email : *secretariat.oncologie@ehc.vd.ch*

www.ehc-vd.ch

06/2021 - 111666

MERCI DE VOTRE ATTENTION

Dr Nicole Doser Joz-Roland
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Nicole.Doser@ehc.vd.ch

Utilité Evaluation gériatrique globale

Prédictifs de mortalité:

- Etat nutritionnel
- Status fonctionnel (AVQinst)
- Syndromes gériatriques tels que dépression

Toxicité relative traitement:

- Status fonctionnel (AVQ Base et AVQi)
- Syndromes gériatriques (surtout Chutes)
- Comorbidités

Complications postopératoires:

- Comorbidités graves
- Dépendance dans les AVQ instrumentaux

Systemic review of utility of CGA. Journal of Geriatric Oncology 2013;4: 271-281 11
ASCO Guidelines JCO 2018; 36.2326-2347