Development of Geriatric Oncology in France

Pr Pierre Soubeyran
Institut Bergonié, Bordeaux, France
Epidemiology

• French population, 2013
  – **9% older than 75** (10.9% females, 7% males)

• Number of cancer cases in France, 2012
  – **355 000 cases**
    • 32.4% ≥ 75y (115 310 cases)
    • 10% ≥ 85y
  – *In 2050: 50% ≥ 75y*
# Epidemiology

- **Patients older than 75 hospitalised in 2013**
  - 361 562 patients
  - 1 529 637 hospitalisations (24%)

<table>
<thead>
<tr>
<th>Hospital Type</th>
<th>&lt;75</th>
<th>&gt;75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Hospital</td>
<td>1 268 963 (26,2%)</td>
<td>473 861 (36,7%)</td>
</tr>
<tr>
<td>Others (Private, ESPIC, Military)</td>
<td>1 387 600 (28.6%)</td>
<td>407 404 (31.5%)</td>
</tr>
<tr>
<td>University Hospitals</td>
<td>1 128 402 (23.3%)</td>
<td>261 699 (20,3%)</td>
</tr>
<tr>
<td>Cancer Center</td>
<td>1 065 288 (22%)</td>
<td>149 303 (11,6%)</td>
</tr>
</tbody>
</table>
INCa initiatives
Plan Cancer
2003 - 2008

Département de l’Amélioration de la Qualité des Soins et de l’Accès aux Innovations

Présentation de l’appel à projets national 2006

Emergence d’unités pilotes de coordination en Oncogériatrie (UPCOG)

Date limite de dépôt des dossiers
Vendredi 15 septembre 2006
15 Geriatric Oncology units
Appel à projets 2011

Déploiement national d’unités de coordination en oncogériatrie-UCOG

Action 4.2
Action 23.4
UCOG - Geriatric Oncology units

Objectives

• Disseminate geriatric oncology practice
  – In other hospitals allowed to perform cancer treatment
  – Implementation of screening
  – Assessment of screened patients

• Develop Geriatric Oncology research
  – Priority of the PHRC program
  – Objective: 5% patients included in clinical trials

• Promote teaching and training
• Inform patients, family and public
UCOG - Geriatric Oncology units

Objectives

• Disseminate geriatric oncology practices
  – In other hospitals allowed to perform cancer treatment
  – Implementation of screening
  – Assessment of screened patients

• Develop Geriatric Oncology research
  – Priority of the PHRC program
  – Objective: 5% patients included in clinical trials

• Promote teaching and training

• Inform patients, family and public
Objectives

- Disseminate geriatric oncology:
  - In other hospitals
  - Implementation of screening of screened patients
- Develop Geriatric Oncology research:
  - Priority of the PHRC program
  - Objective: 5% patients included in clinical trials
- Promote teaching and training
- Inform patients, family and public
Funding

• **Yearly funding by the INCa**
  – *UCOG*: 250 000€ (3) or 160 000 to 200 000 (21)
  – *AOG*: 90 000€ (4)
  – *Plus about 52 154€ for inter-regional support* (5)

• **Overall cost**: 5 200 000€/year
Clinical research
Initially...

- The GERICO national cooperative group
Initially...

• The GERICO national cooperative group
• The EPOG meeting, yearly since 2005
  – Geriatric Oncology practice
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

— With support of the PHRC program and INCa
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

-- With support of the PHRC program and INCa
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

With support of the PHRC program and INCa

<table>
<thead>
<tr>
<th>Items</th>
<th>Possible answers (score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SCORE: 0 – 17
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

Then...

- SoFOG since 2013

— French Society of Geriatric Oncology
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

THEN...

- SoFOG since 2013

— French Society of Geriatric Oncology
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

THEN...

- SoFOG since 2013

– French Society of Geriatric Oncology
Initially...

- The GERICO national cooperative group
- The EPOG meeting, yearly since 2005
- UCOG initiatives since 2007

THEN...

- SoFOG since 2013
  - *French Society of Geriatric Oncology*
- DIALOG in 2014
  - *Geriatric Oncology Intergroup*
Multi-organ clinical trials

PACAN Data Center

Tumor-oriented trials

UNICANCER Platform
DIALOG scientific objectives

1. Improve frailty screening strategy with G8
2. Evaluate impact of geriatric intervention in oncology
   • The PREPARE trial
3. Standardise a minimum dataset for clinical trials
4. Consensus endpoints for trials in older patients with cancer
5. Develop a common minimum database
   • Monitoring of older patients management
Screening to identify unfit patients

- **>14**
  - 32%
  - Probably fit or slightly unfit
  - 41% normal MGA
  - 32% one abnormal Q
  - 28% >1 abnormal Q

- **≤14**
  - 68%
  - Probably unfit
  - 90% with abnormal MGA
  - Median: 3 abnormal questionnaires
  - 10% with normal MGA

### Possible answers (score)

<table>
<thead>
<tr>
<th>Items</th>
<th>Possible answers (score)</th>
</tr>
</thead>
</table>
| A     | 0: severe decrease in food intake  
 1: moderate decrease in food intake  
 2: no decrease in food intake |
| B     | 0: weight loss > 3.5kg  
 1: weight loss 1-3.5kg  
 2: no weight loss |
| C     | 0: yes  
 1: no |
| D     | 0: no  
 1: yes |
| E     | 0: no  
 1: yes |
| F     | 0: BMI < 18.5  
 1: BMI = 18.5 to 23  
 2: BMI = 23 to 28  
 3: BMI > 28 |
| G     | 0: no  
 1: yes |
| H     | 0: not at all  
 1: a little  
 2: quite a bit  
 3: extremely |
| I     | 0: better  
 1: same  
 2: worse |
| J     | 0: 0-17  
 1: 18-35  
 2: >35 |

**TOTAL SCORE**

0 - 17
Screening to identify unfit patients

- >14: 32%
- ≤14: 68%

No urgent need for CGA

Standard treatment

Need for specific attention

CGA to be considered

Treatment adapted to patient’s status
Improvement of G8

Detection of frailty in elderly cancer patients: Improvement of the G8 screening test

Aurélie Petit-Monégera,b,c*, Muriel Rainfraya–d, Pierre Soubeyranb,e, Carine A. Bellera,f, Simone Mathoulin-Pélissiera,b,c

Table 6 – Individual performance of the IADL-modified G8 vs CGA reference standard from the development and validation populations.

<table>
<thead>
<tr>
<th>Population</th>
<th>Patients with abnormal exam</th>
<th>Se</th>
<th>(95% CI)</th>
<th>Sp</th>
<th>(95% CI)</th>
<th>AUC</th>
<th>(95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>756 (80%)</td>
<td>948</td>
<td>77%</td>
<td>(74–80)</td>
<td>67%</td>
<td>81%</td>
<td>(78–84)</td>
</tr>
<tr>
<td>Internal validation</td>
<td>394 (81%)</td>
<td>486</td>
<td>78%</td>
<td>(73–82)</td>
<td>71%</td>
<td>83%</td>
<td>(79–87)</td>
</tr>
<tr>
<td>External validation</td>
<td>322 (95%)</td>
<td>338</td>
<td>88%</td>
<td>(84–91)</td>
<td>69%</td>
<td>90%</td>
<td>(84–95)</td>
</tr>
</tbody>
</table>

For the performance of the G8 modified questionnaires, sensitivity (Se), specificity (Sp), and area under the ROC curve (AUC) with 95% confidence intervals (95% CIs) are presented assuming a cut-off value of 14 (≤14 versus >14) and a prevalence of frailty in the ONCODAGE development population of 80%.

IADL: instrumental activities of daily living; CGA: comprehensive geriatric assessment.

* Development population: N = 948 patients instead of 949 patients due to missing data.

* External validation population: N = 338 patients instead of 364 patients due to missing data.
Improvement of G8

- Weight loss
- Cognition/mood
- Performance status
- Self-rated health
- Polypharmacy
- History of heart failure, coronary heart disease

Figure 2. Area under the ROC curve by cancer site: original versus modified G8. *, p < .05.
The PREPARE trial

**BACKGROUND**

Benefits and feasibility of
A **GERIATRIC INTERVENTION** WITH MANAGEMENT

- **ELDERLY CANCER PATIENTS**
- **ELDERLY NON-CANCER PATIENTS**

**CONCEPT**

Phase III

‘PREPARE’ to assess the efficacy of geriatric intervention in the treatment of elderly cancer patients

- **Fit**
- **Unfit**
- **G8**

**Cohort**

- **RCT**
- **Usual care**
- **Case management**

**Standard oncological care**

**Standard oncological care**
Geriatric Core Dataset

• Process
  • Review of the literature by geriatricians
  • Consensus agreement on tools by geriatricians and oncologists
  • DELPHI validation by French experts
  • Validation by international experts

• Includes: Social environment, ADL, IADL4, TGUG, weight loss, BMI, miniCOG, GDS4, Updated Charlson

• Objective to:
  • Standardise geriatric data collection in trials
  • Value for daily practice unknown
Consensus endpoints

A question of balance

Between two endpoints
Including one highly dependent on patient’s views
Choice of judgment criteria

• This is a clinical job based on
  • the chances of disease control
  • the expected benefit for the patient

• The criteria should be valid and reliable
• Clinically meaningful difference to be defined
Among the judgment criteria...

• **Quality of life**
  - *Advantages*: Pertinence in geriatric oncology
  - *Limits*: Difficult to measure
    - Depends on variable perceptions of patients
    - Missing data
    - Which clinically meaningful threshold to consider benefit...

• **Independence**
  - *Advantages*: Major determinant of QoL in the elderly
  - *Limits*: Difficult to measure
    - Missing data
    - Which clinically meaningful threshold to consider benefit...

• **Overall Treatment Utility**
DATECAN initiative

• International
• Consensus endpoints in Breast, sarcoma and pancreatic cancer
• Three steps
  • Review of the literature
  • Expert consensus
  • Prospective study
• DATECAN Elderly launched in 2016
Evaluation

- Among 721 academic trials in 2013
  - 72 include older patients (either specific of not)
- 5380 patients included in 2013 (4.6% of patients)
Teaching and Training
Training for G8 screening

- Among 944 accredited hospitals
- 376 cover 80% of older patients
- 342 are in contact with their UCOG
- Training performed in 173 hospitals (51%)
Six University diplomas

Geriatric Oncology University diplomas in 2016

Aging index per department in 2007
Six University diplomas

- **830 physicians trained in 2013**

<table>
<thead>
<tr>
<th></th>
<th>Personnes formées (DU, DIU)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nombre</td>
</tr>
<tr>
<td>Oncologues</td>
<td>66</td>
</tr>
<tr>
<td>Spécialistes organes</td>
<td>36</td>
</tr>
<tr>
<td>Gériatres</td>
<td>399</td>
</tr>
<tr>
<td>Chirurgiens</td>
<td>26</td>
</tr>
<tr>
<td>Médecins généralistes</td>
<td>92</td>
</tr>
<tr>
<td>Pharmaciens</td>
<td>85</td>
</tr>
<tr>
<td>Radiothérapeutes</td>
<td>16</td>
</tr>
<tr>
<td>IDE Hors libéraux</td>
<td>65</td>
</tr>
<tr>
<td>IDE libéraux</td>
<td>8</td>
</tr>
<tr>
<td>Autres personnels</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>830</strong></td>
</tr>
</tbody>
</table>
Continuous Professional Development

- **1900 physicians trained through DPC**

<table>
<thead>
<tr>
<th>Personnes formées (DPC)</th>
<th>Nombre</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oncologues</td>
<td>223</td>
<td>12 %</td>
</tr>
<tr>
<td>Spécialistes organes</td>
<td>117</td>
<td>6 %</td>
</tr>
<tr>
<td>Gériatres</td>
<td>543</td>
<td>29 %</td>
</tr>
<tr>
<td>Chirurgiens</td>
<td>62</td>
<td>3 %</td>
</tr>
<tr>
<td>Médecins généralistes</td>
<td>274</td>
<td>14 %</td>
</tr>
<tr>
<td>Pharmacien</td>
<td>37</td>
<td>2 %</td>
</tr>
<tr>
<td>Radiothérapeutes</td>
<td>37</td>
<td>2 %</td>
</tr>
<tr>
<td>IDE Hors libéraux</td>
<td>330</td>
<td>17 %</td>
</tr>
<tr>
<td>IDE libéraux</td>
<td>45</td>
<td>2 %</td>
</tr>
<tr>
<td>Autres personnels</td>
<td>233</td>
<td>12 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1901</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>
General Overview
Organisation of patients’ care

• Regional cancer networks
  – *Accreditation of Cancer centers* (number of cancer patients managed per year)
  – *All cancer hospitals organised in Cancer Coordination Centers (3C)*
    • Multidisciplinary meetings
    • Collection of data (common CRF)
To conclude
To conclude
To conclude
Not yet solved questions...

• At the INCa level
  – *Inclusion of comorbidities and G8 in multidisciplinary meeting sheets*
  – *UCOG, UCOGIR, AOG...*
    • Not the final objective
    • Coordination with Cancer Regional Networks
  – *Fees for geriatric oncologists*
    • Comprehensive Geriatric Assessment in Oncology = 23€
    • Day hospital evaluation with at least 3 Health Professionals = 500€
  – *Geriatric Oncology as a priority of PHRC since 2006*
    • But the number of trials sponsored by PHRC remains limited
Not yet solved questions...

• At the SoFOG level
  – *National Guidelines*
  – *Clinical pathways*

• At the UCOG level
  – *Many documents have been produced by UCOGs for patients and physicians*
    • To be disseminated in all UCOGs
  – *Develop capacity to include in clinical trials*
Not yet solved questions...

• At the DIALOG level
  – *Develop a set of tools for clinical trials*
  – *Develop a prospective database*
  – *Support investigators (platforms and advice)*
  – *Communicate with other cooperative groups to promote geriatric oncology trials*