Adapting care for older cancer patients during COVID-19

Nicolò Matteo Luca Battisti
Medical oncologist - Clinical research fellow
Breast Unit - The Royal Marsden NHS Foundation Trust
Breast Cancer Research Division – The Institute of Cancer Research
Chair of the International society of geriatric oncology (SIOG) Young Interest group
Co-Chair of the SIOG COVID-19 working group

UICC Special Focus Dialogue - Ageing and Cancer series
29th June 2020
Disclosures

• Travel grants: Exact Sciences, Pfizer

• Speaker fees: Pfizer
Outline

• COVID-19 in older adults with cancer
• General implications on management
• Geriatric assessment during the pandemic
• Implications on anticancer treatments
• Conclusions
Outline

• COVID-19 in older adults with cancer
  • General implications on management
  • Geriatric assessment during the pandemic
  • Implications on anticancer treatments
  • Conclusions
COVID-19 infection in older adults

• More frequently **symptomatic**
  • Shortness of breath more frequent: 12% for patients >60 years versus 3% for patients <60 years

• May present with **subtle findings**
  • 57% of patients tested positive in a US nursing home were asymptomatic at time of testing
  • 77% of these subsequently developed typical symptoms

• Sometimes **nonspecific symptoms** may be red flags
  • Falls, confusion, worsening functional impairment

Lian J et al, Clin Infect Dis, 2020
Kimball A et al, MMWR Morb Mortal Wkly Rep, 2020
Nikolich-Zugich J et al, Geroscience, 2020
Age is a predictor of adverse outcomes

• **Higher hospitalization rate** in a modelling study based on Chinese data
  
  • 20-29 years: 1% in individuals aged 20-29 vs 4% in those aged 50-59 years vs 18% in those aged ≥80 years

• **Increased mortality**
  
  • Chinese Chinese Center for Disease Control and Prevention: 8% in patients aged 70-79 versus 15% in those aged ≥80 years versus 2.3% in the overall cohort
  
  • Italian data: 12% in patients aged 70-79 versus 20% in those aged ≥80 years
  
  • US data: 80% of death occurring in adults aged ≥65 years

Verity R et al, Lancet Infect Dis, 2020
Wu Z et al, JAMA, 2020
Onder G et al, JAMA, 2020
CDC COVID-19 Response Team, MMWR Morb Mortal Wkly Rep, 2020
COVID-19 and Cancer Consortium (CCC-19)

**Age groups**
- N=928
- Median age 66
- IQR 57-76
- Range 18 to >90

- <65: 44%
- 65-74: 26%
- ≥75: 30%

**Type of malignancy**
- Breast: 17%
- Prostate: 13%
- GI: 10%
- Thoracic: 8%
- Gynae: 4%
- RCC: 4%
- Endocrine: 3%
- Melanoma: 3%
- H&N: 3%
- CNS: 1%
- Sarcoma: 1%
- Low-grade NHL: 5%
- Myeloma: 5%
- Lymphoma: 9%
- High-grade NHL: 2%
- Myeloid neoplasms: 4%
- Solid tumours NOS: 4%
- Haem malignancy NOS: 1%
- AML: 1%
- ALL: 1%
- Solid tumours NOS: 4%
- Haem malignancy NOS: 1%

Kuderer NM et al, Lancet, 2020
# COVID-19 and Cancer Consortium (CCC-19)

## Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>459</td>
<td>49</td>
</tr>
<tr>
<td>Male</td>
<td>468</td>
<td>50</td>
</tr>
<tr>
<td><strong>NS</strong></td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>No. of comorbidities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>132</td>
<td>14</td>
</tr>
<tr>
<td>1</td>
<td>202</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>231</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>117</td>
<td>13</td>
</tr>
<tr>
<td>≥4</td>
<td>192</td>
<td>21</td>
</tr>
<tr>
<td><strong>Unknown</strong></td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td>31</td>
<td>3</td>
</tr>
<tr>
<td><strong>Cancer status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remission/NED</td>
<td>422</td>
<td>45</td>
</tr>
<tr>
<td>Present &amp; stable/responding</td>
<td>294</td>
<td>32</td>
</tr>
<tr>
<td>Present &amp; progressing</td>
<td>102</td>
<td>11</td>
</tr>
<tr>
<td><strong>Unknown</strong></td>
<td>59</td>
<td>6</td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td>51</td>
<td>5</td>
</tr>
<tr>
<td><strong>ECOG PS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1</td>
<td>614</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>72</td>
<td>8</td>
</tr>
<tr>
<td>3-4</td>
<td>46</td>
<td>5</td>
</tr>
<tr>
<td><strong>Unknown</strong></td>
<td>59</td>
<td>6</td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td>29</td>
<td>3</td>
</tr>
</tbody>
</table>

## Type of anticancer therapy ≤4 weeks

- **None**: 49%
- **Non-cytotoxic**: 18%
- **Cytotoxic**: 14%
- **Radiotherapy**: 1%
- **Immunotherapy**: 3%
- **Endocrine**: 7%
- **Targeted**: 7%
- **Surgery**: <1%
- **Unknown**: 1%
**COVID-19 and Cancer Consortium (CCC-19)**

Multivariate analysis of predictors of 30-day all-cause mortality

<table>
<thead>
<tr>
<th>Factors</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.84</td>
<td>1.53-2.21</td>
</tr>
<tr>
<td>Sex: male vs female</td>
<td>1.63</td>
<td>1.07-2.48</td>
</tr>
<tr>
<td>Smoking status: former vs never</td>
<td>1.60</td>
<td>1.03-2.47</td>
</tr>
<tr>
<td>Cancer status: present/stable/responding vs remission/NED</td>
<td>1.79</td>
<td>1.09-2.95</td>
</tr>
<tr>
<td>Cancer status: present/progressing vs remission/NED</td>
<td>5.20</td>
<td>2.77-9.77</td>
</tr>
<tr>
<td>ECOG PS: 2 vs 0-1</td>
<td>3.89</td>
<td>2.11-7.18</td>
</tr>
<tr>
<td>ECOG PS: 3-4 vs 0-1</td>
<td>5.66</td>
<td>2.79-11.47</td>
</tr>
<tr>
<td>Comorbidities: 2 vs 0</td>
<td>4.50</td>
<td>1.33-15.28</td>
</tr>
<tr>
<td>Comorbidities: 3 vs 0</td>
<td>5.04</td>
<td>1.42-17.93</td>
</tr>
<tr>
<td>Comorbidities: ≥4 vs 0</td>
<td>3.55</td>
<td>1.03-12.30</td>
</tr>
</tbody>
</table>

- Higher rates of **deaths without ICU admission** in patients aged ≥75 years
- Acceleration of **advanced care planning** and patient/family discussion on restricting aggressive interventions in susceptible groups

*Kuderer NM et al, Lancet, 2020*
Outline

• COVID-19 in older adults with cancer
• General implications on management
• Geriatric assessment during the pandemic
• Implications on anticancer treatments
• Conclusions
A matter of competing risks

Comorbidities
- Cardiovascular
- Diabetes mellitus
- Cancer

Increased risk of toxicities/complications
- Chemotherapy
- Surgery
- Radiotherapy

Reduced organ function
- Bone marrow
- Heart
- Kidneys
- Liver

Increased risk of toxicities/complications
- Chemotherapy
- Surgery
- Radiotherapy

COVID-19

Lack of social support

Nutritional problems
- Obesity
- Malnutrition
- Weight loss

Quality of life issues

Psychological distress
- Depression
- Anxiety

Polypharmacy
- Interactions
- Errors
- Reduced compliance

Cognitive impairment

Impaired function
- ADL
- IADL

Nutritional problems
- Obesity
- Malnutrition
- Weight loss
## General implications

<table>
<thead>
<tr>
<th>Changes</th>
<th>Issues &amp; barriers</th>
<th>Potential solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social distancing and isolation</td>
<td>Provision of supplies</td>
<td>Involve social services &amp; charities if available</td>
</tr>
<tr>
<td></td>
<td>Collecting medicines and prescriptions</td>
<td>Remote prescribing &amp; drug delivery</td>
</tr>
<tr>
<td></td>
<td>Psychological distress</td>
<td>Encourage digital literacy</td>
</tr>
<tr>
<td></td>
<td>Malnutrition</td>
<td></td>
</tr>
<tr>
<td>Limiting access of caregivers to hospitals</td>
<td>Functional impairment</td>
<td>Review needs on a patient to patient basis to allow carers’ visits</td>
</tr>
<tr>
<td></td>
<td>Mobility problems</td>
<td>Patient navigators</td>
</tr>
<tr>
<td></td>
<td>Cognitive impairment</td>
<td>Tele-consultations</td>
</tr>
<tr>
<td>Tele-consultations</td>
<td>Hearing impairment</td>
<td>Review needs on a patient to patient basis</td>
</tr>
<tr>
<td></td>
<td>Visual impairment</td>
<td>Favour video consultations where possible</td>
</tr>
<tr>
<td>Self-administration of systemic agents</td>
<td>Functional impairment</td>
<td>Review needs on a patient to patient basis</td>
</tr>
<tr>
<td></td>
<td>Mobility disorders</td>
<td>Engage with primary practice and caregivers</td>
</tr>
<tr>
<td></td>
<td>Cognitive impairment</td>
<td>Set up &quot;Homecare&quot; teams where possible</td>
</tr>
<tr>
<td></td>
<td>Polypharmacy - medication errors</td>
<td></td>
</tr>
<tr>
<td>Pressure on supportive care teams</td>
<td>Impact on symptom control &amp; QOL</td>
<td>Thoroughly address needs in clinic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Always give a “plan B”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engage with primary practice and caregivers</td>
</tr>
</tbody>
</table>
Outline

• COVID-19 in older adults with cancer
• General implications on management
• Geriatric assessment during the pandemic
• Implications on anticancer treatments
• Conclusions
Older adults with cancer are very heterogeneous

**Benefits of geriatric assessment**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Time to Administer (min)</th>
<th>Abnormal Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicting complications and side effects from treatment</td>
<td>Demographic and social status</td>
<td>&gt; 20</td>
</tr>
<tr>
<td>Predicting functional decline during treatment</td>
<td>Conditions of living, marital, 10-20 status, educational level, financial resources, social activities, family support</td>
<td></td>
</tr>
<tr>
<td>Estimating survival</td>
<td>Identification of the caregiver and burden (Zung-Burden Interview)</td>
<td></td>
</tr>
<tr>
<td>Assisting in cancer treatment decisions</td>
<td>Comorbidity (Charlon comorbidity index)</td>
<td></td>
</tr>
<tr>
<td>Detecting problems not found by routine history and physical examination in the initial evaluation</td>
<td>Weight loss (≤ 10% over 6 months)</td>
<td></td>
</tr>
<tr>
<td>Identifying and treating new problems during follow-up care</td>
<td>Weight loss (≥ 10% over 6 months)</td>
<td></td>
</tr>
<tr>
<td>Improving mental health and well-being</td>
<td>Body-mass index (BMI)</td>
<td></td>
</tr>
<tr>
<td>Improving pain control</td>
<td>Body-mass index (BMI)</td>
<td></td>
</tr>
<tr>
<td>Reducing severe chemotherapy toxicity</td>
<td>Weight loss (≥ 10% over 6 months)</td>
<td></td>
</tr>
<tr>
<td>Improving quality of life</td>
<td>Weight loss (≤ 10% over 6 months)</td>
<td></td>
</tr>
<tr>
<td>Reducing unplanned hospitalizations</td>
<td>Functional status (ADL, IADL, Cattell scale)</td>
<td></td>
</tr>
<tr>
<td>Increasing completion of advanced directives</td>
<td>Visual and/or hearing impairment, regardless of use of glasses or hearing aids</td>
<td></td>
</tr>
<tr>
<td>Shortening postoperative inpatient and ICU admissions</td>
<td>Mobility problems (ability to use of walking aid)</td>
<td></td>
</tr>
</tbody>
</table>

**Abbreviations:** ADL, activity of daily living; CDS, Cumulative Illness Rating Scale; CIRS, Geriatric Depression Scale; IADL, instrumental activity of daily living; MIBI-T, Mobility In-Bed Test; DRS, Older American Resources and Services; PS, performance status; START, Screening Tool to Alert Pressure inCare; STOPES, Screening Tool of Older Persons’ Emotions; NCCN, National Comprehensive Cancer Network; ASCO, American Society of Clinical Oncology.
GA in the context of COVID-19

- Geriatric assessment should remain standard of care
- Implement tele-health GA
- Geriatric screening tools can be considered in the context of the current time constraints
  - Some can be administered remotely: G8, VES-13

---

<table>
<thead>
<tr>
<th>G8</th>
<th>VES-13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>We are asking you to answer this questionnaire to better guide our treatment recommendations.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Items</strong></td>
<td><strong>Responses</strong></td>
</tr>
<tr>
<td>1. This question is about the past 3 months. Did you start eating less during that period?</td>
<td>No</td>
</tr>
<tr>
<td>2. How much weight have you lost in the last 3 months?</td>
<td>Yes, one to three</td>
</tr>
<tr>
<td>3. How well are you moving?</td>
<td>No</td>
</tr>
<tr>
<td>4. Do you have psychological (mental) problems?</td>
<td>Yes, more than three</td>
</tr>
<tr>
<td>5. Do you have any medication?</td>
<td>Yes, more than three</td>
</tr>
<tr>
<td>6. Do you think you are healthier or less healthy than most people your age?</td>
<td>Yes</td>
</tr>
<tr>
<td>7. How old are you?</td>
<td>Yes, more than three</td>
</tr>
<tr>
<td>8. How tall are you?</td>
<td>Yes</td>
</tr>
<tr>
<td>9. How much do you weigh?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

---

**G8**  
Wildiers H et al, J Clin Onc, 2014  
Decoster L et al, Ann Oncol, 2014

**VES-13**  
Van Walree IC et al, J Geriatr Oncol, 2019  
Owusu C et al, Cancer, 2016
The University of Rochester SOCARE model

- Tele-health is an effective modality to deliver valuable care to the most vulnerable patients
- Pre-visit evaluation (phone based - nurse navigator-led)
  - Abbreviated questions from the GA (including CARG chemotox score)
- Teleconsultation (HIPAA-compliant application – SOCARE team-led)
  - Clinic nurse
  - OT
  - Geriatric oncologist
  - Multidisciplinary team members

Di Giovanni G et al, J Geriatr Oncol, 2020
Outline

• COVID-19 in older adults with cancer
• General implications on management
• Geriatric assessment during the pandemic
• Implications on anticancer treatments
• Conclusions
Implications on anticancer treatments

**Patient**
- Preferences
- Global health & comorbidities
  - Lung conditions
- Life expectancy
- Social support
- Transport & logistics

**Disease**
- Biology
  - Solid vs haem
- Burden
- Presence of symptoms
  - Neurosurgery & risk of neurological compromise
- Predicted response/disease control

**Treatment**
- Intent
  - Curative vs palliative
- Setting
  - Adjuvant vs neoadjuvant
- Type
  - Systemic: cytotoxic vs targeted vs endocrine vs IO
  - Surgery:
    - Open vs endoscopic
    - Elective vs emergency
- Schedule & dosing
- Route
  - IV vs IM vs SC vs PO
- Use of G-CSF

**Geriatric assessments**

- Duration
  - Shorter vs longer
- Radiotherapy fractionation
  - Hypofractionation
- Resource requirements
  - Anaesthetist input and ICU
  - Risk of complications and postoperative morbidity
- Expected recovery time
- Risk of aerosol-generating procedures
- Alternative options?
- Risk of side effects
  - Chemotherapy toxicity calculators
Chemotherapy toxicity prediction tools

### CRASH score

<table>
<thead>
<tr>
<th>Chemotherapy risk (see CRASH points table)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Haematologic risk factors</td>
<td></td>
</tr>
<tr>
<td>Diastolic blood pressure (&gt;72 mmHg)</td>
<td></td>
</tr>
<tr>
<td>IADL (&lt;28 = 1)</td>
<td></td>
</tr>
<tr>
<td>LDH (&gt;455 = 1)</td>
<td></td>
</tr>
<tr>
<td>Non-haematologic risk factors</td>
<td></td>
</tr>
<tr>
<td>ECOG PS (1.2 = 1; 3.4 = 2)</td>
<td></td>
</tr>
<tr>
<td>Mini Mental State Examination (&lt;30 = 2)</td>
<td></td>
</tr>
<tr>
<td>Mini Nutritional Assessment (&lt;28 = 2)</td>
<td></td>
</tr>
<tr>
<td>Home score</td>
<td></td>
</tr>
<tr>
<td>Non-home score</td>
<td></td>
</tr>
<tr>
<td>Combined score</td>
<td></td>
</tr>
</tbody>
</table>

### CARG score

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0</td>
</tr>
<tr>
<td>&gt;72 years</td>
<td>1</td>
</tr>
<tr>
<td>&gt;72 years</td>
<td>2</td>
</tr>
<tr>
<td>Cancer type</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>G1 or G2</td>
<td>2</td>
</tr>
<tr>
<td>Chemotherapy dose</td>
<td>0</td>
</tr>
<tr>
<td>Dose reduced</td>
<td>1</td>
</tr>
<tr>
<td>Standard dose</td>
<td>2</td>
</tr>
<tr>
<td>No. of chemotherapy drugs</td>
<td>0</td>
</tr>
<tr>
<td>Mono-</td>
<td>1</td>
</tr>
<tr>
<td>chemotherapy</td>
<td>Polychemotherapy</td>
</tr>
<tr>
<td>Haematoglobin</td>
<td>0</td>
</tr>
<tr>
<td>&lt;11 g/dL (male)</td>
<td>1</td>
</tr>
<tr>
<td>&gt;11 g/dL (female)</td>
<td>2</td>
</tr>
<tr>
<td>Creatinine clearance (Jelliffe, ideal weight)</td>
<td>0</td>
</tr>
<tr>
<td>&gt;0.3 mg/dL/min</td>
<td>1</td>
</tr>
<tr>
<td>&lt;0.3 mg/dL/min</td>
<td>2</td>
</tr>
<tr>
<td>Hearing (with hearing aid, if needed)</td>
<td>0</td>
</tr>
<tr>
<td>Excellent or good</td>
<td>1</td>
</tr>
<tr>
<td>Fair, poor or totally deaf</td>
<td>2</td>
</tr>
<tr>
<td>No. of falls in last 6 months</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>IADL: taking medications</td>
<td>0</td>
</tr>
<tr>
<td>Without help</td>
<td>1</td>
</tr>
<tr>
<td>With some help or completely unable</td>
<td>2</td>
</tr>
<tr>
<td>MOS: Walking 1 block</td>
<td>0</td>
</tr>
<tr>
<td>Not limited at all</td>
<td>1</td>
</tr>
<tr>
<td>Limited a little or limited a lot</td>
<td>2</td>
</tr>
<tr>
<td>MOS: Decreased social activity because of physical/emotional health</td>
<td>0</td>
</tr>
<tr>
<td>A little of the time or None of the time</td>
<td>1</td>
</tr>
<tr>
<td>Some of the time, Most of the time, or All the time</td>
<td>2</td>
</tr>
</tbody>
</table>

### CRASH points

<table>
<thead>
<tr>
<th>CRASH points</th>
<th>CRASH score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

### CARG score

<table>
<thead>
<tr>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1.74</td>
</tr>
<tr>
<td>1.75 - 3.02</td>
</tr>
<tr>
<td>3.03 - 4.29</td>
</tr>
<tr>
<td>&gt;4.30</td>
</tr>
</tbody>
</table>

Extermann M et al, Cancer, 2012
Some practical tips: systemic therapy

• **Adapting** systemic therapy
  • Less frequent dosing: CAPOX vs FOLFOX; nivolumab; pembrolizumab
  • Oral agents: capecitabine vs 5-FU for colorectal tumours
  • Shorter courses: 3 vs 6 months of chemotherapy for stage III colon cancer; 6 vs 12 months of trastuzumab for early-stage HER2+ breast cancer
  • De-escalating: omit oxaliplatin for stage III colorectal cancer

• **Delaying** systemic therapy
  • Detrimental >8 weeks for early-stage colorectal and lung cancer
  • Detrimental >12 weeks for early stage breast cancer

• **Omitting** systemic therapy
  • Chemotherapy for ER+ HER2- early breast cancer in the older age group

Giordano SH et al, J Clin Oncol, 2006
Hofheinz RD et al, Lancet Oncol, 2012
Grothey A et al, N Engl J Med, 2018
Hall PS et al, J Clin Oncol, 2019
Lala M et al, Eur J Cancer, 2020
Bos AC et al, Eur J Cancer, 2015
Kupstas AR et al, Ann Surg Oncol, 2019
Some practical tips: radiotherapy

- **Adapting** radiotherapy
  - Shorter courses of chemoradiotherapy for LA rectal cancer
  - Hypofractionation for early breast cancer and prostate cancer
  - IORT for early breast cancer?
  - Single fraction RT for bony metastases and cord compression

- **Delaying** radiotherapy
  - <5 months for early breast cancer
  - 3-6 months for prostate cancer whilst using ADT

- **Omitting** radiotherapy
  - Low-risk breast cancer: no survival benefit in older patients
  - If effective medical treatments available (e.g., analgesia)
Some practical tips: surgery

• **Adapting** surgery
  • Prioritise the most effective and minimally invasive procedures
  • Cohort operations in COVID-free areas
  • Favour endoscopic versus open approaches if possible
  • Favour procedures requiring local versus general anaesthetics if possible

• **Delaying** surgery
  • Neoadjuvant endocrine therapy for ER+ HER2- early breast cancer
  • Neoadjuvant radiotherapy for rectal cancer

• **Omitting** surgery
  • Primary endocrine therapy ER+ HER2- breast cancer in older women
  • SBRT instead of surgery for selected older patients with stage I-II NSCLC

Sud A et al, Ann Oncol, 2020
Mansfield SA et al, Breast J, 2017
Engage with your friendly neighborhood multidisciplinary team if possible
Outline

• COVID-19 in older adults with cancer
• General implications on management
• Geriatric assessment during the pandemic
• Implications on anticancer treatments
• Conclusions
Towards a new treatment paradigm

DISEASE
- Histology
- Grade
- Stage

PATIENT
- Performance status
- Age

INTERACTION
- Histology
- Grade
- Stage
- Biomarkers (EGFR, PIK3CA, AKT, HER2, RAS, BRAF, etc.)

COVID-19

- GA domains
- Life expectancy
- Organ function
- Comorbidities
- Preferences
- Ageing biomarkers?

Adapted from a slide courtesy of Martine Extermann
Conclusions

• Know your local epidemiology
  • Trends are different in different countries and within different regions of the same country

• Consider atypical presentations

• Use tele-medicine

• Consider the bigger picture: life expectancy, predicted response/disease control, patients’ wishes

• Consider a “less is more” strategy where safe/feasible
SIOG COVID-19 Working Group

- Nicolò Matteo Luca Battisti, UK (medical oncologist) – WG Co-chair
- Anna Mislang, Australia (medical oncologist) – WG Co-chair
- Riccardo Audisio, Sweden (surgeon)
- Mahmood Alam, Australia (medical oncologist)
- Etienne Brain, France (medical oncologist)
- Clarito Cairo Jr, Philippines (medical oncologist)
- Kwok Leung Cheung, UK (surgeon)
- Giuseppe Colloca, Italy (geriatrician)
- Lisa Cooper, USA (geriatrician)
- Luiz Antonio Gil Jr, Brazil (geriatrician)
- Regina Gironés Sarrió, Spain (medical oncologist)
- Michael Jaklitsch, USA (surgeon)
- Kumud Kantilal, UK (pharmacist)
- Ravindran Kanesvaran, Singapore (medical oncologist) – SIOG President Elect
- Stuart Lichtman, USA (medical oncologist)
- Anita O'Donovan, Ireland (radiation oncologist)
- Shane O'Hanlon, Ireland (geriatrician)
- Chiara Russo, France (geriatrician)
- Schroder Sattar, Canada (nurse)
- Enrique Soto-Perez-de-Celis, Mexico (medical oncologist)
- Reinhard Stauder, Austria (haematologist)
- Hans Wildiers, Belgium (medical oncologist) – SIOG President
- Grant Williams, USA (medical oncologist)
Thank you!

The Royal Marsden, Sutton, UK

National Cancer Institute, Milan, Italy

H. Lee Moffitt Cancer Center, Tampa, FL, USA

twitter: @nicolobattisti

#gerionc

#gerihem

nicolo.battisti@gmail.com

nicolo.battisti@rmh.nhs.uk