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## Perspectives on geriatric oncology research presented at the 2020 ESMO Science Congress

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### **Abbreviations:**

CVD – cardiovascular disease; CFS – clinical frailty scale; CI – confidence interval; FOLFOX – 5-fluorouracil/leucovorin/oxaliplatin; GO – gastroesophageal; ITT – intention to treat; HR – hazard ratio; OR – odds ratio; OS – overall survival; OTT – oral targeted therapy; PBC – platinum based chemotherapy; PS – performance status; QoL – quality of life; XELOX – capecitabine/oxaliplatin.

## **Introduction**

The European Society for Medical Oncology (ESMO) Congress is an important annual oncology meeting. Due to the COVID-19 pandemic, the 2020 edition was held virtually. Over 30,000 registrants from more than 150 countries utilised the platform. Here we present the studies and presentations from the science weekend relevant to the field of geriatric oncology.

## **COVID-19 and the older cancer population**

The COVID-19 pandemic has had a significant impact on patients with cancer worldwide with several studies suggesting an increased risk of infection and poorer outcomes, particularly in older adults<sup>[1-3]</sup>. ESMO 2020 had two sessions dedicated to COVID-19 and cancer, and presented important outcome data relevant to older patients.

### *United Kingdom Clinical Characterisation Protocol (CCP-UK)*

Prospective data from the CCP-UK was presented for 66,594 hospitalised patients with COVID-19; 7,026 (10.5%) had a history of cancer, including 73% aged  $\geq 70$  and 1,680 (23.9%) on active treatment<sup>[4]</sup>. Patients with cancer were older, more likely to be male and had similar symptoms on presentation to hospital to those without cancer.

Following a diagnosis of COVID-19, having a cancer diagnosis was associated with a lower critical care admission rate (14.6% vs 7.6%; HR 0.65, 95% CI 0.58-0.73). This impact was most marked in patients aged 70-79 (HR 0.62; 0.57-0.67,  $p < 0.001$ ) and aged 80 and older (HR 0.13; 0.12-0.14,  $p < 0.001$ ). Patients with cancer were also less likely to receive invasive mechanical ventilation (8.9% vs 4.1%). This impact was most marked in patients on active treatment (HR 0.52; 95% CI 0.36-0.76,  $p = 0.001$ ).

Compared to patients without cancer, unadjusted 30-day mortality was higher in the cancer population as a whole (40.5% vs 28.5%; HR 1.62, 95% CI 1.56-1.68) and across all age groups. Mortality in the 70-79 age group was 40.1% vs 34.1% (HR 1.27, 95% CI 1.18-1.37) and 46.8% vs 42.5% (HR 1.17, 95% CI 1.11-1.23) in the  $\geq 80$  cohort. This impact was irrespective of whether or not the patient was receiving active treatment. However, data relating to cancer

type, stage or type of treatment was not recorded. A deep cancer dataset is now planned in the CCP-UK Companion Cancer Study to investigate the impact of these factors.

#### COVID-19 and Cancer Consortium (CCC-19)

Updated data from the CCC-19 registry<sup>[1]</sup> analysed the relationship of timing of anti-cancer therapy on mortality in 3,654 patients with COVID-19 and cancer<sup>[5]</sup>. Specific data on age was not presented, however 65% of the overall cohort were aged  $\geq 60$  and 42% had a PS  $\geq 1$ . Unadjusted mortality was higher if cytotoxic chemotherapy (HR 1.30, 95% CI 1.00-1.67) or chemoimmunotherapy (HR 2.13, 95% CI 1.02-3.91) had been administered less than 2 weeks prior to a diagnosis. Of note, mortality was especially high in patients who received anti-CD20 therapy one to three months prior.

#### Thoracic cancer international COVID-19 collaboration (TERAVOLT)

The TERAVOLT collaboration presented observational data on patients with thoracic malignancy and COVID-19<sup>[6]</sup>; 1012 patients were included with 60% aged  $>65$  and 64% PS $\geq 1$ . Fever, cough and dyspnoea were the most common symptoms. Mortality rate was 32%. Patients with PS  $\geq 2$  (OR 3.6, 95% CI 2.7-5.0) and  $>65$  (OR 1.5, 95% CI 1.1-1.5) were at increased risk of death. Other risk factors included more advanced stage, smoking, prior use of steroids and type of oncological treatment.

### **Summary of oral presentations**

#### European Oncology Nursing Society (EONS)

The EONS conference was held parallel to ESMO and offered a panel on age-specific care in oncology in collaboration with the International Society of Geriatric Oncology (SIOG). Dr. Martine Puts presented the draft of an international position statement on care for older adults with cancer. The statement draws on gaps in care identified by registered nurses and outlines eight key principles. These principles include the need for nursing care that is proactive and tailored to patient complexity, incorporates screening tools, engages comprehensive geriatric assessment (where possible), and draws on best evidence to support families and caregivers.

Next, Welford<sup>[7]</sup> presented findings from a study of the clinical utility of the Rockwood Clinical Frailty Scale (CFS) for older adults. They assessed 237 patients over a 1-year period. In 137 adults aged >65, CFS predicted survival ( $p < 0.0001$ ). Patients with a CFS score <5 had an 86% chance of being discharged to home with appropriate support following hospitalization compared to 58% if CFS >6 (OR 4.6; 95% CI 2.3-9.3,  $p < 0.0001$ ).

Lastly, Dieperink<sup>[8]</sup> presented findings from a mixed-methods feasibility study of video consultations as a substitute for physical attendance; 85 patients (mean age 66 years) responded to a survey, while 15 patient-family dyads and six nurses participated in the study. Patients and caregivers expressed willingness to engage in consultations to save travel time (reported travel 2-450 km), to make caregiver participation easier, and to be in their preferred environment. While nurses welcomed the findings, they desired support to learn how to conduct clinical assessments virtually, navigate technological problems, and support patients use of technology.

#### TOSCA trial subgroup analysis

The Phase III TOSCA trial in Stage II-III colorectal cancer compared the safety and efficacy of three versus six months of adjuvant FOLFOX4/XELOX<sup>[9]</sup>. The results of a subgroup analysis in stage III patients aged  $\geq 70$  years were presented<sup>[10]</sup>. Of 2,360 patients with Stage III disease, 1,667 were aged <70 and 693  $\geq 70$ . The older cohort were more likely to be PS 1 (10.5% vs 3.3%,  $p < 0.001$ ), have right sided (40.9% vs 26.6%,  $p < 0.001$ ) and T3/4 tumours (90.9% v 84.3%,  $p < 0.001$ ). Treatment allocation was equally distributed according to age. Patients aged  $\geq 70$  had a higher number of dose reductions (46.7% vs 41.4%,  $p = 0.018$ ) and treatment interruptions (26.1% vs 19.3%,  $p < 0.001$ ). Recurrence rate was higher in the older cohort (24.2% vs 20.3%,  $p = 0.033$ ) but age was not statistically significant in multivariate analysis (HR 1.19; 95% CI 0.98-1.44,  $p = 0.082$ ). The conclusion was that oxaliplatin based adjuvant therapy should be carefully considered in an older population due to potential reduced tolerability and benefit.

#### Oral targeted therapy (OTT) dose adaptation

A French retrospective study of OTT (including afatinib, everolimus, palbociclib, pazopanib, sorafenib and sunitinib) in 123 patients aged  $\geq 70$  found baseline prescribed dose was lower

than recommended in 28% of cases, but this was rarely based on a formal oncogeriatric evaluation<sup>[11]</sup>. The group prescribed a lower dose at baseline were older with poorer PS. In those prescribed the recommended dose, toxicity and subsequent dose reduction were significantly higher than in the adapted dose cohort. Ultimately, 51% required a lower dose than recommended. Further trials are needed to determine optimum dose of ITT in older patients.

#### Pre-existing cardiovascular disease (CVD) and breast cancer

A Canadian study investigated the role of pre-existing CVD and outcome in 9,682 patients aged  $\geq 65$  diagnosed with breast cancer<sup>[12]</sup>; 21.5% had pre-existing CVD, with prevalence increasing with age. They found that these patients were less likely to receive chemotherapy and radiotherapy and that 5-year OS was lower, even after adjustment for stage and treatment. This data supports a role for early cardio-oncology input in optimising outcomes.

### **Research relevant to older patients**

#### Immunotherapy in first-line treatment of advanced gastroesophageal cancer

Gastroesophageal (GO) cancer is a disease of older adults. The results of the three eagerly anticipated key studies in the first-line palliative setting were presented and are shown in **Table 1**. These three studies<sup>[13-15]</sup> found benefit of immune checkpoint inhibitors plus chemotherapy in first-line treatment of patients with advanced GO cancer and may represent a new standard of care. No quality of life (QoL) analysis was reported.

#### The role of CDK 4/6 inhibitors in advanced/recurrent endometrial cancer

The NSGO-PALEO/ENGOT-EN3 phase 2 trial randomized 73 patients with oestrogen receptor-positive advanced/recurrent endometrial cancer to receive oral letrozole and either palbociclib or placebo until progression<sup>[16]</sup>. Median age was 68.5 and 67 years in the palbociclib and placebo groups respectively. Palbociclib significantly improved mPFS (8.3 vs 3.0 months; HR 0.56, 95% CI 0.32-0.98,  $p=0.041$ ) and disease control rate at 24 weeks (63.6% vs 37.8%). Most patients remained on treatment until progression, however grade 3/4 adverse events, namely anaemia (8% vs 3%) and neutropenia (42% v 0%), were more frequent

and 37.8% required a dose reduction. There was no difference in impact on QoL between arms. These results merit a phase 3 validation trial.

#### Advances in treatment of advanced urothelial carcinoma

The KEYNOTE-361 study was a global, open-label study of pembrolizumab alone or combined with platinum-based chemotherapy (PBC) vs PBC as first-line treatment in advanced urothelial cancer<sup>[17]</sup>; 1010 patients with a median age 69 were included, of whom 488 (48.3%) were PS 1 and 70 (6.9%) were PS 2. Median PFS was 3.9 vs 8.3 vs 7.1 months in the arms. Corresponding median OS was 15.6 vs 17.0 vs 14.3 months respectively. The combination arm did not reach statistical significance for either PFS and OS. Of note, grade 3-5 toxicity was 87.4% in the combination arm, compared to 81.9% and 62.9% in the chemotherapy and pembrolizumab arms.

#### Quality of life in advanced breast cancer

A pooled analysis of QoL in the MONALEESA-2, 3 and 7 studies was presented<sup>[18]</sup>. In patients receiving first-line endocrine therapy across the MONALEESA trials, ribociclib delayed deterioration in QoL and well as time to definitive deterioration. This data further supports the use of ribociclib in hormone receptor-positive/HER2-negative advanced breast cancer.

#### **Posters**

A summary of the posters relevant to the management of older patients with cancer is presented in **Table 2**.

#### **Conclusion**

The ESMO 2020 Science meeting was a success for the oncological society with the virtual platform providing an opportunity for greater access worldwide. There were several key oral presentations and impressive data within the poster section relating to onco-geriatrics. We hope that future meetings will continue the collaboration between ESMO and SIOG, with the goal of improving the care of older patients with cancer.

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**Author contributions:**

M A Baxter, T Madureira, K Haase, N M L Battisti: study concepts and design; data acquisition; data analysis and interpretation; manuscript preparation; manuscript editing; manuscript review.



Trial	Phase	Population	Arms	Key Results
CheckMate 649[13]	III	1 <sup>st</sup> line, adenocarcinoma n=1581, 60% CPS $\geq$ 5 Median age = 63 ( $\geq$ 65 and CPS $\geq$ 5, n=403) PS 1: 59%	Nivolumab/CTx vs CTx (CTx = XELOX/FOLFOX)	<u>CPS<math>\geq</math>5</u> : mPFS: 7.7mo vs 6.0mo (HR 0.68, p<0.0001); mOS: 14.4mo vs 11.3mo (HR 0.71, p<0.0001); RR: 60% v 45%; DOR: 9.5mo vs 7.0mo <u>CPS<math>\geq</math>1</u> : mPFS: 7.5mo vs 6.9mo (HR 0.74); mOS: 14mo vs 11.3mo (HR 0.74, p=0.0001) <u>All randomized</u> : mPFS: 7.7mo vs 6.9mo (HR 0.77); mOS: 13.8mo vs 11.6mo (HR 0.80, p=0.0002).
ATTRACTION4[14]	II/III	1 <sup>st</sup> line, Asian, HER2 negative n=724 16% PD-L1 $\geq$ 1% Median age 63.5 PS 1: 46%	Nivolumab/CTx vs CTx (CTx = SOX/OX)	mPFS: 10.45mo vs 8.34mo (HR=0.68, p=0.0007) mOS: 17.45mo vs 17.15mo (HR=0.9, p=0.257) RR: 57.5% vs 47.8% (p=0.0088) DOR: 12.91mo vs 8.67mo
KEYNOTE590[15]	III	1 <sup>st</sup> line, adenocarcinoma or squamous, n=749 49.9% CPS $\geq$ 10 Median age 64 (46% $\geq$ 65) PS 1: 59.8%	Pembrolizumab/CTx vs CTx (CTx = 5FU+Cisplatin)	<u>ITT</u> : mOS: 12.4mo v 9.8mo (HR 0.73 p<0.0001) mPFS: 6.3mo vs 5.8mo (HR 0.65, p<0.0001) RR 45% v 29.3% (p<0.0001) DOR 8.3 vs 6.0 <u>ITT CPS<math>\geq</math>10</u> : mOS 13.5mo vs 9.4mo (HR 0.62, p<0.0001); mPFS 7.5mo vs 5.5mo (HR 0.62, p<0.0001) <u>ESCC</u> : mOS 12.6mo vs 9.8mo (HR 0.72, p=0.0006); mPFS 6.3mo vs 5.8mo (HR 0.65, p<0.0001) <u>ESCC CPS<math>\geq</math>10</u> : mOS 13.9mo vs 8.8mo (HR 0.57, p<0.0001)

**Table 1. Key trials in the first line setting for advanced gastroesophageal cancer presented at ESMO 2020.** \*even low-grade toxicity may be impactful in older patients; \*\*only hazard ratio data presented. Abbreviations: CPS – combined positivity score; CTx – chemotherapy; DOR – duration of response; ESCC – esophageal Squamous Cell Carcinoma; FOLFOX – 5-fluorouracil/leucovorin/oxaliplatin; HR – hazard ratio; ITT – intention to treat; mo – months; mOS – median overall survival; mPFS – median progression free survival; n – number; ORR – overall response rate; OX – Capecitabine/Oxaliplatin; PS – performance score; PD-L1 – programmed death ligand 1; RR – response rate; SOX – S-1/Oxaliplatin; XELOX – capecitabine/oxaliplatin; 5FU – 5-fluorouracil

Abstract	Disease	Topic	Objective	Design	Demographics	
190P Battisti NML et al	Breast cancer	Chemotherapy	Evaluate the impact of chemotherapy on QOL outcomes for patients $\geq 70$ years with early stage breast cancer	Prospective multi-center study (2013-18)	<ul style="list-style-type: none"> <li>N=1520</li> <li>Median age: 76 (IQR 72-80)</li> <li>pT1: 492 (32.4%)</li> <li>pN0: 683 (44.9%)</li> <li>Grade 3: 864 (56.8%)</li> <li>Median CCI: 1 (IQR 0-2)</li> <li>No ADL impairment: 1063 (69.9%)</li> <li>No IADL impairment: 1091 (71.8%)</li> <li>Normal MMSE: 1346 (88.6%)</li> <li>ECOG PS 0: 1036 (68.2%)</li> </ul>	• •
222P Battisti NML et al	Breast cancer	Targeted therapy	Assess the rates of cardiac toxicity in patients $< 65$ versus $\geq 65$ years receiving anti-HER2 therapy for early-stage breast cancer and validate the role of the HFA/ICOS tool to predict the risk of cardiac AEs	Retrospective single-center study (2011-2018)	<ul style="list-style-type: none"> <li>N=931</li> <li>Median age: 54 (IQR 46-63)</li> <li>ECOG PS 0: 826 (88.7%)</li> <li>Median CCI: 0 (0-6)</li> <li>ER+: 638 (68.5%)</li> <li>Stage III: 162 (17.4%)</li> <li>Grade 3: 570 (61.2%)</li> <li>Cardioprotective medications at baseline: 146 (15.7%)</li> <li>Chemotherapy: <ul style="list-style-type: none"> <li>Anthracycline + taxanes: 594 (63.8%)</li> <li>Taxane: 288 (30.9%)</li> <li>Anthracycline: 14 (1.5%)</li> </ul> </li> </ul>	• • •
338P Khan A et al	Breast cancer	Epidemiology	Evaluate the characteristics of older patients with breast cancer in Indigenous versus non-Indigenous cohorts in Western Australia	Retrospective study (Western Australia State Cancer registry data, 2001-16)	<ul style="list-style-type: none"> <li>N = 130</li> <li>Median age: 66.8 years indigenous; 73.6 non-indigenous</li> <li>Subtypes indigenous vs non-indigenous: <ul style="list-style-type: none"> <li>HR+: 36 (55%) vs 39 (60%)</li> <li>HER2+: 10 (15%) vs 4 (6%)</li> <li>TNBC: 10(15%) vs 4(6%)</li> </ul> </li> <li>N+: 29 (45%) indigenous vs 26 (40%) non- indigenous</li> </ul>	• • •
345P Hasler-Strub U et al	Breast cancer	Chemotherapy	Compare the efficacy of an initial dose reduction of Eribulin (1.1mg/m <sup>2</sup> ) vs full dose in the first-line setting in patients with advanced breast cancer aged $\geq 70$ years	Prospective multicenter phase II study (SAKK 25/14) (2015-19)	<ul style="list-style-type: none"> <li>N = 77</li> <li>Median age 76 (70-89)</li> <li>WHO PS 0: 33 (43%)</li> <li>Previous anticancer therapies: 67 (64%)</li> <li>Liver involvement: 35 (45%)</li> <li>HR+: 64 (83%)</li> </ul>	• • • •
409P Nöpel- Dünnebacke S et al	Colon cancer	Chemotherapy	Characterize the use of SACT and cancer-related and noncancer-related mortality in patients aged 50-69 years versus $\geq 70$ years with stage III colon cancer	Retrospective study (German molecular registry Colopredict Plus, 2013-20)	<ul style="list-style-type: none"> <li>N=1149 (50-69: 510; <math>\geq 70</math>: 639)</li> <li>Median CCI: 0.77</li> <li>Adjuvant chemotherapy: 868 (75.5%)</li> <li>Fluoropyrimidine monotherapy: 292 (33.6%)</li> <li>Oxaliplatin: 553 (63.7%)</li> </ul>	• • • • • •

432P Papamichael D et al	Colorectal cancer	Targeted therapy	Evaluate toxicity and efficacy of cetuximab added to doublet chemotherapy in patients aged <70 versus ≥70 years with RAS wild-type metastatic colorectal cancer	Retrospective analysis of 6 trial datasets included in the ARCAD database	<ul style="list-style-type: none"> <li>• N=932</li> <li>• Median age: 62 (20-89)</li> <li>• ECOG PS 0: 500 (53.6%)</li> <li>• Right colon: 241 (25.9%)</li> <li>• Liver involvement: 580 (75.9%)</li> <li>• Lung involvement: 241 (31.5%)</li> </ul>	• • • •
512P De Rycke O et al	Colorectal cancer	Prognosis	Assess the external validity of the ARCAD normogram in a real-world population of older patients with advanced colorectal cancer	Retrospective analysis of the ELCAPA study dataset (2007-17)	<ul style="list-style-type: none"> <li>• N=123</li> <li>• Median age: 80 (IQR 76-83.5)</li> <li>• PS 0: 28 (22.5%)</li> <li>• ±2 metastatic sites: 51 (40.6%)</li> <li>• KRAS mutation: 45 (36.5%)</li> <li>• BRAF mutation: 2 (9.7%)</li> <li>• Prior chemotherapy: 12 (9.7%)</li> <li>• Timed GUG test &gt;20 s: 79 (9.7%)</li> <li>• CIRS: 12 (IQR 9-16)</li> <li>• MMSE score: 29 (IQR 26-29)</li> <li>• ADL score: 6 (IQR 5.5-6)</li> </ul>	•
513P Soler P et al	Colon cancer	Geriatric screening	Evaluate the role of the G8 screening tool in predicting OS in patients aged ≥75 years with colon cancer	Prospective single-center study (2016-18)	<ul style="list-style-type: none"> <li>• N=245</li> <li>• Median age: 80 (75-87)</li> <li>• Stage IV: 45% of patients</li> <li>• ECOG PS 0-1: 160 patients</li> </ul>	• •
514P Nassabein R et al	Colorectal cancer	Surgery	Evaluate survival outcomes of patients aged ≥70 years with resectable liver metastases from colorectal cancer	Retrospective single-center study	<ul style="list-style-type: none"> <li>• N=210</li> <li>• Median age 76 (70-88)</li> <li>• Right tumor: 80 (38%)</li> <li>• Synchronous liver involvement: 118 (56.2%)</li> <li>• CCI ≥1: 177 (84.3%)</li> <li>• Lung involvement: 19 (9%)</li> <li>• ≤2 liver metastases: 155 (73.8%)</li> <li>• Neoadjuvant chemotherapy: 173 (82.4%)</li> </ul>	• •
587P Geriletu AO et al	Solid tumours	Phase 1 trial outcomes	Evaluate toxicity and activity of phase 1 trial agents in patients <65 and ≥65 years with solid tumours	Retrospective single-center study (2008-16)	<ul style="list-style-type: none"> <li>• N=773</li> <li>• 85 phase 1 studies</li> <li>• Mean age: 59 years (18-87)</li> <li>• ECOG PS 0: 56%</li> <li>• Treatments: <ul style="list-style-type: none"> <li>○ Chemotherapy: 43%</li> <li>○ Immunotherapy: 17%</li> <li>○ Targeted therapy: 40%</li> </ul> </li> </ul>	• •
640P Paredero Perez I et al	Prostate cancer	Chemotherapy	Investigate the impact of docetaxel chemotherapy on QOL and OS in patients aged <75 versus ≥75 years with advanced prostate cancer	Retrospective analysis of 3 trial datasets	<ul style="list-style-type: none"> <li>• N=1607</li> <li>• PS 0: <ul style="list-style-type: none"> <li>○ &lt;75: 621 (50.4%)</li> <li>○ ≥75: 141 (45.9%)</li> </ul> </li> <li>• Pain present: <ul style="list-style-type: none"> <li>○ &lt;75: 825 (74.6%)</li> <li>○ ≥75: 181 (66.3%)</li> </ul> </li> </ul>	• • • •
722P Gross-Goupil M et al	Renal cell carcinoma	Targeted therapy	Assess the real-world treatment patterns, cabozantinib exposure and OS in patients enrolled in the	Subgroup analysis of the retrospective multi-center CABOREAL	<ul style="list-style-type: none"> <li>• N=410</li> <li>• 26 centers</li> <li>• Median age: <ul style="list-style-type: none"> <li>○ &lt;65 years: 57.0 (22-64)</li> <li>○ 65-75 years: 69.0 (65-75)</li> <li>○ &gt;75 years: 78.0 (76-92)</li> </ul> </li> </ul>	• •

			CABOREAL study stratified by age	study (2016-18)	<ul style="list-style-type: none"> <li>• ECOG PS 0-1: <ul style="list-style-type: none"> <li>○ &lt;65 years: 137 (62.0%)</li> <li>○ 65-75 years: 93 (60.4%)</li> <li>○ &gt;75 years: 17 (53.1%)</li> </ul> </li> <li>• Poor IMDC prognostic index: <ul style="list-style-type: none"> <li>○ &lt;65 years: 78 (35.3%)</li> <li>○ 65-75 years: 39 (24.8%)</li> <li>○ &gt;75 years: 13 (40.6%)</li> </ul> </li> <li>• Previous nivolumab: <ul style="list-style-type: none"> <li>○ &lt;65 years: 114 (51.8%)</li> <li>○ 65-75 years: 80 (51.3%)</li> <li>○ &gt;75 years: 10 (32.3%)</li> </ul> </li> </ul>	•
791P Bourlon MT et al	Penile cancer	Epidemiology	Describe differences in characteristics and survival of patients <65 and ≥65 years with penile cancer	Retrospective SEER analysis (2004-16)	<ul style="list-style-type: none"> <li>• N=3784</li> <li>• Stage I: 1923 (50.8%)</li> <li>• Insured: 2296 (60.7%)</li> <li>• White ethnicity: 2416 (63.8%)</li> </ul>	•
819P Valabrega G et al	Ovarian cancer	Targeted therapy	Evaluate the impact of age on the efficacy and safety of niraparib in the PRIMA trial	Subgroup analysis of the prospective phase 3 PRIMA study	<ul style="list-style-type: none"> <li>• N=733 <ul style="list-style-type: none"> <li>○ &lt;65 years: 444 (60.6%)</li> <li>○ ≥65 years: 289 (39.4%)</li> </ul> </li> <li>• FIGO stage IV: <ul style="list-style-type: none"> <li>○ &lt;65 years: 163 (22.2%)</li> <li>○ ≥65 years: 94 (12.8%)</li> </ul> </li> <li>• Previous neoadjuvant chemotherapy <ul style="list-style-type: none"> <li>○ &lt;65 years: 308 (42.0%)</li> <li>○ ≥65 years: 201 (27.4%)</li> </ul> </li> </ul>	•
932P Plana M et al	Head and neck cancer	Geriatric assessment	Evaluate the impact of CGA on treatment decisions for patients with head and neck cancer ≥70 years	Prospective single-center study (2018-2020)	<ul style="list-style-type: none"> <li>• N=124</li> <li>• Median age: 80.2 (71-96)</li> <li>• Male: 87 (70.2%)</li> <li>• Stage IV: 77 (62.1%)</li> <li>• Fit: 55 (44.4%)</li> </ul>	•
934P Antonio M et al	Head and neck cancer	Geriatric screening	Compare the accuracy of the VES-13 and the G8 with CGA to detect patients aged ≥70 years with head and neck cancer fit for standard therapy	Prospective single-center study (2018-2020)	<ul style="list-style-type: none"> <li>• N=124</li> <li>• Median age: 80.2 (71-96)</li> <li>• Male: 87 (70.2%)</li> <li>• Stage IV: 77 (62.1%)</li> <li>• Fit: 55 (44.4%)</li> </ul>	•
936P Llop S et al	Head and neck cancer	Geriatric assessment	Evaluate outcomes and toxicity of multimodal therapy for head and neck cancer based on CGA in patients >70 years	Prospective single-center study	<ul style="list-style-type: none"> <li>• N=69</li> <li>• Fit: 26 (37.7%)</li> <li>• Current/former smokers: 43 (62.3%)</li> <li>• Current/former alcohol: 25 (36.2%)</li> <li>• Stage IV: 48 (69.6%)</li> </ul>	•
940P Ferrando Diez A et al	Head and neck cancer	Multidisciplinary treatment	Evaluate the characteristics and treatment outcomes in patients with head and neck cancer aged <75 versus ≥75 years	Retrospective single-center analysis (2019)	<ul style="list-style-type: none"> <li>• N=151</li> <li>• Women: <ul style="list-style-type: none"> <li>○ &lt;75 years: 18%</li> <li>○ ≥75 years: 34%</li> </ul> </li> <li>• Smoking history: <ul style="list-style-type: none"> <li>○ &lt;75 years: 89%</li> <li>○ ≥75 years: 60%</li> </ul> </li> <li>• Alcohol abuse: <ul style="list-style-type: none"> <li>○ &lt;75 years: 63%</li> <li>○ ≥75 years: 44%</li> </ul> </li> <li>• Stage IV: <ul style="list-style-type: none"> <li>○ &lt;75 years: 45%</li> <li>○ ≥75 years: 35%</li> </ul> </li> </ul>	•

1118P García-Castaño A et al	Melanoma	Targeted therapy	Describe treatment patterns and outcomes of patients aged <75 versus ≥75 years receiving dabrafenib and trametinib for unresectable or metastatic BRAF V600 mutation-positive melanoma in the real-world setting	Retrospective multi-center study	<ul style="list-style-type: none"> <li>• N=159 <ul style="list-style-type: none"> <li>◦ &lt;75 years: 130</li> <li>◦ ≥75 years: 29</li> </ul> </li> <li>• Mean age (SD): 60 (15.6)</li> <li>• ≥3 comorbidities: 60 (37.7%)</li> <li>• ≥3 concomitant medications: 70 (44%)</li> <li>• ECOG PS 0: 60 (43.5%)</li> <li>• Stage M1b-c: 127 (79.9%)</li> </ul>	• • • •
1119P Pereira C et al	Melanoma	Targeted therapy Immunotherapy	Evaluate real-world safety profile of targeted therapy and immunotherapy in patients with advanced melanoma aged ≥65 years	Retrospective single-center study (2014-19)	<ul style="list-style-type: none"> <li>• N=120</li> <li>• Median age: 76.4 (65.3-93.3)</li> <li>• Male: 63 (52.5%)</li> <li>• ECOG PS 0-1: 96 (80.0%)</li> <li>• Brain metastases: 22 (17.6%)</li> <li>• BRAF wild type: 66 (55.0%)</li> <li>• Treatment-naïve: 114 (91.2%)</li> </ul>	• •
1177P Apostilidis L et al	Neuroendocrine carcinoma	Chemotherapy	Evaluate the efficacy and toxicity of carboplatin/etoposide in patients ≥70 years with extrapulmonary neuroendocrine carcinoma	Retrospective single-center study (2013-19)	<ul style="list-style-type: none"> <li>• N=47</li> <li>• Median age: 74 (70-85)</li> <li>• Median Ki67: 70% (35-100%)</li> <li>• Metastatic stage: 45 (95.7%)</li> <li>• Male: 27 (57.5%)</li> </ul>	• •
1222P Wang C et al	Non-small cell lung cancer	Surgery	Assess the feasibility and safety of SV-VATS in patients ≥60 years with non-small cell lung cancer	Retrospective single-center study (2012-18)	<ul style="list-style-type: none"> <li>• N=164</li> <li>• No characteristics available</li> </ul>	•
1317P Blanco R et al	Non-small cell lung cancer	Immunotherapy	Evaluate the safety and efficacy of 1 <sup>st</sup> line pembrolizumab in patients ≥70 years with advanced non-small cell lung cancer	Prospective phase II multicenter study (2018-19)	<ul style="list-style-type: none"> <li>• N=74</li> <li>• Mean age (SD): 78.1 (5.48)</li> <li>• PS 0: 18 (24.3%)</li> <li>• Never smoker: 11 (14.9%)</li> <li>• Adenocarcinoma histology: 33 (44.6%)</li> <li>• Stage IV: 63 (85.1%)</li> <li>• Previous surgery: 9 (12.2%)</li> <li>• PD-L1 50-100%: 35 (47.3%)</li> <li>• Edmonton Frailty Scale non-frail: 44 (59.4%)</li> <li>• MMSE 27-30: 39 (52.7%)</li> <li>• MNA 24-30: 27 (37.0%)</li> </ul>	•
1328P Velcheti V et al	Non-small cell lung cancer	Immunotherapy	Evaluate the outcomes of 1 <sup>st</sup> line pembrolizumab plus pemetrexed/carboplat in patients ≥75 years with advanced non-small cell lung cancer with no molecular alterations	Retrospective multi-center study (2017-18)	<ul style="list-style-type: none"> <li>• N=99</li> <li>• Median age: 79 (75-84)</li> <li>• Current/former smoker: 85 (86%)</li> <li>• De novo metastatic: 86 (87%)</li> <li>• ECOG PS 0: 59 (59%)</li> <li>• Brain involvement: 6 (6%)</li> </ul>	• • •

1375P Shimokawa M et al	Non-small cell lung cancer	Chemotherapy toxicity prediction	Predict the risk of chemotherapy toxicity with geriatric assessments in patients aged $\geq 70$ years with advanced non-small cell lung cancer	Prospective multi-center study	<ul style="list-style-type: none"> <li>• N=348</li> <li>• Median age: 76 (70-95)</li> <li>• Stage IV: 307</li> <li>• Adenocarcinoma histology: 250</li> <li>• ECOG PS 0: 130</li> <li>• CCI 0: 183</li> <li>• Upfront standard dose: 216</li> <li>• Median MMSE score: 28 (12-30)</li> <li>• Normal hearing: 301</li> <li>• No falls within 6 months: 321</li> </ul>	•
1536P Tralongo AC et al	Pancreatic cancer	Chemotherapy	Compare overall survival in patients with pancreatic cancer $\geq 80$ years receiving chemotherapy versus best supportive care	Retrospective single-center study (2008-15)	<ul style="list-style-type: none"> <li>• N=78</li> <li>• ECOG PS 0-1: 47 (60%)</li> <li>• Median no. of comorbidities: 3</li> <li>• Polypharmacy: 65 (83.3%)</li> </ul>	•
1688P Hauchecorne M et al	COVID-19	Epidemiology	Assess outcomes of COVID-19 infection in patients with cancer $< 70$ versus $\geq 70$ years	Retrospective single-center study (2020)	<ul style="list-style-type: none"> <li>• N=137</li> <li>• Median age: <ul style="list-style-type: none"> <li>◦ <math>&lt; 70</math>: 58 (45-62)</li> <li>◦ <math>\geq 70</math>: 75.5 (73-81)</li> </ul> </li> <li>• Solid tumors: 115</li> <li>• Hematological malignancies: 22</li> </ul>	•
1833P Almugbel FA et al	-	Chemotherapy toxicity prediction	Evaluate the role of GS and SPPB in predicting chemotherapy toxicity in patients $\geq 65$ years with solid and hematologic malignancies	Retrospective single-center study	<ul style="list-style-type: none"> <li>• N = 85</li> <li>• Mean age (SD): 78.1 (5.9)</li> <li>• Female: 44 (51.8%)</li> <li>• Low GS: <ul style="list-style-type: none"> <li>◦ Women: 15 (34.1%)</li> <li>◦ Men: 13 (31.7%)</li> </ul> </li> <li>• Abnormal SPPB: 47 (55.3%)</li> <li>• Curative treatment: 46 (54.1%)</li> </ul>	•
1860P Ferreira Filho AF et al	-	Oncogeriatric care	Report the feasibility of a realistic designed geriatric assessment in an outpatient oncology setting in Brazil	Retrospective single-center study during 6 months	<ul style="list-style-type: none"> <li>• N=61</li> <li>• Median age: 72 (62-92)</li> <li>• Palliative treatment: 30 (49%)</li> <li>• Mean time to perform RDGA: 9.5 minutes (5-16)</li> <li>• Mean speed gait: 0.93m/s (0.19-1.69)</li> <li>• Polypharmacy: 29 (48%)</li> <li>• Malnutrition: 38 (62%)</li> <li>• Depression: 15 (25%)</li> <li>• Cognitive impairment: 27 (45%)</li> </ul>	•
1861P Dalila M et al	-	Geriatric assessment	Evaluate whether CGA influences treatment decisions in patients $\geq 65$ years with cancer	Prospective single-center study	<ul style="list-style-type: none"> <li>• N=200</li> <li>• Mean age (SD): 74.3 (6.2)</li> <li>• <math>\geq 80</math> years: 35 (17.5%)</li> <li>• ECOG PS 0-1: 102 (51.0%)</li> <li>• Social support: 187 (93.5%)</li> <li>• Illiteracy: 95 (47.5%)</li> <li>• No falls within 6 months: 169 (84.5%)</li> <li>• No comorbidities: 51 (25.5%)</li> <li>• <math>\geq 3</math> concurrent medications: 58 (29%)</li> <li>• G8 score <math>&gt; 14</math>: 109 (54.5%)</li> <li>• Stage IV: 107 (53.5%)</li> </ul>	•
1862P Mazzola R et al	-	Geriatric assessment	Evaluate the feasibility and role of G8 and CCI questionnaires in predicting QOL in	Prospective single-center study	<ul style="list-style-type: none"> <li>• N=40 (28 prostate cancer; 12 oligometastases)</li> <li>• Median age: 73 (65-85)</li> <li>• Median G8 score: 15 (10-17)</li> <li>• Median CCI: 6 (4-11)</li> </ul>	•

			patients ≥65 years receiving abdominal-pelvic SBRT			
1863P Olivares Hernández A et al	-	Systemic treatment	Evaluate the impact of systemic treatment compared to best supportive care on survival outcomes in patients with cancer ≥80 years	Retrospective single-center study (2016-18)	<ul style="list-style-type: none"> <li>• N=398</li> <li>• Median age: 87 (80-102)</li> <li>• Systemic treatment: 218 (54.8%)</li> <li>• Best supportive care alone: 180 (45.2%)</li> <li>• Advanced stage disease: 202 (50.8%)</li> <li>• Tumour types: <ul style="list-style-type: none"> <li>○ Digestive: 205 (51.5%)</li> <li>○ Breast: 48 (12.1%)</li> <li>○ Lung: 36 (9.0%)</li> <li>○ Other: 109 (27.4%)</li> </ul> </li> </ul>	•

**Table 2. Posters relevant to Geriatric Oncology presented at ESMO 2020.** Abbreviations:

ADL: activities of daily living; AE: adverse event; ARCAD: advanced colorectal cancer database; BRAF: v-raf murine sarcoma viral oncogene homolog B1; CCI: Charlson Comorbidity Index; CGA: Comprehensive Geriatric Assessment; CIRS: Cumulative Illness Rating Scale; CSS: cancer-specific survival; DCR: disease control rate; DFS: disease-free survival; ECOG: Eastern Cooperative Oncology Group; ELCAPA: ELderly Cancer Patients; EORTC: European Organisation for Research and Treatment of Cancer; ER+: Estrogen Receptor positive; FIGO: International Federation of Gynecology and Obstetrics; GS: grip strength; HER2: human epidermal growth factor receptor 2; HFA/ICOS: Heart Failure Association/International Cardio-Oncology Society; HR: hormonal receptor; IMDC: International Metastatic renal cell cancer Database Consortium; IQR: interquartile range; KRAS: Kirsten rat sarcoma; MMSE: Mini Mental State Examination; MV-VATS: mechanical ventilation video-assisted thoracoscopic surgery; N+: lymph node positive; OS: overall survival; ORR: objective response rate; PD1: Programmed cell death protein 1; PD-L1: Programmed death-ligand 1; PS: Performance Status; QOL: quality of life; RAS: Rat sarcoma; RR: response rate; SBRT: stereotactic body radiotherapy; SD: standard deviation; SEER: Surveillance, Epidemiology and End Results Program; SPPB: Short Physical Performance Battery; SV-VATS: spontaneous ventilation video-assisted thoracoscopic surgery; TNBC: triple-negative breast cancer; VES-13: Vulnerable Elderly Survey-13.

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