



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Background: The ongoing SARS-CoV-2 pandemic and ensuing coronavirus disease (COVID-19) is challenging cancer care and services worldwide.

Methods: A 95 items survey was distributed worldwide by 20 oncologists from 10 of the most affected countries in order to evaluate the impact on organization of oncological care.

Results: 109 representatives from oncology centers in 18 countries (62.4% academic hospitals) filled out the survey (June 17 – July 14, 2020). A swab or gargle test is systematically performed before day care unit or overnight stay admissions in 27.5% and 58.7% of the centers, respectively. A local registry (64.2%) and systematic tracing (77.1%) of infected patients was organized in many centers. Treatment modalities mostly affected by the pandemic (cancellation/delay) were surgery (44.1%) and chemotherapy (25.7%). Earlier cessation of palliative treatment was observed in 32.1% of centers, and 64.2% of participants agree that under-treatment is a major concern. At the pandemic peak, teleconsultations were performed for follow-up (94.5%), for oral therapy (92.7%), but also for patients receiving immunotherapy (57.8%) or chemotherapy (55%). Approximately 82% of participants estimate that they will continue to use telemedicine. Most participants reported more frequent use of virtual tumor boards (82%) and oncological team meetings (92%), but 45% disagree that virtual meetings are an acceptable alternative to live international meetings. Although 60.9% report reduced clinical activity during the pandemic peak, only 28.4% had an increased scientific activity. Only 18% of participants estimate that their well-being will not recover to previous levels by the end of the year; 63% indicate easily accessible psychological support for caregivers, but only 10% used or planned to use it. All clinical trial activities are or will soon be reactivated in 72.5% of the centers. Major study protocol violations/deviations were observed in 27.5% and significant reductions of clinical trial activities are expected by 37% of centers this year.

Conclusions: COVID-19 has a major impact on organization of patient care, well-being of caregivers, continued medical education and clinical trial activities in oncology.

Legal entity responsible for the study: The authors.

Funding: Fondation Léon Fredericq.

Disclosure: G. Jerusalem: Advisory/Consultancy, Research grant/Funding (institution), Travel/Accommodation/Expenses: Novartis; Advisory/Consultancy, Research grant/Funding (institution), Travel/Accommodation/Expenses: Roche; Advisory/Consultancy, Research grant/Funding (institution), Travel/Accommodation/Expenses: Pfizer; Advisory/Consultancy, Travel/Accommodation/Expenses: Lilly; Advisory/Consultancy, Travel/Accommodation/Expenses: Amgen; Advisory/Consultancy, Travel/Accommodation/Expenses: BMS; Advisory/Consultancy, Travel/Accommodation/Expenses: AstraZeneca; Advisory/Consultancy, Travel/Accommodation/Expenses: Daiichi Sankyo; Advisory/Consultancy: AbbVie; Travel/Accommodation/Expenses: MedImmune; Travel/Accommodation/Expenses: Merck KGaA. G. Curigliano: Advisory/Consultancy, Speaker Bureau/Expert testimony: Roche; Advisory/Consultancy, Speaker Bureau/Expert testimony: Seattle Genetics; Speaker Bureau/Expert testimony, Writing engagement: Novartis; Advisory/Consultancy, Speaker Bureau/Expert testimony: Lilly; Advisory/Consultancy, Speaker Bureau/Expert testimony: Pfizer; Advisory/Consultancy, Speaker Bureau/Expert testimony: Foundation Medicine; Advisory/Consultancy, Speaker Bureau/Expert testimony: Samsung; Advisory/Consultancy, Speaker Bureau/Expert testimony: Celltrion; Leadership role, Scientific Affairs Group: Ellipsis; Speaker Bureau/Expert testimony, Writing engagement: BMS; Speaker Bureau/Expert testimony: MSD; Advisory/Consultancy: Mylan. M. Campone: Honoraria (self), Advisory/Consultancy: GT1; Honoraria (institution), Advisory/Consultancy: Sanofi; Honoraria (institution), Advisory/Consultancy: Pierre-Favre; Honoraria (institution), Advisory/Consultancy: AstraZeneca; Honoraria (institution), Advisory/Consultancy: Servier; Honoraria (institution), Advisory/Consultancy, Speaker Bureau/Expert testimony: Novartis; Honoraria (institution), Advisory/Consultancy: AbbVie; Honoraria (institution), Advisory/Consultancy: Accord; Honoraria (institution), Advisory/Consultancy: Pfizer; Speaker Bureau/Expert testimony: Lilly. M. Martin: Advisory/Consultancy, Research grant/Funding (institution): Roche; Advisory/Consultancy, Research grant/Funding (institution): Novartis; Advisory/Consultancy, Research grant/Funding (institution): Puma; Advisory/Consultancy: AstraZeneca; Advisory/Consultancy: Amgen; Advisory/Consultancy: Taiho Oncology; Advisory/Consultancy: Daiichi Sankyo; Advisory/Consultancy: PharmaMar; Advisory/Consultancy: Eli Lilly; Advisory/Consultancy: Pfizer. M. Cristofanilli: Advisory/Consultancy: CytoDin; Advisory/Consultancy, Speaker Bureau/Expert testimony, Research grant/Funding (institution): Pfizer; Advisory/Consultancy: Lilly; Advisory/Consultancy: Novartis; Advisory/Consultancy, Speaker Bureau/Expert testimony: Foundation Medicine; Advisory/Consultancy: G1 Therapeutics; Advisory/Consultancy: Sermonix; Advisory/Consultancy: Genentech. L. Pusztai: Honoraria (self), Research grant/Funding (institution), Clinical trial support: Merck; Honoraria (self), Research grant/Funding (institution), Clinical trial support: AstraZeneca; Honoraria (self), Research grant/Funding (institution), Clinical trial support: Seattle Genetics; Honoraria (self): Novartis; Honoraria (self), Research grant/Funding (institution), Clinical trial support: Roche Genentech; Honoraria (self): Eisai; Honoraria (self): Daiichi; Honoraria (self): Syndax; Honoraria (self): Immunomedics. R. Bartsch: Advisory/Consultancy: Accord; Honoraria (self): AstraZeneca; Advisory/Consultancy, Research grant/Funding (institution): Daiichi; Advisory/Consultancy, Travel/Accommodation/Expenses: Eli-Lilly; Advisory/Consultancy, Travel/Accommodation/Expenses: MSD; Advisory/Consultancy, Research grant/Funding (institution): Novartis; Advisory/Consultancy, Research grant/Funding (institution): Roche; Advisory/Consultancy: Puma; Advisory/Consultancy: Pierre-Favre; Advisory/Consultancy: Sandoz; Advisory/Consultancy: Eisai. M. Tagliamento: Travel/Accommodation/Expenses: Roche; Travel/Accommodation/Expenses: Bristol-Myers Squibb; Travel/Accommodation/Expenses: AstraZeneca; Travel/Accommodation/Expenses: Takeda; Travel/Accommodation/Expenses: Novartis; Travel/Accommodation/Expenses: Amgen. J. Cortés: Honoraria (self), Advisory/Consultancy, Research grant/Funding (institution), Travel/Accommodation/Expenses: Roche; Honoraria (self), Advisory/Consultancy: Celgene; Advisory/Consultancy: Cellectia; Advisory/Consultancy, Research grant/Funding (institution): AstraZeneca; Advisory/Consultancy: Biethera Pharmaceutical; Advisory/Consultancy: Merus; Advisory/Consultancy: Seattle Genetics; Honoraria (self), Advisory/Consultancy, Travel/Accommodation/Expenses: Daiichi Sankyo; Advisory/Consultancy: Erytech; Advisory/Consultancy: Athenex + Polyphor; Advisory/Consultancy, Shareholder/Stockholder/Stock options: MedSIR; Honoraria (self), Advisory/Consultancy: Lilly; Advisory/Consultancy: Servier; Honoraria (self), Advisory/Consultancy, Research grant/Funding (institution): Merck Sharp Dome; Advisory/Consultancy: GSK; Advisory/Consultancy: Leuko; Advisory/Consultancy: Bioasis; Advisory/Consultancy: Clovis Oncology; Advisory/Consultancy: Boehringer Ingelheim; Honoraria (self), Travel/Accommodation/Expenses: Novartis; Honoraria (self), Travel/Accommodation/Expenses: Eisai; Honoraria (self), Research grant/Funding (institution), Travel/Accommodation/Expenses: Pfizer; Honoraria (self): Samsung Bioepis; Research grant/Funding (institution): Ariad Pharmaceuticals; Research grant/Funding (institution): Baxalta GMBH/Servier Affaires; Research grant/Funding

(institution): Bayer Healthcare; Research grant/Funding (institution): F. Hoffmann-La Roche; Research grant/Funding (institution): Guardanthe Health; Research grant/Funding (institution): Piqu Therapeutics; Research grant/Funding (institution): Puma C; Research grant/Funding (institution): Queen Mary University of London. E.M. Ciruelos: Advisory/Consultancy, Speaker Bureau/Expert testimony, Travel/Accommodation/Expenses: Roche; Advisory/Consultancy, Speaker Bureau/Expert testimony: Lilly; Advisory/Consultancy, Speaker Bureau/Expert testimony: Novartis; Advisory/Consultancy, Speaker Bureau/Expert testimony, Travel/Accommodation/Expenses: Pfizer. H.S. Rugo: Research grant/Funding (institution): Eisai; Research grant/Funding (institution): Genentech; Research grant/Funding (institution): Lilly; Research grant/Funding (institution), Travel/Accommodation/Expenses: MacroGenics; Research grant/Funding (institution): Merck; Research grant/Funding (institution), Travel/Accommodation/Expenses: Novartis; Research grant/Funding (institution): Obi Pharma; Research grant/Funding (institution): Odonate Therapeutics; Research grant/Funding (institution): Immunomedics; Research grant/Funding (institution), Travel/Accommodation/Expenses: Daiichi-Sankyo; Research grant/Funding (institution), Travel/Accommodation/Expenses: Pfizer; Advisory/Consultancy: Samsung; Advisory/Consultancy: Celltrion; Travel/Accommodation/Expenses: Mylan; Travel/Accommodation/Expenses: AstraZeneca. All other authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2020.08.2317>

LBA77 Anti-SARS-CoV-2 antibody response in patients with cancer and oncology healthcare workers: A multicenter, prospective study

A. Marra¹, D.G. Generali², P. Zagami¹, S. Gandini³, V. Cervoni⁴, S. Venturini⁵, S. Morganti¹, R. Passerini⁶, R. Orecchia⁷, G. Curigliano¹

¹Divisione Sviluppo di Nuovi Farmaci per Terapie Innovative, Istituto Europeo di Oncologia IRCCS, Università di Milano, Milan, Italy; ²UO Patologia Mammaria e Ricerca Trasazionale - Breast Unit, Azienda Socio-Sanitaria Territoriale di Cremona and University of Trieste, Cremona, Italy; ³Experimental Oncology, Istituto Europeo di Oncologia IRCCS, Milan, Italy; ⁴UO Patologia Mammaria e Ricerca Trasazionale - Breast Unit, Azienda Socio-Sanitaria Territoriale di Cremona and University of Trieste, Cremona, Italy; ⁵Dipartimento di Management, Università di Torino, Turin, Italy; ⁶Division of Laboratory Medicine, Istituto Europeo di Oncologia IRCCS, Milan, Italy; ⁷Scientific Direction, Istituto Europeo di Oncologia IRCCS, Milan, Italy

Background: Poor outcomes for patients with cancer and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)-related disease (COVID-19) have been reported so far. Although anti-SARS-CoV-2 IgG response is usually detectable within three weeks after infection, limited information on the seroconversion rate of patients with cancer infected by SARS-CoV-2 is available.

Methods: This is a multicenter, observational, prospective study that included patients and oncology healthcare workers (HCWs) with SARS-CoV-2 infection confirmed by RT-PCR or clinical/radiological suspicious of infection as well as patients with cancer who are considered at high risk for infection. All subjects were tested with the 2019-nCoV IgG/IgM Rapid Test Cassett for the fast detection of IgG and IgM antibodies against SARS-CoV-2. The aim of the study was to evaluate anti-SARS-CoV-2 seroconversion rates by qualitative assay in patients with cancer and HCWs with confirmed or clinically suspected COVID-19.

Results: At first interim analysis, 166 subjects were enrolled in the study. Cancer patients and HCWs were 61 (36.7%) and 105 (63.3%), respectively. HCWs were younger than patients with cancer (median age 41 vs 62 years; $P < 0.001$). Eighty-six subjects (51.8%) had confirmed SARS-CoV-2 diagnosis by RT-PCR testing on nasopharyngeal swab specimen, while forty-nine (29.5%) had a clinical suspicious of COVID-19 in absence of RT-PCR confirmation. In patients with RT-PCR-confirmed SARS-CoV-2 infection, 62 (83.8%) were IgG-positive. Neither differences in terms of IgG positivity (87.9% vs 80.5%; $P = 0.39$) nor in median time from COVID-19 diagnosis to IgG detection (23.0 vs 28.0 days; $P = 0.21$) were found between patients with cancer and HCWs.

Conclusions: Our data show that SARS-CoV-2-specific IgG antibody response is not different between cancer patients and healthy subjects. Qualitative rapid test for antibody detection represents an useful support to RNA RT-PCR testing for the diagnosis of COVID-19 in high-risk populations, including patients with cancer.

Legal entity responsible for the study: Istituto Europeo di Oncologia IRCCS.

Funding: This work was partially supported by the Italian Ministry of Health with Ricerca Corrente and 5x1000 funds. MEDnoTE srl (Spin-off of University of Trieste) supported the present study by providing the rapid test used for anti-SARS-CoV-2 antibody detection.

Disclosure: D.G. Generali: Honoraria (self), Advisory/Consultancy, Speaker Bureau/Expert testimony, Travel/Accommodation/Expenses: Novartis, Pfizer, Lilly. G. Curigliano: Speaker Bureau/Expert testimony: MSD; Advisory/Consultancy: Mylan, Daiichi Sankyo; Advisory/Consultancy, Speaker Bureau/Expert testimony: Lilly, Pfizer, Merck, Foundation Medicine, Samsung, Celltrion; Advisory/Consultancy, Speaker Bureau/Expert testimony: Seattle Genetics, Nanostring; Advisory/Consultancy, Speaker Bureau/Expert testimony: Roche; Speaker Bureau/Expert testimony: Novartis, BMS; Honoraria (self): Ellipsis. All other authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2020.08.2318>