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Call for ensuring cancer care continuity during COVID-19 pandemic

Marco Tagliamento ,[1,2] Matteo Lambertini ,[1,3] Carlo Genova,[2] Emanuela Barisione,[4] Andrea De Maria,[5,6] Marco Grosso,[4] Francesca Poggio ,[2] Stefano Vagge ,[7] Francesco Boccardo,[1,3] Paolo Pronzato,[2] Lucia Del Mastro [1,2]

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[1]Department of Internal Medicine and Medical Specialties (Di.M.I.), School of Medicine, University of Genoa, Genoa, Italy
[2]Department of Medical Oncology, U.O.C. Oncologia Medica 2, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
[3]Department of Medical Oncology, U.O.C. Clinica di Oncologia Medica, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
[4]Interventional Pneumology Unit, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
[5]Department of Health Sciences, University of Genoa, Genoa, Italy
[6]Infectious Diseases Unit, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
[7]Department of Radiation Oncology, IRCCS Ospedale Policlinico San Martino, Genoa, Italy

Correspondence to
Dr Marco Tagliamento;
tagliamento.marco@gmail.com

On 11 March 2020, WHO declared the outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) to be a pandemic, and the related syndrome was then named coronavirus disease 2019 (COVID-19). As of 6 April 2020, 1 211 203 confirmed cases and 67 596 deaths have been recorded worldwide, Italy being one of the worst affected countries so far.

Frail patients, such as elderly people or those with underlying conditions, are at higher risk of complications related to COVID-19.[1] The burden of SARS-CoV-2 infection among patients with cancer has not been established yet, but their potential immunocompromised state is of concern.[2] Preliminary data suggest an increased risk of developing infection-related severe events (ie, admission to the intensive care unit, mechanical ventilation or death) in the case of antitumour treatment administration within two weeks before COVID-19 diagnosis. Therefore, the authors suggested that treatment strategies likely to cause immunosuppression should be avoided or retained at decreased dosages.[3] The Italian directives for the management of onco-haematological patients *on therapy* during the COVID-19 pandemic recommend considering treatment delays on a case-by-case basis, taking into account the characteristics of the patient and the disease.[4]

By reporting consecutive cases of SARS-CoV-2 infection among patients with cancer treated at our centre, we aim to call for the need for adequate and dedicated facilities to manage cancer care after infection with SARS-CoV-2. Between 10 March and 6 April, 17 patients with a median age of 68 years (range 46–89) tested positive for SARS-CoV-2 by RT-PCR on nasopharyngeal swab. Among these patients, 16 (94%) had symptoms related to COVID-19; eight had severe respiratory symptoms, and 13 (76%) were admitted to hospital (table 1). At a median follow-up of 15 days since the confirmed diagnosis of SARS-CoV-2 infection, the case fatality rate was 24%: four patients out of 17 died due to severe COVID-19, two of whom were on oncological follow-up (ie, *off therapy*). All 12 patients (100%) who were *on therapy* in different settings have experienced treatments delays or permanent discontinuation, and one patient did not undergo the scheduled diagnostic procedures. Notably, we had patients with mild symptoms or no symptoms who had antineoplastic treatments delayed; these treatments had a curative purpose as well as a high probability of long-term disease control (eg, neoadjuvant chemotherapy for locally advanced triple-negative breast cancer, chemo-radiotherapy for limited-stage small-cell lung cancer, first-line ALK inhibitor for advanced lung adenocarcinoma). Similarly, other patients currently in hospital with mild COVID-19 syndrome might need to resume their therapeutic plan after complete resolution of their symptoms despite SARS-CoV-2 still being detectable potentially for weeks. According to hospital guidelines, recovery is defined by two consecutive negative RT-PCR tests obtained at least 24 hours apart, performed at least 15 days after the resolution of signs and symptoms. Moreover, if we assume that there is a non-negligible proportion of asymptomatic cases that are a potential source of transmission to other patients with cancer,[5] we estimate that the number of unrecognised patients with SARS-CoV-2 infection might be higher than expected. Widespread testing for SARS-CoV-2 among patients with cancer and their healthcare providers could also help to control the potential negative consequences of this outbreak on cancer care. Based on our preliminary experience, we are opening a new unit that will work as a regional cancer hub for the care of patients with cancer affected by COVID-19 within a multidisciplinary team. With the current

Table 1 Patient's, disease and treatment characteristics

Gender	Age	Tumour type	Setting	COVID-19 syndrome	Hospitalisation due to COVID-19	Treatment not started/ delayed/ discontinued	Treatment
M	71	NSCLC	Unresectable stage III	Severe	Yes	Not started	CT+RT
M	54	NSCLC	Metastatic 1st line	Asymptomatic	No	Delayed	CT+IT
M	68	Glioblastoma	Follow-up (after Stupp)	Severe	Yes	NA	NA
M	73	NSCLC	Metastatic 1st line	Mild	No	Delayed	ALKi
F	68	Pleural mesothelioma	Metastatic >1st line	Severe	Yes	Not started	CT
M	64	Prostate	Metastatic >1st line	Severe	Yes	Delayed	ET
F	46	Breast	Neoadjuvant	Mild	No	Delayed	CT
F	66	Breast	Metastatic >1st line	Severe	Yes	Delayed	ET+mTORi
F	51	Breast	Metastatic >1st line	Mild	Yes	Delayed	CT
F	68	Breast	Metastatic 1st line	Severe	Yes	Delayed	CT+anti-HER2
F	79	Breast	Follow-up (after adjuvant ET)	Mild	Yes	NA	NA
M	70	NSCLC	Follow-up (after surgery)	Mild	Yes	NA	NA
M	66	NSCLC; duodenal cancer	Metastatic 1st line for both cancers	Severe	Yes	Discontinued	CT+IT
F	66	SCLC	Localised	Mild	Yes	Not started	CT+RT
M	89	Prostate	Follow-up (after RT)	Severe	Yes	NA	NA
M	75	SCLC	Metastatic 1st line	Mild	No	Delayed	CT
M	76	Single lung lesion not biopsied yet	Diagnosis	Mild	Yes	NA	NA

ALKi, ALK inhibitor; CT, chemotherapy; ET, endocrine therapy; F, female; HER2, human epidermal growth factor receptor 2; IT, immunotherapy; M, male; mTORi, mTOR inhibitor; NA, not applicable; NSCLC, non-small-cell lung cancer; RT, radiotherapy; SCLC, small-cell lung cancer; Stupp, Stupp protocol.

uncertainty, the important aim behind this decision is to ensure continuity of care to those selected patients who can reasonably receive oncological treatments in spite of SARS-CoV-2 positivity, balancing the risks associated with the infection and the disruption of proper antineoplastic strategies.

Twitter Marco Tagliamento @tagliamento_m and Matteo Lambertini @matteolambe

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ORCID iDs
Marco Tagliamento http://orcid.org/0000-0001-7461-023X
Matteo Lambertini http://orcid.org/0000-0003-1797-5296
Francesca Poggio http://orcid.org/0000-0002-4518-2827
Stefano Vagge http://orcid.org/0000-0002-8212-7069
Lucia Del Mastro http://orcid.org/0000-0002-9546-5841

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