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# Letter to the Editor

## In the face of the SARS-CoV-2 outbreak, do people suffering from oncological disease need specific attention?

*Dear Editor,*

The new SARS-CoV-2 epidemic is imposing immense strain on the health systems in several countries. The few nations around the world that have yet to face the outbreak of the epidemic are gearing themselves up. The growth of the epidemic has led the WHO to recently declare the 2019-nCoV disease as a global pandemic[1].

Saving resources has imposed strict criteria everywhere to determine who may access diagnostic tests. But in cases where the healthcare systems are particularly under stress, we are starting to talk about the likely need of choosing which subjects group must preferably receive laboratory test, i.e., SARS-CoV-2 RNA detection in oropharyngeal swab, in the event that a choice has to made when such treatment is not available for all[2-4]. This is a serious issue for doctors who are forced to make such a choice. Therefore, Italian national and international scientific societies have done well to start to indicate guidelines that will prevent doctors from being alone when faced with such an important decision.

However, further clarification is needed on the fact that most nations are introducing standard rules (equally valid for everyone) for access to diagnostic tests. Indeed, diagnostic specificity sometimes differentiates between people not just in terms of individual vulnerability, but even more as regards their potential risk to public health. Fever are considered an essential criterion for admission to the diagnostic tests in many countries. Even a cough is a very common clinical manifestation of the disease (73%), especially in patients with lung neoplasm, although in this case it has very low specificity, making diagnosis very hard. There are cancer patients who may develop interstitial pneumonia with no fever or cough due to the baseline conditions that interfere with the fever response or on account of therapy. Notably, lung cancer patients are difficult to differentiate from patients with Sars-CoV-2 in terms of clinical symptoms, which cause more problems for clinical work and the physical and mental health of lung cancer patients. It could however be argued that they are still people with a high risk of an inauspicious outcome, because they are often affected by other co-morbid diseases. Thus, just as we said above regarding the possible choice of who should undergo therapy, it would still be more worthwhile to use that swab for someone with a better prognosis, if he/she were to result positive.

We know that infections are the main cause of treatment-related mortality in cancer patients. Whereas bacterial and fungal infections are common and well-known, infections by community acquired respiratory viruses have to date often received less attention.

Hermann et al[5] have recently demonstrated that in patients with active malignant disease (hematological and solid malignancies) who contracted the influenza virus infection (IVI), superinfections occurred in 18% of patients and admission to an intensive care unit was required for 13% of them. Nine % of patients died due to IVI complications.

The study considered the following independent risk factors for death: delayed diagnosis of IVI and bacterial or fungal superinfections, but no underlying malignancies or ongoing immunosuppression. The authors concluded that cancer patients with IVI showed high rates of pneumonia and mortality.



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It is clear that the same considerations cannot be transferred to cancer patients and the SARS-CoV-2 infection, but these data are useful for providing a better understanding of this health emergency.

According to the literature, we know that the presence of comorbidities increases lethality due to SARS-CoV-2, in 10.5%, 7.3%, 6.3%, 6%, and 5.6% respectively in heart, diabetic, chronic bronchitis, hypertensive, and cancer patients.

By translating the data about IVI complications in cancer patients with active disease, as demonstrated by Hermann et al[5], cancer patients that are undergoing medical treatment, such as antiblastic chemotherapy (AC) and/or immunotherapy are more exposed to infectious complications. On this basis, we agree with a recent Chinese study[6] and AIOM (Associazione Italiana di Oncologia Medica) considerations that suggest the evaluation of a tailored clinical approach (email or phone contact) based on the clinical needs of cancer patients. For example, with the aim of reducing the risk of SARS-CoV-2 infection, for the patients themselves and the community, half-yearly and annual follow-ups can be delayed in asymptomatic patients. Different considerations are necessary in cancer patients with active disease and undergoing treatment (AC, immunotherapy, etc.). In fact, in these cases it is fundamental to evaluate the kind of ongoing treatment (neoadjuvant, adjuvant, palliative treatment) so as to offer, at the same time, the best care opportunities.

However, this is a very high-risk group that could infect many doctors and nurses, as well as other patients. Recognized positivity would endanger entire segments of a healthcare system and, therefore, perhaps deserves more attention.

There is also a general topic that must be underlined. Globalization has disrupted the ecology of viruses. People living with immunosuppression, who risk becoming infected simultaneously by different human and even animal viruses and who may therefore be the scene of recombination, have a greater life expectancy and are in exponentially greater numbers than in the past. This will likely lead to new epidemics after HIV, Ebola and the three coronaviruses. It is an aspect that has not yet been adequately discussed but which leads us to think that people with low immune response should be the ones to focus on for an early diagnosis.

The last aspect concerns the right to have equal access to care in case of disability. This right is enshrined in Article 25 of the United Nations Convention for the Rights of Persons with Disabilities (CRPD), an agreement signed by all European countries and by the European Union itself. If disability leads to a low febrile response, does that person have the same right to have a diagnostic test as someone who has no such disability?

In conclusions, the problems discussed here are not easy to solve, and thus, this editorial does not want to suggest solutions but simply to offer elements for reflection.

**Conflict of interest**

The authors declare no conflict of interest.

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