



## Commentary

## Impact of COVID-19 pandemic on clinical and surgical breast cancer management

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The COVID-19 viral pandemic responsible for the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) disease has dramatically impacted our work worldwide in the management of patients in terms of diagnosis and surgical treatment of cancer – including breast cancer. It has led to a rapid and unprecedented re-organization of surgical units to ensure that those patients with respiratory distress disease received optimal care. From this global situation, we can observe two important consequences that affect clinical practice. In the short term, researchers and related resources have been reassigned to managing the test procedures of COVID-19 patients, and routine research activities have been suspended. Moreover, studies and clinical trials for COVID-19 have become a priority. In addition, travel restrictions have meant that several international conferences, audits, and student training have been cancelled [1]. In the medium to longer term, recruitment delays resulting from the pandemic will negatively affect the early diagnosis of cancer and surgical procedures, with implications that are damaging not only financially, but also in terms of potential diagnosis of more advanced cancers, reducing possibilities of survival and optimal care delivery.

A retrospective multicentric study by Li J. et al. [2], recently published in EClinicalMedicine, clearly demonstrated that the management of breast cancer patients suffered from a lack of care in terms of diagnosis and surgical procedures. They collected data on 8397 breast cancer patients from 97 Chinese cancer centers. In detail, Hubei province recorded the lowest incidence of early breast cancer (5.3%) in comparison to the other provinces (15.3%). Surgical procedures decreased dramatically from 16.4% (December 2019) to 2.6% (February 2020), and there was also a delay in timelines from surgery to adjuvant therapy.

Lombardy is the region in Italy most affected by the COVID-19 infection, and the COVID-19 cumulative incidence growth rate peaked on 22 March 2020 [3]. During the outset of the disease in February 2020 and throughout March, it became necessary to repurpose the surgical operating areas into intensive care units, and we observed progressive saturation levels of hospital bed occupancy. In the majority of cases, patients with breast cancer were classified as non-urgent [4]. At that time, our breast service at the European Institute of Oncology in Milan, was recognized by the Lombardy Regional Authorities as a “hub” center for breast cancer treatment during the re-organization of the pandemic emergency health system, and as such, provided continuity of care for patients whose treatment could not be delayed. In our cancer center, similarly to the Hubei province, we recorded a reduction of 87% in breast surgery outpatient clinical activity, with only 274 accesses compared to 2020 accesses in 2019 (an 84% reduction of extra-regional patients and a 42% reduction of patients from Lombardy). However, an increased number of patients (about 20%) from Lombardy was observed in comparison to the same period of 2019, because patients already scheduled for surgery in other breast services were transferred to our cancer center [5]. An international group of clinical experts described recently specific recommendations for early breast cancer management during this pandemic [6].

We cannot forget also the psychological impact of delayed cancer diagnosis due to the COVID-19 pandemic. When physical, psychological, social, and spiritual health of patients are dealt with in a constructive manner, cancer survivorship is seen as a continuum that begins with a state of illness and goes to a state of health. Consequently, the disease begins a meaningful aspect of health [7,8]. This aspect could be different after this pandemic, and cancer survivorship may be delayed in reaching this state of health (or never reach it).

At the time of writing, the spread of the COVID-19 pandemic is decreasing, and this decrease appears to be well under way in Italy, as well as in its Lombardy region. However, we are still observing a low number of new early diagnoses of breast cancer. These data are worrying; we could expect an increased number of new breast cancer cases after the end of the pandemic and a greater number of more advanced breast cancer cases, probably also inoperable.

COVID-19 has had an immense and negative effect on cancer treatment and research. In the very near future, we should expect a new health emergency for the management of these cancer patients.

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## Declaration of Interests

The authors have nothing to declare.

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