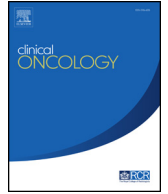




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter

Clinical Outcome of Breast Cancer Patients on Chemotherapy during the COVID-19 Pandemic in South Korea



Madam — South Korea reported the highest number of patients with coronavirus disease 2019 (COVID-19) outside China between 20 February and 9 March 2020, primarily in Daegu city [1]. At that time, there were no guidelines for the treatment of cancer patients during the pandemic. Between 18 February and 30 April 2020, 2295 breast cancer patients visited our regional cancer centres. Of these, 569 (24.8%) patients received systemic treatment, including cytotoxic chemotherapy ($n = 230$, 40.4%), targeted therapies ($n = 23$, 4.0%) and hormonal therapy ($n = 316$, 55.5%) (Table 1). In total, 229 (9.9%) patients were tested for COVID-19. All were negative except for two patients undergoing adjuvant trastuzumab treatment. They both showed a mild COVID-19 disease course and completed the planned schedule. Other than those two patients, we found no significant effect on increasing infection risk. Considering the prognosis of breast cancer patients, our cancer centre focused on personal hygiene and patient education to reduce the risk of COVID-19 infection rather than changing the treatment strategy. Notwithstanding, we did not find an increased risk of infection in combination with active anticancer treatment, including cytotoxic chemotherapy, even during the pandemic in Daegu, Korea. With our institutional experience, an effective way to protect cancer patients from COVID-19 has been suggested [2,3].

- Routine screening for COVID-19 when the patients are hospitalised or before a major surgical procedure (Figure 1).
- A screening facility for COVID-19 in a separate building to the main hospital, including a drive-through screening centre
- Close co-operation with governmental and regional Centers for Disease Control and Prevention.

Based on our experience in treating breast cancer patients in a pandemic region, we recommend that breast

cancer patients can undergo their planned treatment with minimal impact of COVID-19 where there are active hygiene and institutional measures against COVID-19.

Table 1

Breast cancer patient characteristics (total, $n = 569$)

Characteristics	n (%)
Age (years)	
≤40	48 (8.4)
40–50	158 (27.8)
50–60	211 (37.1)
60–70	100 (17.6)
>70	52 (9.1)
Gender	
Female	566 (99.5)
Male	3 (0.5)
ECOG performance status	
0 or 1	399 (70.1)
2	120 (21.1)
Unknown	50 (8.8)
Stage (AJCC eighth edition), anatomic	
I	168 (29.5)
IIA/B	209 (36.7)
IIIA/B/C	87 (15.3)
IV	105 (18.5)
Type of anticancer therapy	
Cytotoxic chemotherapy	230 (40.4)
Docetaxel/paclitaxel	109 (19.1)
Adriamycin	45 (7.9)
Gemcitabine	29 (5.1)
Vinorelbine	8 (1.4)
CMF	19 (3.3)
Eribulin	8 (1.4)
Clinical trial	12 (2.0)
Non-cytotoxic therapy	339 (59.6)
Endocrine therapy	316 (55.5)
Palbociclib with letrozole	7 (1.2)
Targeted therapy including trastuzumab	23 (4.0)

AJCC, American Joint Committee on Cancer; CMF, Cyclophosphamide, Methotrexate, Fluorouracil.

ECOG, Eastern Cooperative Oncology Group [1–3].

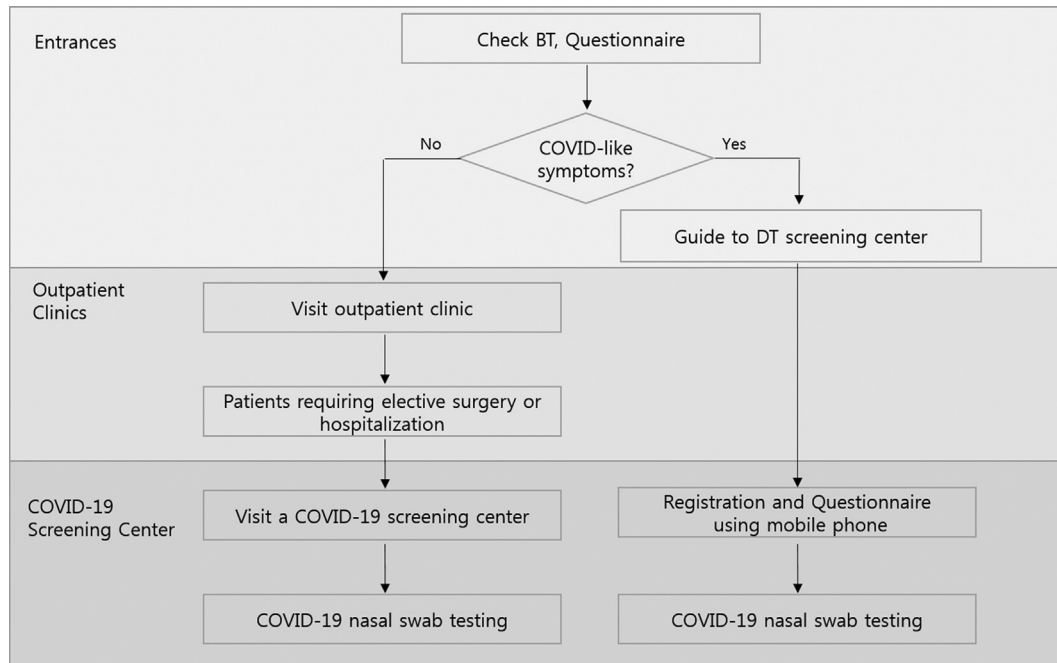


Fig 1. Patient care policy during the coronavirus disease 2019 (COVID-19) pandemic in our cancer centre. The processes Kyungpook National University Chilgok Hospital have in place to keep our cancer patients safe from COVID-19 while receiving anticancer treatment. BT, body temperature; DT, drive-through.

Conflict of interest

The authors declare no conflict of interest.

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