# Cancer in the context of COVID-19: Summary of emerging evidence (4)

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The CRI presents a selection of emerging research articles and clinical practice guidelines related to cancer and COVID-19, with a summary of their key findings/recommendations (links to the articles are embedded as hyperlinks in the titles). This is the fourth of our weekly compilation, which we plan to update and disseminate as the pandemic evolves globally and nationally.

This week, we highlight the latest research related to oncology services in COVID-19 outbreak settings, some of which had been shared in the past week via the **CRI Twitter page (@UctCri)**. We hope that insights from these pieces of evidence will help guide how we rethink cancer prevention, treatment and care in the context of the ongoing pandemic, in view of its unprecedented implications for patients, healthcare providers and the community in general. We are keen to include research and guidelines from African settings and will profile these as they become available. Previous weeks' editions can be found on the **CRI website**.

**Vanderpuye et al. Preparedness for COVID-19 in the oncology community in Africa. Lancet Oncology. April 2020. DOI:https://doi.org/10.1016/S1470-2045(20)30220-5**

**Country context:** Regional (Africa)

This paper reviews the COVID-19 pandemic preparedness of oncology services in the African region. It notes that oncologists in Africa are often not empowered to ensure that the governments are attentive to the special circumstances for cancer care in this crisis. The authors also expressed concern about the situation in which oncology departments in the region have had to rely on COVID-19 cancer care guidelines from high-income countries, which may not be contextually practical in resource limited settings. They make a case for oncologists on the continent to make critical decisions to ensure continuity of timely, life-saving cancer treatments during the pandemic. Because patients with cancer often present with advanced disease in Africa, the authors note that delaying treatment will result in progression and clinical deterioration as well as higher out-of-pocket expenditure for treatments, leading to further psychological distress.

**Jazieh et al. Managing Oncology Services During a Major Coronavirus Outbreak: Lessons From the Saudi Arabia Experience. JCO Global Oncology 2020 :6, 518-524**

**Country Context:** Saudi Arabia

This article describes the approach used to manage patients with cancer during a large-scale Middle East respiratory syndrome–coronavirus (MERS-CoV) hospital outbreak in Saudi Arabia

in 2015, to ensure continuity of care and minimize harm from treatment interruption. The crisis management plan is summarized in the table below:

TABLE 1. Crisis Management Plan for Middle East Respiratory Syndrome-Coronavirus Outbreak

| Component | Objectives | Actions |
|---|---|---|
| Leadership and communications | To facilitate communication among all stakeholders in managing oncology services and the health care system | Frequent meetings |
| | To oversee the management of oncology clinical and administrative services | Frequent updates by different avenues, such as e-mail and social media |
| | | Making collaborative decisions about patient management and administrative issues |
| Patient management | To prevent new infection | Screen all patients before entering the clinic area |
| | To manage currently infected patients | Schedule outpatients based on priority criteria |
| | To provide timely cancer care for the whole patient population | Arrange with other facilities to accept patients who require inpatient admission |
| | | Isolate patients with suspected infection until they are cleared |
| Staff management | To minimize staff exposure to infection | Frequent transparent effective communication |
| | To educate staff about the crisis | Education and training |
| | To streamline physician work processes | N95 mask fitting |
| | To clarify the roles and responsibilities | Clear delineation of job responsibilities |
| | To minimize anxiety and stress | Minimize attendance of nonclinical staff |
| | | Prompt identification of suspected infection among staff and application of appropriate isolation |
| Infection control management | To prevent further infection of the virus among patients and staff | Implement the appropriate policies and procedures |
| | | Monitor adherence to policies and procedures |
| | | Educate staff and the public about the disease and protective measures |
| | | Identify patients with suspected infection early with appropriate intervention |
| Recovery plan | To resume patient care to baseline level and improve other organizational functions | Resume care of patients based on priority |
| | To apply lessons learned to avoid or at least be better prepared for similar crises | Integrate all best-practice approaches into work processes to prevent further transmission |

The approach may serve as a template than can be contextually adapted to manage oncology services during similar crises that pose serious risks for continuity of services, patients and staff.

**Lewis MA. Between Scylla and Charybdis — Oncologic Decision Making in the Time of Covid-19. NEJM. April 2020. DOI: 10.1056/NEJMp2006588**

**Country context:** USA

In this perspective article, an oncologist draws on personal experience to highlight the complexities of triaging cancer patients for chemotherapy in the time of COVID-19. Among other things, the author stresses the importance of shared decision making between patients and care providers, in which patients' decisions are based on ethically sound and clear understanding of benefits and potential risks of chemotherapy in COVID-19 outbreak settings.

**Souadka et al. Preparing African anticancer centres in the COVID-19 outbreak. April 2020. Lancet Oncology. https://doi.org/10.1016/S1470-2045(20)30216-3**

**Country context:** Regional (Africa)

This editorial letter highlights the challenges and uncertainties that cancer care faces in Africa during the COVID-19 pandemic. Health-care providers might need to make the difficult ethical shift from individual cancer patient management to public health priorities, imposed by these exceptional circumstances. Anticancer resources, especially intensive-care unit beds and

human resources, may need to be repurposed in the fight against the COVID-19 pandemic and cancer treatments may have to be postponed.

The authors proffer some ways of navigating these challenges. Notably, they urge anticancer centres to embrace the uncertainties and proactively prepare for the worst of the COVID-19 pandemic, which may not have come in African countries. They recommend the following preparedness measures:

- Oncology departments should prepare at the early stages of the pandemic to receive suspected or confirmed patients with COVID-19 and cancer, and adopt measures to protect patients only with cancer during treatment who have a higher risk of severe events or death (× 3·5) than the general population.
- Healthcare workers need to be protected, because, unlike ventilators, they cannot be urgently manufactured or run at 100% capacity for long periods.
- All major elective surgeries for stable cancers should be postponed to leave intensive-care unit beds free during the peak of the epidemic.
- Oncological waiting strategies and a prioritisation of curative and adjuvant treatments over palliative ones to limit the impact on vulnerable patients.
- Specialists in cancer centres should be prepared to manage patients with COVID-19 but not cancer in case the national health-care system is overwhelmed.

**He et al. Strategic plan for management of COVID-19 in paediatric haematology and oncology departments. Apr 2020. Lancet Haematology. DOI:https://doi.org/10.1016/S2352-3026(20)30104-6**

**Country context:** China

This paper proposes a strategic plan for the management of COVID-19 outbreaks in paediatric haematology and oncology departments, focusing primarily on viral infection prevention and control strategies. It recommends that medical staff should be kept up to date with the latest information about COVID-19 and do regular assessments to look for cases of COVID-19 in their departments. It also recommends that a COVID-19 expert committee should be established in the hospital to make medical decisions in multidisciplinary consultation meetings. Committee members should include: respiratory physicians, infectious disease physicians, haematology and oncology physicians, radiologists, pharmacists, and medical staff from hospital infection control departments. To minimise cross-infection between all people within the hospital, regional management strategies should be adopted. Personnel within the hospital should not enter other medical areas without permission.

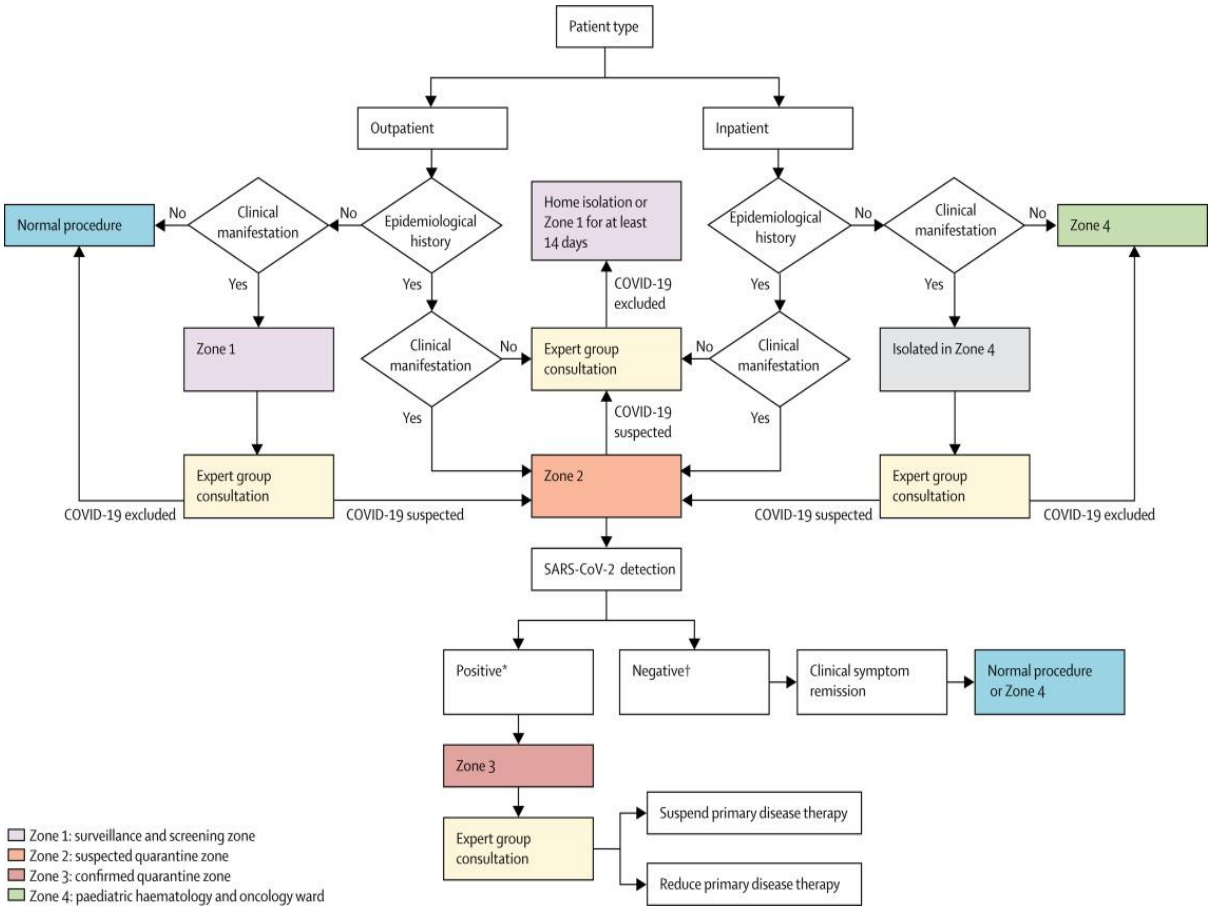
To reduce the incidence of cross-infection, and to screen patients who are potentially infected with COVID-19, the authors recommend four zones be created within each hospital:

- Zone 1 (surveillance and screening zone) is for patients who are deemed to need surveillance by expert consultation because they could potentially be infected with SARS-CoV-2; each patient should be isolated in a single room.
- Zone 2 (suspected quarantine zone) is for suspected cases of COVID-19; each patient should be isolated in a single room.
- Zone 3 (COVID-19 confirmed quarantine zone) is used to treat patients with confirmed COVID-19. This area might be a challenge to set up if the hospital does not have the appropriate conditions to treat confirmed patients, in which case patients can be transferred to specialised hospitals with capacity for treatment.

- Zone 4 (haematological oncology ward) is used for the treatment of patients with haematological malignancies but who do not have COVID-19.

All zones must provide personal protective equipment (PPE), such as protective clothing, helmets, goggles, or other garments and equipment. The workplace should provide written instructions about when to wear PPE and which type to use. Before leaving the work area, people should remove all PPE and put it in special waste containers for subsequent decontamination by the biosafety facility.

The broader strategic plan is described in the figure below:




**Weinkove et al. Managing haematology and oncology patients during the COVID-19 pandemic: interim consensus guidance. Medical Journal of Australia. March 2020**

**Country context:** Australia

This interim consensus guidance summarises the clinical presentation and diagnosis of COVID-19 disease, while identifying factors to consider when managing patients with cancer, and discusses risk factors for severe COVID-19 disease. Possible actions for clinicians managing patients with cancer are suggested, and are phased according to the presence or absence of community transmission and disruption to normal healthcare provision. Overall, clinicians are recommended to reassess the risks and benefits of cancer therapies, balancing the risks of tumour progression against those of infections or other treatment complications on a case-by-case basis, while ensuring measures are proportionate, equitable and transparent. Key

communication points for patients are proposed, and the potential impacts of COVID-19 disease on transfusion practice, stem cell transplantation and cellular therapies, radiation oncology, clinical trial participation and provision of palliative care are discussed.

Specifically, clinicians should be aware of the following considerations for patients with cancer who develop symptoms of COVID-19 disease:

1. Among immunocompromised patients, the differential diagnosis of fever and respiratory symptoms is broad, and clinicians should be alert to the possibility of alternative or secondary infections, including bacterial, fungal or other viral infections. Early recognition and treatment of bacterial sepsis remains vital, particularly in severely neutropenic patients;
2. Pneumonitis can occur following certain cytotoxic chemotherapies, immune checkpoint blockade or radiotherapy, and shares clinical and radiological features with COVID-19 disease. Corticosteroids should be considered if therapy-related pneumonitis is suspected, acknowledging that a detrimental impact of corticosteroids on the risk of severe COVID-19 disease has not been excluded;
3. Temporary discontinuation of cancer therapies will be warranted for some patients with cancer who develop symptoms of COVID-19 disease, to minimise treatment-related immunosuppression or to reduce the risk of drug interactions. This should be undertaken in discussion with an oncologist or haematologist familiar with management of the malignancy, who can advise on the benefits and risks of pausing therapy.

### Desai et al. COVID-19 and Cancer: Lessons From a Pooled Meta-Analysis. JCO Global Oncology 2020: 6, 557-559

**Country Context:** Global

This meta-analysis pooled estimates of cancer prevalence among patients with COVID-19 from 11 studies. It found that the overall prevalence of cancer in patients with COVID-19 in these studies was 2.0%. It adds to a growing body of evidence on the high risk of COVID-19 among cancer patients and survivors.

**Sites:**

### The Union for International Cancer Control's (UICC). Cancer and coronavirus resources, 2020

**Country context:** Global

This webpage provides a repository of resources specific to COVID-19 for cancer patients and their care givers. It features resources from cancer control programmes across the world, as well as information for specific cancer types such breast and lung cancers.

### Desai et al. COVID-19, Cancer, and the Need for Clarity. April 2020

**Country context:** USA

This commentary explores the many unclear aspects of the relationship between cancer and COVID-19 and proposes approaches to closing the evidence gap, including the crowdsourcing of evidence from clinicians.