Title: Starting or Resuming Cancer Therapy after COVID-19 Infection

Question: What is the optimal strategy for assessing patients who were infected with COVID-19 for suitability for starting or resuming cancer treatment?
   a. What criteria can be used to assess both clinical suitability for proceeding with therapy in the setting of recent infection, as well as infection control criteria to reduce risk of transmission of COVID-19 in cancer care environments?
   b. What criteria should be used to ensure that patients are well enough to have cancer treatment after COVID-19 infection?

Context:
   • Delivering cancer treatment during the COVID-19 pandemic is challenging given that cancer patients are at increased risk for serious complications from COVID-19.
   • Cancer patients are often immunocompromised due to their underlying condition and its therapies; therefore they are at increased risk for serious complications from COVID-19 infection and transmission.
   • Decisions for clearing cancer patients infected by COVID-19 so they can safely initiate (or re-initiate) cancer treatment are critical since it is important to reduce any risk that patients may be infectious to others, and because of concerns of increased risk of therapy in the setting of recent COVID-19 infection as it is unclear if relapse of infection may occur.

Recommendations: – Provided by: AHS COVID-19 Scientific Advisory Group

1. Cancer patients with COVID-19 should defer non-urgent cancer treatment until at least 14 days after all virus symptoms have resolved and it’s confirmed that potential viral shedding appears to have stopped, evidenced by 2 negative nasopharyngeal swab tests performed 7 days apart after resolution of symptoms. Even then, it may be potentially beneficial to further delay non-urgent treatment for cancer patients, due to limited health resources during the pandemic to both delivery therapy and provide support if complications arise. For cancer patients requiring urgent cancer treatment, it’s recommended that treatment be deferred until at least COVID-19 symptoms have resolved and the virus is not detected on 1 nasopharyngeal swab test. To ensure patient and healthcare worker safety, Alberta Health Services’ Infection Prevention and Control isolation recommendations for immunocompromised patients should be followed when such patients receive urgent cancer treatment. Droplet and contact precautions are required until these patients are free of COVID symptoms, are at least 14 days from the onset of symptoms, and have had 2 consecutive negative COVID-19 RT-PCR swab tests performed at least 7 days apart.

2. Reasonable time ranges of deferral of cancer therapeutics to allow convalescence and optimal healthcare supports are suggested as follows: >3 months may be acceptable for cancers with low risk progression, and 1-3 months
for cancers with immediate risk of progression. There are no deferrals for cancer therapeutics recommended in patients with high risk of progression.

3. Patients should fulfill standard eligibility criteria for the specific cancer treatment (e.g., adequate performance status and organ function), and provide informed consent considering relative risks and benefits of the specific treatment [2].

Summary of evidence:

- Cancer patients are at increased risk for serious complications related to a COVID-19 infection due to their cancer therapy and/or underlying disease.
- Cancer patients with COVID-19 who have undergone or are undergoing cancer treatment (specifically within a month of infection) might be at increased risk of worse outcomes from a COVID-19 infection.
- There is no evidence available to guide assessing recovery from COVID-19 for cancer patients. The recommendations presented in this review are made primarily based on the increased risk of poor outcomes in patients with cancer who have been infected with COVID-19.
- For cancer patients with COVID-19 it is recommended that cancer treatment is deferred until symptoms of COVID-19 have resolved and the virus is no longer detectable by RT-PCR, unless the cancer is rapidly progressing and the risk-benefit assessment favours proceeding with cancer treatment. There is a lack of data overall on the correlation between RT-PCR positivity and the presence of replicating or infectious virus in immunocompetent and immunocompromised hosts. Given that, there are a variety of symptom based and/or swab based strategies in determining infection control strategies in different settings, for example, assessment of HCW return to work may be based on time elapsed since symptom onset rather than swab results.
- As a precaution pending further data, test-based strategies for discharging COVID-19 patients have been recommended to guide therapy decisions as well as infection control considerations. AHS guidelines recommend that after symptom resolution, at least 2 negative approved RT-PCR specimens collected at least 1 week apart from all previously positive sites are needed before discontinuing precaution.
- There are no accepted guidelines to ensure safe initiation (or re-initiation) of cancer treatment after a COVID-19 infection. Expert consensus suggests reasonable durations of delay are >3 months for cancers with low risk progression, 3 months for cancers with intermediate risk of progression, and no delay for cancer with high risk of progression depending on the patient context and prognosis.