BACKGROUND INFORMATION SARS-CoV-2 and COVID-19

What are SARS-CoV-2 and COVID-19?
Coronaviruses are a family of viruses that can cause illness from the common cold to more severe diseases. There have been two prior outbreaks of coronaviruses in the last 20 years. First, the Severe Acute Respiratory Syndrome CoronaVirus (SARS-CoV) in 2002-2003 and second, the Middle Eastern Respiratory Syndrome CoronaVirus (MERS-CoV) in 2012. Some of what we learned about transmission and behavior of coronaviruses comes from the experiences with these viral outbreaks. Both of these outbreaks were epidemics but not pandemics and had higher mortality rates than is being seen with the current coronavirus outbreak, which may in fact be why they were contained more easily. The current novel strain of coronavirus named SARS-CoV-2 was first detected in Wuhan, China in December 2019, and when the infection causes symptoms, it is termed the CoronaVirus Disease, 2019 or COVID-19. On March 11, 2020, the World Health Organization classified COVID-19 as a pandemic, meaning that it is worldwide.

How is SARS-CoV-2 transmitted? What is the relationship to COVID-19?
SARS-CoV-2 is primarily transmitted via respiratory droplets produced when an infected person sneezes or coughs and can infect people in close contact (within 6 feet). Touching contaminated surfaces (like shared towels or hard surfaces in bathrooms or other shared spaces) before touching your eyes/nose/mouth might also lead to infection. There is emerging information that intact virus is detectable in stool and a fecal-oral route of transmission is postulated. Most people infected with the virus SARS-Co-2 do not develop the disease called COVID-19, but of those who develop COVID-19, many may require hospitalization and care in an intensive care unit.

How does COVID-19 compare with seasonal influenza?
Both are infectious respiratory illnesses that present with symptoms such as fever, cough, and shortness of breath. Both can lead to serious illness especially in older people and those with prior medical conditions. One difference is that you can get vaccinated for the flu, but there is not a vaccine available yet for COVID-19. There are other differences that are important, too, such as the infectivity of SARS-CoV-2 appears higher than influenza viruses, the number of young people with disease requiring hospitalization is higher with COVID-19, and the mortality rate of COVID-19, while not fully known, appears to be higher than that with influenza as well.
What does this mean for IBD patients?
IBD is a condition of an overactive immune system and is often treated with immune modification or immune suppression to achieve a goal of symptom control and disease modification. IBD patients taking some medications may be more susceptible to infection, but this depends on the type of medications that they are receiving.

To date, there are limited data about patients with IBD who have COVID-19.

What is IOIBD doing to help during the COVID-19 pandemic?
From the early time of the SARS-CoV-2 outbreak, members of IOIBD (and many other healthcare workers involved in the care of IBD patients) have been monitoring the situation and providing our patients with our best advice to stay healthy, both from their Crohn’s disease or ulcerative colitis as well as from the COVID-19 pandemic. While this advice from individual IBD experts is essential, we also recognize that it is of great importance to talk to and learn from one another in order to help our patients and our colleagues around the world.

Such collaboration has resulted in the initial information about SARS-CoV-2 and COVID-19 posted to the IOIBD.org website on 4 March 2020 and an update on 11 March 2020. On 20 March 2020, IOIBD hosted an international webinar of its membership and additional invited expert scientists and physicians to discuss the situation and develop best practices and recommendations to our patients and to our colleagues. In preparation for the 20 March call, participants were invited to respond to statements related to the risk of infection and management of IBD therapies during the current COVID-19 pandemic. The statements covered a variety of clinical scenarios (IBD patients who are not infected with SARS-CoV-2, IBD patients infected with SARS-CoV-2 but who did not develop COVID-19, and IBD patients who develop COVID-19).

During the webinar the group heard from colleagues in different parts of the world and experts who provided information about viral transmission and what is known about infections and available IBD therapies. In addition, the results from the first round of voting were reviewed, and we focused on statements in which there was disagreement or uncertainty.

Subsequent to the 20 March call as per RAND panel protocol, a second round of voting with modified statements was sent to the participants. This post (on 26 March 2020) is a summary report of the results from this final round of voting.
What is a RAND panel?
The RAND/UCLA approach was developed to collect expert opinions in the setting of uncertainty when having to make decisions about complex situations (1). We used this method to address the appropriateness of specific medical interventions or medical decisions related to the COVID-19 pandemic. A series of statements are provided and the respondents rate each of the patient scenarios on a scale of 1 to 9, such that statements rated 1-3 are considered “inappropriate,” 4-6 are “uncertain,” and 7-9 are “appropriate.”

The summary of the IOIBD-COVID-19 RAND panel is provided here. The full data are being submitted for publication in a peer-reviewed journal and will be available soon.


Due to the nature of this rapidly evolving situation, we acknowledge that as we learn more, our understanding of COVID-19 and IBD is likely to evolve and change, and these statements will be modified. These statements are meant to inform clinical decision making and should not replace individualized management and discussions with a patient’s healthcare team.

Rand panel statements used are stated in a separate document.