

Pediatric IBD and COVID-19

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Family Education Day 2021

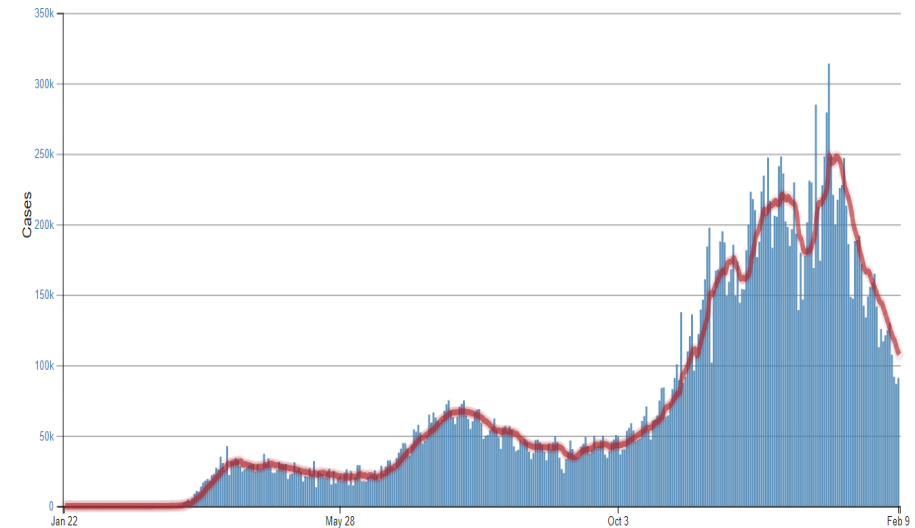


Outline

- Introduction to COVID-19
- COVID-19 and IBD
 - Risk of COVID-19
 - Medication management and COVID-19
- COVID-19 and CHOP IBD Center
- Vaccine data
 - CHOP IBD Center recommendations

COVID-19 Global Pandemic

- COVID-19 was first reported in December 2019 in China and has spread throughout the world
- Over 100 million cases diagnosed worldwide
 - Over 2 million deaths worldwide
- Over 26 million cases diagnosed in the US
 - Over 400,000 deaths in the US

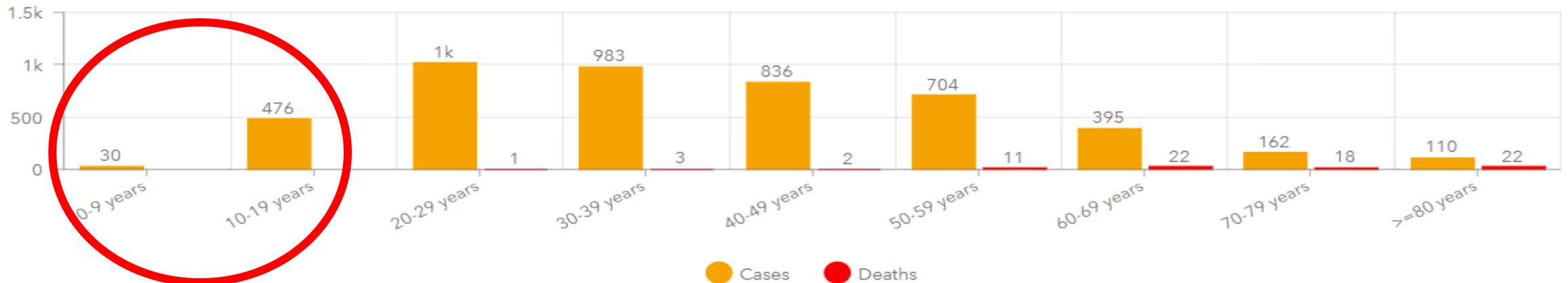
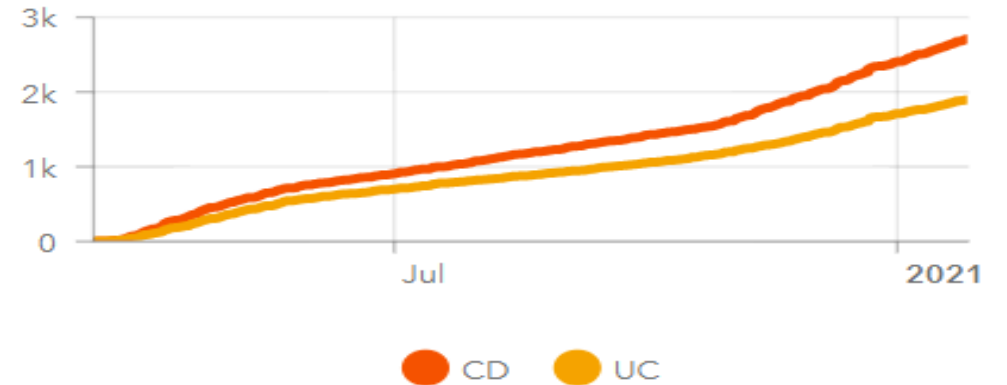


SECURE IBD Database



- 5,081 cases reported
 - 532 (10%) children and adolescents
- 821 hospitalizations
 - 25 (3%) children and adolescents
- 81 deaths
 - 0 children and adolescents

Cumulative Cases



Risk of COVID-19 in IBD

- Rate of COVID-19 in IBD patients is similar to the general population
- Risk of severe COVID-19 or death in IBD patients is similar to the general population
- Risk factors for severe COVID-19 in IBD patients
 - Older age (over 60 years old)
 - Greater number of medical problems (1 or more)
 - Active disease
 - Chronic steroid use

COVID-19 and IBD Medications

Medications that *MAY* increase risk

- Chronic steroids
- Azathioprine (Imuran, 6-MP)
- Combination therapy
- 5-ASA (mesalamine)

Medications that *MAY NOT* increase risk

- Remicade (infliximab), Humira (adalimumab)
- Stelara (ustekinumab)
- Entyvio (vedolizumab)

*** If you are diagnosed with COVID-19 let your GI provider know:*

- *Based on the medication you are on and when your next dose is due, your provider may delay the next dose*
- *Recommendations may be changing and our recommendations will reflect this*

COVID-19 and Pediatric IBD

Benign Evolution of SARS-Cov2 Infections in Children With Inflammatory Bowel Disease: Results From Two International Databases

Erica J. Brenner,^{*,a} Bénédicte Pigneur,^{‡,a} Gili Focht,[§] Xian Zhang,^{||}
Ryan C. Ungaro,[¶] Jean-Frederic Colombel,[¶] Dan Turner,^{§,b}
Michael D. Kappelman,^{*,b} and Frank M. Ruemmele^{‡,b}

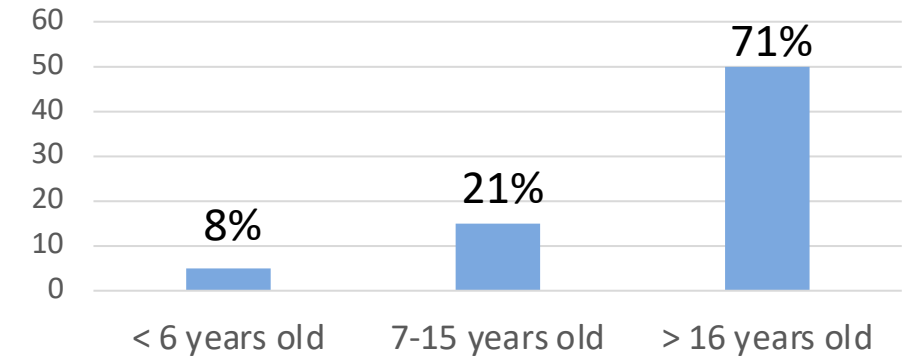
- 209 pediatric IBD patients
 - 14 (7%) hospitalized
 - 2 (1%) mechanical ventilation
 - 0 deaths

COVID-19 and CHOP IBD Center

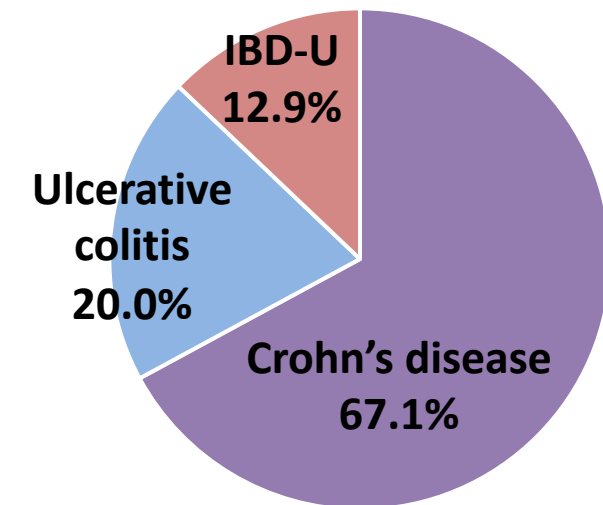
- 70 IBD patients reported

Patient characteristics	Patient # (%) or Median (range)
Sex (males)	39 (55.7%)
Age (years)	18 (1.0-22.0)
Race (Caucasian)	61 (87.2%)
No comorbidities	44 (62.9%)
Age at IBD diagnosis	12.1 (1.2-19.0)
Physician's global assessment	
Quiescent	48 (68.6%)
Mild	19 (27.1%)
Moderate/Severe	3 (4.3%)

Age at COVID-19 Diagnosis

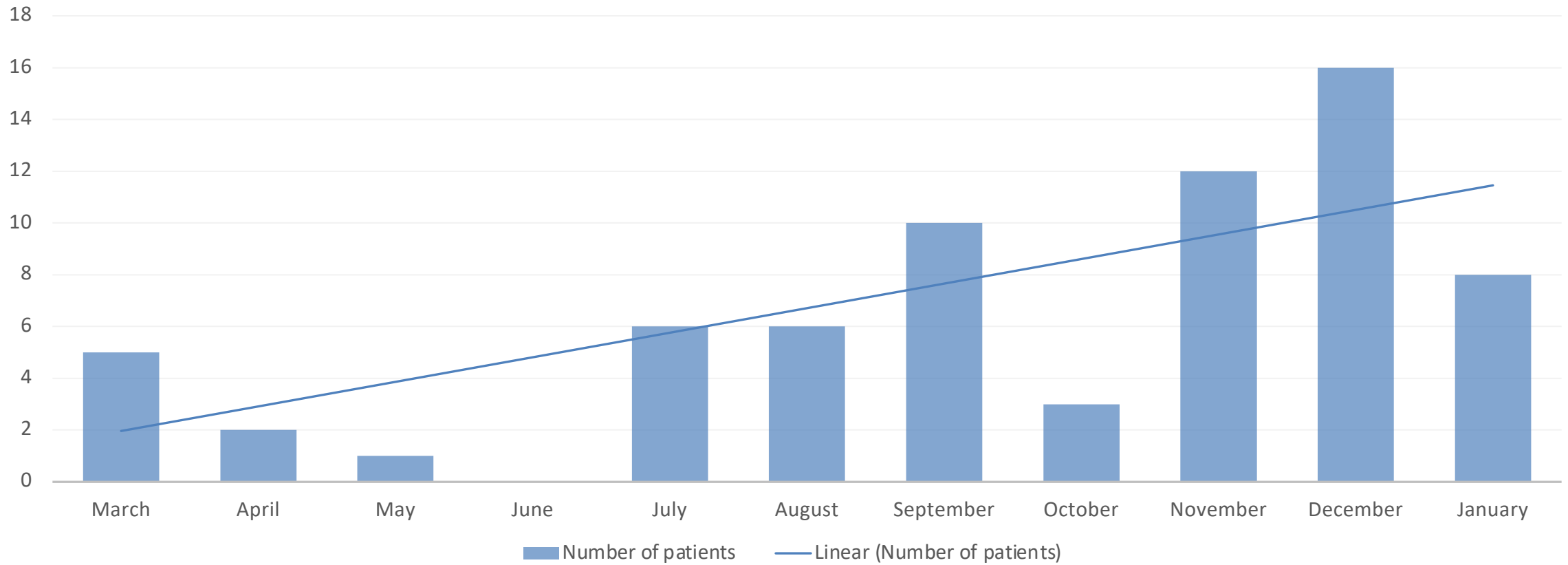


IBD Type



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patients diagnosed with COVID-19 by month



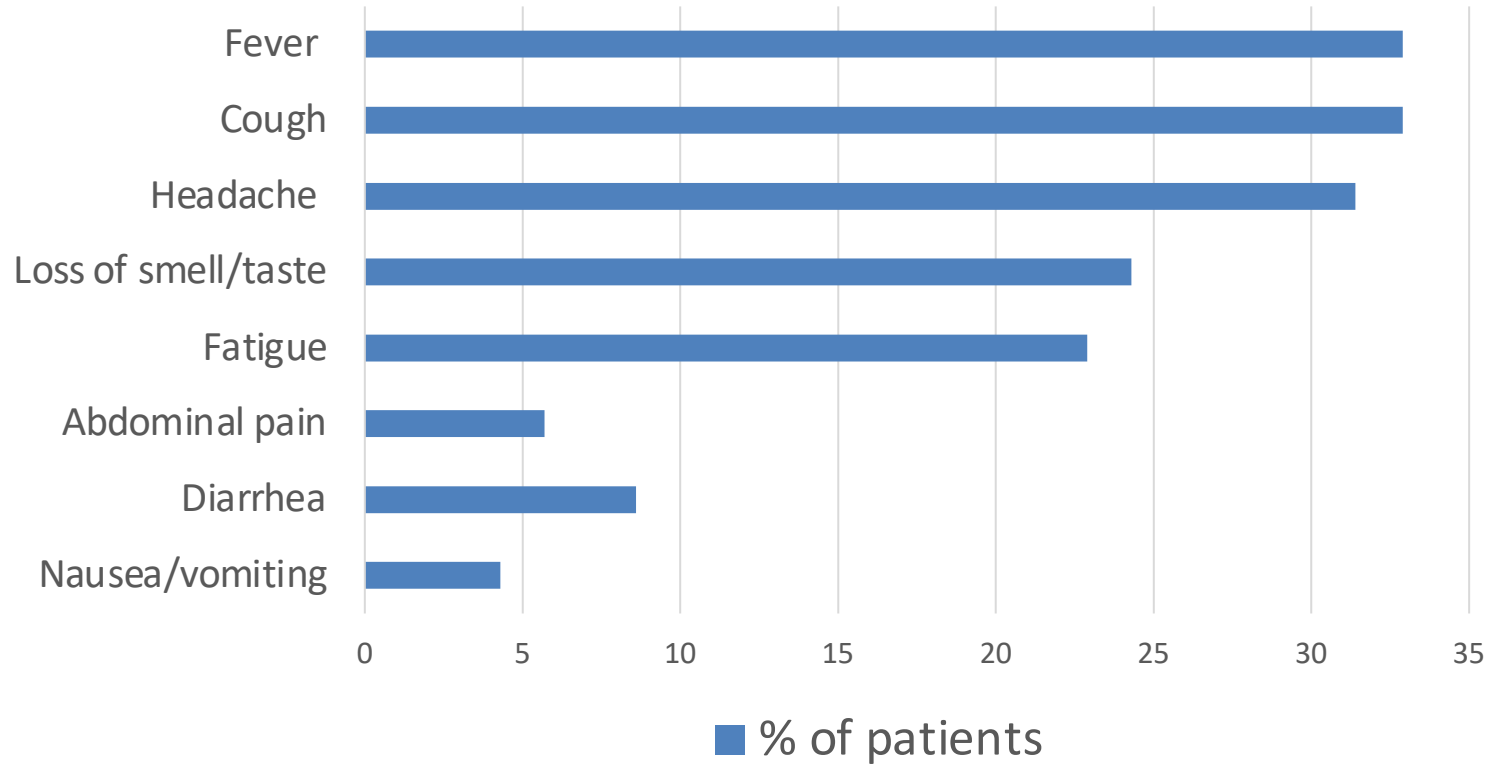
COVID-19 and CHOP IBD Center

Medication name	Number of patients on medication
Remicade (infliximab)	32 (45.7%)
Humira (adalimumab)	17 (24.3%)
Entyvio (vedolizumab)	4 (5.7%)
Stelara (ustekinumab)	4 (5.7%)
Xeljanz (tofacitinib)	3 (4.3%)
5-ASA (i.e. mesalamine)	9 (12.9%)
Oral steroids	5 (7.1%)
Combination therapy (biologic + immunomodulator)	12 (17.1%)

- Medication delay
 - 26 (37.1%) required delay
 - Average delay: 11 days
 - 3 developed flare with delay

COVID-19 and CHOP IBD Center

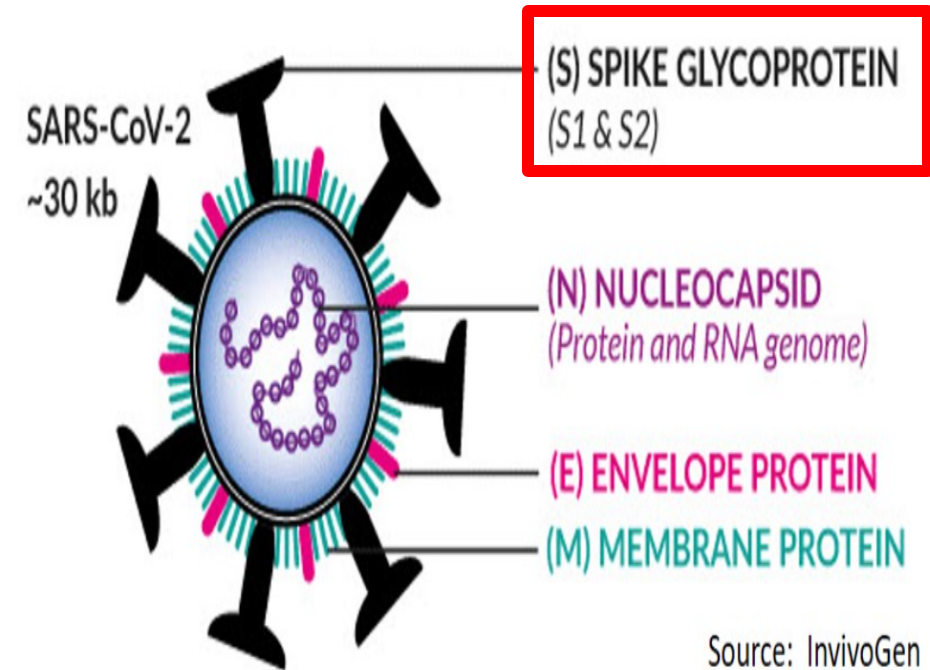
Patient symptoms



- Need for ER or hospitalization
 - 3 (4.3%) seen in ER
 - 1 (1.4%) hospitalized

COVID-19 Vaccine

- COVID-19 vaccines help the body develop protection against COVID-19
- Types of vaccine
 1. mRNA vaccine
 - Pfizer: 2 shots, 21 days apart (≥ 16 years old)
 - Moderna: 2 shots, 28 days apart (≥ 18 years old)
 2. Vector vaccine (Johnson & Johnson, AstraZeneca)
 3. Protein subunit vaccine (Novavax)
- Common side effects:
 - Arm pain, fever, chills, fatigue, headache



COVID-19 Vaccine and Recommendations for IBD Patients

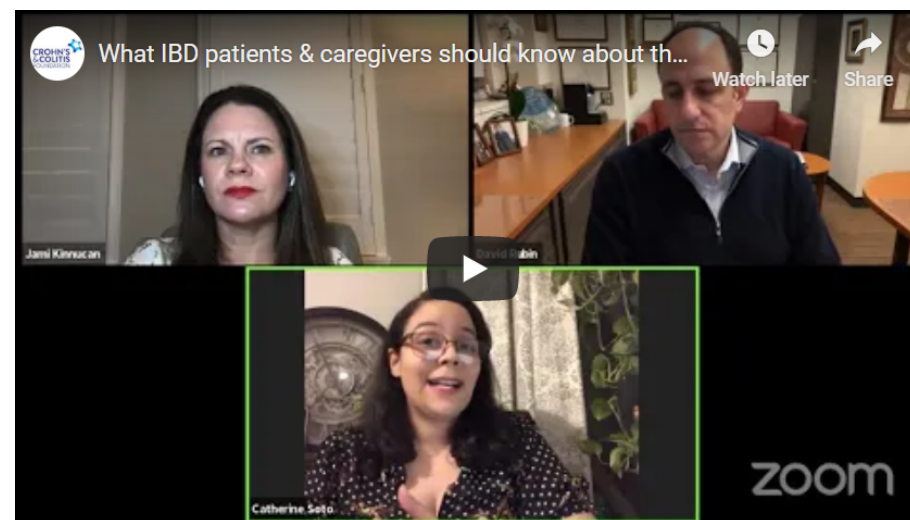
- Patients with IBD should be vaccinated against COVID-19
- The best time for vaccination is at the patient's earliest opportunity to receive the vaccine
- COVID-19 vaccines (mRNA, vector vaccines, inactivated vaccine) are safe to give to IBD patients
- COVID-19 vaccination should not be deferred because a patient is on immune-modifying therapies
- *You should speak with your GI provider for specific questions or concerns*
- *Vaccination does NOT mean you should stop standard precautions*

Take home points

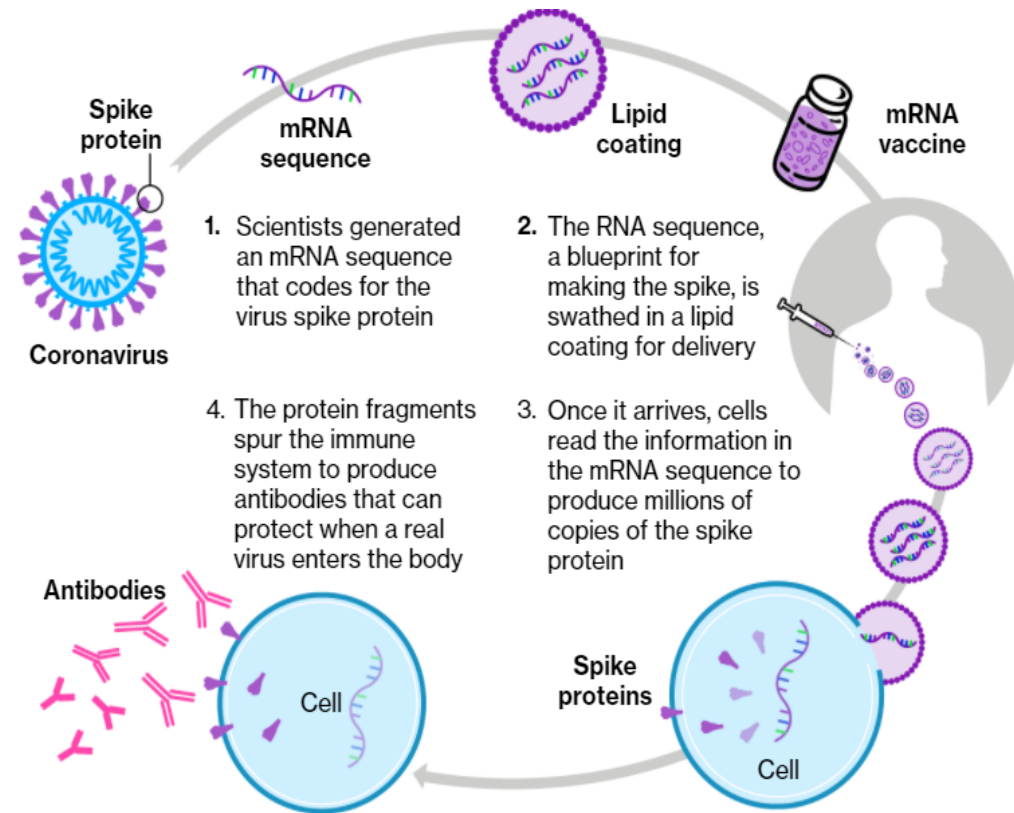
- Risk of COVID-19 in IBD patients is similar to the general population
- Rate in pediatric IBD patients is very low and outcomes are good
- The adult and pediatric IBD community are actively looking at outcomes in our IBD patients
- IBD patients should get the COVID vaccine when available
- *This is a dynamic situation and we are still collecting information, continue to touch base with your GI provider*

Resources on COVID-19 and Vaccination

- <https://www.crohnscolitisfoundation.org/coronavirus>
- <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>



Thank you!



Sources: Pfizer, Bloomberg research