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MEET OUR Speakers



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President, Global Allergy & Airways Patient Platform

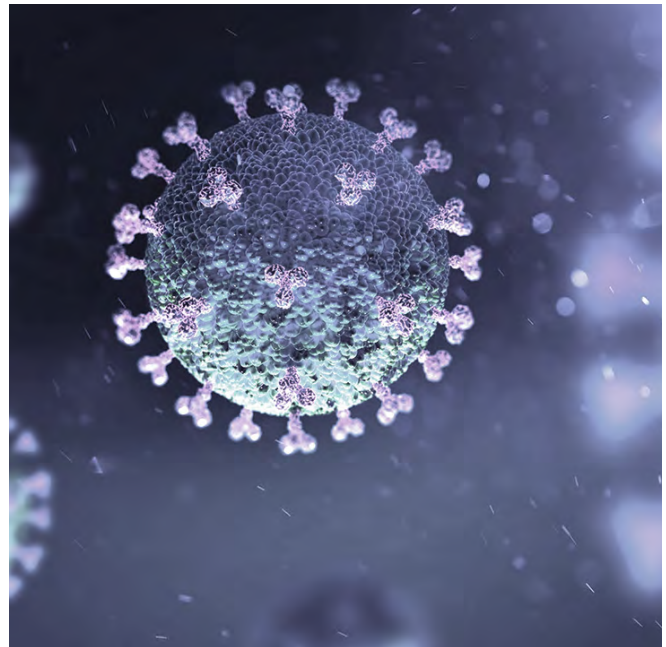
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Today's Program

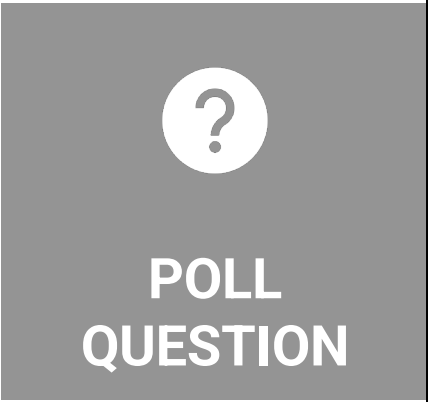

01 | CURRENT STATE OF COVID-19

02 | IMMUNITY ISSUES

03 | MANAGEMENT OPTIONS FOR COVID-19



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**POLL
QUESTION**

We'd like to know who is with us today!

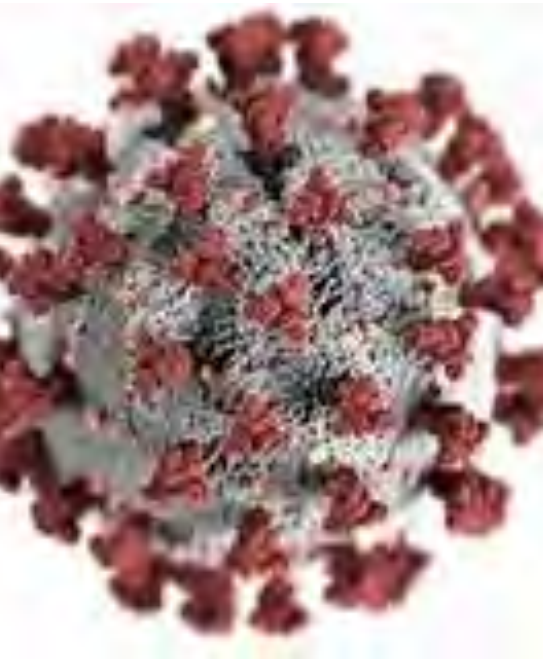
What category best describes you? (we have a limited number of answers or would offer more!)

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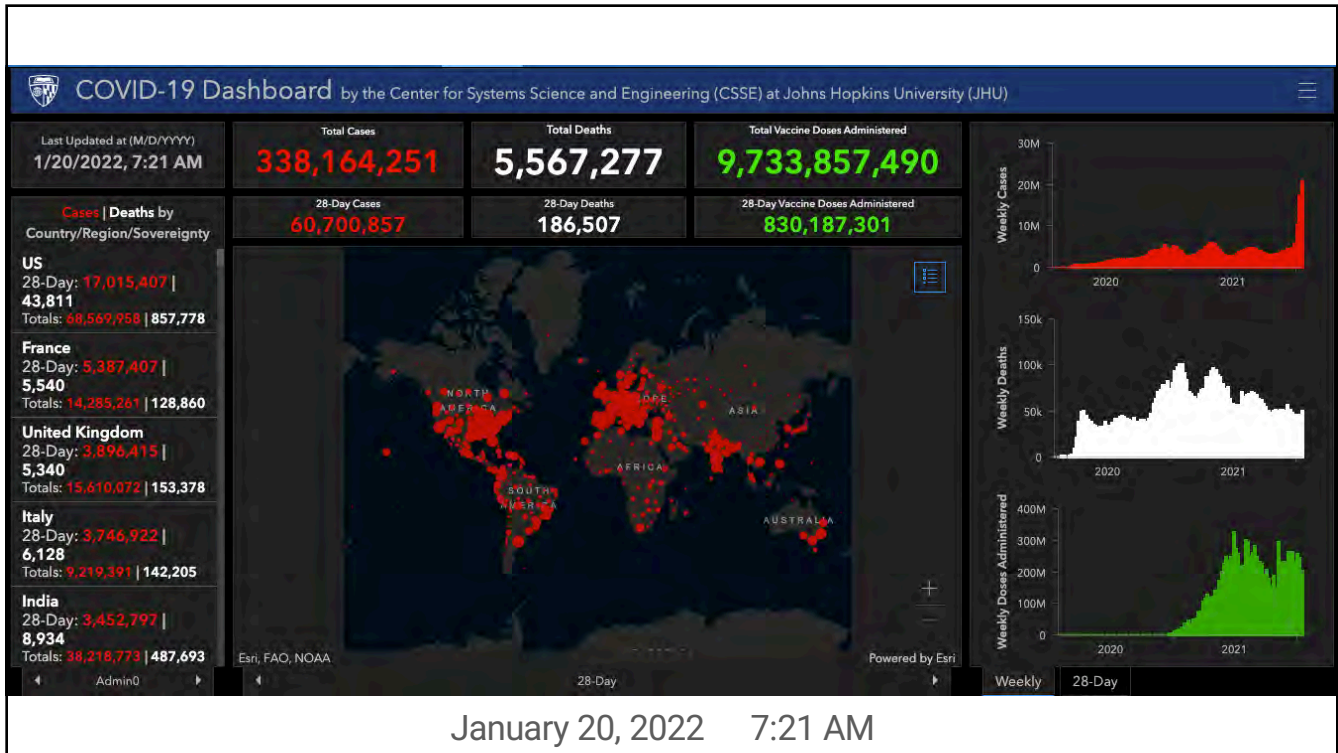


**CURRENT
STATE OF
COVID-19**

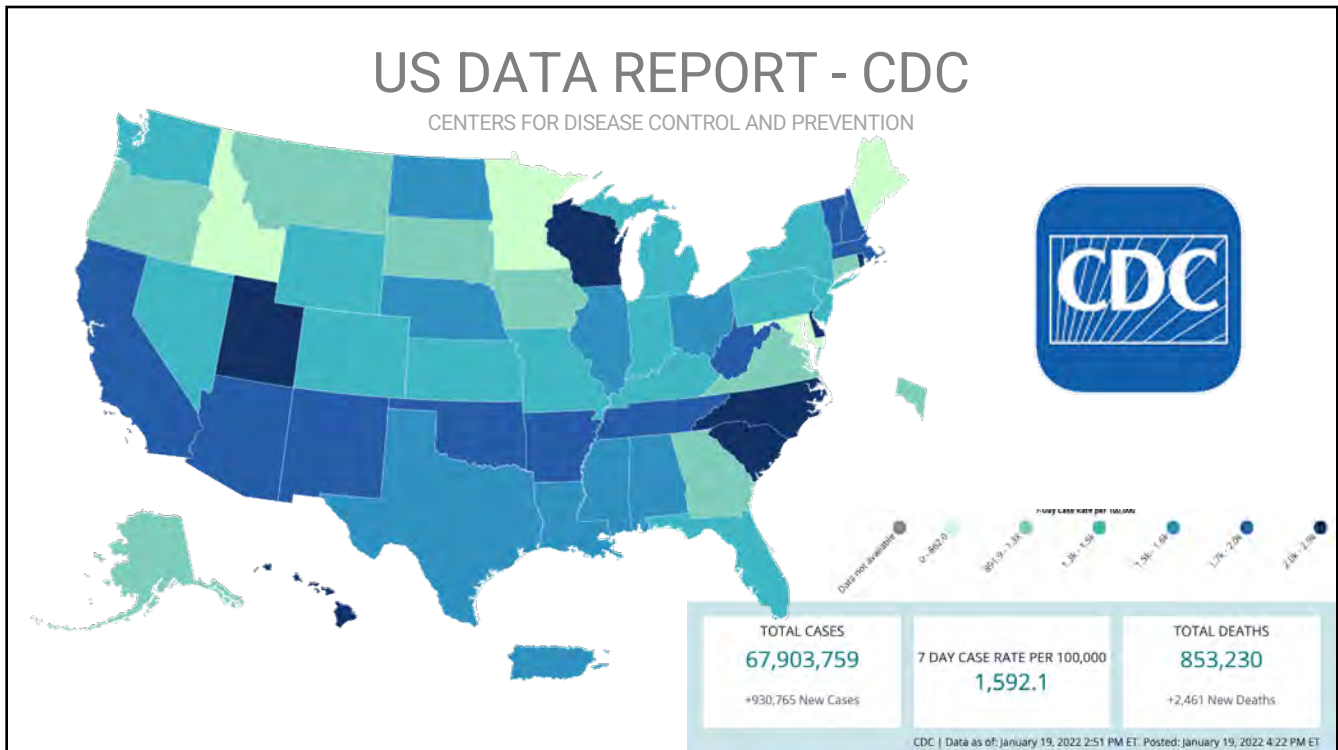
Tonya Winders



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IN THE NEWS

Case rates of Covid-19 have been on the rise as the Omicron variant has spread, but hospitalization numbers appear to be staying relatively low. For vaccinated people, evidence suggests that infection with this variant seems less likely to be severe, epidemiologist and former Detroit Health Department executive director, Dr. Abdul El-Sayed said.

The US Food and Drug Administration authorized Pfizer's Covid-19 vaccine for booster shots in 12- to 15-year-olds. Boosters are now available for everyone 12 and older in the United States.

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IN THE NEWS

Changes in CDC recommendations:

- People with COVID-19 should isolate for 5 days if asymptomatic or symptoms are resolving
- Follow with 5 days of wearing a mask around others

Change motivated by science demonstrating that the majority of SARS-CoV-2 transmission occurs early in the course of illness, generally in the 1-2 days prior to onset of symptoms and the 2-3 days after.

If You Were Exposed to Someone with COVID-19 (Quarantine)

If you:

Have been boosted

OR

Completed the primary series of Pfizer or Moderna vaccine within the last 6 months

OR

Completed the primary series of J&J vaccine within the last 2 months

- Wear a mask around others for 10 days.
- Test on day 5, if possible.

If you develop symptoms get a test and stay home.

If you:

Completed the primary series of Pfizer or Moderna vaccine over 6 months ago and are not boosted

OR

Completed the primary series of J&J over 2 months ago and are not boosted

OR

Are unvaccinated

- Stay home for 5 days. After that continue to wear a mask around others for 5 additional days.
- If you can't quarantine you must wear a mask for 10 days.
- Test on day 5 if possible.

If you develop symptoms get a test and stay home

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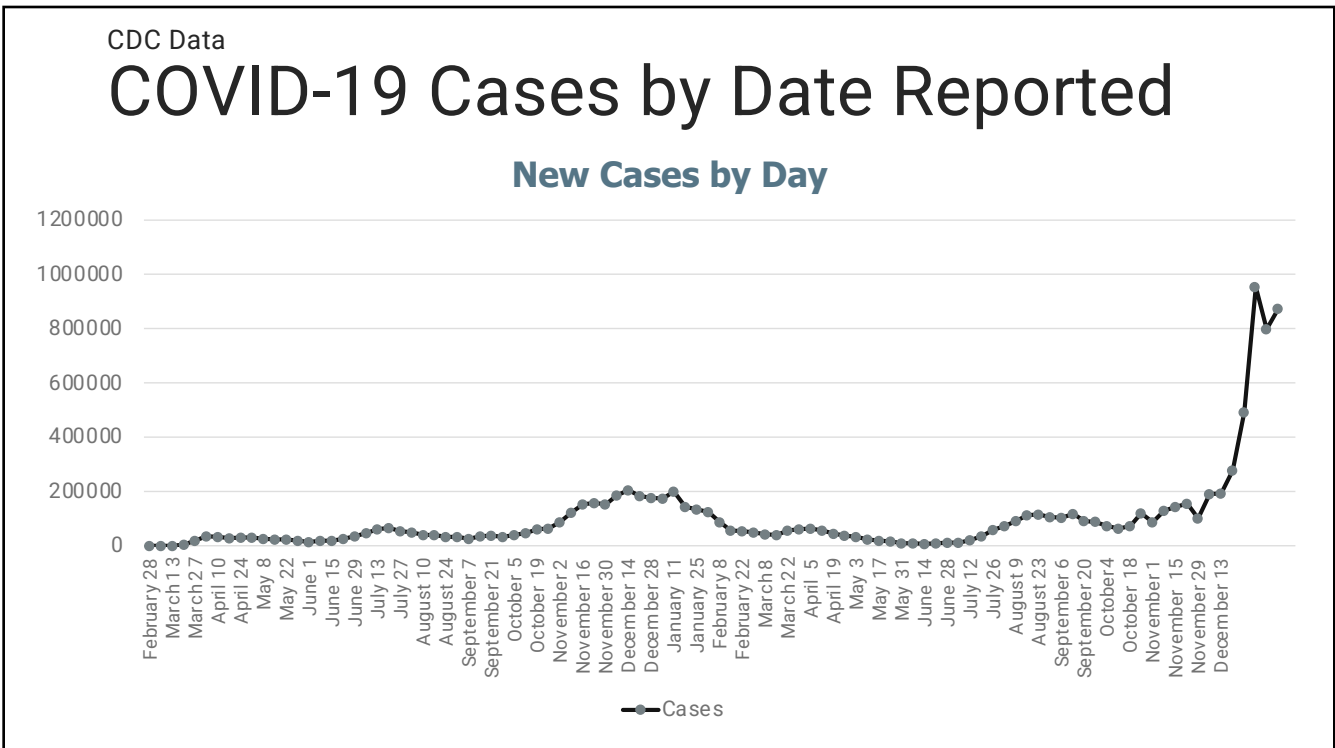
IN THE NEWS

US surpassed its record for COVID-19 hospitalizations last Tuesday – with no end in sight for sky-rocketing case loads. 145,982 patients in US hospitals for COVID-19



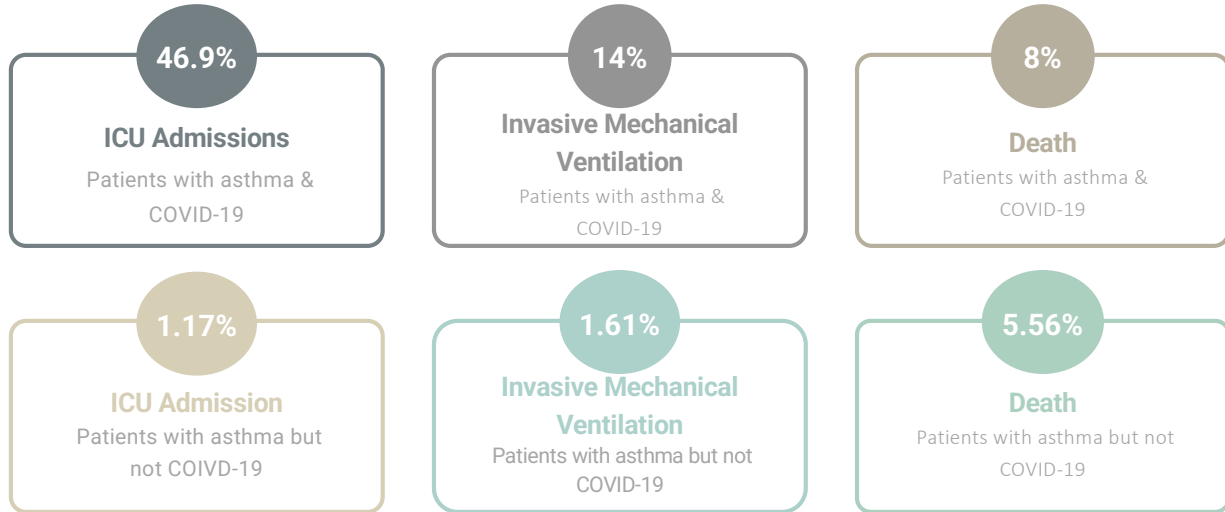
Under the new policy announced by the White House, individuals covered by a health insurance plan who purchase an over-the-counter COVID-19 diagnostic test that has been authorized, cleared or approved by the Food and Drug Administration will be able to have those test costs covered by their insurance.

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Risk for Severe Disease Among Hospitalized Adults with Asthma or COPD



Hospitalizations among patients with asthma and/or COPD with COVID-19 had a more severe clinical course than hospitalizations for asthma and/or COPD exacerbations without COVID-19.

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POLL QUESTION

Poll Question

Have you witnessed the COVID-19 surge in your community?

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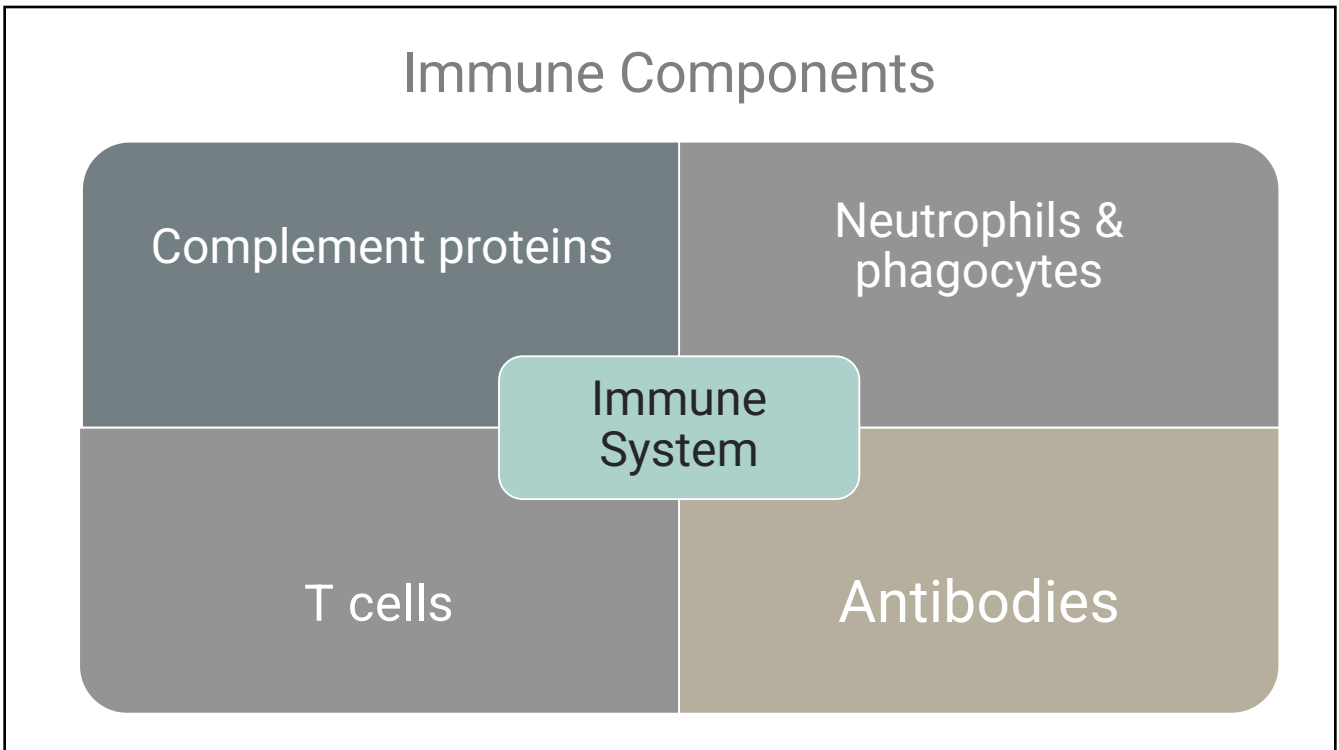




IMMUNITY ISSUES

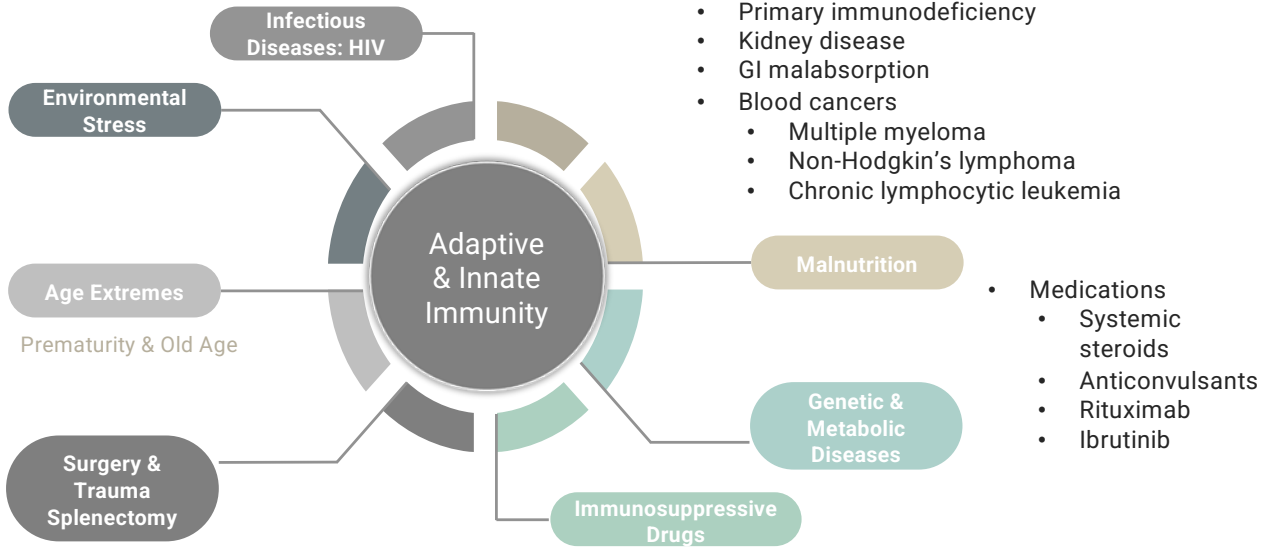
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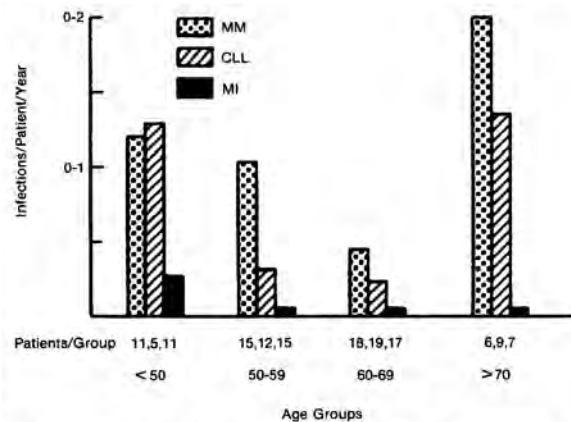
Causes of Immunodeficiency



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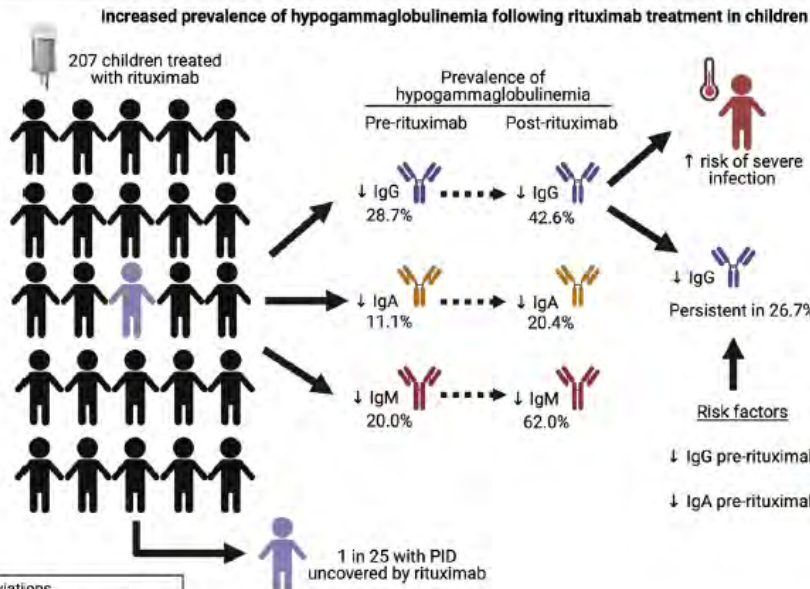
Summary of Findings*			
Category	MM	CLL	MI
Total No. of patients	50	45	50
% of patients with ≥ 1 infection	78	84	18
Period in years under observation (average \pm SD)	1.58 \pm 1.4	3.17 \pm 2.4	2.17 \pm 3.2
Average annual infection rate	0.026	0.009	0.002
Total No. of infections	102	71	9
% of infections while receiving therapy	36	37	...
Total mortality	36	30	11
% of deaths primarily due to infections	50	63	9
Site of infection			
Pulmonary	49(9)†	36(6)	4(1)
Urinary tract	22	13	4
Ectodermal	11(1)	14	1
Septicemia	10(5)	4(4)	0
Meningitis	7(4)	1(1)	0
Miscellaneous	3	3	0
Pathogens			
Total Identified	73	54	8
Pneumococcus	26(3)‡	9(2)	8
Staphylococcus	10(3)	14(6)	1
Escherichia coli	13(2)	11(3)	2
Pseudomonas	6(1)	6(5)	1
Proteus mirabilis	4(1)	7(2)	3
Haemophilus influenzae	5(2)	2	0
Klebsiella enterobacter	4(1)	2(1)	0
Streptococcus	2	2	0
Meningococcus	0	1	0
Mycobacterium tuberculosis	2	1	0
Herpes zoster	1	4	0
Monilia albicans	0	2(1)	0

Risk of Infection due to B Cell Malignancy



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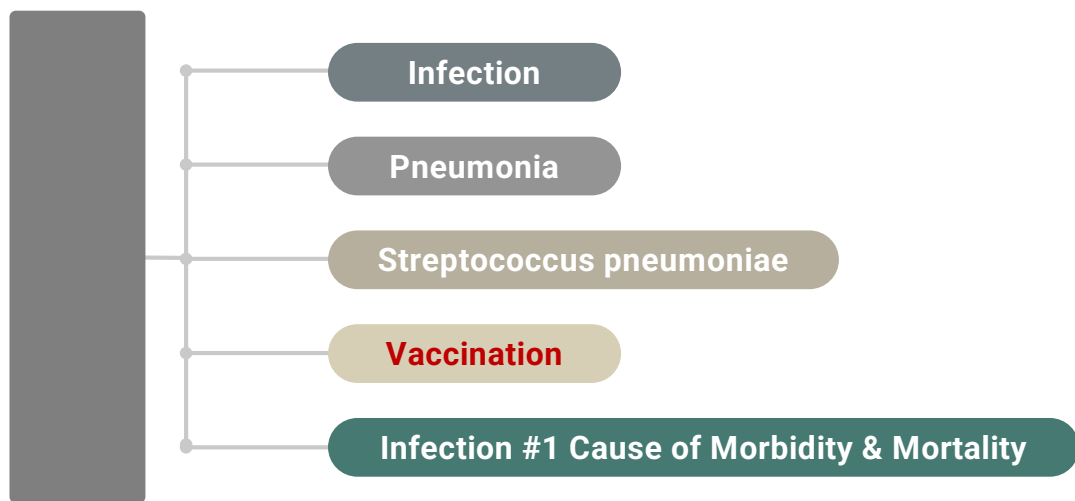
Risk of Infection due to Medications



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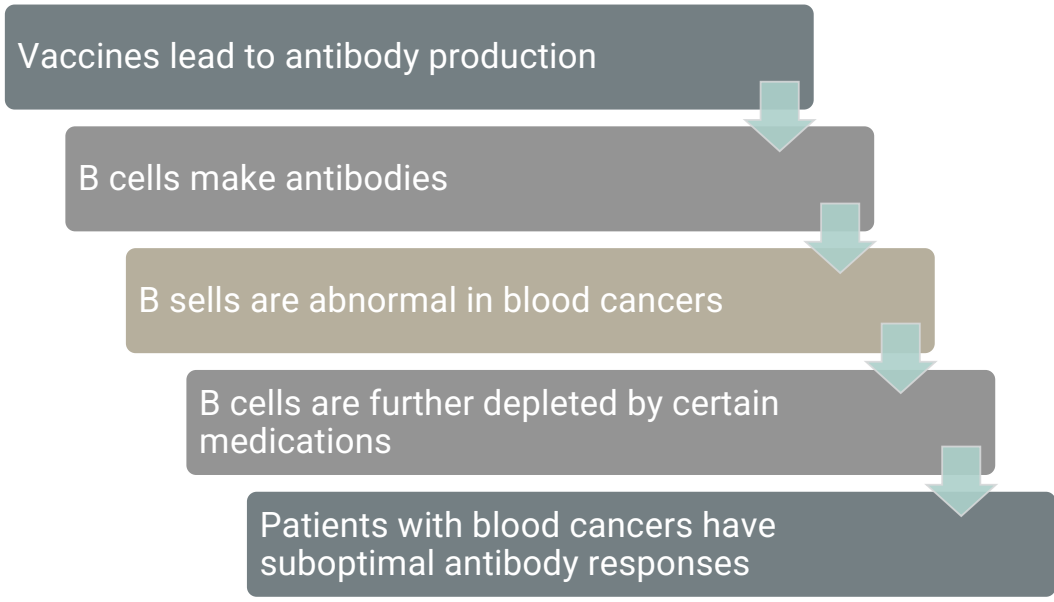
Current State

Conley. Clin Immunol 1999; 93: 190.



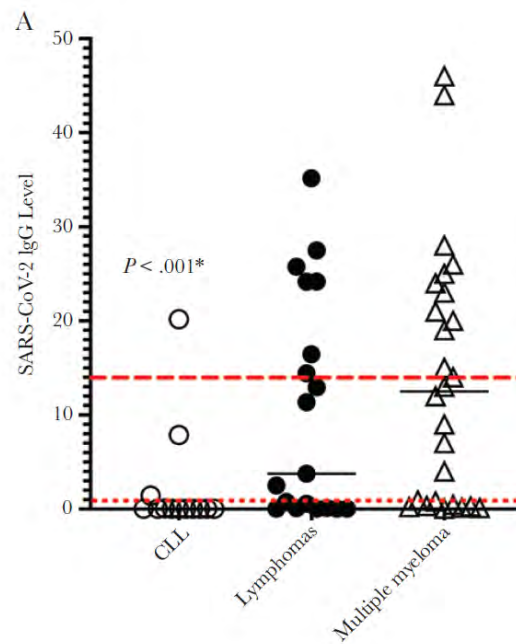
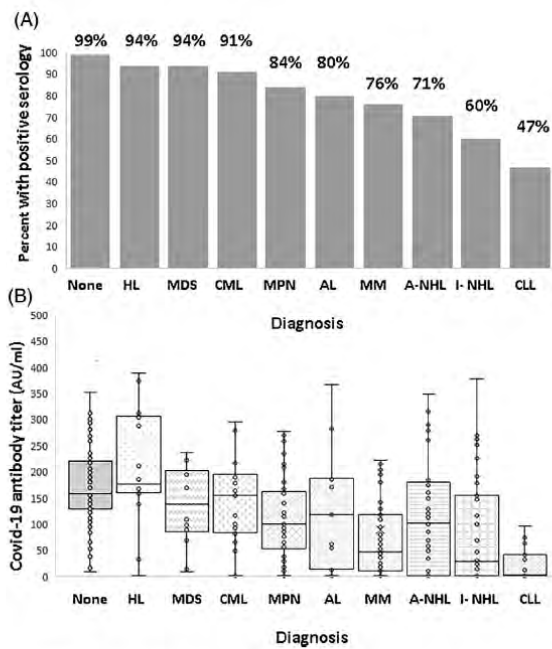
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Vaccination in Immunodeficiency



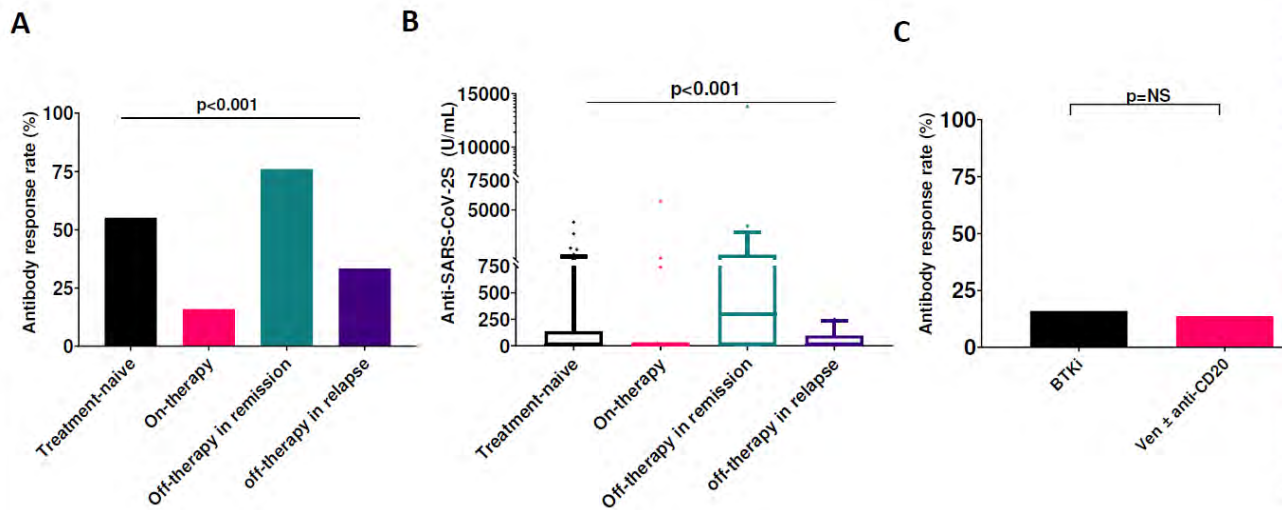
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COVID-19 Vaccine in Blood Cancers



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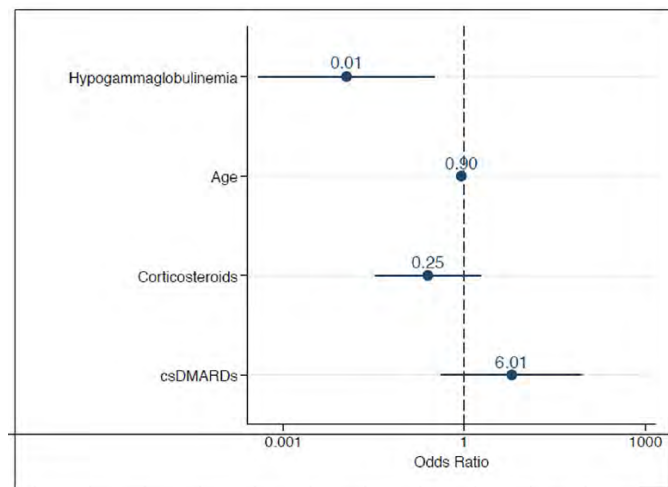
COVID-19 Vaccine in Blood Cancers



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COVID-19 Vaccine s/p Rituximab

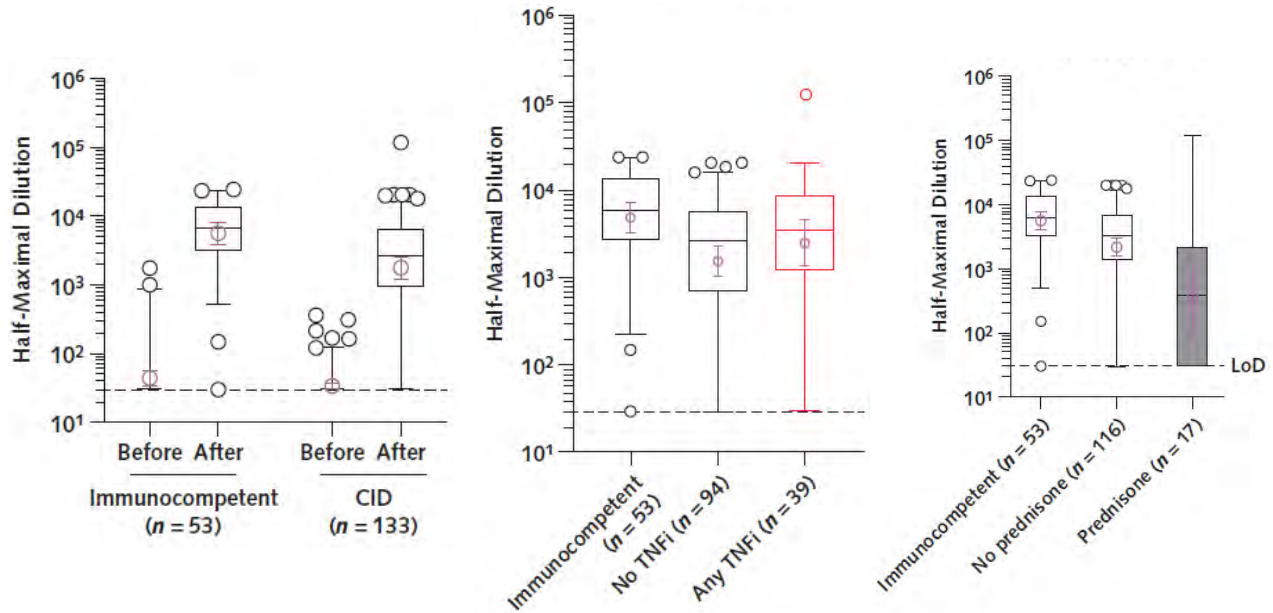
- Roughly 1/3 of rheumatology patient demonstrated detectable antibodies



Magliulo. Clin Immunol 2022; 234: 108897.

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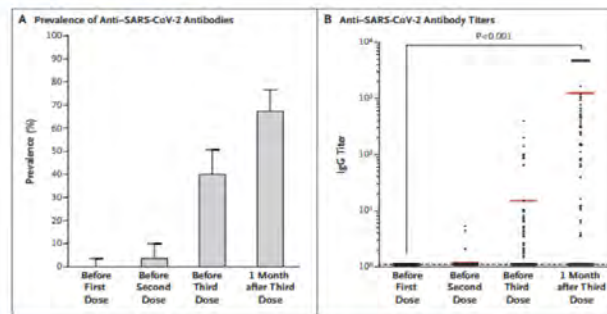
COVID-19 in Inflammatory Conditions



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COVID-19 mRNA Vaccine 3rd Dose

Three doses of an mRNA COVID-19 vaccine in solid-organ transplant recipients



- No serious adverse events were reported after administration of the 3rd dose, and no acute rejection episodes occurred (n=99)

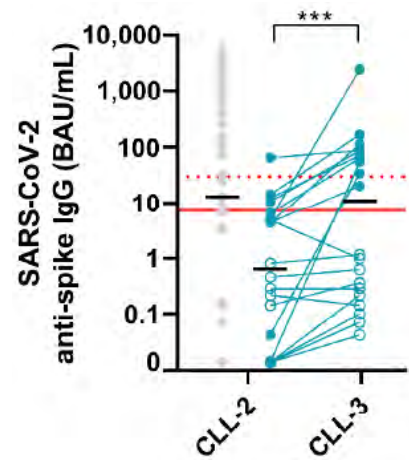
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COVID-19 mRNA Vaccine in 3rd Dose in CLL


41/172 (23.8%) of patients with no detectable antibodies s/p 2nd doses demonstrated antibodies s/p 3rd dose

Table 3. Multivariate analysis for serologic response in CLL patients

Variable	Odds ratio	95% CI	p-value
Age ≤65y	2.5	0.9-6.6	0.067
Lack of active therapy	5.6	2.3-13.8	<0.001
Serum IgG level ≥550, mg/dL	1.0	0.3-3.2	0.974
Serum IgA level ≥80, mg/dL	5.8	2.1-15.9	<0.001



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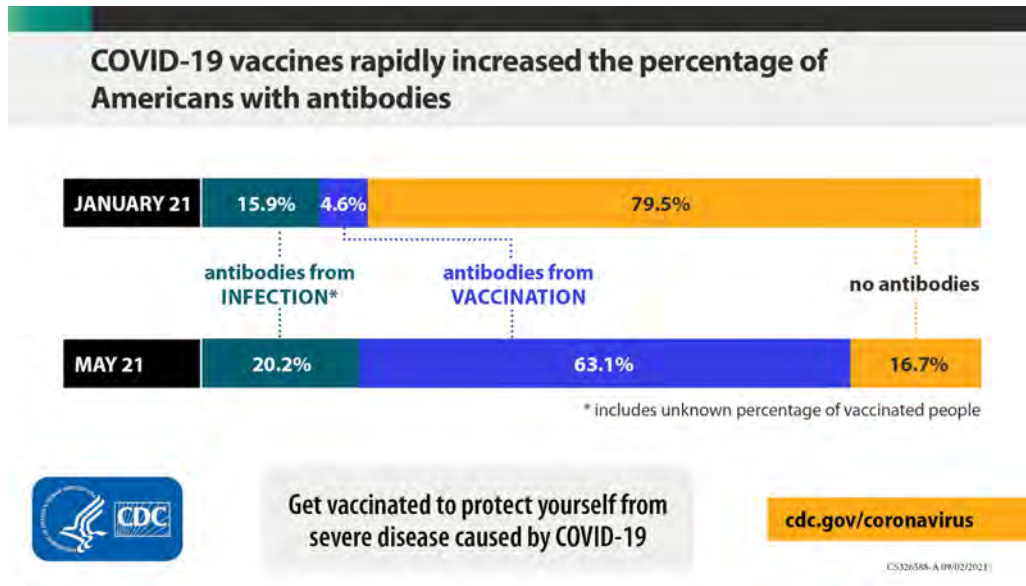
MANAGEMENT OPTIONS FOR COVID-19

Dr. Mustafa



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COVID-19 Prophylaxis – Ig Replacement



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COVID-19 Prophylaxis

AZD7442 PROVENT Phase III prophylaxis trial met primary endpoint in preventing COVID-19

PUBLISHED
20 August 2021

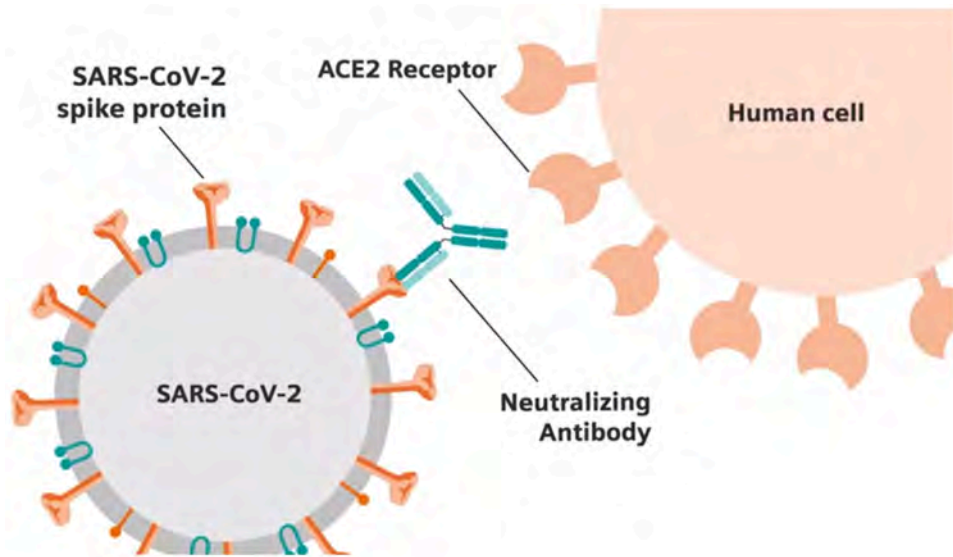
20 August 2021 07:00 BST

77% reduced risk of developing symptomatic COVID-19

First long-acting antibody combination to prevent COVID-19

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COVID-19 Treatment – Monoclonal Antibodies



- Sotrovimab (GSK), Casirivimab w/ imdevimab (Regeneron), Bamlanivimab + etesevimab (Eli Lilly)

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COVID-19 Treatment Outcomes with MABs

The infographic displays four key outcomes of COVID-19 treatment with monoclonal antibodies (MABs):

- Quicker decrease in viral load:** Represented by a circular arrow icon, indicating a faster reduction in the amount of virus in the body.
- Decreased rate of hospitalization:** Represented by a hospital building icon, showing that fewer patients require hospital care.
- Quicker resolution of symptoms:** Represented by a thermometer icon, indicating that symptoms subside more rapidly.
- No increased risk of side effects as compared to placebo:** Represented by a prohibition sign (a circle with a diagonal line), indicating that the treatment is safe and does not pose a higher risk of adverse effects than a placebo.

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COVID-19 Treatment – Oral Antivirals

Treatment of mild to moderate COVID-19 in adults and pediatrics (≥ 12 years) with positive results for SARS-CoV-2 testing and are at high risk for progressing to severe COVID-19 and/or hospitalization.

Paxlovid (nirmetreliver + ritonavir)

- Consider drug-drug interactions

Molunpiravir

- Contraindicated in pregnancy or in individuals who may become pregnant

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COVID-19 Treatment – Oral Antiviral Therapy

Pfizer's Novel COVID-19 Oral Antiviral Treatment Candidate Reduced Risk of Hospitalization or Death by 89% in Interim Analysis of Phase 2/3 EPIC-HR Study

Friday, November 05, 2021 - 06:45am



- PAXLOVID™ (PF-07321332; ritonavir) was found to reduce the risk of hospitalization or death by 89% compared to placebo in non-hospitalized high-risk adults with COVID-19
- In the overall study population through Day 28, no deaths were reported in patients who received PAXLOVID™ as compared to 10 deaths in patients who received placebo
- Pfizer plans to submit the data as part of its ongoing rolling submission to the U.S. FDA for Emergency Use Authorization (EUA) as soon as possible

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Summary



Roughly 3% of US population has significant immunodeficiency



COVID-19 pandemic poses increased risk to individuals with immunodeficiency



Vaccines are recommended by response is often suboptimal



Individuals with immunodeficiency warrant consideration of additional therapeutic options for prevention & treatment of COVID-19

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QUESTIONS



Record your questions in the question box
We'll get to as many as we can!

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Next Webinar

Join us for our upcoming webinar

Asthma Monitoring Options for the Digital Age: Improving Outcomes

Thursday, January 27, 2022
7:00 PM ET

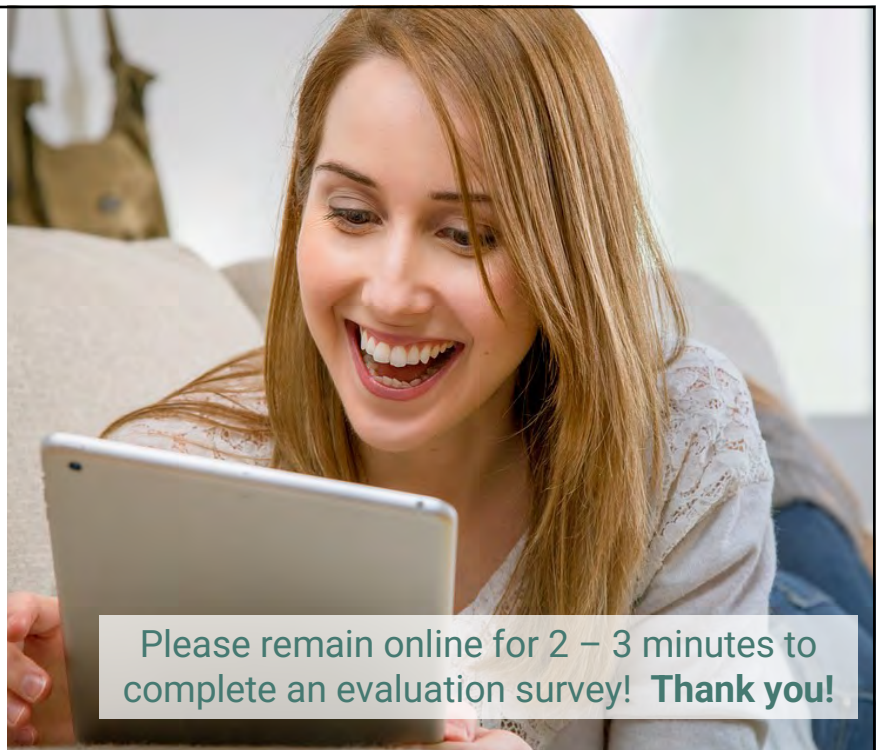


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Breathe
Better
Together



allergyasthmanetwork.org



Please remain online for 2 – 3 minutes to complete an evaluation survey! **Thank you!**

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