



COVID-19

Literature review current through Dec 2020
Document created on 30th Dec 2020

- This version only contains newer updates from Sept 2020
- Refer to Sept 2020 Update for the rest of the information on COVID and Rheumatic Diseases





Vaccination?

Safe or Unsafe?

What are the types of vaccines?

- There are five phase 3 vaccines belonging to three basic categories
 - a) **mRNA based** – codes for viral spike protein stimulating host immune response
 - b) **Vector Vaccines** – Harmless viral vector carrying the genetic material for coding SARS-CoV2 viral protein integrates with host cell to produce the protein and immune response
 - c) Protein subunit vaccines contain purified viral protein with an adjuvant to boost the immune response.

There are no live attenuated vaccines



How efficacious is vaccine?

- The formula is the following:

$(\% \text{ who get COVID in control group}) - (\% \text{ who get COVID in vaccine group}) / (\% \text{ who get COVID in control group})$.

This is an ongoing process as more data is collected and analysed



Were immunocompromised patients or patients with rheumatic diseases or those taking immunosuppressants part of trials?

× Unfortunately, they were not

Which of the following patients can take vaccination?

Rheumatic Diseases?

?

Taking Steroids

?

On Immune suppressing drugs?

?

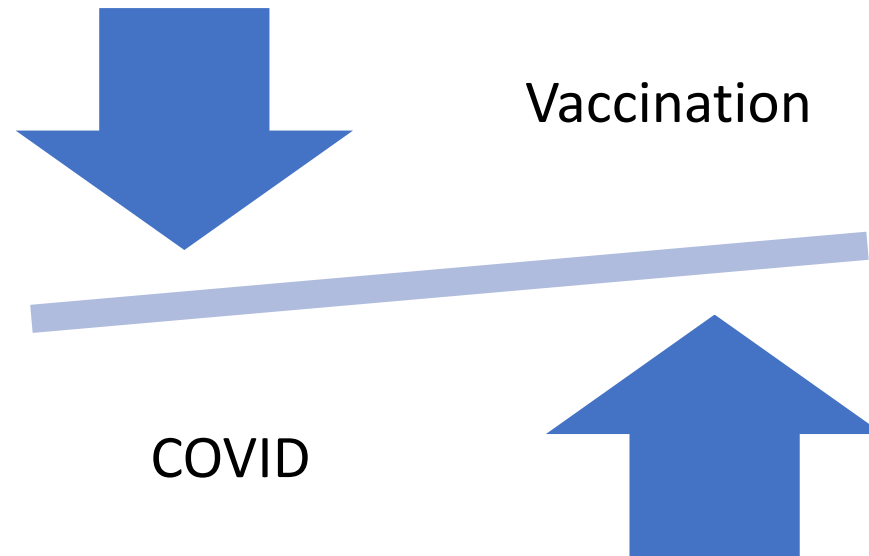


Vaccination in patients with rheumatic diseases

- There is no data to recommend or not recommend vaccination for our patients as yet
- Protein based vaccines have been used previously safely and with almost similar immunogenicity but we don't have data for SARS-CoV2 vaccine as yet
- Live-attenuated vaccines is a contra-indication for patients taking immunosuppressive agents above a specified dose but none of the COVID vaccines in phase 3 trial are live-attenuated

Should you take vaccine?

- American College of Rheumatology talks about **risk** and **benefit** ratio.





- Since these are not live vaccines, the benefits far outweigh the risk(s)
- American College of Rheumatology anticipate recommending all patients, including rheumatology patients, receive an approved COVID-19 vaccine.




Should medications be stopped before or after vaccination?

No data are available to guide use of medications before or after vaccination

**More
Data
Needed**

Data from experience from previous vaccines may need to be extrapolated as more data from COVID Vaccine emerge




Duration of protection from re-infection after first natural infection?

- There is not enough data at present to guide us regarding the duration of protection from natural infection
 - Presence of IgG antibodies against SARS-CoV2 does not necessarily mean protection from re-infection
-



Duration of protection from vaccination?

- There is not enough data at present to guide us regarding the duration of protection from natural infection
 - Hence, it is difficult to answer this question about vaccination in general population or patients with autoimmune diseases
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Herd Immunity

- How can we help our patients with autoimmune diseases?
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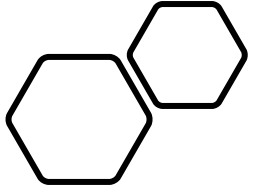


Herd Immunity and protection of vulnerable population

- Herd immunity helps protect population who have not been vaccination or suffered from previous infection
- For SARS-CoV2, ~ 70% of population should be immune to virus
- Therefore all population not on high risk should definitely be vaccinated as more data emerge for vaccination for individuals with autoimmune diseases



What needs to be continued?



Maintain distancing and Hygiene

01

Avoid unnecessary travelling especially airplanes and public transport

02

Avoid social functions wherever possible

03

Sneeze into a tissue preferably to avoid contaminating clothes or hands

04

Avoid going to crowded places

05

Contact your doctor immediately if you are unwell or if there is any suspicion

How can we prevent the transmission?

- Cover your face with a mask if you have flu like symptoms and consult immediately
- Avoid handshakes, touching eyes, nose or mouth
- Wash your hands diligently with soap and water or Use spirit with 60% or more alcohol. This kills the viruses and other potential infectious micro-organisms.

Hand Hygiene

- Wash your hands with soap for 20 seconds
- If you think your forearm has been exposed, then wash forearm followed by hands
- You can also use alcohol-based sanitizer with alcohol content more than 65%





Got more questions?

Mail us on indianrheum@gmail.com or

write on our Facebook page <https://www.facebook.com/IndianRheumatology/> or

tweet us [@www.twitter.com@Indianrheum](https://twitter.com/Indianrheum)



For more details
and regular
updates, visit

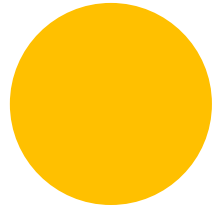
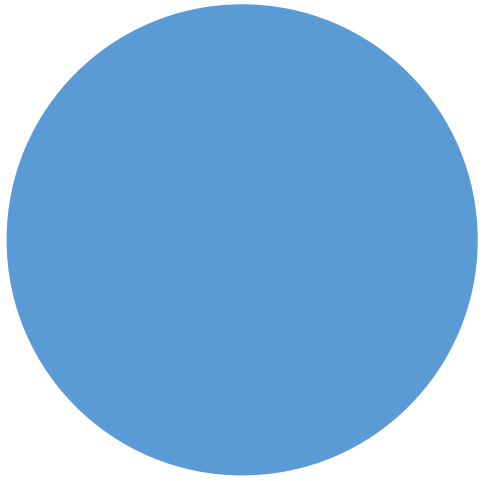
<https://www.who.int/health-topics/coronavirus>

For latest updates
on outbreak, visit

<https://www.worldometers.info/coronavirus/>

India's very own
COVID19
Dashboard

<https://covidout.in/>



Remember the old
saying

**Prevention is
better than
cure**



Prepared and modified from

December 2020 update: Information from the American College of Rheumatology Regarding Vaccination Against SARS-CoV-2

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