Welcome to the 4th Edition of CLARITY News. It has been more than 40 weeks since the start of the CLARITY IBD research study. Thanks to your help and support, we have gathered vital information to help us understand the impact of IBD medications on immune responses to the COVID-19 virus and vaccines.

In this edition, we report the latest study results, including antibody responses and breakthrough infections following 2 doses of COVID-19 vaccine. We also explain why we are asking participants to continue in the extension study for a further 24 weeks, and summarise the latest government’s guidelines with regards to 3rd vaccine doses.

In this issue:
• Antibody and T-cell responses following 2 doses of COVID-19 vaccine
• CLARITY Extension study
• Participants who have had COVID-19, we need your help!
• Impact of flu vaccine on COVID-19 vaccine response
• Third dose vs. booster COVID-19 vaccine doses
What did we investigate?

We investigated antibody responses after 2 doses of either the Pfizer/BioNTech or the Oxford/AstraZeneca COVID-19 vaccines in 2491 infliximab- and 1127 vedolizumab-treated participants who did not have prior COVID-19 infection. Antibody tests were carried out 2-10 weeks after a second vaccine dose.

We also measured antibody levels at each visit following vaccination to investigate how long these antibodies remain in the body following vaccination (antibody durability).

In a smaller cohort of participants (293 infliximab- and 119 vedolizumab-treated participants), we measured T cell responses following 2 doses of either vaccine. T cells are a type of white blood cell that work together with antibodies to fight off infections like COVID-19.

Finally, we reported the number of participants who had a COVID-19 infection despite receiving the 2nd dose of vaccine. We investigated if the risk of having a so-called ‘breakthrough infection’ was related to the level of COVID-19 antibody in the body.

What did the results show?

• Following 2 doses of vaccine, participants treated with infliximab had antibody levels that were 4-6 times lower compared to vedolizumab-treated patients.

• By 6 months, antibody levels in infliximab-treated participants had dropped below a level that is thought to protect you from getting a COVID-19 infection.

• T cell responses were similar in both infliximab- and vedolizumab-treated patients, although 1 out of 5 participants in both groups did not generate a T cell response.

• COVID-19 infections after 2 vaccine doses were more common and occurred earlier in infliximab-treated participants who received the Oxford/AstraZeneca vaccine. Fortunately most breakthrough infections were mild with only 1% requiring admission to hospital.

• People with lower antibody levels after the second dose of vaccine were more likely to go on and have a COVID-19 infection.

• In both infliximab and vedolizumab-treated participants higher and more sustained antibody levels were observed in those with prior COVID-19 infections.

• A link to the published paper will appear shortly on the clarity website.
What does this mean for me?

Until people receive a second vaccine dose, they should consider that they are not protected.

All patients treated with anti-TNF therapy should receive a third dose of SARS-CoV-2 vaccine - the study data support the UK JCVI recommendations to use the Pfizer vaccine 8 weeks after the second dose.

Should I stop if I change my medication?

No. Do not stop or switch your medication without talking to your IBD team. You might risk a flare-up.

COVID-19 infections after 2 vaccine doses were unusual and nearly always mild.

Should I still have a COVID-19 vaccine?

If you have not yet received a vaccine, we strongly recommend that you get so asap.

In line with the British society of Gastroenterology guidelines https://www.bsg.org.uk/covid-19-advice/ we recommend patients treated with infliximab or vedolizumab therapy receive a 3rd dose of COVID-19 vaccine, regardless of whether you have had a previous COVID-19 infection, and irrespective of your antibody test results.

Should I have a Flu vaccine?

Yes. Flu will be circulating this winter and as usual we advise you have a vaccine. Please record the date of vaccination using the study 8-weekly questionnaire or using the electronic link which will be sent to you.

---

**VACCINE THIRD DOSE vs. BOOSTER**

the latest government recommendation

<table>
<thead>
<tr>
<th>Third COVID-19 Vaccine Dose</th>
<th>COVID-19 Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timing</strong></td>
<td>• 6 months after 2nd dose of vaccine</td>
</tr>
<tr>
<td><strong>Who is eligible</strong></td>
<td>• Those living in care homes for older adults</td>
</tr>
<tr>
<td></td>
<td>• Adults aged 50 years or over</td>
</tr>
<tr>
<td></td>
<td>• Frontline health and social care workers</td>
</tr>
<tr>
<td></td>
<td>• All those aged 16 to 49 years with underlying health conditions that put them at higher risk of severe COVID-19 and adult carers</td>
</tr>
<tr>
<td></td>
<td>• Adult household contacts (aged 16 or over) of immunosuppressed individuals.</td>
</tr>
<tr>
<td>If you were taking any of the following medicines 3 months before either vaccine dose: infliximab, adalimumab, ustekinumab, tocitatinib, steroids (at least 20mg for more than 10 days). The full list of medicines can be found on the website below. If you are taking a medicine not listed in the table, please speak to your local specialist.</td>
<td></td>
</tr>
</tbody>
</table>

How do I get the vaccine?

The IBD team at your local hospital will advise your GP or local vaccine centre on whether you are eligible and on the timing of any third vaccine dose.

You will be contacted centrally by the NHS when you are eligible.

---

CCUK provides further information about IBD and COVID-19 vaccinations, please visit https://crohnsandcolitis.org.uk/
Extension Study

Thank you very much for your support with the CLARITY IBD study. Having shown that patients who are being treated with infliximab have lower antibody levels following COVID-19 infection and vaccination, we would like to investigate whether antibody levels in your blood fall over time and whether they can be restored with additional vaccine doses.

To do this, we have recently been awarded funding from Crohn’s & Colitis UK to allow us to continue the study and answer this important question. We would like to invite you to continue in the CLARITY IBD study for an additional 24 weeks (3 additional study visits). We would continue to measure and report your antibody results to you.

**Am I eligible?** You are eligible as long as you remain on either infliximab or vedolizumab, regardless of whether it is given as an infusion or injection.

**How do I join?** If your hospital has agreed to remain in the study, you will receive an email link inviting you to participate in the extension study and to sign a consent form. Alternatively, for more information please approach your local research team or call the central clarity IBD team on 07742909322.

---

### Have you had COVID-19?

#### Understanding how long IBD patients carry the COVID-19 virus

2 weeks after a confirmed COVID-19 infection most people will have cleared the virus and if re-tested, have a negative PCR swab test. We are interested to see if specific IBD drugs influence how long you carry the COVID-19 virus.

All we require is a repeat swab test from you to see if the COVID-19 virus is still present. We will send this in the post to your home. If you have had a previous positive PCR test and have not yet been contacted, please contact the central study team on 07742909322.

#### Long COVID study

For some people, having COVID-19 can cause symptoms that last weeks or months even after the infection has gone. We would like to understand more about how common this condition is in patients with IBD. In addition, we are investigating whether drugs used to treat IBD reduce the chances of developing Long COVID symptoms.

The study involves completion of a short questionnaire. If you have had a previous positive PCR test for COVID-19 and have not yet completed this questionnaire, please call 07742909322.
Frequently Asked Questions

I have stopped having infusions, how will this affect my participation in the CLARITY IBD study?

If you have stopped having infusions or have switched to a subcutaneous administration of your biologic drug, we really want you to stay in the main study. Please let your local research nurse know and keep completing the questionnaires every 8 weeks. You can have your blood sample taken at routine blood monitoring appointments or a home blood collection kit can be sent to you. Please ask your IBD nurse or doctor about this.

If you have stopped infliximab or vedolizumab treatment you will not be eligible to continue in the extension study.

I have received the COVID-19 vaccine but I can’t find the link to report this?

After you have received a vaccine dose please record the details in the 8-weekly questionnaire, or use the link that has been sent to you.

If you can’t find the link, please inform your local hospital team, or email rde-tr.clarityibd@nhs.net with the name of the hospital you attend, and we will forward the link to you.

I haven’t received the link to the patient questionnaire?

If you are having difficulties accessing the questionnaire, or you have not received the link, please contact your local site or the Exeter team at rde-tr.clarityibd@nhs.net.

When should I complete my next questionnaire?

An electronic link or text will be sent to you every 8 weeks. If you do not have access to a smartphone or a computer, then you will be given a paper copy when you attend hospital. Alternatively, your research site can ask you the questions over the telephone.

Thank you for completing them!

I am moving out of the area, can I still stay in the CLARITY IBD study?

Yes! We are able to transfer you to one of the other 92 hospitals in Scotland, England and Wales who are participating. If you are moving to a different country, then it is not possible to collect blood samples, but you can continue to complete the questionnaire.

If you have a question, please email us at rde-tr.clarityibd@nhs.net or ring 07742909322

Remember if you change your email address or mobile number please let us, or your site know. This will help ensure we are sending the antibody results and questionnaires to your correct address.

Follow us on Twitter: @clarityibd

www.clarityibd.org