

# Clinical information for vaccine consenters: Pfizer, AstraZeneca, Moderna vaccines

**DISCLAIMER:** Information within this document may be updated before the PGD or Protocol you are working under. In the event of a discrepancy, always adhere to your PGD/Protocol.

This document is regularly updated; please download the most recent version:

[https://ncl-mon.nhs.uk/wp-content/uploads/0\\_COVID\\_vaccine\\_Information\\_for\\_vaccinators.pdf](https://ncl-mon.nhs.uk/wp-content/uploads/0_COVID_vaccine_Information_for_vaccinators.pdf)



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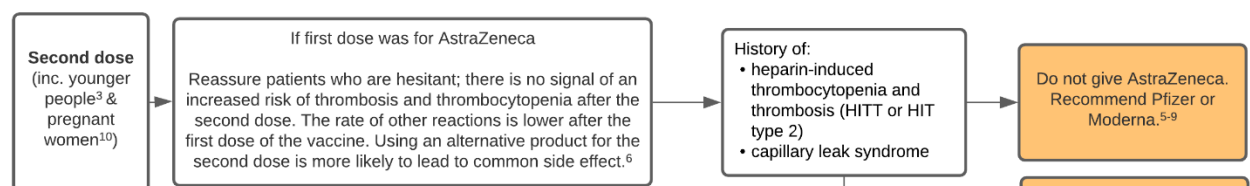
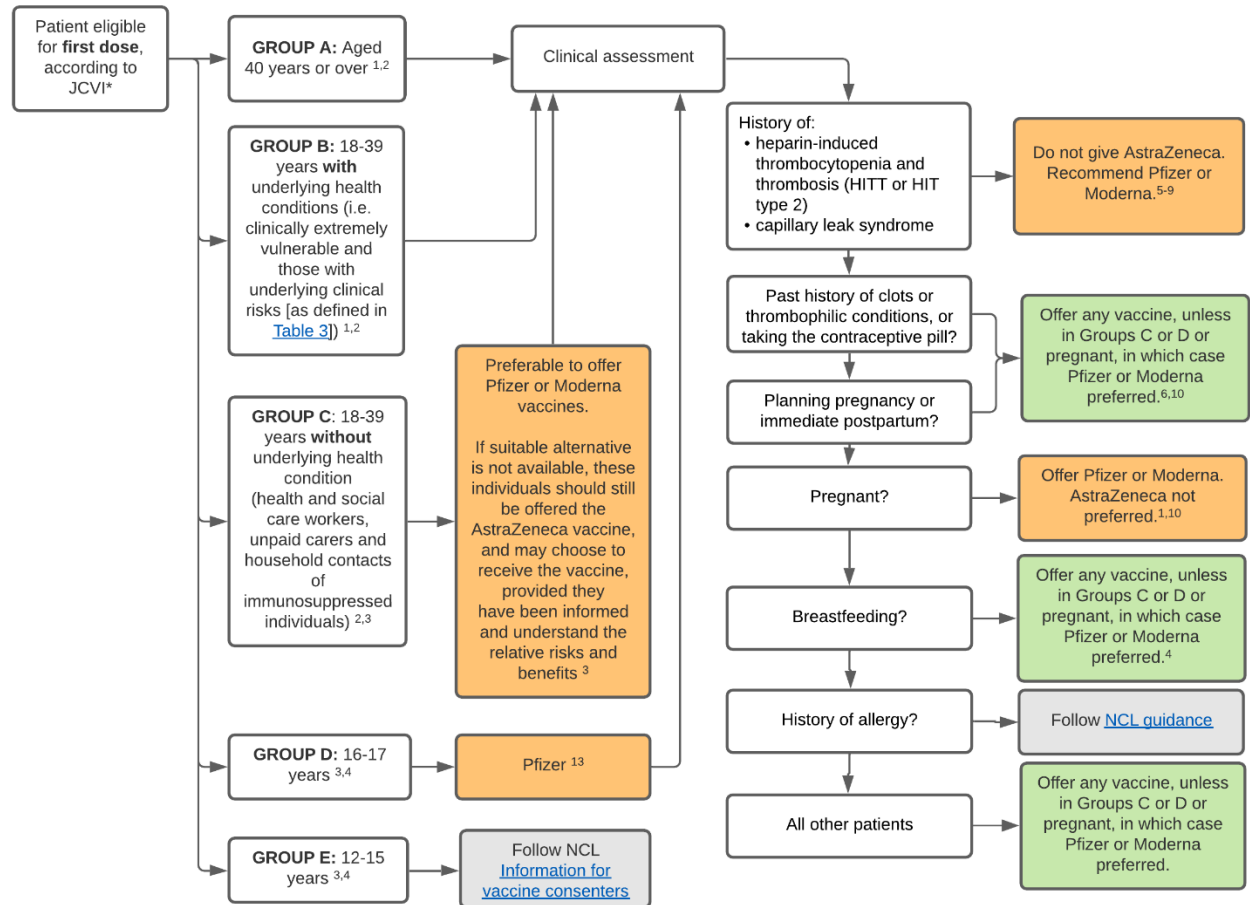
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## Key references

- Summary of product characteristics:
  - [AstraZeneca vaccine](#)
  - [Pfizer/BioB Tech vaccine: Information for Healthcare Professionals](#)
  - [Moderna vaccine](#)
- Specialist Pharmacy Service: Answers to Questions specific to vaccines
  - [General information](#)
  - Vaccine specific information
    - [Pfizer/BioNTech](#)
    - [AstraZeneca](#)
    - [Moderna](#)
- [Immunisation against infectious disease: Chapter 14a – COVID-19](#) (The Greenbook)
- [COVID-19 vaccination programme: Information for healthcare practitioners](#)

# 1 Assessing for vaccine appropriateness

This tool should only be used once the decision to offer a vaccine has been made. It supports clinicians in confirming whether a given vaccine is appropriate for a given individual. It does not consider vaccine eligibility (JCVI criteria) or contraindications to vaccination (e.g. acutely unwell).



**\* BE AWARE:** This is a tool to support clinicians choosing the correct vaccine, once the decision to vaccinate has been made. It does not consider vaccine eligibility (JCVI criteria, age group) or contraindications to all vaccinations (e.g. acutely unwell).

### References

1. Pg 17; Green Book Chapter 14a (01 July 2021)
2. Pg 9; Green Book Chapter 14a (01 July 2021)
3. Pg 16; Green Book Chapter 14a (01 July 2021)
4. Pg 19; Green Book Chapter 14a (01 July 2021)
5. History of thrombosis with thrombocytopenia syndrome is a 'Special warning and precaution for use' (AstraZeneca vaccine SPC; 19 July 2021)
6. Pg 23; Green Book Chapter 14a (01 July 2021)
7. NCL COVID Vaccine Pharmacy Group recommends avoiding AstraZeneca for patients with a history of thrombosis with thrombocytopenia syndrome whilst alternatives are available (15 July 2021)
8. History of capillary leak syndrome is a 'Contraindication' (AstraZeneca vaccine SPC; 19 July 2021)
9. Pg 21; Green Book Chapter 14a (01 July 2021)
10. Pg 18; Green Book Chapter 14a (01 July 2021)
11. Thrombosis with thrombocytopenia syndrome following vaccination with AstraZeneca is a 'Contraindication' (AstraZeneca vaccine SPC; 19 July 2021)
12. London COVID-19 Clinical Advice Response Service (08 July 2021)
13. Pg 17; Green Book Chapter 14a (30 July 2021)

Version 1.2

## 2 Administration & dosing

2.1 Dosing schedule (timing and brands)	<p><a href="https://www.sps.nhs.uk/articles/dosing-information-for-covid-19-vaccines/">https://www.sps.nhs.uk/articles/dosing-information-for-covid-19-vaccines/</a></p> <p>Includes:</p> <ul style="list-style-type: none"><li>• Recommended interval</li><li>• Interval too long</li><li>• Interval too short</li><li>• Different brand for second dose</li></ul>
2.2 Overseas vaccinations	<p>See 'Individuals who received COVID vaccination overseas' (pg 14) and Appendix 1 <a href="https://www.gov.uk/government/publications/covid-19-vaccination-programme-guidance-for-healthcare-practitioners">https://www.gov.uk/government/publications/covid-19-vaccination-programme-guidance-for-healthcare-practitioners</a></p> <p>Patients should be asked to contact their GP surgery so that their overseas vaccinations can be recorded on their healthcare record.</p>
2.3 Vaccine administration error	<p>See 'Inadvertent vaccine administration errors' <a href="https://www.gov.uk/government/publications/covid-19-vaccination-programme-guidance-for-healthcare-practitioners">https://www.gov.uk/government/publications/covid-19-vaccination-programme-guidance-for-healthcare-practitioners</a></p> <p>This provides advice for inadvertent administration of:</p> <ul style="list-style-type: none"><li>• The whole multi-dose vial</li><li>• Over-diluted vaccine</li><li>• Incomplete dose of vaccine</li><li>• Vaccine which was subject to storage or preparation error</li></ul>

<p>2.4 Children &amp; young people eligibility</p>	<p>17 ¾ - &lt;18 years:</p> <ul style="list-style-type: none"> <li>• Eligibility criteria (two doses): All.<sup>a</sup></li> <li>• Preferred vaccine: Pfizer</li> <li>• Legal administration mechanism: PSD, PGD or National Protocol</li> </ul> <p>16-17 ¾ years:</p> <ul style="list-style-type: none"> <li>• Eligibility criteria (<b>two doses</b>): <ul style="list-style-type: none"> <li>○ employed/studying/training for health and social care work<sup>b</sup></li> <li>○ 'at risk' (Table 3<sup>b</sup>) which includes all patients who are clinically extremely vulnerable</li> <li>○ living on most days with individuals of any age who are immunosuppressed<sup>c</sup></li> </ul> </li> <li>• Eligibility criteria (<b>one dose</b>): <ul style="list-style-type: none"> <li>○ All other 16-17 ¾ year old who do not meet criteria for two doses<sup>a</sup></li> </ul> </li> <li>• Preferred vaccine: Pfizer</li> <li>• Legal administration mechanism: PSD, PGD or National Protocol<sup>d</sup></li> </ul> <p>12 to &lt;16 years:</p> <ul style="list-style-type: none"> <li>• Eligibility criteria (two doses): <ul style="list-style-type: none"> <li>○ severe neuro-disability and/or neuromuscular conditions that compromise respiratory function. This includes conditions (such as cerebral palsy, autism and muscular dystrophy) that may affect swallowing and protection of the upper airways, leading to aspiration, and reduce the ability to cough and resulting overall in increased susceptibility to respiratory infections<sup>b</sup></li> <li>○ children and young adults with learning disability (LD), including<sup>b</sup>: <ul style="list-style-type: none"> <li>▪ individuals with Down's syndrome</li> <li>▪ those who are on the learning disability register</li> <li>▪ those with profound and multiple learning disabilities (PMLD) or severe LD</li> </ul> </li> <li>○ immunosuppression due to disease or treatment (defined within Table 3<sup>b</sup>)</li> <li>○ living on most days with individuals of any age who are immunosuppressed (defined within Table 3<sup>b</sup>)</li> </ul> </li> <li>• Preferred vaccine: Pfizer</li> <li>• Legal administration mechanism: PSD or PGD [awaiting National Protocol to be update]</li> </ul> <p>&lt;12 years:</p> <ul style="list-style-type: none"> <li>• Eligibility criteria: Nil</li> </ul>
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	<p><sup>a</sup> Pfizer PGD Version 3.03 (06/08/2021) which specifies “all individuals aged 18 years and over (including those who those who are within three months of their 18th birthday)”</p> <p><sup>b</sup> Green Book Chapter 14 <a href="https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a">https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a</a></p>
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### 3 History of allergy or anaphylaxis

3.1 History of allergy (inc. anaphylaxis) before first dose	Follow North Central London flow diagram – Page 1 <a href="https://www.ncl-mon.nhs.uk/wp-content/uploads/Guidelines/0_Managing_Allergy_COVID-19_vaccine.pdf">https://www.ncl-mon.nhs.uk/wp-content/uploads/Guidelines/0_Managing_Allergy_COVID-19_vaccine.pdf</a>  Further information (including excipients and approach to prior history of allergy [latex, food, thiomersal, medicines]): <ul style="list-style-type: none"><li>• Pfizer: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-pfizer-biontech/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-pfizer-biontech/</a></li><li>• AstraZeneca: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-astrazeneca/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-astrazeneca/</a></li><li>• Moderna: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-moderna/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-moderna/</a></li></ul>
3.2 Allergy to first dose of COVID-19 vaccine	Follow North Central London flow diagram – Page 2 <a href="https://www.ncl-mon.nhs.uk/wp-content/uploads/Guidelines/0_Managing_Allergy_COVID-19_vaccine.pdf">https://www.ncl-mon.nhs.uk/wp-content/uploads/Guidelines/0_Managing_Allergy_COVID-19_vaccine.pdf</a>

## 4 Cautions and contraindications

4.1 General information	<p><a href="https://www.sps.nhs.uk/home/covid-19-vaccines/general-information-and-guidance/answers-to-questions/#cautions-and-contraindications">https://www.sps.nhs.uk/home/covid-19-vaccines/general-information-and-guidance/answers-to-questions/#cautions-and-contraindications</a></p> <p>Separate pages for:</p> <ul style="list-style-type: none"><li>• Anticoagulation and bleeding disorders</li><li>• Blood clots with COVID-19 vaccination (also see <a href="#">Green Book Chapter 14a</a> 'Thrombosis and thrombocytopenia occurring after COVID-19 vaccination')</li><li>• Acute severe febrile illness</li><li>• History of COVID-19</li><li>• Extremes of body weight</li><li>• Concurrent immunosuppressive medicines</li><li>• Extremes of bodyweight</li><li>• Porphyria</li></ul>
4.2 AstraZeneca vaccine only: Capillary Leak Syndrome	<p>Avoid in patients who have previously experienced episodes of capillary leak syndrome <sup>a</sup> (offer an alternative <sup>1</sup>).</p> <p><sup>a</sup> <a href="https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting">https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting</a> (6 August 2021)</p>
4.3 Glucose-6-phosphate dehydrogenase (G6PD) deficiency	<p>G6PD deficiency is not a contraindication to routine immunisation <sup>a</sup></p> <p><sup>a</sup> <a href="https://www.gov.uk/government/publications/contraindications-and-special-considerations-the-green-book-chapter-6">https://www.gov.uk/government/publications/contraindications-and-special-considerations-the-green-book-chapter-6</a></p>



4.4 Lymphoedema	<p>The vaccine is advisable for patients with lymphoedema <sup>a</sup>:</p> <ul style="list-style-type: none"> <li>• One arm affected by lymphoedema: Both doses of COVID-19 vaccine should be given in the unaffected, opposite arm.</li> <li>• Lymph nodes removed from the axilla (armpit) of one arm: Both doses of COVID-19 vaccine should be given in the opposite arm.</li> <li>• Both arms are affected by lymphoedema, but not the legs: Both doses of COVID-19 vaccine should be given into one of the thighs.</li> <li>• Both arms and one leg is affected by lymphoedema: Both doses of COVID-19 vaccine should be given into the unaffected thigh.</li> <li>• Both arms and both legs are affected by lymphoedema: Both doses of COVID-19 vaccine should be given into the limb least affected by lymphoedema</li> </ul> <p>Lymph node swelling is a known side effect of all the COVID-19 vaccines. It should resolve promptly after the vaccination. <sup>a</sup></p> <p><sup>a</sup> <a href="https://www.lymphoedema.org/wp-content/uploads/2021/05/Consensus_Document_on_COVID_Vaccination_amended_25May2021.pdf">https://www.lymphoedema.org/wp-content/uploads/2021/05/Consensus_Document_on_COVID_Vaccination_amended_25May2021.pdf</a> (25 May 2021)</p>
4.5 Drug interactions	See <a href="#">Interactions</a>
4.6 Recent or imminent elective surgery	<a href="https://www.sps.nhs.uk/articles/use-of-covid-19-vaccine-in-people-with-recent-or-imminent-elective-surgery/">https://www.sps.nhs.uk/articles/use-of-covid-19-vaccine-in-people-with-recent-or-imminent-elective-surgery/</a>
4.7 Religious beliefs (Jewish and Muslim communities)	<p>Pfizer: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-pfizer-biontech/">https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-pfizer-biontech/</a></p> <p>AstraZeneca: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-astrazeneca/">https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-astrazeneca/</a></p> <p>Moderna: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-moderna/">https://www.sps.nhs.uk/articles/advising-individuals-with-religious-or-other-dietary-practices-and-beliefs-on-their-suitability-for-the-covid-19-vaccine-moderna/</a></p>

## 5 Adverse effects

5.1 Common and important adverse effects	See PHE patient information leaflet ‘What to expect after your COVID-19 vaccination’ <a href="https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination">https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination</a>
5.2 Bell’s Palsy	The number of reports of facial paralysis received so far is similar to the expected natural rate and does not currently suggest an increased risk following the vaccines. <sup>a</sup>  <sup>a</sup> <a href="https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting">https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting</a> (6 August 2021)
5.3 Guillain-Barré Syndrome	Refer to Green Book for vaccine specific information (search GBS) <a href="https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a">https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a</a>
5.4 AstraZeneca vaccine: Risk of blood clots with lowered platelets	See ‘Risk of blood clots with COVID-19 vaccination’ <a href="https://www.sps.nhs.uk/articles/covid-19-vaccination-and-blood-clotting/">https://www.sps.nhs.uk/articles/covid-19-vaccination-and-blood-clotting/</a>  To understand an individual’s risk/benefit of vaccination with AstraZeneca vaccines, offer PHE patient information leaflet ‘COVID-19 vaccination and blood clotting’ <a href="https://www.gov.uk/government/publications/covid-19-vaccination-and-blood-clotting">https://www.gov.uk/government/publications/covid-19-vaccination-and-blood-clotting</a>  For signs and symptoms of clots with lowered platelets, offer PHE patient information leaflet ‘What to expect after your COVID-19 vaccination’ <a href="https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination">https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination</a>  For people worried about receiving a second dose of AstraZeneca vaccine, offer PHE patient information leaflet ‘COVID-19 vaccination: worried about having your second dose of AstraZeneca?’ <a href="https://www.gov.uk/government/publications/covid-19-vaccination-worried-about-having-your-second-dose-of-astrazeneca">https://www.gov.uk/government/publications/covid-19-vaccination-worried-about-having-your-second-dose-of-astrazeneca</a>

5.5 Pfizer and Moderna vaccines: Myocarditis and pericarditis	<p>Myocarditis and pericarditis, inflammation of the heart, is seen more frequently in young males and shortly after the second dose of the Pfizer and Moderna vaccines. These reports are extremely rare, and the events are typically mild with individuals usually recovering within a short time with standard treatment and rest.<sup>a</sup> Patients who experiences new onset of symptoms should seek medical attention.<sup>b</sup></p> <p><sup>a</sup> <a href="https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting">https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting</a> (6 August 2021)</p> <p><sup>b</sup> <a href="https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination">https://www.gov.uk/government/publications/COVID-19-vaccination-what-to-expect-after-vaccination</a></p>
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## 6 Excipients

6.1 List of excipients	<p>See 'Excipients'</p> <ul style="list-style-type: none"> <li>• Pfizer: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-pfizer-biontech/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-pfizer-biontech/</a></li> <li>• AstraZeneca: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-astrazeneca/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-astrazeneca/</a></li> <li>• Moderna: <a href="https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-moderna/">https://www.sps.nhs.uk/articles/advising-individuals-with-allergies-on-their-suitability-for-covid-19-vaccine-moderna/</a></li> </ul>
6.2 Alcohol content	<ul style="list-style-type: none"> <li>• Pfizer: No alcohol</li> <li>• Moderna: No alcohol</li> <li>• AstraZeneca: There is a very small amount of alcohol in the vaccine (0.002 g per dose).<sup>2</sup> This is not enough to cause any noticeable effects and is less than the amount of alcohol found in bread, vinegar and fruit juice.<sup>a</sup> The British Islamic Medical Association recommends the AstraZeneca vaccine<sup>b</sup></li> </ul> <p><sup>b</sup> <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5421578/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5421578/</a></p> <p><sup>b</sup> <a href="https://britishima.org/covid19-vaccine-az/">https://britishima.org/covid19-vaccine-az/</a></p>
6.3 Vegan friendly or vegetarian?	<p>The approved COVID-19 vaccines do not contain any animal, meat or egg products <sup>3</sup></p> <p><a href="#">VeganFriendly</a> believe COVID-19 vaccines are vegan. <a href="#">PeTA</a> recommends that vegan and animal rights campaigners take up the vaccines.</p>

## 7 Pregnancy and breastfeeding

7.1 Pregnancy	<p><a href="https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-women-of-child-bearing-potential/">https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-women-of-child-bearing-potential/</a></p> <p><b>Useful resources when consenting:</b></p> <ul style="list-style-type: none"> <li>• PHE patient information leaflet: <a href="#">Women of childbearing age, currently pregnant or breastfeeding</a></li> <li>• RCOG Q&amp;A: <a href="https://www.rcog.org.uk/en/guidelines-research-services/coronavirus-covid-19-pregnancy-and-womens-health/covid-19-vaccines-and-pregnancy/covid-19-vaccines-pregnancy-and-breastfeeding/">https://www.rcog.org.uk/en/guidelines-research-services/coronavirus-covid-19-pregnancy-and-womens-health/covid-19-vaccines-and-pregnancy/covid-19-vaccines-pregnancy-and-breastfeeding/</a></li> <li>• RCOG Decision aid: <a href="https://www.rcog.org.uk/globalassets/documents/guidelines/2021-02-24-combined-info-sheet-and-decision-aid.pdf">https://www.rcog.org.uk/globalassets/documents/guidelines/2021-02-24-combined-info-sheet-and-decision-aid.pdf</a></li> </ul> <p><b>Recording vaccination during pregnancy:</b></p> <ul style="list-style-type: none"> <li>• <i>Where woman is known to be pregnant when vaccinated (1<sup>st</sup> or 2<sup>nd</sup> dose):</i> <ul style="list-style-type: none"> <li>○ Consenter should record pregnancy status on Pinnacle/NIVS, <b>and</b></li> <li>○ Invite woman to register with the <a href="#">Yellow Card Vaccine Monitor</a></li> </ul> </li> <li>• <i>Where woman did not know she was pregnant when vaccinated, or became pregnant shortly after vaccination:</i> <ul style="list-style-type: none"> <li>○ HCP who the pregnant women presents to should complete <a href="#">Inadvertent vaccination in pregnancy</a> notification</li> </ul> </li> </ul> <p><b>Legal mechanism for administration:</b></p> <ul style="list-style-type: none"> <li>• PSD, PGD and NP</li> </ul>
7.2 Breastfeeding	<p><a href="https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-breastfeeding-women/">https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-breastfeeding-women/</a></p> <p><b>Useful resources when consenting:</b></p> <ul style="list-style-type: none"> <li>• PHE patient information leaflet: <a href="#">Women of childbearing age, currently pregnant or breastfeeding</a></li> </ul>
7.3 Implications for fertility & IVF programmes	<p><a href="https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-women-of-child-bearing-potential/">https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-women-of-child-bearing-potential/</a></p>

## 8 Interactions

8.1 Vaccine interactions	<ul style="list-style-type: none"><li>• Pfizer: <a href="https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-pfizer-biontech/">https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-pfizer-biontech/</a></li><li>• AstraZeneca: <a href="https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-astrazeneca/">https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-astrazeneca/</a></li><li>• Moderna: <a href="https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-moderna/">https://www.sps.nhs.uk/articles/interactions-information-for-covid-19-vaccine-moderna/</a></li></ul>
8.2 Patient taking immunosuppressants	<p><a href="https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-patient-taking-immunosuppressive-medicines/">https://www.sps.nhs.uk/articles/using-covid-19-vaccines-in-patient-taking-immunosuppressive-medicines/</a></p> <ul style="list-style-type: none"><li>• Scheduled to begin immunosuppressive therapy</li><li>• Treated with<ul style="list-style-type: none"><li>○ Chemotherapy</li><li>○ Corticosteroids</li><li>○ Rituximab (oncology)</li><li>○ Rituximab (rheumatology)</li><li>○ Multiple sclerosis</li></ul></li></ul>

8.3 Alcohol	<p>Some news and social media have reported you should abstain from alcohol to boost your immune response to the vaccine. This is selective reporting from a statement from DrinkAware (a UK alcohol education charity).<sup>a</sup> Their detailed recommendations:</p> <ul style="list-style-type: none"><li>• Get vaccinated if you are offered a COVID-19 vaccine, <i>regardless of whether you ever drink any alcohol or not.</i></li><li>• Heavy drinkers have a higher risk of becoming seriously ill with COVID-19 <i>therefore please keep your appointment for vaccination if you are offered one</i></li><li>• There is no direct evidence that heavy or social drinking will affect your body's response to the COVID-19 vaccine</li><li>• It is possible, but not proven, that drinking alcohol, especially regular heavy drinking, can reduce your body's response to some vaccines. Therefore it is prudent for you not to drink any alcohol for a few days before, and for at least two weeks after, you've been vaccinated.</li></ul> <p>Summary:</p> <ul style="list-style-type: none"><li>• Receiving your COVID-19 vaccine without delay is important (regardless of whether you drink or not)</li><li>• You may like to reduce your alcohol consumption as this is generally good for your health and there is limited evidence that it might improve your body's response to the vaccine.</li></ul> <p><sup>a</sup> <a href="https://www.drinkaware.co.uk/professionals/press/drinkaware-issues-advice-on-alcohol-and-the-covid-19-vaccine">https://www.drinkaware.co.uk/professionals/press/drinkaware-issues-advice-on-alcohol-and-the-covid-19-vaccine</a> (18 January 2021)</p>
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## 9 Other questions

9.1 Implications for blood donation	Please wait 7 full days from your vaccine before donating on the 8th day. If you had side effects from the vaccine such as headache, temperature, aches and chills please wait 28 days from your recovery. <sup>a</sup>  <sup>a</sup> <a href="https://www.blood.co.uk/news-and-campaigns/news-and-statements/coronavirus-covid-19-updates/">https://www.blood.co.uk/news-and-campaigns/news-and-statements/coronavirus-covid-19-updates/</a>
9.2 Will there be a choice of vaccines?	You will not be able to choose which vaccine you have. However, all the vaccines have been approved for use which means they are safe and effective. <sup>3</sup>  Currently JCVI has advised that it is preferable for people under 40 to have a vaccine other than Oxford/AstraZeneca. If you choose to have another COVID-19 vaccine you may have to wait to be protected. You may wish to go ahead with the AZ vaccination after you have considered all the risks and benefits for you. <sup>3</sup>



## 10 Management of patients recruited into trials

### 10.1 COV002 (Oxford) trial

Participant need to unblind to understand their options<sup>4</sup>:

- <https://apps.ovg.ox.ac.uk/login/>
- Login is their participant number. Password is their DOB as an 8 digit number (DDMMYYYY)

Control arm (MenACWY vaccine)	<ul style="list-style-type: none"><li>• Receive national rollout vaccine as normal (2 doses of vaccine)</li><li>• A 2 week gap is recommended between the last dose of control vaccine and the national rollout vaccine</li></ul>
One dose of ChAdOx1 vaccine (either low or standard dose)	<ul style="list-style-type: none"><li>• Receive one dose of national rollout vaccine</li><li>• A 3 week gap is recommended between the last dose of ChAdOx1 vaccine and the national rollout vaccine</li></ul>
Two doses of ChAdOx1 vaccine (either low:low or low:standard)	<ul style="list-style-type: none"><li>• No need to have the national rollout vaccine</li></ul>

**Participants who were advised to not receive a booster dose of the trial vaccine should contact the site to discuss options before having a COVID-19 vaccine as part of the national rollout.**

### 10.2 COVAC1 (Imperial) trial

All participants should receive national rollout vaccine as normal (2 doses of vaccine). A 4 week gap is recommended between the last dose of COVAC vaccine and the national rollout vaccine.

### 10.3 NOVOVAX trial

Participants are asked to contact the trials team to be unblinded before they make an appointment for a vaccine.

#### 10.4 ENSEMBLE2 trial (Janssen; Johnson & Johnson; Ad26.COVS.S)

Participants need to unblind to understand their options therefore are asked to contact their trials team. Evidence of unbinding is needed before national rollout vaccine should be given.

Control arm (placebo)	Either: i. Enrol onto the ENSEMBLE2 open label crossover study (subject to trial protocol amendment), or ii. Receive national rollout vaccine as normal (2 doses of AZ/Pfizer/Moderna vaccine)
Ad26.COVS.S vaccine arm (1 or 2 doses)	Either: i. No national rollout vaccine (EMA has licensed the vaccine based on a single-dose regimen), or ii. Receive one dose of national rollout vaccine (anyone receiving a trial vaccine, is eligible for a single dose of national rollout vaccine, but the safety/efficacy of combining different regimens is not known). An 4 week gap is recommended between the last dose of Ad26.COVS.S vaccine and the national rollout vaccine.

#### 10.5 Cov-Compare trial (Valneva; VLA2001)

Participants in the over 30s cohort need to unblind to understand their options, therefore are asked to contact their trials team. Evidence of unbinding is needed before national rollout vaccine should be given. Participants in the under 30s cohort do not require unblinding, as they will all have received the Valneva vaccine.

Valneva vaccine (VLA2001)	<ul style="list-style-type: none"> <li>• Receive national rollout vaccine as normal</li> <li>• A 2 week gap is recommended between the last dose of control vaccine and the national rollout vaccine</li> </ul>
One dose of AstraZeneca vaccine (AZD1222)	<ul style="list-style-type: none"> <li>• Receive one dose of national rollout vaccine</li> <li>• A 3 week gap is recommended between the last dose of AZD1222 vaccine and the national rollout vaccine</li> </ul>
Two doses of AstraZeneca vaccine (AZD1222)	<ul style="list-style-type: none"> <li>• No need to have the national rollout vaccine</li> </ul>

## 11 Vaccine brands available nationally and internationally

The table below lists vaccine manufacturers and associated vaccine names. It is intended to support pharmacy staff in identifying which vaccine a given patient has already been received.

When the vaccine is identified, follow Public Health England's advice relating to foreign vaccine administration (Appendix 1).

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/992270/COVID-19\\_vaccination\\_programme\\_guidance\\_for\\_healthcare\\_workers\\_09\\_June\\_2021\\_v3.8.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992270/COVID-19_vaccination_programme_guidance_for_healthcare_workers_09_June_2021_v3.8.pdf)

Manufacturer	Vaccines names
Sinovac Life Sciences Co., Ltd (Beijing <sup>5</sup> )	<ul style="list-style-type: none"> <li>• Vero Cell<sup>6</sup> <b>[be aware that another vaccine may also be called Vero Cell, see below]</b></li> <li>• CoronaVac<sup>7</sup></li> <li>• Adsorbed COVID-19 (inactivated) Vaccine manufactured by Sinovac/Butantan Institute<sup>8</sup></li> </ul>
CureVac AG	<ul style="list-style-type: none"> <li>• CVnCoV<sup>6</sup></li> <li>• CV07050101<sup>9</sup></li> </ul>
Novavax CZ AS	<ul style="list-style-type: none"> <li>• NVX-CoV2373<sup>6</sup></li> </ul>
Russia's Gamaleya National Centre of Epidemiology and Microbiology	<ul style="list-style-type: none"> <li>• Sputnik V<sup>6</sup></li> <li>• Gam-COVID-Vac<sup>6</sup></li> <li>• rAd26-S<sup>10</sup></li> <li>• rAd5-S<sup>10</sup></li> <li>• Gam-COVID-Vac<sup>10</sup></li> </ul>
Pfizer-BioNTech	<ul style="list-style-type: none"> <li>• Comirnaty<sup>11</sup></li> <li>• Tozinameran<sup>12</sup></li> <li>• BNT162b2<sup>13</sup></li> </ul>
Janssen (also Johnson & Johnson <sup>14</sup> )	<ul style="list-style-type: none"> <li>• COVID-19 Vaccine Janssen<sup>11</sup></li> <li>• Ad26.COV2.S<sup>15</sup></li> <li>• JNJ-78436735<sup>15</sup></li> <li>• VAC31518<sup>16</sup></li> <li>• Ad26COVS1<sup>17</sup></li> </ul>

Moderna (also Takeda <sup>18</sup> )	<ul style="list-style-type: none"> <li>• COVID-19 Vaccine Moderna<sup>11</sup></li> <li>• Spikevax<sup>1</sup></li> <li>• mRNA-1273<sup>19</sup></li> <li>• TAK-919<sup>18</sup></li> </ul>
AstraZeneca (Institute of India Covishield <sup>20</sup> )	<ul style="list-style-type: none"> <li>• Vaxzevria<sup>11</sup></li> <li>• COVID-19 Vaccine AstraZeneca<sup>11</sup></li> <li>• ChAdOx1-S<sup>13</sup></li> <li>• AZD1222<sup>21</sup></li> </ul>
Sinopharm (China National Pharmaceutical Group <sup>22</sup> ) – Beijing <sup>5,23</sup>	<ul style="list-style-type: none"> <li>• Inactivated COVID-19 vaccine BIBP<sup>22</sup></li> <li>• BBIBP-CorV<sup>22,23</sup></li> </ul> <p><i>PHE have advised that both Sinopharm vaccines should be managed in the same way.</i></p>
Sinopharm (China National Pharmaceutical Group) - Wuhan <sup>5,24</sup>	<ul style="list-style-type: none"> <li>• Vero Cells<sup>24</sup> <b>[be aware that another vaccine may also be called Vero Cell, see above and below]</b></li> </ul> <p><i>PHE have advised that both Sinopharm vaccines should be managed in the same way.</i></p>
CanSino Biologics	<ul style="list-style-type: none"> <li>• Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector)<sup>25</sup></li> <li>• Ad5-nCoV<sup>25</sup></li> <li>• Convidecia<sup>26</sup></li> <li>• PakVac<sup>27</sup></li> </ul>
Bharat Biotech	<ul style="list-style-type: none"> <li>• Covaxin<sup>28</sup></li> <li>• BBV152<sup>29</sup></li> </ul>

The list of manufacturers was taken from the EMA website and the Public Health England 'COVID-19 vaccination programme Information for healthcare practitioners' document

Others approved for use in at least one country, which we have explored in further detail include (and is not limited to):

- Anhui Zhifei Longcom (RBD-Dimer vaccine; ZF2001)
- Chumakov Center (KoviVac vaccine; BBV152)
- FBRI (EpiVacCorona vaccine)
- Kazakhstan RIBSP (QazVac vaccine; QazCovid-in)
- Minhai Biotechnology Co (SARS-CoV-2 Vaccine [Vero Cells]; KCONVAC)
- Shifa Pharmed Industrial Co (COVID-19 Inactivated Vaccine; COVIran Barekat)

<https://covid19.trackvaccines.org/vaccines/>

## 12 Document management

This document is subject to constant review. If you identify any information that needs to be updated please contact [admin.ncl-mon@nhs.uk](mailto:admin.ncl-mon@nhs.uk).

## 13 Version history

Date	Version	Amendments
10 Aug 2021	1.0	New document (merges three separate documents into one)

## References

1. Public Health England. COVID-19: The Green Book, Chapter 14a. Published online July 30, 2021. <https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a>
2. Medicines and Healthcare Regulatory Agency. Summary of Product Characteristics for Vaxzevria (formerly AstraZeneca vaccine). Published online July 19, 2021. <https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-astrazeneca/information-for-healthcare-professionals-on-covid-19-vaccine-astrazeneca>
3. NHS England & NHS Improvement. Covid-19 frequently asked questions (v6). Published online August 2021. <https://www.england.nhs.uk/london/our-work/covid-19-vaccine-communication-materials/>
4. COV002 (Oxford) trial. IRAS Project ID: 281904 REC Ref: 20/SC/0179 COV002 Participant Email and Online Unblinding Form version 1.0. Published online December 8, 2020.
5. Mallapaty S. China's COVID vaccines are going global — but questions remain. *Nature*. 2021;593(7858):178-179. doi:10.1038/d41586-021-01146-0
6. European Medicines Agency. COVID-19 vaccines: under evaluation. European Medicines Agency. Published January 11, 2021. Accessed June 23, 2021. <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/treatments-vaccines/vaccines-covid-19/covid-19-vaccines-under-evaluation>
7. ClinicalTrials.gov. *An Effectiveness Study of the Sinovac's Adsorbed COVID-19 (Inactivated) Vaccine (Projeto S)*.; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04747821>
8. ClinicalTrials.gov. *Active Pharmacovigilance Study of Adsorbed COVID-19 (Inactivated) Vaccine*.; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04845048>
9. ClinicalTrials.gov. *A Study to Evaluate the Immunogenicity and Safety of the SARS-CoV-2 MRNA Vaccine CVnCoV in Elderly Adults Compared to Younger Adults for COVID-19*.; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04838847>
10. ClinicalTrials.gov. *Study of Sputnik V COVID-19 Vaccination in Adults in Kazakhstan*.; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04871841>
11. European Medicines Agency. COVID-19 vaccines: authorised. European Medicines Agency. Published January 11, 2021. Accessed June 23, 2021. <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/treatments->

vaccines/vaccines-covid-19/covid-19-vaccines-authorised

12. COVID19 Vaccine Tracker. Pfizer/BioNTech: BNT162b2 – COVID19 Vaccine Tracker. Accessed June 23, 2021. <https://covid19.trackvaccines.org/vaccines/6/>
13. ClinicalTrials.gov. *Heterologous Vaccination With an Vaxzevria (ChAdOx1-S) Prime and a Comirnaty (BNT162b2) Boost Compared With Homolog Vaccination With Vaxzervria (Prime/Boost) or Comirnaty (Prime/Boost).*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04907331>
14. Centres for Disease Control and Prevention. Information about the J&J/Janssen COVID-19 Vaccine. Centers for Disease Control and Prevention. Published June 1, 2021. Accessed June 23, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/janssen.html>
15. ClinicalTrials.gov. *A Study of Ad26.COV2.S in Adults (COVID-19).*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04509947>
16. ClinicalTrials.gov. *A Study of Ad26.COV2.S in Healthy Adults (COVID-19).*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04894305>
17. ClinicalTrials.gov. *A Study of Ad26.COV2.S in Healthy Pregnant Participants (COVID-19) (HORIZON 1).*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04765384>
18. COVID19 Vaccine Tracker. Takeda: TAK-919 – COVID19 Vaccine Tracker. Accessed June 23, 2021. <https://covid19.trackvaccines.org/vaccines/79/>
19. ClinicalTrials.gov. *A Study to Evaluate Efficacy, Safety, and Immunogenicity of MRNA-1273 Vaccine in Adults Aged 18 Years and Older to Prevent COVID-19.*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04470427>
20. Serum Institute of India PVT. LTD. COVISHIELD FAQs. Published online May 21, 2021. Accessed June 23, 2021. [https://www.seruminstitute.com/health\\_faq\\_covishield.php#faq1](https://www.seruminstitute.com/health_faq_covishield.php#faq1)
21. Voysey M, Clemens SAC, Madhi SA, et al. Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK. *The Lancet*. Published online December 2020:S0140673620326611. doi:10.1016/S0140-6736(20)32661-1
22. World Health Organisation. The Sinopharm COVID-19 vaccine: What you need to know. Accessed June 23, 2021.

<https://www.who.int/news-room/feature-stories/detail/the-sinopharm-covid-19-vaccine-what-you-need-to-know>

23. COVID19 Vaccine Tracker. Sinopharm (Beijing): BBIBP-CorV. Accessed June 23, 2021. <https://covid19.trackvaccines.org/vaccines/5/>
24. COVID19 Vaccine Tracker. Sinopharm (Wuhan): Inactivated (Vero Cells). Accessed June 25, 2021. <https://covid19.trackvaccines.org/vaccines/16/>
25. ClinicalTrials.gov. *Phase III Trial of A COVID-19 Vaccine of Adenovirus Vector in Adults 18 Years Old and Above.*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04526990>
26. COVID19 Vaccine Tracker. CanSino: Ad5-nCoV – COVID19 Vaccine Tracker. Accessed June 23, 2021. <https://covid19.trackvaccines.org/vaccines/2/>
27. Pakistan produces Chinese CanSinoBio COVID vaccine, brands it PakVac. Reuters. Published June 4, 2021. Accessed June 23, 2021. <https://www.reuters.com/world/asia-pacific/pakistan-produces-chinese-cansinobio-covid-vaccine-brands-it-pakvac-2021-06-04/>
28. Ella R, Reddy S, Jogdand H, et al. Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: interim results from a double-blind, randomised, multicentre, phase 2 trial, and 3-month follow-up of a double-blind, randomised phase 1 trial. *Lancet Infect Dis.* 2021;0(0). doi:10.1016/S1473-3099(21)00070-0
29. ClinicalTrials.gov. *An Efficacy and Safety Clinical Trial of an Investigational COVID-19 Vaccine (BBV152) in Adult Volunteers.*; 2021. Accessed June 21, 2021. <https://clinicaltrials.gov/ct2/show/NCT04641481>