

FREQUENTLY ASKED QUESTIONS & ANSWERS

VACCINATION AGAINST COVID-19

ORGAN AND ISLET TRANSPLANT RECIPIENTS,  
PATIENTS ON THE TRANSPLANT WAITING LIST AND  
LIVING DONORS

**SECTION 1: PRIORITISATION AND EXCEPTIONS FOR VACCINATION**

1.1	<b>Who is being offered a vaccine and when?</b>
	<p>The order of priority for vaccination is defined by the government, based upon criteria related to the risk of severe disease from COVID-19.</p> <p>The Joint Committee on Vaccination and Immunisation (JCVI) advises on the order in which people are vaccinated. People who are eligible to receive vaccination include:</p> <ul style="list-style-type: none"><li>• All adults over 18 years of age</li><li>• Young people of 16 and 17 years of age</li><li>• Children and young people between 12-15 years of age if they are more vulnerable to infection and/or live with someone who is more vulnerable to infection (e.g. transplant recipients or people who are immunosuppressed)</li></ul> <p><b>Latest guidance can be found at this link:</b> <a href="https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/">https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/</a></p>
1.2	<b>I am an adult on the transplant waiting list or a transplant recipient, will I be prioritised to receive a vaccine?</b>
	<p>The criteria for vaccination are referenced in section 1.1 above. Your medical condition initially put you ahead of other groups because you are classified as clinically extremely vulnerable, but other criteria were used as well, such as age.</p> <p>The JCVI recommend that adult patients who are about to receive planned immunosuppressive therapy (i.e., waiting for a transplant) should, where possible, be considered for vaccination prior to starting such treatment. Emerging evidence suggests that three doses of vaccine may offer better protection for clinically extremely vulnerable people, including transplant patients. Vaccination with a 3<sup>rd</sup> dose of vaccine is expected to be rolled out from September 2021.</p> <p>Separate advice is given for children under the age of 16 years and pregnant and breast-feeding women (see also sections 1.3 &amp; 1.5)</p>

1.3	<b>Should children and young people on the transplant waiting list receive the vaccine?</b>
	<p>Vaccination before transplantation is recommended for children and young people of 12 years and above provided that transplantation is not delayed if the vaccination cannot be given before.</p> <p>In addition, Individual assessment is advised in children under 16 years of age according to their risk of exposure and serious outcome from COVID-19.</p>
1.4	<b>I live in a household with someone who is on the transplant waiting list or who is a transplant recipient. Should I be vaccinated too?</b>
	<p>The JCVI recommends household contacts of severely immunosuppressed patients (like organ transplant recipients) are offered COVID-19 vaccination (see section 1.1).</p> <p>It is still important that everyone continues to take precautions to prevent transmission of the virus to vulnerable individuals.</p>
1.5	<b>Are there any groups of people that should <u>not</u> receive the vaccines?</b>
	<p>Contraindications to receive the Pfizer BioNTech, the Oxford University/ AstraZeneca or the Moderna vaccines are very limited. Close monitoring of vaccine safety is in place to identify any new issues and emerging evidence will be incorporated into this Q&amp;A.</p> <p>The vaccine should not be given to:</p> <p><b>1. Those who have had confirmed serious allergic reaction to</b></p> <ul style="list-style-type: none"> <li>- a previous dose of the same COVID-19 vaccine</li> <li>- any components of the COVID-19 vaccine</li> </ul> <p>There is no evidence of any safety concerns from vaccinating individuals with a history of previous unexplained allergic reaction or severe allergic reaction to any other drug, vaccine, or food item. This advice will be kept under review.</p> <p><b>2. Those who currently have proven COVID-19</b></p> <p>If you have any current symptoms of COVID-19, please do not attend for vaccination, and discuss with your doctors when to reschedule your vaccination. It is usual practice, with any vaccine, to wait for recovery from an acute infection or illness. A minimum of 28 days is recommended.</p> <p>There is no evidence of any safety concerns from vaccinating individuals with a history of COVID-19 or with detectable antibodies.</p> <p>Special considerations apply to the following groups of people, whether they are on the transplant waiting list or a transplant recipient or in the general population:</p>

	<p><b>1. Pregnant and breast-feeding women,</b></p> <p>According to their most recent advice, the JCVI recommends that you can have a COVID-19 vaccine if you are:</p> <ul style="list-style-type: none"> <li>• Pregnant or think you might be</li> <li>• Breastfeeding</li> <li>• Trying for a baby</li> </ul> <p>Women in the later stages of pregnancy can become seriously ill due to COVID-19 but the vaccine cannot give you or your baby COVID-19. Pregnant women should be offered COVID-19 vaccines at the same time as people of the same age or risk group.</p> <p><b>2. If you have participated in a COVID-19 vaccine trial and you are called to receive a vaccine, you should seek advice from the trial coordinator. You will be provided with advice on whether you should be vaccinated through the routine programme.</b></p> <p><b>For further information</b></p> <ul style="list-style-type: none"> <li>• Government advice <a href="https://www.gov.uk/coronavirus">https://www.gov.uk/coronavirus</a> <a href="https://www.gov.uk/government/publications/covid-19-vaccination-women-of-childbearing-age-currently-pregnant-planning-a-pregnancy-or-breastfeeding/covid-19-vaccination-a-guide-for-women-of-childbearing-age-pregnant-planning-a-pregnancy-or-breastfeeding">https://www.gov.uk/government/publications/covid-19-vaccination-women-of-childbearing-age-currently-pregnant-planning-a-pregnancy-or-breastfeeding/covid-19-vaccination-a-guide-for-women-of-childbearing-age-pregnant-planning-a-pregnancy-or-breastfeeding</a></li> <li>• JCVI advice: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007737/Greenbook_chapter_14a_30July2021.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007737/Greenbook_chapter_14a_30July2021.pdf</a></li> <li>• MHRA advice: <a href="https://www.gov.uk/government/collections/mhra-guidance-on-coronavirus-covid-19#vaccines-and-vaccine-safety">https://www.gov.uk/government/collections/mhra-guidance-on-coronavirus-covid-19#vaccines-and-vaccine-safety</a></li> </ul>
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**SECTION 2: SAFETY AND EFFICACY OF THE VACCINES**

<b>2.1</b>	<b>How safe are the vaccines?</b>
	<p>All vaccines approved for use meet strict standards of safety, quality and effectiveness set out by the independent Medicines and Healthcare products Regulatory Agency (MHRA).</p> <p>Any COVID-19 vaccine that is MHRA approved must go through the same clinical trials and safety checks that all other licensed medicines go through. The MHRA follows international standards of safety and any MHRA-approved vaccine is safe for use in organ and islet transplant recipients, people on the waiting list and living donors provided there is no other contra-indication.</p> <p>Millions of COVID-19 vaccines have been administered since the start of the rollout in the UK. Reports of serious side effects, such as allergic reactions, are very rare.</p> <p>As with any new medicine in the UK, COVID-19 vaccines are closely monitored to allow quick identification of new safety concerns.</p> <p>A <a href="#">condition known as vaccine induced immune thrombocytopenia and thrombosis (VITT)</a> has been described in a small number of people after they received a first dose of the Astra</p>

	<p>Zeneca vaccine. It is rare but can cause serious complications. In the UK, 405 cases of VITT out of 14.2 million doses of the AstraZeneca vaccine had been reported by end of July 2021. The condition presents 5 to 28 days post vaccination with low platelets, blood clotting in unusual places - including the brain, and unusual antibody formation.</p> <p>The JCVI has recommended adults aged 18-39 years without underlying health conditions, who are yet to receive their first dose, should be offered either the Pfizer or Moderna vaccines as an alternative to the AstraZeneca vaccine, provided this does not delay their vaccination.</p> <p>For specific questions about the AstraZeneca vaccine, please refer to sections 2.24-2.32. Further information at:  <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992072/PHE_COVID-19_AZ_vaccine_and_blood_clots_factsheet_8June21.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992072/PHE_COVID-19_AZ_vaccine_and_blood_clots_factsheet_8June21.pdf</a></p>
<b>2.2</b>	<b>Should I be worried about how quickly the vaccines have been developed?</b>
	<p>No. The speed of development might make some people concerned, so it is important to say that no corners have been cut. Before they can be used, the vaccines must meet all the same very stringent criteria set by the regulator (the MHRA) as for all other medicines.</p> <p>The usual process for vaccine development is very long and it was recognised that things had to be done differently in response to this worldwide emergency. During the development of the COVID-19 vaccines, regulators and researchers have worked in parallel to avoid delays. Newer technologies, already being developed for other diseases, have enabled the more rapid development of COVID-19 vaccines.</p>
<b>2.3</b>	<b>Do the Covid-19 vaccines contain live coronavirus?</b>
	<p>None of the approved vaccines contains live coronavirus so they cannot cause infection in the person vaccinated.</p> <p>These vaccines are considered safe for organ transplant recipients and people on the transplant waiting list.</p> <p>The AstraZeneca and Janssen vaccines use an adenovirus vector (carrier), but this cannot cause infection in the person vaccinated.</p>
<b>2.4</b>	<b>What are the side effects of the vaccines?</b>
	<p>Most side effects of the COVID-19 vaccines are mild and resolve within 24 to 48 hours from vaccination:</p> <ul style="list-style-type: none"> <li>• a sore or heavy arm where the needle went in</li> <li>• feeling tired</li> <li>• a headache</li> <li>• feeling achy</li> <li>• low grade fever</li> </ul>

2.5	<b>Will I be able to choose what vaccine I receive?</b>
	<p>There are several COVID-19 vaccines being produced. Specific considerations related to the AstraZeneca vaccine are detailed below (see sections 2.24-2.33).</p> <p>Of the other approved vaccines, there is currently no evidence that any one vaccine is better than another and it is recommended that suitable recipients receive any of these vaccines when one is offered to them. <a href="#">Studies into how effective different vaccines are in transplant recipients and immunosuppressed patients by vaccine type are on-going.</a></p>
2.6	<b>How many doses of the vaccine will I need?</b>
	<p>Of the vaccines approved for use in the UK, Pfizer, AstraZeneca and Moderna are routinely given as 2 doses, 3 to 12 weeks apart. <a href="#">The single dose vaccine by Janssen has been approved for use in the UK but has not been rolled out.</a></p> <p>For patients on the transplant waiting list receiving Pfizer, AstraZeneca and Moderna vaccines, it is recommended that two doses of vaccine are given 21-28 days apart (depending upon vaccine type), before starting immunosuppression therapy. Where this is not possible, your clinical team will advise you on the best plan for you according to your individual circumstances.</p> <p>The aim is to deliver at least two doses of vaccine to as many people as possible. <a href="#">Latest evidence suggests that three doses of vaccine are likely to offer better protection for clinically extremely vulnerable people and everyone is encouraged to accept a 3<sup>rd</sup> dose of vaccine when it is offered.</a></p> <p>It is very important that you follow up to date advice on the dosing, in order to achieve the best response to the vaccines. New scientific evidence or new vaccines may become available, which may differ from what we are doing at the moment.</p> <p>Further information at: <a href="https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2021/07/C1327-covid-19-vaccination-autumn-winter-phase-3-planning.pdf">https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2021/07/C1327-covid-19-vaccination-autumn-winter-phase-3-planning.pdf</a></p>
2.7	<b>Why should I take 3 doses of the vaccine?</b>
	<p>Response to the vaccine can start from around 14 days after the first dose, but some people are getting COVID-19 between doses <a href="#">and after they have received both doses.</a> Whilst the second dose will further improve the response and length of protection <a href="#">against severe COVID-19 disease,</a> <a href="#">recent evidence shows that a third dose is likely to offer better protection to those who are at increased risk of infection (see section 2.6).</a> For these reasons, it is very important that you receive at least two doses of vaccine and accept a 3<sup>rd</sup> dose when it is offered to you.</p> <p>There is a chance that you might get or spread COVID-19 after you have been vaccinated so you are still advised to follow government advice at <a href="https://www.gov.uk/coronavirus">https://www.gov.uk/coronavirus</a> after vaccination.</p>

2.8	<b>If I received the first dose of the vaccine and I am waiting for the <b>second or third</b> to be administered, will I be able to have a transplant if it is offered to me?</b>
	Yes. Response to the vaccine starts around two weeks after the first dose and a stronger, longer lasting response is expected after the second <b>and third doses</b> . If at all possible, you should aim to receive <b>at least</b> two doses of vaccine before your transplant so that you increase the chance of a stronger response. You can discuss this with your doctor in more detail so that you understand the benefits for you.
2.9	<b>I am on the transplant waiting list. Will I need to be suspended from the transplant list for a period of time after receiving the vaccine?</b>
	No, you will not need to be suspended from the waiting list. To comply with hospital infection control requirements, if you are receiving a planned living donor transplant, you will need to self-isolate for two weeks after your last dose of vaccine before your admission to hospital for surgery.
2.10	<b>If I receive the vaccine and then my transplant soon afterwards, will I need the vaccine again?</b>
	We continue to study this to provide answers to this question. At the moment, three doses of vaccine are recommended for transplant recipients and immunosuppressed patients to give maximum protection Your transplant team will look at your individual case and discuss this with you as more evidence becomes available.
2.11	<b>If I have the vaccine, will I need to have COVID-19 screening undertaken if I am admitted to hospital for a transplant?</b>
	Yes. The vaccine is given primarily to prevent severe COVID-19, so infection could still occur and result in no symptoms or very mild symptoms. As above, you are still advised to follow government advice at <a href="https://www.gov.uk/coronavirus">https://www.gov.uk/coronavirus</a> even after vaccination.
2.12	<b>If I have recently received my transplant should I have the vaccine?</b>
	Depending on the anti-rejection treatment you have received, you are advised to wait for a period after the transplant, so that you develop a better response to the vaccine. This may be three months or more in some individuals. The transplant team will advise you.
2.13	<b>Could the vaccines cause rejection of my transplanted organ?</b>
	Many vaccines are routinely given to transplant recipients. Organ damage or rejection has not been proven scientifically to be associated with use of any of the approved vaccines.

2.14	<b>Will the vaccines interact with any other medicines?</b>
	There is no evidence that the vaccines interact with other medicines. Your doctors will advise you if there is anything that you should be concerned about. If concerned, always ask.
2.15	<b>Should I tell my transplant centre once I receive the vaccine?</b>
	Yes. Please provide the information on your vaccination card, which will show the name of the vaccine and the date you received it.
2.16	<b>How effective are the vaccines?</b>
	<p>The main aim from vaccination is to reduce risk of severe infection or death due to COVID-19. After having any of the vaccines most people with a <b>normal immune system</b> will be protected against serious illness due to COVID-19 disease. Clinical trial results published for the vaccines show between 70-95% effectiveness in healthy volunteers- that is for every 100 vaccinated individuals, 70 to 95 individuals were protected from becoming ill with COVID-19, which is very good when compared with other common vaccines such as influenza.</p> <p>Research is ongoing to assess the efficacy of vaccination in transplant recipients, people waiting for a transplant and those who are taking immunosuppressant medications. <b>Emerging evidence suggests that the vaccine effectiveness could be enhanced in clinically extremely vulnerable patients, including transplant patients, by receipt of a third vaccine dose.</b></p> <p><b>However</b>, analysis by NHS Blood and Transplant (NHSBT) of combined data from Public Health England, the national vaccine registry and NHSBT, confirms that amongst transplant recipients and patients waiting for a transplant, those receiving <b>two doses of vaccine</b> had a significantly lower chance of contracting or dying from COVID-19 in comparison with unvaccinated patients.</p> <p>This data strongly supports the recommendation that, in the absence of any other health contraindication, suitable transplant recipients and patients on the transplant waiting list <b>receive at least two doses of the COVID-19 vaccine and a third dose when offered</b> for maximum protection against the virus.</p> <p><b>Vaccination will reduce risk of severe disease or death due to COVID-19 but not eliminate the risk of getting coronavirus infection and/or infecting others.</b> This means it is important to continue to protect yourself and others in line with government guidance:</p> <ul style="list-style-type: none"> <li>- face covering</li> <li>- physical distancing</li> <li>- handwashing</li> </ul> <p>You will need to continue these precautions even after you are vaccinated. We need to allow time for as many people as possible to be vaccinated, for the number of infected people to decrease significantly, and for more data about the level of protection in transplant recipients to become known.</p>

	Updates will be provided as data becomes available.
<b>2.17</b>	<b>If I don't have a high level of antibodies against COVID-19 (SARS-CoV 2) after vaccination, does it mean I'm not protected?</b>
	<p>Measuring antibody levels can vary considerably depending on how they are measured and, on its own may not adequately reflect the amount of protection you have from the vaccine. Even though <a href="#">recent UK and international evidence</a> has confirmed that immunosuppressed patients may not have levels of antibody that are as high as we expect to see in non-immunosuppressed patients, there are other forms of immunity after vaccination, such as T cells, and research is on-going to fully understand the relevance of lower antibody levels. As outlined in 2.16, recent analysis suggests that vaccination still offers the best protection from severe disease or death due to COVID-19 for transplant recipients and patients waiting for a transplant.</p> <p>The JCVI still recommend being vaccinated and observing social distancing and face coverings even after receiving <a href="#">the full course</a> of the vaccine (see section 2.16)</p>
<b>2.18</b>	<b>Will the vaccine still be effective if the virus mutates?</b>
	<p>Similar to seasonal flu, the coronavirus changes (mutates) naturally, and we might need slightly different vaccines. This is monitored very carefully by public health authorities.</p> <p>Work is continuously being done to understand the impact that these changes in the virus may have on the efficacy of the vaccines and the response to them in different groups of people, including those who are immunosuppressed/with weakened immune systems. If needed, vaccines can be changed to improve responses to new variants and protection for those who are more vulnerable to infection.</p>
<b>2.19</b>	<b>Does age affect how well the vaccines work?</b>
	It does not appear so. Older people have been shown to be equally protected from disease through vaccination when compared with younger people
<b>2.20</b>	<b>Is there any difference in vaccine efficacy in people from Black, Asian, Mixed Race and Minority Ethnic Groups?</b>
	<p>No differences in outcomes have been found in Black, Asian, Mixed Race and Minority Ethnic groups but, there is currently limited evidence available from clinical trials on vaccine efficacy, as the numbers enrolled were smaller.</p> <p>Everyone who is offered vaccination is encouraged to accept it to protect themselves and others. We recognise that some people may be hesitant about vaccination and they need to trust that it is the right decision for them. NHS organisations, patient organisations and professional societies work together to produce information for patients about vaccination that is factual, accurate and up to date. Some examples can be found at the following links:</p>



	<p>Kidney Care UK <a href="https://www.kidneycareuk.org/search/?query=vaccination">https://www.kidneycareuk.org/search/?query=vaccination</a>  National Kidney Federation <a href="https://www.kidney.org/coronavirus/vaccines-kidney-disease">https://www.kidney.org/coronavirus/vaccines-kidney-disease</a>  British Liver Trust <a href="https://britishlivertrust.org.uk/update-for-people-with-liver-disease-on-the-covid-19-vaccine/">https://britishlivertrust.org.uk/update-for-people-with-liver-disease-on-the-covid-19-vaccine/</a>  Renal Association <a href="https://renal.org/health-professionals/covid-19/covid-19-vaccination/vaccine-information">https://renal.org/health-professionals/covid-19/covid-19-vaccination/vaccine-information</a>  British Transplantation Society <a href="https://bts.org.uk/information-resources/covid-19-information/">https://bts.org.uk/information-resources/covid-19-information/</a>  Public Health England <a href="https://coronavirusresources.phe.gov.uk/">https://coronavirusresources.phe.gov.uk/</a></p>
<b>2.21</b>	<b>How well do the vaccines work for organ and islet transplant recipients or people on the transplant waiting list?</b>
	<p>As the vaccines are new, we will not have all the answers to how people with different health conditions respond for some time. Experience with vaccines that have been used for a long time show that, even with a weaker response, they still offer <b>the best protection against serious disease and complications of COVID-19.</b> (see section 2.16-2.17)</p> <p>We know a limited amount about how organ or islet transplant recipients or those waiting for a transplant respond to the vaccines, but recent NHSBT analysis suggests that vaccination does offer protection. (see section 2.16-2.17). Vaccination before starting immunosuppressive therapy is recommended to offer the best chance of a good response to the vaccine.</p> <p>There is no evidence that the vaccines themselves cause infection in patients following an organ or islet transplant.</p>
<b>2.22</b>	<b>Could ‘herd immunity’ help protect organ and islet transplant recipients or people waiting for a transplant?</b>
	<p>It is not clear if herd immunity is achievable and the JCVI is monitoring the situation. Due to the timeframes involved and the lack of ‘longitudinal studies’, it remains uncertain whether or not ‘herd immunity’ to SARS CoV2 infection can be achieved.</p>
<b>2.23</b>	<b>What about the trial where people without functioning immune systems are given antibodies instead of a vaccine? Could this be the best thing for people with organ and islet transplants?</b>
	<p>Interim outcomes of trials (RECOVERY and REMAP-CAP) to assess the impact of antibody treatment for people with COVID-19 infection have shown no overall benefit for people in hospital care. Both trials are still analysing whether plasma could benefit some groups of patients, such as people with low natural antibody levels or for people with severely impaired immune systems who would not respond to the vaccine. Use of convalescent plasma early in infection, before people become very unwell, is also being studied.</p>
<b>2.24</b>	<b>My first dose of vaccine was AstraZeneca and I’m due my second dose soon. Should I receive it?</b>
	<p>The JCVI guidance is clear that adults who have not experienced any trouble with blood clots following their first dose of AstraZeneca vaccine can safely receive the second dose of the</p>

	<p>same vaccine. To date, all reported cases of serious blood clots happened after receiving the first dose of vaccine.</p> <p>The risk of death from COVID-19 is much higher than the risk of blood clots related to the AstraZeneca vaccine, particularly for kidney dialysis patients and recipients of organ and islet transplants.</p>
<p><b>2.25</b></p>	<p><b>Have there been any clotting complications in the recipients of organ or islet transplants who have received the AstraZeneca vaccine?</b></p>
	<p>Not to our knowledge but we are closely monitoring the situation.</p>
<p><b>2.26</b></p>	<p><b>Can I have the Pfizer vaccine as my preferred first or second dose?</b></p>
	<p>For first doses, the vaccine you are offered is in line with JCVI advice and will relate to your age. For people aged 40 years or over, any vaccine type is deemed safe for both first and second doses.</p> <p>For <a href="#">anyone under 40 years of age, including children and young people</a>, who are invited to receive their first dose of vaccine, the recommendation is to offer an alternative to the Oxford/Astra Zeneca vaccine approved for use in the UK.</p> <p>For the first dose of vaccine, you will receive an invitation from your GP, who will offer you the vaccine that is right for you based on latest JCVI advice. It will not be possible to choose the vaccine type when you attend for your vaccination itself.</p> <p>For second doses of vaccine, the JCVI advice is that anyone, irrespective of age, who had a first dose of AstraZeneca vaccine and had no problems related to blood clots afterwards, can safely receive a second dose of AstraZeneca vaccine. Adults who experienced blood clots after the first dose of AstraZeneca vaccine should not have a second dose of the same vaccine type. They should receive an alternative vaccine type for the second dose.</p> <p>Your GP will ensure that you receive a second dose of vaccine that is right for you when the time comes for your scheduled appointment.</p>
<p><b>2.27</b></p>	<p><b>I am a woman, aged between 20 to 50 years. Should I receive my second dose of AstraZeneca vaccine?</b></p>
	<p>Always follow the latest Government guidance and advice from your GP (see 2.24 and 2.26)</p>
<p><b>2.28</b></p>	<p><b>I have received one or two doses of AstraZeneca vaccine. Do I need to be tested for blood clots?</b></p>
	<p>No. If your health is unchanged post vaccination, no tests are needed. If you experience any of the <b><u>following from around 4 days to four weeks after vaccination you should seek medical advice urgently</u></b> from your GP or nearest hospital</p>

	<ul style="list-style-type: none"> <li>• a new, severe headache which is not helped by usual painkillers or is getting worse</li> <li>• an unusual headache, which is worse when lying down or bending over and accompanied by             <ul style="list-style-type: none"> <li>• blurred vision, nausea, and vomiting</li> <li>• difficulty with your speech</li> <li>• weakness, drowsiness, or seizures</li> </ul> </li> <li>• shortness of breath, chest pain, leg swelling or persistent abdominal pain</li> <li>• new, unexplained pinprick bruising or bleeding (other than at the injection site)</li> </ul>
<b>2.29</b>	<b>I received a dose of AstraZeneca vaccine a few weeks ago and developed headaches or bruising or bleeding (e.g. bleeding gums/nose bleeds/blood in urine or stools). What should I do?</b>
	If you are experiencing new symptoms (as above) after you have received a dose of vaccine, please contact your GP or nearest hospital or transplant team (if appropriate). They may arrange for you to have some specific blood tests to check that your blood clotting is normal.
<b>2.30</b>	<b>I developed blood clot (e.g. in my leg/arm/dialysis fistula) AFTER my first dose of AstraZeneca vaccine. Should I have my second dose?</b>
	The JCVI advises against a second dose of AstraZeneca vaccine in this situation. Your GP can arrange for you to receive the Pfizer or Moderna vaccine instead for your second dose (see 2.26). It is a good idea to discuss this with your GP when you are offered your second dose so that the right vaccine type is available for you when you attend for your vaccination.
<b>2.31</b>	<b>I have PREVIOUSLY suffered from blood clots in my leg/arm/elsewhere in my body? Should I receive my first dose of AstraZeneca vaccine?</b>
	The JCVI <b>advises</b> that it is safe to receive a first or second dose of AstraZeneca vaccine in this situation unless you are aged under 40 years and due your first vaccine dose. For <b>anyone</b> aged under 40 years, irrespective of previous history or clotting disorders, the recommendation is to offer Pfizer or Moderna vaccines (see 2.26).
<b>2.32</b>	<b>I am currently taking blood thinning medication for another health reason. Should I receive the AstraZeneca vaccination?</b>
	In the absence of any other contra-indication (as above) it is safe for you to receive the AstraZeneca vaccination if you are taking blood thinning medications.
<b>SECTION 3: LIVING DONORS</b>	
<b>3.1</b>	<b>I am a previous living kidney or lobe of liver donor. Should I have the vaccine?</b>
	Yes. Everyone who is invited to receive vaccination is encouraged to consider it <b>to protect themselves and others.</b>

3.2	<b>I am a living donor currently under assessment or awaiting a date for surgery. If I'm vaccinated, how long do I need to wait before I can donate?</b>
	<p>Current advice is that you do not need to be vaccinated to be an organ donor <b>but everyone is encouraged to consider it</b>. If you are vaccinated, your response is expected to be the same as for someone with a normal immune system/healthy volunteer in trials (see section 2.17). The available vaccines do not carry a risk to the recipient, as they do not contain live coronavirus. It is important you continue to apply strict precautions as per government advice, to minimise the chances of catching the virus.</p>