National Haemoglobinopathy Panel

COVID-19 Vaccination in patients with Haemoglobinopathies and Rare Inherited Anaemias

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We welcome the news that vaccines are now available to help protect against COVID-19 infection. The Medicines and Healthcare products Regulatory Agency (MHRA) has now approved the Pfizer/BioNTech COVID-19 vaccine, Oxford/AstraZeneca COVID-19 Vaccine and Moderna COVID-19 vaccine. It is likely that more vaccines will be approved during 2021.

We would encourage everyone to read the patient information below and ask your haematology team any questions you may have. We think it is vital that people with haemoglobin disorders get the vaccine as soon as it is offered in order to keep them safe and well.

How safe is the COVID-19 vaccine?

We know many people have been concerned about how quickly the vaccine has been developed. However, due to the global emergency, developing a coronavirus vaccine has been prioritised by scientists, drug companies and governments, and a huge amount of collaboration has helped this to happen as fast as possible. Any coronavirus vaccine that is approved must go through all the clinical trials and safety checks all other licensed medicines go through.

The first vaccines currently approved for use in the UK (Pfizer/BioNTech and Oxford Astra/Zeneca and Moderna) have met strict standards of safety, quality and effectiveness set out by the independent Medicines and Healthcare products Regulatory Agency (MHRA).

Other vaccines are being developed. However, they will only be available on the NHS once they have been thoroughly tested to make sure they are safe and effective following clinical trials and safety checks that meets international standards.

So far, over 30 million people in the UK have been given a COVID-19 vaccine (almost 50% of the population) and over 10 million have had both doses of a vaccine. The vaccination programme has been highly effective and substantially reduces the risk of infection and severe COVID-19 infection.

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What are the risks of developing a blood clot after the vaccine?

There have been reports of an extremely rare adverse event of developing blood clot and low platelet count following vaccination with first dose of AstraZeneca vaccine. This may be slightly higher in young adults and as younger adults have a lower risk of severe effects of COVID-19 infection, individuals under 30 years with no underlying health conditions should be offered an alternative COVID-19 vaccine, if available.

Many of those with haemoglobinopathies and rare anaemias will have already had a vaccination.

- If they have already had one vaccination they should proceed to have their second vaccination.
- If they have had a first dose of AstraZeneca vaccination they should be offered the second dose of AstraZeneca vaccination. There are no reports, to date, of the rare blood clot/low platelets syndrome with the second dose.
- If they have not yet been vaccinated and are under 30 years of age they should be offered an alternative COVID-19 vaccine if available. If there is no alternative, their increased risk of severe COVID-19 should be considered to allow them to make an informed choice about whether to receive the AstraZeneca COVID-19 vaccine to ensure earlier protection

The benefits of vaccination continue to outweigh any risks.

This information is being frequently updated:

https://www.gov.uk/government/publications/use-of-the-astrazeneca-covid-19-vaccine-jcvi-statement/jcvi-statement-on-use-of-the-astrazeneca-covid-19-vaccine-7-april-2021

When will people with haemoglobin disorders receive the vaccine?

All those who are at highest risk of severe COVID-19 have now been offered a vaccination. This includes:

- All adults with sickle cell disease
- Adults with thalassaemia who have significant iron overload or have their spleens removed
- Adults with rare inherited anaemia who have had their spleens removed or are immunosuppressed.
- All adults aged 45 years and older
- Adults who are a main carer for someone at high risk from COVID-19

People who are eligible for the vaccine but have not yet received it may book an appointment:
https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/book-coronavirus-vaccination/

The government aims to vaccinate all adults by July 2021

How is the COVID-19 vaccine given?

The COVID-19 vaccine is given as an injection into your upper arm. Both vaccines require two doses for full protection. The second dose will be given between 3 and 12 weeks after the first dose. You will have 2 doses of the same vaccine.

Can the vaccine cause coronavirus?

No. You can't get coronavirus from the vaccine. None of the vaccines being used in the UK contain any live virus.

How effective is the COVID-19 vaccine?

After having both doses of the vaccine most people will be protected against coronavirus.

It will start to work about three weeks after the first dose but you will not get full protection until week after you have the second dose.

There is a small chance you might still get coronavirus even if you have the vaccine. It is possible that patients with haemoglobinopathies may not respond as well to the vaccine as the general population and it is not clear how long the protection against the virus will last.

This means it is important to:

- continue to follow social distancing guidance
- you should continue to wear a face covering in places where it's hard to stay away from other people

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What are the side effects of the COVID-19 vaccine?

Most side effects are mild and should not last longer than a week, such as:

- a sore arm where the needle went in
- feeling tired
- a headache
- feeling achy
- feeling or being sick

You can take painkillers, such as paracetamol, if you need to.

It's very rare for anyone to have a serious reaction to the vaccine (anaphylaxis). If this does happen, it usually happens within minutes.

Staff giving the vaccine are trained to deal with allergic reactions and treat them immediately.

In view of the very small risk of blood clotting/low platelets anyone who develops the following symptoms from 4 days to 4 weeks after being vaccinated should call 111 immediately:

- A severe headache that feels worse when you lie down or bend over
- A headache that feels worse when you lie down or bend over
- A headache that occurs with blurred vision, feeling or being sick, weakness, drowsiness or fits
- A rash that looks like small bruises or bleeding under the skin
- Shortness of breath, chest pain, leg swelling or persistent abdominal pain.

COVID-19 vaccine ingredients

The COVID-19 vaccine does not contain any animal products or egg.

Are there any groups of patients who should NOT receive the vaccine?

There is very limited data on safety and efficacy of vaccination in children and young people and COVID-19 vaccines are not routinely recommended for children and young people under 16 years of age.

COVID-19 vaccine should not be given to people with a previous systemic allergic reaction to a previous dose of the same COVID-19 vaccine or to any components of the vaccine.

COVID-19 vaccine can be given if you are pregnant or breastfeeding. The vaccine has no effect on your chances on becoming pregnant.

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Can the vaccination be given to those who have had previous COVID-19?

Individuals who have a past history of COVID-19 infection or who have COVID-19 antibody can be vaccinated once they have completely recovered. Ideally vaccination should be deferred until around four weeks from onset of symptoms or from the first positive test.

If you need further information:

Discuss with your clinical team. More information can be found here.
https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/coronavirus-vaccine/

This has been produced in collaboration between multidisciplinary clinical forum (National Haemoglobinopathy Panel and UK Forum on Haemoglobin Disorders) and patient organisations (UK Thalassaemia Society and Sickle Cell Society).
Information in this statement is likely to change rapidly. Advice should be based on updated advice and will depend on the individual clinical situation.