



Publications approval reference: C1555

## Patient Group Direction for Spikevax (formerly COVID-19 Vaccine Moderna)

This Patient Group Direction (PGD) is for the administration of Spikevax (formerly COVID-19 Vaccine Moderna) to individuals 18 years and over in accordance with the national COVID-19 vaccination programme.

This PGD is for the administration of Spikevax (formerly COVID-19 Vaccine Moderna) by registered healthcare practitioners identified in [Section 3](#).

The national COVID-19 vaccination programme may also be provided under national protocol or on a patient specific basis (that is by or on the direction of an appropriate independent prescriber). Supply and administration in these instances are not covered by this PGD.

Reference no: Spikevax COVID-19 Vaccine (Moderna) PGD  
Version no: v05.00  
Valid from: 19 January 2022  
Expiry date: 31 March 2022

**The UK Health Security Agency (UKHSA) has developed this PGD for authorisation by NHS England and NHS Improvement (NHSEI) to facilitate the delivery of the national COVID-19 vaccination programme.**

NHSEI and those providing services in accordance with this PGD must not alter, amend or add to the clinical content of this document (sections 3, 4, 5 and 6); such action will invalidate the clinical sign-off with which it is provided. [Section 2](#) may be amended only by the person(s) authorising the PGD, in accordance with Human Medicines Regulations 2012 (HMR2012)<sup>1</sup> [Schedule 16 Part 2](#), on behalf of NHSEI. [Section 7](#) is to be completed by registered practitioners providing the service and their authorising/line manager.

Operation of this PGD is the responsibility of NHSEI and service providers. The final authorised copy of this PGD should be kept by NHSEI for 8 years after the PGD expires. Provider organisations adopting authorised versions of this PGD should also retain copies for the period specified above.

**Individual registered practitioners must be authorised by name to work according to the current version of this PGD by signing section 7. A manager with the relevant level of authority should also provide a counter signature, unless there are contractual arrangements for self-declaration.**

Providers must check that they are using the current version of the PGD. Amendments may become necessary prior to the published expiry date. Current versions of UKHSA developed COVID-19 vaccine PGDs can be found via: [COVID-19 vaccination programme](#)

The most current national recommendations should be followed. This may mean that a Patient Specific Direction (PSD) is required to administer the vaccine in line with updated recommendations that are outside the criteria specified in this PGD.

Any concerns regarding the content of this PGD should be addressed to:  
[immunisation@phe.gov.uk](mailto:immunisation@phe.gov.uk)

<sup>1</sup> This includes any relevant amendments to legislation (such as [2013 No.235](#), [2015 No.178](#), [2015 No.323](#) and [2020 No.1125](#)).  
Spikevax COVID-19 Vaccine (Moderna) PGD v05.00 Valid from 19/01/2022 Expiry: 31/03/2022 Page 1 of 24


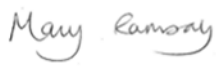

## Change history

Version	Change details	Date
V01.00	New PGD template for COVID-19 Vaccine Moderna.	01/04/2021
V02.00	<p>COVID-19 Vaccine Moderna PGD amended to:</p> <ul style="list-style-type: none"> <li>• update organisation from PHE to UKHSA</li> <li>• update name of vaccine</li> <li>• remove specific reference to clinically extremely vulnerable (CEV) individuals as they are covered by the inclusion of those in at risk groups</li> <li>• include individuals referred for a third primary dose of COVID-19 vaccine in accordance with patient specific recommendations from their specialist, GP or prescriber</li> <li>• update the additional information on immunosuppressed individuals</li> <li>• include individuals eligible for a booster dose as part of the national COVID-19 vaccination programme</li> <li>• exclude individuals who have experienced myocarditis or pericarditis determined as likely to be related to previous COVID-19 vaccination</li> <li>• move cautions relating to pregnancy and those involved in clinical trials to the additional information section</li> <li>• update to cautions</li> <li>• update the additional information on immunosuppressed individuals, co-administration and incomplete vaccination</li> <li>• remove key references to JCVI statements which are now incorporated into the guidance in <a href="#">Chapter 14a</a> of the Green Book.</li> <li>• minor wording changes and additions to text for consistency; updated references</li> </ul>	06/10/2021
V03.00	<p>Spikevax COVID-19 Vaccine (Moderna) PGD amended to:</p> <ul style="list-style-type: none"> <li>• reword criteria for inclusion</li> <li>• reword criteria for exclusion pertaining to allergic reactions</li> <li>• update cautions in line with revisions to Chapter 14a of the Green Book.</li> <li>• <a href="#">reword actions if excluded pertaining to age</a></li> <li>• update the myocarditis and pericarditis section in actions to be taken if excluded section in line with updates in the <a href="#">Chapter 14a</a> of the Green Book</li> <li>• update off-label section in line with updated SPC and revised recommendations from JCVI and in <a href="#">Chapter 14a</a> of the Green Book</li> <li>• update storage section</li> <li>• update dose and frequency of administration section, to include a paragraph on minimum intervals post COVID-19 infection, recommend that immunosuppressed individuals who have not yet received a third dose may be given their third dose now (8 weeks after their second dose) to avoid further delay and that a booster dose can be given to immunosuppressed individuals 3 months after their third primary dose and all individuals from 18 years of age</li> <li>• provide a minimum interval of 3 months between completion of primary vaccination and a booster dose</li> <li>• update adverse reactions section in line with the updated SPC</li> <li>• update drug interactions and special considerations and additional information sections in line with revisions to Chapter 14a of the Green Book</li> <li>• remove line stating that pregnant women should be vaccinated at the same time as non-pregnant women</li> <li>• minor wording changes and additions to text for consistency; updated references</li> </ul>	08/12/21

V04.00	<p>Spikevax COVID-19 Vaccine (Moderna) PGD amended to:</p> <ul style="list-style-type: none"> <li>• update the cautions section in line with updated Chapter 14a of the Green Book 14 December 2021 and UK Chief Medical Officers (<a href="#">CMO</a>) report 14 December 2021</li> <li>• update off-label use section regarding temporary removal of 15 minutes observation and monitoring requirement in the in line with updated Chapter14a of the Green Book 14 December 2021 and CMO report 14 December 2021</li> <li>• update the special considerations and additional information section regarding use of heterologous schedules in primary immunisation in line with updated Chapter 14a of the Green Book 14 December 2021 and add subtitles</li> <li>• update patient advice and follow up treatment section in line with updated Chapter 14a of the Green Book 14 December 2021 and CMO report 14 December 2021</li> <li>• update the key references</li> </ul>	16/12/2021
V5.00	<p>Spikevax COVID-19 Vaccine (Moderna) PGD amended to:</p> <ul style="list-style-type: none"> <li>• provide clarity in cautions, off-label and patient advice sections for individuals without history of allergy</li> <li>• update cautions section to include immune thrombocytopenia (ITP) in line with the updated Chapter 14a of the Green Book 24 December 2021</li> <li>• update off-label and dose and frequency sections with reference to boosting in line with the updated Chapter 14a of the Green Book 24 December 2021</li> <li>• update shelf life in storage section</li> <li>• update the special considerations section regarding the completion of the course in pregnancy at the recommended interval in line with the updated Chapter 14a of the Green Book 24 December 2021</li> <li>• update references section</li> </ul>	14/01/2022

## 1. PGD development

This PGD has been developed by the following health professionals on behalf of the UKHSA:

Developed by:	Name	Signature	Date
<b>Pharmacist</b> (Lead Author)	Beth Graham Lead Pharmacist Immunisation Services, Immunisation and Vaccine Preventable Diseases Division, UKHSA		14/01/2022
<b>Doctor</b> (Chair of Expert Panel)	Mary Ramsay Consultant Epidemiologist, Immunisation and Vaccine Preventable Diseases Division, UKHSA		18/01/2022
<b>Registered Nurse</b>	Kelly Stoker Lead Immunisation Nurse Specialist Immunisation and Vaccine Preventable Diseases Division UKHSA		14/01/2022

In addition to the signatories above the working group included:

Name	Designation
Suki Hunjunt	Lead Pharmacist Immunisation Services, Immunisation and Vaccine Preventable Diseases Division, UKHSA
Jane Horsfall	Senior Policy Manager, Primary Care Group, NHSEI
Jo Jenkins	Specialist Pharmacist (Patient Group Directions), NHS Specialist Pharmacy Service
Jill Loader	Deputy Director, Primary Care Group, NHSEI
Jane Freeguard	Director of Pharmacy, COVID-19 Vaccination Programme, NHSEI
Gul Root	Principal Pharmaceutical Officer, Department of Health and Social Care and National lead pharmacy public health, Office for Health Improvement and Disparities
Naveen Dosanjh	Senior Clinical Advisor, Clinical Workstream, COVID-19 Vaccination Programme, NHSEI

This PGD has been peer reviewed by the UKHSA Immunisations PGD Expert Panel (see [below](#)) in accordance with the UKHSA PGD Policy. It has been ratified by the UKHSA Medicines Governance Group and the UKHSA Clinical Quality and Oversight Board.

## Expert Panel


<b>Name</b>	<b>Designation</b>
Nicholas Aigbogun	Consultant in Communicable Disease Control, Yorkshire and Humber Health Protection Team, UKHSA
Sarah Dermont	Clinical Project Coordinator and Registered Midwife, NHS Infectious Diseases in Pregnancy Screening Programme, NHSEI
Ed Gardner	Advanced Paramedic Practitioner/Emergency Care Practitioner, Medicines Manager, Proactive Care Lead
Michelle Jones	Principal Medicines Optimisation Pharmacist, NHS Bristol North Somerset and South Gloucestershire CCG
Jacqueline Lamberty	Lead Pharmacist Medicines Governance, UKHSA
Vanessa MacGregor	Consultant in Communicable Disease Control, East Midlands Health Protection Team, UKHSA
Alison Mackenzie	Consultant in Public Health Medicine, Screening and Immunisation Lead, NHSEI South (South West)
Gill Marsh	Principal Screening and Immunisation Manager, NHSEI (North West)
Lesley McFarlane	Screening and Immunisation Manager: Clinical (COVID-19 and Influenza), NHSEI (Midlands)
Tushar Shah	Lead Pharmacy Advisor, NHSEI (London Region)

## 2. Organisational authorisation

The PGD is not legally valid until it has had the relevant organisational authorisation from NHSEI completed below.

NHSEI accepts governance responsibility for this PGD. Any provider delivering the national COVID-19 vaccination programme under PGD must work strictly within the terms of this PGD, relevant NHS standard operating procedures (SOPs) and contractual arrangements with the commissioner for the delivery of the national COVID-19 vaccination programme.

NHSEI authorises this PGD for use by the services or providers delivering the national COVID-19 vaccination programme.

Organisational approval (legal requirement)			
Role	Name	Sign	Date
Medical Director, COVID-19 Vaccination Programme, NHSEI	Dr Jonathan Leach OBE		19/01/2022

[Section 7](#) provides a practitioner authorisation sheet. Individual practitioners must be authorised by name to work to this PGD. Alternative practitioner authorisation records, specifying the PGD and version number, may be used where appropriate in accordance with local policy. This may include the use of electronic records.

Assembly, final preparation and administration of vaccines supplied and administered under this PGD must be subject to NHS governance arrangements and standard operating procedures that ensure that the safety, quality or efficacy of the product is not compromised. The assembly, final preparation and administration of the vaccines should also be in accordance with the manufacturer's instructions in the product's UK Summary of Product Characteristics ([SPC](#)) and/or in accordance with official national recommendations.

### 3. Characteristics of staff

<p><b>Qualifications and professional registration</b></p>	<p>Practitioners must only work under this PGD where they are competent to do so. Practitioners working to this PGD must also be one of the following registered professionals who can legally supply and administer under a PGD (see <a href="#">Patient Group Directions: who can administer them</a>):</p> <ul style="list-style-type: none"> <li>• nurses and midwives currently registered with the Nursing and Midwifery Council (NMC)</li> <li>• pharmacists currently registered with the General Pharmaceutical Council (GPhC)</li> <li>• chiropodists/podiatrists, dieticians, occupational therapists, orthoptists, orthotists/prosthetists, paramedics, physiotherapists, radiographers and speech and language therapists currently registered with the Health and Care Professions Council (HCPC)</li> <li>• dental hygienists and dental therapists registered with the General Dental Council</li> <li>• optometrists registered with the General Optical Council.</li> </ul> <p>Practitioners must also fulfil all of the <a href="#">Additional requirements</a>.</p>
<p><b>Additional requirements</b></p> <p>Continued over page</p>	<p>Additionally, practitioners:</p> <ul style="list-style-type: none"> <li>• must be authorised by name as an approved practitioner under the current terms of this PGD before working to it</li> <li>• must have undertaken appropriate training for working under PGDs for supply/administration of medicines</li> <li>• must be competent in the use of PGDs (see <a href="#">NICE Competency framework</a> for health professionals using PGDs)</li> <li>• must be familiar with the vaccine product and alert to changes in the <a href="#">SPC</a>, and familiar with the national recommendations for the use of this vaccine</li> <li>• must be familiar with, and alert to changes in relevant chapters of Immunisation Against Infectious Disease: the <a href="#">Green Book</a></li> <li>• must be familiar with, and alert to changes in the relevant NHS standard operating procedures (SOPs) and commissioning arrangements for the national COVID-19 vaccination programme</li> <li>• must have undertaken training appropriate to this PGD as required by local policy and SOPs and in line with the <a href="#">Training recommendations for COVID-19 vaccinators</a>.</li> <li>• must have completed the <a href="#">national COVID-19 vaccination e-learning programme</a>, including the relevant vaccine specific session, and/or locally-provided COVID-19 vaccine training</li> <li>• must be competent to assess individuals for suitability for vaccination, identify any contraindications or precautions, obtain informed consent (or 'best interests' decision in accordance with the <a href="#">Mental Capacity Act 2005</a>) and to discuss issues related to vaccination. For further information on consent see <a href="#">Chapter 2</a> of 'The Green Book'.</li> <li>• must be competent in the correct handling and storage of vaccines, and management of the cold chain</li> <li>• must be competent in the handling of the vaccine product and use of the correct technique for drawing up the correct dose</li> <li>• must be competent in the intramuscular injection technique</li> <li>• must be competent in the recognition and management of anaphylaxis, have completed basic life support training and be able to respond appropriately to immediate adverse reactions</li> </ul>

<p><b>Additional requirements</b> (continued)</p>	<ul style="list-style-type: none"> <li>• must have access to the PGD and relevant <a href="#">COVID-19 vaccination programme</a> online resources such as the <a href="#">Green Book</a> and <a href="#">COVID-19 vaccination programme: Information for healthcare practitioners</a></li> <li>• must have been signed off as competent using the <a href="#">COVID-19 vaccinator competency assessment tool</a> if new to or returning to immunisation after a prolonged period (more than 12 months) or have used the tool for self-assessment if experienced vaccinator (vaccinated within past 12 months)</li> <li>• should fulfil any additional requirements defined by local or national policy</li> </ul> <p><b>The individual practitioner must be authorised by name, under the current version of this PGD before working according to it.</b></p>
<p><b>Continued training requirements</b></p>	<p>Practitioners must ensure they are up to date with relevant issues and clinical skills relating to vaccination and management of anaphylaxis.</p> <p>Practitioners should be constantly alert to any subsequent recommendations from the UKHSA and/or NHSEI and other sources of medicines information.</p>



#### 4. Clinical condition or situation to which this PGD applies

<p><b>Clinical condition or situation to which this PGD applies</b></p>	<p>Spikevax (formerly COVID-19 Vaccine Moderna and hereafter referred to as Spikevax) is indicated for the active immunisation of individuals for the prevention of coronavirus disease (COVID-19) caused by the SARS-CoV-2 virus, in accordance with the national COVID-19 vaccination programme (see <a href="#">COVID-19 vaccination programme page</a>) and recommendations given in <a href="#">Chapter 14a</a> of the Immunisation Against Infectious Disease: the 'Green Book' (hereafter referred to as <a href="#">Chapter 14a</a>), and subsequent correspondence/publications from the UKHSA and/or NHSEI.</p>
<p><b>Criteria for inclusion</b></p>	<p>Spikevax should be offered to individuals, aged 18 years and over, in accordance with the recommendations in <a href="#">Chapter 14a</a>.</p> <p>Individuals are eligible for different dose schedules based on their recognised risk group (see the <a href="#">Dose and frequency of administration</a> section).</p>
<p><b>Criteria for exclusion<sup>2</sup></b></p>	<p>Individuals for whom valid consent, or 'best-interests' decision in accordance with the <a href="#">Mental Capacity Act 2005</a>, has not been obtained (for further information on consent see <a href="#">Chapter 2</a> of 'The Green Book'). The <a href="#">Patient information leaflet</a> (PIL) for Spikevax should be available to inform consent.</p> <p>Individuals who:</p> <ul style="list-style-type: none"> <li>• are less than 18 years of age</li> <li>• have had a previous systemic allergic reaction (including immediate onset anaphylaxis) to a previous dose of a COVID-19 mRNA vaccine or to any component or residue from the manufacturing process<sup>3</sup> in Spikevax</li> <li>• have a history of prior allergic reaction to COVID-19 vaccine that required medical intervention in hospital</li> <li>• have a history of immediate anaphylaxis to multiple, different drug classes, with the trigger unidentified (this may indicate polyethylene glycol (PEG) allergy)</li> <li>• have a history of anaphylaxis to a vaccine, injected antibody preparation or a medicine likely to contain PEG (such as depot steroid injection, laxative)</li> <li>• have history of idiopathic anaphylaxis</li> <li>• have experienced myocarditis or pericarditis determined as likely to be related to previous COVID-19 vaccination</li> <li>• are suffering from acute severe febrile illness (the presence of a minor infection is not a contraindication for vaccination)</li> <li>• have received a full dose of COVID-19 vaccine in the preceding 28 days</li> </ul>
<p><b>Cautions, including any relevant action to be taken</b></p> <p>Continued over page</p>	<p>Facilities for management of anaphylaxis should be available at all vaccination sites (see <a href="#">Chapter 8</a> of the Green Book) and advice issued by the <a href="#">Resuscitation Council</a>.</p> <p>There is a temporary suspension of the recommended observation and monitoring for 15 minutes in individuals without a history of allergy (see <a href="#">off-label</a> use section below).</p> <p>Following COVID-19 vaccine administration, individuals without a history of allergy should be:</p> <ul style="list-style-type: none"> <li>• observed for any immediate reactions whilst they are receiving any</li> </ul>

<sup>2</sup> Exclusion under this PGD does not necessarily mean the medication is contraindicated, but it would be outside its remit and another form of authorisation will be required.

<sup>3</sup> Contains polyethylene glycol (PEG), refer to the product's [SPC](#) for a full list of excipients.

**Cautions, including any relevant action to be taken**  
(continued)

verbal post vaccination information and exiting the centre

- informed about the signs and symptoms of anaphylaxis and how to access immediate healthcare advice in the event of displaying any symptoms. In some settings, for example domiciliary vaccination, this may require a responsible adult to be present for at least 15 minutes after vaccination.

Individuals with a personal history of allergy should be managed in line with [Chapter 14a](#), Table 5 of the Green Book. No specific management is required for individuals with a family history of allergies.

As fainting can occur following vaccination, all those vaccinated with any of the COVID-19 vaccines should be advised not to drive for 15 minutes after vaccination.

Where individuals experienced a possible allergic reaction to a dose of COVID-19 vaccine, follow the guidance in [Chapter 14a](#) in relation to the administration of subsequent doses.

Individuals with non-allergic reactions (vasovagal episodes, non-urticarial skin reaction or non-specific symptoms) to a COVID-19 vaccine can receive subsequent doses of vaccine in any vaccination setting. Observation for 15 minutes is recommended for these individuals.

Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic limb movements during recovery. It is important that procedures are in place to avoid injury from faints.

Individuals with a bleeding disorder may develop a haematoma at the injection site. Individuals with bleeding disorders may be vaccinated intramuscularly if, in the opinion of a doctor familiar with the individual's bleeding risk, vaccines or similar small volume intramuscular injections can be administered with reasonable safety by this route. If the individual receives medication/treatment to reduce bleeding, for example treatment for haemophilia, intramuscular vaccination can be scheduled shortly after such medication/treatment is administered. Individuals on stable anticoagulation therapy, including individuals on warfarin who are up to date with their scheduled INR testing and whose latest INR was below the upper threshold of their therapeutic range, can receive intramuscular vaccination. A fine needle (equal to 23 gauge or finer calibre such as 25 gauge) should be used for the vaccination, followed by firm pressure applied to the site (without rubbing) for at least 2 minutes. If in any doubt, consult with the clinician responsible for prescribing or monitoring the individual's anticoagulant therapy. The individual/carer should be informed about the risk of haematoma from the injection.

Very rare reports have been received of Guillain-Barre Syndrome (GBS) following COVID-19 vaccination (further information is available in [Chapter 14a](#)). Healthcare professionals should be alert to the signs and symptoms of GBS to ensure correct diagnosis and to rule out other causes, in order to initiate adequate supportive care and treatment. Individuals who have a history of GBS should be vaccinated as recommended for their age and underlying risk status. In those who are diagnosed with GBS after the first dose of vaccine, the balance of risk benefit is in favour of completing a full COVID-19 vaccination schedule. On a precautionary basis, however, where GBS occurs within six weeks of an Astra Zeneca vaccine, for any future doses Pfizer or Moderna COVID-19 vaccines are preferred. Where GBS occurs following either of the mRNA vaccines, further vaccination can proceed as normal, once recovered.

Continued over page

<p><b>Cautions, including any relevant action to be taken</b> (continued)</p>	<p>Previous immune thrombocytopenia (ITP) is not a contra-indication for vaccination but platelet monitoring is advised for individuals with a history of ITP who receive AstraZeneca vaccine. Although evidence suggests a raised risk of ITP after the AstraZeneca vaccine, ITP has also been reported with other COVID-19 vaccines. Guidance produced by the UK ITP Forum Working Party therefore advises discussing the potential for a fall in platelet count in individuals with a history of ITP receiving any COVID-19 vaccine and recommends a platelet count check 2-5 days after the vaccine (<a href="#">British Society for Haematology-COVID-19</a>).</p> <p><b>Past history of COVID-19 infection</b></p> <p>There is no convincing evidence of any safety concerns from vaccinating individuals with a past history of COVID-19 infection, or with detectable COVID-19 antibody.</p> <p>Vaccination of individuals who may be infected but asymptomatic or incubating COVID-19 infection is unlikely to have a detrimental effect on the illness. Vaccination should be deferred in those with confirmed infection to avoid confusing the differential diagnosis. As clinical deterioration can occur up to two weeks after infection, vaccination of adults should be deferred until clinical recovery to around four weeks after onset of symptoms or four weeks from the first confirmed positive specimen in those who are asymptomatic. This interval may be reduced in periods of high incidence or where there is concern about vaccine effectiveness (for example a new variant). The timing of any change will be advised by JCVI or UKHSA and published in operational guidance agreed by DHSC and NHSEI.</p> <p>Having prolonged COVID-19 symptoms is not a contraindication to receiving COVID-19 vaccine but if the individual is seriously debilitated, still under active investigation, or has evidence of recent deterioration, deferral of vaccination may be considered to avoid incorrect attribution of any change in the person's underlying condition to the vaccine.</p> <p><b>Vaccine Surveillance</b></p> <p>The UK regulator will maintain real-time surveillance post deployment of COVID-19 vaccines in the UK. In response to any safety signals, the Medicines and Healthcare products Regulatory Agency (MHRA) may provide temporary advice or make substantive amendments to the authorised conditions of the vaccine product's supply in the UK. Administration under this PGD must be in accordance with the most up-to-date advice or amendments (see Green Book <a href="#">Chapter 14a</a> and the <a href="#">SPC</a>). These documents take precedence for the purposes of compliance with this PGD, if there is a delay in updating other provisions of this PGD that cut across them.</p>
<p><b>Action to be taken if the patient is excluded</b></p> <p>Continued over page</p>	<p>This PGD is for individuals aged 18 years and over in accordance with recommendations in <a href="#">Chapter 14a</a> for the use of Spikevax. For individuals under 18 years of age, Comirnaty<sup>®</sup> vaccine is recommended (see <a href="#">Comirnaty<sup>®</sup> PGD</a>).</p> <p>The risk to the individual of not being immunised must be considered. The indications for risk groups are not exhaustive, and the healthcare practitioner should consider the risk of COVID-19 exacerbating any underlying disease that an individual may have, as well as the risk of serious illness from COVID-19 itself. Where appropriate, such individuals should be referred for assessment of clinical risk. Where risk is identified as equivalent to those currently eligible for immunisation, vaccination may be provided by an appropriate prescriber or on a patient specific basis, under a PSD.</p> <p>For individuals who have had a previous systemic allergic reaction (including immediate onset anaphylaxis) to a previous dose of COVID-19</p>

<p><b>Action to be taken if the patient is excluded</b> (continued)</p>	<p>mRNA vaccine, or any component of the vaccine, advice should be sought from an allergy specialist.</p> <p>Special precautions as described in <a href="#">Chapter 14a</a>, and consideration of the possibility of undiagnosed PEG-allergy, is required for individuals with:</p> <ul style="list-style-type: none"> <li>• history of prior allergic reaction to COVID-19 vaccine that required medical intervention in hospital</li> <li>• history of immediate anaphylaxis to multiple, different drug classes, with the trigger unidentified (this may indicate PEG allergy)</li> <li>• history of anaphylaxis to a vaccine, injected antibody preparation or a medicine likely to contain PEG (such as depot steroid injection, laxative)</li> <li>• history of idiopathic anaphylaxis</li> </ul> <p>Such individuals should not be vaccinated with Spikevax, except on the expert advice of an allergy specialist and under a PSD.</p> <p>Individuals who have experienced myocarditis or pericarditis following COVID-19 vaccination should be assessed by an appropriate clinician to determine whether it is likely to be vaccine related. As the mechanism of action and risk of recurrence of myocarditis and pericarditis are being investigated, the current advice is that an individual's second or subsequent doses should be deferred pending further investigation. Following investigation, any subsequent dose should be provided by an appropriate prescriber or on a patient specific basis, under a PSD.</p> <p>In case of postponement due to acute illness, advise when the individual can be vaccinated and if possible, ensure another appointment is arranged.</p> <p>Document the reason for exclusion and any action taken.</p>
<p><b>Action to be taken if the patient or carer declines treatment</b></p>	<p>Informed consent, from the individual or a person legally able to act on the person's behalf, must be obtained for each administration and recorded appropriately. Where a person lacks the capacity, in accordance with the <a href="#">Mental Capacity Act 2005</a>, a decision to vaccinate may be made in the individual's best interests. For further information on consent see <a href="#">Chapter 2</a> of '<a href="#">The Green Book</a>'.</p> <p>Advise the individual/carer about the protective effects of the vaccine, the risks of infection and potential complications if not immunised.</p> <p>Document advice given and the decision reached.</p>
<p><b>Arrangements for referral</b></p>	<p>As per local policy.</p>

## 5. Description of treatment

<b>Name, strength and formulation of drug</b>	<p>Spikevax dispersion for injection.</p> <p>COVID-19 mRNA Vaccine (nucleoside modified).</p> <p>This is a multidose vial and one vial contains 10 primary doses. One multidose vial should contain 20 booster doses (see <a href="#">Off-label use</a>).</p> <p>One primary dose (0.5ml) contains 100micrograms of mRNA (embedded in SM-102 lipid nanoparticles).</p> <p>One booster dose (0.25ml) contains 50micrograms of mRNA (embedded in SM-102 lipid nanoparticles).</p>
<b>Legal category</b>	Prescription only medicine (POM).
<b>Black triangle▼</b>	Yes. As a new vaccine product, MHRA has a specific interest in the reporting of adverse drug reactions for this product.
<b>Off-label use</b>	<p><b>Primary immunisation</b></p> <p>The Spikevax <a href="#">SPC</a> recommends an interval of 28 days between primary doses. There is evidence of better immune response and/or protection from COVID-19 vaccines where longer intervals between doses are used. Therefore, Spikevax should be administered under this PGD in accordance with recommendations from the JCVI and <a href="#">Chapter 14a</a> for the delivery of the COVID-19 vaccination programme in England. At the time of writing, JCVI recommends an interval of 8 weeks between primary doses (see <a href="#">Dose and frequency of administration</a> section).</p> <p><b>Booster immunisation</b></p> <p>The Spikevax <a href="#">SPC</a> recommends a booster dose may be administered 6 months after the second dose. Booster vaccination may be offered under this PGD to individuals aged 18 years and over, at a minimum interval of three months from the previous dose in accordance with the recommendations from the JCVI and <a href="#">Chapter 14a</a>.</p> <p><b>Allergy</b></p> <p>According to the respective SPCs, it is recommended that all recipients of the Pfizer BioNTech and Moderna vaccines are kept for observation and monitored for a minimum of 15 minutes. In recognition of the need to accelerate delivery of the programme in response to the emergence of the Omicron variant, the UK Chief Medical Officers (<a href="#">CMO</a>) have recommended suspension of this requirement. This is a temporary suspension in individuals without a history of allergy. However, vaccinated individuals should be informed about the signs and symptoms of anaphylaxis and how to access immediate healthcare advice in the event of displaying any symptoms. In some settings, for example domiciliary vaccination, this may require a responsible adult to be present for at least 15 minutes after vaccination.</p> <p>Individuals with a personal history of allergy, should be managed in line with Chapter 14a, Table 5 of the Green Book. No specific management is required for individuals with a family history of allergies.</p> <p>As fainting can occur following vaccination, all those vaccinated with any of the COVID-19 vaccines should be advised not to drive for 15 minutes after vaccination.</p> <p>The MHRA will continue to closely monitor anaphylaxis post-COVID-19 vaccination; reporting of adverse events via the Yellow Card Scheme is</p>
Continued over page	

<p><b>Off-label use</b> (continued)</p>	<p>strongly encouraged.</p> <p>Vaccine should be stored according to the conditions detailed in the <a href="#">Storage section</a> below. However, in the event of an inadvertent or unavoidable deviation of these conditions refer to <a href="#">Vaccine Incident Guidance</a>. Where vaccine is assessed in accordance with these guidelines as appropriate for continued use this would constitute off-label administration under this PGD.</p> <p>Where a vaccine is recommended off-label consider, as part of the consent process, informing the individual/carer that the vaccine is being offered in accordance with national guidance but that this is outside the product licence.</p>
<p><b>Route / method of administration</b></p>	<p>Spikevax is for administration by intramuscular injection only, preferably into deltoid region of the upper arm.</p> <p>Vaccine should be prepared in accordance with manufacturer's recommendations (see the product's <a href="#">SPC</a>) and NHS standard operating procedures for the service.</p> <p>The vaccine should not be mixed in the same syringe with any other vaccines or medicinal products.</p> <p>Inspect visually prior to administration and ensure appearance is a white to off-white dispersion. It may contain white or translucent product-related particulates. If foreign particulate matter or discolouration are present, the vaccine should not be administered.</p> <p>Check product name, batch number and expiry date prior to administration.</p> <p>Swirl the vial gently after thawing and between each withdrawal. Do not shake.</p> <p>Aseptic technique should be used to withdraw each dose of vaccine from the vial, using a new sterile needle and syringe for each injection to prevent transmission of infectious agents from one person to another. The dose in the syringe should be used promptly.</p> <p>The stopper of each vial should ideally be pierced at a different site for each dose that can be withdrawn from the vial.</p> <p>Spikevax vials are multidose and, if low dead-volume syringes and/or needles are used, one vial contains at least 10 primary or 20 booster doses.</p> <p>Care should be taken to ensure a full 0.5ml primary or 0.25ml booster dose is administered. Where a full dose cannot be extracted, the remaining volume should be discarded. Do not pool excess vaccine from multiple vials.</p> <p>This product is preservative-free. Once the vial has been used (needle-punctured) to withdraw the initial dose, the vaccine should be used immediately. Any unused vaccine should be discarded after 6 hours.</p>
<p><b>Dose and frequency of administration</b></p> <p>Continue over page</p>	<p><b>Interval post SARS-CoV-2 infection</b></p> <p>For individuals who have had proven SARS-CoV-2 infection (see <a href="#">Cautions</a>), any subsequent COVID-19 vaccination should ideally be deferred until at least four weeks from onset (or sample date) for all those over 18 years of age. This interval may be reduced in periods of high incidence or where there is concern about vaccine effectiveness (for example a new variant). The timing of any change will be advised by JCVI or UKHSA and published in operational guidance agreed by DHSC and NHSEI.</p> <p><b>Primary vaccination</b></p> <p>A primary dose of Spikevax is 0.5ml and contains 100micrograms of COVID-19 mRNA vaccine in 0.5ml.</p>

**Dose and frequency of administration**  
(continued)

The two-dose primary course consists of a first dose of 100micrograms in 0.5ml followed, after an interval of at least 28 days, by a second dose of 100micrograms in 0.5ml. However, the programme schedule, including both the number of doses and the intervals between them, should be administered in accordance with official national guidance which, at the time of writing, recommends a minimum interval of eight weeks between primary doses for adults, as set out in [Chapter 14a](#).

For both adenovirus vector and mRNA vaccines, there is evidence of better immune response and/or protection where longer intervals between doses in the primary schedule are used.

Based on this evidence, longer intervals are likely to provide more durable protection. JCVI is currently recommending a minimum interval of eight weeks between doses of all the available COVID-19 vaccines where a two-dose primary schedule is used for adults. Operationally, this consistent interval should be used for all vaccines with a two-dose primary schedule to avoid confusion and simplify booking and will help to ensure a good balance between achieving rapid and long-lasting protection.

The main exception to the eight-week lower interval would be those about to commence immunosuppressive treatment. In these individuals, the licensed minimal interval of at least 28 days may be followed to enable the vaccine to be given whilst their immune system is better able to respond.

If an interval longer than the recommended interval is left between doses, the second dose should still be given (using the same vaccine as was given for the first dose if possible, see [Additional Information](#)). The course does not need to be restarted.

**Third primary dose**

JCVI advises that a third primary dose (0.5ml) be offered to individuals who had severe immunosuppression in proximity to their first or second COVID-19 doses in the primary schedule (see 'Box 1: Criteria for a third primary dose of COVID-19 vaccine' in [Chapter 14a](#)). The third dose should be given ideally at least 8 weeks after the second dose. JCVI has previously advised that, the decision on the timing of the third primary dose should be undertaken by the specialist involved in the care of the individual. Following the recognition of the Omicron variant, JCVI has now advised that those who have not yet received their third primary dose may be given their third dose now (8 weeks after their second dose) to avoid further delay. Boosters should be given three months after the previous dose, in line with the clinical advice on optimal timing (see [Additional information](#) section and [below](#)).

**Booster vaccination**

A booster dose of Spikevax is 0.25ml and contains 50micrograms of COVID-19 mRNA vaccine in 0.25ml.

Boosters should be offered to individuals eligible as part of the national COVID-19 vaccination programme in accordance with the recommendations from the [JCVI](#) and in [Chapter 14a](#).

Individuals should complete a primary course of COVID-19 vaccination before receiving any boosters.

Boosters should be given at a minimum interval of three months from the previous dose.

[JCVI](#) have now advised that both the Moderna (50microgram) and Pfizer-BioNTech (30microgram) vaccines should be used with equal preference in the COVID-19 booster programme. Both vaccines have been shown to substantially increase antibody levels when offered as a booster dose.

<b>Duration of treatment</b>	See <a href="#">Dose and frequency of administration</a> above.
<b>Quantity to be supplied / administered</b>	Administer 0.5ml (100micrograms) per primary dose. Administer 0.25ml (50micrograms) per booster dose.
<b>Supplies</b>	Providers should order/receive COVID-19 vaccines via the national appointed supply route for the provider.  NHS standard operating procedures should be followed for appropriate ordering, storage, handling, preparation, administration and waste minimisation of Spikevax, which ensure use is in accordance with the product's <a href="#">SPC</a> and official national recommendations.
<b>Storage</b>	<p>Spikevax multiple-dose vials are stored frozen at -25°C to -15°C. Shelf life of an unopened vial is 9 months at -25°C to -15°C. Do not store on dry ice. Store in the original carton to protect from light. Once thawed (see <a href="#">below</a>) the vaccine should not be refrozen.</p> <p><b>Transportation</b></p> <p>Do not store or transport below -50°C. If transport at -50°C to -15°C is not feasible, available data support transportation of one or more thawed vials in liquid state for up to 12 hours at 2°C to 8°C (within the 30 days shelf life at 2°C to 8°C).</p> <p><b>Thaw each vial before use</b></p> <p>Remove the required number of vials from freezer storage and thaw each vial before use:</p> <ul style="list-style-type: none"> <li>• thaw in refrigerated conditions between 2°C to 8°C for 2½ hours. Then let each vial stand at room temperature for 15 minutes before administering.</li> <li>• alternatively, thaw at room temperature between 15°C to 25°C for 1 hour.</li> <li>• Thawed vials and syringes can be handled in room light conditions.</li> </ul> <p><b>After thawing</b></p> <p>Once thawed, do not re-freeze. The unopened vaccine may be stored at 2°C to 8°C, protected from light, for up to 30 days if not used (needle-punctured), 12 hours of this period may be used for transportation (see <a href="#">above</a>). The unopened vaccine may be stored at 8°C to 25°C for up to 24 hours after removal from refrigerated conditions.</p> <p><b>Punctured Vial:</b></p> <p>Chemical and physical in-use stability has been demonstrated for 6 hours at 2°C to 25°C after first puncture (within the allowed use period of 30 days at 2°C to 8°C and 24 hours at 8°C to 25°C). Spikevax is preservative-free. Once the vial has been used (needle-punctured) to withdraw the initial dose, the vaccine should be used immediately. Any unused vaccine should be discarded after 6 hours. The above details relate to storage requirements and available stability data at the time of product authorisation. This may be subject to amendment as more data becomes available. Refer to NHS standard operating procedures</p>
Continued over page	



<p><b>Storage</b> (continued)</p>	<p>for the service and the most up to date manufacturer’s recommendations in the product’s <a href="#">SPC</a>.</p> <p>In the event of an inadvertent or unavoidable deviation of these conditions, vaccine that has been stored outside the conditions stated above should be quarantined and risk assessed for suitability of continued off-label use or appropriate disposal. Refer to <a href="#">Vaccine Incident Guidance</a>.</p>
<p><b>Disposal</b></p>	<p>Follow local clinical waste policy and NHS standard operating procedures and ensure safe and secure waste disposal.</p> <p>Equipment used for vaccination, including used vials, ampoules, or discharged vaccines in a syringe or applicator, should be disposed of safely and securely according to local authority arrangements and guidance in the <a href="#">technical memorandum 07-01</a>: Safe management of healthcare waste (Department of Health, 2013).</p>
<p><b>Drug interactions</b></p>	<p>Immunological response may be diminished in those receiving immunosuppressive treatment, but it is important to still immunise this group.</p> <p>Although no data for co-administration of COVID-19 vaccine with other vaccines exists, in the absence of such data, first principles would suggest that interference between inactivated vaccines with different antigenic content is likely to be limited. Based on experience with other vaccines, any potential interference is most likely to result in a slightly attenuated immune response to one of the vaccines. There is no evidence of any safety concerns, although it may make the attribution of any adverse events more difficult. Similar considerations apply to co-administration of inactivated (or non-replicating) COVID-19 vaccines with live vaccines such as MMR. In particular, live vaccines which replicate in the mucosa, such as live attenuated influenza vaccine (LAIV) are unlikely to be seriously affected by concomitant COVID-19 vaccination.</p> <p>A seven-day interval should ideally be observed between COVID-19 vaccination and shingles vaccination. This is based on the potential for an inflammatory response to COVID-19 vaccine to interfere with the response to the live virus in the older population and because of the potential difficulty of attributing systemic side effects to the newer adjuvanted shingles vaccine.</p> <p>For further information about co-administration with other vaccines see <a href="#">Additional Information</a> section.</p>
<p><b>Identification and management of adverse reactions</b></p> <p>Continued over page</p>	<p>Spikevax adverse reactions most commonly reported are pain at the injection site, fatigue, headache, myalgia, arthralgia, chills, nausea, vomiting, axillary swelling/tenderness, fever, injection site swelling, redness, injection site erythema, injection site urticaria, injection site rash, delayed injection site reaction. Lymphadenopathy is captured as axillary lymphadenopathy on the same side as the injection site. Other lymph nodes (such as cervical, supraclavicular) are affected in some cases.</p> <p>Acute peripheral facial paralysis, facial swelling, hypoaesthesia (numbness), dizziness and injection site pruritis have been rarely reported.</p> <p>Anaphylaxis and hypersensitivity have also been reported.</p> <p>Adverse reactions are usually mild or moderate in intensity and resolve within a few days after vaccination. A slightly lower frequency of reactogenicity events is associated with greater age.</p> <p>Local and systemic adverse reactions are more frequently reported after dose two than after dose one.</p>

<p><b>Identification and management of adverse reactions</b> (continued)</p>	<p>Very rare cases of myocarditis and pericarditis have been observed following vaccination with Spikevax. These cases have primarily occurred within 14 days following vaccination, more often after the second vaccination, and more often in younger males. Available data suggest that the course of myocarditis and pericarditis following vaccination is not different from myocarditis or pericarditis in general. Healthcare professionals should be alert to the signs and symptoms of myocarditis and pericarditis. Vaccinated individuals should be instructed to seek immediate medical attention if they develop symptoms indicative of myocarditis or pericarditis such as (acute and persisting) chest pain, shortness of breath, or palpitations following vaccination. Healthcare professionals should consult <a href="#">guidance</a> and/or specialists to diagnose and treat this condition.</p> <p>Individuals should be provided with the advice within the leaflet <a href="#">What to expect after your COVID-19 vaccination</a>, which covers the reporting of adverse reactions and their management, such as with analgesic and/or antipyretic medication.</p> <p>Vaccinated individuals should be advised that the COVID-19 vaccine may cause a mild fever, which usually resolves within 48 hours. This is a common, expected reaction and isolation is not required unless COVID-19 is suspected.</p> <p>A detailed list of adverse reactions is available in the product's <a href="#">SPC</a>.</p>
<p><b>Reporting procedure of adverse reactions</b></p>	<p>Healthcare professionals and individuals/carers should report suspected adverse reactions to the MHRA using the <a href="#">Coronavirus Yellow Card reporting scheme</a> or search for MHRA Yellow Card in the Google Play or Apple App Store.</p> <p>As a new vaccine product, MHRA has a specific interest in the reporting of all adverse drug reactions for this product.</p> <p>Any adverse reaction to a vaccine should also be documented in the individual's record and the individual's GP should be informed.</p> <p>The Green Book <a href="#">Chapter 14a</a> and <a href="#">Chapter 8</a> provide further details regarding the clinical features of reactions to be reported as 'anaphylaxis'. Allergic reactions that do not include the clinical features of anaphylaxis should be reported as 'allergic reaction'.</p>
<p><b>Written information to be given to patient or carer</b></p>	<p>Ensure the individual has been provided appropriate written information such as the:</p> <ul style="list-style-type: none"> <li>• <a href="#">Patient information leaflet for Spikevax</a></li> <li>• <a href="#">COVID-19 Vaccination Record Card</a></li> <li>• <a href="#">What to expect after your COVID-19 vaccination</a></li> <li>• <a href="#">COVID-19 vaccination: women of childbearing age, currently pregnant, or breastfeeding</a></li> <li>• <a href="#">COVID-19 vaccination: a guide to booster vaccination</a></li> <li>• <a href="#">Waiting after COVID-19 vaccination</a></li> </ul>
<p><b>Patient advice / follow up treatment</b></p> <p>Continue over page</p>	<p>There is a temporary suspension of the recommended observation and monitoring for 15 minutes in individuals without a history of allergy (see <a href="#">off-label use</a> section).</p> <p>Following COVID-19 vaccine administration, individuals without a history of allergy should be:</p> <ul style="list-style-type: none"> <li>• observed for any immediate reactions whilst they are receiving any verbal post vaccination information and exiting the centre</li> <li>• informed about the signs and symptoms of anaphylaxis and how to access immediate healthcare advice in the event of displaying any</li> </ul>

<p><b>Patient advice / follow up treatment</b> (continued)</p>	<p>symptoms (see leaflets <a href="#">What to expect after your COVID-19 vaccination</a> and <a href="#">Waiting after COVID-19 vaccination</a>)</p> <p>Individuals with a personal history of allergy should be managed in line with <a href="#">Chapter 14a</a>, Table 5 of the Green Book.</p> <p>Inform the individual/carer of possible side effects and their management.</p> <p>As fainting can occur following vaccination, all those vaccinated with any of the COVID-19 vaccines should be advised not to drive for 15 minutes after vaccination.</p> <p>The individual/carer should be advised to seek appropriate advice from a healthcare professional in the event of an adverse reaction. In some settings, for example domiciliary vaccination, this may require a responsible adult to be present for at least 15 minutes after vaccination.</p> <p>Vaccinated individuals should be advised to seek immediate medical attention should they experience new onset of chest pain, shortness of breath, palpitations or arrhythmias.</p> <p>Advise the individual/carer that they can report side effects directly via the national reporting system run by the MHRA known as the <a href="#">Coronavirus Yellow Card reporting scheme</a> or search for MHRA Yellow Card in the Google Play or Apple App Store. By reporting side effects, they can help provide more information on the safety of medicines.</p> <p>As with all vaccines, immunisation may not result in protection in all individuals. Immunosuppressed individuals should be advised that they may not make a full immune response to the vaccine. Nationally recommended protective measures should still be followed.</p> <p>When applicable, advise the individual/carer when to return for vaccination or when a subsequent vaccine dose is due.</p>
<p><b>Special considerations / additional information</b></p> <p>Continue over page</p>	<p>Ensure there is immediate access to an anaphylaxis pack including adrenaline (epinephrine) 1 in 1,000 injection and easy access to a telephone at the time of vaccination.</p> <p>Minor illnesses without fever or systemic upset are not valid reasons to postpone vaccination. If an individual is acutely unwell, vaccination should be postponed until they have fully recovered. This is to avoid confusing the differential diagnosis of any acute illness (including COVID-19) by wrongly attributing any signs or symptoms to the adverse effects of the vaccine.</p> <p><b>Pregnancy</b></p> <p>Vaccination in pregnancy should be offered in accordance with recommendations in <a href="#">Chapter 14a</a> following a discussion of the risks and benefits of vaccination with the woman. Although clinical trials on the use of COVID-19 vaccines during pregnancy are not advanced, the available data do not indicate any harm to pregnancy. There is extensive post-marketing experience of the use of the Pfizer BioNTech and Moderna vaccines in the USA with no safety signals so far. Over 80,000 women now report having been vaccinated whilst pregnant or when they might be pregnant in England. Because of wider experience with mRNA vaccines, these are currently the preferred vaccines to offer to pregnant women.</p> <p>Routine questioning about last menstrual period and/or pregnancy testing is not required before offering the vaccine. Women who are planning pregnancy or in the immediate postpartum should be vaccinated with a suitable product for their age and clinical risk group.</p> <p>If a woman finds out she is pregnant after she has started a course of vaccine, she should complete vaccination at the recommended interval.</p>

<p><b>Special considerations / additional information</b> (continued)</p> <p>Continued over page</p>	<p><b>Breastfeeding</b></p> <p>There is no known risk associated with being given a non-live vaccine whilst breastfeeding. JCVI advises that breastfeeding women may be offered any suitable COVID-19 vaccine. Emerging safety data is reassuring: mRNA was not detected in the breast milk of recently vaccinated women and protective antibodies have been detected in breast milk.</p> <p>The developmental and health benefits of breastfeeding are clear and should be discussed with the woman, along with her clinical need for immunisation against COVID-19.</p> <p><b>Previous incomplete vaccination</b></p> <p>If the course is interrupted or delayed, it should be resumed using the same vaccine but the earlier doses should not be repeated. Evidence suggests that those who receive mixed schedules, including mRNA and adenovirus vectored vaccines make a good immune response, although rates of side effects at the second dose are higher. Accumulating evidence now supports the use of heterologous schedules for primary immunisation, and these are now recognised by the European Medicines Agency (<a href="#">EMA</a>). For individuals who started the schedule and who attend for vaccination where the same vaccine is not available or suitable, or if the first product received is unknown or not available, one dose of the locally available product should be given to complete the primary course. Individuals who experienced severe expected reactions after a first dose of AstraZeneca or Pfizer BioNTech vaccines should be informed about the higher rate of such reactions when they receive a second dose of an alternate vaccine. In these circumstances, this PGD may be used.</p> <p>For individuals with a history of thrombosis combined with thrombocytopenia following vaccination with the AstraZeneca COVID-19 vaccine, current evidence would support completion of the course with an mRNA vaccine, provided a period of at least 12 weeks has elapsed since the dose of AstraZeneca vaccine.</p> <p>Individuals with a history of capillary leak syndrome should be carefully counselled about the risks and benefits of vaccination. An alternative vaccine to the AstraZeneca COVID-19 vaccine, such as Spikevax, may be offered to complete a vaccination course.</p> <p>Individuals who are participating in a clinical trial of COVID-19 vaccines who present for vaccination should be referred back to the investigators. Eligible persons who are enrolled in vaccine trials should then be provided with written advice on whether and when they should be safely vaccinated in the routine programme. Advice should also be provided from the trial investigators on whether any individual could receive additional doses for the purposes of vaccine certification. Trial participants who are eligible for boosters should be offered vaccination in line with the general population, at least three months after the dose considered as the final primary dose or the final revaccination (if the latter is required for certification purposes).</p> <p>Individuals who have been vaccinated abroad are likely to have received an mRNA or vector vaccine based on the spike protein, or an inactivated whole viral vaccine. Specific advice on <a href="#">Vaccination of those who received COVID-19 vaccine overseas</a> is available from the UKHSA.</p> <p><b>Co-administration with other vaccines</b></p> <p>Where individuals in an eligible cohort present having recently received one or more inactivated or live vaccines, COVID-19 vaccination should still be given. The same applies for most other live and inactivated vaccines where COVID-19 vaccination has been received first or where an individual presents requiring two or more vaccines. It is generally better for vaccination</p>
--	---

<p><b>Special considerations / additional information</b> (continued)</p>	<p>to proceed and it may be provided under this PGD, to avoid any further delay in protection and to avoid the risk of the individual not returning for a later appointment. This includes but is not limited to vaccines commonly administered around the same time or in the same settings (including influenza and pneumococcal polysaccharide vaccine in those aged over 65 years, pertussis-containing vaccines and influenza vaccines in pregnancy, and HPV, MenACWY and Td-IPV vaccines. The only exceptions to this are the shingles vaccines, where a seven-day interval should ideally be observed. This is based on the potential for an inflammatory response to COVID-19 vaccine to interfere with the response to the live virus in the older population and because of the potential difficulty of attributing systemic side effects to the newer adjuvanted shingles vaccine.</p> <p>A UK study of co-administration of Pfizer BioNTech mRNA and AstraZeneca COVID-19 vaccines with inactivated influenza vaccines confirmed acceptable immunogenicity and reactogenicity. Where co-administration of COVID-19 vaccine with influenza vaccine does occur, individuals should be informed about the likely timing of potential adverse events relating to each vaccine. If the vaccines are not given together, they can be administered at any interval, although separating the vaccines by a day or two will avoid confusion over systemic side effects.</p> <p><b>Non-responders / immunosuppressed</b></p> <p>Immunological response may be lower in immunocompromised individuals, but they should still be vaccinated.</p> <p>JCVI advises that a third primary vaccine dose be offered to individuals who had severe immunosuppression in proximity to their first or second COVID-19 doses in the primary schedule (see 'Box 1: Criteria for a third primary dose of COVID-19 vaccine' in <a href="#">Chapter 14a</a>). Most individuals whose immunosuppression commenced at least two weeks after the second dose of vaccination do not require an additional primary vaccination at this stage.</p> <p>JCVI has previously advised that the decision on the timing of the third primary dose should be undertaken by the specialist involved in the care of the individual. In general, vaccines administered during periods of minimum immunosuppression (where possible) are more likely to generate better immune responses. However, following the recognition of the Omicron variant, JCVI has now advised that boosters should be offered from three months after the third dose.</p> <p>Those who have not yet received their third primary dose may be given their third dose now (8 weeks after the second dose) to avoid further delay. Boosters should be given at a minimum interval of three months from the previous dose in line with the clinical advice on optimal timing.</p> <p>Individuals who have received a bone marrow transplant after vaccination should be considered for a re-immunisation programme for all routine vaccinations and for COVID-19 (see <a href="#">Chapter 7</a> of the Green Book). This is not covered by this PGD and should be provided on a patient specific basis.</p>
<p><b>Records</b></p> <p>Continued over page</p>	<p>Record:</p> <ul style="list-style-type: none"> <li>• that valid informed consent was given or a decision to vaccinate made in the individual's best interests in accordance with the <a href="#">Mental Capacity Act 2005</a></li> <li>• name of individual, address, date of birth and GP with whom the individual is registered (or record where an individual is not registered with a GP)</li> <li>• name of immuniser</li> <li>• name and brand of vaccine</li> <li>• date of administration</li> </ul>

<p><b>Records</b> (continued)</p>	<ul style="list-style-type: none"> <li>• dose, form and route of administration of vaccine</li> <li>• quantity administered</li> <li>• batch number and expiry date</li> <li>• anatomical site of vaccination</li> <li>• advice given, including advice given if excluded or declines vaccination</li> <li>• details of any adverse drug reactions and actions taken</li> <li>• supplied via PGD</li> </ul> <p>All records should be clear, legible and contemporaneous.</p> <p>As a variety of COVID-19 vaccines are available, it is especially important that the exact brand of vaccine, batch number and site at which each vaccine is given is accurately recorded in the individual's records.</p> <p>It is important that vaccinations are recorded in a timely manner on appropriate health care records for the individual. Systems should be in place to ensure this information is returned to the individual's general practice record in a timely manner to allow clinical follow up and to avoid duplicate vaccination.</p> <p>A record of all individuals receiving treatment under this PGD should also be kept for audit purposes.</p>
---------------------------------------	--

## 6. Key references

<b>Key references</b>	<p><b>Spikevax</b></p> <ul style="list-style-type: none"><li>• Immunisation Against Infectious Disease: The Green Book, <a href="#">Chapter 14a</a>. Updated 12 January 2022. <a href="https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book">https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book</a></li><li>• UK Chief Medical Officers <a href="#">Report</a>; suspension of the 15minutes wait for vaccination with mRNA vaccine for COVID-19. 13 December 2021</li><li>• COVID-19 vaccination programme. Updated 10 January 2022. <a href="https://www.gov.uk/government/collections/covid-19-vaccination-programme">https://www.gov.uk/government/collections/covid-19-vaccination-programme</a></li><li>• Training recommendations for COVID-19 vaccinators. Published 4 October 2021. <a href="https://www.gov.uk/government/publications/covid-19-vaccinator-training-recommendations/training-recommendations-for-covid-19-vaccinators">https://www.gov.uk/government/publications/covid-19-vaccinator-training-recommendations/training-recommendations-for-covid-19-vaccinators</a></li><li>• National COVID-19 vaccination e-learning programme <a href="https://www.e-lfh.org.uk/programmes/covid-19-vaccination/">https://www.e-lfh.org.uk/programmes/covid-19-vaccination/</a></li><li>• COVID-19 vaccinator competency assessment tool. Updated 16 March 2021 <a href="https://www.gov.uk/government/publications/covid-19-vaccinator-competency-assessment-tool">https://www.gov.uk/government/publications/covid-19-vaccinator-competency-assessment-tool</a></li><li>• COVID-19: vaccination programme guidance for healthcare practitioners. Updated 6 August 2021. <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></li><li>• Summary of product characteristics and patient information leaflet for Spikevax. Published 24 December 2021. <a href="https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-moderna">https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-moderna</a></li></ul> <p><b>General</b></p> <ul style="list-style-type: none"><li>• Health Technical Memorandum 07-01: Safe Management of Healthcare Waste. Department of Health 20 March 2013 <a href="https://www.england.nhs.uk/publication/management-and-disposal-of-healthcare-waste-htm-07-01/">https://www.england.nhs.uk/publication/management-and-disposal-of-healthcare-waste-htm-07-01/</a></li><li>• NICE Medicines Practice Guideline 2 (MPG2): Patient Group Directions. Published March 2017. <a href="https://www.nice.org.uk/guidance/mpg2">https://www.nice.org.uk/guidance/mpg2</a></li><li>• NICE MPG2 Patient group directions: competency framework for health professionals using patient group directions. Updated March 2017. <a href="https://www.nice.org.uk/guidance/mpg2/resources">https://www.nice.org.uk/guidance/mpg2/resources</a></li><li>• Patient Group Directions: who can use them. Medicines and Healthcare products Regulatory Agency. 4 December 2017. <a href="https://www.gov.uk/government/publications/patient-group-directions-pgds/patient-group-directions-who-can-use-them">https://www.gov.uk/government/publications/patient-group-directions-pgds/patient-group-directions-who-can-use-them</a></li><li>• UK Statutory Instrument 2012 No. 1916, The Human Medicines Regulations 2012 <a href="https://www.legislation.gov.uk/ukSI/2012/1916/contents">https://www.legislation.gov.uk/ukSI/2012/1916/contents</a></li><li>• UK Statutory Instrument 2020 No. 1125, The Human Medicines (Coronavirus and Influenza) (Amendment) Regulations 2020 <a href="https://www.legislation.gov.uk/ukSI/2020/1125/contents/made">https://www.legislation.gov.uk/ukSI/2020/1125/contents/made</a></li><li>• UK Statutory Instrument 2020 No. 1594, The Human Medicines (Coronavirus and Influenza) (Amendment) Regulations 2020 <a href="https://www.legislation.gov.uk/ukSI/2020/1594/regulation/4/made">https://www.legislation.gov.uk/ukSI/2020/1594/regulation/4/made</a></li></ul>
-----------------------	--

## 7. Practitioner authorisation sheet

### Spikevax COVID-19 Vaccine (Moderna) PGD v05.00

Valid from: 19/01/2022 Expiry: 31/03/2022

By signing this PGD you are indicating that you agree to its contents and that you will work within it.

PGDs do not remove inherent professional obligations or accountability.

It is the responsibility of each professional to practise only within the bounds of their own competence and professional code of conduct.

I confirm that I have read and understood the content of this PGD and that I am willing and competent to work to it within my professional code of conduct.			
Name	Designation	Signature	Date

### Authorising manager

I confirm that the registered healthcare professionals named above have declared themselves suitably trained and competent to work under this PGD. I give authorisation on behalf of insert name of organisation for the above named healthcare professionals who have signed the PGD to work under it.			
Name	Designation	Signature	Date

### Note to authorising manager

Score through unused rows in the list of practitioners to prevent practitioner additions post managerial authorisation.

This authorisation sheet should be retained to serve as a record of those practitioners authorised to work under this PGD.