



COVID-19 Therapeutic Alert

CEM/CMO/2022/015

28 November 2022

Treatment of Hospital-Onset COVID-19 In Adults and Children

Summary

The [published UK-wide policy](#) covering COVID treatment options for adults and children with 'hospital-onset COVID-19' – i.e. those hospitalised for a non COVID indication but who test positive for COVID during the period of their admission - has been updated to provide access to the following antiviral treatment options:

- First-line: nirmatrelvir/ritonavir (Paxlovid) (antiviral, administered orally)
- Second-line: remdesivir (antiviral, administered intravenously)

Exceptionally, sotrovimab may be considered where the available antiviral treatments are deemed unsuitable and its use is supported following multi-disciplinary team (MDT) assessment.

Eligible children and adolescents may only be considered for treatment with remdesivir (for those weighing 40kg and above) or sotrovimab (for those aged 12 years and above AND weighing 40kg and above). For paediatric/adolescent patients paediatric multi-disciplinary team (MDT) assessment should be used to determine clinical capacity to benefit from the treatment.

Patients are eligible to be considered for treatment if the initial criteria below are met:

- Hospitalised for indications other than for the management of acute symptoms of COVID-19¹

AND

- SARS-CoV-2 infection is confirmed by either:
 - Polymerase chain reaction (PCR) testing OR
 - Lateral flow test

AND

- [Symptomatic with COVID-19](#) and showing no signs of clinical recovery

AND

¹ This includes patients admitted to community and mental health hospitals. Where possible patients being considered for intravenous treatment should be transferred to a suitable facility for treatment delivery.

- The patient is a member of a 'highest' risk group (as defined in the Department of Health and Social Care commissioned [Independent Advisory Group Report](#))

OR

COVID-19 infection presents a material risk of destabilising a pre-existing condition or illness or compromising recovery from surgery or other hospital procedure (as determined by multidisciplinary team (MDT) assessment).

Further details, including medicine specific guidance, may be [found in the clinical policy](#). Further information on selecting the most appropriate treatment can be found in [the accompanying clinical guide](#).

Action

NHS acute trusts / health boards are asked to take the following immediate steps to support the treatment of patients with a hospital-onset COVID-19 infection:

1. Consider prescribing an antiviral treatment to adults in line [with the published policy](#). Exceptionally, sotrovimab may be considered where the available antiviral treatments are deemed unsuitable and its use is supported following multi-disciplinary team (MDT) assessment.
2. Note that eligible children and adolescents may only be considered for treatment with remdesivir (for those weighing 40kg and above) or sotrovimab (for those aged 12 years and above AND weighing 40kg and above). For paediatric/adolescent patients paediatric multi-disciplinary team (MDT) assessment should be used to determine clinical capacity to benefit from the treatment.
3. In the absence of a confirmed virological diagnosis, the treatment should only be used when a multidisciplinary team has a high level of confidence that the clinical and radiological features suggest that COVID-19 is the most likely diagnosis.
4. Note that nirmatrelvir/ritonavir is **not recommended during pregnancy**. The use of ritonavir may reduce the efficacy of combined hormonal contraceptives. Patients using combined hormonal contraceptives should be advised to use an effective alternative contraceptive method or an additional barrier method of contraception during treatment and until after one complete menstrual cycle after stopping nirmatrelvir/ritonavir.
5. Ensure that any patients who receive a COVID antiviral while pregnant are reported to the UK COVID-19 antivirals in pregnancy registry on 0344 892 0909 (available 9:00am to 5:00pm, Monday to Friday, excluding bank holidays) so that they can be followed up. For more information, go to <https://www.medicinesinpregnancy.org/COVID-19-Antivirals-Pregnancy-Registry/>.
6. **Noting the important role of surveillance, treating clinicians are asked to support testing and / or data requirements as recommended under country specific or UK wide surveillance programmes, where laboratory capacity and resourcing allows.** Sequencing is an important part of surveillance activities to monitor for the development of new variants and drug resistance. Genotype results do not form part of the eligibility criteria for any treatment under this policy and treatment should not be delayed pending these results.

7. Discharge letters to primary care, and other handovers of clinical care, should explicitly record the treatment that has been given, together with the dose and date of administration. The following **SNOMED codes should be used to support evaluation and to inform subsequent treatment decisions**:

Provision of nirmatrelvir/ritonavir

Procedure code: 427314002 |Antiviral therapy (procedure)|

Presentation:

- 30 tablet pack - 40325111000001108

Administration of remdesivir

Procedure code: 47943005 |Administration of anti-infective agent (procedure)|

Presentation:

- 100mg powder for solution for infusion, 1 vial – 38376311000001103

Administration of sotrovimab

Procedure code: 47943005 |Administration of anti-infective agent (procedure)|

Presentation:

- Sotrovimab 500mg/8ml solution for infusion vials – 40219011000001108

8. Adhere to the guidance which has been developed by the Specialist Pharmacy Service (SPS) to support the administration of [antivirals](#) or [monoclonal antibodies](#).
9. In England, trusts who have not yet done so should register (by site) to participate in COVID-19 specific medicine supply arrangements, via Blueteq. Blueteq should also then be used to confirm pre-authorisation for individual patients. HSC Trusts in Northern Ireland should liaise with the Regional Pharmaceutical Procurement Service to register interest. In Scotland, Health Board Directors of Pharmacy should notify NHS National Procurement if they wish to participate. Health Boards in Wales should notify the All Wales Specialist Procurement Pharmacist of their intention to participate.
10. Regular stock updates should be provided to trust / hospital and regional pharmacy procurement lead / chief pharmacists. Hospitals should enter the product onto stock control and prescribing systems as described below:
- Paxlovid - nirmatrelvir (150mg tablets) and ritonavir (100mg tablets), 30 tablet pack
 - Remdesivir 100mg powder for concentrate for solution for infusion
 - Sotrovimab 500mg/8ml solution for infusion vials
11. Hospital pharmacies should continue to appropriately store unused stocks of the casirivimab and imdevimab (Ronapreve) combination monoclonal antibody; further guidance will be provided.

Product Details

Nirmatrelvir plus ritonavir (Paxlovid) is a combination oral antiviral supplied by Pfizer that works by inhibiting a protease required for viral replication. It is supplied as a pack providing a five-day treatment course containing both nirmatrelvir (150mg tablets) and ritonavir (100mg tablets). Nirmatrelvir plus ritonavir has a conditional market authorisation in Great Britain (under the Medicines and Healthcare products Regulatory Authority (MHRA)), and in Northern Ireland (under the European Medicines Agency (EMA)), for the treatment of COVID-19 in adults who do not require supplemental oxygen and who are at increased risk for progression to severe COVID-19.

Remdesivir (Veklury) is supplied by Gilead. Delivered intravenously, it has market authorisations for use as a treatment for COVID-19 in both Great Britain (under the Medicines and Healthcare products Regulatory Authority (MHRA)) and in Northern Ireland (under the European Medicines Agency (EMA)) for 1) adults and paediatric patients (at least 4 weeks of age and weighing at least 3 kg) with pneumonia requiring supplemental oxygen (low- or high-flow oxygen or other non-invasive ventilation at start of treatment), and 2) adults and paediatric patients (weighing at least 40 kg) who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19.

Sotrovimab (Xevudy) is supplied by GlaxoSmithKline and Vir Biotechnology. Delivered intravenously, sotrovimab has a conditional marketing authorisation in Great Britain (England, Scotland and Wales) and a marketing authorisation in Europe (under the European Medicines Agency) for the treatment of symptomatic adults and adolescents (aged 12 years and over and weighing at least 40 kg) with acute COVID-19 infection who do not require oxygen supplementation and who are at increased risk of progressing to severe COVID-19 infection. Access to sotrovimab in Northern Ireland is through a Regulation 174 approval or the European Medicines Agency marketing authorisation.

Co-Administration

There is no interaction expected of the treatments covered under the policy with other treatments available for COVID under published UK clinical access policies.

For further information please visit the University of Liverpool COVID-19 Drug Interactions website (<https://www.covid19-druginteractions.org/checker>).

Antivirals should not be infused concomitantly in the same IV line with other medications.

Monitoring, tracking and follow-up

All handovers of clinical care (including between hospitals if patients are transferred, between levels of care and clinical teams within hospitals, and between hospitals and primary care) should explicitly record the treatment that has been given together with the dose and date of administration. SNOMED codes (see action section, above) should be used in discharge letters to primary care.

Healthcare professionals are asked to report any suspected adverse reactions via the United Kingdom Yellow Card Scheme www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

Distribution

- NHS Trusts (NHS boards in Scotland and Wales)
- National / Regional Medical Directors
- National / Regional Chief Pharmacists
- Lead/Senior Pharmacists and Regional Procurement Pharmacy Leads
- Trust/Hospital Pathology Directors (to circulate to pathology networks and laboratory staff)
- Trust / Hospital Medical Directors (to circulate to medical and nursing staff managing admitted patients infected with COVID-19)

Enquiries

England

Enquiries from NHS trusts in England should in the first instance be directed to your trust pharmacy team who will escalate issues to the Regional Chief Pharmacist and national teams if required. Further information can be requested from the dedicated email address: england.spoc-c19therapeutics@nhs.net.

Northern Ireland

Enquiries from hospitals in Northern Ireland should in the first instance be directed to your hospital pharmacy team who will escalate issues to the Regional Pharmaceutical Procurement Service or Pharmaceutical Directorate at the Department of Health if required. Further information can be obtained by contacting RPHPS.Admin@northerntrust.hscni.net

Scotland

Enquiries from hospitals in Scotland should in the first instance be directed to your hospital pharmacy team who will escalate issues to either NHS National Procurement or the Scottish Government's Medicines Policy Team if required. Contact should be made using the following emails: nss.nhssmedicineshortages@nhs.scot or medicines.policy@gov.scot

Wales

Enquiries from hospitals in Wales should in the first instance be directed to the health board's Chief Pharmacist who will escalate issues to the Pharmacy and Prescribing Team at Welsh Government if required. Enquiries to the Welsh Government should be directed to: COVID-19.Pharmacy.Prescribing@gov.wales.