

COVID-19 Therapeutic Alert

CEM/CMO/2022/016

28 November 2022

This alert updates and replaces alert [CEM/CMO/2022/006](#), previously published in February 2022.

Remdesivir for patients hospitalised due to COVID-19

Summary

Remdesivir is an adenosine nucleotide prodrug that is metabolised intracellularly to form the pharmacologically active substrate remdesivir triphosphate. Remdesivir triphosphate inhibits SARS-CoV-2 RNA polymerase which perturbs viral replication.

Evidence from the ACTT-1 trial showed that remdesivir improved time to recovery in patients hospitalised with COVID-19 by 5 days compared to placebo ([Beigel et al, 2020](#)). The World Health Organization (WHO) Solidarity trial indicated that remdesivir did not improve overall mortality, initiation of ventilation or duration of hospitalisation ([Pan et al, 2020](#)). The National Institute for Health and Care Excellence (NICE) recommends the consideration of remdesivir for up to 5 days for COVID-19 pneumonia in adults, and young people 12 years and over weighing 40 kg or more, in hospital and needing low-flow supplemental oxygen under its [COVID Rapid Guideline](#).

Adults and paediatric patients (at least 4 weeks of age and weighing at least 3 kg) hospitalised due to symptoms of COVID-19 are eligible for treatment under the published UK clinical access policy if they fulfil the following eligibility criteria:

- SARS-CoV-2 infection is confirmed by polymerase chain reaction (PCR) test or where a multidisciplinary team (MDT) has a high level of confidence that the clinical and/or radiological features suggest that COVID-19 is the most likely diagnosis
- AND
- Hospitalised specifically for the management of COVID-19 symptoms
- AND
- Requiring low-flow¹ supplemental oxygen (see later section on 'Immunocompromised patients' for how this criterion applies to this group)
- AND
- Presented to hospital not more than 10 days since symptom onset

¹ Low-flow oxygen supplementation as defined in the [NICE COVID-19 Rapid Guideline: Managing COVID-19](#).

AND

- Estimated glomerular filtration rate (eGFR) at least 30 ml/minute

AND

- Alanine aminotransferase (ALT) below 5 times the upper limit of normal at baseline.

Exemptions to the above eligibility criteria apply to the following patient groups:

- Patients with end-stage renal disease on haemodialysis are exempt from the eGFR treatment threshold above
- Significantly immunocompromised patients (see later section on 'Immunocompromised patients' for exemptions in this cohort).

Remdesivir is also available as a treatment for COVID-19 under separately published UK clinical access policies for [non-hospitalised individuals at highest risk from COVID-19 infection](#) and [patients with hospital-onset COVID infection](#), respectively.

Action

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

1. **Organisations are recommended to consider prescribing remdesivir to adults and paediatric patients (at least 4 weeks of age and weighing at least 3 kg) hospitalised due to COVID-19 in line [with the published policy](#).**

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.

2. All healthcare professionals are asked to 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 so that they can be followed up. For more information, go to <http://www.uktis.org/>
3. Clinicians are encouraged to proactively support recruitment into trials developing further evidence in the treatment of COVID-19. Patients admitted to hospital due to COVID may be considered for entry into the [RECOVERY](#) or [REMAP-CAP](#) trials.
4. **Noting the critical role of surveillance, treating clinicians are strongly encouraged to actively support additional testing or data requirements as requested under country specific or UK wide surveillance programmes, in line with further guidance to be issued.** Sequencing is an important part of surveillance activities to monitor for the development of new variants and drug resistance. Therefore in patients being considered for treatment with antivirals, samples pre-treatment and, where part of the clinical pathway, post-treatment, should be prioritised for sequencing. Genotype results do not form part of the eligibility criteria for treatment with remdesivir in this policy and treatment should not be delayed pending these results.

5. Discharge letters to primary 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**:

Administration of Remdesivir

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

Presentation:

- 100mg powder for solution for infusion, 1 vial – 38376311000001103
6. 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.
 7. Organisations should note that following initial nationally determined allocations to participating hospitals, ongoing supplies to each hospital will be replenished on the basis of relative use / need. Ongoing ordering may be through existing (business as usual) routes, supported by volume-based caps (reflecting estimated eligible admissions) where required.
 8. Organisations should note that some supply of COVID medicines may be available within 'emergency supply' packaging, which differs from the Great Britain (GB) packaging / labelling aligned to the product's GB licence (or the equivalent product packaging / labelling aligned to the European Medicines Agency marketing authorisation as applicable in Northern Ireland). **To preserve available supply, providers must ensure that packs with shorter use by dates are used first.**
 9. 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:
 - Remdesivir 100mg powder for concentrate for solution for infusion

Product Details

Remdesivir (Veklury) is supplied by Gilead. Delivered intravenously, it has a conditional market authorisation 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.

Co-Administration

There is no interaction expected for remdesivir with other routine treatments available for COVID under published UK clinical access policies - dexamethasone or hydrocortisone, baricitinib, or tocilizumab or sarilumab.

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

Monitoring of longer-term progress is strongly recommended via recruitment of patients receiving COVID therapies to the [ISARIC-CCP study](#).

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 that an antiviral or monoclonal antibody 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.