Clinical Guideline

COVID-19 THERAPIES FOR ADULT IN-PATIENTS

SETTING	Adult patients on in-patient wards
FOR STAFF	Doctors, nursing staff, pharmacists
PATIENTS	Adult patients presenting with COVID-19 pneumonitis & admitted adult patients with an incidental finding/hospital-acquired COVID

Therapeutics

COVID-19 therapies for adult patients can be split into three groups: all three groups assume the patient has a new positive COVID-19 test result:

- No new oxygen requirement
- New low flow oxygen requirement attributable to COVID
- New high flow oxygen requirement

(See also COVID-19 therapies [redacted] July 2024)

No new oxygen requirement

Inclusion criteria:

- New positive COVID-19 test result, **and**
- Symptom onset within 5-7 days
- Meet the criteria for high risk of progression to severe disease (link to NICE TA878, risk factors for progression to severe COVID)

For Paxlovid therapy only:

- Patient falls into an expanded access group (link to NICE TA878)
- Expanded access group includes:
- People aged 70 years and over, or who have a BMI of 35 kg/m^2 or more, diabetes or heart failure, and:
  - are resident in a care home, or
  - are already hospitalised

N.B. The expanded access group also includes those NOT in hospital but is outside of the scope of this guidance. See NICE TA878 for detail. Included in this group are: people aged 85 years and over, those with end-stage heart failure who have a long-term ventricular assistance device, those on the organ transplant list.

Drug	Dose	Duration	N.B.
Paxlovid (nirmatrelvir plus ritonavir) Oral antiviral	Nirmatrelvir 300mg PO BD plus ritonavir 100mg PO BD (reduce dose of nirmatrelvir to 150mg PO BD if eGFR ≥30-60ml/min)	5 days	Multiple **significant** drug interactions can occur –d/w pharmacist or see Paxlovid SPC Complete a [redacted] form Do **NOT** use in pregnancy
If Paxlovid inappropriate: **Remdesivir**	Loading dose: 200mg IV OD Followed by:	3 days total	Complete a [redacted] form For use in pregnancy, d/w obstetrics, see RCOG guidance

[redacted]	100mg IV OD for 2 more days		[redacted]
If above unsuitable: **Sotrovimab** [redacted]	500mg IV infusion	Single dose	Complete a [redacted] form Sotrovimab is a monoclonal antibody and activity against the current circulating variant is unknown. In pregnancy, d/w obstetrics

Further information:

If time from symptom onset allows and the patient does not require admission, treatment can be given on the next working day by the CMDU service: Refer via: [redacted]

(There is no expectation that any of the above treatments need to be started out-of-hours for the cohort above [no new oxygen requirement]: drug supply can be sought from pharmacy the following day).

New low-flow oxygen requirement attributable to COVID

Inclusion criteria:

- New positive COVID-19 test result, **and**
- High risk of severe disease, consider the addition of remdesivir (link to [redacted]

Drug	Dose	Duration	N.B.
Dexamethasone Oral or IV alternative	6mg OD	5 days	Offer to all patients needing O2 for COVID pneumonitis Use hydrocortisone if dexamethasone C/I Pregnant: prednisolone 40mg OD for 10 days [redacted]
Consider addition of Remdesivir IV antiviral	Loading dose: 200mg IV OD Followed by: 100mg IV OD for 4 more days	5 days May be extended to 10 days in immunosuppressed	Complete a [redacted] form For use in pregnancy, d/w obstetrics, see RCOG guidance [redacted]

New high flow oxygen requirement

Inclusion criteria:

- New positive COVID-19 test result, **and**
- New high flow O2 requirement or mechanical ventilation attributable to COVID, **or**

- Failure to respond to dexamethasone

All treatments below may be considered additive if appropriate for the patient and clinical condition.

Ensure treatment with any immunosuppressive therapy is documented on the discharge summary.

Drug	Dose	Duration	N.B.
Dexamethasone Oral or IV alternative	6mg OD	5 days	Offer to all patients needing O2 for COVID pneumonitis Use hydrocortisone if dexamethasone C/I Pregnant: prednisolone 40mg OD for 10 days [redacted]
Consider addition of tocilizumab to steroid therapy, particularly if CRP >75mg/L **Tocilizumab** IV infusion MAb	8mg/kg (see weight banded dosing in appendix 1)	Single dose	Do **not** administer if: • Thrombocytopaenia (platelets <50x10^9/L) • Neutropaenia (<1x10^9/L) • Liver enzymes ≥ 10x ULN • Pregnancy- do **not** use, use effective contraception for up to 3 months after treatment see [redacted] for breast-feeding advice & further cautions (no evidence of bacterial or other viral infection, pre-existing condition or treatment causing immunosuppression) (Document batch numbers in clinical notes) Complete a [redacted] form
Consider addition of: **Baricitinib** JAK 1 & 2 inhibitor PO therapy	4mg PO OD Renal dose: 2mg PO once daily (eGFR 30 to <60mL/min/1.73m^2) **OR** 2mg PO alternate days (eGFR 15 to <30mL/min/1.73m^2)	10 days (or until discharge)	Note can also be added if clinical deterioration despite treatment with tocilizumab or if tocilizumab cannot be given. Do **not** administer if: • Pregnancy (use effective contraception for at least 1 week after treatment) & breast-feeding • Neutrophil count (ANC) <0.5 x 10^9 cells/L • Active TB or significant other active infection • eGFR<15ml/min See [redacted] for further advice/cautions Complete a one-off non-formulary request **N.B:** Off label use

REFERENCES	NICE TA878, Nirmatrelvir plus ritonavir, sotrovimab and tocilizumab for treating COVID-19 NICE TA971, Remdesivir and tixagevimab plus cilgavimab for treating COVID-19 [redacted]
RELATED DOCUMENTS AND PAGES	
AUTHORISING BODY	ASG
SAFETY	
QUERIES AND CONTACT	Antimicrobial pharmacist; extn: [redacted] Microbiology: extn: [redacted]
AUDIT REQUIREMENTS	Antimicrobial compliance audits

Document Change Control

Date of Version	Version Number	Lead for Revisions	Type of Revision	Description of Revision

July 2022	5.0	Consultant Pharmacist Anti-infectives	Major	Addition of COVID patient groups Group 2 patient information added for clarity Molnupiravir section added Enhanced VTE prophylaxis table removed
Aug 2023	6	Consultant Pharmacist Anti-infectives	Major	Up-dated according to NICE Technology Appraisal [TA878], June 2023
July 2024	7	Consultant Pharmacist Anti-infectives	Major	Re-written as per 2024 NICE guidance

Appendix 1: Tocilizumab dose banding

Estimated or measured weight	Tocilizumab dose
<41 kg	8mg/kg to nearest 20mg
≥ 41 and ≤ 45 kg	1 x 200mg + 2 x 80mg = **360mg**
≥ 46 and ≤ 55 kg	1 x 200mg + 3 x 80mg = **440mg**
≥ 56 and ≤ 60 kg	1 x 400mg + 1 x 80mg = **480mg**
≥ 61 and ≤ 65 kg	1 x 200mg + 4 x 80mg = **520mg**
≥ 66 and ≤ 70 kg	1 x 400mg + 2 x 80mg = **560mg**
≥ 71 and ≤ 75kg	1 x 400mg + 1 x 200mg = **600mg**
≥ 76 and ≤ 80kg	1 x 400mg + 3 x 80mg = **640mg**
≥ 81 and ≤ 85 kg	1 x 400mg + 1 x 200mg + 1x 80mg = **680mg**
≥ 86 and ≤ 90 kg	1 x 400mg + 4 x 80mg = **720mg**
≥ 91kg	2 x 400mg = **800mg**