

Interim arrangements for the treatment of COVID-19 from 1st July 2023 – 1st October 2023 in North East London ICS

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Background

From the 1st April 2023, the commissioning responsibility for all COVID-19 treatments was transferred from NHS England to Integrated Care Boards (ICBs). NICE Multiple Technology Appraisal (MTA) Guidance TA878 – Casirivimab plus imdevimab (Ronapreve), nirmatrelvir plus ritonavir (Paxlovid), sotrovimab and tocilizumab for treating COVID-19 was published on 29th March 2023, providing positive recommendations for Paxlovid, sotrovimab and tocilizumab and a negative recommendation for Ronapreve. On 22nd June 2023, the NICE TA was further updated with a section with supporting information on risk factors for progression to severe COVID-19. This supporting information was provided by the independent advisory group commissioned by the Department of Health and Social Care.

The recommendations of the NICE MTA878 for Paxlovid, sotrovimab and tocilizumab were ratified by the North East London Integrated Medicines Optimisation Committee (NEL IMOC) for implementation across North East London.

Baracitinib does not have a licence for the use of treatment in COVID -19 and is therefore an off-label use. For this reason, it also meant it fell outside of the scope for the NICE MTA878 and could not be included in the recommendations. However, NHS England wrote to all ICB Medical Directors in April 2023 directing them to a template baracitinib policy in the treatment of patients hospitalised due to COVID-19.

Remdesivir and Molnupiravir were excluded from the NICE TA subject to an appeal from the manufacturing companies, however recommendations were also made in the NICE rapid guidelines. From the appeal hearing in May 2023, many elements of the appeal were upheld and the NICE appraisal committee have been asked to make further considerations before their final draft, hence the final publication will be further delayed.

Interim Treatment pathway

An interim treatment pathway for patients across North East London who have COVID-19 is required. The interim pathway will include the treatment options available for (1) inpatients admitted to a Trust in North East London due to COVID-19, (2) hospital on-set of COVID-19 (no oxygen requirement) and (3) non-hospitalised patients across North East London. The interim pathway will include the use of baricitinib, as an off-label agent for COVID-19, and remdesivir and molnupiravir whilst awaiting the final NICE recommendations being published following the appeals process.

The treatment pathway will adhere to the recommendations set out in the interim <u>Clinical</u> <u>Commissioning Policy: remdesevir and molnupiravir for non-hospitalised patients with COVID-19</u>. This interim policy from NHS England provides guidance on the use of remdesevir and molnupiravir, alongside <u>NICE guideline NG191 - COVID-19 rapid guideline: managing COVID-19</u>, until the outcomes of the appeals are determined.

Inpatients

The following treatment pathways are being recommended for use in North East London. **Appendix one contains detailed information about the drug treatments.**

- (1) Inpatients' with severe COVID-19 who have been hospitalised in a North East London Hospital Trust:
 - All +ve patients on O2 should receive corticosteroids

Further treatment options are based on the patients' individual clinical picture.

- Consider tocilizumab and / or baracitinib as per patient eligibility criteria
- Consider remdesevir for patients who are on low flow O2 as per patient eligibility criteria

Please note that patients may receive multiple therapies as indicated (see appendix 1).

(2) Patients with mild COVID-19 (nosocomial or community onset) in a North East London Trust for other conditions and not requiring supplemental oxygen:

First line: Paxlovid

Second line: Sotrovimab Third line: Remdesivir Fourth line: Molnupiravir

The following patients should be discussed with local COVID panel/specialist MDT.

- 1. If treating clinicians wish to use drug outside of patient eligibility criteria
- 2. Patients with severe immunosuppression
- 3. Patients with persistent SARS-CoV-2 RNA detection +/- symptoms

For all actions/decisions outside of the guidance these should be managed through Trust chairs actions.

(Sarilumab to be used only in the event of tocilizumab shortage.)

Non-hospitalised patients

This interim treatment pathway for non-hospitalised patients will adhere to the recommendations set out in the interim <u>Clinical Commissioning Policy: remdesevir and molnupiravir for non-hospitalised patients with COVID-19</u>.

Appendix two contains detailed information about the drug treatments.

(1) Non-hospitalised patients across North East London

First line: Paxlovid Second line: Sotrovimab

Third line: Remdesivir (where supply is available)

Fourth line: Molnupiravir

Acquisition of drugs

Pre-purchased Department of Health and Social Care (DHSC) stock will continue to be used until supplies are exhausted for all treatments. This stock continues to be available for Paxlovid, sotrovimab and molnupiravir. Tocilizumab, sarilumab and baricitinib are provided from NHS stock and will be cross charged to the ICB.

The usage for financial year 2022/23 is shown below with current prices to indicate possible maximum expenditure if the COVID drugs to the ICB.

Remdesivir pre-purchased DHSC stock has however been depleted.

Until the recommendations following the appeal to NICE have been released for the use remdesivir, the drug costs will be funded by the Trusts for inpatient treatments. Remdesivir is available at £358.88 + VAT per 100mg vial directly from Gilead.

Post Interim Projected Costs

The projected costs have been calculated from 2022/23 usage based on 2022/23 guidelines. However, the guidelines will be reviewed with the final NICE TA publication hence this may not reflect future costs. Usage is also likely to be lower for 2023/24 with increased overall immunity to COVID-19 through infection or vaccination though difficult to quantify.

Projected Cost Table

This table takes into account the pre-purchased DHSC stock, that is expected to cover for at least 6 months from 1^{st} July $2023 - 1^{st}$ October 2023.

	Barts Health no. of patients (2022/23)	BHRUT no. of patients (2022/23)	♦Homerton no. of patients (From December 2021)	Number of CMDU patients in 2022/23	Maximum Total number of Patients 1 st April – 1 st October	Unit cost with VAT	Projected cost for 1 st April – 1 st October 2023
Paxlovid 150							
mg/100mg							
Tablets	499	21	17	94	631	£994.80	prepaid stock
Sotrovimab 500							
mg in 8mL	FF1	4	0	F2	604	C2 CE0 2	
Infusion	551	1	0	52	604	£2,650.2	prepaid stock
*Tocilizumab							
400mg in 20mL Infusion	53	32	16	0	50	£723.45	£36,172
**Baricitinib 2mg	Limited	32	10	0	30	1/23.43	150,172
or 4mg tablets	data				5	£184.10	£920
of 4ffig tablets	uata				3	no	1920
Molnupiravir 200						current	
mg Capsules						price	prepaid stock
Remdesivir						price	p. cpaid stock
100 mg Infusion							
powder					24	£430.59	£10,334
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Total							£47,426

*Tocilizumab 8mg per kg (calculation of cost is 400mg vial [£482.30] + 200mg vial [241.15])
Sarilumab will be used in the place of tocilizumab only. (Acquisition cost £728.58 per 175mg pair). Usage is predicted to be minimal

**Baricitinib 4mg x 28tablets = £460.27 (inclusive of VAT)
Calculation made for adult course only: 4mg once a day for 10 days = £184.10

♦ Homerton data was provided from December 2021 to March 2023, therefore the projected costs for 2023/24 will be lower than stated above for Homerton hospital.

Data collection

The Trusts will continue to submit Blueteq forms for reporting purposes as an interim measure until a longer-term solution can be agreed for reporting with NEL ICB.

References

NICE NG191 Overview | COVID-19 rapid guideline: managing COVID-19 | Guidance | NICE

NICE MTA 878 for Paxlovid, sotrovimab, tocilizumab (positive recommendation) and Ronapreve (negative recommendation) Overview | Casirivimab plus imdevimab, nirmatrelvir plus ritonavir, sotrovimab and tocilizumab for treating COVID-19 | Guidance | NICE

NICE MTA <u>Project information | Molnupiravir, remdesivir and tixagevimab plus cilgavimab for treating</u> COVID-19 [ID6261] | Guidance | NICE

Rapid Policy Statement Interim Clinical Commissioning Policy: remdesivir and molnupiravir for nonhospitalised patients with COVID-19

<u>Microsoft Word - PRN00453_Rapid Policy Statement - Interim Clinical Commissioning Policy - remdesivir and molnupiravir for non-hospitalised patients with COVID-19_May 2023 (england.nhs.uk)</u>

Appendix 1

Further information for Treatment COVID-19 hospitalised patients

Treatment of patients who have been hospitalised due to ACUTE COVID-19 illness management and require supplemental oxygen

		symptoms		no concomitant infection No restriction on duration onset of symptoms
criteria for treatment me	atient requires upplemental oxygen to neet their prescribed xygen saturation evels	 SARS-CoV-2 positive by diagnostic PCR on this hospital admission or MDT has high level of confidence that COVID-19 is most likely diagnosis 	 SARS-CoV-2 positive by diagnostic PCR on this hospital admission or MDT has high level of confidence that COVID-19 is most likely diagnosis 	SARS-CoV-2 positive by diagnostic PCR on this hospital admission or MDT has high level of confidence that COVID-19 is most likely diagnosis AND
tha su bu	lave a level of hypoxia hat needs hat needs hupplemental oxygen ut who are unable to ave or tolerate it	The patient has pneumonitis with saturations <92% on room air requiring:	Have Covid19 pneumonia AND	 Viral pneumonia syndrome² is present AND > 2 years of age³
Th coi hy act	here are no drug ontra-indications e.g., ypersensitivity to any ctive substances or xcipients	a) supplemental oxygen AND CRP ≥ 75 mg/L; OR b) requiring advanced respiratory support (HFNO, CPAP or other non-invasive ventilation or invasive mechanical ventilation) within the last 48 hours, regardless of CRP	 Hospitalised and need low flow supplemental oxygen AND Adults and paediatric patients (at least 4 weeks of age and weighing at least 3 kg) 	Receiving supplemental oxygen or respiratory support (HFNO, CPAP or other non-invasive ventilation or invasive mechanical ventilation) for the treatment of COVID-19 AND

	 > 18 years of age 	Within 7 days of symptom	Already receiving dexamethasone or an equivalent
	AND	onset (unless exempt)	corticosteroid (unless contraindicated)
	Already receiving or has completed	AND	AND
	a course of dexamethasone or equivalent corticosteroid (<i>unless</i> contra-indicated)	 eGFR >30ml/min (use with caution if GFR <50ml/min) OR the patient is established on renal 	 eGFR >15mL/min/1.73m² [if patient is <9 years, eGFR should be >30mL/min/1.73m²]
	AND	replacement therapy (haemo- or peritoneal dialysis)	AND
	Have not received an IL-6 inhibitor	AND	Not receiving dialysis or haemofiltration
	(tocilizumab, sarilumab) during this admission episode	 ALT < 5 x ULN and NO history of chronic liver disease (Childs Pugh 	AND
	AND	C)	No history of severe hepatic disease
	The MDT is confident of a low probability of any active infection	AND	AND
	other than COVID-19 (consider checking procalcitonin). This	ISARIC 4C score ≥ 4	Absolute neutrophil count (ANC) >0.5 x 10 ⁹ cells/L and haemoglobin >8g/dL
	includes bacterial superinfection such as HAP, UTI, cellulitis.	AND	AND
A second	AND	There are no drug contra- indications e.g., hypersensitivity to	Patient does not have active tuberculosis
	 No known pre-existing condition or treatment resulting in ongoing 	any active substances or excipients	AND
	immunosuppression		Patient is not pregnant or breastfeeding (women of childbearing potential should use effective
	AND		contraception during and for at least 1 week after treatment
	 ALT/AST< 10 times upper limit of normal (caution with pre-existing liver disease) 		AND
	AND		There are no drug contra-indications e.g., hypersensitivity to any active substances or excipients

	 Platelet count ≥ 50 x 10⁹/L AND Neutrophil count ≥ 1 x 10⁹/L (caution) There are no drug contra-indications e.g., hypersensitivity to any active substances or excipients Baricitinib may be considered in people who meet the above criteria, and who cannot have tocilizumab. When there is clinical deterioration despite treatment with tocilizumab, it may be appropriate to add baricitinib. 		criteria clinica	a, and who ca	nnot have toc despite treati	lizumab. Who	eet the above en there is ilizumab, it may
Dose and treatment duration	Tocilizumab: Dosing based on weight and stock availability as per table Total treatment duration: STAT dose ONLY	Remdesivir (adults and children >40kg) 200mg IV STAT dose on day 1, then 100mg IV OD for days 2 to 5 Total treatment duration: 5 days For significantly immunocompromised patients a course of remdesivir can be extended to a maximum of 10 days Refers to patients with a significant impairment of humoral immune response (antibody production) and/or cellular immune competence).	Barici	≥ 9 years old and adults Children 2 to <9 years old	eGFR >60mL/mi n 4mg OD	eGFR ≥30 to <60 mL/min 2mg OD 2mg on alternate days	eGFR 15 to <30mL/mi n 2mg on alternate days avoid

	supervised virtual COVID ward.			*Co-administration of an Organic Anion Transporter 3 (OAT3) inhibitor with a strong inhibition potential e.g., probenecid – Dose reduced to Baricitinib PO 2mg OD Total treatment duration: 10 days (or until discharge if sooner)
Approval form	No	Yes	Yes	Yes

Treatment of patients with symptomatic hospital onset COVID-19, who have been hospitalised for other conditions and contracted COVID-19 during their admission without requiring supplemental oxygen)

Treatment	Paxlovid (nirmatrelvir plus ritonavir) First Line	Sotrovimab Second line	Remdesivir Third line	Molnupiravir Fourth line
Eligibility criteria for treatment	The patient does not need supplemental oxygen for COVID-19	 The patient does not need supplemental oxygen for COVID- 19 	 The patient does not need supplemental oxygen for COVID-19 	 The patient does not need supplemental oxygen for COVID-19
	AND	AND	AND	AND
	 Confirmed by PCR OR lateral flow test. 	 Confirmed by PCR OR lateral flow test. 	 Confirmed by PCR OR lateral flow test 	 Confirmed by PCR OR lateral flow test
	AND	AND	AND	AND
	 Symptomatic with COVID-19 and showing no signs of clinical recovery. 	 Symptomatic with COVID-19 and showing no signs of clinical recovery 	 Symptomatic with COVID-19 and showing no signs of clinical recovery 	a) The patient is a member of a 'highest' risk group OR b) The COVID-19 infection
	AND	AND	AND	presents a material risk of destabilising a pre-existing
	 a) The patient is a member of a 'highest' risk group OR b) The COVID-19 infection presents a material risk of destabilising a pre-existing 	a) The patient is a member of a <u>'highest'</u> risk group OR	a) The patient is a member of a 'highest' risk group OR	condition or illness or compromising recovery from surgery or other hospital

condition or illness or compromising recovery from surgery or other hospital procedure (as determined by MDT assessment) AND	b) The 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 MDT assessment)	b) The 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 MDT assessment)	procedure (as determined by MDT assessment) AND Treatment is commenced
No history of severe renal or liver disease. These patients require their treatment to be discussed with the responsible specialist clinical team. Pregnancy has been excluded in women of childbearing age. Breast-feeding should be discontinued during treatment and for 7 days after last dose AND Deemed safe after assessing potential drug interactions. Please note there are numerous significant drug interactions associated with Paxlovid. AND		Treatment is commenced within 7 days of symptom onset AND Adults and children (BUT weighing at least 40kg) Treatment with Paxlovid, and Sotrovimab, are both contraindicated or not clinically suitable AND Patient does not require hospital-level care (i.e., Group 1) for the management of acute COVID-19* AND Patient does not have a new supplemental oxygen requirement specifically for the management of COVID-19. AND	within 5 days of symptom onset AND - >18 years of age and not pregnant AND - Treatment with Paxlovid, Sotrovimab and Remdesivir are all contraindicated or not clinically suitable AND - There are no drug contra-indications e.g., hypersensitivity to any active substances or

	Patient does not require hospital-level care for the management of acute COVID-19* There are no drug contra-indications e.g., hypersensitivity to any active substances or excipients, or drug interactions If there are significant drug interactions present between Paxlovid and the patient's current medication regimen, please consider 2nd & 3rd line treatment options. If Paxlovid is the most appropriate treatment of choice, please contact the respective specialist team for further advice on the management of the drug interactions.		 There are no drug contraindications e.g., hypersensitivity to any active substances or excipients AND eGFR is >30ml/min, OR Patient has end-stage renal failure and is on haemodialysis AND ALT <5 times the upper limit of normal 	
Dose and Treatment Duration	(1x100mg ritonavir tab) PO BD for 5 days. For patients with eGFR ≥30ml/min – 60ml/min: 150mg (1x150mg nirmatrelvir tabs) PO with 100mg (1x100mg ritonavir) PO BD for 5 days Total treatment duration: 5 days	Sotrovimab: 500mg IV Total treatment duration: STAT dose ONLY	Remdesivir 200mg IV STAT dose on day 1, then 100mg IV OD for days 2-3. Total treatment duration: 3 days	Molnupiravir PO 800mg BD Total treatment duration: 5 days
Approval form	Yes	Yes	Yes	Yes

Appendix 2

Further information for Treatment COVID-19 non-hospitalised patients

Treatment of patients with non-hospitalised adults and children aged over 12 years and older with COVID-19, who are symptomatic

Treatment	Paxlovid (nirmatrelvir plus ritonavir) First Line	Sotrovimab Second line	Remdesivir Third line (where supply is available)	Molnupiravir Fourth line
Eligibility criteria for treatment	 The patient does not need supplemental oxygen for COVID-19 	 The patient does not need supplemental oxygen for COVID- 19 	 The patient does not need supplemental oxygen for COVID-19 	 The patient does not need supplemental oxygen for COVID-19
	Confirmed by PCR OR lateral flow test. AND Symptomatic with COVID-19 and showing no signs of clinical recovery. AND a) The patient is a member of a 'highest' risk group OR	Confirmed by PCR OR lateral flow test. AND Symptomatic with COVID-19 and showing no signs of clinical recovery AND a) The patient is a member of a 'highest' risk group	Confirmed by PCR OR lateral flow test AND	Confirmed by PCR OR lateral flow test AND a) The patient is a member of a 'highest' risk group OR b) The COVID-19 infection presents a material risk of destabilising a pre-existing condition or illness or compromising recovery from surgery or other hospital
	b) The 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 MDT assessment) AND	on the 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 MDT assessment) AND	b) The 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 MDT assessment) AND	procedure (as determined by MDT assessment) AND Treatment is commenced within 5 days of symptom onset

> 18 years of age	 > 12 years of age and at least 40kg 	Treatment is commenced within 7 days of symptom onset	>18 years of age and not
Treatment is commenced within 5 days of symptom onset ¹	Treatment with Paxlovid is contraindicated or not clinically suitable.	Adults and children (BUT weighing at least 40kg)	pregnantANDTreatment with Paxlovid,
No history of severe renal or liver disease. These patients require their treatment to be discussed with the responsible specialist clinical team.	Treatment is delivered within 5 days of symptom onset ¹ AND	Treatment with Paxlovid, and Sotrovimab, are both contraindicated or not clinically suitable	Sotrovimab and Remdesivir are all contraindicated or not clinically suitable
Pregnancy has been excluded in women of childbearing age. Breast-feeding should be discontinued during treatment and for 7 days after last dose	Patient does not have a new supplemental oxygen requirement specifically for the management of COVID-19 AND	Patient does not require hospital-level care (i.e., Group 1) for the management of acute COVID-19*	 There are no drug contra-indications e.g., hypersensitivity to any active substances or excipients
Deemed safe after assessing potential drug interactions. Please note there are numerous significant drug interactions associated with Paxlovid.	There are no drug contra- indications e.g., hypersensitivity to any active substances or excipients	Patient does not have a new supplemental oxygen requirement specifically for the management of COVID-19. AND	
Patient does not require hospital-level care for the management of acute COVID-19* AND		There are no drug contra- indications e.g., hypersensitivity to any active substances or excipients AND	

	There are no drug contra-indications e.g., hypersensitivity to any active substances or excipients, or drug interactions If there are significant drug interactions present between Paxlovid and the patient's current medication regimen, please consider 2 nd & 3 rd line treatment options.		 eGFR is >30ml/min, OR Patient has end-stage renal failure and is on haemodialysis AND ALT <5 times the upper limit of normal 	
Dose and Treatment Duration	Paxlovid (nirmatrelvir plus ritonavir) Patients with eGFR >60ml/min: 300mg (2x150mg nirmatrelvir tabs) PO with 100mg (1x100mg ritonavir tab) PO BD for 5 days. For patients with eGFR ≥30ml/min – 60ml/min: 150mg (1x150mg nirmatrelvir tabs) PO with 100mg (1x100mg ritonavir) PO BD for 5 days Total treatment duration: 5 days	Sotrovimab: 500mg IV Total treatment duration: STAT dose ONLY	Remdesivir 200mg IV STAT dose on day 1, then 100mg IV OD for days 2-3. Total treatment duration: 3 days	Molnupiravir PO 800mg BD Total treatment duration: 5 days