

Oral antiviral agents for covid positive patients in primary care



East and North
Hertfordshire
NHS Trust

Mark Leamon (Pharmacist Manager – Clinical Services)

Krupa Mandalia (Pharmacist Manager – Medicine)

Wednesday 5th June 2024

ProudToBeENHT

Contents

- Background to CMDU service (December 2021 to present)
- Current pathway for patients to obtain oral antivirals
- Where does Paxlovid® and molnupiravir fit in the treatment pathway
- Focus on Paxlovid®
- Focus on Molnupiravir
- Questions

Background to CMDU service

- Covid Medicine Delivery Unit service
- National call to arms worked up and launched on 16th December 2021
- Specific aim – *“to reduce the severity of symptoms for clinically vulnerable patients in order to prevent hospital admission”*
- Service designed to reduce burden on secondary care so that only the most critically unwell covid patients were being admitted into hospital

Background to CMDU service

- Three CMDU services set up within HWE ICB:
 - Lister Hospital, Stevenage
 - Princess Alexandra Hospital, Harlow
 - Watford General Hospital, Watford
- Similar set up:
 - Covid positive patients identified in community
 - Telephone triage with patient
 - Treatment decision made (if patient eligible)

Background to CMDU service

- Treatment options:
 - Neutralising monoclonal antibody:
 - Sotrovimab
 - IV antiviral:
 - Remdesivir (initially licensed to treat ebola)
 - Oral antivirals:
 - Paxlovid®
 - Molnupiravir

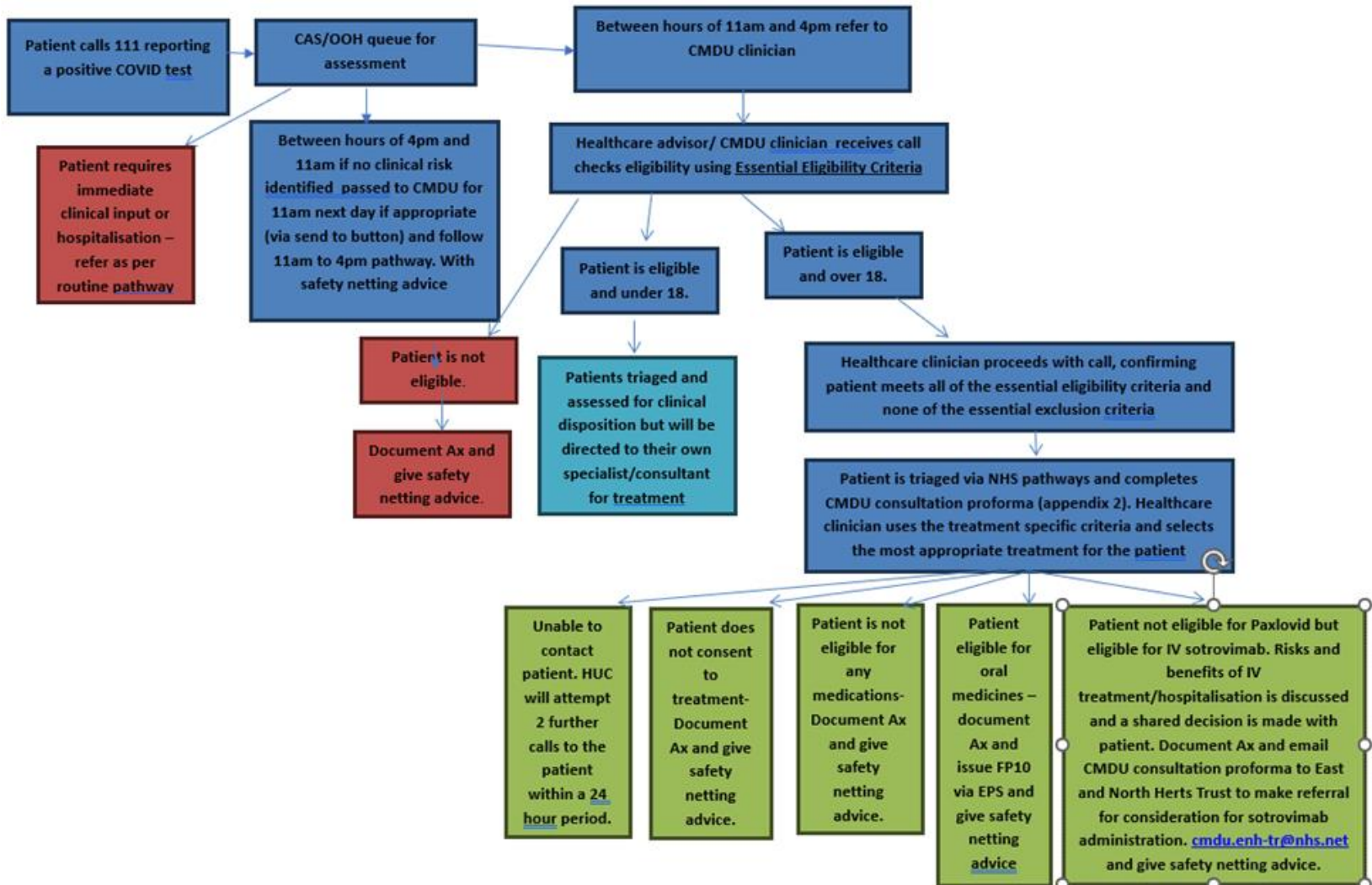
Background to CMDU service

- From 16th December 2021 to 31st March 2024:
 - >6,000 patients triaged
 - 2,590 patients treated (43%)
 - 865 treated with sotrovimab (33%)
 - 9 treated with remdesivir (0.3%)
 - 451 treated with Paxlovid® (17.4%)
 - 1,265 treated molnupiravir (48.8%)
- Pattern of referrals mirrored local and national prevalence data

Current pathway for oral antivirals

- From 1st April 2024, access to anti-covid drugs for patients in primary care changed
- The 3 secondary care CMDUs were decommissioned and replaced by an ICB wide service primarily provided by HUC
- For the 1st time oral antivirals are available in community via FP10 prescriptions

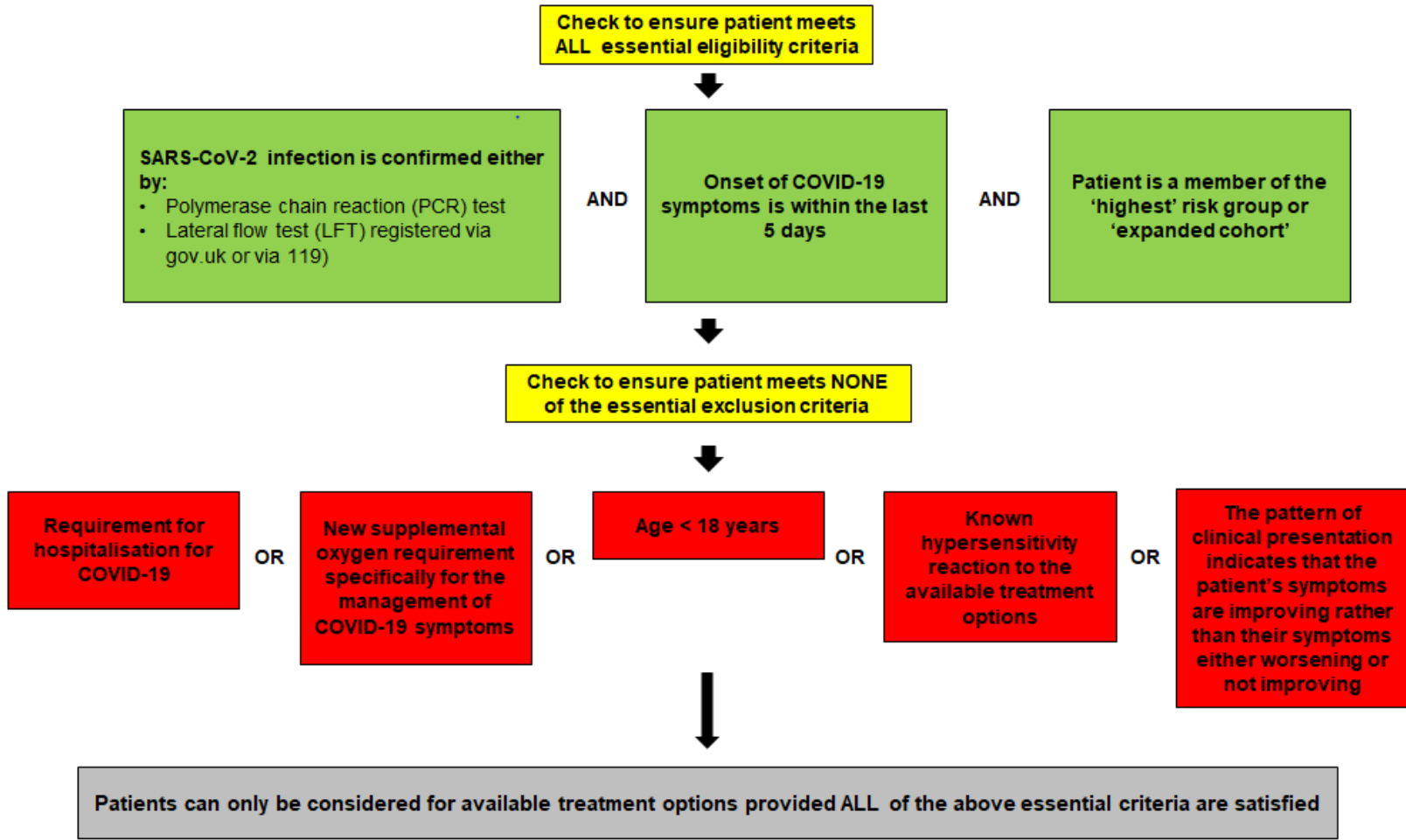
Current pathway for oral antivirals



Paxlovid® and molnupiravir in treatment pathways

- Eligibility criteria is key to access for covid treatments
- National commissioning has changed multiple times over past 2.5 years
- Current latest guidance:
 - NICE TA 878
 - <https://www.nice.org.uk/guidance/ta878>

Paxlovid® and molnupiravir in treatment pathways



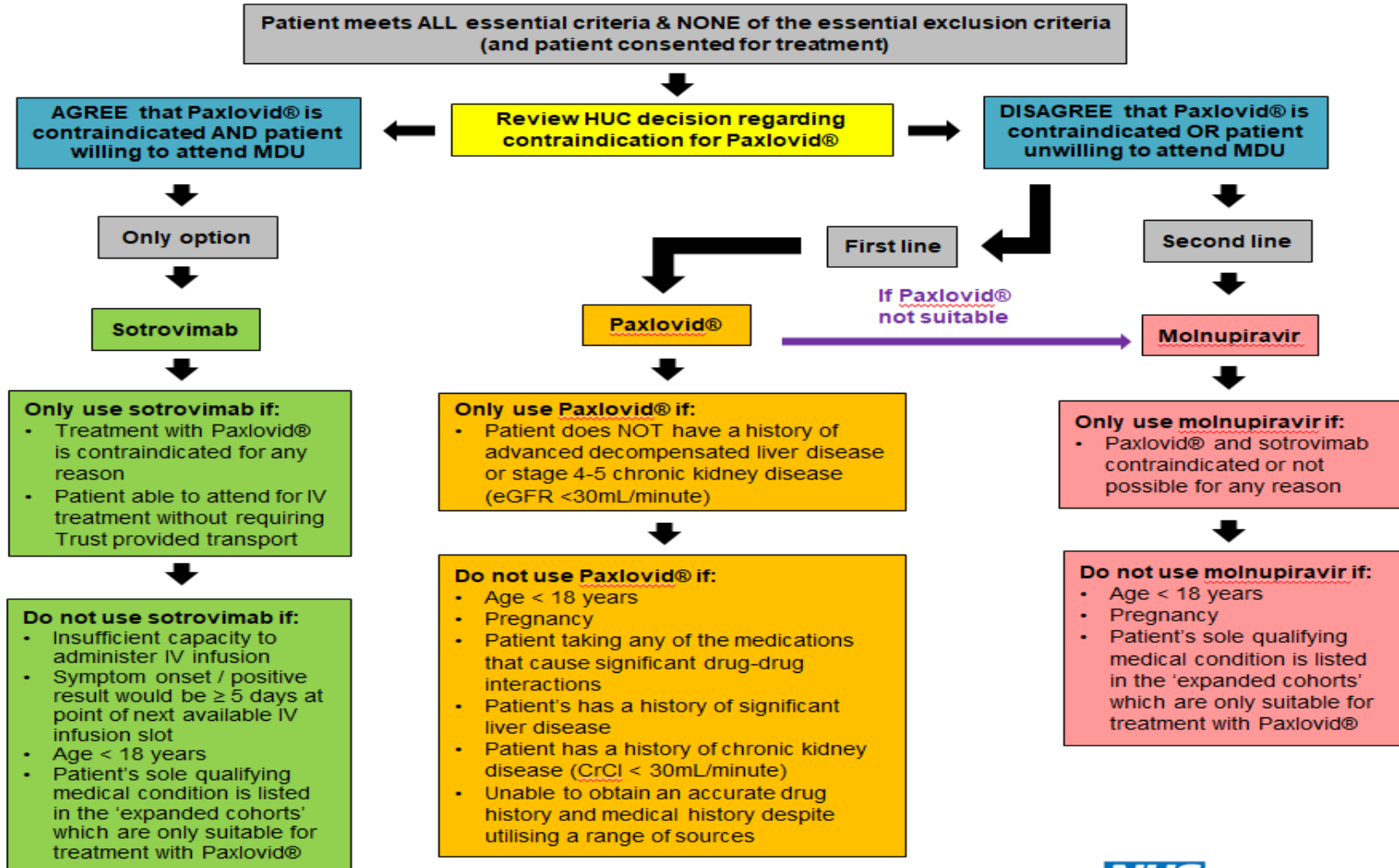
Paxlovid® and molnupiravir in treatment pathways

- High risk groups:
 - Down's syndrome and other genetic disorders
 - Solid cancer
 - Haematological diseases and haematological stem cell transplant (HSCT) recipients
 - Renal disease
 - Liver disease
 - Solid organ transplant recipients
 - Immune-mediated inflammatory disorders (IMID)
 - Respiratory disease
 - Immune deficiencies
 - HIV/AIDs
 - Neurological conditions
- Patients fitting into the criteria above – eligible for Paxlovid® or molnupiravir

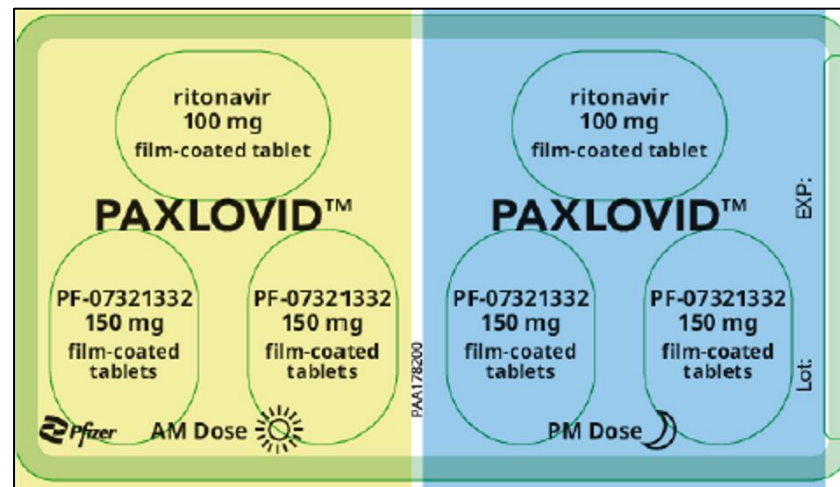
Paxlovid® and molnupiravir in treatment pathways

- Expanded cohort:
 - Aged 85 years and over
 - End-stage heart failure who have a long-term ventricular assistance device
 - Organ transplant waiting list
 - Aged 70 years and over, or who have a BMI of 35 kg/m² or more, diabetes or heart failure, and:
 - are resident in a care home, or
 - are already hospitalised
- Patients fitting into the criteria above – eligible for Paxlovid® only
- <https://www.nice.org.uk/guidance/ta878/chapter/5-Supporting-information-on-risk-factors-for-progression-to-severe-COVID-19>

Paxlovid® and molnupiravir in treatment pathways



- Combination product of two antiviral agents:
 - Nirmatrelvir 150mg tablets
 - Ritonavir 100mg tablets



- Efficacy: relative risk reduction of hospitalisation or death by 88% (started within 5 days of symptom onset)

- Dose

- Nil or mild renal impairment [$\text{CrCl} \geq 60\text{ml/min}$]

2 tablets of Nirmatrelvir (300mg) + 1 tablet of Ritonavir (100mg)
TWICE daily

- Moderate renal impairment (CKD stage 3) [$\text{CrCl} 30\text{-}59\text{mL/min}$]

1 tablet of Nirmatrelvir (150mg) + 1 tablet of Ritonavir (100mg) TWICE
daily

- Duration: 5 days

- Dispensing

- Full dosing:

- Supply ONE pack (30 tablets) of Paxlovid® 150 mg/100 mg film-coated tablets in the original box.

- Reduced dosing:

- Supply 10 x single-dose boxes (each containing ONE tablet of Nirmatrelvir 150mg and ONE tablet of Ritonavir 100mg)

East and North Hertfordshire NHS Trust		PATIENT PRESCRIPTION FORM	
<i>only be dispensed at the pharmacy within the hospital</i>			
Hospital number: Sample Prescription		Pharmacy use	
Address: xxxxxx		Screened by	
Date of birth: xx/xx/xxxx		Labeled by	
		Dispensed by	
		Checked by	
		Given out by	
One patient pack will be supplied for drugs which are to continue. For short courses, state length of course.			
Rx Paxlovid® Nirmatrelvir 150mg/Ritonavir 100mg tablets Take TWO tablets of Nirmatrelvir and ONE tablet of Ritonavir TWICE daily for 5 days PO		Pharmacy quantity and strength endorsement	
Drug allergies / sensitivities NKDA		Pt weight	
Signature of prescriber Dr ABC Print name		Consultant team Dr ABC	
Paid / exempt		Bleep	
<i>Affix stamp here</i>		Date xx/xx/xx	

ENH00196-5

East and North Hertfordshire NHS Trust		PATIENT PRESCRIPTION FORM	
<i>only be dispensed at the pharmacy within the hospital</i>			
Hospital number: Sample Prescription		Pharmacy use	
Address: xxxxxx		Screened by	
Date of birth: xx/xx/xxxx		Labeled by	
		Dispensed by	
		Checked by	
		Given out by	
One patient pack will be supplied for drugs which are to continue. For short courses, state length of course.			
Rx Paxlovid® Nirmatrelvir 150mg/Ritonavir 100mg tablets Take ONE tablet of Nirmatrelvir and ONE tablet of Ritonavir TWICE daily for 5 days PO <u>Note to pharmacy:</u> Please dispense in 10 x single-dose boxes & discard remaining Nirmatrelvir 150mg tablets not required		Pharmacy quantity and strength endorsement	
Drug allergies / sensitivities NKDA		Pt weight	
Signature of prescriber Dr ABC Print name		Consultant team Dr ABC	
Paid / exempt		Bleep	
<i>Affix stamp here</i>		Date xx/xx/xx	

ENH00196-5

- **Cautions and special populations**
 - Renal impairment – contraindicated if CrCl < 30mL/minute
 - Hepatic impairment- contraindicated in severe hepatic impairment (child-pugh class B)
 - Pregnancy – Not recommended
 - Breast feeding – Discontinue breast feeding during treatment and for 7 days after the last dose of Paxlovid®
 - ADR – nausea, vomiting and diarrhoea
 - Contraindications: Hypersensitivity to active substance or any of the excipients
- **Drug interactions**
 - Risk of serious adverse reactions!
 - Use the Liverpool COVID19 drug interaction checker for management of interactions
 - Examples of common drug interaction:
 - Statins - advice to hold statins for during treatment and for 3 days after the last dose of Paxlovid®
 - DOACs - Avoid
 - Amiodarone – Avoid

- Liverpool covid drug interaction checker
- <https://www.covid19-druginteractions.org/checker>

- Example:

The screenshot displays the 'COVID-19 drug interaction checker' interface. It is divided into three main sections: 'COVID Drugs', 'Co-medications', and 'Drug Interactions'.

- COVID Drugs:** A search box contains 'paxlovid'. Below it are filters for 'A-Z', 'Class', and 'Trade'. Three results are listed, all checked: 'Nirmatrelvir/ritonavir (5 days)' (twice) and 'Nirmatrelvir/ritonavir (extended administration; 10 days or longer)' (unchecked).
- Co-medications:** A search box contains 'amlodipine'. Below it are filters for 'A-Z' and 'Class'. Three results are listed, all checked: 'Apixaban', 'Amlodipine', and 'Amlodipine'.
- Drug Interactions:** A checkbox 'Check COVID/COVID drug interactions' is checked. A 'Reset Checker' button is present. Below are two 'Potential Interaction' alerts. The first alert shows 'Nirmatrelvir/ritonavir (5 days)' and 'Amlodipine' with a 'Look for alternatives' button and a 'More Info' dropdown. The second alert shows 'Nirmatrelvir/ritonavir (5 days)' and 'Apixaban' with a 'Look for alternatives' button.

Molnupiravir

- Single novel agent



- Efficacy: relative risk reduction of hospitalisation or death by 30% (started within 5 days of symptom onset)

Molnupiravir

- Dose
 - 800mg (4 X 200mg) twice daily
- Duration
 - 5 days
- Dispensing: Supply ONE pack of 200 mg capsules (40 capsules pack-size) per prescription
- Cautions and special populations
 - Renal impairment: No dose adjustment is required
 - Hepatic impairment: No dose adjustment is required
 - Pregnancy: Not recommended
 - Breast feeding: Discontinue during treatment and for 4 days after the last dose Molnupiravir
 - ADR: nausea, vomiting, diarrhoea, dizziness
 - Contraindications: Hypersensitivity to active substance or any of the excipients
 - Drug interactions – no major drug interactions

Thank you

