Notable Updates for COVID-19

October 2022

COVID-19 Response: Test-to-Treat

What is Test-to-Treat?

The Test-to-Treat approach is designed for health facilities to provide "one-stop" *early detection* of symptomatic COVID-19 infection by rapid antigen testing and *treatment* with approved oral antiviral medications. These strategies are intended for individuals who:

Test positive for COVID-19	Are within 5 days of symptom onset	Meet the clinical criteria for receiving oral therapeutics

Primary Objectives:
(1) Prevent hospitalizations and death from COVID-19.

(2) Reduce the burden on health systems.

Given the high case fatality ratios of greater than 1% in many low-resource settings, and the heightened risk for severe outcomes among key populations (i.e., older adults, PLHIV, diabetes and obesity), the Test-to-Treat (T2T) approach is crucial to mitigating excess morbidity and mortality for COVID-19. The T2T strategy provides a faster and easier pathway to receive essential oral therapeutics, Nirmatrelvir/Ritonavir (brand name: Paxlovid™) and Molnupiravir. These oral therapeutics have been shown to reduce the likelihood of hospitalization by 89%. A summary of the evidence is provided below[1,2].

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[1] Pfizer's Novel COVID-19 Oral Antiviral Treatment Candidate Reduced Risk of Hospitalization or Death by 89% in Interim Analysis of Phase 2/3 EPIC-HR Study | Pfizer

[2] https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/molnupiravir/

Evidence for Oral Therapeutics[1,2]

	Paxlovid™ (Nirmatrelvir/Ritonavir)	Molnupiravir
Category	Oral antiviral medication/protease inhibitor	Oral antiviral medication
Mechanism of Action	Paxlovid™ is a combined medication with Nirmatrelvir a novel protease inhibitor: ● Blocks the activity of an enzyme that the SARS-CoV-2 virus needs to replicate/reproduce ● Boosted with Ritonavir, a medication often used in treatment of HIV, to increase the concentrations of Nirmatrelvir ● 89% reduction in risk of COVID-19-related hospitalization or death from any cause, compared to placebo, in patients treated within three days of symptom onset, where patients met high-risk treatment indications	Molnupiravir works by introducing errors in the process by which the cells of a person infected with SAR-COV-2 (COVID-19) virus replicate the virus's genome (the virus's RNA): ● Interferes with protein translation by introducing mutations in the copied RNA code ● Prevents the activity of the enzymes that normally work to 'proof-read' and correct the copied RNA sequence
Treatment Duration	5-day treatment course	5-day treatment course

Questions & Answers[3]

WHICH SITES ARE PARTICIPATING IN TEST-TO-TREAT?

Participating locations will include health clinics and/or pharmacies that offer rapid antigen testing (or accept at home/self-tests) and have qualified health care providers that can assess eligibility and prescribe these COVID-19 therapeutics.

WHICH TREATMENTS WILL BE INCLUDED IN TEST-TO-TREAT?

Sites participating in Test-to-Treat will receive brand name COVID-19 oral therapeutics Paxlovid™ and Molnupiravir through existing procurement processes. Later in 2022 and early 2023 generic versions of these medications will become available.

HOW DOES TEST-TO-TREAT WORK?

It is one stop health care. Individuals can get tested – and depending on the result and eligibility – get a prescription from a qualified health care provider, and have their prescription filled all at one location. Individuals who receive COVID-19 test results through at-home tests or another testing site can also utilize a Test-to-Treat location to receive on-the-spot treatment if eligible. Some Test-to-Treat sites may also have telehealth options available.

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[3] https://aspr.hhs.gov/TestToTreat/Documents/Fact-Sheet.pdf

WHY USE TEST-TO-TREAT?

COVID-19 can be severe with negative health outcomes particularly in key populations, like persons living with HIV, adults older than 65, and those who are immunocompromised. The socioeconomic impact of COVID-19 can lead to significant economic instability and take a toll on caregivers. Test-to-Treat strategies aim to limit these effects, by reducing the chance of severe illness, hospitalization and death. The T2T goal is to quickly connect eligible individuals who are at high risk of getting very sick from COVID-19 to appropriate treatments[4].

ARE THERE DRUG-DRUG INTERACTIONS WITH PAXLOVID™ (NIRMATRELVIR/RITONAVIR)[5] AND MOLNUPIRAVIR[6]?

Clinicians should be aware that many commonly used medications can be safely administered with Paxlovid™ despite its drug-drug interaction potential, which can include cardiovascular, neuropsychiatric, and pain agents. However, in some cases, drug-drug interactions with Paxlovid™ may lead to serious or life-threatening drug toxicities. Please see the NIH COVID-19 treatment guidelines for further details on the administration of Paxlovid™.

DOES THIS MEDICATION WORK IF I AM ASYMPTOMATIC OR SEVERELY ILL?

It is not currently recommended that asymptomatic individuals be treated with oral antivirals. Patients that require supplemental oxygen or require hospitalization should not be treated in an outpatient Test-to-Treat setting, but rather referred to a higher level of care for triage, stabilization and treatment with alternative therapeutic options.

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[4] https://www.hhs.gov/about/news/2022/03/08/fact-sheet-biden-administration-launches-nationwide-test-treat-initiative-ensuring-rapid-on-spot-access-lifesaving-covid-treatments.html#:~:text=Building%20upon%20the%20existing%20distribution,COVID%2D19%20to%20appropriate%20treatments.

[5] https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/ritonavir-boosted-nirmatrelvir--paxlovid-/paxlovid-drug-drug-interactions/

[6] https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/molnupiravir/