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COVID-19 Supplement on Emerging Oral Antiviral Medications

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Summary

During the initial phases of the COVID-19 pandemic, compensable work-related claims have had a limited impact on retail pharmacy claims in workers' compensation. For pharmaceuticals such as inhalers or cough suppressants, myMatrixx has responded quickly to implement necessary formulary updates for clients. The development and release of the COVID-19 vaccines, the cost of which was largely absorbed by the federal government, have also had little-to-no effect on retail pharmacy spending and coverage for our sector.

As the pandemic moves into its third year, there is every indication that COVID-19 will remain a major part of the health care landscape for the foreseeable future. During this time, the pharmaceutical industry, under the guidance of the Food and Drug Administration (FDA), has been working to develop, test and distribute drug therapies as quickly and safely as possible.

The declaration of COVID-19 as a public health emergency in January of 2020 allowed the FDA to issue emergency use authorizations (EUAs) for COVID-related treatments and preventative measures. In addition to expediting the process for research, development, testing and distribution of a drug, the data EUAs generate around these therapies can also accelerate the approval process.

The first FDA-approved treatment for COVID-19 was actually the antiviral drug Veklury (remdesivir) in December of 2020. Since this therapy is for severe COVID-19 cases and is only administered in a hospital or other acute care setting, myMatrixx and other workers' compensation pharmacy services organizations have not encountered remdesivir dispensed through retail pharmacies in COVID-compensable claims.

More recently, the first two oral antiviral medications received EUAs in late 2021, which means we are now seeing therapies come to market that are available to compensable work-related COVID-19 cases in a retail pharmacy setting. In this supplement, the myMatrixx clinical pharmacy team has provided an overview of these treatments — **molnupiravir and Paxlovid** (nirmatrelvir and ritonavir) — and their potential impact on workers' compensation pharmacy.

Molnupiravir (Merck)

On December 23, 2021, the FDA issued an EUA for the Merck-produced oral antiviral drug molnupiravir. The medication is designed to treat mild-to-moderate COVID-19 in adults at a high risk for severe progression. For these patients, molnupiravir may be able to lessen the severity and prevent hospitalization or death if alternative authorized treatments are not accessible or clinically appropriate.

Currently, molnupiravir is available only by prescription. Therapy needs to be initiated soon after a COVID-19 diagnosis, and within five days of the onset of symptoms. The FDA says molnupiravir is not a substitute for the vaccine and urges the public to get vaccinated and receive a booster if eligible. The clinical trials have shown this treatment is not effective for pre-exposure or post-exposure COVID-19 prevention and should not be used in patients already hospitalized for the disease.

Molnupiravir works by introducing errors into the genetic code of the virus to prevent it from replicating.

Therapeutic dosage is administered as four 200 milligram capsules taken orally every 12 hours for five days, totaling 40 capsules.

Currently not authorized for longer use

The EUA was issued while the agency observes the available evidence and known or potential risks to assess overall benefit. Based on current findings, the FDA determined it reasonable to believe that molnupiravir may be effective for certain cases of COVID-19.

The primary data supporting the authorization for molnupiravir comes from a randomized, double-blind, placebo-controlled clinical trial studying non-hospitalized patients with mild to moderate COVID-19 at risk for severe COVID-19 that could lead to hospitalization. Of the 709 patients taking molnupiravir, 6.8% were hospitalized or died compared to 9.7% of 699 taking a placebo. Of the people who received molnupiravir, one died during the follow-up period compared to nine people who received placebo.

There is some early evidence from animal trials that molnupiravir may result in fetal harm, resulting in molnupiravir not being recommended for use by pregnant women. The FDA has made molnupiravir fact sheets available to both health care providers and patients with dosing instructions, potential side effects and prescription information.

Paxlovid (Pfizer)

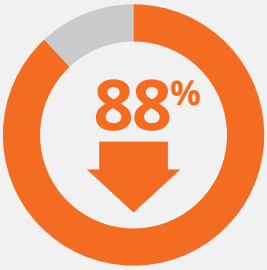
On December 22, 2021, the FDA also issued an EUA for Pfizer's Paxlovid - a combination of two tablets, nirmatrelvir and ritonavir, co-packaged for oral use by adults and pediatric patients 12 years of age or older.

Like molnupiravir, Paxlovid is available by prescription only and should be initiated soon after diagnosis of COVID-19, ideally within five days of symptom onset. It is also not authorized for the pre-exposure or post-exposure prevention of COVID-19 or for initiation of treatment in those requiring hospitalization due to severe or critical COVID-19. Similarly, Paxlovid should not be seen as a vaccine substitute or replacement.

Paxlovid works through its component nirmatrelvir, which inhibits a SARS-CoV-2 protein to stop the virus from replicating. The other medication, ritonavir, slows down the breakdown of nirmatrelvir enabling it to stay in the body longer and at a higher concentration. Paxlovid is administered as three tablets, two nirmatrelvir and one ritonavir, taken together orally twice daily for five days, totaling 30 tablets. Paxlovid is not authorized for use for longer than five consecutive days.

Potential side effects include:

- Impaired sense of taste
- Diarrhea
- High blood pressure
- Muscle aches



Paxlovid significantly reduced the proportion of people with COVID-19 related hospitalization or death from any cause by 88% compared to placebo among patients treated within five days of symptom onset and not receiving therapeutic monoclonal antibodies.

The evidence supporting the Paxlovid EUA comes from a randomized, double-blind, placebo-controlled clinical trial. Paxlovid significantly reduced the proportion of people with COVID-19 related hospitalization or death from any cause by 88% compared to placebo among patients treated within five days of symptom onset and not receiving therapeutic monoclonal antibodies. In the analysis, 1,039 patients received Paxlovid, and 1,046 patients had received placebo. Among these groups, 0.8% who received Paxlovid were hospitalized or died during 28 days of follow-up compared to 6% of the placebo group.

There is also some evidence of potentially significant drug interactions from Paxlovid, and patients with an uncontrolled or undiagnosed HIV-1 infection may experience drug resistance. The FDA is urging caution when giving Paxlovid to patients with preexisting liver diseases, liver enzyme abnormalities or liver inflammation. For a complete list of side effects, conditions, and drugs that should not be taken in combination with Paxlovid, please see the FDA fact sheet.

Workers' compensation pharmacy impact

The myMatrixx clinical pharmacy team will be monitoring these and other emerging treatments as we continue to understand the long-term impact of COVID-19 on workers' compensation retail pharmacy. Compensable COVID-19 claims have so far been a limited group, consisting mainly of first responders and frontline workers exposed to the virus. The indication for both of these oral antiviral medications is short-term usage, currently not to exceed five days, and it is not likely either would be used on a long-term basis or for post-COVID syndrome.

Coverage of new oral antiviral medications for COVID-19 is still being assessed, and myMatrixx will notify clients of any formulary updates for these or other treatments as soon as they are available. As always, myMatrixx adopts a pharmacovigilant approach to intervene with prescribers and ensure injured workers and patients receive appropriate and cost-effective treatments.

Additional resources

Click the links below to learn more about molnupiravir and Paxlovid:

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-additional-oral-antiviral-treatment-covid-19-certain

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

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-first-oral-antiviral-treatment-covid-19

https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/ritonavir-boosted-nirmatrelvir--paxlovid-/

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