COVID-19 PHARMACY UPDATE

September 11, 2020

Disclaimer: We are getting frequent COVID-related questions about drug concerns and potential interactions. This information is as of September 8, 2020. We will do our best to keep you up to date with this ever evolving situation. This is the most update information at the time of publication.

Note: There are no Food and Drug Administration (FDA) approved therapies for treatment or prevention of COVID-19. If at all possible, it is best to have patients enrolled in a clinical trial.

FDA EXPANDS REMDESIVIR EMERGENCY USE AUTHORIZATION (EUA):

FDA1 has expanded remdesivir's emergency use authorization to include all hospitalized patients with COVID-19. This is in addition to the previous authorization which was restricted to only hospitalized patients with severe COVID-19. The FDA expanded the drug's EUA use following data review from 2 studies that included patients with mild or moderate COVID-19. Both studies showed the drug's benefits outweighing its known and potential risks in all hospitalized COVID-19 patients.

The ACTT-12 clinical trial, a randomized, double-blind placebo, controlled trial was conducted to evaluate the recovery time for patients with mild, moderate and severe COVID-19. Patients were randomized to receive remdesivir (n=541) or placebo (n=521) plus standard of care. Recovery was defined as hospital discharge, hospitalization without the need for supplemental oxygen and minimal ongoing need for medical care. Median time to recovery was 10 days in the remdesivir group and 15 days in the placebo group. Overall clinical improvement at day 15 was statistically significantly higher in the remdesivir group versus the placebo group.

The second clinical trial, a phase 3 randomized, open-label trial, evaluated the safety and antiviral activity of remdesivir (GS-5734™)3 in patients with moderate COVID-19 versus standard of care. Patients were randomized to receive 10 days of remdesivir (n=191) versus standard of care (n=200). The primary outcome measure was the odds of ratio for clinical improvement on a 7-point ordinal scale between the two treatment groups on day 11. While not statistically significant, the odds of improvement with the remdesivir group at day 11 were numerically favorable than the patients receiving standard of care.

Currently there are many clinical trials in various stages studying the efficacy of remdesivir for COVID-19. As of the publishing of this newsletter article, there is no FDA approved drug for the treatment of COVID-19.

1. FDA broadens Emergency Use Authorization for Veklury (remdesivir) to include all hospitalized patients for treatment of COVID-19. https://www.fda.gov/news-events/press-announcements/covid-19-update-fda-broadens-emergency-use-authorization-veklury-remdesivir-include-all-hospitalized. Accessed August 31, 2020.
2. Beigal JH, Tomasheck KM, et al. "Remdesivir for the Treatment of Covid-19 – Preliminary Report." *N Engl J Med*. https://www.nejm.org/doi/pdf/10.1056/NEJMoa2007764?articleTools=true Accessed August 31, 2020.
3. Study to evaluate the safety and antiviral activity of remdesivir (GS-5734) in participants with moderate coronavirus disease (COVID-19) compared to standard of care treatment. NCT04292730. https://www.clinicaltrials.gov/ct2/show/NCT04292730

Potential Drug Shortages

The Health Plan of Southwestern Health Resources, Care N' Care has been monitoring potential drug shortages related to COVID-19 in outpatient settings. Care N' Care is able to gather data from up-to-the-minute pharmacy claims as well as information coming into the call centers from its members and pharmacies. The shortages are confirmed through the American Society of Health-System Pharmacists (ASHP) website. Please note, these are for outpatient drugs obtained in a retail setting only. The status for currently reported shortages are listed below:

Hydroxychloroquine tablets- There is currently availability from many different manufacturers now, but not all. Care N' Care Members, that take this drug for Non-COVID illnesses are able to fill prescriptions for this drug.

Albuterol Sulfate Metered Dose Inhalers- There are many generic products available from Par and Teva manufacturers, as well as name brand: ProAir, Ventolin HFA and Proventil HFA.

Flovent Inhalers, famotidine tablets and hydrocortisone tablets -There is now some availability and Care N' Care members have been filling prescriptions for these products.

For additional information and updates on drug shortages please visit the American Society of Health-System Pharmacists website or the FDA website.

GENERAL PHARMACY UPDATE

September 11, 2020

Disclaimer: This is the most update information at the time of publication. The General Pharmacy Update Newsletter section is providing these tips on lower cost alternatives to higher cost non-preferred prescription drugs. The key objective is to provide physicians with information. Ultimately, decisions about patient care, including prescriptions, are based on a physician's individual medical judgment.

OSTEOPOROSIS TREATMENT

High cost (non-preferred)	Cost/year *	Lower cost alternative (preferred)	Cost/year*
Denosumab (Prolia®)	$2453.94	Alendronate (Fosamax®)	$74.52
Abaloparatide (Tymlos®)	$23376.48	Risendronate (Actonel®)	$275.40
Teriparatide (Forteo®)	$42687.72	Zoledronic Acid (Reclast®)	$13.01+
Romosozumab (Evenity®)	$22461.60+		

Treatment of osteoporosis in postmenopausal women is a combination of lifestyle and pharmaceutical therapy. Adjustment of calcium and vitamin D either through supplement, diet, or a combination is a mainstay in osteoporosis treatment. Supplementation is important to continue even if a pharmaceutical agent is added. If patients are on chronic acid suppression, calcium citrate is recommended. Exercise and smoking cessation should also be included in lifestyle therapy. Patients with the highest risk of fracture benefit the most from pharmaceutical therapy. Therapy choice should be based on efficacy, safety, cost, convenience, and other patient related factors. In most postmenopausal patients, oral bisphosphonates are first line. These should not be used in patients with esophageal disorders, inability to follow dosing requirements, or severe renal impairment. In patients with esophageal disorders, annual IV bisphosphonate, zoledronic acid, may be considered. Reevaluation of patient fracture risk to determine eligibility for a drug holiday is typical after 3-5 years of therapy based on the route of bisphosphonate therapy. Other treatment agents, above, are reserved for patients who cannot tolerate oral or IV bisphosphonates, patients with severe renal impairment, or patients at very high risk of fracture. Duration of therapy reevaluation, based on fracture risk, with Prolia® is recommended after 5 to 10 years. Therapy with Prolia® should not be stopped or delayed without being on an antiresorptive therapy because of rapid bone mineral density loss and increased fracture risk seen when this agent is discontinued. A life-time treatment duration limit of 2 years is noted by the FDA for both Tymlos® and Forteo®. Patients on these agents are recommended to be continued on Prolia® or a bisphosphonate. Currently, Evenity® is FDA approved for a duration of 12 months to be followed by therapy with either Prolia® or a bisphosphonate.

1. Eastell R, Rosen CJ, Black DM, Cheung AM, Murad MH, Shoback D. Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society clinical practice guideline. J Clin Endocrinol Metab, 2019; 104: 1595-1622.
2. Camacho PM, Petak SM, Binkley N et al. American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016 Update. Endocr Pract. 2016; 22(Suppl 4):1-42.

UPDATE: METFORMIN ER RECALL

Bayshore Pharmaceuticals has issued a voluntary recall of 2 lots of its metformin extended release tablets. One involving 750 mg tablets and the other involving 500 mg tablets. This latest recall of metformin extended release now brings the total recalls up to 102 involved NDCs across a variety of manufacturers since June 2020. In all cases, the potential contaminate has been N-Nitrosodimethylamine (NDMA), which is listed as a probable human carcinogen. NDMA is also found in the environment in water and foods, including meats, dairy products, and vegetables. At this time the only products being recalled are the **metformin extended release** products. This specific recall does not impact any other strength besides the 1 lot of the 750 mg tablets and 1 lot of 500 mg from Bayshore Pharmaceuticals.

A full list of all recalled extended release metformin products/lots can be located here: https://www.fda.gov/drugs/drug-safety-and-availability/search-list-recalled-metformin-products. If your patient is on metformin extended release, they can find the name of the manufacturer on their prescription label or they can call their dispensing pharmacy to see if their product was affected by this recall. There are other manufacturers of extended release metformin not impacted by the FDA notice so shortages may not occur. If the decision is made to change strengths/products, please be aware that some of extended release metformin products, like the extended release 1000 mg tablets, are exorbitantly expensive. The most affordable extended release products are generic Glucophage XR.

1. https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-and-press-announcements-ndma-metformin#:~:text=8%2F21%2F2020%3A%20UPDATE,lot%20of%20500%20mg%20tablets).
2. https://www.fda.gov/news-events/press-announcements/fda-alerts-patients-and-health-care-professionals-nitrosamine-impurity-findings-certain-metformin

For questions or concerns regarding information within this newsletter, Contact: Pharmacy@Southwesternhealth.org