Immediate Release:

Expansion of Blood Pressure Drug Recall

Two manufacturers recently announced voluntary recalls of their blood pressure lowering medications: losartan and valsartan. Both recalls are due to the presence of an impurity known as NDEA (N-nitrosodiethylamine). This substance is found in some foods, drinking water and air pollution, and is considered to have the potential to cause cancer in humans.

Losartan Recall – December 20, 2018 and January 3, 2019

Torrent Pharmaceuticals Limited announced the voluntary recall of two lots for three NDCs of losartan potassium tablets, USP on December 20, 2018. This recall was expanded on January 3rd to include four additional NDCs affecting a total of 10 lots. The products are being recalled due to trace amounts of the NDEA impurity found in the active pharmaceutical ingredient (API) losartan.

The following strengths of losartan potassium tablet, USP are affected: 100 mg, 50 mg and 25 mg. View the manufacturer's announcement posted on the U.S. Food and Drug Administration (FDA) website for a complete listing of affected products' NDCs, lot numbers and expiration dates: December 20th recall and January 3rd recall. The tablets were distributed throughout the U.S. to wholesalers, repackagers and retail consumers.

The manufacturer has arranged for recalled products to be returned to Qualanex. Questions regarding the return of the recalled product can be directed to Qualanex at 888-280-2040, 8 am to 9 pm EST. Patients with questions about the recall are instructed to contact Torrent Pharmaceuticals at Medinfo.Torrent@apcerls.com or 800-912-9561, 8 am to 5 pm EST.

Valsartan Recall – December 31, 2018

Aurobindo Pharma USA, Inc. announced the voluntary recall of 80 lots of amlodipine/valsartan tablets, valsartan/hydrochlorothiazide (HCTZ) tablets and valsartan tablets. These lots are also being recalled due to trace levels of NDEA in the API valsartan.

The following products are affected:

- 2 lots of **valsartan tablets**
- 26 lots of **valsartan/amlodipine tablets**
- 52 lots of **valsartan/hydrochlorothiazide (HCTZ) tablets**

View the manufacturer's announcement posted on the FDA website for a complete listing of affected products' NDCs, lot numbers and expiration dates. The manufacturer is arranging for the return of recalled products to Inmar/CLS Medturn. Questions about the return of recalled product should be directed to Inmar/CLS-Medturn at 877-208-2407, 9 am to 5 pm EST, or rxrecalls@inmar.com. Patients with questions about the recall can contact Aurobindo at 866-850-2876, option 2, or pvg@aurobindousa.com.

Losartan and Valsartan

Losartan and valsartan are blood pressure lowering drugs from the class of agents known as angiotensin II receptor blockers or ARBs. Losartan is also used for treating high blood pressure in patients with an enlarged heart as well as for the treatment of kidney disease related to diabetes. Valsartan is also used to treat heart failure. When valsartan is used in combination with hydrochlorothiazide and/or amlodipine, it is used to lower blood pressure.

The FDA has stated patients with any recalled ARB should continue taking their medication until a replacement product or an alternative therapy is provided. Patients taking a recalled product should contact their pharmacist or prescriber to discuss an alternative therapy. The potential for harm to a patient may be greater if the ARB therapy is discontinued without an alternative agent being initiated.

FDA Investigation Ongoing

On December 19, 2018, the FDA published interim acceptable levels for nitrosamine impurities in ARBs. NDEA and another impurity, known as NDMA (N-Nitrosodimethylamine), are considered to have the potential to cause cancer in humans. Although these impurities should not be detectable in finished drug products, the FDA has set interim limits that will be allowed for these impurities in order to avoid shortages in this class of medications.

Manufacturers are instructed to use the interim acceptable levels provided by the FDA to determine if their drug product needs to be voluntarily recalled due to higher levels of impurities than are currently considered acceptable. Both of these recent recalls are due to NDEA levels greater than the interim acceptable thresholds.

The FDA has published documents detailing the valsartan-containing products affected by the most recent recall and previous recalls as well as those that are not being recalled.

- Valsartan products under recall – Updated December 31, 2018
- Valsartan products not currently recalled – Updated December 31, 2018

The FDA is continuing to evaluate all ARBs to detect potential impurities and has also posted a document detailing losartan products under recall. The most up-to-date information on their findings can be found on the FDA website. The FDA also has posted a questions and answers document providing additional details. CastiaRx plans to provide ongoing communication regarding the FDA's investigation and review of the impurities recently found in ARB drugs.

References:

1. Torrent Pharmaceuticals Limited issues voluntary nationwide recall of losartan potassium tablets, USP. Company Announcement. https://www.fda.gov/Safety/Recalls/ucm628966.htm. Updated December 20, 2018. Accessed December 27, 2018.
2. Torrent Pharmaceuticals Limited expands voluntary nationwide recall of losartan potassium tablets, USP. Company Announcement. https://www.fda.gov/Safety/Recalls/ucm629261.htm. Updated January 3, 2019. Accessed January 3, 2019.
3. Aurobindo Pharma USA, Inc. initiates voluntary nationwide consumer level recall of 80 lots of amlodipine/valsartan tablets USP, valsartan/HCTZ tablets, USP and valsartan tablets USP, due to the detection of NDEA (N-Nitrosodiethylamine) impurity. Company Announcement. https://www.fda.gov/Safety/Recalls/ucm629213.htm. Updated December 31, 2018. Accessed January 2, 2019.
4. Mylan expands its voluntary nationwide recall of Valsartan Tablets, USP, Amlodipine and Valsartan Tablets, USP, and Valsartan and Hydrochlorothiazide Tablets, USP, to all lots within expiry due to the detection of trace amounts of NDEA (N-Nitrosodiethylamine) impurity found in the active pharmaceutical ingredient. Company Announcement. https://www.fda.gov/Safety/Recalls/ucm627647.htm. Updated December 4, 2018. Accessed December 14, 2018.
5. FDA updates on angiotensin II receptor blocker (ARB) recalls including valsartan, losartan and irbesartan. FDA Drug Safety and Availability. https://www.fda.gov/Drugs/DrugSafety/ucm613916.htm. Updated January 3, 2019. Accessed January 3, 2019.
6. Questions and Answers: Impurities found in certain generic angiotensin II receptor blocker (ARB) products. FDA Drug Safety and Availability. https://www.fda.gov/Drugs/DrugSafety/ucm626122.htm. Updated November 23, 2018. Accessed November 23, 2018.