



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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## Valsartan: review of impurities extended to other sartan medicines

### A batch of losartan found to contain low levels of NDEA

The European Medicines Agency (EMA) is expanding its [review](#) of impurities in valsartan following the detection of very low levels of N-nitrosodiethylamine (NDEA) in another active substance, losartan, made by Hetero Labs in India.

As a result of the detection of this impurity by German authorities, the review will now include medicines containing four other 'sartans', namely candesartan, irbesartan, losartan and olmesartan.

Like valsartan, these active substances have a specific ring structure (tetrazole) whose synthesis could potentially lead to the formation of impurities such as NDEA. Other medicines of the class which do not have this ring are not included in the review.

Both NDEA and a related compound N-nitrosodimethylamine (NDMA) are classified as probable human carcinogens (substances that could cause cancer). How these impurities came to be present during the manufacture of sartans is yet to be fully established and is being evaluated in the ongoing review.

Based on the trace amounts of NDEA seen so far in one batch of losartan from Hetero Labs, there is no immediate risk to patients. Patients are therefore advised not to stop taking losartan or other sartan medicines without speaking to their doctor.

Further tests are required to determine the extent of the contamination and whether impurities are present in sartan medicines above levels that can be considered acceptable.

This review was started when unacceptable levels of NDMA were found in some valsartan medicines, which have now been recalled in the EU. Subsequently, NDEA was detected in some of the recalled valsartan products.

The extension of the review to other sartans is precautionary. EMA is working closely with national authorities, international partners and [EDQM](#) to gather data on these medicines as quickly as possible.

EMA will continue providing [updates](#) as more information becomes available and will take any necessary actions to protect patients' health.



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### **More about the medicine**

Candesartan, irbesartan, losartan, olmesartan and valsartan belong to a class of medicines known as angiotensin-II-receptor antagonists (also known as sartans).

The medicines are used to treat patients with hypertension (high blood pressure) and those with heart failure or who have had a recent heart attack. They work by blocking the action of angiotensin II, a hormone that constricts blood vessels and causes blood pressure to rise.

### **More about the procedure**

The review of valsartan medicines was triggered by the European Commission on 5 July 2018 under [Article 31 of Directive 2001/83/EC](#). On 20 September 2018, the review was extended to include medicines containing candesartan, irbesartan, losartan and olmesartan.

The review is being carried out by EMA's Committee for Medicinal Products for Human Use (CHMP), responsible for questions concerning medicines for human use, which will adopt the Agency's opinion. The CHMP opinion will then be forwarded to the European Commission, which will issue a final legally binding decision applicable in all EU Member States.