



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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## EMA to provide guidance on avoiding nitrosamines in human medicines

EMA's Executive Director has asked the human medicines committee (CHMP) to provide guidance for avoiding the presence of nitrosamine impurities in human medicines containing chemically synthesised active substances.

"We will continue to work with our partners to address the presence of nitrosamines and reassure patients about the quality of their medicines," says the Executive Director Professor Guido Rasi.

"It is of paramount importance that we learn from our experience with sartans and take a proactive approach for other classes of medicines."

Nitrosamines are classified as probable human carcinogens (substances that could cause cancer) on the basis of animal studies. In 2018, nitrosamines were found in a number of blood pressure medicines known as 'sartans', leading to a recall of several products and an [EU review](#), which set strict new manufacturing requirements for these medicines.

Since then, a nitrosamine impurity has been detected in a few batches of [pioglitazone](#) from one company and in [batches of ranitidine](#). An EU-wide review of ranitidine has been initiated.

Marketing authorisation holders are responsible for ensuring that their products are manufactured in accordance with relevant regulations. Consequently, they are responsible for ensuring that the quality of each batch of their finished product is fully satisfactory, including the quality of active substances and other ingredients.

Drawing on work already carried out with the CMDh<sup>1</sup>, the CHMP will now provide guidance on avoiding presence of nitrosamine impurities to marketing authorisation holders, which they should consider alongside their knowledge of the manufacturing processes of their products.

The Committee will also evaluate all available scientific knowledge on the presence of nitrosamines in medicines and advise regulatory authorities on actions to take if companies find nitrosamines in their medicines.

In addition, the Committee will consider whether to provide guidance for medicines other than those containing chemically synthesised active substances.

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<sup>1</sup> Co-ordination Group for Mutual Recognition and Decentralised Procedures – Human, a medicines regulatory body representing the European Union (EU) Member States, Iceland, Liechtenstein and Norway.



EMA will continue working closely with national authorities, [EDQM](#) and international partners to protect patients and ensure that effective measures are taken to prevent these impurities from being present in medicines.

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## Notes

- The request by EMA's Executive Director was made according to [Article 5\(3\) of Regulation \(EC\) No 726/2004](#), which allows the CHMP to draw up an opinion on any scientific matter concerning the evaluation of medicinal products for human use.