



EUROPEAN MEDICINES AGENCY
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PRAC recommends new measures to avoid dosing errors with methotrexate

EMA's safety committee (PRAC) is recommending new measures to avoid dosing errors that have led to some patients incorrectly taking methotrexate-containing medicines daily instead of weekly.

The new measures include restricting who can prescribe these medicines, making warnings on the packaging more prominent and providing educational materials for patients and healthcare professionals. In addition, to help patients follow the once-weekly dosing, methotrexate tablets for weekly use will be provided in blister packs and not in bottles (or tubes).

Methotrexate is used for treating both inflammatory diseases and cancers. When used for inflammatory diseases, such as arthritis and psoriasis, it is taken once a week but for some types of cancer, a much higher dosage is needed and the medicine is taken more frequently. Mistakes in prescribing or dispensing methotrexate as well as misunderstandings of the dosing schedule have led to patients taking the medicine daily instead of weekly for inflammatory diseases, with serious consequences, including fatalities.

The risk of dosing errors with methotrexate-containing medicines is well known. However, despite several measures already in place, these errors continue to be reported.

The PRAC examined the available evidence and recommended additional measures to reduce dosing errors so that benefits of methotrexate-containing medicines continue to outweigh their risks. The measures were agreed after consultation with patients and healthcare professionals.

Measures to prevent dosing errors with methotrexate

- Only doctors with expertise in using methotrexate-containing medicines to prescribe them.
- Healthcare professionals to ensure that patients or carers are able to follow the once-weekly dosing schedule.
- To avoid confusion, recommendations to split the dose should be deleted from the product information for the tablet formulation.
- Packaging for all methotrexate-containing medicines for once-weekly use to include a prominent reminder of how the medicine should be used.
- Patient card emphasising the weekly dosing for inflammatory diseases to be provided with oral

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Measures to prevent dosing errors with methotrexate

medicines.

- Healthcare professionals to be provided with educational materials for oral medicines and to counsel patients accordingly.
- Tablets to be available in blister packs instead of bottles (or tubes) in order to help patients follow the once-weekly dosing.

The PRAC recommendations will now be sent to the Committee for Medicinal Products for Human Use (CHMP), which will adopt an opinion.

Healthcare professionals will be informed in writing of the above changes. Patients who have any concerns about their medicine in the meantime should discuss them with their doctor or pharmacist.

More about the medicine

Methotrexate-containing medicines are used to treat cancers such as acute lymphoblastic leukaemia and various inflammatory conditions, including rheumatoid arthritis, juvenile idiopathic arthritis, psoriasis, psoriatic arthritis and Crohn's disease.

Methotrexate can be taken orally or given by injection.

Most methotrexate-containing medicines have been authorised via national procedures. They are marketed in all EU countries under several brand names including: Ledertrexate, Maxtrex, Metex and Metoject. Jylamvo (for use by mouth) and Nordimet (for injection) are the only centrally authorised medicines containing methotrexate.

More about the procedure

The review of methotrexate has been initiated at the request of Spain, under [Article 31 of Directive 2001/83/EC](#).

The review was carried out by the Pharmacovigilance Risk Assessment Committee (PRAC), the committee responsible for the evaluation of safety issues for human medicines, which made a set of recommendations. The PRAC recommendations will now be forwarded to the Committee for Medicinal Products for Human Use (CHMP), responsible for questions concerning medicines for human use, which will adopt an opinion. The final stage of the review procedure is the adoption by the European Commission of a legally binding decision applicable in all EU Member States.