



EMA issues advice on use of Paxlovid (PF-07321332 and ritonavir) for the treatment of COVID-19

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Rolling review starts in parallel

EMA's human medicines committee ([CHMP](#)) has issued advice on the use of Paxlovid (PF-07321332 and ritonavir) for the treatment of COVID-19. The medicine, which is not yet authorised in the EU, can be used to treat adults with COVID-19 who do not require supplemental oxygen and who are at increased risk of progressing to severe disease. Paxlovid should be administered as soon as possible after diagnosis of COVID-19 and within 5 days of the start of symptoms. The two [active substances](#) of the medicine, PF-07321332 and ritonavir, which are available as separate tablets, should be taken together twice a day for 5 days.

EMA issued this advice to support national authorities who may decide on possible early use of the medicine prior to [marketing authorisation](#), for example in emergency use settings, in the light of rising rates of infection and deaths due to COVID-19 across the EU.

The advice is based on interim results from the main study in non-hospitalised, unvaccinated patients who had symptomatic disease and at least one underlying condition putting them at risk of severe COVID-19. These data showed that Paxlovid reduced the risk of hospitalisation and death when treatment started within 5 days of the start of symptoms. About 1% of patients (6 out of 607) who took Paxlovid within five days of the start of symptoms were hospitalised within 28 days of starting treatment compared with 6.7% of patients (41 out of 612) given placebo (a dummy treatment); none of the patients in the Paxlovid group died compared with 10 patients in the placebo group.

In terms of safety, the most common side effects reported during treatment and up to 34 days after the last dose of Paxlovid were dysgeusia (taste disturbance), diarrhoea and vomiting.

Paxlovid must not be used with certain other medicines, either because due to its action it may lead to harmful increases in their blood levels, or because conversely some medicines may reduce the activity of Paxlovid itself. The list of medicines that must not be used with Paxlovid is included in the proposed conditions for use. Paxlovid must also not be used in patients with severely reduced kidney or liver function.

Paxlovid is not recommended during pregnancy and in people who can become pregnant and who are not using contraception. Breastfeeding should be interrupted during treatment. These recommendations are because laboratory studies in animals suggest that high doses of Paxlovid may impact the growth of the foetus.

EMA's proposed conditions of use will be published shortly on the EMA website.

The Agency's advice can now be used to support national recommendations on the possible use of the medicine before [marketing authorisation](#).

Start of rolling review

In parallel to the provision of this advice, a more comprehensive rolling review started on 13 December 2021 ahead of a possible application for a [marketing authorisation](#).

EMA will evaluate more complete data on the quality, safety and effectiveness of the medicine as they become available. The rolling review will continue until enough evidence is available for the company to submit a formal [marketing authorisation application](#).

EMA will communicate further when a [marketing authorisation application](#) for the medicine has been submitted.

How the medicine is expected to work

Paxlovid is an oral antiviral medicine that reduces the ability of SARS-CoV-2 (the virus that causes COVID-19) to multiply in the body. The active substance PF-07321332 blocks the activity of an enzyme needed by the virus to multiply. Paxlovid also supplies a low dose of ritonavir (a protease inhibitor), which slows the breakdown of PF-07321332, enabling it to remain longer in the body at levels that affect the virus. Paxlovid is expected to reduce the need for hospitalisation in patients with COVID-19.

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