

Nirmatrelvir Plus Ritonavir: Adis Evaluation

Key Points

- A co-packaged combination of nirmatrelvir and ritonavir is being developed by Pfizer for the treatment and post-exposure prophylaxis of COVID-19
- Received its first emergency use authorization on 22 December 2021 in the USA, for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (≥ 12 years of age and weighing ≥ 40 kg) at increased risk for progression to severe COVID-19
- Received its first conditional authorization on 31 December 2021 in the UK, for the treatment of COVID-19 in adults who do not require supplemental oxygen and are at increased risk for progression to severe COVID-19
- Received conditional authorization in the EU on 28 January 2022

Summary

Nirmatrelvir plus ritonavir (Paxlovid™; Pfizer) is a co-packaged combination of nirmatrelvir and ritonavir tablets, intended for co-administration and developed for the treatment and post-exposure prophylaxis of coronavirus disease 2019 (COVID-19). Nirmatrelvir is a peptidomimetic inhibitor of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) main protease, while ritonavir is a human immunodeficiency virus type 1 (HIV-1) protease inhibitor and CYP3A inhibitor. Nirmatrelvir plus ritonavir received its first authorization in December 2021 in the United Kingdom, for the treatment of COVID-19 in adults who do not require supplemental oxygen and who are at increased risk for progression to severe COVID-19. In January 2022, nirmatrelvir plus ritonavir received authorization in the EU, for use in the same indication. Nirmatrelvir plus ritonavir is authorized for emergency use in the USA. This article summarizes the milestones in the development of nirmatrelvir plus ritonavir leading to its first authorizations and approval for the treatment of COVID-19.

This summary represents the opinions of the author. For a full list of declarations, including funding and author disclosure statements, please see the full text online. © Springer Nature Switzerland AG 2022.