Orphan medicines in the EU

Finding effective treatment for patients with rare diseases can be very difficult. Since the EU orphan regulations entered into force in 2000, it has played a central role in facilitating the development and authorisation of medicines for rare diseases.

1 in 17 * people in the EU has a rare disease

Around 26 million people in the EU are likely to suffer from a debilitating rare disease. This represents a huge unmet medical need and a significant public health challenge.

* This is based on an estimated 26 million patients with rare diseases out of a population of 447 million in the EU. Source: EUROSTAT 2022.

Development of medicines for rare diseases

The EU offers incentives to encourage companies to research and develop medicines for rare diseases that otherwise would not be developed. To access these incentives, companies can apply for orphan designation for their medicine, provided certain criteria are met.

Criteria for orphan designation

- The medicine must treat, prevent, or diagnose a disease which is life-threatening or chronically debilitating, or it is unlikely that the medicine will generate sufficient returns to justify the investment needed for its development
- The disease must not affect more than 5 in 10,000 people across the EU
- No satisfactory method of diagnosis, prevention or treatment exists, or if such a method already exists, the medicine must be of significant additional benefit to those affected by the condition

Incentives

During an orphan medicine’s research and development, the company can benefit from incentives such as scientific advice on study protocols, various fee reductions and access to EU grants. Orphan-designated medicines that eventually make it to the market, and for which it can be demonstrated that they maintain the criteria for the designation, are granted 10 years of market exclusivity.

Orphan designation is not an authorisation

Not all orphan-designated medicines reach the marketing authorisation application stage. Those that do, are evaluated by EMA’s Committee for Medicinal Products for Human Use (CHMP) using the same strict safety and efficacy standards that apply to all medicines evaluated by EMA.

Over 230 orphan medicines authorised in the EU

How orphan medicines reach patients

Once an orphan medicine is authorised by the European Commission, it can be marketed in all EU Member States. However, availability and reimbursement are subject to review by the relevant national authorities.

Over 6000 rare diseases

When is a disease a rare disease?

A disease is considered rare if fewer than 5 in 10,000 people have it. Very few medicines are available for these rare diseases. One of the reasons is that companies are less likely to recover the development cost for medicines for such small numbers of patients.

Over 2730 medicines with orphan designation

EMA’s Committee for Orphan Medicines

The Committee for Orphan Medicinal Products (COMP) is in charge of reviewing applications for orphan designation. If a medicine is recommended for marketing authorisation, the COMP will assess it again to check whether the criteria are still met and the orphan designation can be maintained for the authorised medicine.

Number of medicines that have received an orphan designation (2001-2022)

Number of orphan medicines recommended for authorisation (2001-2022)

- Orange: medicines recommended for authorisation
- Blue: other medicines recommended for authorisation

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