



CDDF & EORTC Joint Workshop

**Navigating the Evolving Regulatory Landscape
of Orphan Drugs in Europe**

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EU Regulatory Fast Track Schemes

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Navigating the Evolving Regulatory Landscape of Orphan Drugs in Europe

What is a Rare disease?



Overview

- There is not a universal definition of rare disease
- A rare disease affects a small number of patients in a country or region
- Rare diseases are serious, chronic and progressive



Numbers

- There are more than **8,000 rare diseases worldwide**
- **80% of rare diseases** are **genetic** origin (e.g. Tay Sachs, Cystic Fibrosis, a number of severe metabolic disorders)
- 50% of rare diseases appear during adulthood

What is
a rare disease?



Lack of treatment

- Majority of the rare diseases have no **adequate treatment**
- Early diagnostic is key

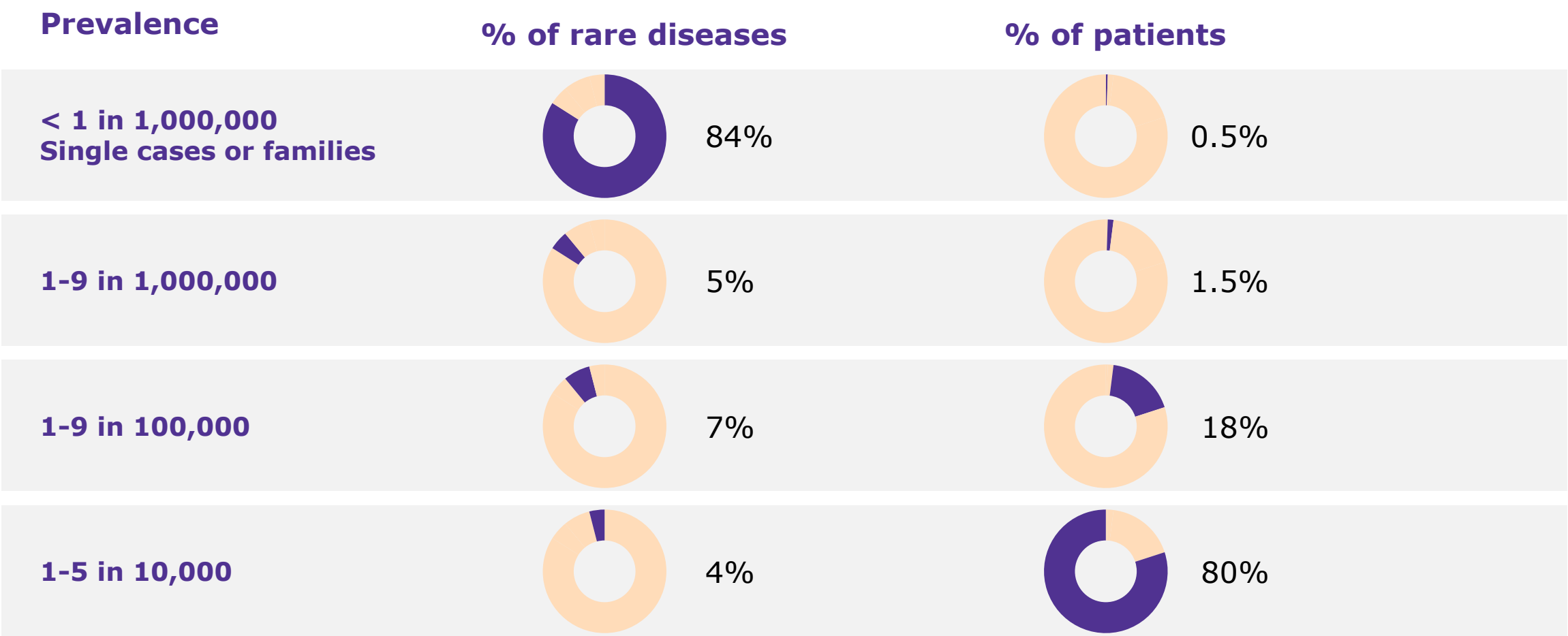


Lack of research

- More research is needed
- Grants for research
- Investment

Navigating the Evolving Regulatory Landscape of Orphan Drugs in Europe

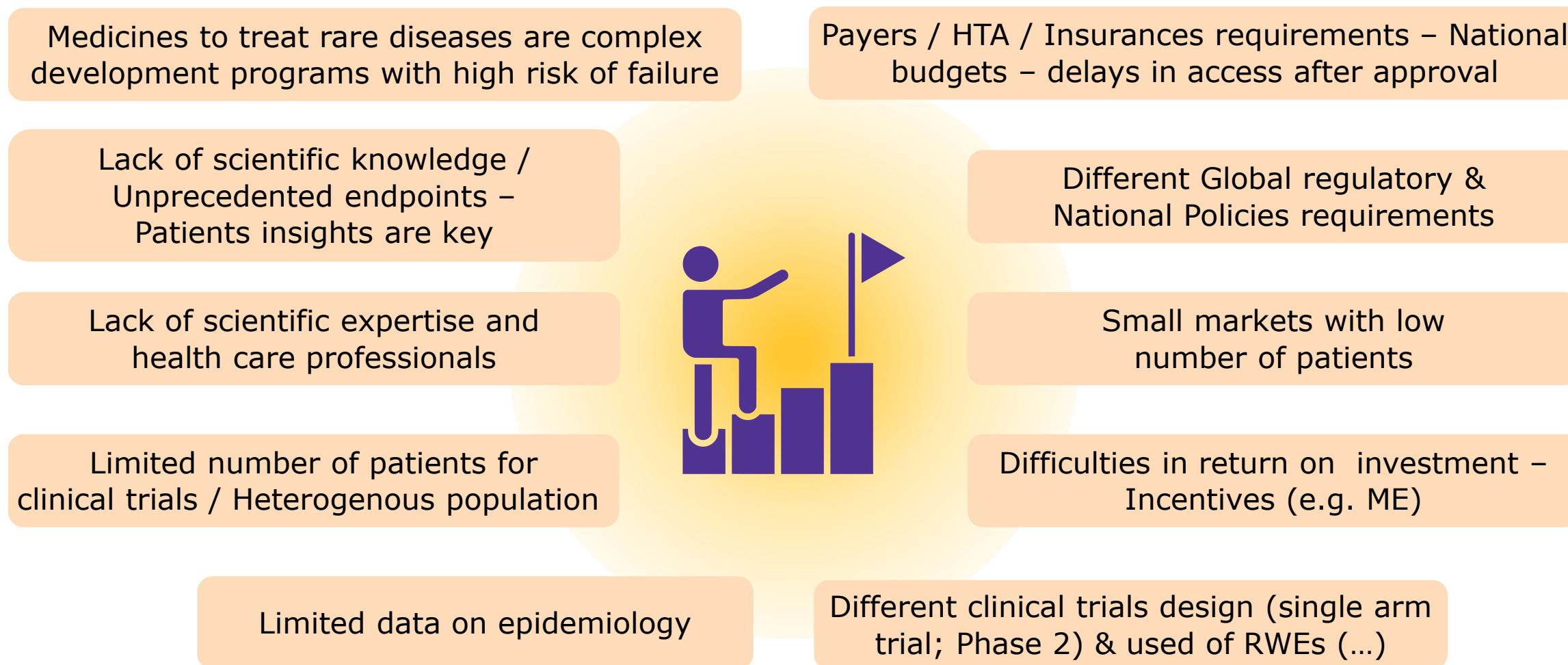
Distribution of rare diseases and patients according to prevalence



Source: Nguengang Wakap, S., Lambert, D.M., Olry, A. et al. Estimating cumulative point prevalence of rare diseases: analysis of the Orphanet database. Eur J Hum Genet 28, 165–173 (2020).[1]

Navigating the Evolving Regulatory Landscape of Orphan Drugs in Europe

What are the challenges of developing an orphan drug?



Navigating the Evolving Regulatory Landscape of Orphan Drugs in Europe

Why do we need an orphan drug legislation / policy?



Why?

- 1 Many patients do not have treatment(s) for their rare disease
- 2 To promote research and new treatments in areas of unmet need
- 3 To increase the number of new treatments in areas of unmet medical need – Orphan drugs
- 4 To create an ecosystem in which pharmaceutical industry & investors feel comfortable to invest in risky projects

Overview of the orphan regulatory Framework

Historical Context

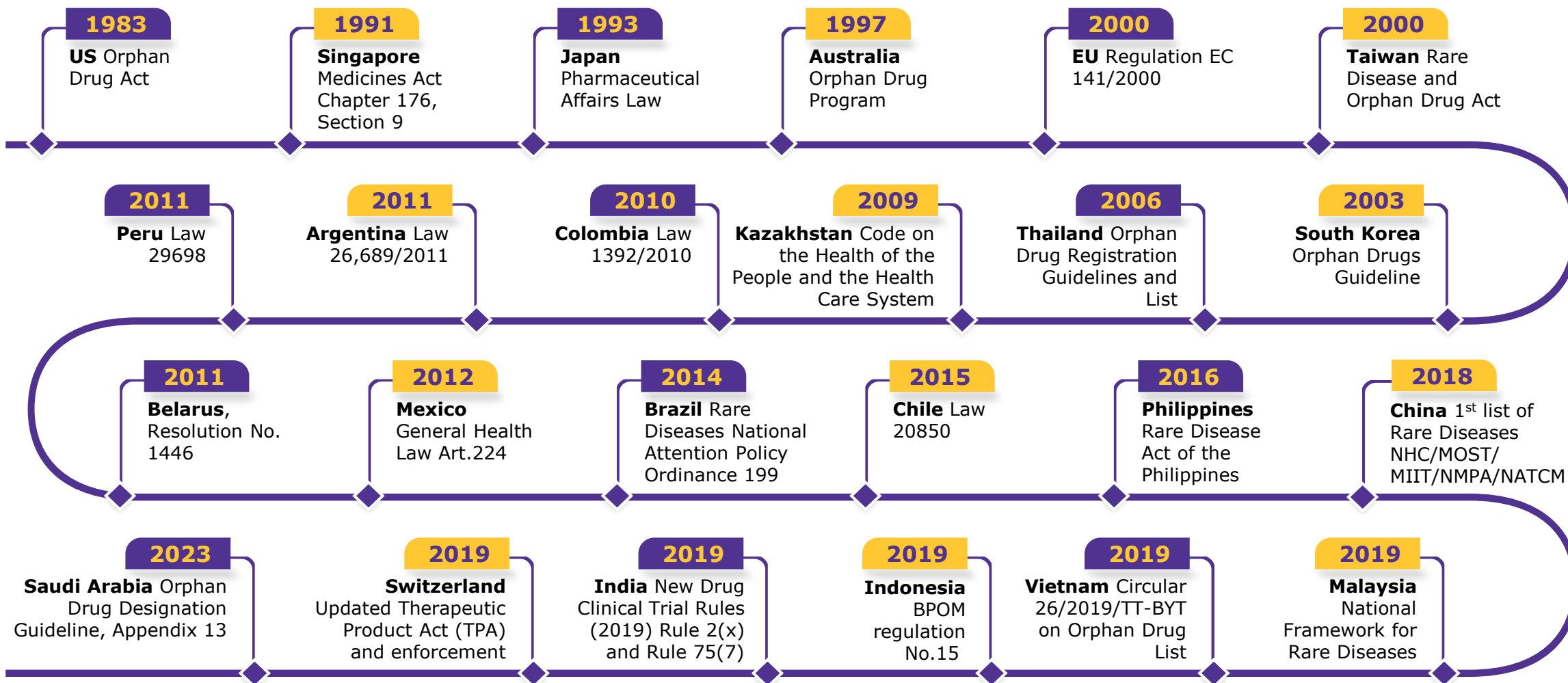
- **Orphan drug regulatory framework in the EU began in 2000**, 17 years after the US
- The European Orphan Drug Regulation (EC) No 141/2000 was adopted in 1999

Criteria Defined in the Orphan Regulation

- **Seriousness of condition:** life-threatening and/or chronically debilitating.
- **Rarity (prevalence <5/10,000)** or non-return of investment – very rare disease.
- **No satisfactory methods or if exist will have significant benefit** (= 'clinically relevant adv. or major contrib. to patient care').

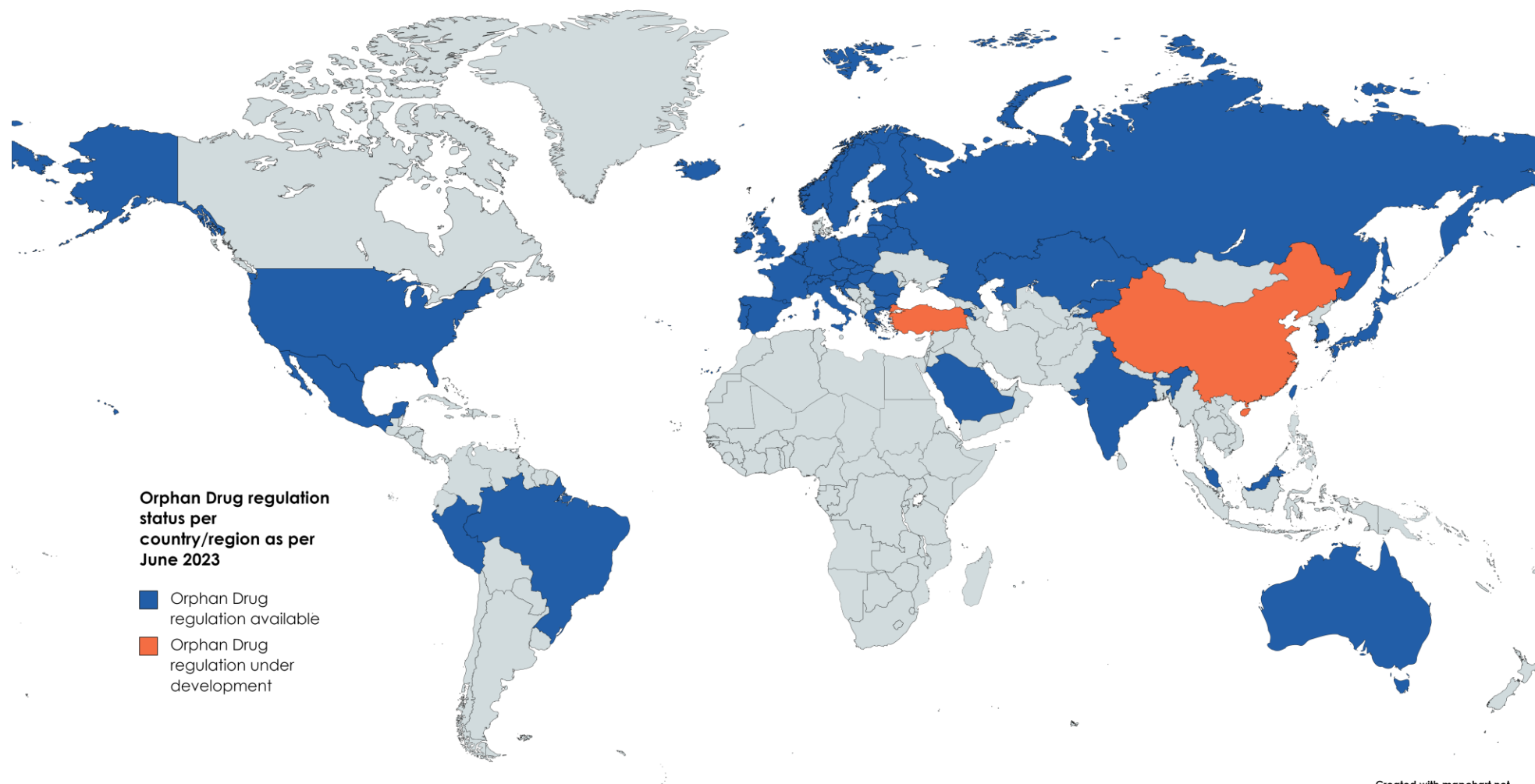
Historical overview

Orphan drug legislations worldwide



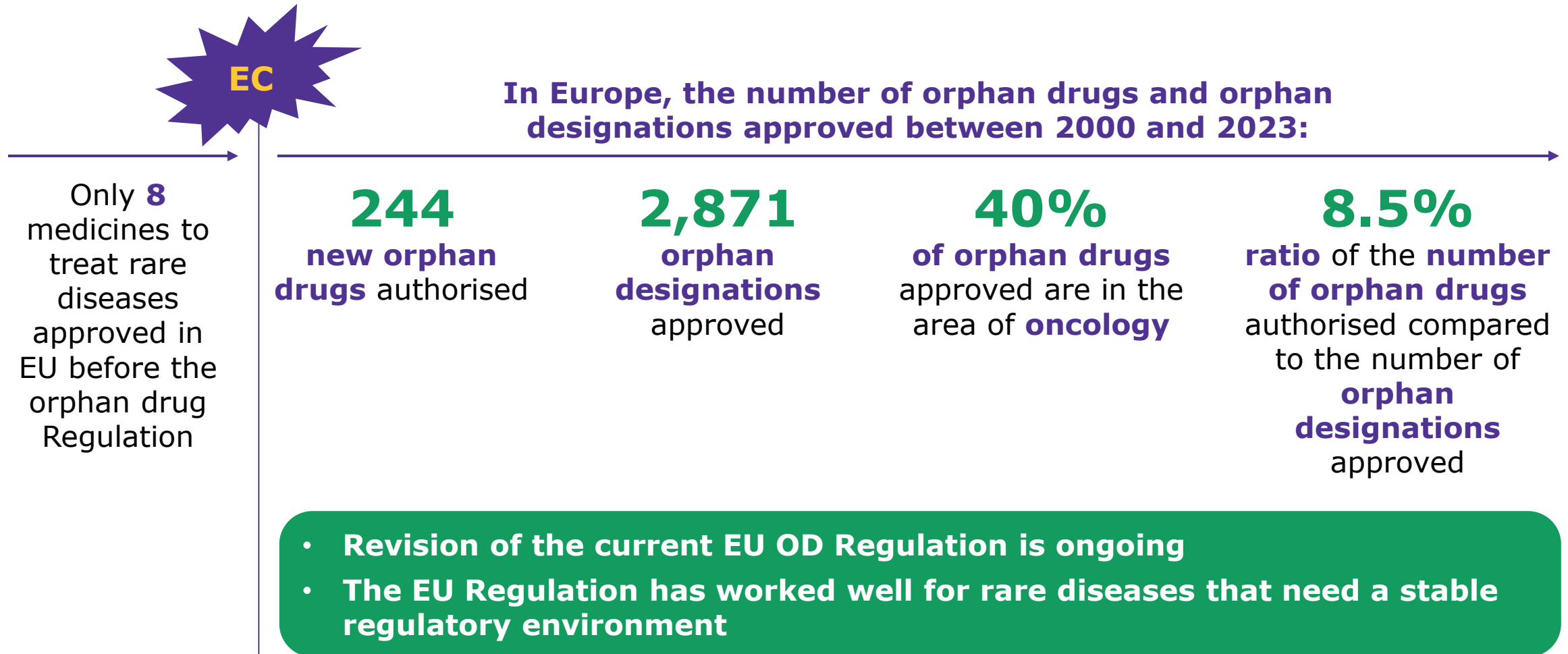
Orphan drug legislations available worldwide

EFPIA overview – June 2023



Created with mapchart.net

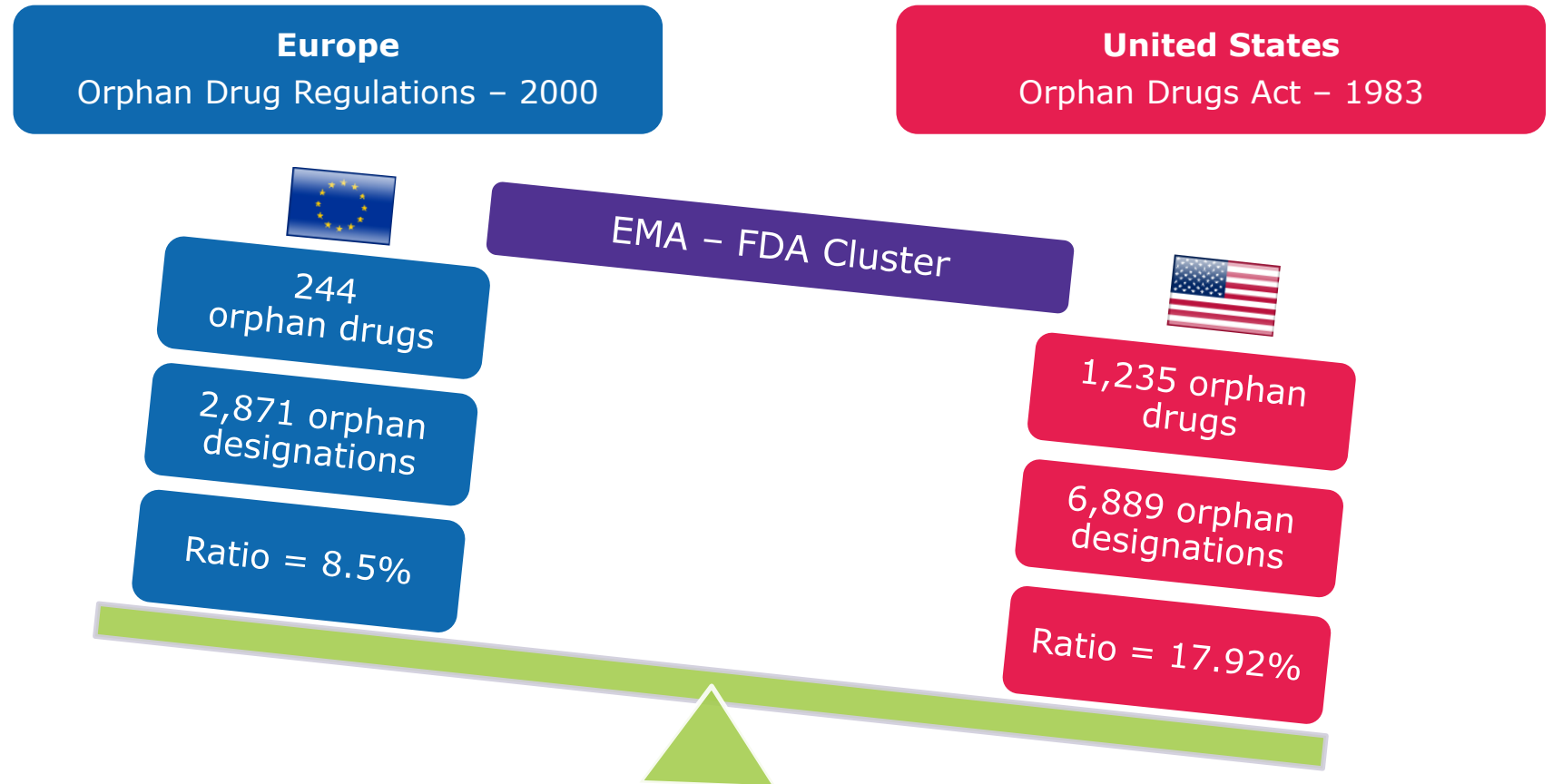
Impact of the orphan drug legislation in EU



Europe

Impact of the orphan drug legislation in EU

US
versus
Europe



European Orphan drug framework

Revision of the European Pharmaceutical Legislation



**Intro-
duction**

**What problems
is this legislation
trying to solve?**

**Unmet medical needs
(UMN) not addressed
Combating AMR**

**Patients have unequal
Access across EU**

**Affordability of
medicines challenging
for health systems**

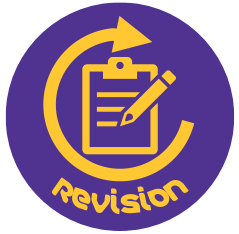
**Environmental
Sustainability**

**Competitive
Regulatory framework**

**Availability of
medicines/shortages**

European Orphan drug framework

Revision of the European Pharmaceutical Legislation

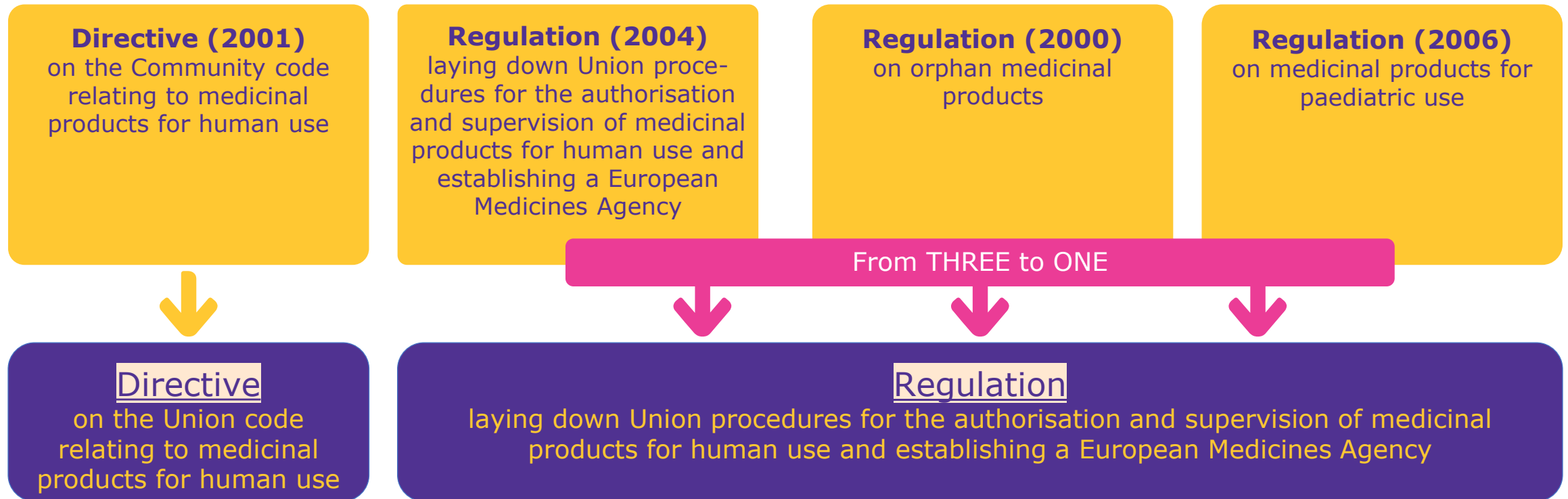


"General pharmaceutical legislation – GPL"

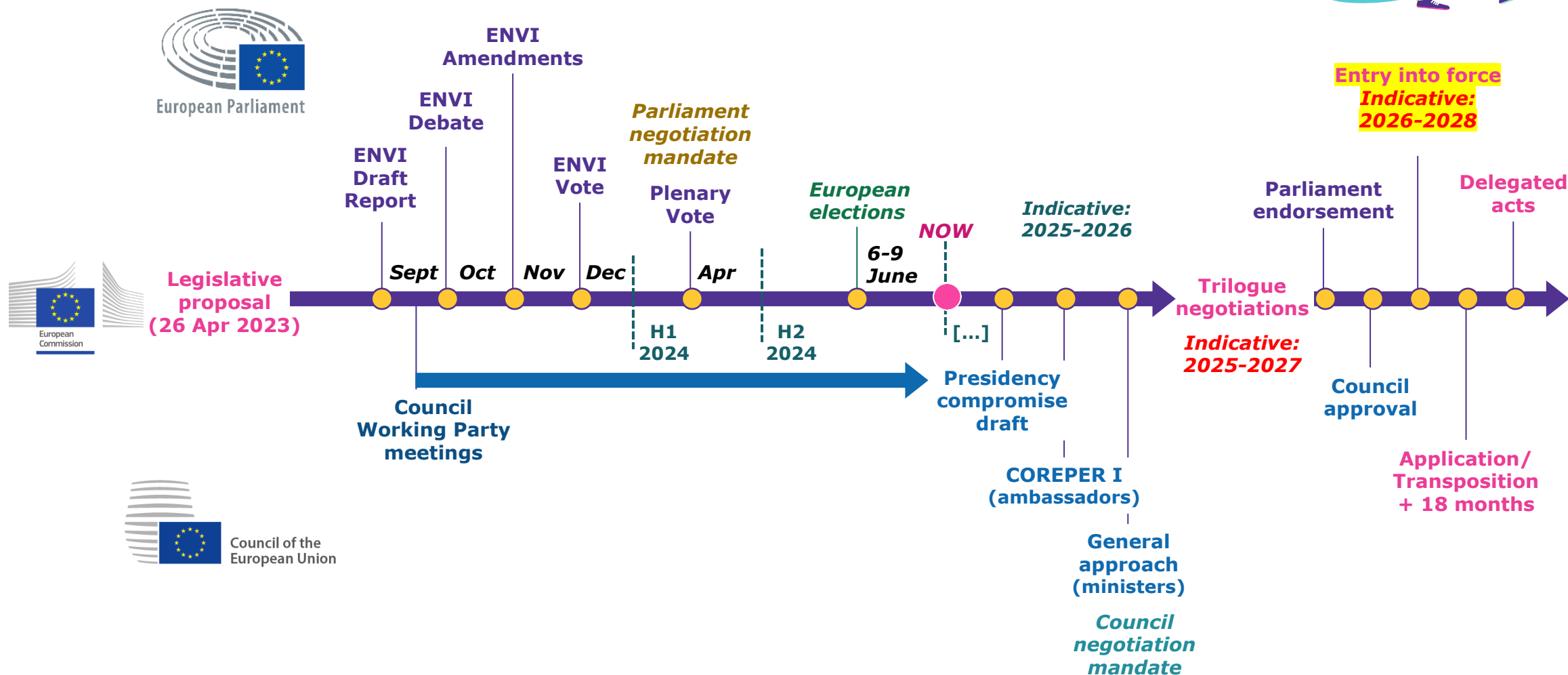
(regulates authorisation, manufacturing, distribution and monitoring of medicines + provides regulatory protection to reward innovative medicines)

"Orphan regulation" and "Paediatric regulation"

(complement the general pharmaceutical legislation – support the development of medicines in previously neglected areas)



General Pharma Legislation Timelines Forecast



European Orphan drug framework

Revision of the European Pharmaceutical Legislation



What are the topics under discussion concerning orphan drugs:

- Definition of Unmet Medical Need & High Unmet Medical Need
- **Incentives:**

**Marketing Exclusivity duration
for all products including well
established use**

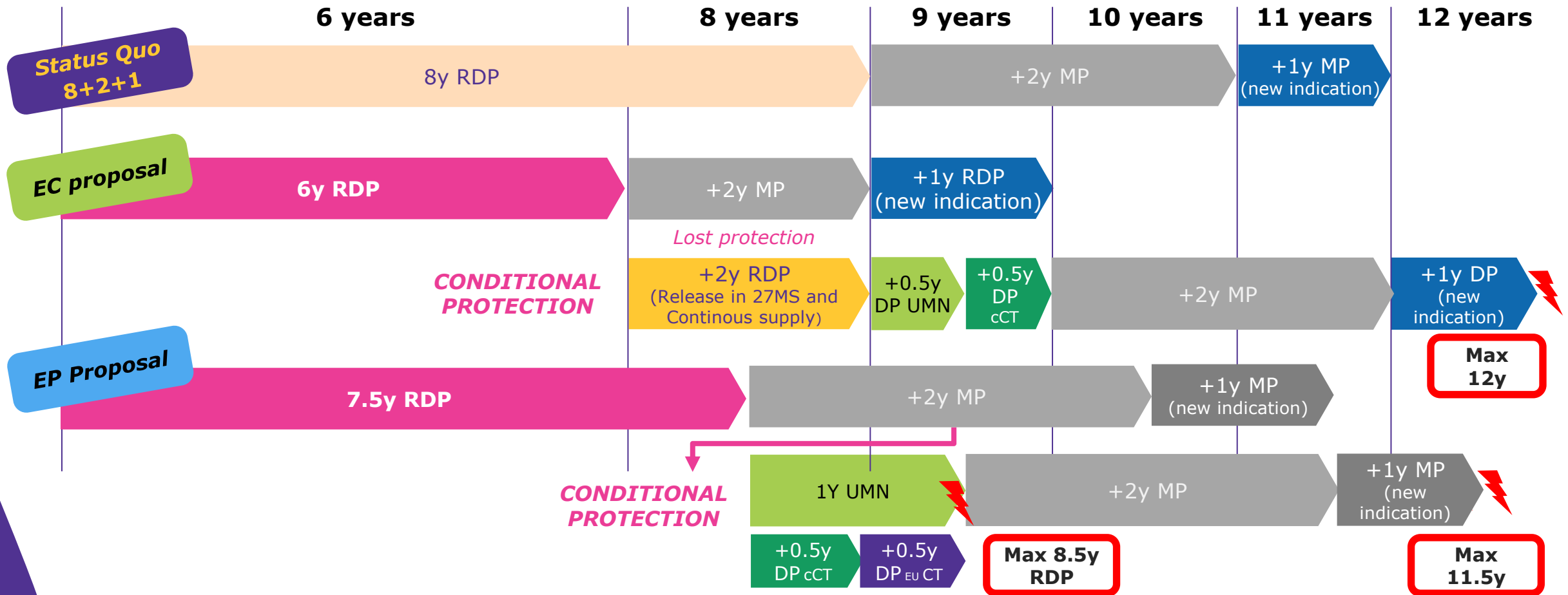
Vouchers concept

**Data Protection &
Market Protection**

- Orphan drug Committee versus Working Party
- Orphan designation definition – keeping Prevalence = 5/10000
- Orphan designation validity 7 years – impact in innovation of small biotech and startups
- Significant benefit definition

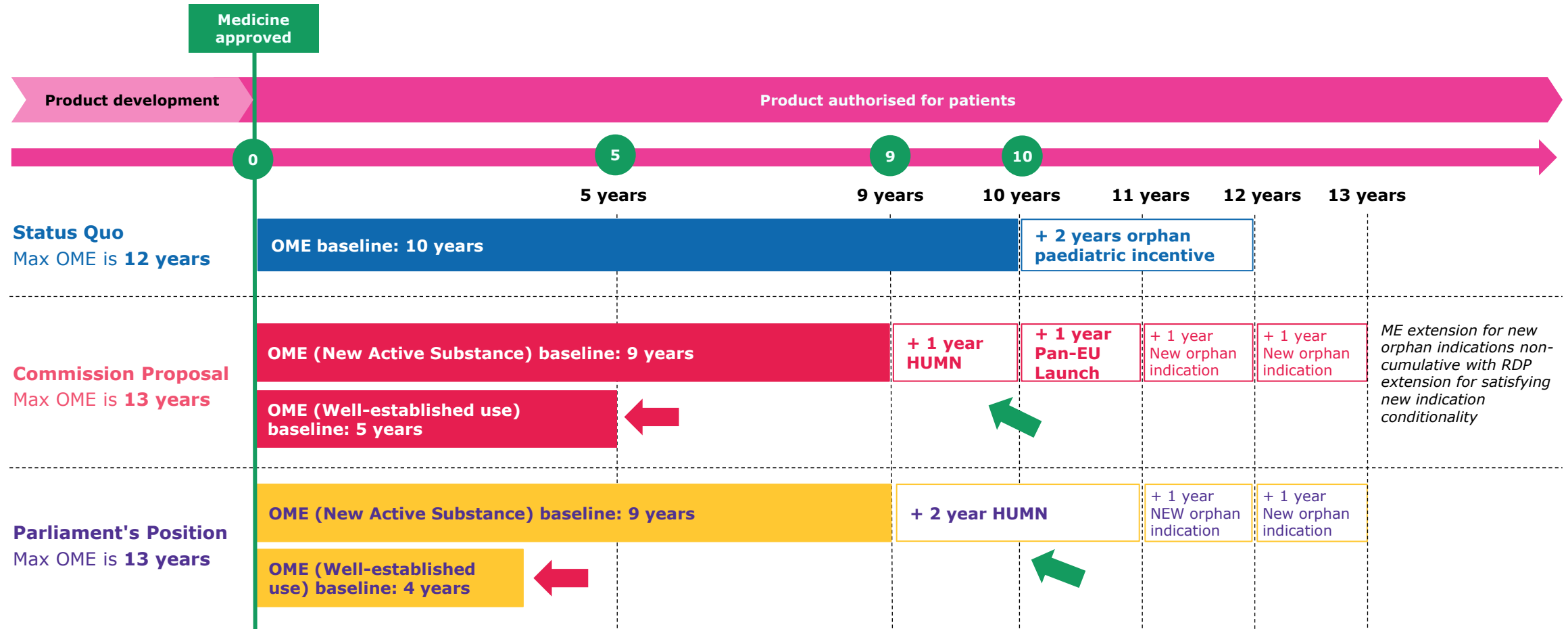
Regulatory Data and Market Protection

Status Quo vs Commission Proposal vs EP Position



DP = Data protection; MP = Market protection; cCT = Comparative clinical trials; MS = member states; UMN = unmet need
 EU CT= pre-clinical and clinical, was conduct in the EU and at least in part in collaboration with public entities.

Orphan Market Exclusivity (OME): Status Quo vs Commission Proposal vs EP Position



i GOMA in COM Proposal & EP Position: ME starts from the date of the first orphan MA granted in the European Union

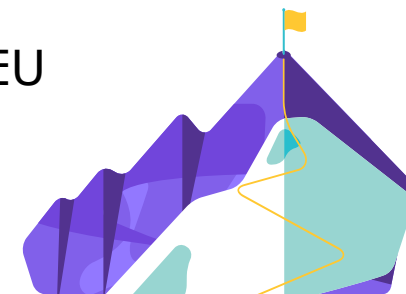
Future of EU regulatory framework

Advocacy plan



Industry Goals

- 1 Preserve incentives for R&D investment in Rare disease treatments
- 2 Facilitate patient access to Orphan medicines across Europe
- 3 Continue to improve the Orphan ecosystems
- 4 Continue improving Orphan drug legislation and research in the EU



EU regulatory framework

Why have orphan drug regulations been successful?

- **Created a positive ecosystem** in which sponsor feels comfortable to invest in risky rare diseases projects:

Incentives

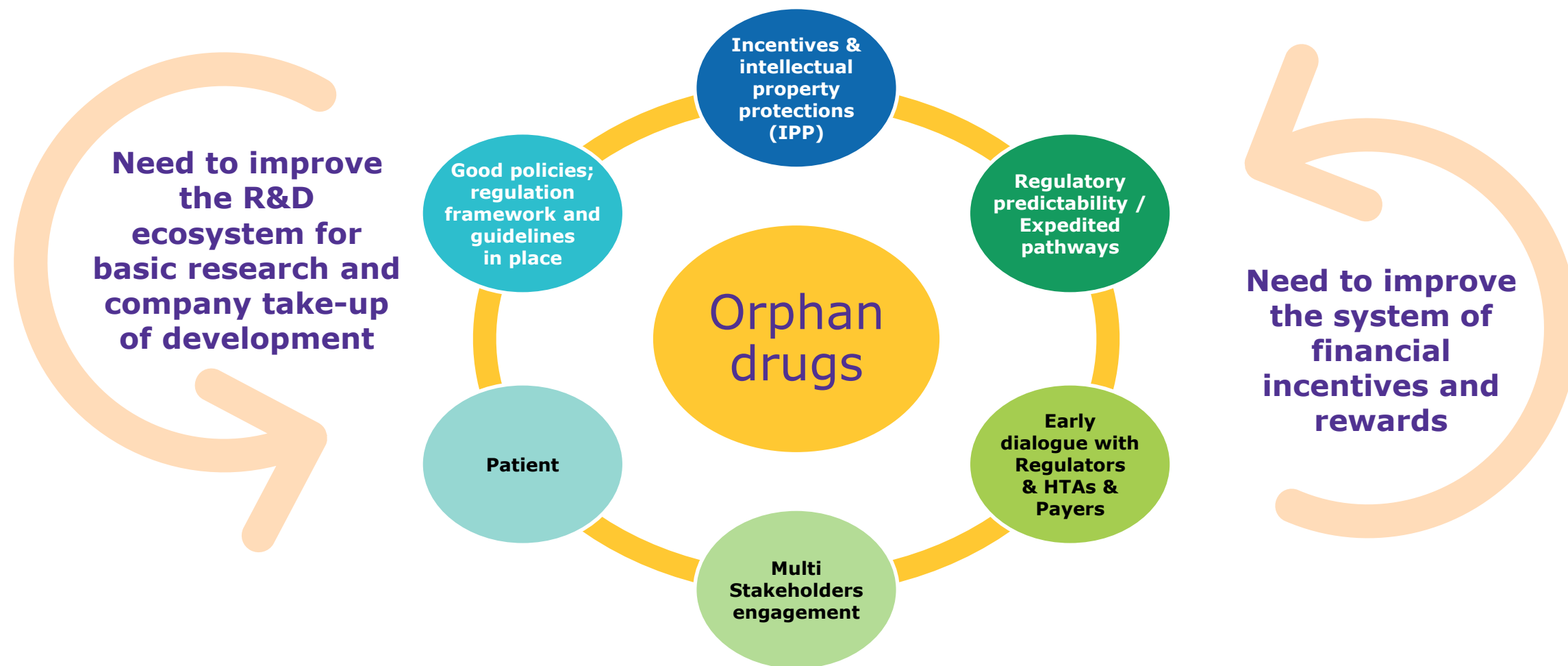
**Regulatory
flexibilities**

**Additional protection –
Marketing Exclusivity &
Data protection**

- The current orphan drug regulations have been effective in supporting successful development and market access for rare diseases and address market failures
- Increase the number of treatments in the area of rare diseases
- Key to these successes are the stability and predictability of regulatory incentives, regulatory flexibilities and intellectual property protections (IPP)

Is the orphan drug development at Risk

Create an optimised orphan drug ecosystem





Key take-aways

- **Success of Mature Orphan Drug Legislations** have proven effective in driving the development of new treatments for rare diseases
- **Collaboration and working with Patient Advocacy Groups** is key. They are driving forward early access of new medicines in rare diseases
- **Global Approach to Orphan Drug Development** is crucial
- **Need for Regulatory and Economic Incentives** to promote and support the development of new treatments for rare diseases, encouraging investment and innovation in this critical area of healthcare
- Importance of **preserving the EU ecosystem of orphan drugs during the revision of the EU Pharma legislation**
- Cooperation between Health Authorities, Governments, HTA bodies, and Payers to ensure effective access to treatments for rare diseases
- **Foster local policies** to ensure improved access to treatments for rare diseases, addressing specific regional needs and challenges

**Thank you for your
attention!**



**Do you have
any questions?**

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