

New regulatory strategies

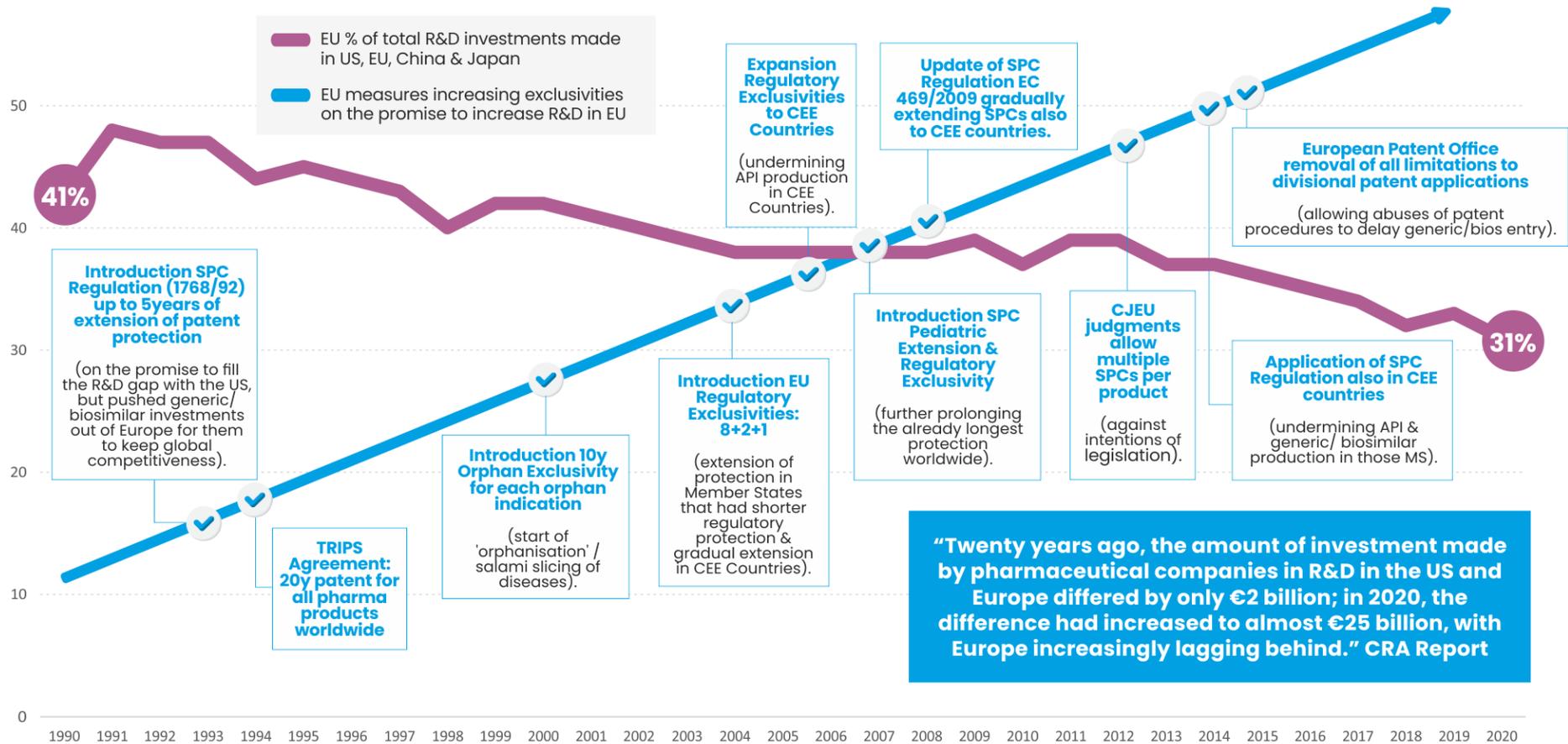
Maria do Carmo Neves
President of APOGEN

Agenda

- Revision of the pharmaceutical legislation
 - Predictability and legal certainty to deliver on equitable access.
 - Make medicines available via a robust and efficient regulatory system.
 - Affordable innovation that delivers on unmet health needs.

Predictability and legal certainty to deliver on equitable access

Decline of R&D in Europe VS. European measures increasing exclusivities



Sources: for R&D decline: CRA Report, Factors affecting the location of biopharmaceutical investments and implications for European policy priorities (Oct 2022) – prepared for EFPIA; for exclusivities increases: House of Commons, The Influence of the Pharmaceutical Industry (March 2005); EU legislation

Predictability and legal certainty to deliver on equitable access

- Regulatory data and market protection
 - In comparison with other jurisdictions, the EU ranks high

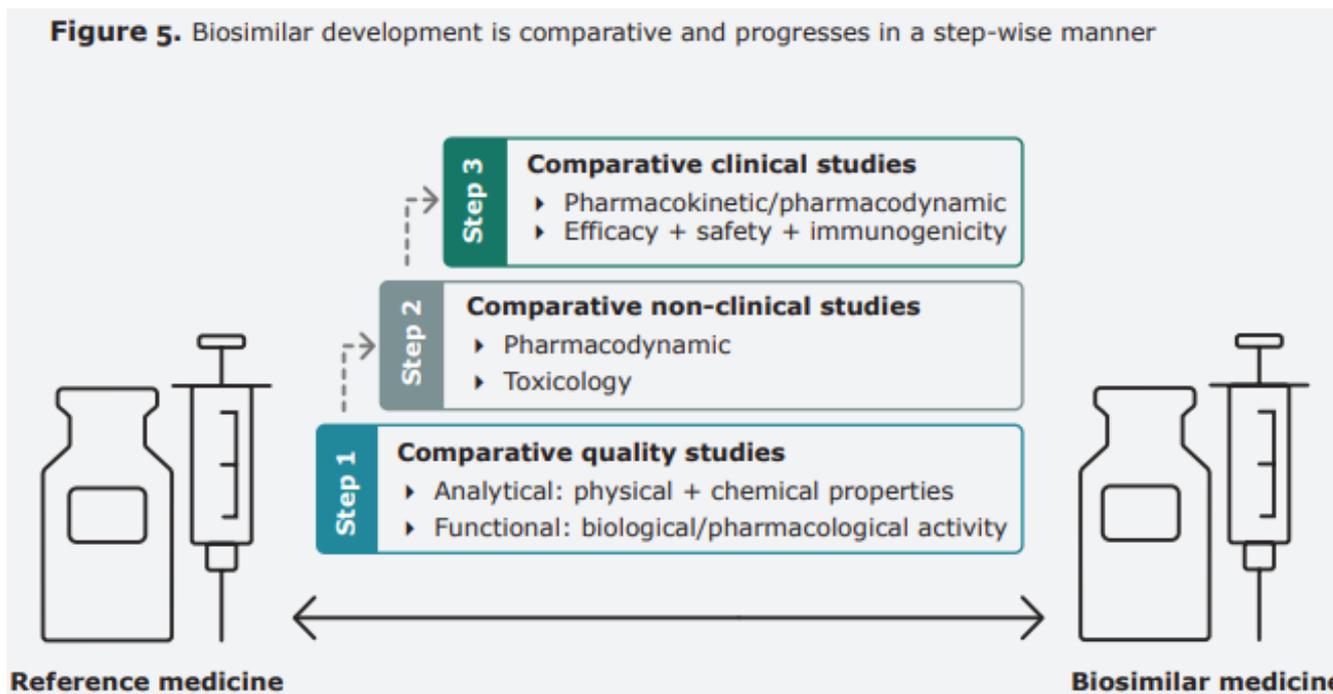
Table 2 Basic regulatory protection periods for medicines globally¹²⁸

Country	Protection	Duration
Canada	New Chemical Entity+ Market Protection	6+2 years
EU	New Chemical Entity+ Market Protection	8+2+1 years
Switzerland	New Chemical Entity	10 years
USA	New Chemical Entity (small molecule)	5 years
USA	Biosimilar Application Approval Exclusivity (biologic)	4+8 years
Israel	Market Protection	6 or 6.5 years
China	New Chemical Entity	6 years
Japan	New Chemical Entity	8 years

Source: EC, COMMISSION STAFF WORKING DOCUMENT - IMPACT ASSESSMENT REPORT, 2023

Make medicines available via a robust and efficient regulatory system

- Biosimilar medicines development
 - Comparability is a well-established scientific principle of regulatory science: comprehensive comparative quality studies prove that physicochemical properties and biological activity are highly similar

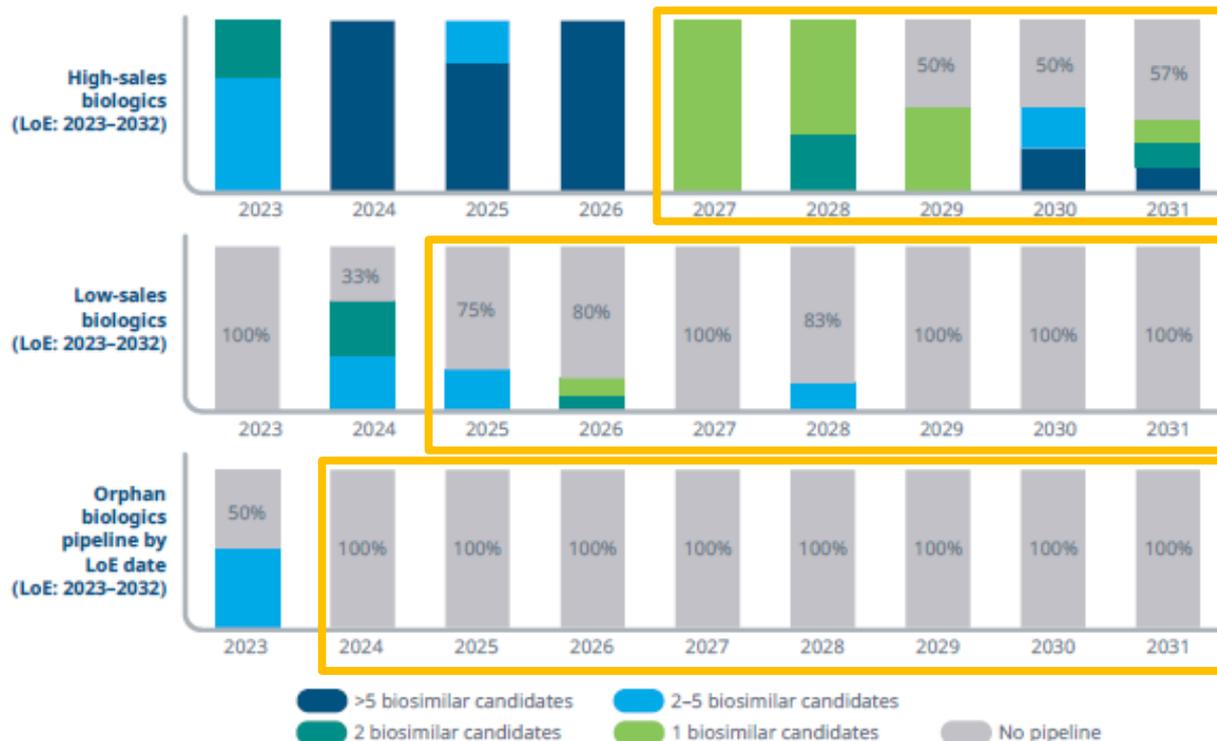


Source: EMA - Biosimilars in the EU - Information guide for healthcare professionals

Make medicines available via a robust and efficient regulatory system

- Biosimilar medicines pipeline (2023-2031)

Exhibit 11: Biosimilar pipeline for biologic segments by LoE date (2023-2031)



Source: IQVIA MIDAS; IQVIA Ark Intelligence; IQVIA Forecast Link; IQVIA Global Biosimilar Database. Notes: Pipeline data only includes biosimilars in development (phase I to phase III, including pre-registration). No approved biosimilar is included in the analysis. Caveat: biosimilar pipeline data is based on publicly available information only. High sales= biologics with over €500 in European sales before LoE (LoE-1). No high-sales biologic medicine is expected to lose exclusivity in 2032 (data not shown).

Make medicines available via a robust and efficient regulatory system

- Biosimilar medicines pipeline (2023-2031)

If nothing changes...

*“Available information suggests that the biosimilar void could cost a minimum of **~€15Bn in lost savings**, approximately 25% of the total LoE opportunity by 2032.”*

Source: IQVIA - Assessing the Biosimilar Void, 2023

Make medicines available via a robust and efficient regulatory system

- Biosimilar medicines - streamlined development

Regulation in the UK

*In the UK, the Medicines and Healthcare products Regulatory Agency's (MHRA) guidance on the licensing of biosimilar products issued in May 2021 confirmed that the **MHRA has dropped the requirement in most cases for comparative efficacy trials where there is a sound scientific rationale to do so.** The justification for this approach given by the MHRA is that **the efficacy and safety of a biologic can usually be related to the biological events triggered by the activity of the molecule.***

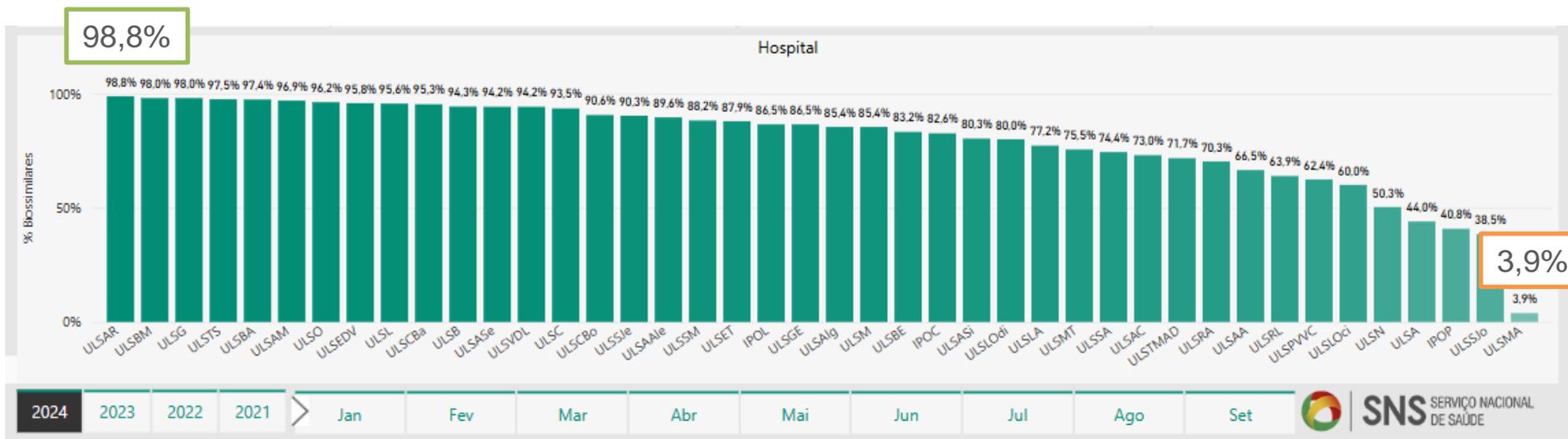
*A biosimilar with comparable binding and other relevant functional characteristics to the reference product could therefore be expected to have an equivalent clinical effect. **Where an applicant has argued that a phase III trial is not required, the MHRA require supporting data to include PK trial data confirming that the biosimilar has comparable safety and immunogenicity to the reference product.***

*This shift in the **MHRA's approach to biosimilar approvals provides biosimilar manufacturers with an opportunity to launch their products in the UK more quickly, and at a lower cost, than in other regions.***

Source: Penningtons Manches Cooper, 2022

Make medicines available via a robust and efficient regulatory system

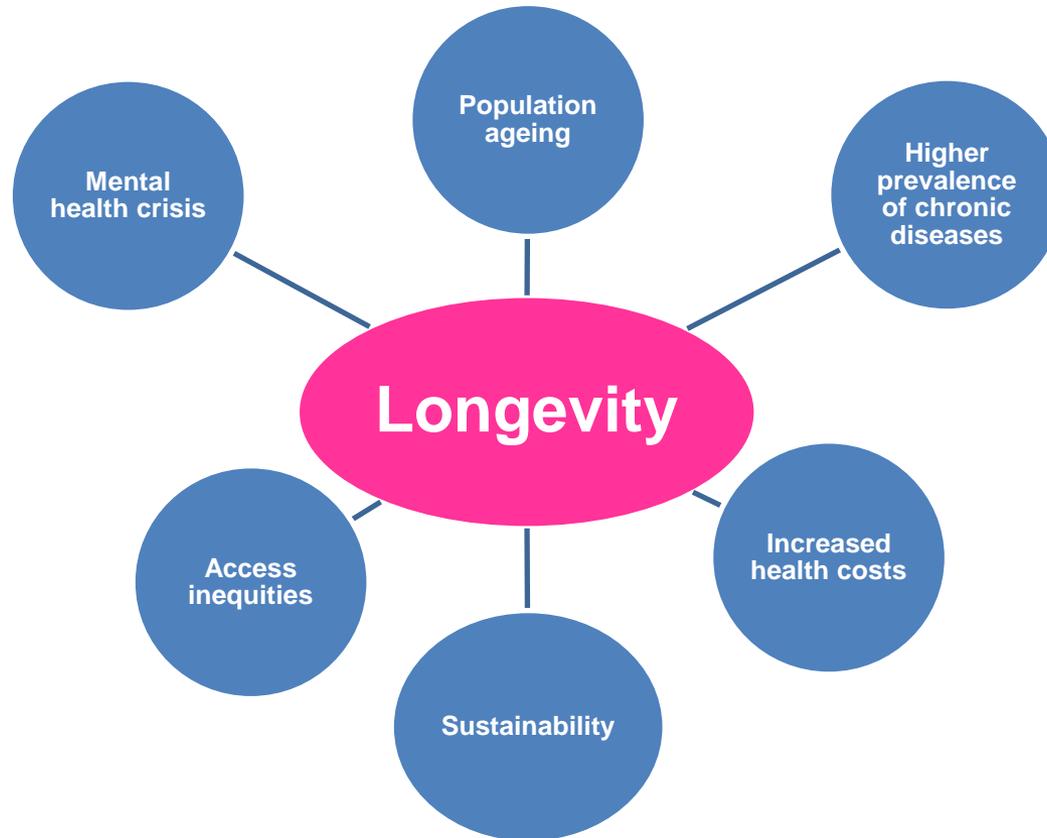
- NHS hospital benchmarking – uptake



Source: INFARMED, Hospital biosimilar benchmarking, available at <https://www.infarmed.pt/web/infarmed/entidades/medicamentos-uso-humano/monitorizacao-mercado/benchmarking/benchmarking-hospitalar/medicamentos-biosimilares>, 15th November 2024

Affordable innovation that delivers on unmet health needs

- Challenges



Affordable innovation that delivers on unmet health needs

Value added medicines are medicines based on known molecules that address healthcare needs and deliver relevant improvement for patients, carers, healthcare professionals and/or payers.



Relevant improvements include:

A better efficacy, safety and/or tolerability profile;
A better way of administration and/or ease of use;
New therapeutic uses (indication/population).

Affordable innovation that delivers on unmet health needs

- These improvements contribute to:

Better adherence, health outcomes or quality of life

A new version of the antirheumatic drug, methotrexate. Instead of being taken orally in a tablet form, it is available as a pre-filled auto-injector. The previous oral tablets often caused unwanted side effects, particularly in the stomach, which often led patients to switch to expensive biologic treatments. **With this new formulation, patients have experienced improved treatment outcomes, allowing them to stay on treatment for 1-2 years longer than with the oral version⁷, which reduced the financial burden on healthcare systems.**

Improved safety and efficiency of healthcare professional resources

Building on Covid-19 lessons learned, moving care closer to patients by using self-administered pharmaceutical forms, **can greatly reduce burden on patients, on healthcare professionals and health systems.** According to NHS data, in England alone switching to ready to administer formulations can **save the time for 4,000 nurses per year as well as free up 1 million beds.**

Increased treatment options & preventing therapeutic escalation

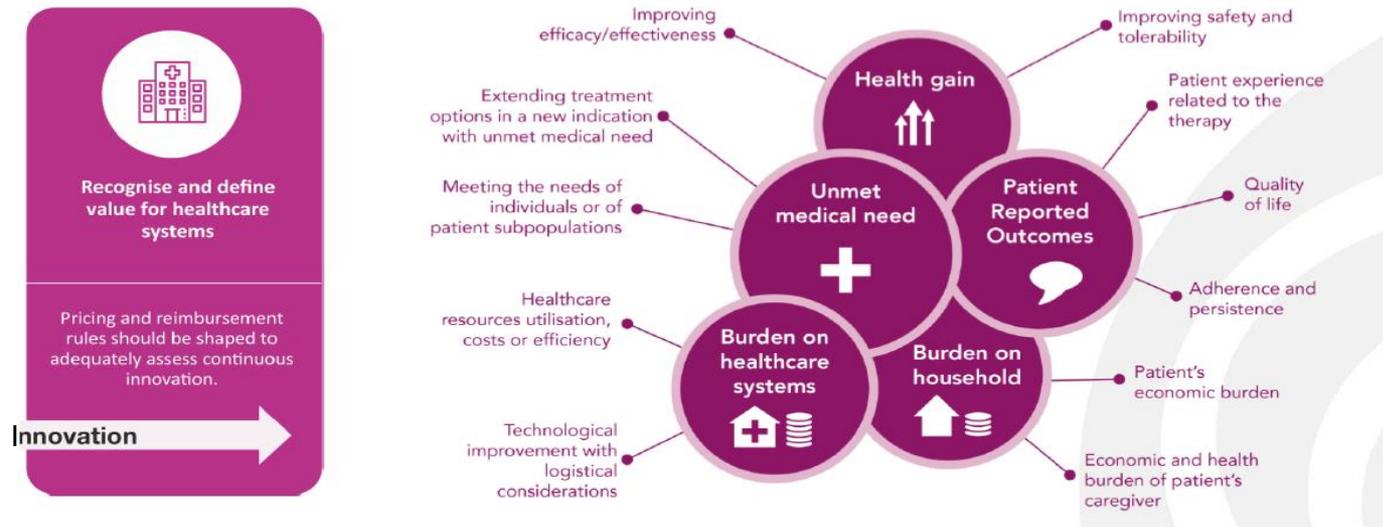
Dexamethasone, an affordable steroid normally used to treat inflammatory conditions (such as allergic disorders and skin conditions) and severe autoimmune diseases (ulcerative colitis, arthritis, lupus, psoriasis, and breathing disorders), was **repositioned for Covid-19 treatment, as it was shown to reduce deaths by 1/3 in hospitalised Covid-19 patients receiving mechanical ventilation in ICU.**

Improved cost-effectiveness and ultimately access to healthcare

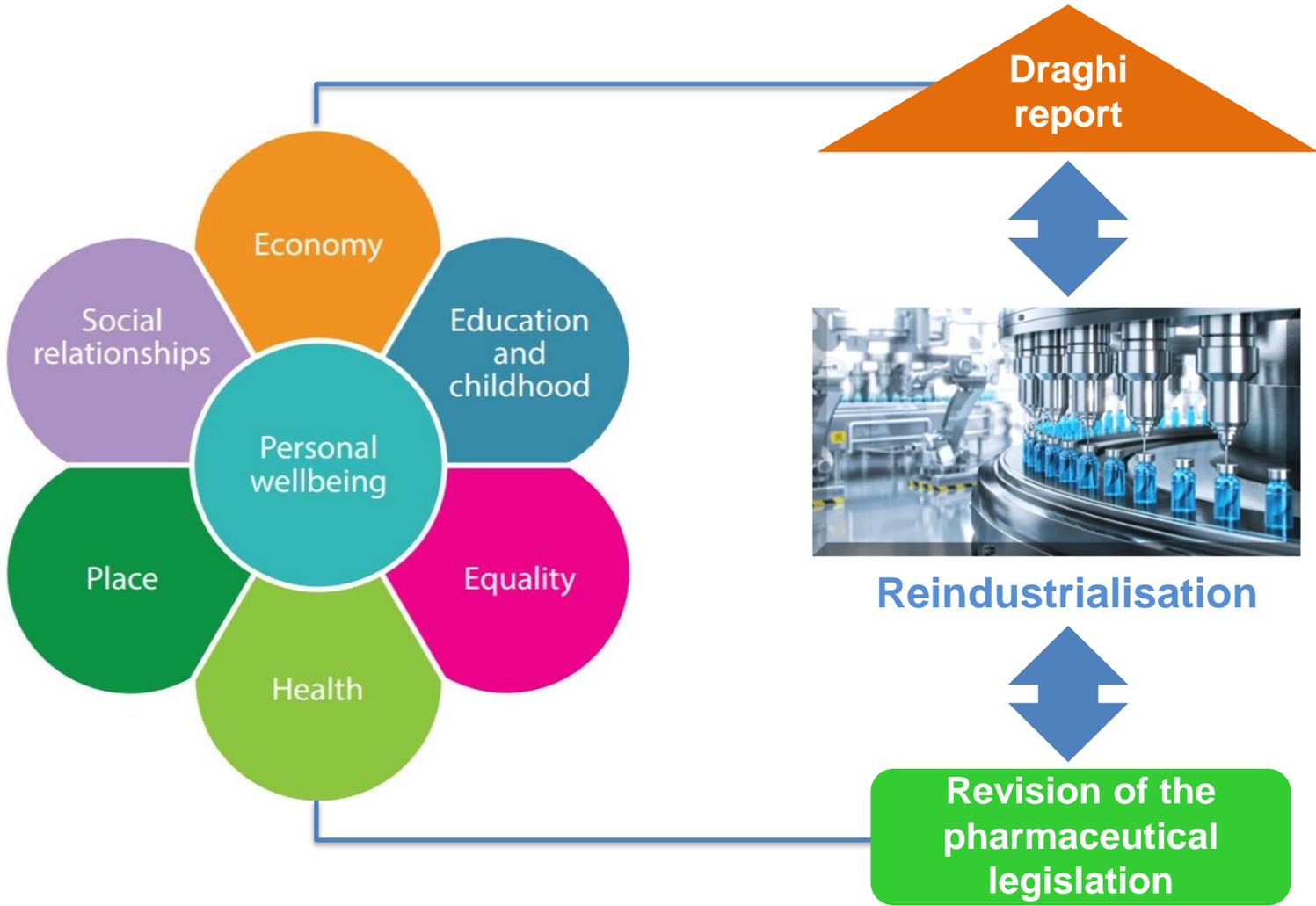
The dose and timing for administering the product can be relevant to address adherence which negatively impacts health outcomes but also bring huge additional costs to the EU system of around **125 billion euros.**

Affordable innovation that delivers on unmet health needs

- Recognise and define the value of VAM for healthcare systems
 - Pricing and reimbursement rules should be shaped to adequately assess continuous innovation of VAM and recognise the value to patients, healthcare professionals, carers and health system.



Citizen centricity



Thank you.