## The transition to methods of financing biomedical R&D that delink R&D costs, including incentives, from the prices of products or services

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# Motivations for delinking the costs of R&D from prices

• One motivation is to reduce barriers for access, and to avoid fiscal toxicity for patients.

• Competitive prices for drugs, vaccines, cell and gene therapies and diagnostic tests are lower, often radically lower, and make access radically more equal, than the prices from a monopoly seller.

• By delinking R&D costs from prices, governments can potentially save money, and more efficiently target subsidies and incentives.

#### Mechanisms to Finance R&D

R&D is financed through a combinations of

- 1. government and charity grants and other direct funding of research,
- 2. government funded research subsidies,
- 3. and incentives that reward successful development and commercialization of products and services.

#### Most of the money goes to incentives.

The <u>temporary monopoly</u> is the primary incentive today, enforced by patents and a variety of regulatory monopolies. The temporary legal monopolies are expensive, and are the primary reason why prices are high and access is unequal.

#### Market Entry Rewards: 1

One candidate to replace the temporary monopoly are market entry rewards, sometimes referred to as innovation inducement prizes, or end product prizes.

The basic idea is that a company will invest in R&D there is an expectation of robust monetary rewards for successful projects. Monopolies are merely an indirect means to obtaining monetary rewards. Market entry rewards are a more direct, and more flexible way to design the incentives.

Some early, 1990s, proposals on market entry rewards were flawed, but over time, more sophisticated approaches have been put forward.

#### Market Entry Rewards: 2

The modern approach to market entry rewards is to create an innovation fund of a fixed size, and have a multi-year competition among suppliers of innovations, for shares of the fund.

Rewards are larger if products or services are better, and if utilization is larger, all other things being equal, but not a strict QALY calculation. Several nuances are possible.

Improvements in health outcomes are benchmarked against existing treatments.

#### **Competitive Intermediaries**

#### Open source dividend

### Transition approach

Year 1, Cap all patent and non-patent exclusivities at 15 years, and introduce new market entry rewards (or expanded R&D subsidies), to induce more innovation in areas of priority.

Year 2, Cap all patent and non-patent exclusivities at 14 years, and expand funding for market entry rewards (or expanded R&D subsidies), to induce more innovation in areas of priority.

Year 3, etc.

#### Next steps

Feasibility studies

Proposals for size of MERs