

Innovation in medicine

R&D and access

Key

- Mid-term ABPI/industry focus - UK level
- Long-term ABPI/industry focus - EU level



Electronic health records/data linkages

Enhanced post-marketing surveillance

Adaptive licensing

Pharmacological tools and re-purposing

Open innovation

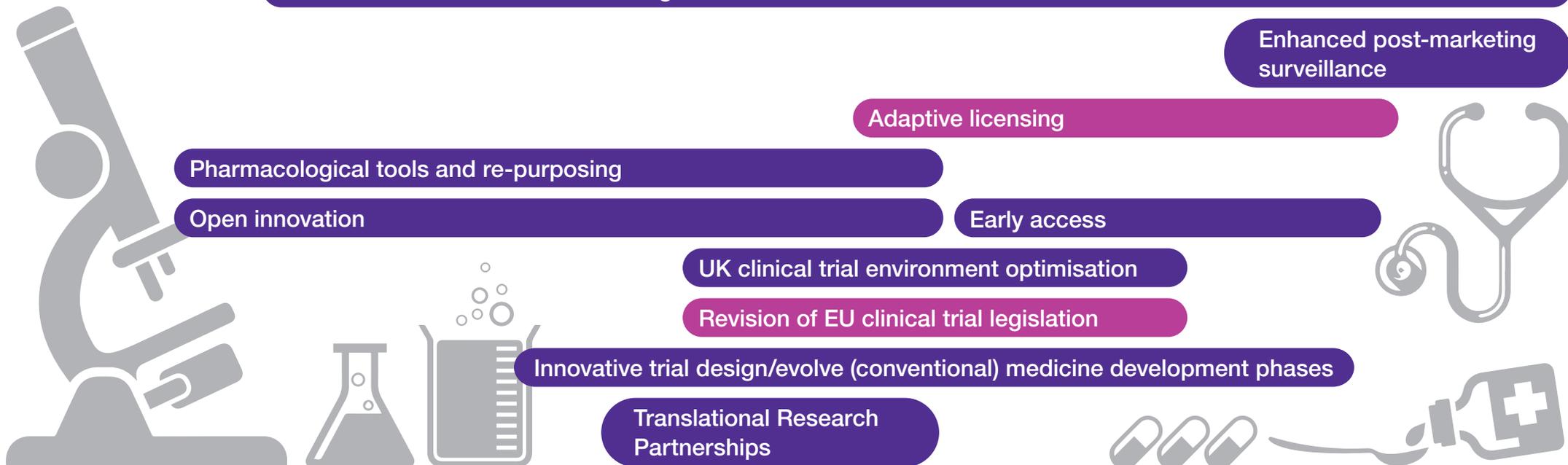
Early access

UK clinical trial environment optimisation

Revision of EU clinical trial legislation

Innovative trial design/evolve (conventional) medicine development phases

Translational Research Partnerships



	Pre discovery	Drug discovery	Pre-clinical testing	Phase 1 clinical trial	Phase 2 clinical trial	Phase 3 clinical trial	Licensing approval	Medicine available for patients
Average cost to research and develop successful medicine ³		£436 million	£533 million	£710 million	£916 million	£1.1 billion	£1.15 billion	
Number of medicinal candidates tested to achieve <u>one</u> approved medicine		5,000 - 10,000 candidates	10-20 candidates	5-10 candidates	2-5 candidates	1-2 candidates	1 medicine	
	<p>Based on their disease focus, companies' scientists work to understand the disease</p>	<p>Researchers select a 'target', such as a gene or protein, then search for a molecule, or compound, that may act on the 'target' to alter the disease</p>	<p>Early safety and efficacy tests are undertaken in computational models, cells and in animals</p>	<p>The candidate medicine is tested in people for the first time. Studies are conducted with about 20 to 100 healthy volunteers</p>	<p>Researchers evaluate the candidate medicine's efficacy in about 100 to 500 patients with the disease</p>	<p>Researchers study the candidate medicine in about 1,000 to 5,000 patients to generate data about safety, efficacy and the overall benefit-risk relationship of the medicine</p>	<p>Information and results from all the studies is compiled and submitted to the regulatory agencies</p>	<p>The medicine is now licensed for use and patients may benefit from it, subject to value and cost-effectiveness assessments and local health budget availability</p>