

# The Future of Vaccines



**Vaccine R&D: A long and risky journey<sup>1</sup>**

**+10** years of R&D for each successful vaccine<sup>1</sup>

**12-18** months for first regulatory approval<sup>11</sup>

**24** months to manufacture<sup>12</sup>

**70%** of production dedicated to quality control<sup>1</sup>

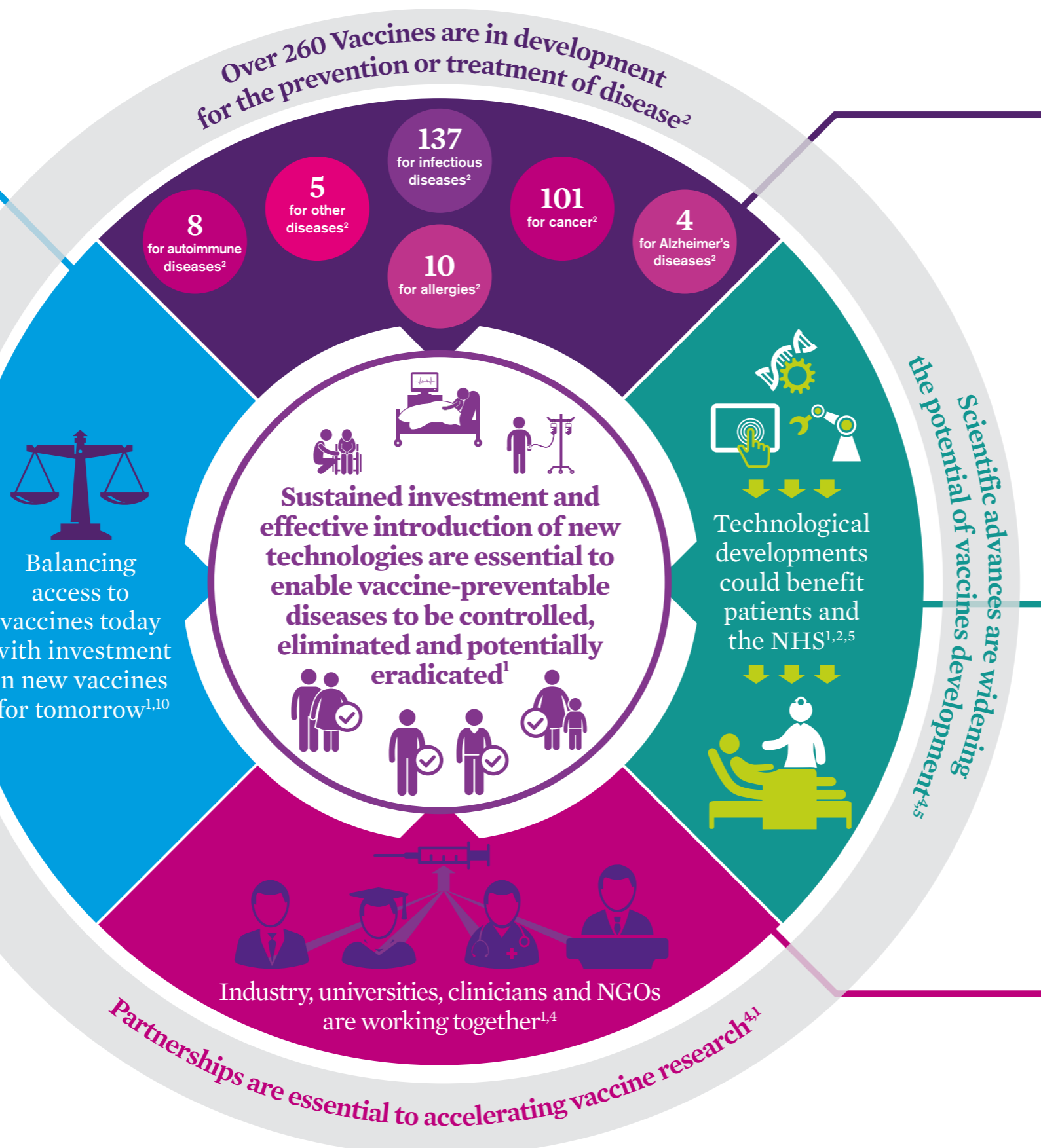
**6%** probability of market entry from preclinical<sup>1</sup>

**£374m-£1.5bn** GBP cost of development<sup>3</sup>

**£448m** cost of building a biological manufacturing site<sup>1</sup>

Date of preparation: July 2018

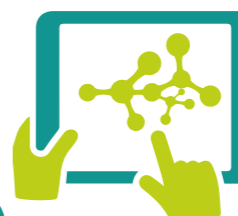
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Vaccines have an important role in the global fight against anti-microbial resistance<sup>3</sup>

Governments, NGOs and industry must work together to:

- Increase use of existing vaccines<sup>3</sup>
- Boost early stage scientific research<sup>3</sup>
- Sustain viable markets for future vaccines<sup>3</sup>



Technology could improve the simplicity and efficiency of vaccine delivery<sup>1,5</sup>:

- Reducing the need for multiple doses of a vaccine by boosting the body's immune response<sup>5</sup>
- Improving manufacturing processes to deliver vaccine doses more quickly<sup>1</sup>
- Making transportation and storage of vaccines easier could reduce wastage<sup>1</sup>



ABPI member companies working in collaboration:

- With Gavi to improve vaccination access and uptake in the developing world and contribute to the advancement of Sustainable Development Goals<sup>6,7</sup>
- With the UK Vaccine Network on vaccines and vaccine technology for infectious diseases with the potential to cause an epidemic<sup>8</sup>

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