

**AMR Innovation Mission  
Welcome**

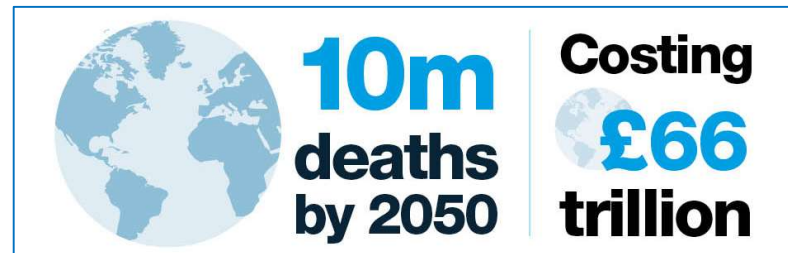
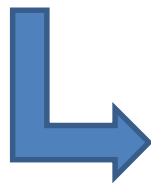
**Dr Ruth McKernan CBE FMedSci  
Chair of the UK BioIndustry  
Association**



# Antimicrobial Resistance (AMR) – what we know



Over/inappropriate use (healthcare/agriculture) of antibiotics (1940s ++)  
AMR already causes >700,000 per year globally. But this is set to become much worse



AMR could become the leading cause of mortality globally, overtaking cancer  
Significant direct economic burden (healthcare)  
Significant indirect cost burden due to lost productivity, long term health impact, carers etc.

# What have we learned from Covid-19

- Health security is now a priority across the world.
- The number of people in hospital and the duration of their stay is critical
- The COVID-19 pandemic has highlighted concerns about AMR. Resistance is now understood
- AMR as a slow pandemic which has huge implication to public and global health
- There is increased use of antibiotics for secondary infections/surgery

## Three elements to the solution



# How to approach the problem

- Prevention

Willingness to change behaviour

Public health guidance



- Diagnosis

- test for the presence or absence of a bacterial infection can dramatically cut overuse

- Quickly match pathogen to optimal existing treatment

- surveillance of drug resistance

- Data and global monitoring



- New Therapeutics



# The AMR therapeutic landscape

## Innovation is stalled?

The broken business model has made investment hard

Volume of sales is low



*New products are kept in reserve to limit the rise of resistance*

Pricing is low



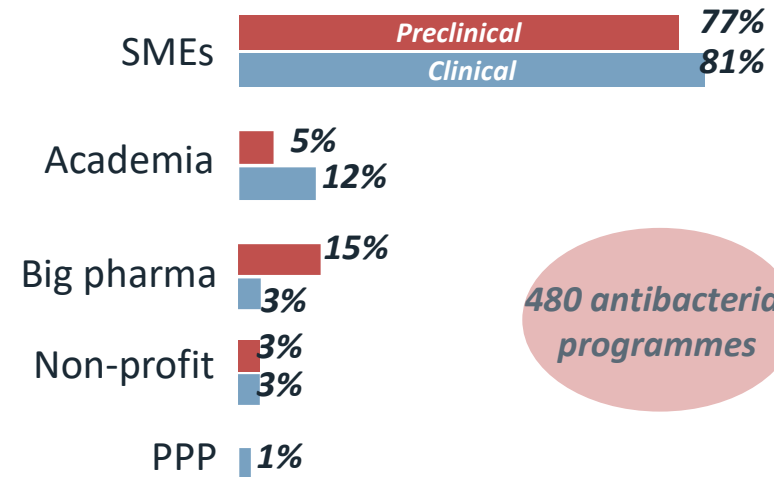
*Pricing policy compares new drugs with old & cheap generic drugs*



R&D costs are inevitably higher than the return on investment

## Why SMEs are key players?

SMEs hold 80% of AMR product portfolio



480 antibacterial programmes

A whole ecosystem of European SMEs focusing on AMR

Innovation  
and  
partnership

The Future

