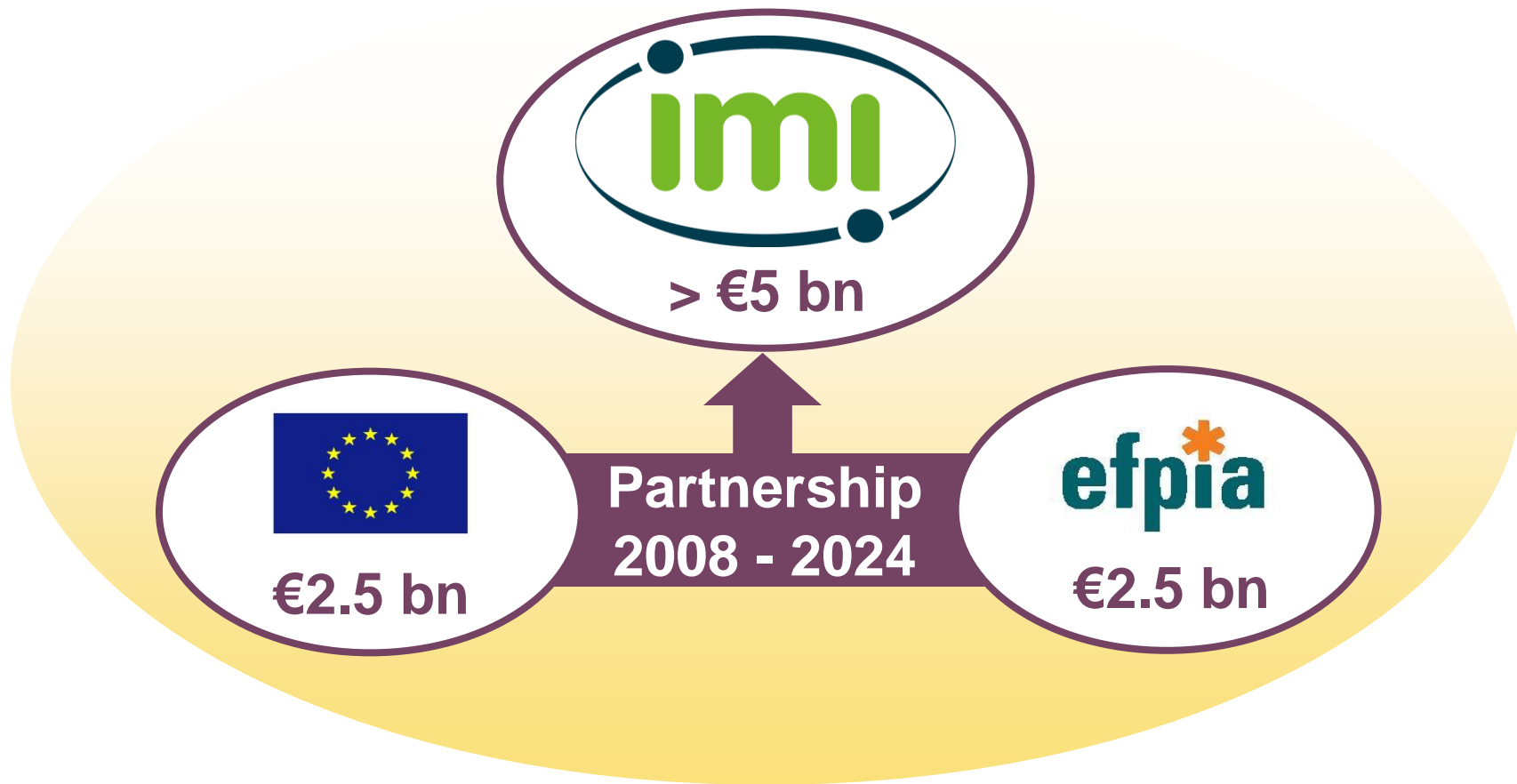




Public-private partnerships to boost antibiotic development

Pierre Meulien
Executive Director
Innovative Medicines Initiative | @IMI_JU

The Innovative Medicines Initiative



IMI New Drugs for Bad Bugs programme

Challenge 1: Getting the drug into the bug

TRANSLOCATION: Addressing scientific challenge of penetration barriers & efflux

Challenge 2: Translation from early discovery to clinic

ENABLE: Combine academia / industry expertise to work on early-stage novel molecules



Challenge 3: Clinical dvpt long, costly & often inefficient

COMBACTE family, iABC: Creating sustainable clinical investigator / laboratory / epidemiology networks; clinical studies

Challenge 4: Low return on investment

DRIVE-AB: Options for a new economic model of antibiotic development & stewardship. Buy in from all stakeholders

ND4BB facts



7 projects up and running

EUR 700 million / USD 785 million

+ 1 project in the pipeline

CLIN-Net hospital network

697 hospitals – 437 cities –

39 countries in Europe

LAB-Net network: 426 laboratories

6 clinical development programmes active

Observational studies, epidemiology

ND4BB facts

- Development of **new techniques** to analyse uptake of antibiotics by bacteria.
- Worked out **structure of 20 proteins** found in membranes of bacteria & greater understanding of efflux pumps
- **Hit-to-clinical candidate discovery engine** has accepted **15 novel programmes** to date (largely academia & SMEs), of which 6 terminated again on scientific grounds (ENABLE)
- Discovery that **30% drop in efficacy of antibiotics** could result in 120 000 extra infections & 6 300 deaths / year in US alone

Collaboration among funders

IMI & BARDA



Carbapenem-resistant enterobacteriaceae (CRE)
Development of Aztreonam-Avibactam (ATM-AVI)

- IMI supports Phase 2 study of ATM-AVI in Europe under COMBACTE-CARE.
- Parallel collaborations between IMI & BARDA to deliver Phase 3 study
- COMBACTE-CARE to lead European aspects & provide global medical leadership to global Phase 3 study supported by BARDA OTA (other transaction authority)
- BARDA supports additional studies for development of ATM-AVI

The future: international collaboration in clinical trials related to AMR



Workshop

Transatlantic collaboration on clinical trials related to antimicrobial resistance

organised in collaboration with:



Agenda

21–22 January 2016

Sheraton Stockholm Hotel
Tegelbacken 6 • 101 23 Stockholm, Sweden

Summary

- IMI can address challenges related to discovery & development of new medicines against AMR
- Collaboration is key!
- Support for early stage programmes from academia & SMEs is vital
- We will see more international collaboration in clinical trials in AMR
- We see increasing activity on new economic models of antibiotic R&D

Thank you!

www.imi.europa.eu | @IMI_JU
infodesk@imi.europa.eu