

Leading Group Task Force on Innovative Financing on Health

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### Background

- Classical Funding Poverty related diseases: Grants by Government Money, EU, Gates, others.....
- Financial crisis put extreme pressure on all sources
- Basic research, discovery access to existing tools: relatively OK
- Translational research: urgent need to think differently
- Translational research= translation of knowledge into globally accessible products
- \* TBVI has several promising vaccine candidates in its

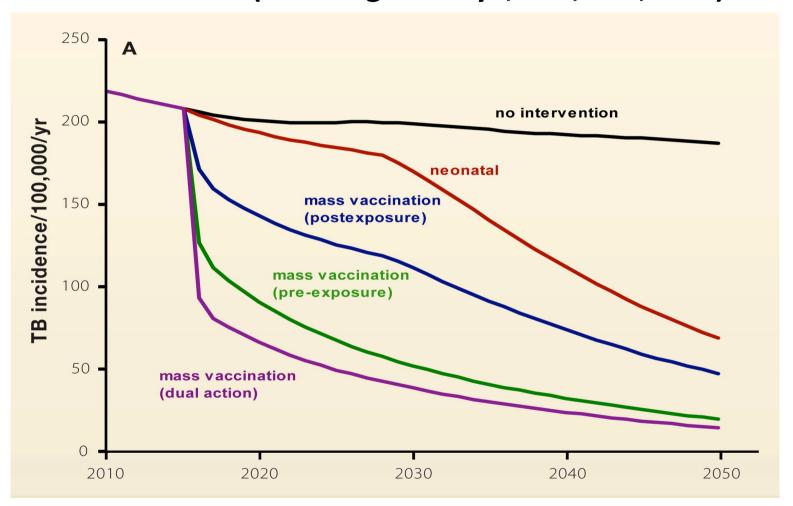
#### The case of TB vaccines: TBVI

• Existing BCG: 90 years old, safety insufficient, not protective enough for pulmonary TB

#### Hence:

- almost 2 million deaths, thousands in the EU, + 10 million new cases yearly
- one third of world population latent carrier= source TB
- huge economic cost=0,52 % GNI yearly
- worrying also in Europe: MDR, XDR
- cost: treatment alone: near 10 Bn worldwide, 2 Bn €
  Europe alone yearly

# Potential impact of vaccination on TB control (D. Young & C. Dye, Cell, 124,2006)





#### **TBVI:** portfolio and opportunities

- Consortium of 40 European Research Institutes
- Objective: develop globally accessible vaccines for TB: active and safe
- portfolio 39 vaccine candidates, 19 well advanced
- Candidates showed advantages over BCG
- Portfolio allows selection of best candidates
- If funded now: can select the best candidates to bring at least two vaccines to the market by 2020, if not: risk of total loss!

# Particularities of translational research innovative vaccines for TB

- Long term: 10 years at least
- Markets in LDC's and emerging countries
- Market perception was bad
- Existing funding systems aim either basic research or access to existing products/services
- Expensive: Pre-phaseI 2 million €, Phase I 2,5 million €, Phase II: 35 Million €, Phase III: 160 million €

### What can be financed, what not?

Discovery/ Preclinical	Pre-phase I	Phase I	Phase IIa	Phase IIb	Phase III
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Cl. instruments could come in if crit. fin. gap filled and proved success

### Questions frequently posed

- Decision makers:
  - Where to find money in Financial crisis?
  - Which problem will this solve in my backyard?
  - Can you propose a solution, business case?
- New business model:
  - where will financial effort lead to?
  - is there a market?
  - is there a return on investment?

#### Basics of TBVI's finance plan 1

- Change paradigm: investment case
- Compromise state budget control and 3% GNI innovation commitment (EU 2020)
- Societal advantages for society
- TB a major threat for mankind, MDR, XDR, Poverty reduction
- Vaccines a cost/benefit human success story
- Hook in the EU: Innovation EU 2020 Flagship initiative, EU 2020 programme Barroso/ TB elimination by 2050

### Basics of TBVI's finance plan 2

- Finance pre-clinical and clinical development (Prephase I, phase I, phase II, phase III) to fill the critical financing gap of 560 Mio €, 10 years
- Bring two vaccines to market
- System: raise the money needed at the EIB, under state guarantee, and pay back only with exits (selling of projects) or royalties on sales



Real interest decision makers for *global win* win approach LDC, emergent, developed

# THE INNOVATIVE FUNDING PLAN IN SHORT



#### How will it work?

- Step wise approach: proposals need approval for funding
- 11 are already ready for funding, 8 more to come
- Contract between TBVI and partners, with conditions such as global access and exit or royalty to pay to TBVI
- TBVI pays back the loan

#### How will it work: Decision Making

- Representation of Guaranteeing parties and EIB and other stakeholders
- Independent decision process: persons independent from the projects
- Transparency
- Selection on technically and scientifically fixed gating criteria and affordability for LDC's



### Do funded partners take any risk?

- Technically: their normal risk
- Financially: no.
- Successful partners (= vaccine candidate is on the market) only pay back AFTER they cashed:
  - when they made added value by exit
  - or by royalties



### This plan offers

- Stability of funding over 10 years
- Quick start of development and translation of best candidates into globally accessible vaccines= portfolio effect
- Simplification of funding
- Responsibility to guaranteeing parties to justify choices
- Minimal or no risk for governments since no cash and repay foreseen
- Value creation of done investment (est. 250 M €)

# INVESTMENT MEETS SOCIETAL CHALLENGES

- SAVE 2 million lives the earliest possible
- 0,52 % growth if TB eliminated
- Avoid human dramas for millions
- Finish ticking of a sanitary Time Bomb
- Virtuous circle translating knowledge into innovation generating new knowledge & innovation
- Added value for North and South trough strengthened North/South South/North, South/ South collaborations

#### CONCLUSION

- Make a business case of translation research projects
- Two fat birds with one stone: poverty reduction through TB elimination and added value through translation of knowledge into innovative vaccines

