



Innovative Medicines Initiative

# IMIDIA – Intellectual Property and Open Innovation in IMI projects

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Sanofi

# Agenda

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- **Open Innovation – why do we need it ?**
- **Collaboration – what does this mean ?**
- **Sustainable win win situations – examples how to put this into practice (Intellectual Property aspects)**
- **Short summary**



# Open innovation (for better health)

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- **Integrate (external) problem solvers in the innovation and development process**
  - Select the right problem solving team = heterogeneous group of different stakeholders (with different interests)
  - Removing (internal & external) project barriers
  - Develop sustainable win win for all parties
  - Enable the collaboration towards common goals
- **Bridge different (company / management / scientific) cultures**
- **(Alliance / consortium / project) management is key towards delivery**

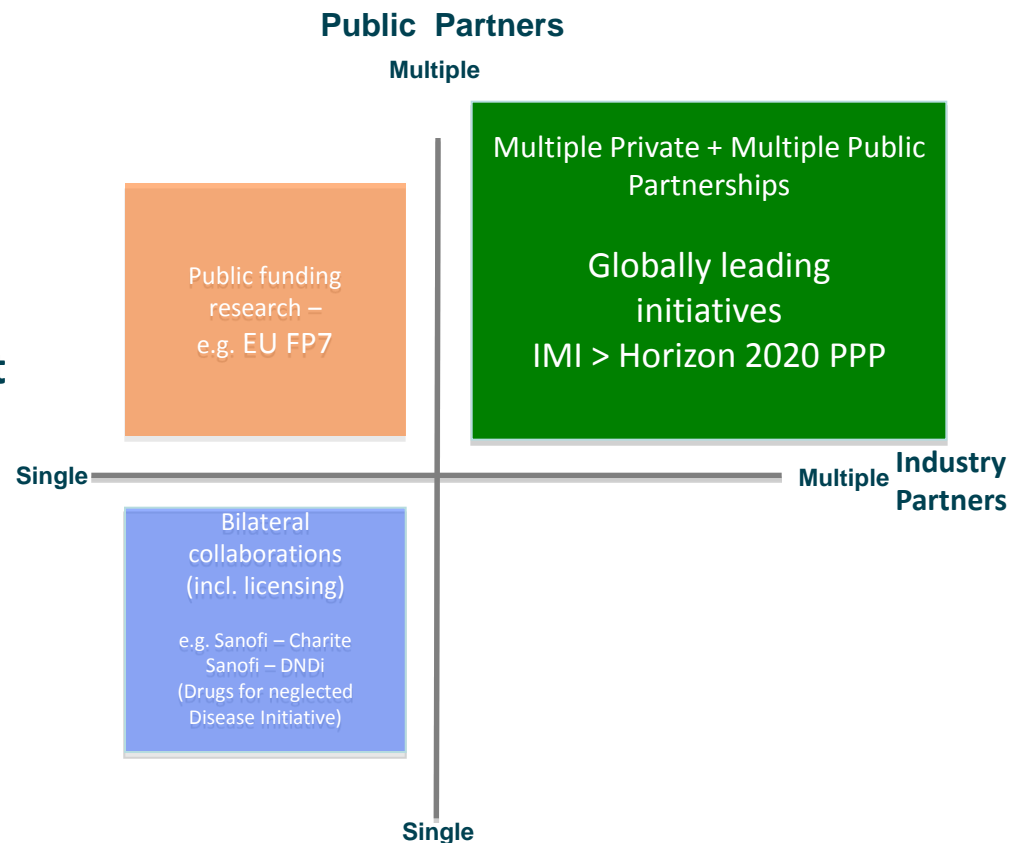


# Why are Public Private Partnerships essential for Sanofi?



Global challenge: Innovate on innovation to the benefit of the patient

- Key to change how we search for innovation
- Disease management – new rule book (e.g. Personalized Medicine)
- Create, evaluate and implement new operational models (e.g. pooling of screening resources across companies)
- Enable the environment to effectively engage with policy makers



# Collaboration is a mind set towards success

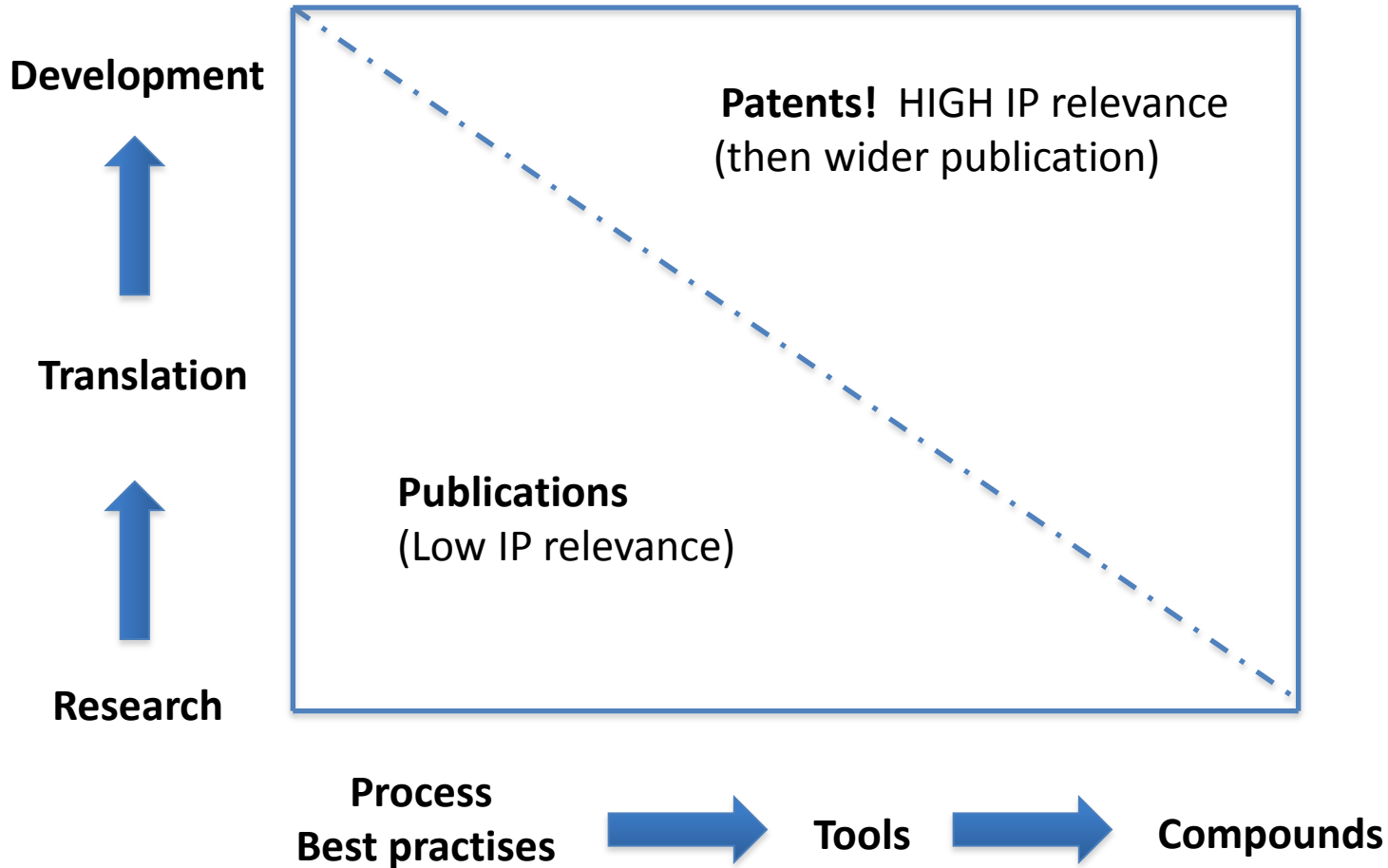


## Intellectual Property (IP) management to accompany the project planning and implementation process

- Planning first – common understanding
- Definition of (IP) needs
- Alignment & communication
  - Different levels: Scientists, Patent, Legal, Finance etc.
  - “Glue” function
- **Balance and Relevance**



# Dissemination strategy – the right tool for the right scenario



# IMI Project IMIDIA

IMPROVING BETA-CELL FUNCTION AND IDENTIFICATION OF  
DIAGNOSTIC BIOMARKERS FOR TREATMENT MONITORING IN DIABETES



- **Focus:** patient centric validated disease models / Biomarker / improved disease management
- **Challenge:** Value perception (innovation – application – development)
  - Considerable knowledge brought into the project, e.g. via SME (beta cell candidates)
- **Solution:**
  - Added value based on Pharma validation within IMIDIA
  - Fair and reasonable terms for research use outside of project
  - Stringent protection by Material Transfer Agreements
- **Success:**
  - Highly collaborative incl. SME
  - First validated human beta cell lines
  - First (Imaging) Biomarker Candidates



#### 8 Pharma Companies:

- Sanofi (Coordinator)
- Servier (Deputy Coordinator)
- AstraZeneca
- Boehringer Ingelheim
- Eli Lilly
- Novartis
- Novo Nordisk
- F. Hoffmann-La Roche

#### 13 Academic Partners & Biotech:

- Université de Lausanne,
- Centre National de la Recherche Scientifique (CNRS)
- Commissariat à l' Energie Atomique
- Imperial College of Science, Technology and Medicine
- Institut Suisse de Bioinformatique
- Institut National de la Santé et de Recherche Medicale (INSERM)
- Medizinische Hochschule Hannover
- Technische Universität Dresden,
- Universita di Pisa
- Université Paris Diderot
- Université de Geneve, Geneva
- Vrije Universiteit Brussel, Brussel
- Endocells SARL, Paris, France

#### FINANCING:

IMI funding:	€ 7.074.760
Other contributions:	€ 3.750.920
Pharma costs: :	€ 15.081.800
<b>TOTAL PROJECT COST:</b>	<b>€ 25.907.480</b>

**STARTING DATE:** 1.2.2010

**DURATION:** 60 months



# IMI Project COMPACT

Collaboration on the optimization of macromolecular pharmaceutical access to cellular targets



➤ **Focus:** Transport pathways across biological barriers, non-invasive delivery of biopharmaceuticals

➤ **Challenge:** Translation/dissemination of results

➤ Wide spectrum of Foreground  
(from basic research results on membrane transport up to improved formulations for biopharmaceuticals)

➤ Different participant's expectations and concerns

➤ **Solution:**

➤ Never give up to find the best compromise, don't exclude key contributors on majority votes

➤ Different terms on access rights (research use) for EFPIA companies and academics to ensure effective dissemination of basic research results as well as fair participation on development aspects



#### 7 Pharma Companies:

- Sanofi (Coordinator)
- GSK (Dept. Coordinator)
- Abbott
- Novo Nordisk
- Merck
- Boehringer
- Pfizer

#### 16 Academic Partners & Biotech:

- Utrecht University (Science)
- Utrecht University (Veterinary Science)
- University of Copenhagen
- Helmholtz Institute for Pharmaceutical Research
- Cardiff University
- Stockholm University
- Southampton University
- University of Vienna
- LMU
- University of Zurich
- Ghent University
- Pharmacoidea
- Bioneer:FARMA
- University of Helsinki
- Leiden University
- University of Oxford

**STARTING DATE:**

01.11.2012

**DURATION:**

60 months





# IMI Project on Lead Compounds – Tool Compounds

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## (project under preparation)

- **Focus:** Discovery of novel small molecule candidates as starting points for subsequent optimisation to drug candidates, provide high-quality compound collection for drug discovery platform
- **Challenge:** Generate value from compound screening results (“qualified hit list”)
  - Align patentability and development issues with IMI access and publication policy
  - Increase likelihood to develop innovative drugs to reach the patient from this initiative
- **Solution:**
  - Use flexibility of IPR policy (foreground ownership)
  - Setup adjusted dissemination policy



# IMI Project AMR (New Drugs for Bad Bugs - Topic 3)

New antimicrobial drugs for antimicrobial resistance



## (Call topic under preparation)

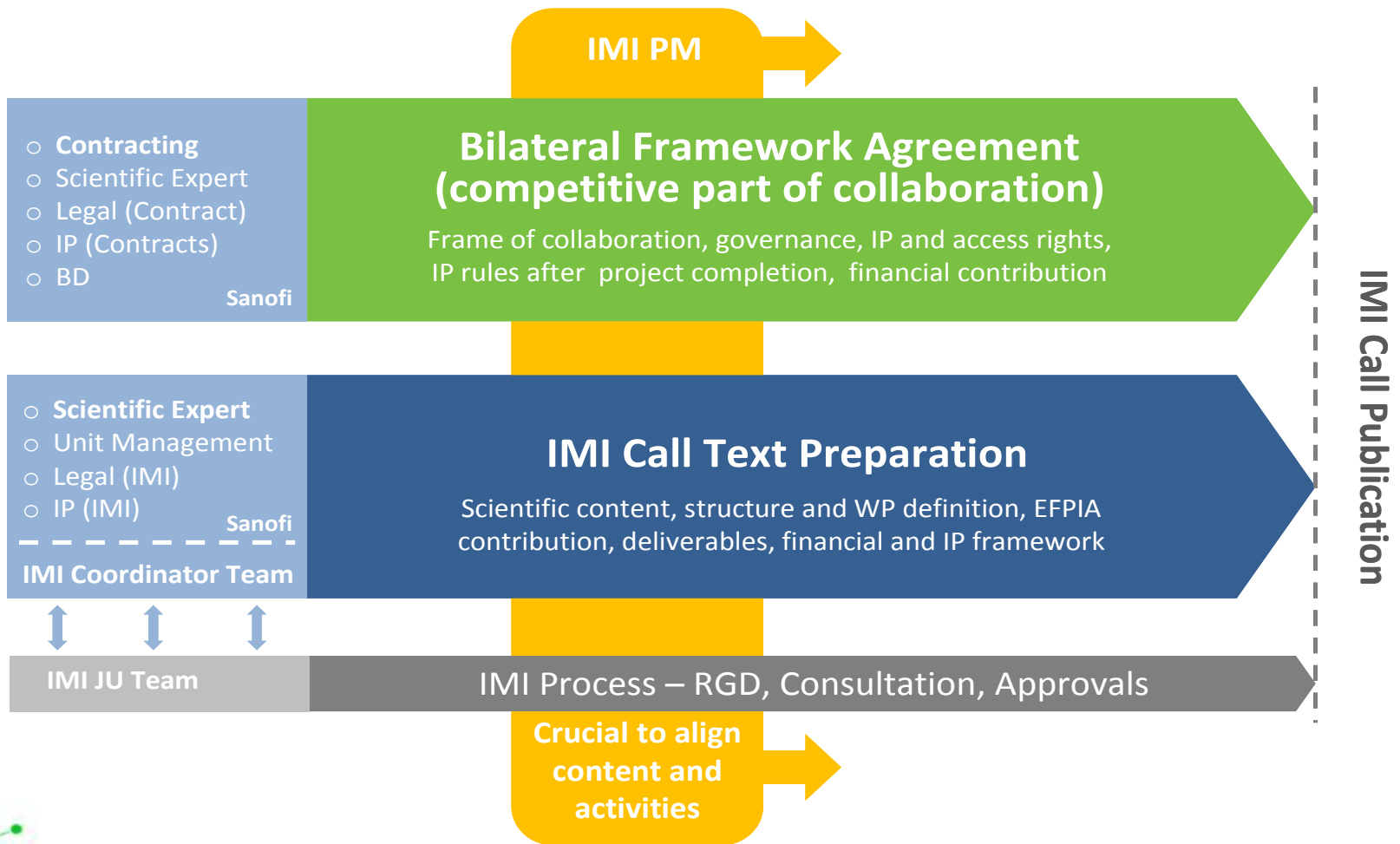
- **Focus:** Increase the probability of success of developing the next generation of antibiotics by PPP with multidisciplinary teams with different skills sets and expertise
- **Challenge:** Execute PPP in highly IP relevant and competitive research and development environment
  - Define effective collaboration framework
  - Need to engage different (company) functions efficiently (scientific unit, BD, Legal, Contracting, IP)
- **Proposed solution**
  - Setup binding collaboration framework
  - Use flexibility of IPR policy (foreground ownership)
  - Pre-defined process for potential commercial exploitation

(Elaborate compensation schemes for participants generating Foreground with respect to development results)

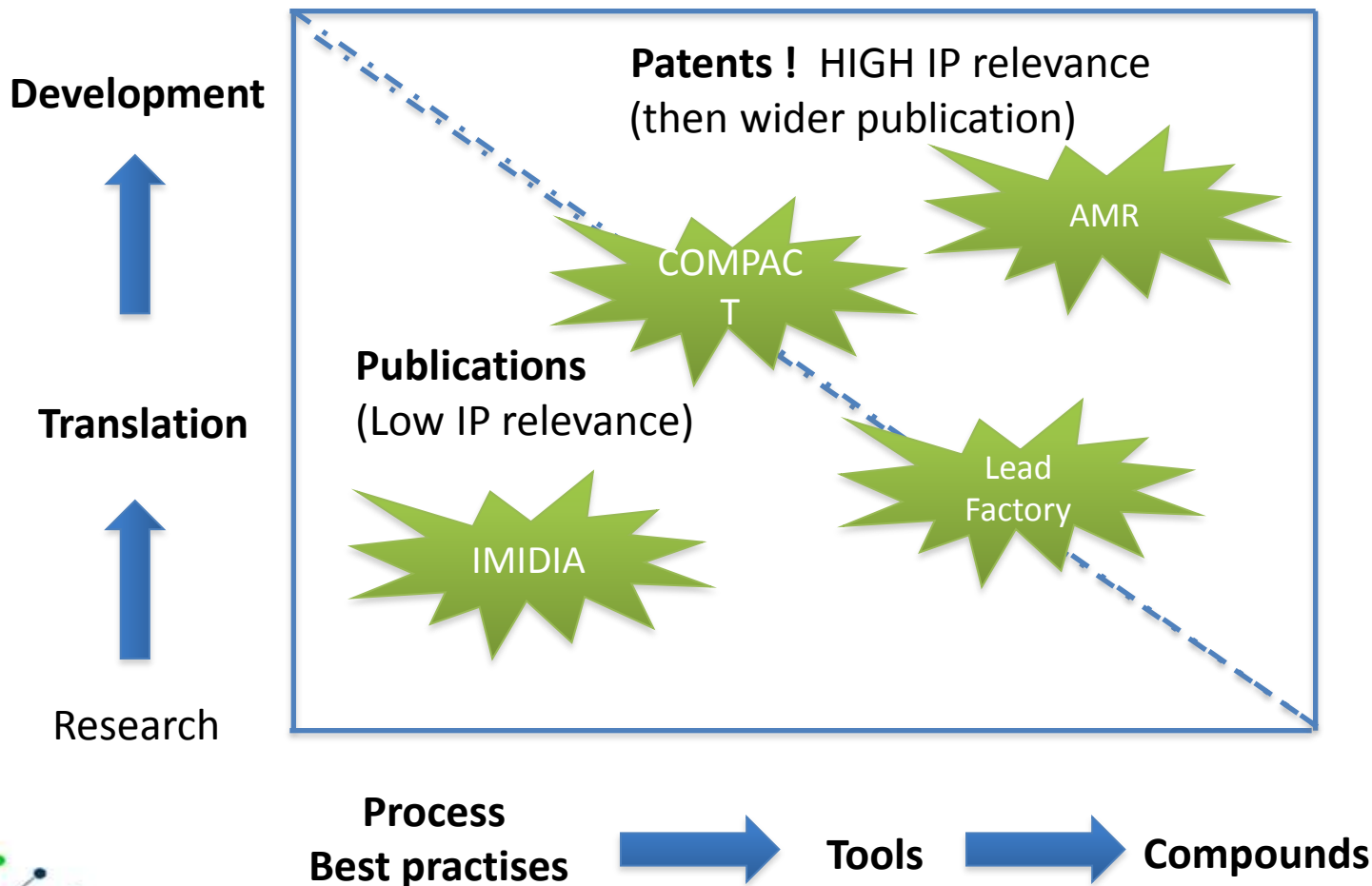


# Setting-up IMI projects with considerable competitive aspects in Sanofi

(in restricted areas of high medical and society needs such as AMR)



# Dissemination strategy – the right tool for the right scenario



# Summary

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- **Open innovation – sustainable win win situation**
- **Project determines the dissemination channel for results to secure the value for all participants**
  - Publication
  - Patent – then publication
- **Complexity and diversity are opportunities and not a pain**
  - needs to be managed, but not in isolation
- **Results depend on longer breath and many short sprints – but they will come!**

