

EATRIS



The one-stop-shop to Europe's
high end academic infrastructure
VPM days, Sep 17 - 18 2015

EATRIS positioning

Vision

Making translation of scientific discoveries into medical products more effective to improve human health and quality of life.

Mission

To support researchers in developing their biomedical discoveries for novel preventive, diagnostic or therapeutic products up to clinical proof of concept.

**Supporting academia, biotech,
pharma & funders**



Jan 2014 - EATRIS ERIC

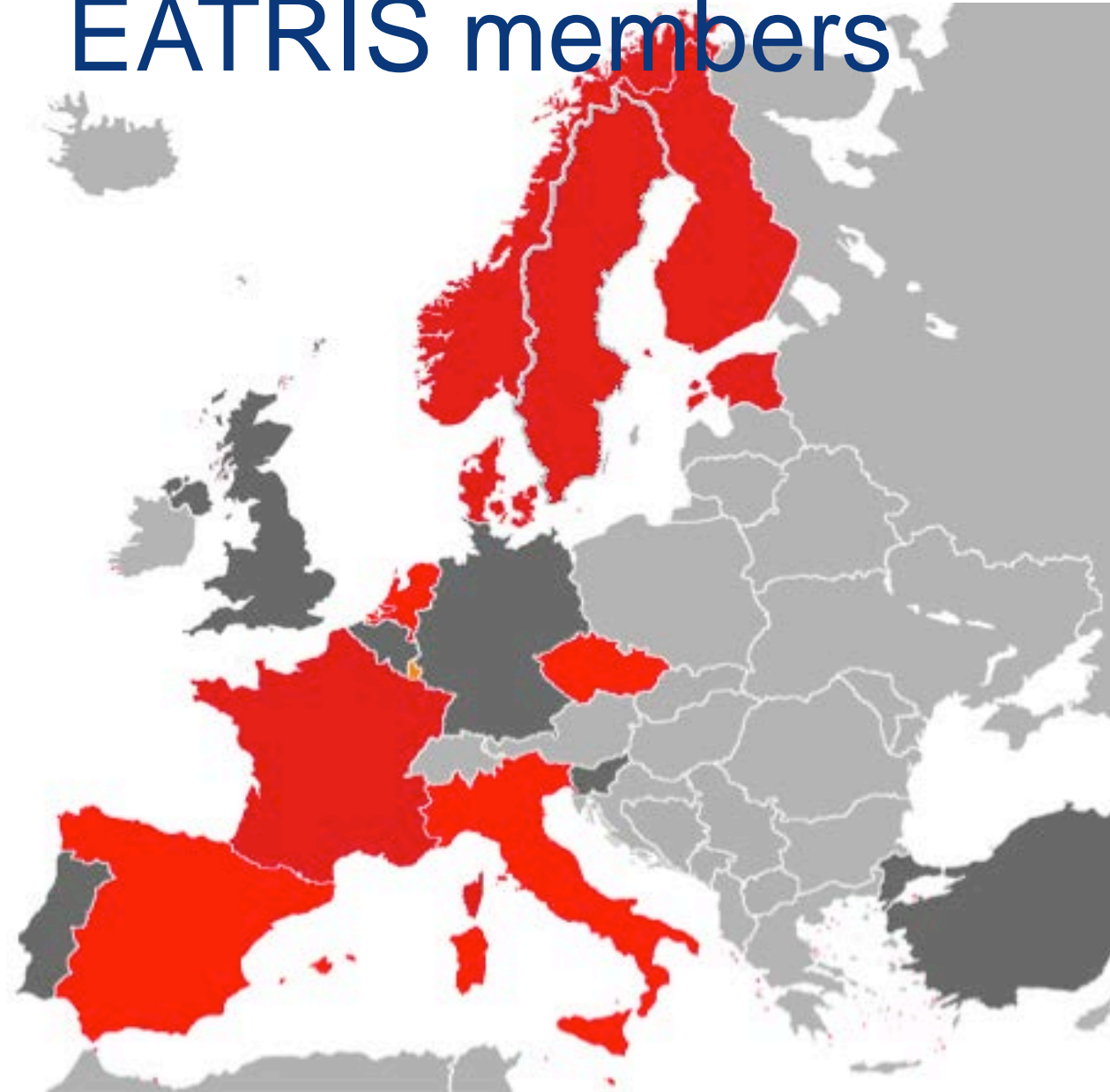
European Research Infrastructure Consortium



Born from Europ. Strategy Forum on Research Infrastructures (ESFRI)

- Legal form - directly applicable across EU
- Permanent, independent & non-commercial
- Long term commitment of member governments
- VAT exempt

EATRIS members



Participating countries : CZ, DK, ES, FI, FR, IT, NO, EE, SE, NL
(Host)

Negotiations ongoing with: BE, CRO, DE, LUX, PT, SI, TR, UK

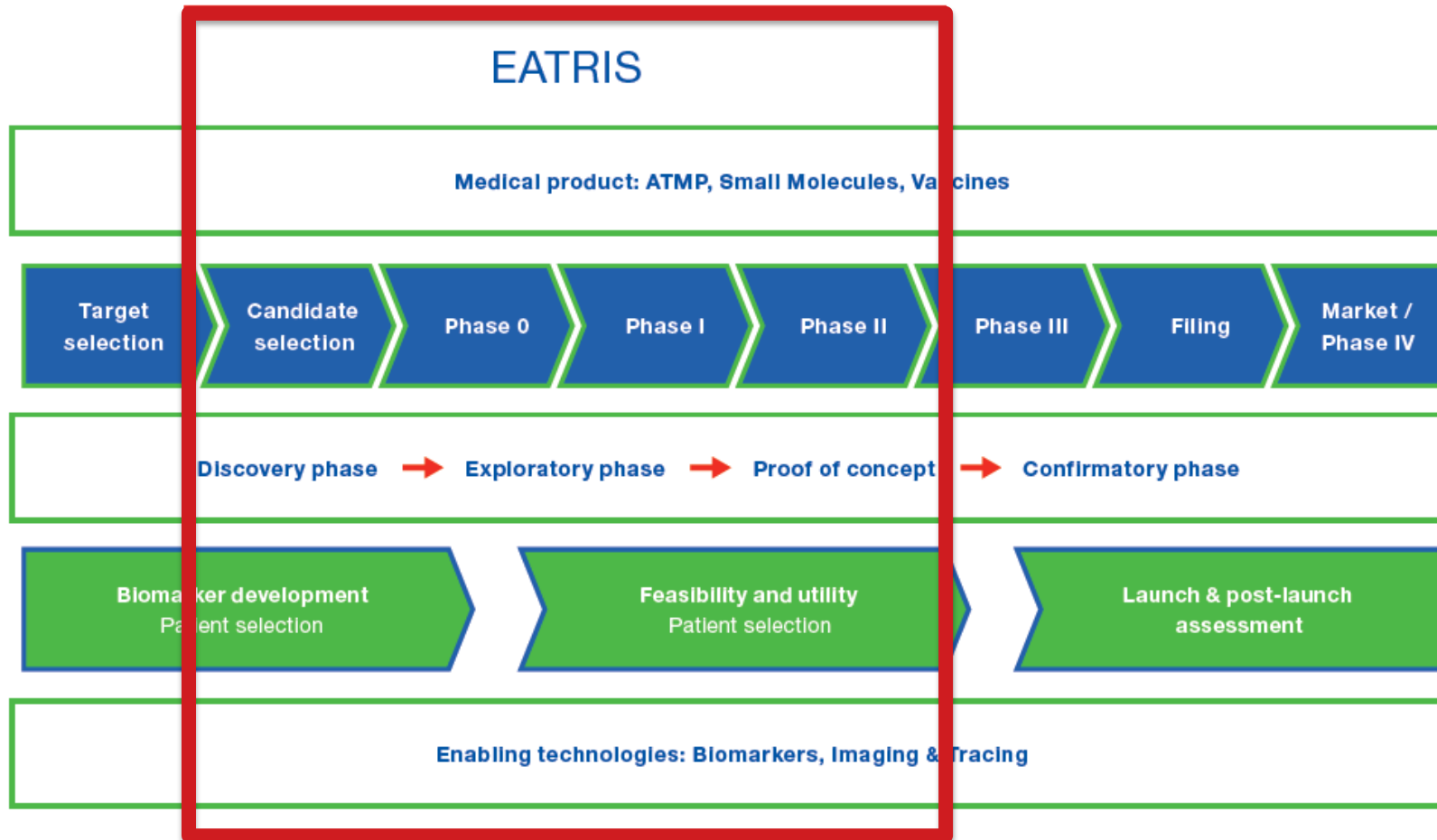
The Infrastructure: 75+ Academic & non-profit research institutions of excellence in translational medicine

EATRIS Infrastructure

Composed of academic & non-profit research institutions

- Active in translational research
 - Track record in entering clinical development
 - Unique infrastructure, expertise and licenses
 - Access to broad array patient cohorts (also rare diseases)
 - Working at top quality level in harmonized manner
- Working together to create a complete translational pipeline
 - Via distributed infrastructure
 - Using hub-and-spoke model
 - Supported by C&S 'hub'

EATRIS scope of operations



EATRIS offering: five product platforms

- Advanced Therapy Medicinal Products
 - Tissue engineering, Gene therapy, Cell therapy, GMP facilities, etc.
- Biomarkers
 - Biobank facilities, Multiplexed immunostaining, deep genome sequencing, etc
- Imaging and Tracing
 - Imaging-enabled drug development: (Pre-clinical) PET imaging, GMP tracer development and production, (Ultra) high field MRI, Optical and hybrid imaging, etc

EATRIS offering: five product platforms

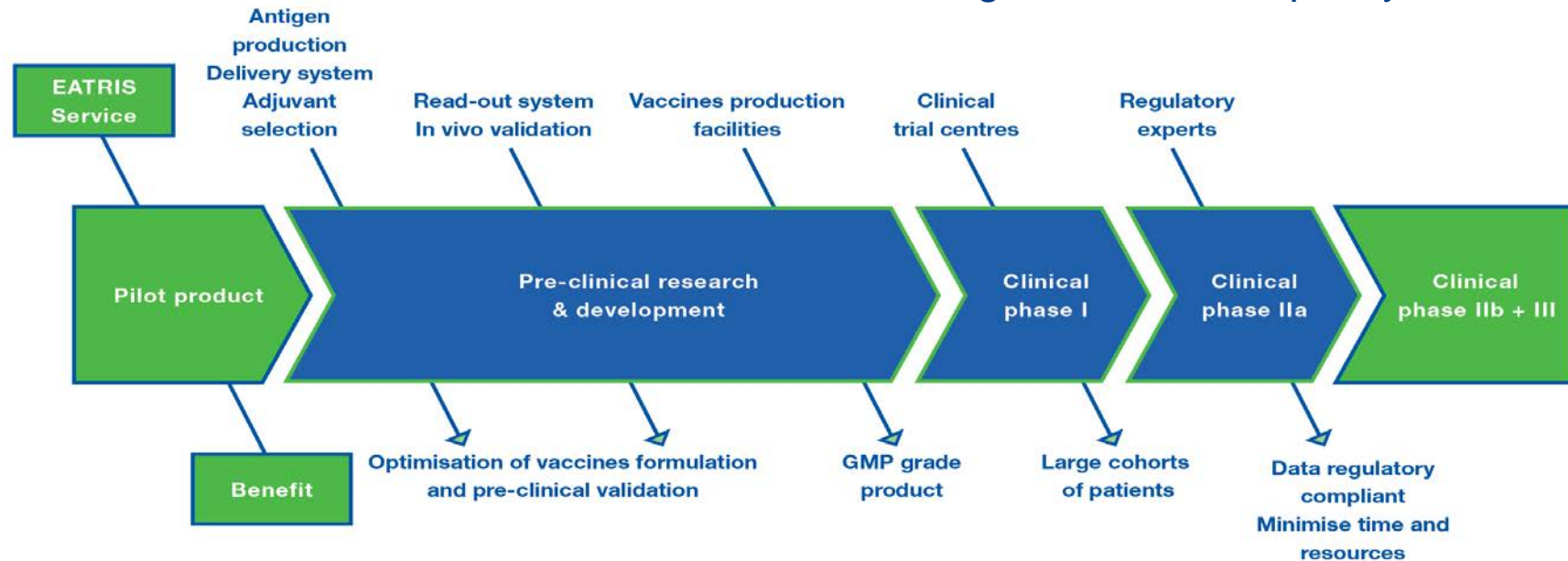
- Small molecules
 - Advanced screening (also for instance in 3D cultures), Development of xenograft and in vivo models, Drug (re-)formulation, (Pre-)clinical validation nanomedicines, etc
- Vaccines
 - Antigen characterisation, Vaccine formulation, Process development, etc

EATRIS-Vaccines Platform



Jan Langermans, BPRC

- 12 European high-end facilities
 - Antigen characterisation
 - Specialised GMP manufacturing facilities covering USP and DSP; Formulation & adjuvantation
 - Animal facilities up to BSL3
 - Animal models including non-human primates and GLP-toxicology
- Immunomonitoring and clinical capacity



EATRIS – How do we work?

1) Provide fast and professional access to high end academic expertise and facilities; market the services

2) Develop long-term solutions to challenges in the translational field (develop the infrastructure)

- ✓ Through large-scale technical development projects
- ✓ By engaging policy-makers, funders, regulators

1.1 Matching clients with infrastructure

- Academia
- Research /charities
- SME/biotech
- Pharma

- Nat'l governments
- Regional dev. Funds
- H2020
- Venture capital
- Pharma partnering

Client projects

Funding

Infrastructure

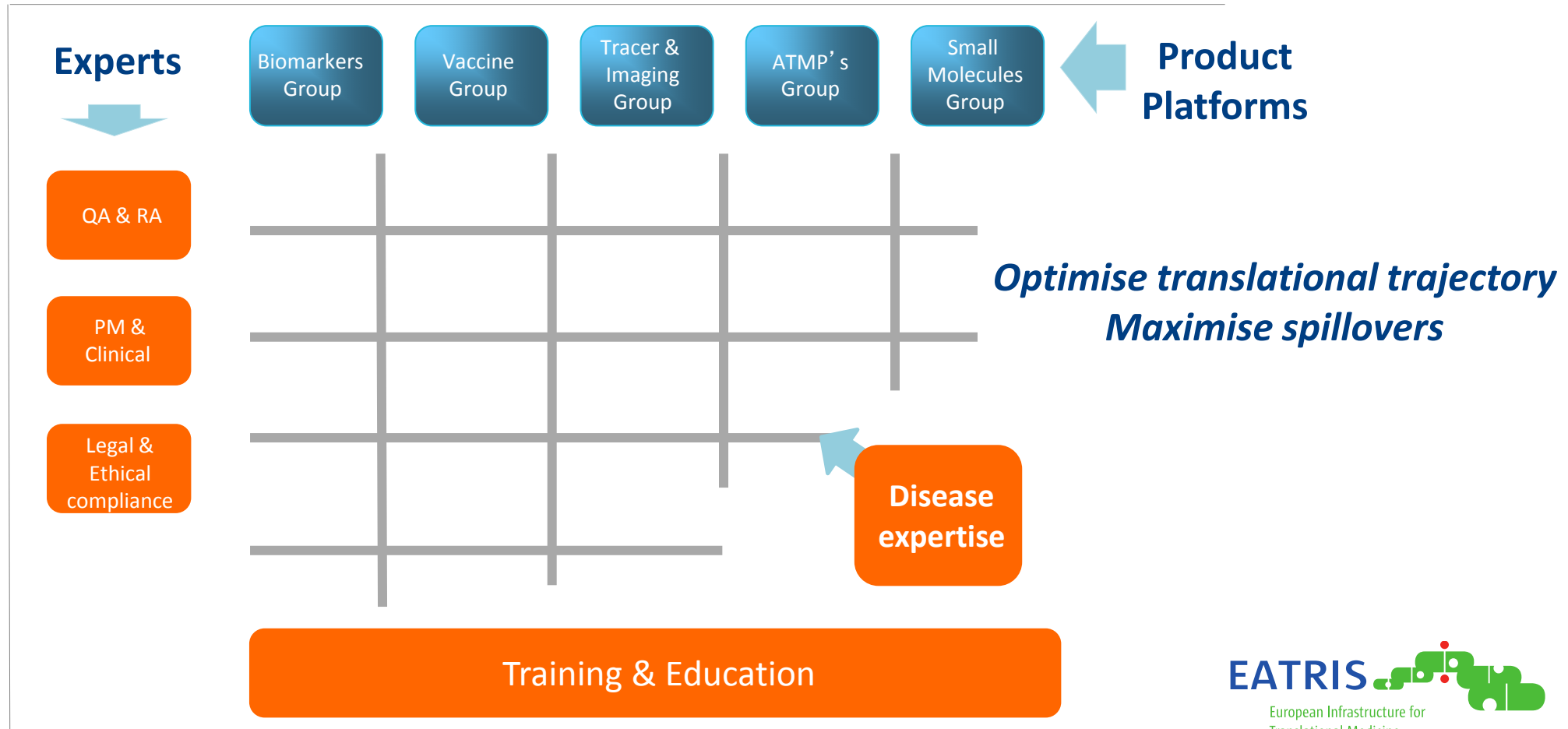
Expertise

- GMP manufacturing
- Licenses
- Imaging facilities
- Biobanks
- Clinical trial units
- Patient groups

- Clinicians
- Latest technologies
- Project management
- Regulatory
- Partnering

1.2 Matching clients with infrastructure

Consortia of centres of excellence in a 3D **matrix** model



1.3 Matching clients with infrastructure

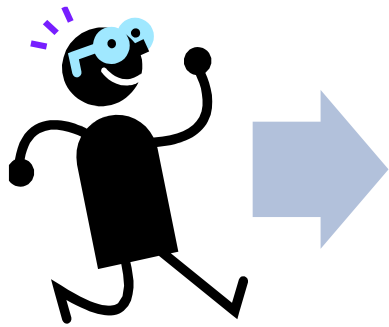
EATRIS
European Infrastructure for Translational Medicine

IMAGING & TRACING
Draft Translational Pipeline

Institution	Country	Translational Pipeline																
		DC	DE	NO	NO	NO	NL	NL	NL	NL	FR	FR	IT	CZ	ES	FI	DE	NL
Pre-clinical Imaging	Optical - general																	
	Bioluminescence																	
	Fluorescence																	
	OCT																	
	DOI																	
	Photo-acoustic																	
	uCT																	
	MRI																	
	PET																	
	SPECT																	
	PET/MRI																	
	PET/CT																	
	Ultrasound																	
	MRI Guided RFU																	
Pre-clinical Radiosotope Production	250																	
	18F																	
	13C																	
	22F																	
Pre-clinical Tracer Production	224/212																	
	212Pb/212Bi																	
	Equipment																	
	13C																	
	22F																	
	220																	
Animal facilities and disease models, surgeries and techniques	PET																	
	SPECT																	
	Optical																	
	Small animal facility																	
	001 1/3																	
	001 3/4																	
	Mouse																	
	Rat																	
	001 1/3																	
	001 3/4																	
Non-human primate facility	Large animal facility																	
	001 1/3																	
	001 3/4																	
	001 1/3																	
001 3/4																		
Data analysis & kinetic modelling																		



1.4 Matching client with infrastructure in 4-steps



1. Service request

- Letter of engagement
- Outline of project goals & service request



2. Matchmaking

- Database identifies relevant infrastructure, disease knowledge and patient cohorts
- Client has lead in selecting partners



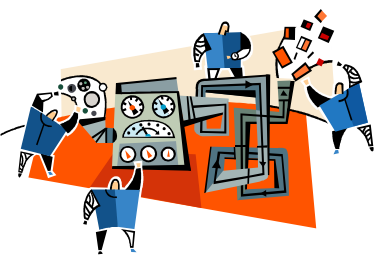
3. Exploration

- Institutes explore project with client
- Client chooses institute(s)
- Project Plan created



4. Initiation

- Define steps, milestones, budgets
- Draw up bilateral contracts - from template or master agreement



How do we add value?

- Improve and accelerate access to high-end infrastructure and expertise (across Europe)
- Support in optimising translational trajectory of each project
- Support portfolio management, reduce risk, waste and cost – translational feasibility, imaging tools
- Harmonisation to facilitate multi-centre (clinical) trials
- Improve effectiveness and return on investment

2. Improving pipeline productivity

In- & External collaboration focusing on 3 areas

- Tools, technologies and methodologies
- Funding, policy and collaboration models
- Regulatory affairs

2.1 Tools, technologies and methodologies

Identification of technical bottlenecks, validation of solutions: examples

- Biomarker Factory
 - Generic framework to ensure optimal QA/QC for BM validation for any given disease/technology
 - Collaborate with industry and sister infrastructures
 - Seeking funding
- Zr-89 accreditation
 - With EANM – enabling imaging-enabled multi-centre trials for antibody development

2.2 Funding, policy & collaboration models

Improving the translational process: examples

- “EATRIS Inside”
 - Public funders use EATRIS to support shortlisted PIs
 - To optimise translational strategy
 - To embed translational tools in project
 - To identify feasibility issues
- Global collaboration: finding solutions to common translational bottlenecks
 - NIH-NCATS (USA), Therapeutic Innovation Australia, CDRD (Canada), MRC technology (UK), EATRIS

EATRIS

European Infrastructure for
Translational Medicine



2.3 Regulatory Affairs

Access to expertise & working with regulators: examples

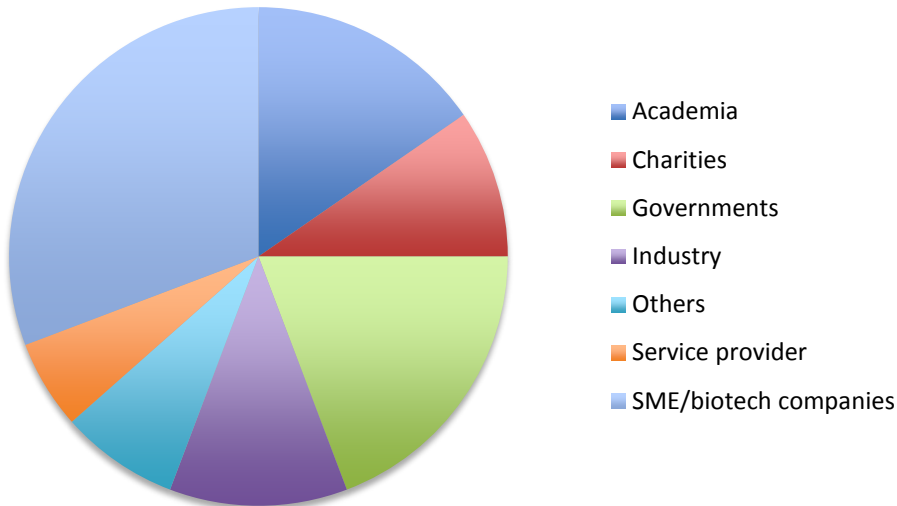
- Regulatory Knowledge & Support Centre
 - Provides reg support for any given project
 - Makes reg. intelligence & resources available
 - Engages regulators in dialogue
- MoU - NL Medicines Agency
 - Provide mechanism for early, non-binding advice for projects not yet mature enough for Sci. Advice procedure
 - Similar agreement with CZ and FI competent authority

EATRIS

Project activities performed (Aug 2015)



2014



2015

