



# EATRIS ERIC

The European Infrastructure for  
Translational Medicine

The ISS and its role in the European  
Research Infrastructure

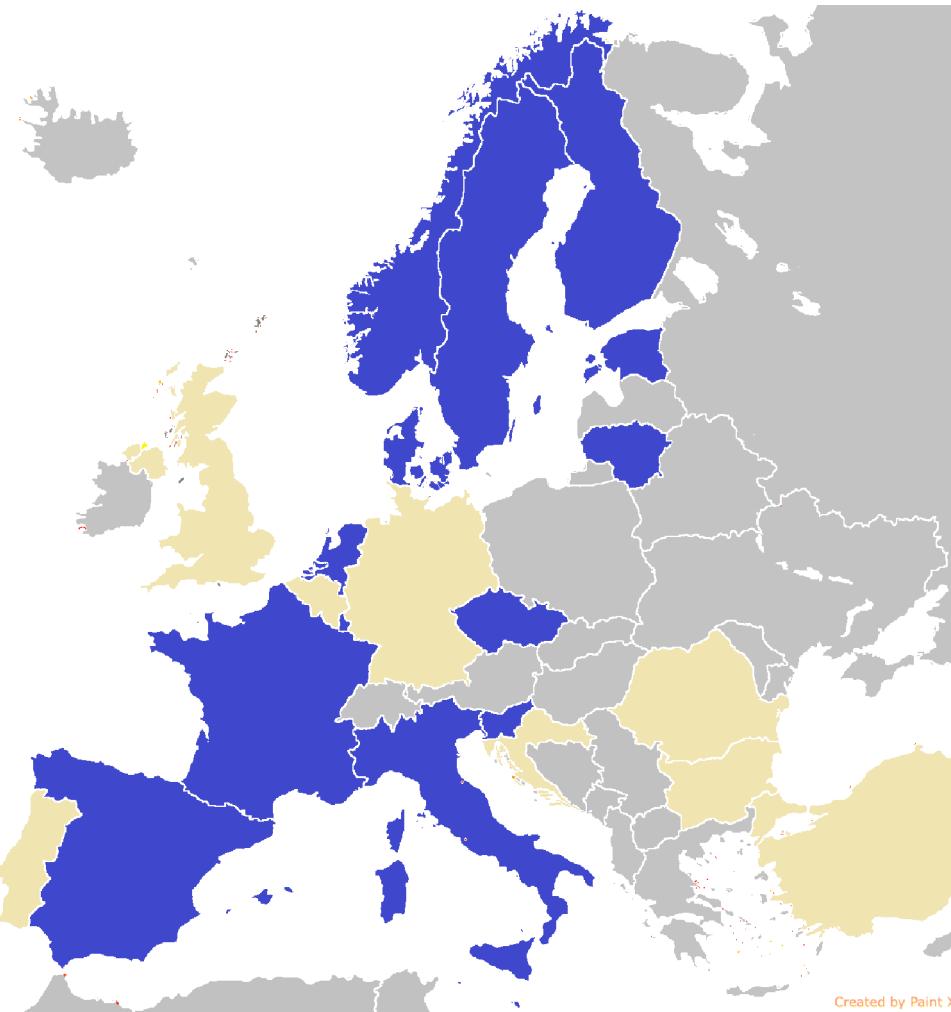
EATRIS ERIC and the ISS

European Network of Excellence for Paediatric Clinical Research

# EATRIS ERIC

- **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**

# EATRIS Members



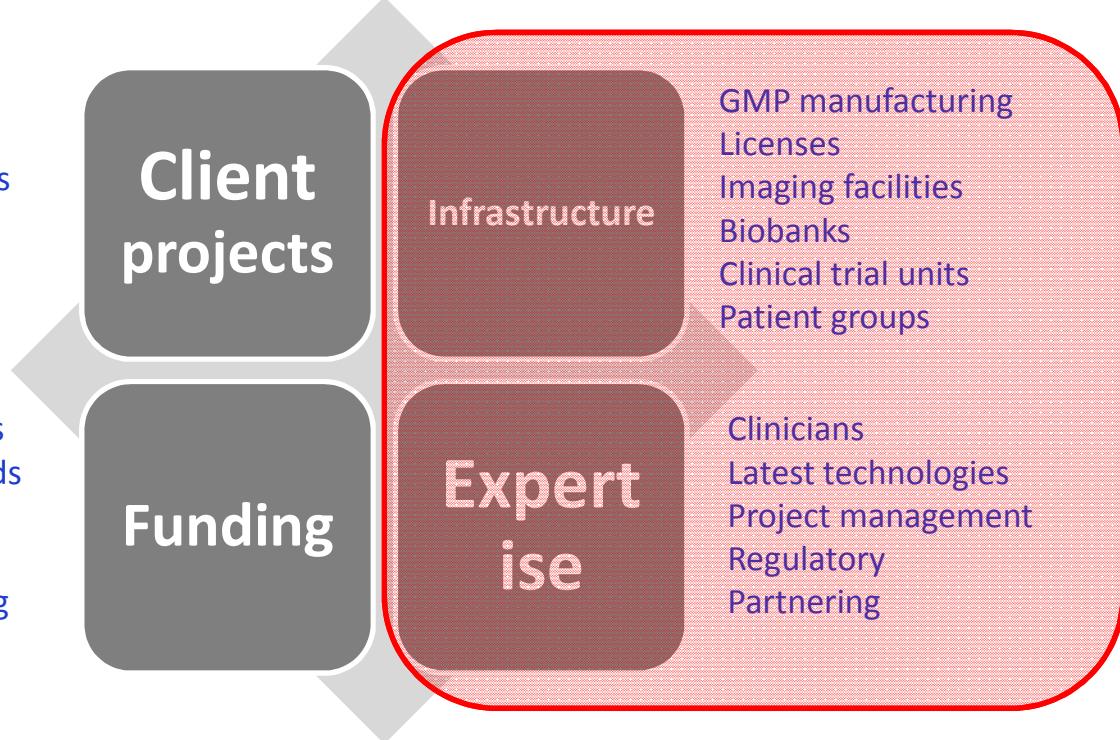
Participating countries :  
CZ, DK, ES, FI, FR, IT, LU, LV,  
NO, EE, SE, SI, NL (Host)

Interactions ongoing with:  
BE, HR, DE, LT, PT, TR, UK

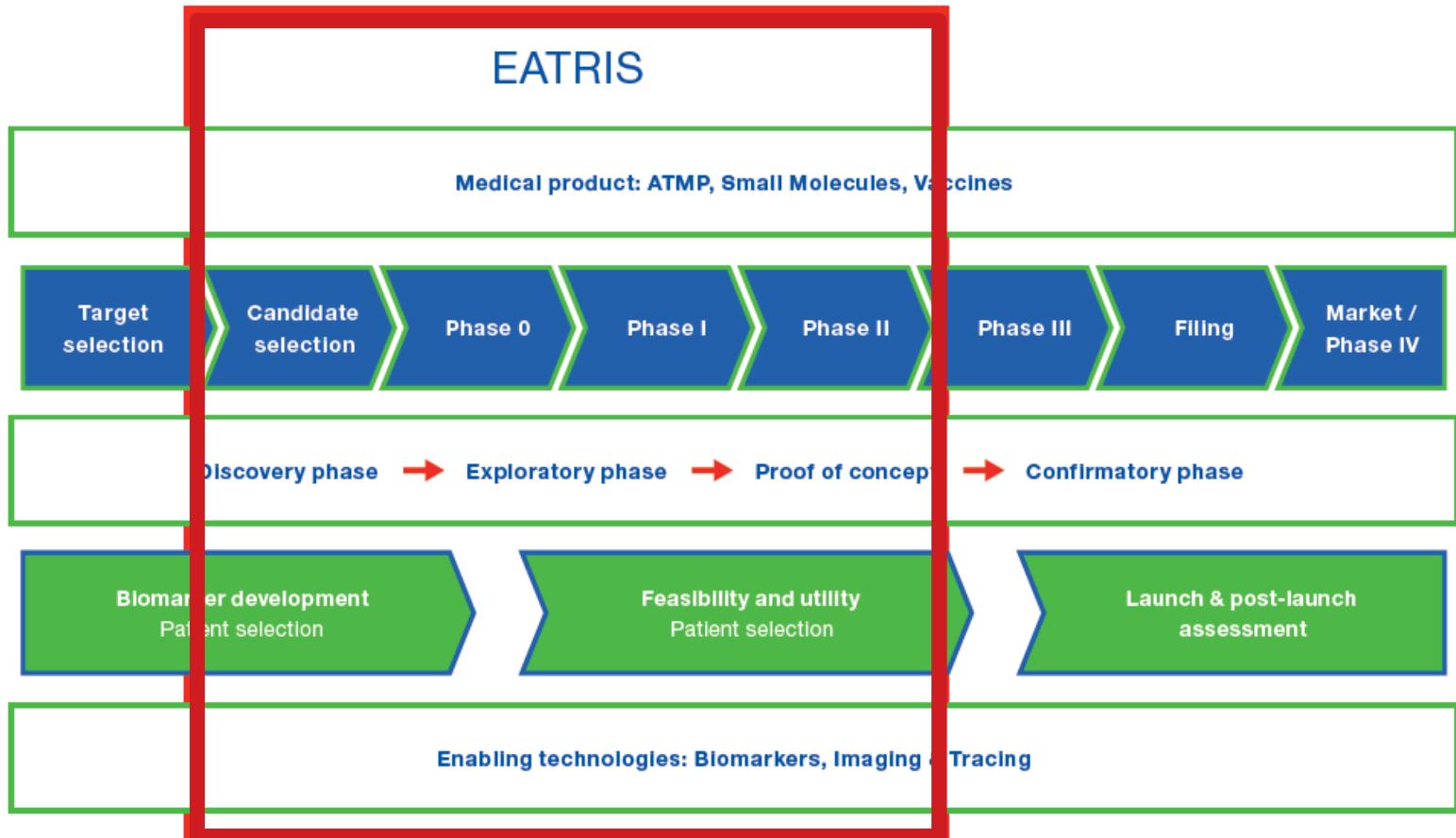
*The Infrastructure: 80+  
Academic & non-profit  
research institutions of  
excellence in translational  
medicine*

# Matching clients with infrastructure

- Academia
  - Research /charities
  - SME/biotech
  - Pharma
- 
- Nat'l governments
  - Regional dev. Funds
  - H2020
  - Venture capital
  - Pharma partnering



# EATRIS scope of operations

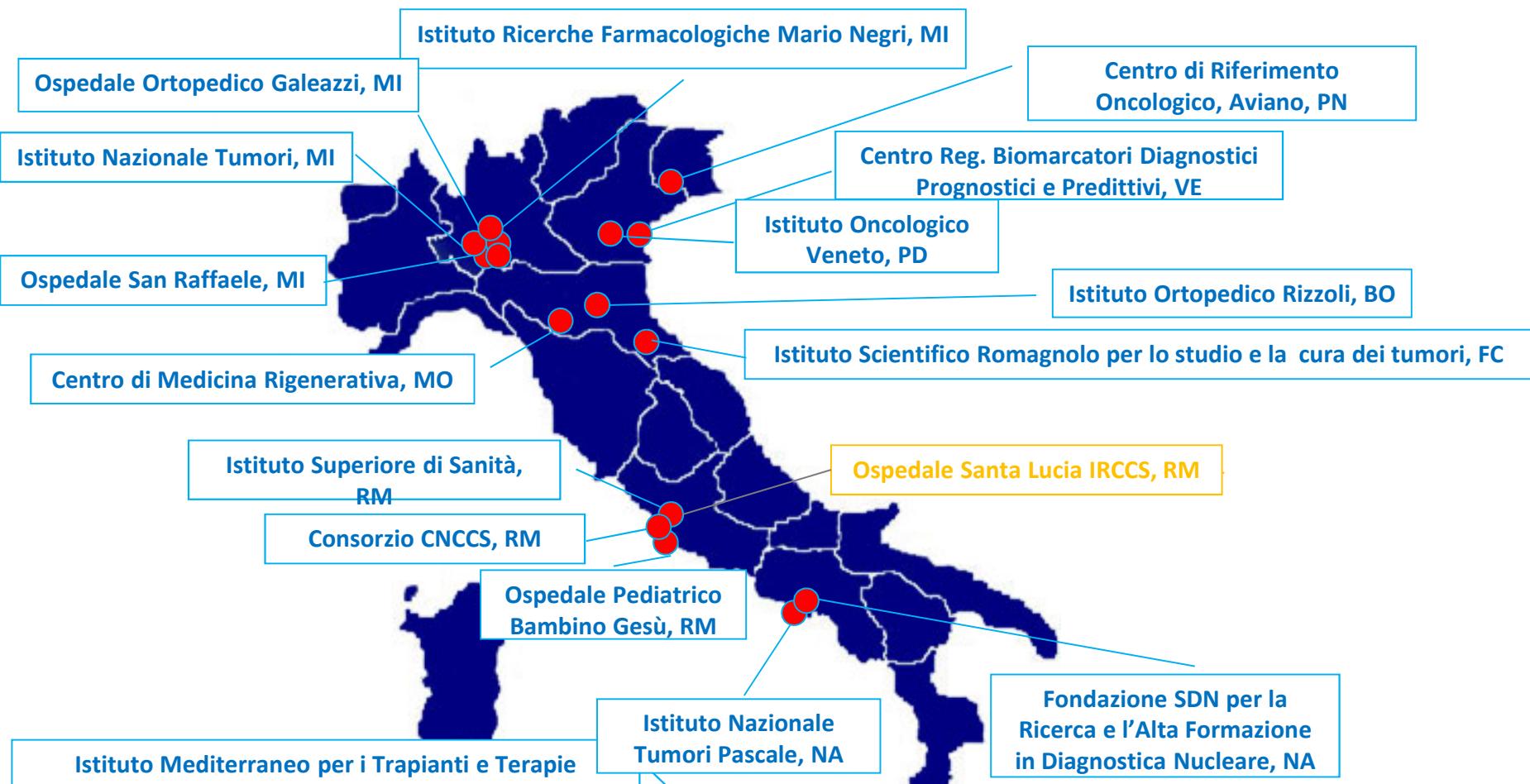


- EATRIS ERIC and the ISS

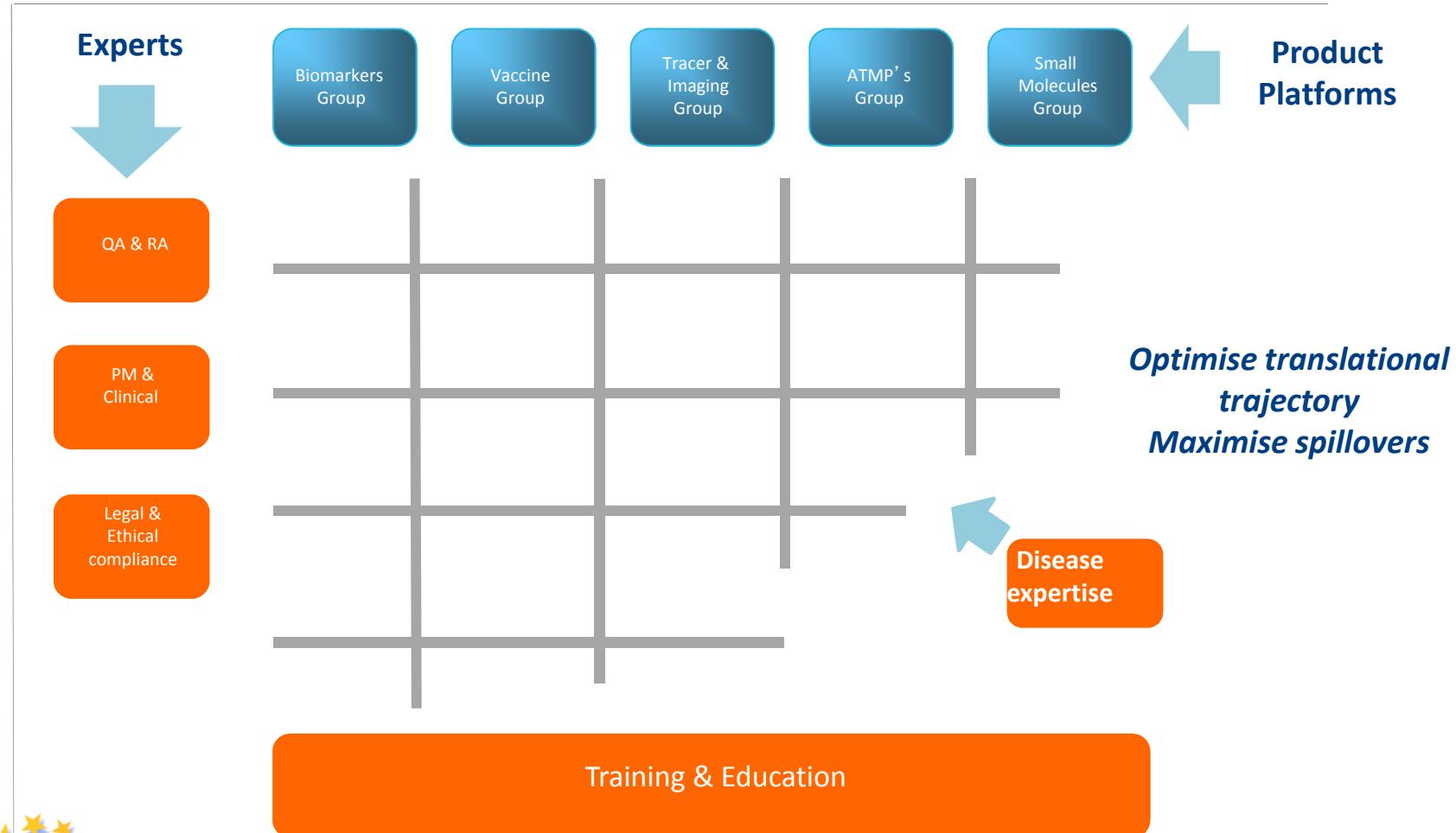
# The IATRIS Network

- In Italy, the Istituto Superiore di Sanità (ISS), is the EATRIS coordinator and has promoted the creation of the IATRIS, (Italian Advanced Translational Research Infrastructure)
- IATRIS is the national node coordinating the Translational Medicine activities in Italy.
- The association, A-IATRIS has been subscribed on December 15, 2015 which now includes 16 centres
- The Association finalities are the delivery of services to national and international users by collaborative or contract research project.

# Membri della A\_IATRIS

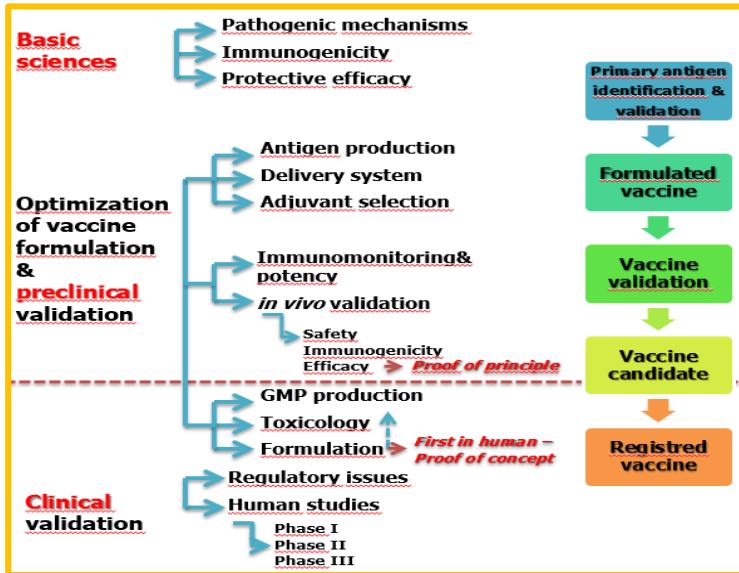


# Matching clients with infrastructure

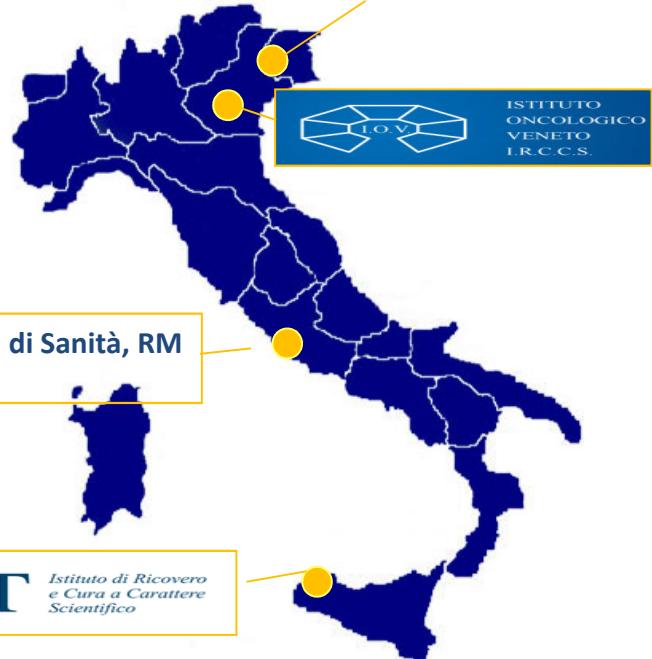


# Vaccines Platform

## Obiettivi



Istituto Superiore di Sanità, RM



# Small Molecules Platform

## Principali Infrastrutture e Metodologie disponibili

- Animal Care Facilities: Transgenic, PDX behaviourl
- In vivo imaging NMR, micro TAC, micro PET
- Peptide synthesis and purification
- PK and PD infrastructures
- Proteomic, Genomic, Metabolomic infrastructures
- Proprietary ChemBank with 150.000 chemical compounds “drug-like”
- In silico modeling

Istituto Ricerche Farmacologiche Mario Negri, MI



Istituto Scientifico Romagnolo per lo studio e la cura dei tumori, FC

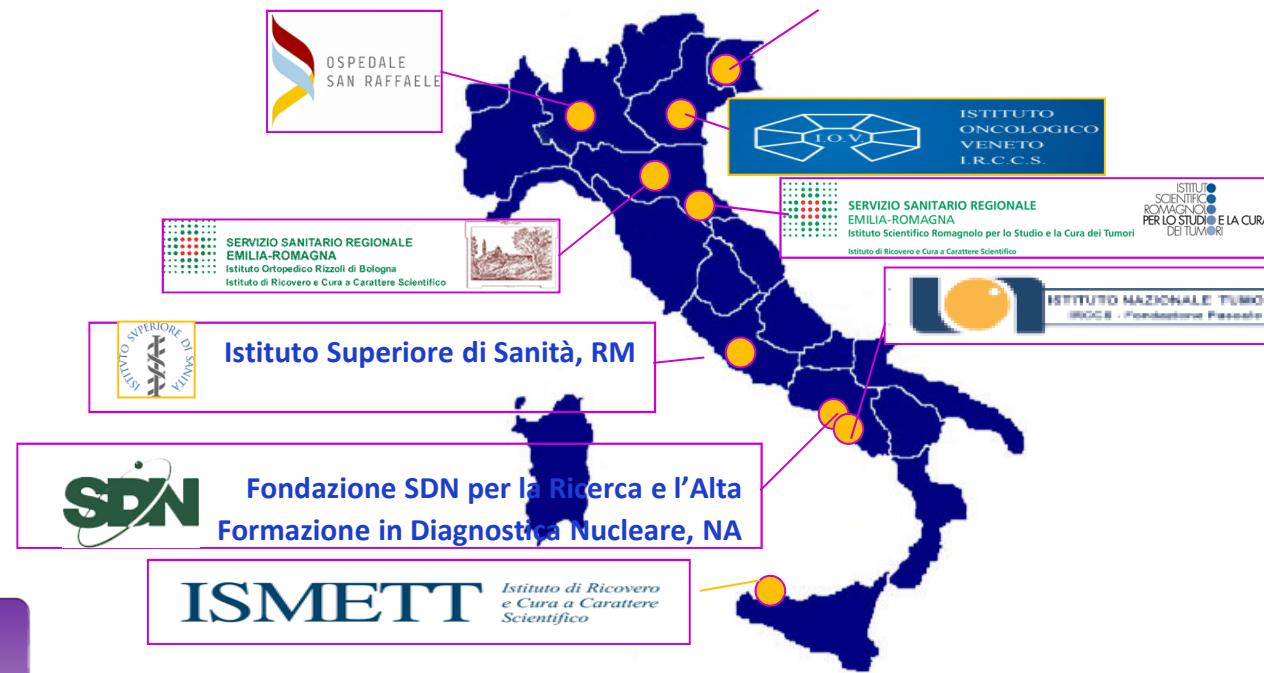
Istituto Superiore di Sanità, RM

Consorzio CNCCS, RM

Istituto Nazionale Tumori Pascale, NA

# Imaging & Tracing Platform

**CRO AVIANO** Centro di Riferimento Oncologico  
Istituto di ricovero e cura a carattere scientifico  
Servizio Sanitario Regionale FVG



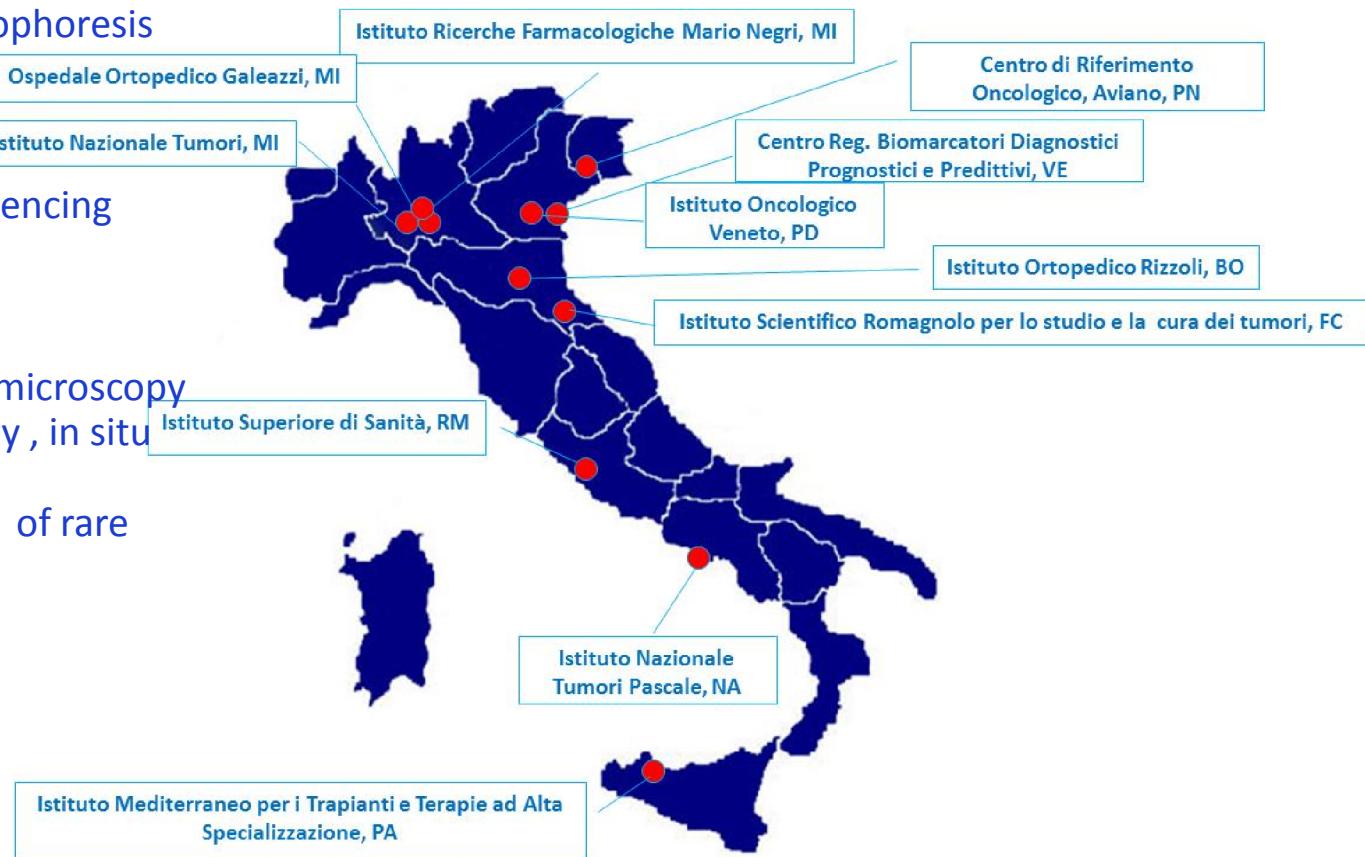
## Imaging Molecolare

- Early diagnosis
- Biomarker identification and validation as predictor of therapeutic response
- target therapy, stem cell imaging & tracking
- Tissue and organ transplant

# Biomarker Platform

## Available technologies

- Proteomics
  - Mass spectrometry
  - reverse phase proteomic array
  - Chromatography
  - Bidimensional electrophoresis
- Genomics
  - microarrays
  - Q-PCR
  - next generation sequencing
- Immunoassay
  - ELISA
  - multiplex
- Optical and electronical microscopy
- Histology , histochemistry , in situ hybridization
- Flow-citometry / Sorting of rare population
- Biological assays

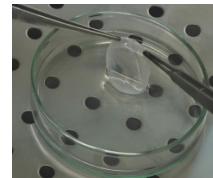


# ATMP / Biologicals Platform

**Excellence in Italy : Three of the five ATMP on the market were developed in Italy**



**Holoclar** (CMR/Chiesi-autorizzato 2015):  
TEP (corneal tissue with autologous limbal stem cells for cornea regeneration)



**Strimvelis** (OSR/Telethon/GSK-autorizzato 2016): GTMP  
(autologous CD34+ cells transduced with a retroviral vector encoding human ADA cDNA sequence, for treating ADA-SCID children)



**Zalmoxis** (MolMed-autorizzato 2016):  
CTMP (allogeneic T cells genetically modified with HSV-TK) for treatment of GVHD within a haploidentical haematopoietic stem cell transplant for various types of blood cancer)



# “The right expert at the right time”

Franca Moretti

Coordinatrice A\_IATRIS

Rappresentante italiana nel Board  
of National Directors di EATRIS-ERIC

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