

# VHIR Innovation Process



## Innovation & Business Development Unit

**Rafael Navajo,**

Director of Innovation and Business Development VHIR ([Rafael.Navajo@vhir.org](mailto:Rafael.Navajo@vhir.org))

**Gabriela Fuentes,**

a.i. Head of Innovation VHIR ([Gabriela.Fuentes@vhir.org](mailto:Gabriela.Fuentes@vhir.org))



# What is Innovation?





**Innovation** is any  
**improved** process or product,  
**made available** to users,  
that generates **Impact**

---

# Invention vs Innovation

The initial research  
advance

The translation of the advance  
to a marketable product



# Why should we innovate?



Solve  
**NEEDS**

Get  
**SOLUTIONS**

Create  
**IMPACT**

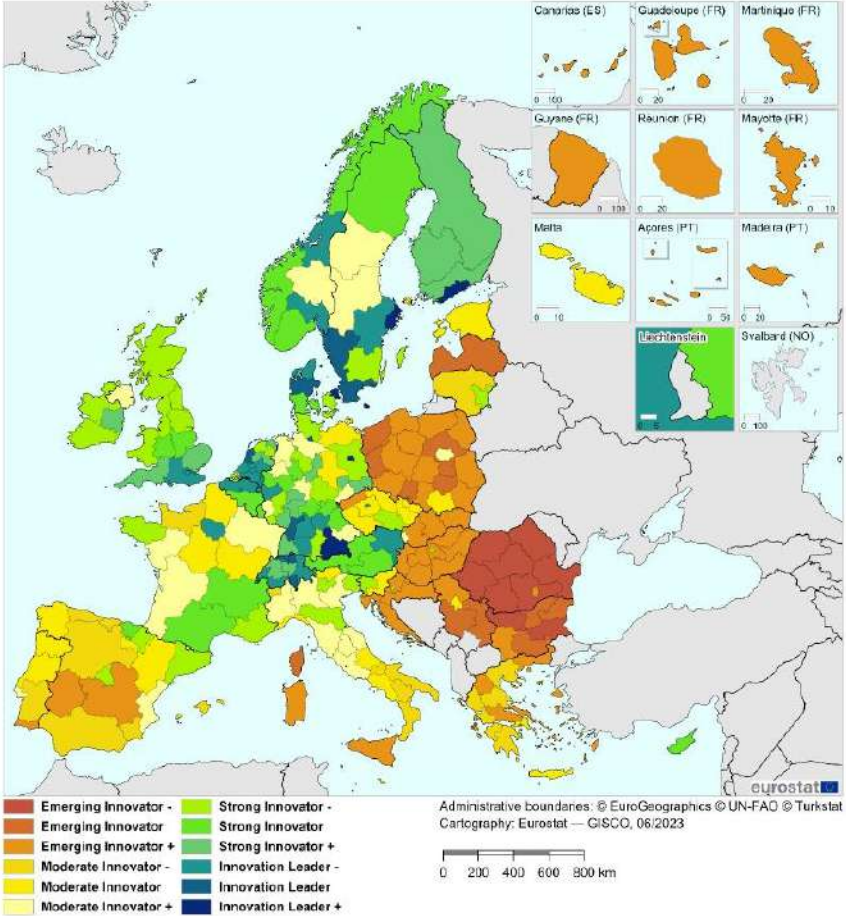
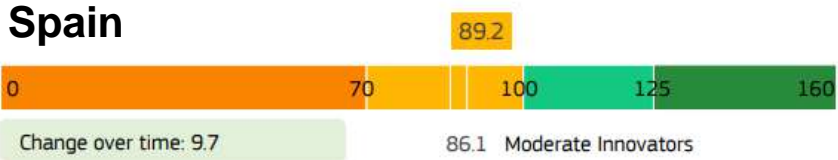
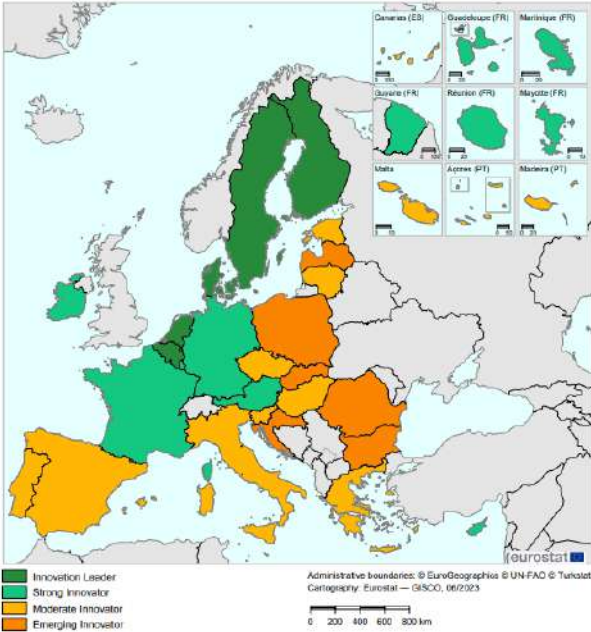
Achieve  
**CHANGE**

Generate  
**KNOWLEDGE**

Provide  
**NOVELTY**

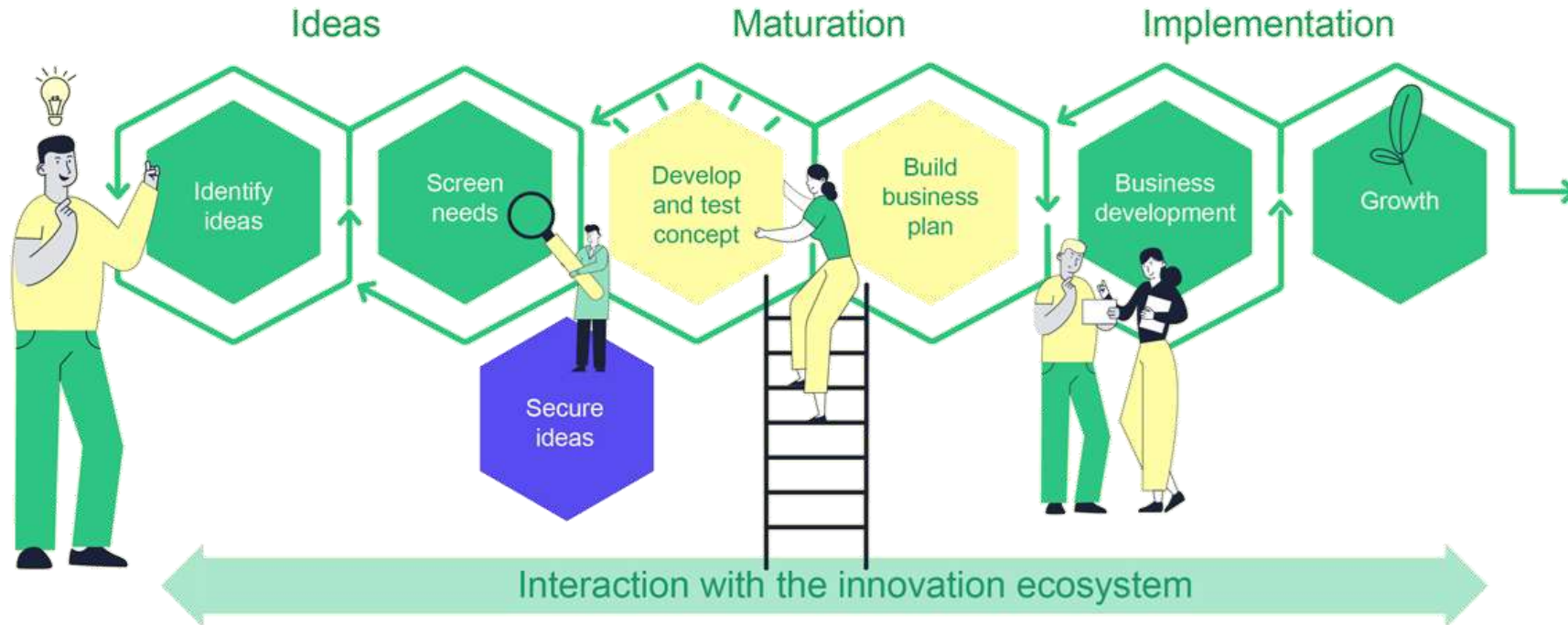


# Why should we innovate?



Spain is considered as a **moderate innovator** at the European Innovation Scoreboard

# The Innovation process



Not linear and often turbulent, that is why it is important to plan and constantly test



# Innovation in Health



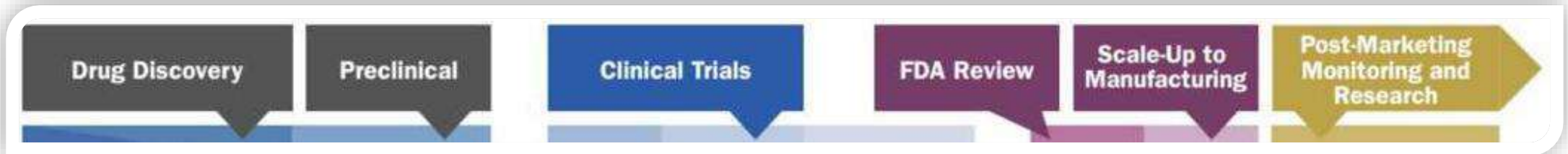
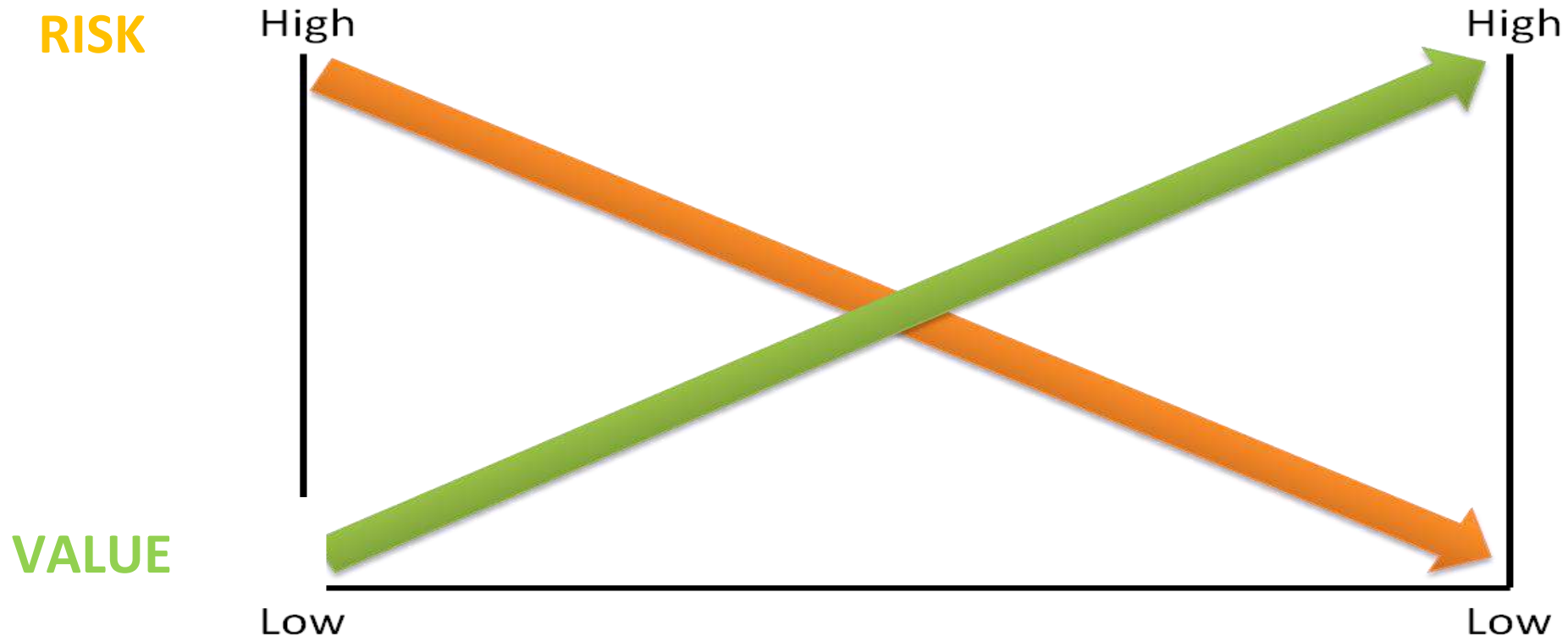


**Ethical & Social** concerns  
bind an strict  
**regulatory framework,**  
which associates to an  
**increased risk** for projects

# Risk vs Value

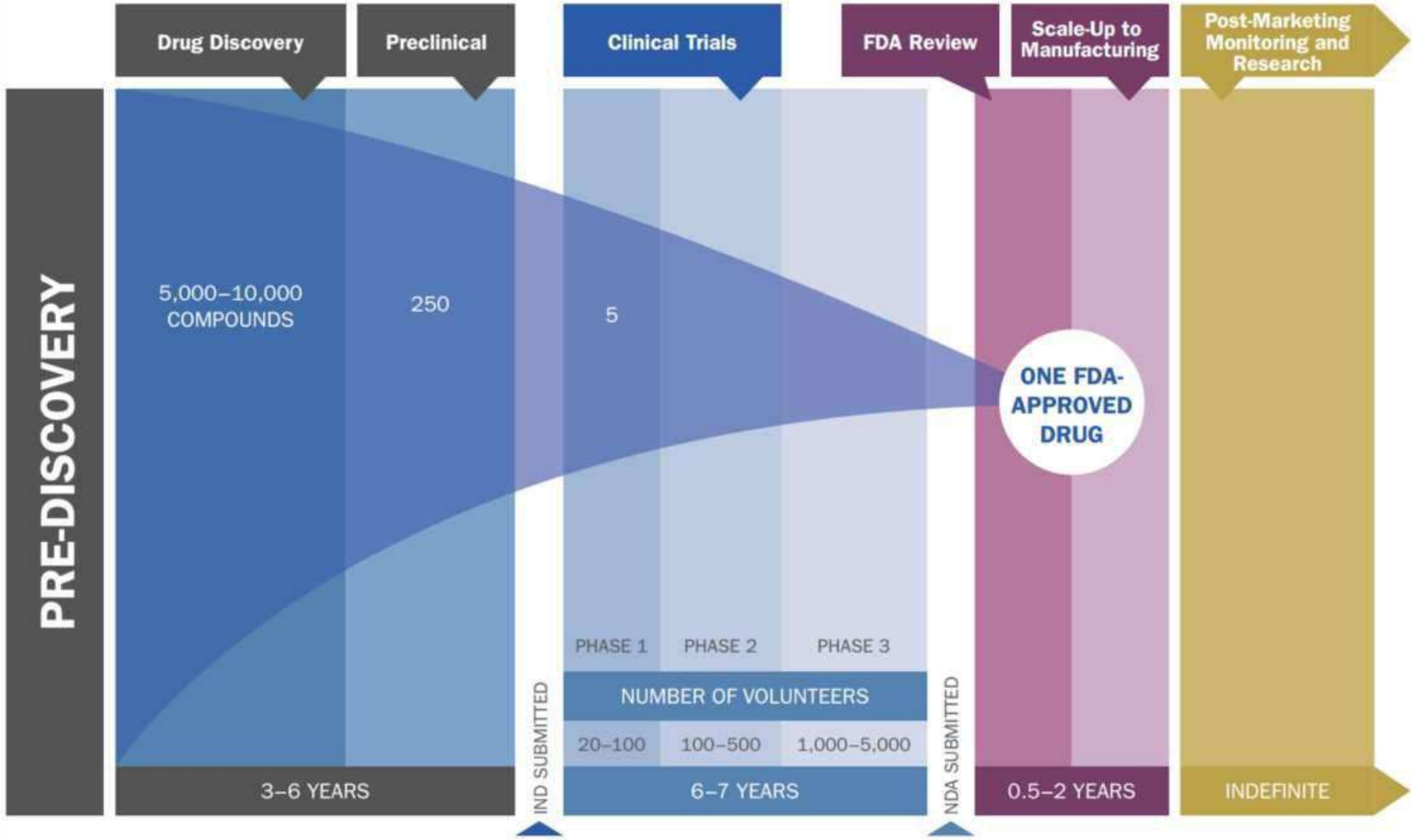
The healthcare innovation process is bound to a high risk of failure

The more we do for a project, the more value it gains





Developing a new medicine takes an average of 10-15 years.



SOURCE: Pharmaceutical Research and Manufacturers of America, Drug Discovery and Development: Understanding the R&D Process, [www.innovation.org](http://www.innovation.org).


# Impact

All projects in Health Innovation, big and small,  
have a direct impact in PATIENTS



# **Technology Transfer**





**Technology transfer** is  
the part of the innovation  
process in which **scientific  
results** are conveyed **to  
the market place**



# **Innovation Process**

# Innovation Process Today

## Proactivity, Structure and Innovation Leadership

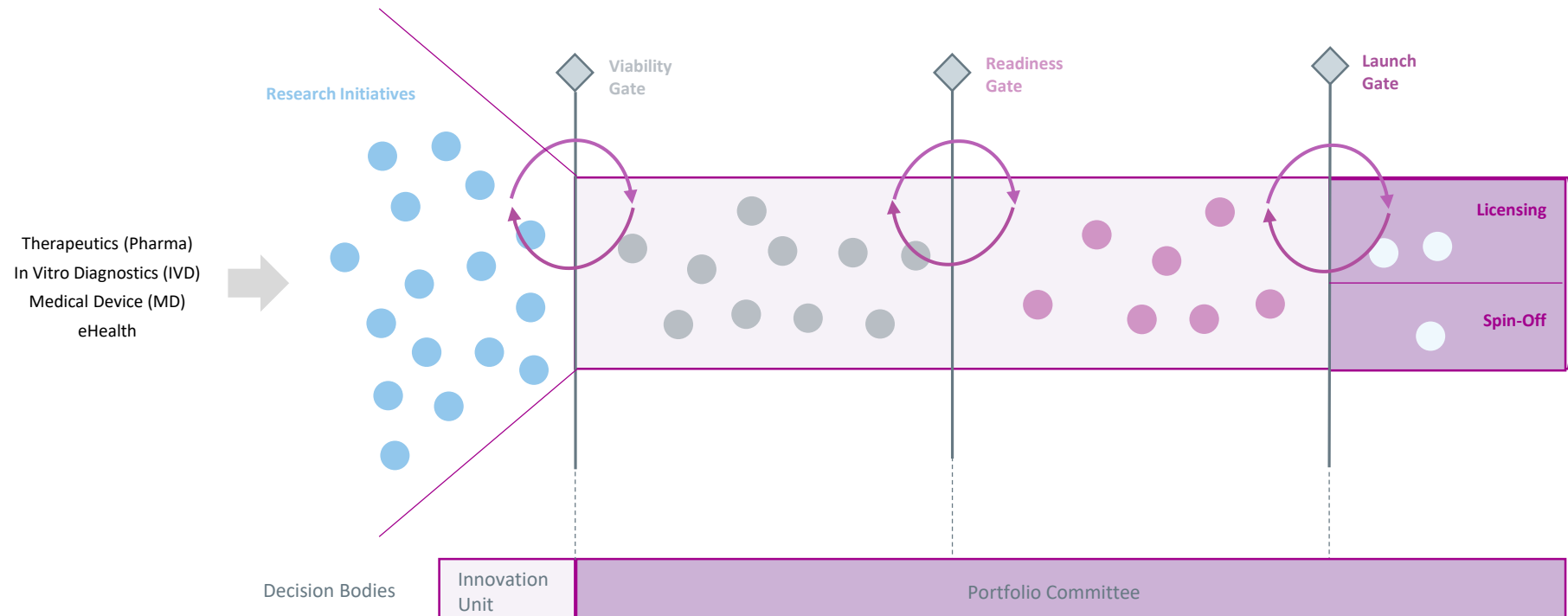
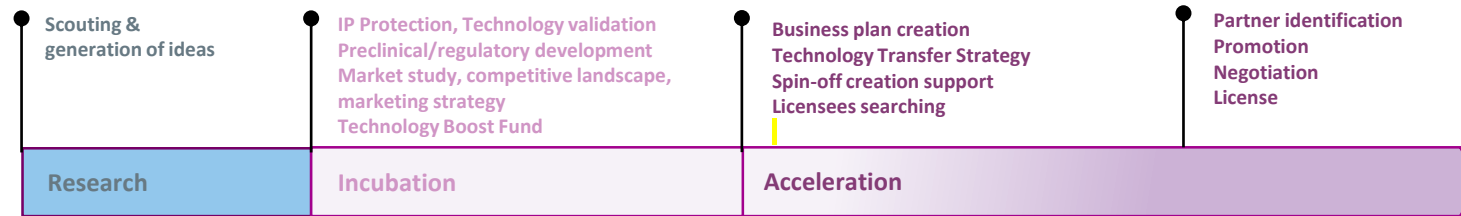
The new **lean innovation process** boosts the technology transfer and impulses the relations with the different stakeholders.

This **new proactive approach**, enhances success rates by addressing concerns early (“fast fail approach”), fostering a culture of adaptability and transforming the innovation process in a more structured, responsive, conducive and sustainable process.



# New Lean Innovation Process

Based on three gates that determine the asset maturity in a multidimensional perspective.



# Evaluation system through GATES

- Creation of a new process that ensures innovation projects **transfer to the market** and maximizes **impact to society**. Through this process, innovation projects mature in a multidimensional framework across 3 different gates:



## Viability Gate

Evaluation of assets viability with a multidimensional perspective



## Readiness Gate

Multidimensional maturation of assets; consolidation of the business and the technology transfer strategy



## Launch Gate

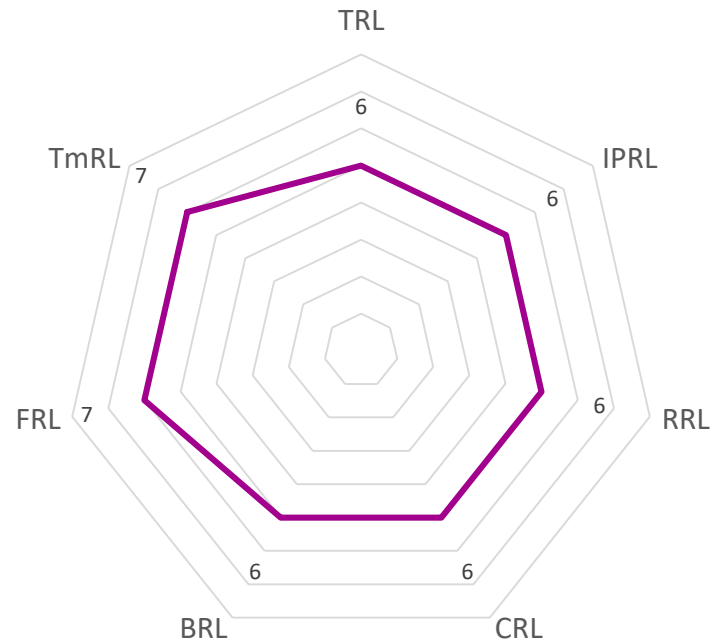
Execution of technology transfer strategy (licensing, spin-off creation)

- Innovation assets are classified into **4 categories**:
  - Therapeutics (Pharma)
  - In Vitro Diagnostics (IVD)
  - Medical Device (MD)
  - eHealth

# VHIR's adapted Multidimensional Innovation Readiness Model

Inclusion of an additional area,  
the **Regulatory Readiness Level**, which is  
crucial for the development of healthcare  
innovation projects:

- Technology Readiness Level (TRL)
- IP Readiness Level (IPRL)
- **Regulatory Readiness Level (RRL)**
- Customer Readiness Level (CRL)
- Business Model Readiness Level (BRL)
- Funding Readiness Level (FRL)
- Team Readiness Level (TmRL)



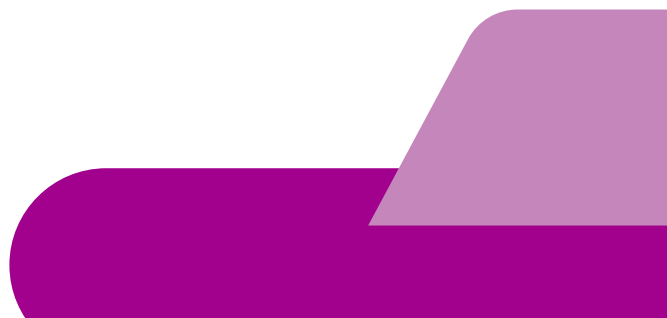


---

# Novelty & Development

Ideas need to be new in some way

Technology Readiness Level (TRL) scale is used in assessing the development status of an idea



---

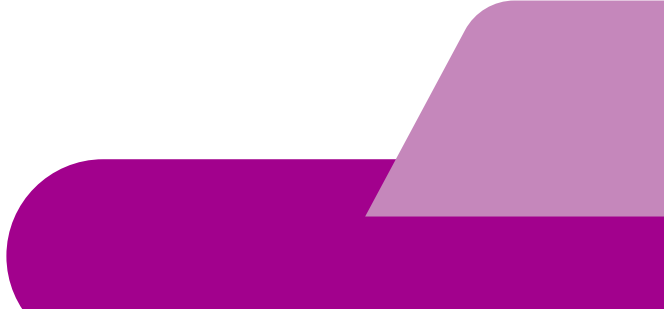
# Industrial property

VS

# Intellectual property

Patents for inventions, utility models, Trademarks and industrial designs

Literary Works, copyrights, artist's know-how, music, cinematography and architectural designs



---

# Patentability requirements

## NOVELTY

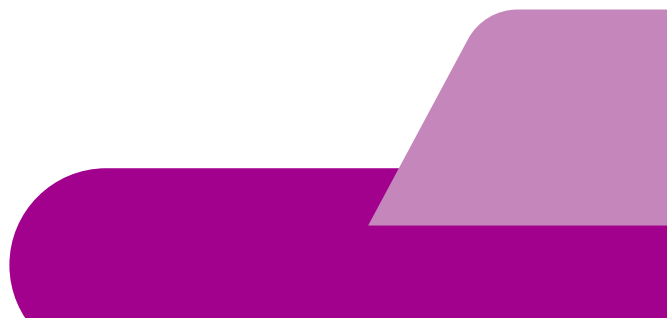
Not known to the public  
before the patent date

## INVENTIVENESS ACTIVIY

It is not an obvious  
modification of something  
already existent

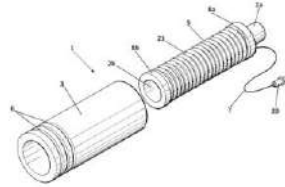
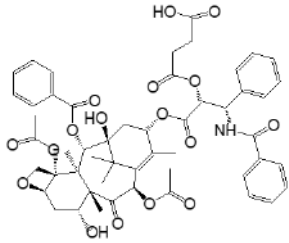
## INDUSTRIAL APPLICATION

It can be manufactured or  
used in any type of industry





# IP Protection



Patents & Utility Models



Industrial Design



Registered Brand



Algoritme d'una App  
per al seguiment de  
pacients crònics

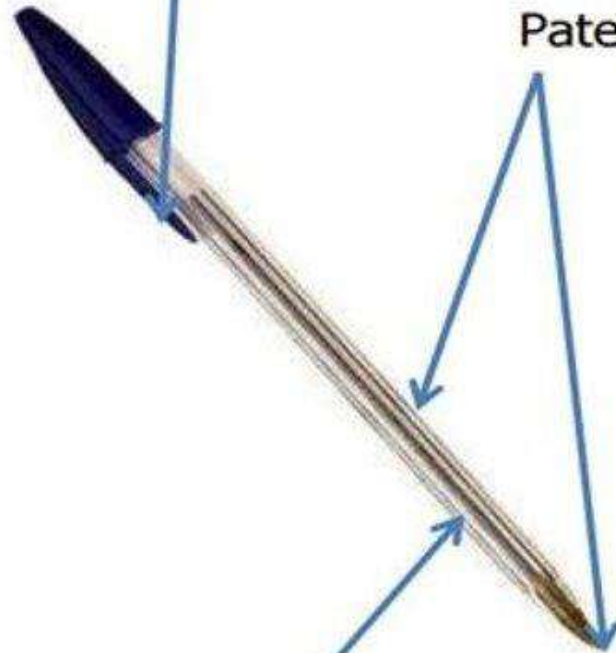


Author's Rights



Trade Secret

Modelo de utilidad



Patente

Diseño industrial (modelo industrial)



Marca mixta

**No sabe fallar**

Aviso comercial



# Publishing vs Patenting

Can wait

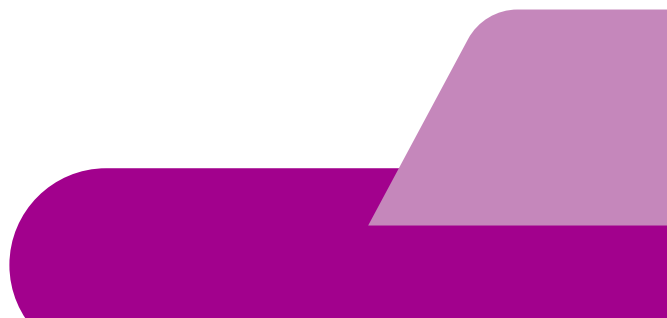
**Nothing** can be published  
Long term strategy: inventorship,  
competitiveness, market adressed

---

# Licensing vs Spin-off

“Renting” my asset to others so they can further develop or commercialize it

Creating a novel company to further develop or commercialize an asset belonging to a research institution





---

# What can we license?

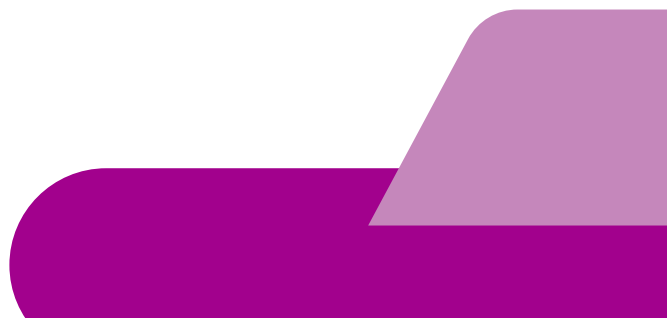
- Patents and utility models
  - Trade Secret
  - Copyrights
  - Brands
  - Industrial Designs
- 

---

# Spin-off vs Start-up

Creation of a new company descending from an institution that will be responsible of continuing with the development and validation of the invention.

New company, usually technology-based, that develops a new product and aims to scale it up in collaboration with a partner that develops the activity.



# VHIR's innovation



- **32** IP assets
- **13** licenses



- **127** patent applications
- **37** licensed (29.1%)



- **9** spin-off



- **20** spin-offs & Start-ups:
  - 16 active
  - 2 exit / 2 closed



- 2 Policies:
  - IP policy
  - Spin-off policy

- **EUHA innovation network**



- **+50M€** Competitive funding: Public – Private consortia
- **+20M€** Public – Private Collaborations
- Member of ITEMAS (**500K€**)

- **2,6M€** Returns for VHIR (up to date)
- **33M€** Funding, investment raised (2023)



# Spin-off/Start-up portfolio & Income

16 active (VHIR)



3 closed



2 exit



+1.2M€

3 active (VHIO)



Impact:

**+70 people**  
Employed up to date

**+95M€**

Investment accumulated

**496M€** → **8.8M€**  
Market Value → VHIR shares

*Expansión*

VHIR as “the Spin-off Factory”



# The Innovation and Business Development Unit





# What do we do?

- We identify and support **innovative solutions with high impact** in healthcare across Innovation process in order to promote its transfer to the market.
- We manage and **public-private collaborations** to support Innovation assets.
- We **boost SpinOffs creation and Startups collaborations**



To create **impact** in patients health and quality of life

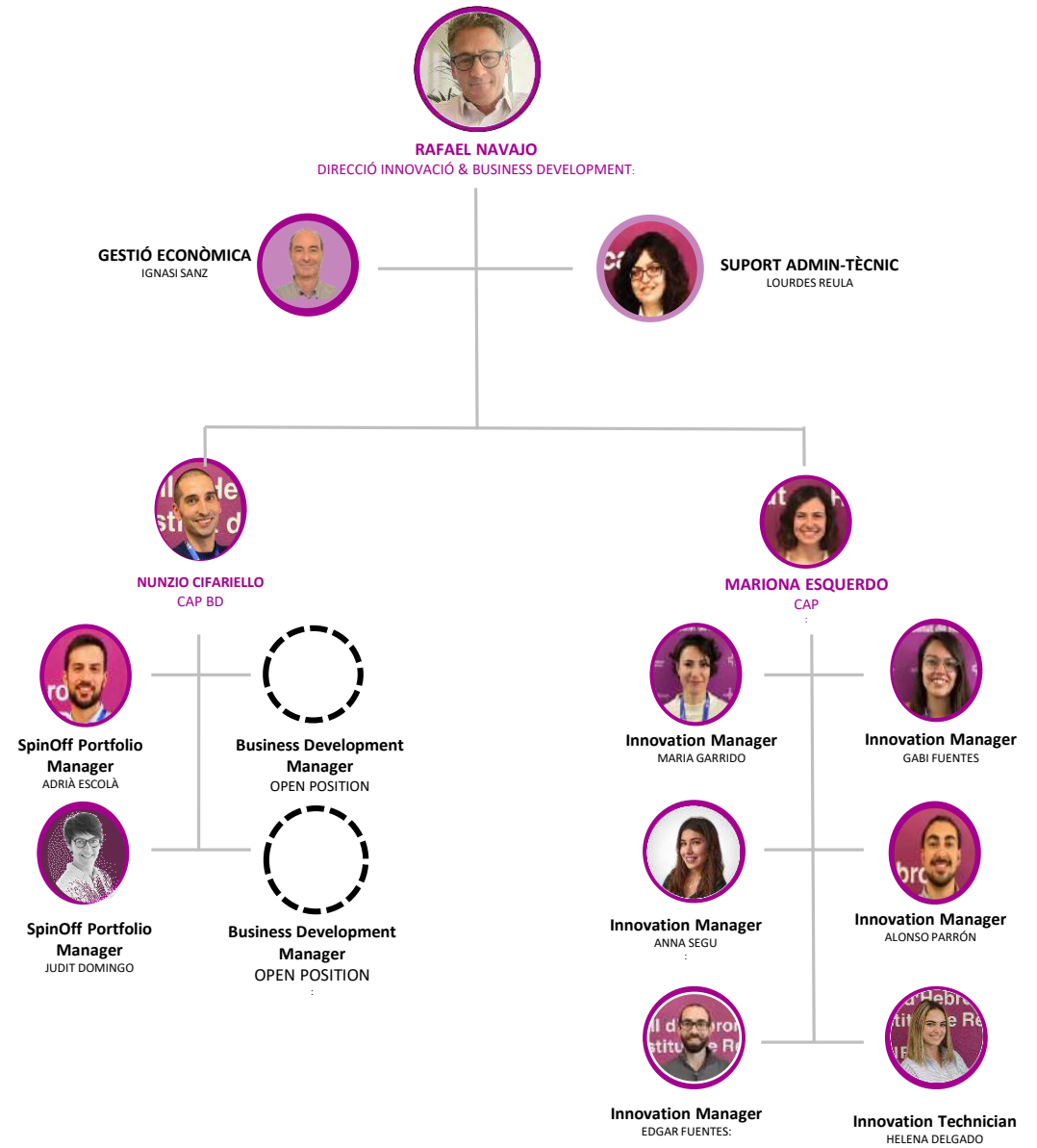


To generate **social and economic wealth** in a responsible and sustainable manner



To become a **global model** for new healthcare ecosystems

# Innovation and Business Development Team



# Thank you!

[innovation@vhir.org](mailto:innovation@vhir.org)