



STRETCHING INNOVATION

WISE, from lab to venture.

22 June 2022

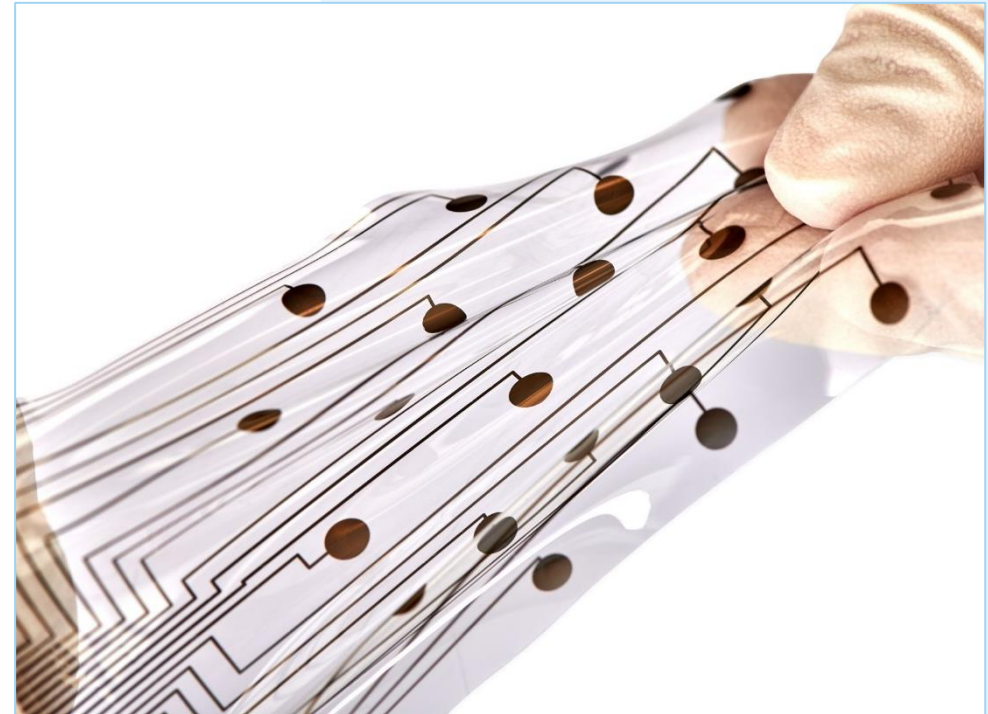
Luca Ravagnan
CEO

wiseneuro.com



WISE

What do we do?



WISE vision

First to produce **Neuro-leads**:

- **soft & conformable,**
- **stretchable,**
- **minimally invasive.**

Intraoperative lead WCS[®]: commercial in EU



Chronic Heron[®] lead: engineering finalization



**Revolutionizing leads
for any medical device**

The unsolved Medical need of Neuro-leads

Soft Neuro-tissue



Hard Neuro-leads



Huge mechanical mismatch

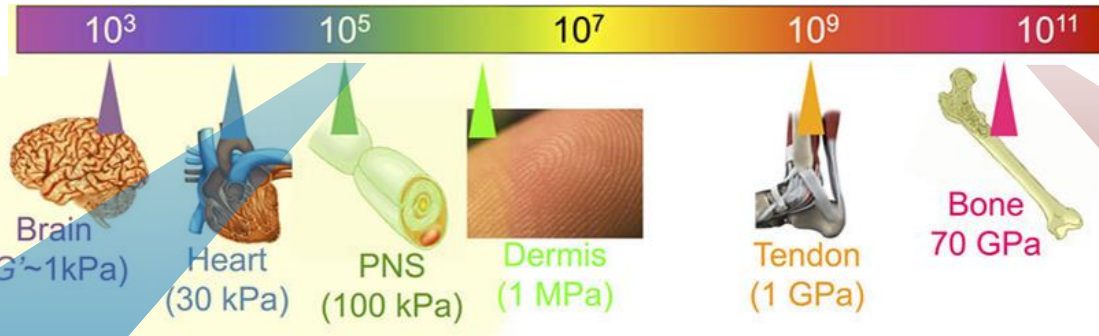
Today
Neuro-leads Market
excides \$600M

The unsolved Medical need of Neuro-leads

Soft Neuro-tissue



Young's modulus



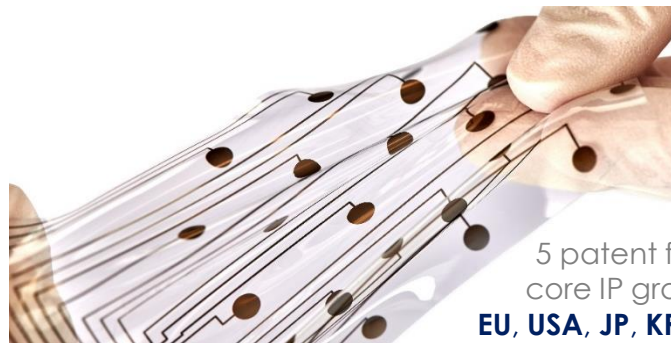
Soft elastomeric conductor

WISE technology closes the gap

Hard Neuro-leads

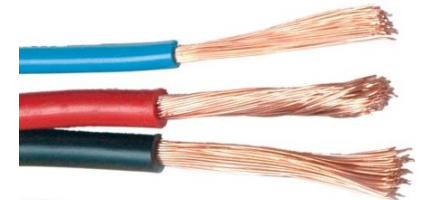


Hard metal conductor



5 patent families, core IP granted in EU, USA, JP, KR, IL, CA

- Reduces **INVASIVITY**
- Increases **CONFORMABILITY**
- Allows **NEW GEOMETRIES**



WISE Cortical Strip vs. Conventional Strips

The Past



The **WISE** future



Test performed on an explanted bovine brain

Better contact to the brain



**Improving the reliability of
intraoperative Neuromonitoring**

WISE's Team

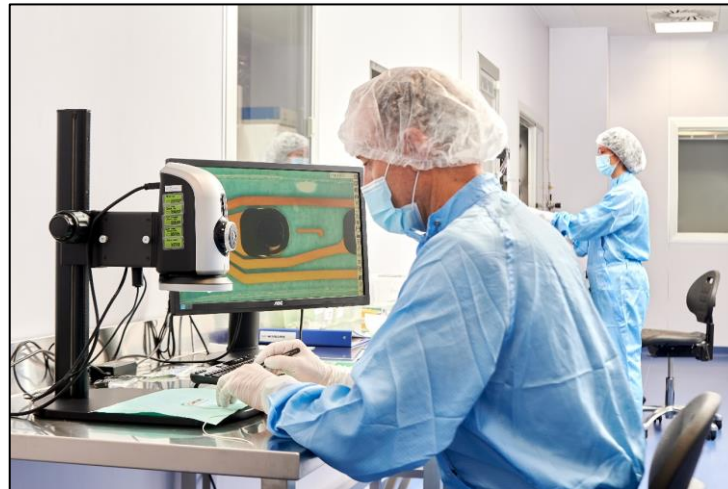


30 operatives, 50% women,
80% graduated, 25% PhD or Master level

WISE's Factory

Italian headquarter:

- 1500 m² facility
- Offices, Labs and Production
- 120 m² ISO7 cleanrooms



WISE's Financial Resources

€26M of Equity Investments

in 6 rounds, from Angel to Series C

xyence



eureka!
venture sgr

New Frontier

cdp Fondo Nazionale Innovazione
CDP Venture Capital Sgr

High-Tech Gründerfonds



Agite!

Antares



€6.3M of Grants

European, National, Regional, Local



EIC Accelerator

Grant only €2.3M on 2020

- 2551 Projects submitted in the EU (NON COVID)
 - 36 (1.4%) Projects Financed
 - WISE's project was the sole Italian

WISE

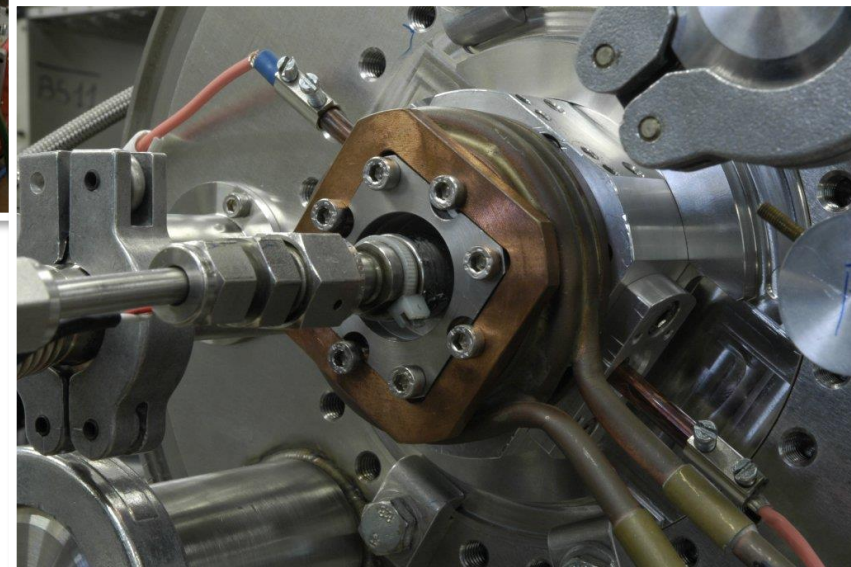
Our history in short



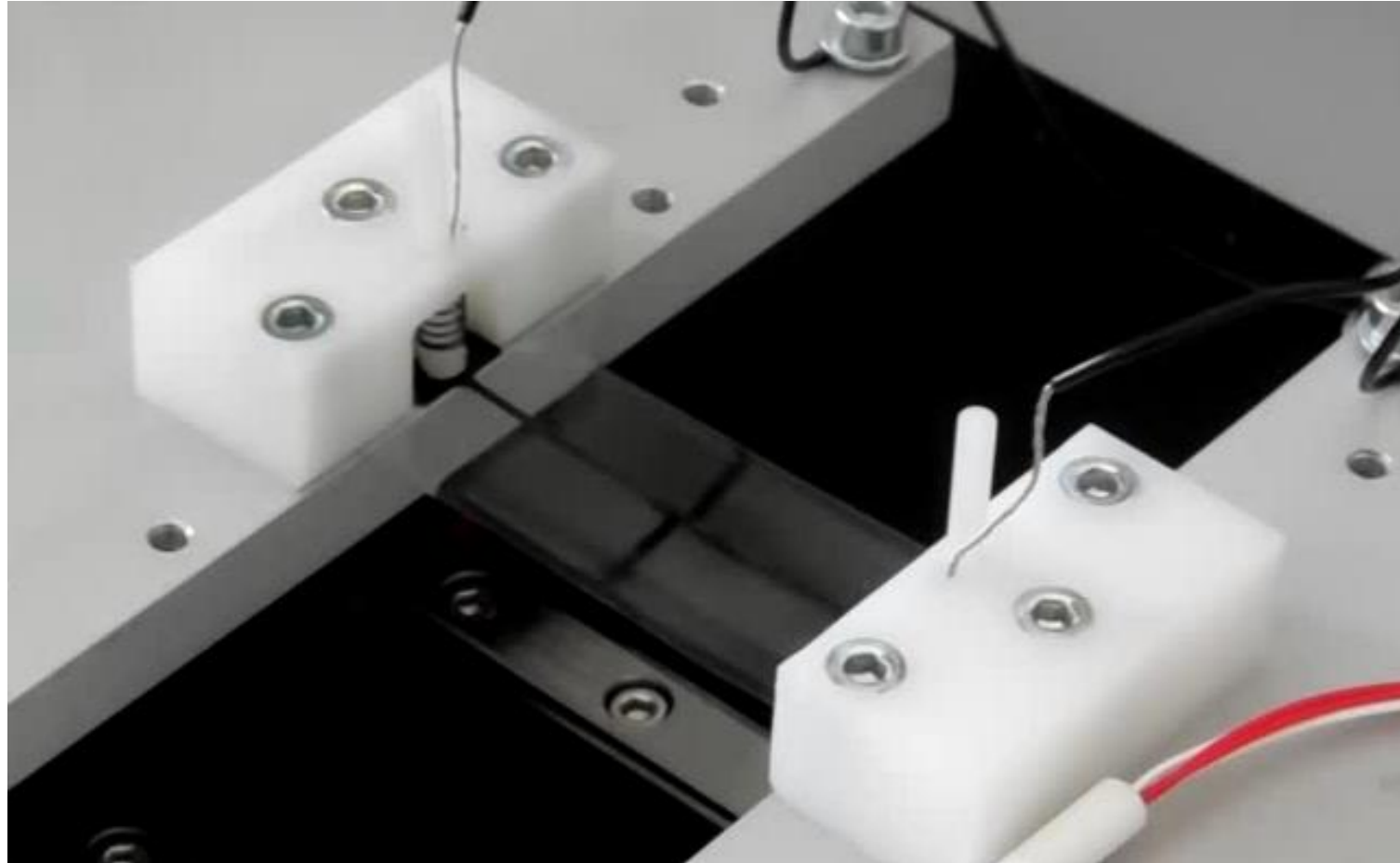
All started from a laboratory experiment...



Prof. Paolo Milani
research group



Electrical Stretchability

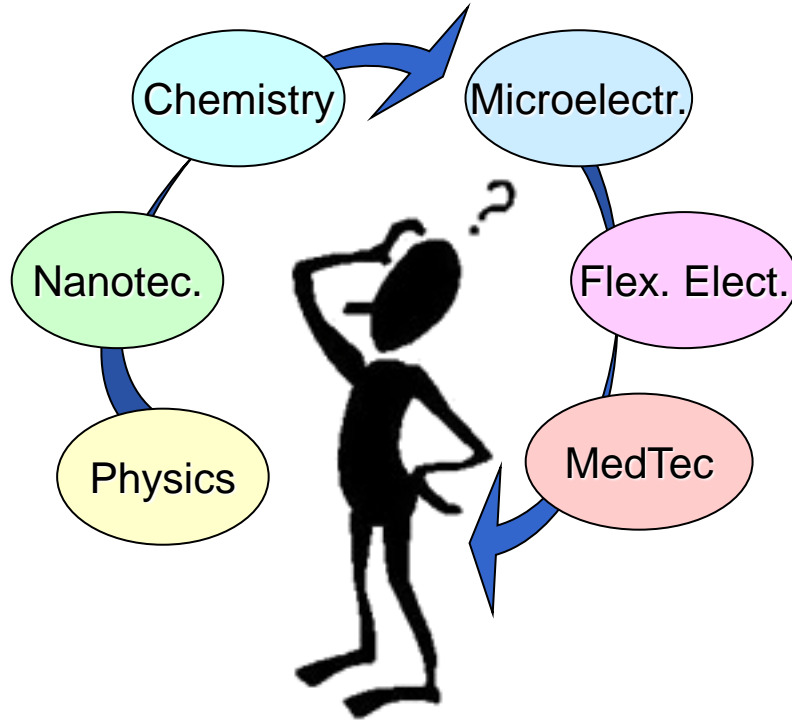
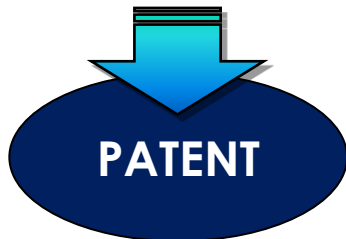


☺ No failure even after +1,000,000 strain cycles

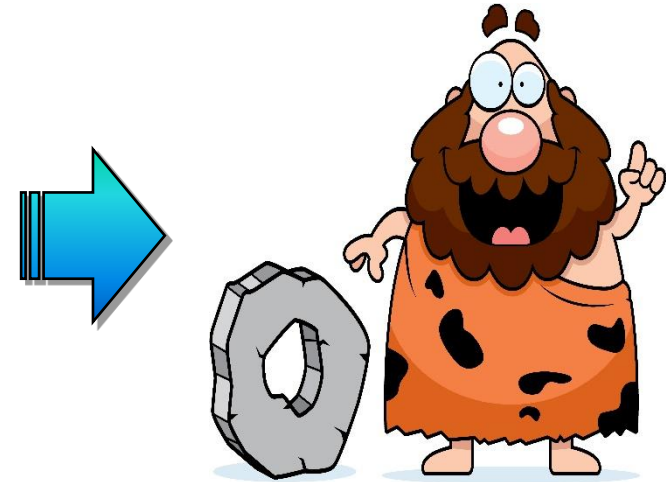
From Discovery to Start-up



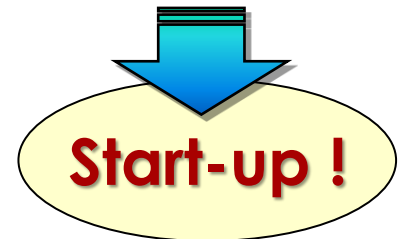
Scientific Discovery



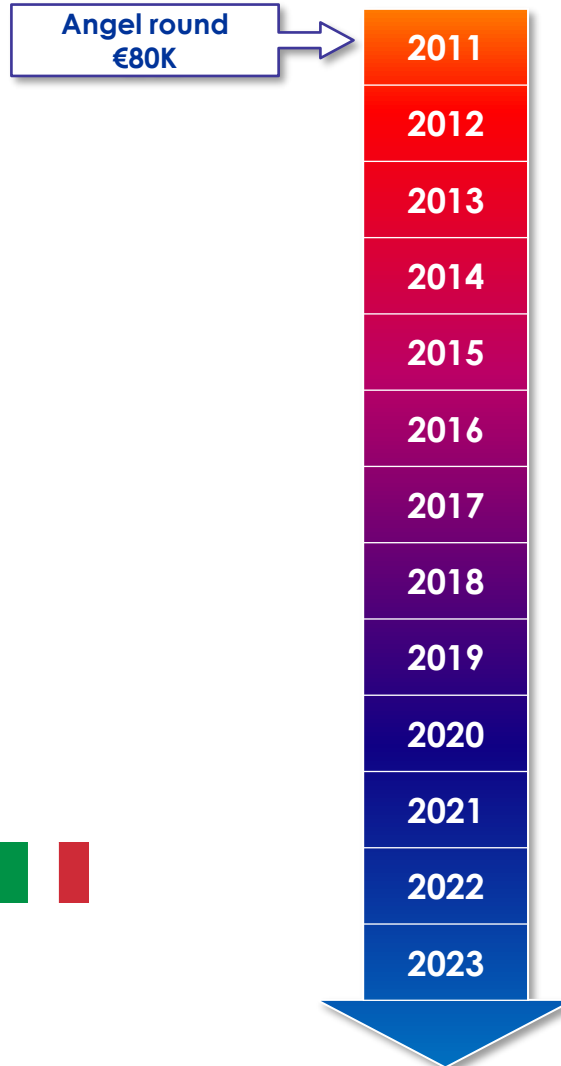
Interdisciplinary research



Business Idea



WISE's Financial History



Patenting &
Technology Consolidation

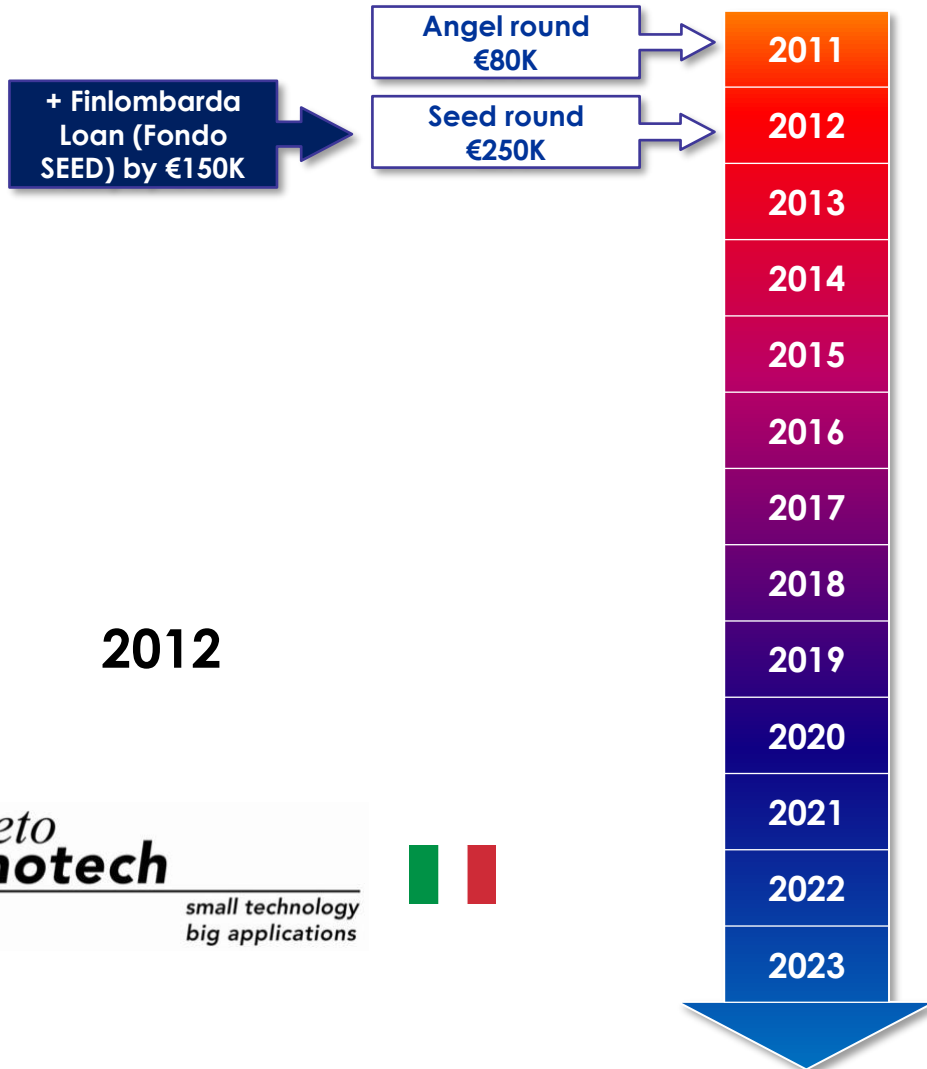


2011

Agite!



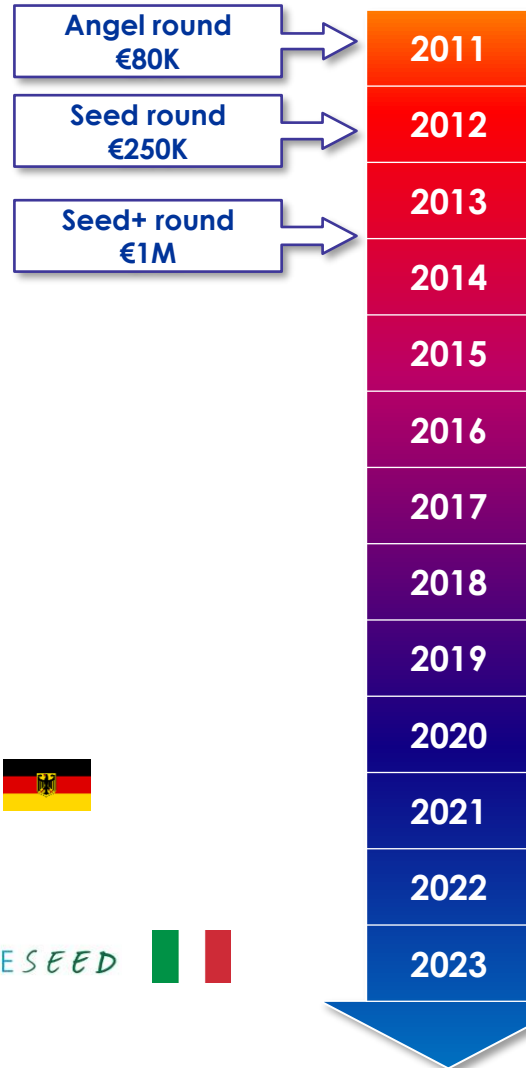
WISE's Financial History



Patenting & Technology Consolidation



WISE's Financial History



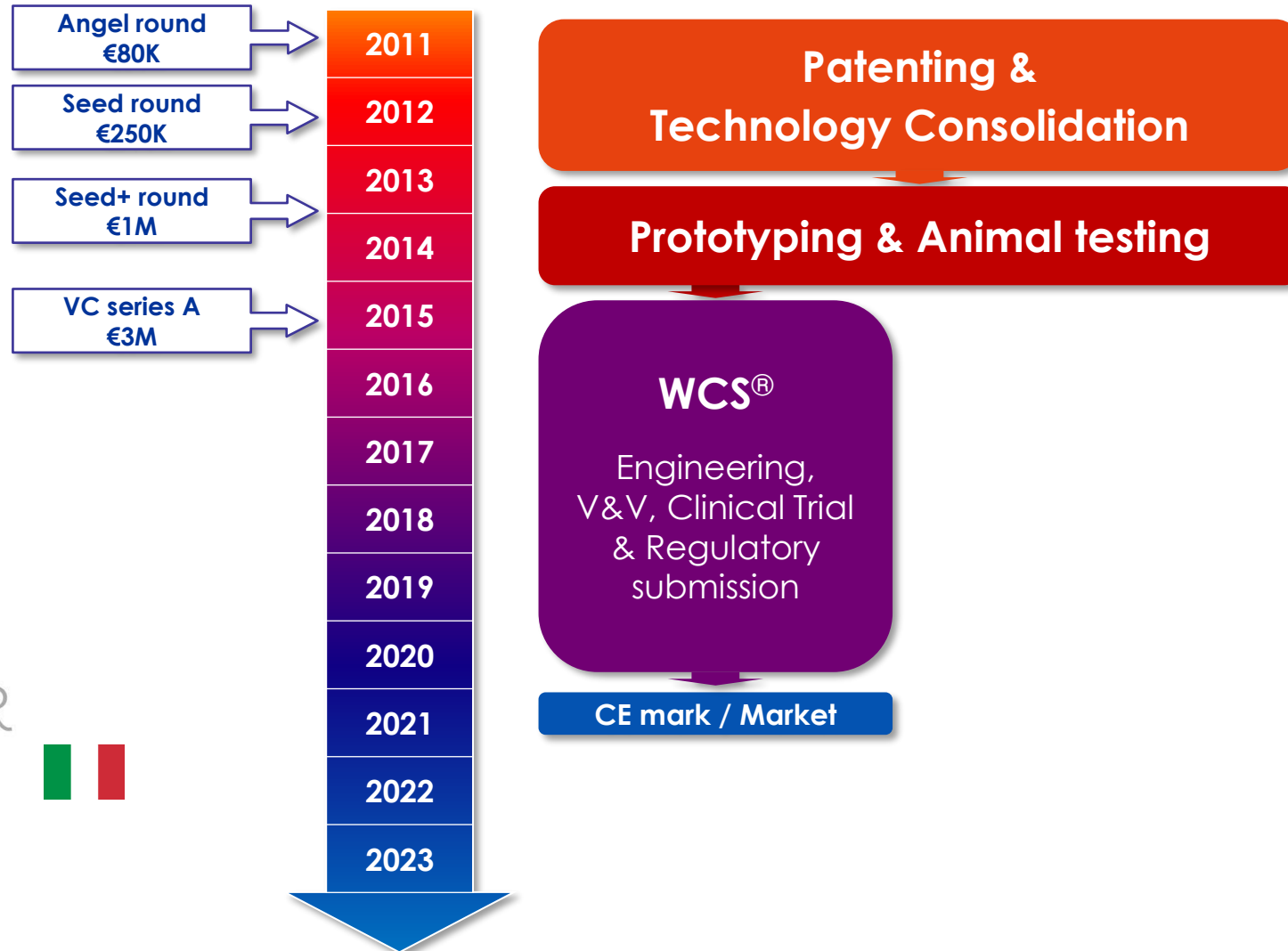
Patenting &
Technology Consolidation

Prototyping & Animal testing

2013



WISE's Financial History

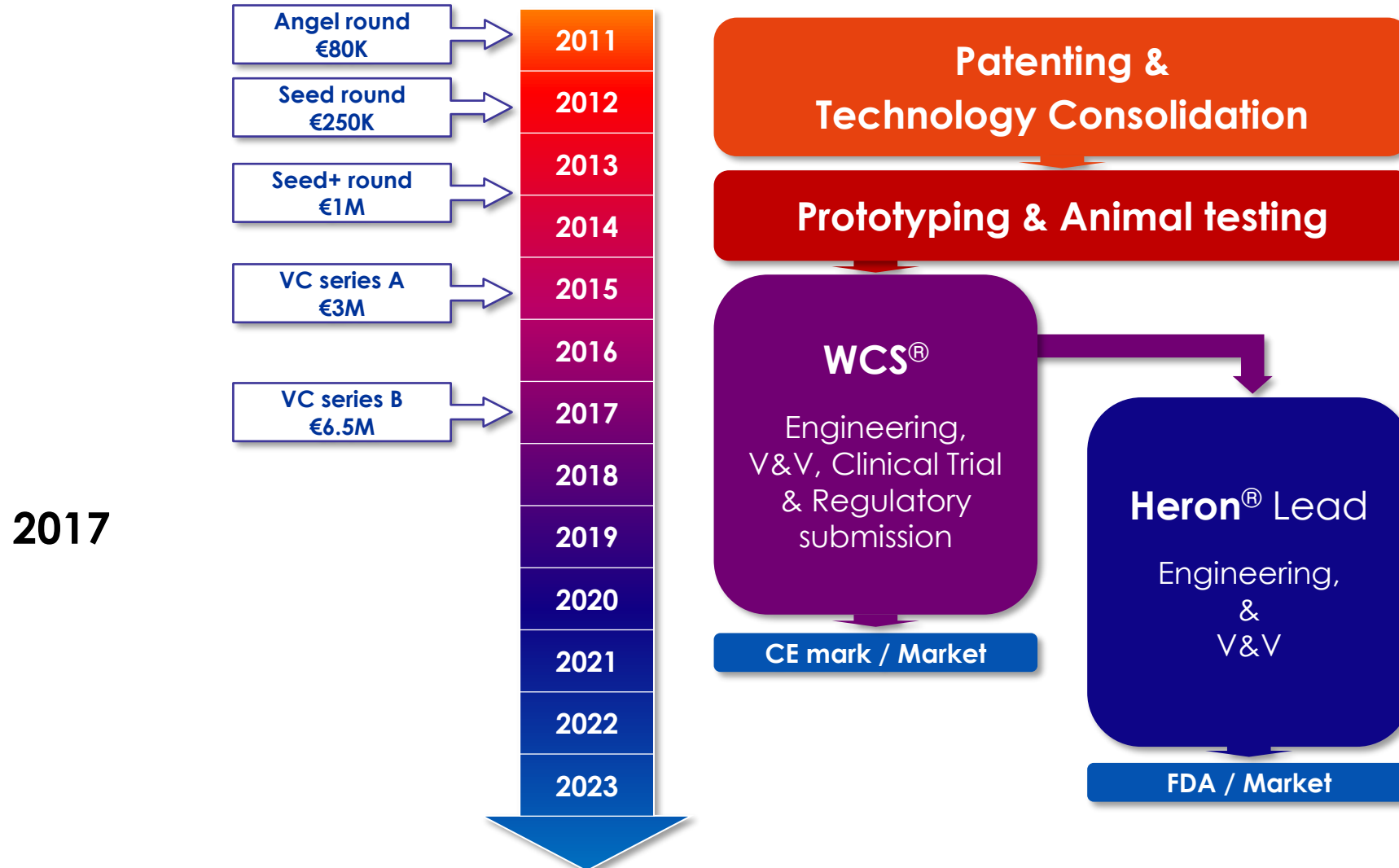


2015

PRINCIPIA SGR
Capitali per l'innovazione

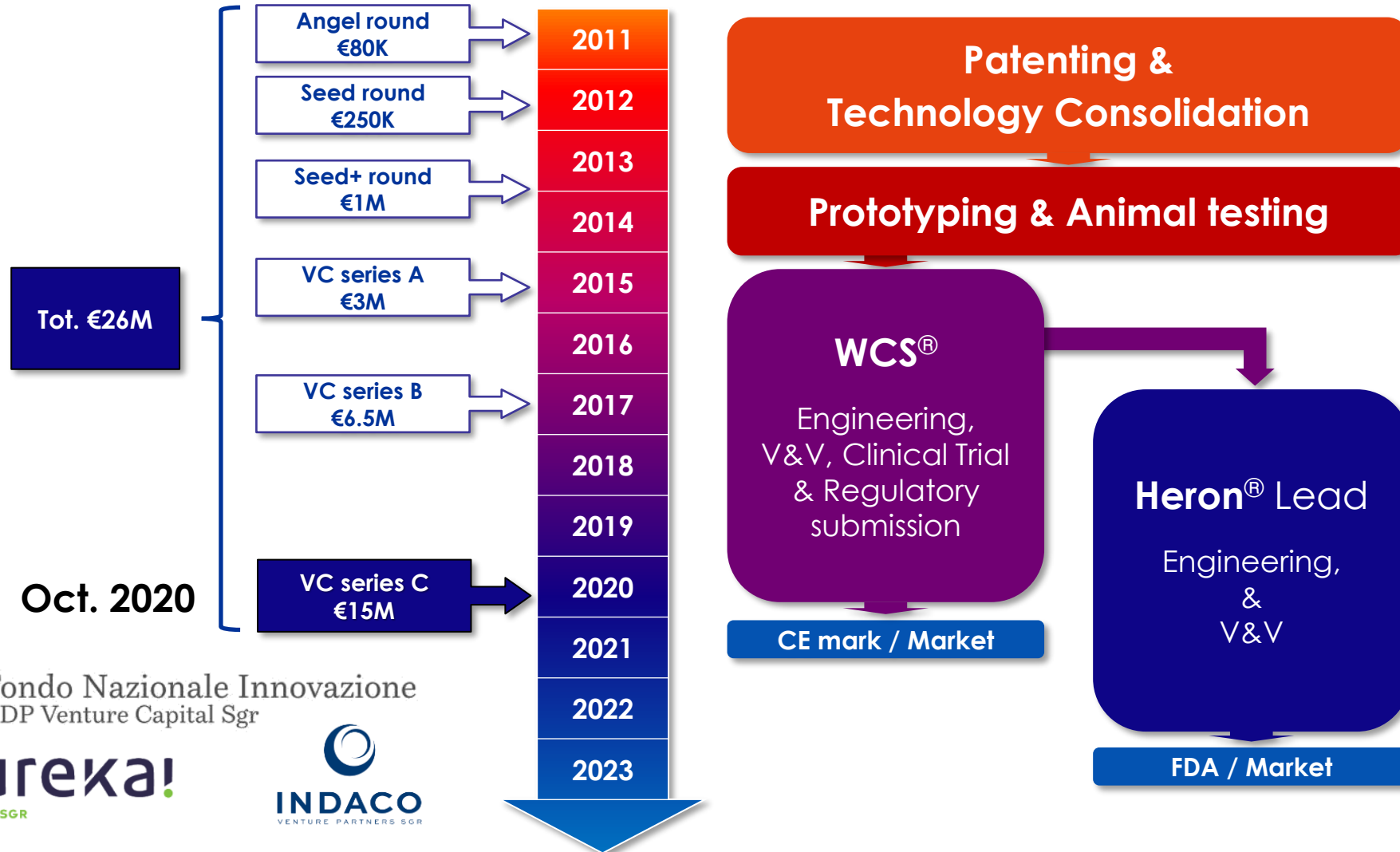


WISE's Financial History



2017

WISE's Financial History

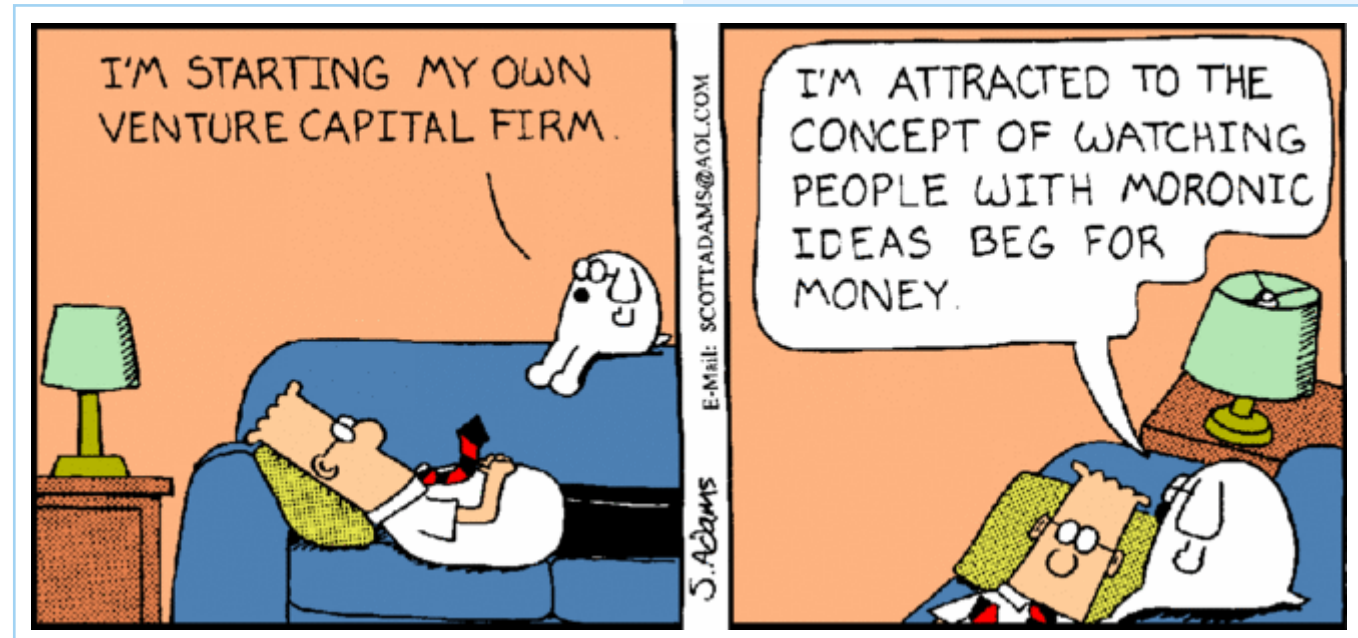


cdp  Fondo Nazionale Innovazione
CDP Venture Capital Sgr

 **eureka!**
venture sgr


INDACO
VENTURE PARTNERS SGR

The pathway to VC: the Pitch



What is a Pitch?



A fishing hook

Its objectives are:

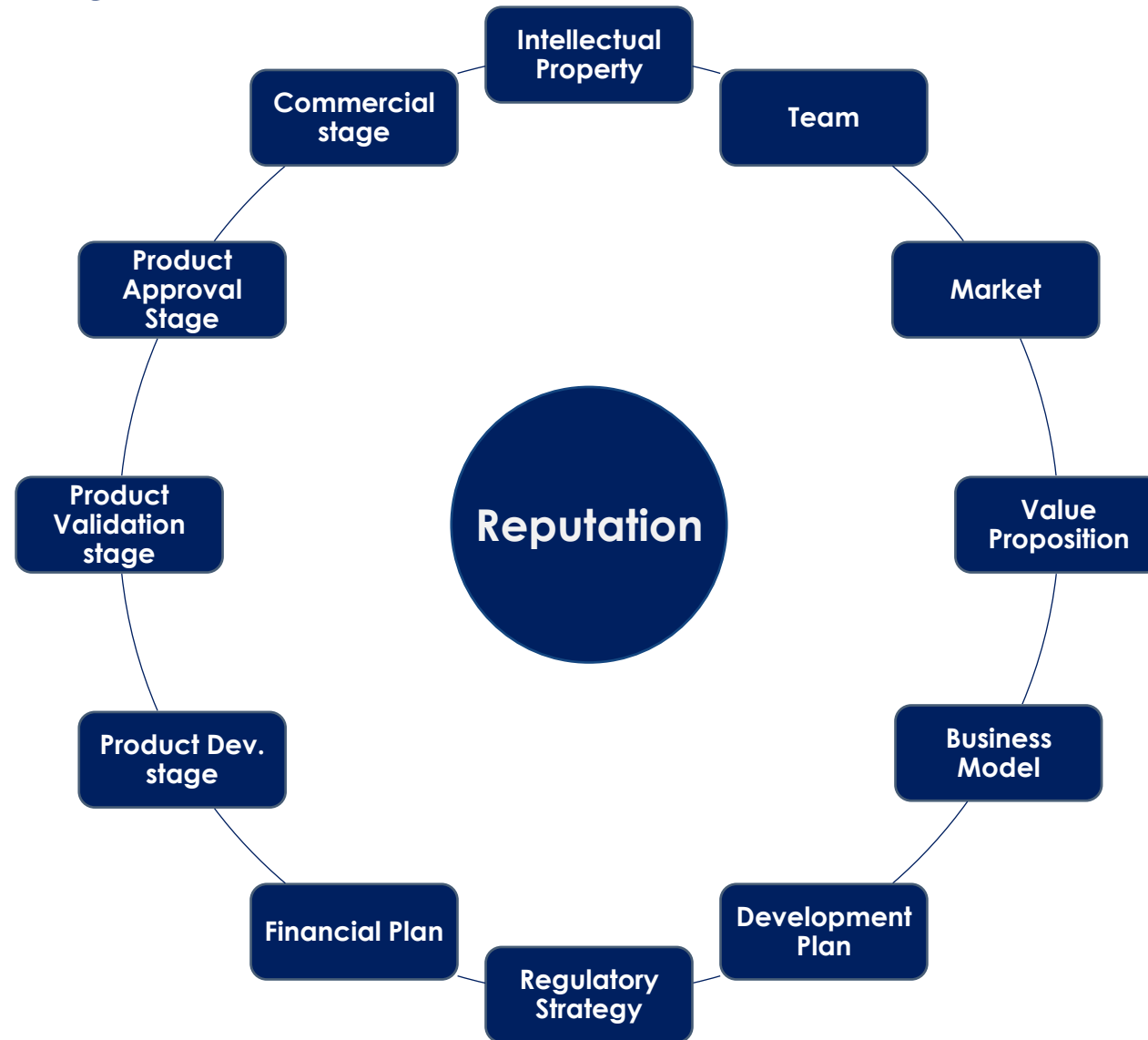
- to create **interest and curiosity**
- to **select/attract the right investors** (in terms of stage, business sector, etc...)
- to convince these investors to **arrange a short non confidential meeting/call** with you to learn more about the project

What are the key characteristics of a Pitch?

The Pitch should:

- be in **English**
- contain **short and clear messages**
- contain the **right information** with the **proper detail** and in the **right order**
- provide the **feeling of authenticity** => be careful in “filling forms” / don’t use standardized formats => this is **YOUR pitch**
- be **graphically nice**, but the graphics shouldn’t become the pitch subject => **it is not an art competition!**
- be **careful with videos**

Basic ingredients



Different stages require different “Resolutions”

Basic details

Different stages require different “Resolutions”



More details

Different stages require different “Resolutions”

Full details

Basic ingredients – Angel Round

	Angel Round
Company stage	Start-up phase
Round Size	10k - 200k
Round coverage	12 months
Reputation	15% - nice to have
Intellectual Property	100% - Core IP needs to be well protected by patent application(s) - well defined ownership by the company - broad claims coverage
Team	100% - the core team must show commitment and hungriness . Ok if some competences are missing
Market	80% - Market clearly identified, basic knowledge of size and competition
Value Proposition	70% - the KEY competitive advantages of the product have been identified
Business Model	50% - basic idea on the business model
Development Plan	40% - identified the key phases of the plan and timeline
Regulatory Strategy	20% - basic idea of the regulatory pathway (identification of the class of the device, CE mark? FDA?)
Financial Plan	20% - basic financials, focused on the costs in the next 12-24 months - perspective model of revenues
Product Dev. stage	15% - samples / concepts / sometimes a PREtotype
Product Validation stage	5% - in MD very unlikely
Product Approval Stage	0% - in MD if you have it you don't look for an Angel round
Commercial stage	0% - in MD if you have it you don't look for an Angel round

Basic ingredients – Seed Round

	Seed Round
Company stage	Prototyping
Round Size	150k - 500k
Round coverage	12-18 months
Reputation	80% - reputation becomes a key factor
Intellectual Property	100% - Core IP patenting process has to proceed smoothly
Team	100% - the core team must show commitment and hungriness. Most competences are in the team
Market	100% - advanced knowledge of market size & competition
Value Proposition	80% - the competitive advantages of the product have been identified
Business Model	80% - business model defined - with still some flexibility
Development Plan	60% - detailed GANTT of the development plan
Regulatory Strategy	60% - regulatory plan drafted
Financial Plan	60% - detailed financial plan covering all the development period - perspective model of revenues
Product Dev. stage	30% - "PREtotype" available
Product Validation stage	10% - Some functional test done in the lab
Product Approval Stage	0% - for an invasive product (50% in a class 1 or 2)
Commercial stage	0% - in MD if you have it you don't look for an Seed round

Basic ingredients – Late Seed

	Late Seed
Company stage	Advanced Prototyping
Round Size	400K - 1M
Round coverage	18-24 months
Reputation	90% - very relevant
Intellectual Property	100% - Core patents granted at least in some countries, secondary IP filed
Team	100% - the core team must show commitment and hungriness. Most competences are in the team
Market	100% - advanced knowledge of market size & competition - some interaction with key players
Value Proposition	100% - the competitive advantages of the product have been FULLY identified & confirmed by KOL
Business Model	100% - business model fully defined and frozen
Development Plan	80% - detailed plan with intermediate milestones
Regulatory Strategy	80% - regulatory plan developed and validated by external consultants
Financial Plan	80% - detailed financial plan covering all the development period - revenues & costs model
Product Dev. stage	40% - First Prototype
Product Validation stage	25% - Some functional test done in the lab or in small animal
Product Approval Stage	0% - for an invasive product (50% in a class 1 or 2)
Commercial stage	0% - in MD if you have it you don't look for an Seed round

Basic ingredients – VC round A

	VC round A
Company stage	Product development
Round Size	1M - 5M
Round coverage	24 months
Reputation	100% - must have
Intellectual Property	100% - Core patents fully granted in most of the countries, secondary IP proceeding well
Team	100% - the core team must show commitment and hungriness . ALL the competences are in the team
Market	100% - advanced knowledge of market size & competition - interactions with some key players
Value Proposition	100% - the competitive advantages of the product have been fully identified & confirmed by KOL
Business Model	100% - business model fully defined and frozen
Development Plan	100% - detailed plan with intermediate milestones and external validation
Regulatory Strategy	100% - regulatory plan developed and validated. Definition of a clinical strategy (protocol endpoints)
Financial Plan	80% - detailed financial plan covering the development period and the market launch - advanced model for the production cost structure
Product Dev. stage	80% - product engineered
Product Validation stage	40% - Several functional tests done including small animals
Product Approval Stage	10% - not expected, very unlikely, obviously strong plus if possessed
Commercial stage	20% - commercial strategy fully defined

Basic ingredients – VC round B

	VC round B
Company stage	Product (clinical) validation
Round Size	4M - 10M
Round coverage	24 months
Reputation	100% - must have
Intellectual Property	100% - Core patents fully granted , secondary IP proceeding well (some granted)
Team	100% - the core team must show commitment and hungriness. ALL the competences are in the team
Market	100% - advanced knowledge of market size & competition - interactions with most of the key players
Value Proposition	100% - the competitive advantages of the product have been extensively confirmed by KOL
Business Model	100% - business model fully defined and frozen
Development Plan	100% - detailed plan with intermediate milestones and external validation
Regulatory Strategy	100% - Clinical Study in preparation or started
Financial Plan	100% - detailed financial plan comprising the market launch – analysis of the production costs
Product Dev. stage	100% - core product frozen
Product Validation stage	100% - All bench tests done, preclinical trial on large animal completed. Clinical Study in preparation or started
Product Approval Stage	50% - Product approved nice to have
Commercial stage	40% - Interest from potential KOL to buy/try the product (also within the Clinical Trial)

Basic ingredients – VC round C

	VC round C
Company stage	Market Launch
Round Size	>10M
Round coverage	24-36 months
Reputation	100% - must have
Intellectual Property	100% - Core patents fully granted, secondary IP granted in most countries
Team	100% - the core team must show commitment and hungriness. ALL the competences are in the team
Market	100% - advanced knowledge of market size & competition – adv. interactions with most key players
Value Proposition	100% - the competitive advantages of the product have been extensively confirmed by KOL
Business Model	100% - business model fully defined and frozen
Development Plan	100% - detailed plan with intermediate milestones and external validation
Regulatory Strategy	100% - Clinical Validation completed. Technical File for submission to Notified Body completed.
Financial Plan	100% - detailed financial plan covering the development period and the market launch - first revenues nice to have
Product Dev. stage	100% - core product in production , new versions in development pipeline
Product Validation stage	100% - Clinical trial completed. All other regulatory validations done.
Product Approval Stage	80% - Product approved or in the process for approval.
Commercial stage	80% - Preparative job for the product launch / first sales

Basic ingredients – VC round D, etc..

	VC round D, etc..
Company stage	Market expansion
Round Size	>15M
Round coverage	24-36 months
Reputation	100% - must have
Intellectual Property	100% - Core patents fully granted, secondary IP granted in most countries
Team	100% - the core team must show commitment and hungriness. ALL the competences are in the team
Market	100% - advanced knowledge of market size & competition - advanced interactions with most of the key players
Value Proposition	100% - the competitive advantages of the product have been extensively confirmed by KOL
Business Model	100% - business model fully defined and frozen
Development Plan	100% - detailed plan with intermediate milestones and external validation
Regulatory Strategy	100% - Job concluded
Financial Plan	100% - detailed financial plan with future sales forecast - revenues evolution
Product Dev. stage	100% - ramp-up of core product production , new versions in development pipeline
Product Validation stage	100% - Post-market validation ongoing
Product Approval Stage	100% - Product approved at least in one region (EU/USA), approval process in other markets ongoing.
Commercial stage	100% - key requirement: demonstration of increasing sales traction

What is a Pitch?

**The Pitch is a means,
it is not an end**



STRETCHING INNOVATION

**For any further information,
please contact:**

Luca Ravagnan
CEO

E: luca.ravagnan@wiseneuro.com
M: +39 3337657189

www.wiseneuro.com

