



VALPHARMA S.p.A.



VALPHARMA  
INTERNATIONAL S.p.A.



ERBA VITA GROUP S.p.A.

# Agenda

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- Company presentation
- Innovation in Pharmaceutical activities\_**[Products and Services]**
- Innovation lead by Sustainability\_**[Industrial and Operational impacts]**
- Valpharma Green project\_**[Reason and Expectation]**

# WHO WE ARE

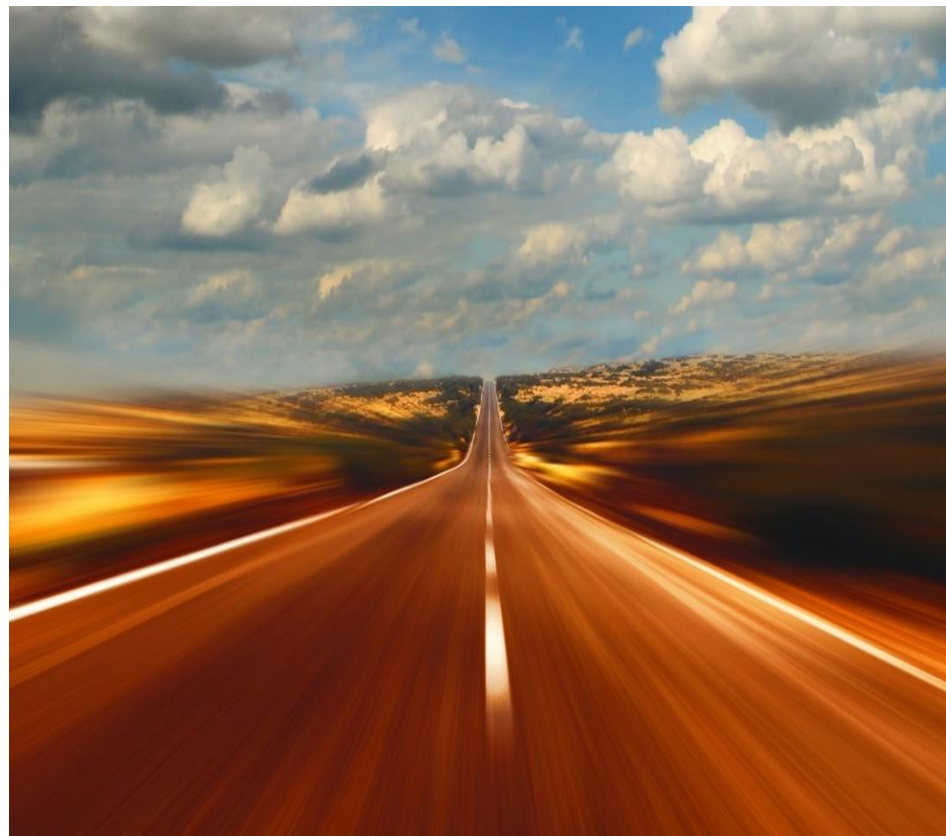
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- A privately owned, European provider, specialized in development and supply of finished oral solid dosage forms;
- Innovative solutions for sustained release forms;
- A reliable partner with flexible manufacturing capabilities;
- Clinical and commercial demand for large volumes;
- PT RD group to develop together with our customers complex solid oral dosages;
- 10% of annual turnover invested in product development and technology innovation

# OUR VISION

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We contribute to the Health and Wellness of human being by pursuing and developing a sustainable business model in the pharmaceutical and nutraceutical sector, in relation to oral solid products with modified release and phytotherapeutic products.



# VALUE TO OUR CUSTOMERS

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Close collaboration;

Open and transparent dialogue with pharmaceutical industries all over the world, including the most important multinationals;

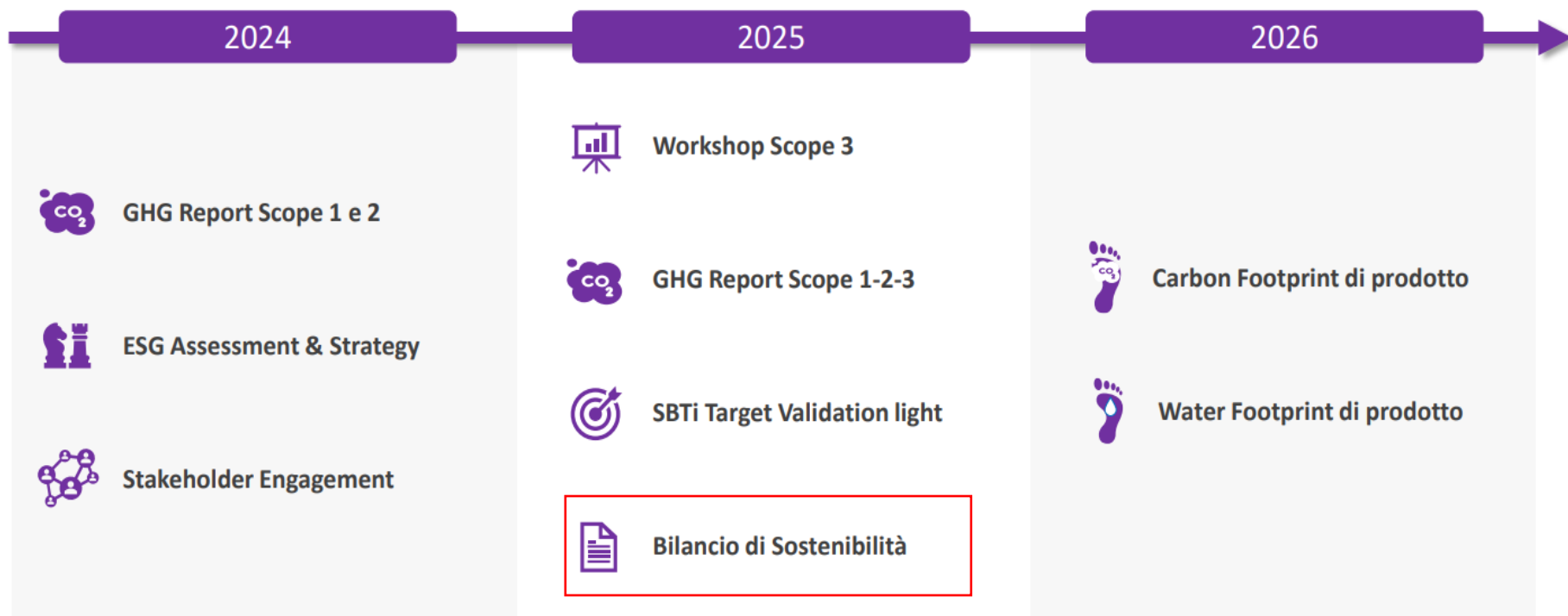
Consolidated business based on signed agreements (more than 500), with a combined manufacturing capacity of 1,6 billion solid oral doses/year;

and 300 products developed;

in 50 years of experience.



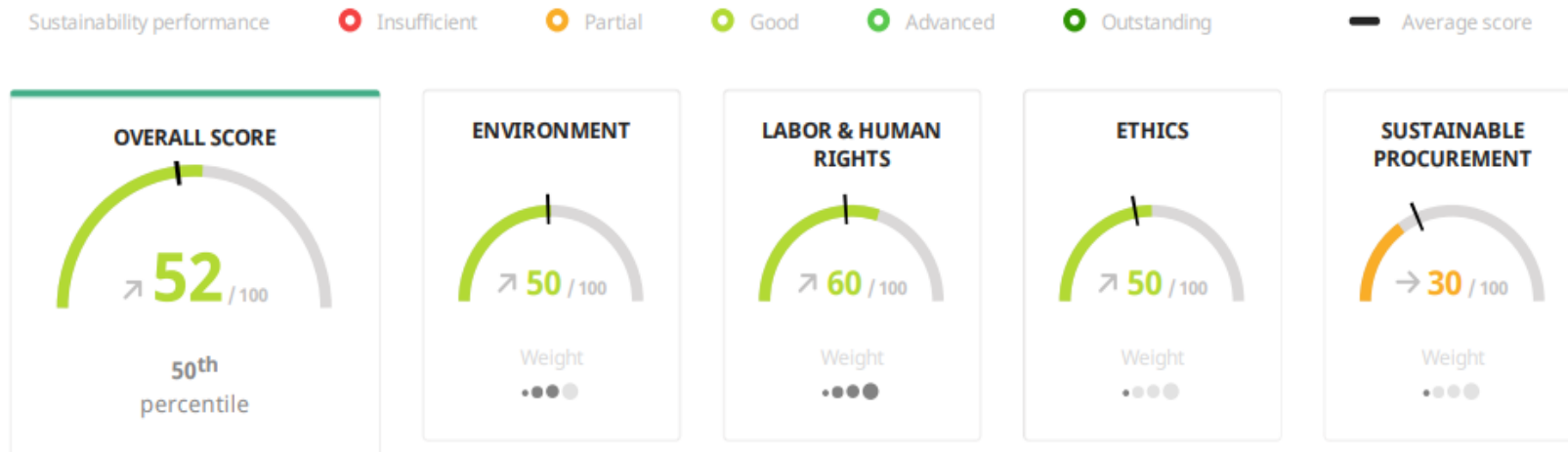
# Sustainability RoadMap



to be re-evaluated within July 2025

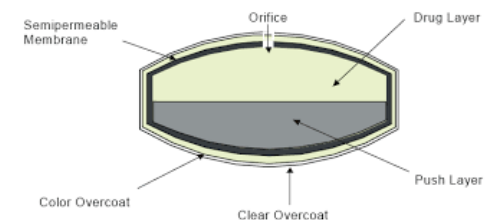
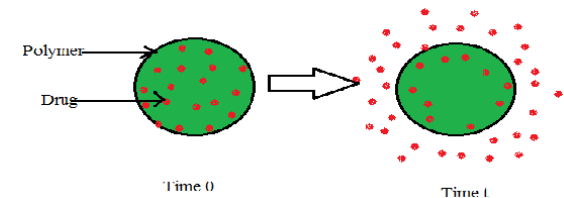
**ecovadis**

• **Ecovadis Ratings: 52/100**





- **Powder and granulates**  
Amourphous spray dried Nifedipine/PVP aggregate  
Enhance of Solubility/Taste masking of APIs by Hot Melt Extrusion
- **Matrix tablets Delayed release achieved by excipients that physically create a barrier in the release of the API from the formulation.**  
COMMERCIAL STAGE PRODUCTS:  
Gliclazide 30-60 mg Tablets  
Nifedipine 30-60 mg Tablets  
Pentoxifylline 400 mg Tablets
- **Capsules and Stickpacks containing Pellets Microspheres containing Active Principle, then retarded by coating with low solubility polymers.**  
COMMERCIAL STAGE PRODUCTS:  
Diltiazem HCl 200-300mg Capsules  
Isosorbide-5-mononitrate 50-80 mg Capsules  
Mesalazine 1500mg Sticks  
Esomeprazole Mg Trihydrate 20-40 mg Capsules (stage: RD- BE completed)
- **OROS (Osmotic Release Oral System) tablets By-layer tablets with 0-order kinetics controlled by an osmotic system.**  
COMMERCIAL STAGE PRODUCTS  
*Nifedipine 30-60 mg Tablets OROS*  
*Oxybutynin 7.5-15 mg Tablets OROS (stage: RD)*  
*Doxazosin Etexilate Mesylate 4-8 mg Tablets OROS (Stage RD)*  
*Methylphenidate HCl 18-27-36-54 mg Tablets OROS (stage: RD)*



- **MUPS tablets (Multiple Unite Pellets System)**

Pellets inserted into tablets.

COMMERCIAL STAGE PRODUCTS

Esomeprazole Mg Dihydrate 20-40 mg Tablets MUPS

Theophylline 200-300 mg Tablets MUPS



- **Orally Disintegrating Tablets**

ODTs be considered solid oral preparations that disintegrate rapidly in the oral cavity, with an in-vitro disintegration time of approximately 30 seconds or less,



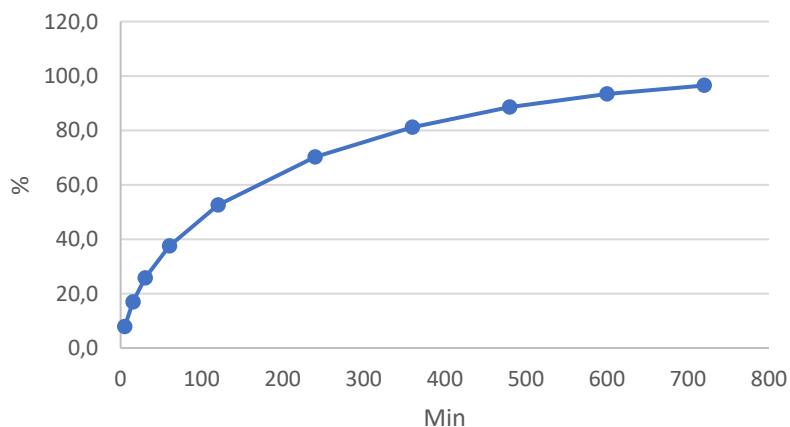
- **Multi-layer tablets**

Tablets having several layers, able to give the same formulation several degrees of release (immediate + delayed, faster delay + slower delay, etc.).

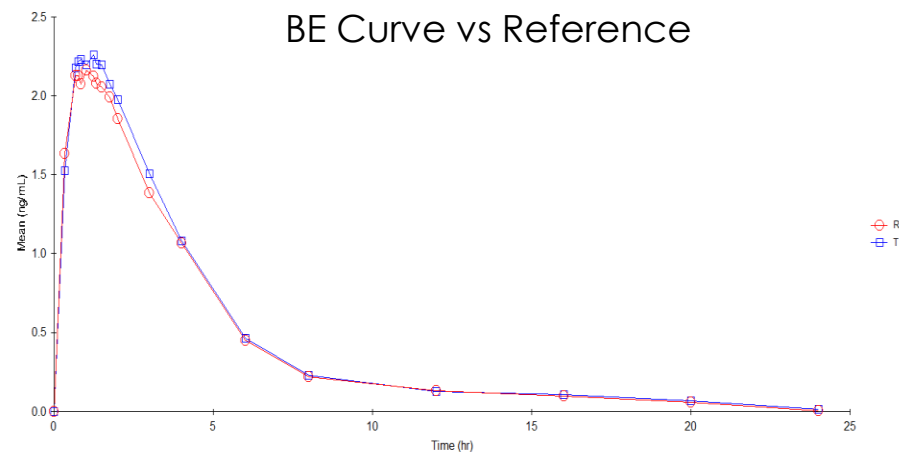


- Melatonin ER tablet (Matrix Tablets)
- Unmet need
  - Monotherapy for the short-term treatment of primary insomnia characterized by poor quality of sleep in patients who are aged 55 or over.  
Dose: 2 mg once daily, 1-2 hours before bedtime and after food. This dosage may be continued for up to thirteen weeks.  
Modified-release melatonin causes the blood concentration over time to more closely mimic a naturally occurring melatonin profile.

Melatonin Dissolution Profile



BE Curve vs Reference



# Valpharma International S.p.A.

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Valpharma International S.p.A. grass-root plant with enlarged capacity, surface 45'000 m<sup>2</sup> employs today approx. 200 staff and offers large spaces for further expansion and technology specialization



Valpharma International offers for Pharmaceutical Products :

- Powders,
- Granules,
- Tablets,
- Film-coated tablets,
- Pellets for hard gelatine capsules
- Blister's Packaging line.

# Valpharma San Marino Plant

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- Valpharma San Marino Plant employs 136 people and operates on a surface of 6'000 m<sup>2</sup>. Valpharma produces and offers:



- Powders
- Granules
- Tablets
- Film-coated tablets
- Pellets which can be filled into hard gelatine capsules

# Regulatory & Compliance

## International Authorizations issued to Valpharma Group

Valpharma Group can reach its partners and clients everywhere, to meet all requests and needs, always working with **certification regulators and the authorization of worldwide health authorities.**

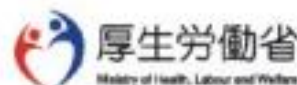
AIFA Italia



ANVISA Brazil



MHLW  
Japan



Ministry of Health Care  
Russia



United Arab Emirates



NMPA China



Iranian  
Health Authority

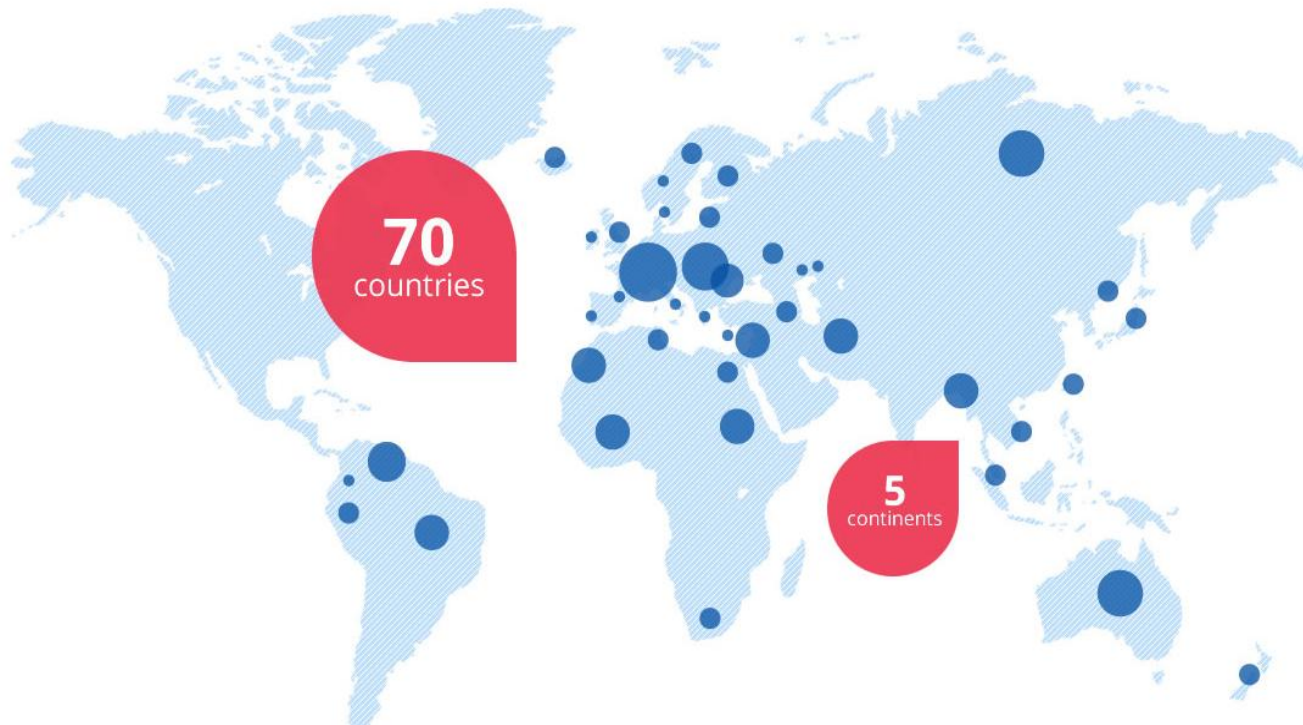


F.D.A. Taiwan



Ivory Coast  
Health Authority





**Valpharma's** modified release products were granted marketing authorizations by many national authorities and are sold with success in 5 continents and in more than **70 countries**. [www.valpharma.com](http://www.valpharma.com)

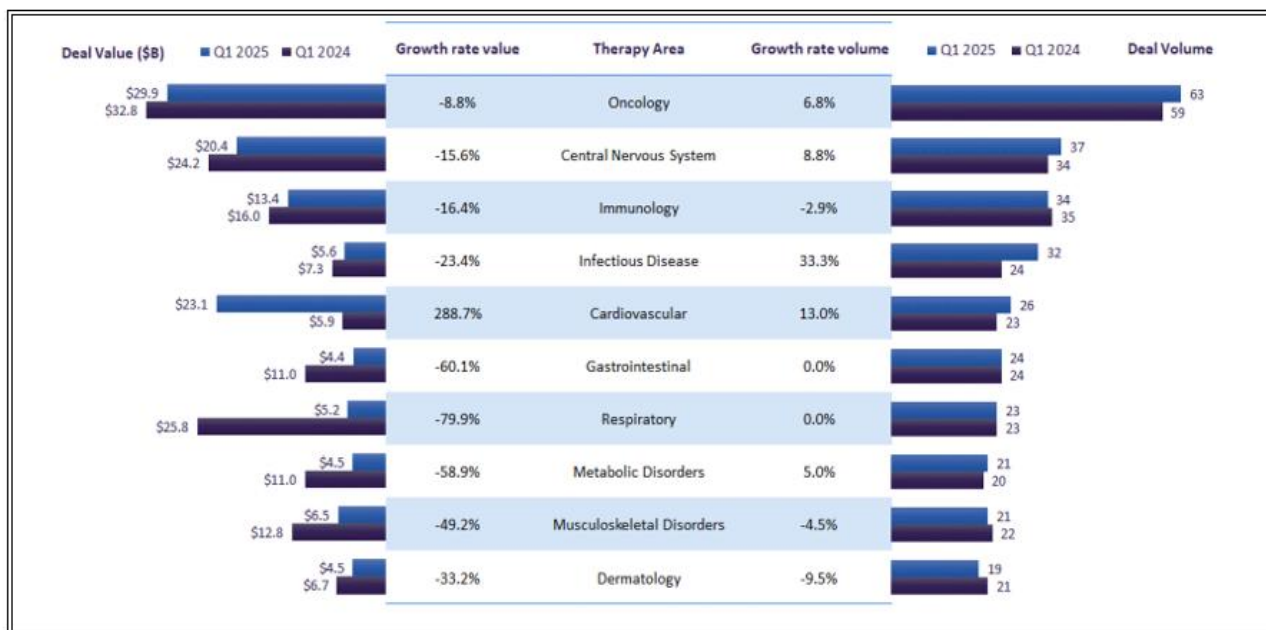
# Innovation by product:

- a) Me too: develop of new generic drug product identifying challenging products in term of Delivery Technologies or Equipment to avoid clones (Cmax; Tmax; T1/2)
- b) Me better: identify niche or needs (patient side) to improve the originator:
  - Dose Regimen
  - Taste
  - Tolerability
  - Side Effects (nausea; dizziness; peak effect; etc)
  - Swallow
- e) Life Cycle Management to constantly monitor new regulatory requirements mostly at supply aspects to avoid any commercial discontinuity (impurities; organic solvent reduction; reduce of water; new packaging solution)
- c) Repurposing Develop new formulation using well known Active Pharmaceutical Ingredient to treat new pathologies; (by partner or co-development)

# Innovation by product\_ therapeutic trends in M&A

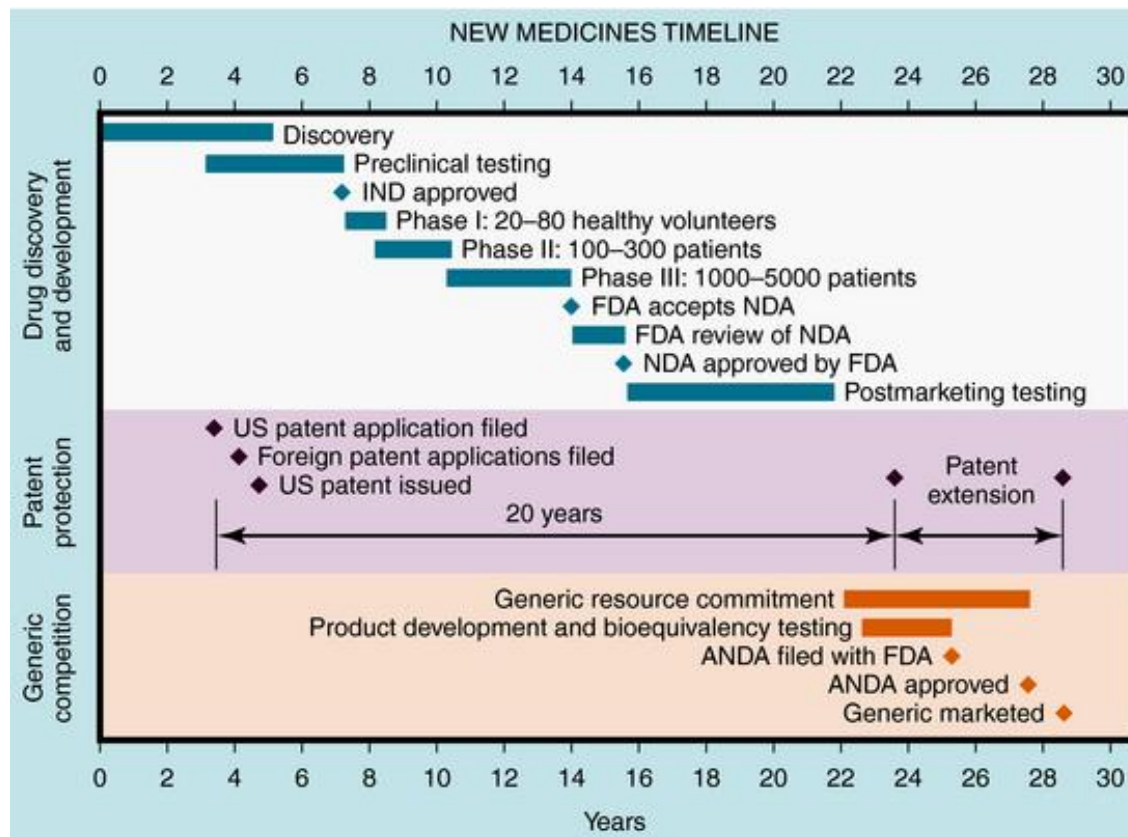


**Figure 12: Top 10 Therapy Area M&A Review**



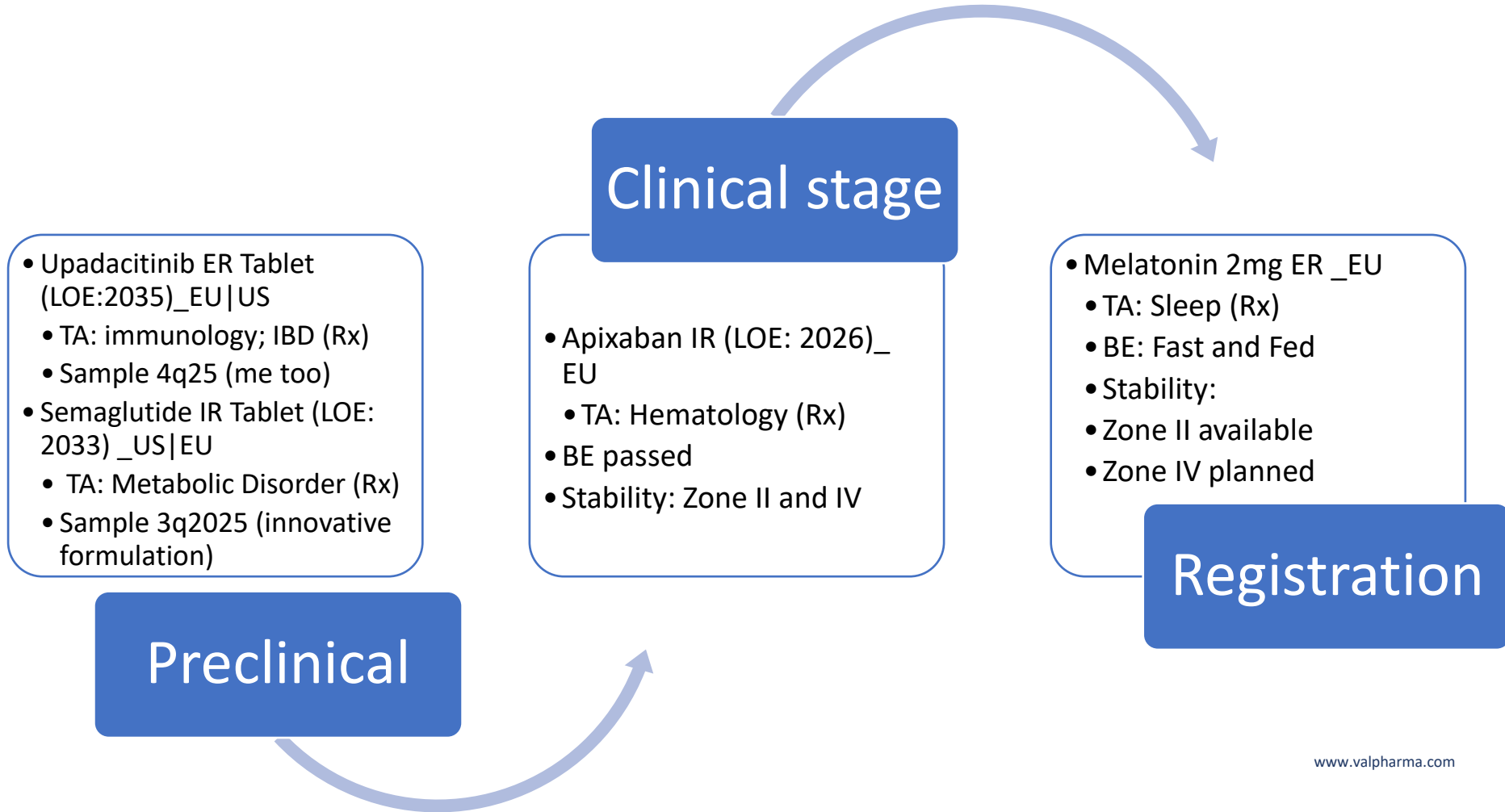
Global M&A and licensing deals are influencing access to new therapies

# Innovation by product\_generic & innovators



Efficiency in project development to meet stringent deadline and make available dossier at DAY=0

# Current Gx Product Pipeline

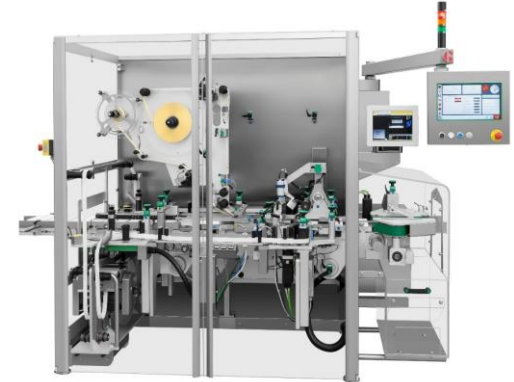


# Innovation as capabilities extension

Blistering/cartoning machine



Labelling Machine



Casepacker



**Approx 3 mln € of direct investment to establish new production line:**

Cost of Packaging line: 1,9 million euros

Cost of Packaging department : 1 million euros

Demand to reduce supply chain (for state of the art technologies) is one of the main driver of sustainability topics in Pharmaceutical;

# New packaging line: Project\_Milestones

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## Main Milestones:

▪ End of line installation:	June 2022	<u>(Completed)</u>
▪ End of line packaging validation :	June 2023	<u>(Completed)</u>
▪ AIFA line inspection and authorization:	Mar 2025	<u>(Completed)</u>
▪ <b>Start of supply within</b>	<b>Q32025</b>	<b>(Planned)</b>

Valpharma has planned to start commercial packaging supply within q3 2025

confidential

# Innovation in Industrial Operation

## Valpharma **Green** project



# Innovation in Industrial Operation

## Valpharma **Green** project

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### Reason to **change**

- 🌱 Obtain maximal **Environmental Sustainability**
- 🌱 Value local **Energy provider**
- 🌱 **Reduce Emission of Gas** driving greenhouse effect
- 🌱 Adopt **Efficiency and Containment approach** of energy **maintenance costs** and maintenance
- 🌱 **Improve** quality of Electrical Energy

# Innovation in Industrial Operation

## Valpharma **Green** project

### Risultati attesi

	ANTE	POST	RISULTATO
<i>Gas Naturale [TEP]</i>	1.246	370	- 876
<i>Energia Elettrica prelevata da rete [TEP]</i>	804	724	- 80
<b>Energia Elettrica autoprodotta da FV [TEP]</b>	0	314	<b>+ 314</b>
<b>Consumo Totale [TEP]</b>	2.050	1.408	<b>- 642</b>
<b>CO<sub>2</sub> emessa [ton]</b>	4.636	3.241	<b>- 1.395</b>
<i>Reflui conferiti [ton]</i>	2.073	145	- 1.928

# Innovation in Industrial Operation \_ Valpharma **Green** project

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Total amount investment	8.0 mln €
Subsidized finance	3 mln €
Expected saving	1,5 mln €

Partner: MIMIT; Invitalia; Unicredit; Banca Intesa;  
Industrial partner: SGR



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R&D topics: Silvano Pavani (RD Manager)

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Valpharma International SpA

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Jacopo Pozzi (Chief Financial Officer);

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Valpharma Group SpA

Alessandro Caprio (Communication Manager)

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