



Athens
LifeTech
Park



Exploring synergies & collaborations

Eleni Pentafragka
Chair of the Board, Athens LifeTech Park
Member of the Board, ELPEN

Greece VS global biotechnology innovation



PHARMACEUTICAL
INDUSTRY



DRUG
DISCOVERY &
DEVELOPMENT
PROCESS



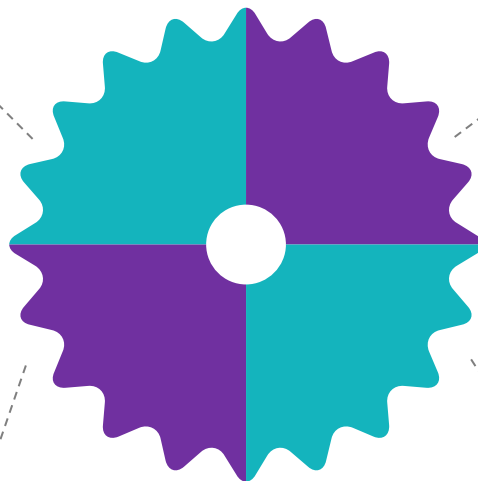
ACADEMIA

A more effective model for biotech innovation

Academia

Pharma

- Lower R&D budget
- Lower exposure to risk
- Access to expertise



Biotech start-ups

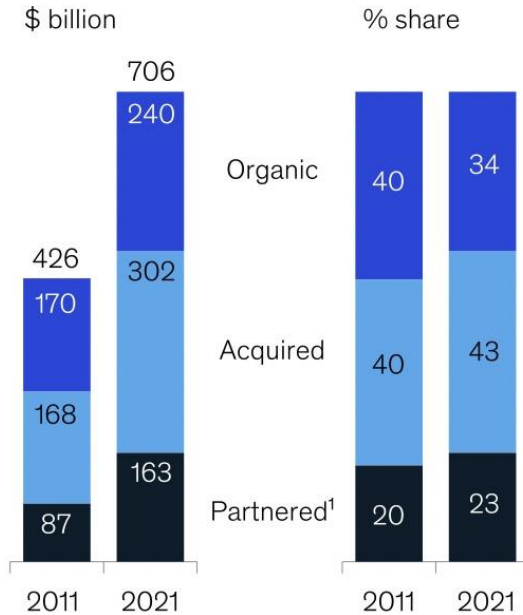
- Small flexible teams
- Lower "cost of failure"
- Ability to pivot
- Subject matter expertise

Venture opportunities



External innovation sourcing

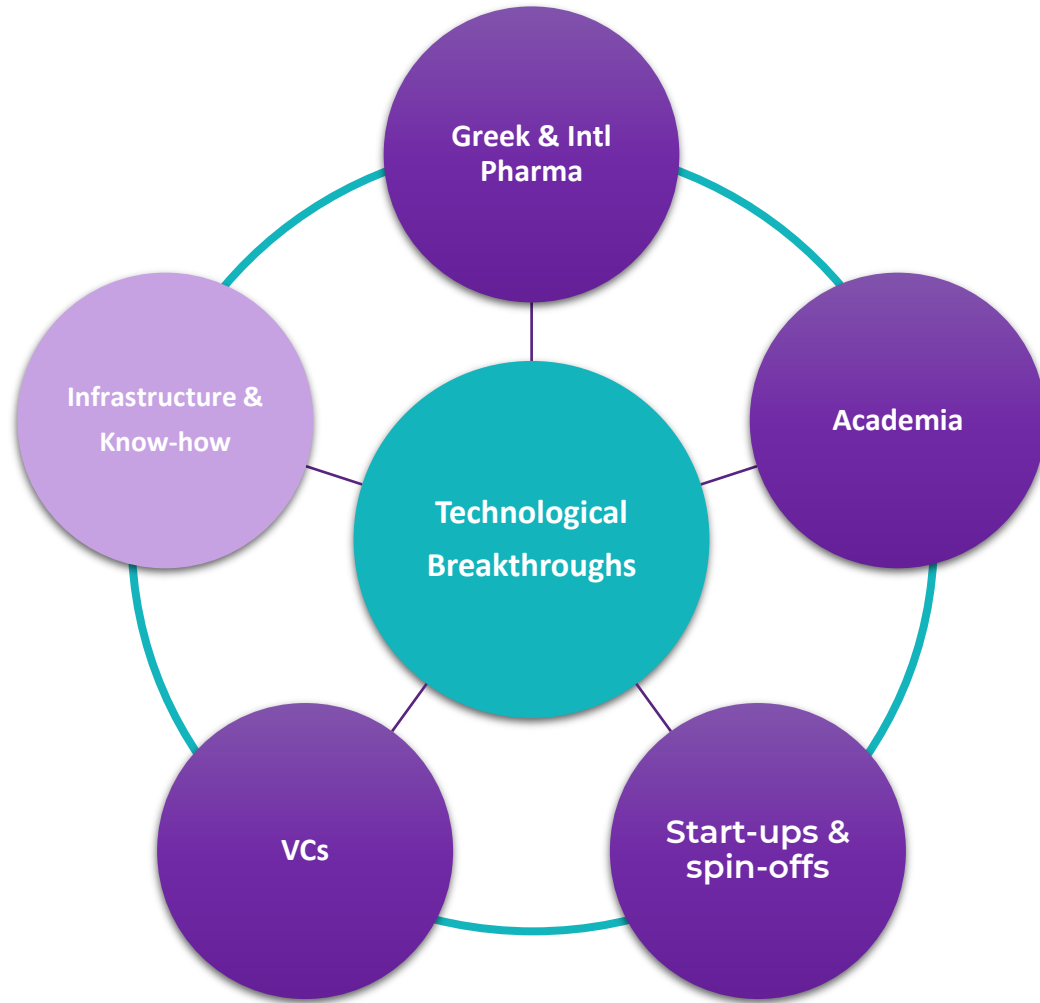
Industry revenue from new molecular entity products by sourcing strategy



45% sourced externally

66% of revenue generated

¹In-licensing or codevelopment.
Source: EvaluatePharma, 2022; Pharmaprojects; McKinsey analysis



Biotech
Incubator

Translational
Research & Precision
Medicine

Athens LifeTech
Park



Preclinical
Research

Education &
Conference Center



Athens
LifeTech
Park

THANK YOU





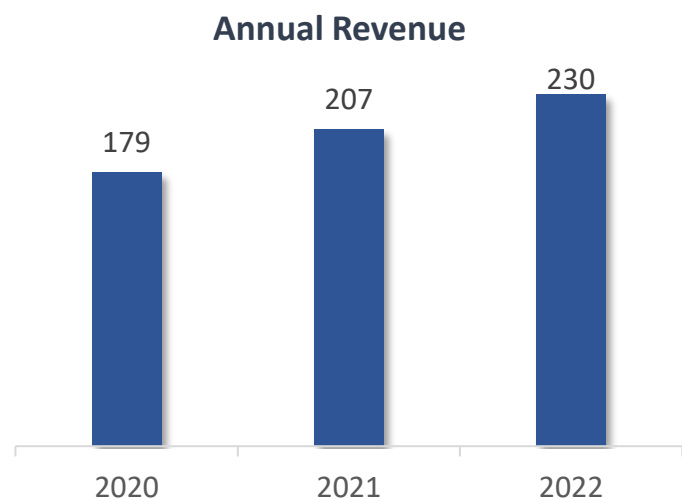
30 Healthcare – Life Sciences meetup




Vassilis Paretzoglou

Group Director – Corporate Development

DEMO S.A. in figures





 **>1200**
employees


 **66,000 m²**
facilities


 **86+**
countries

 **>2,970**
products
worldwide

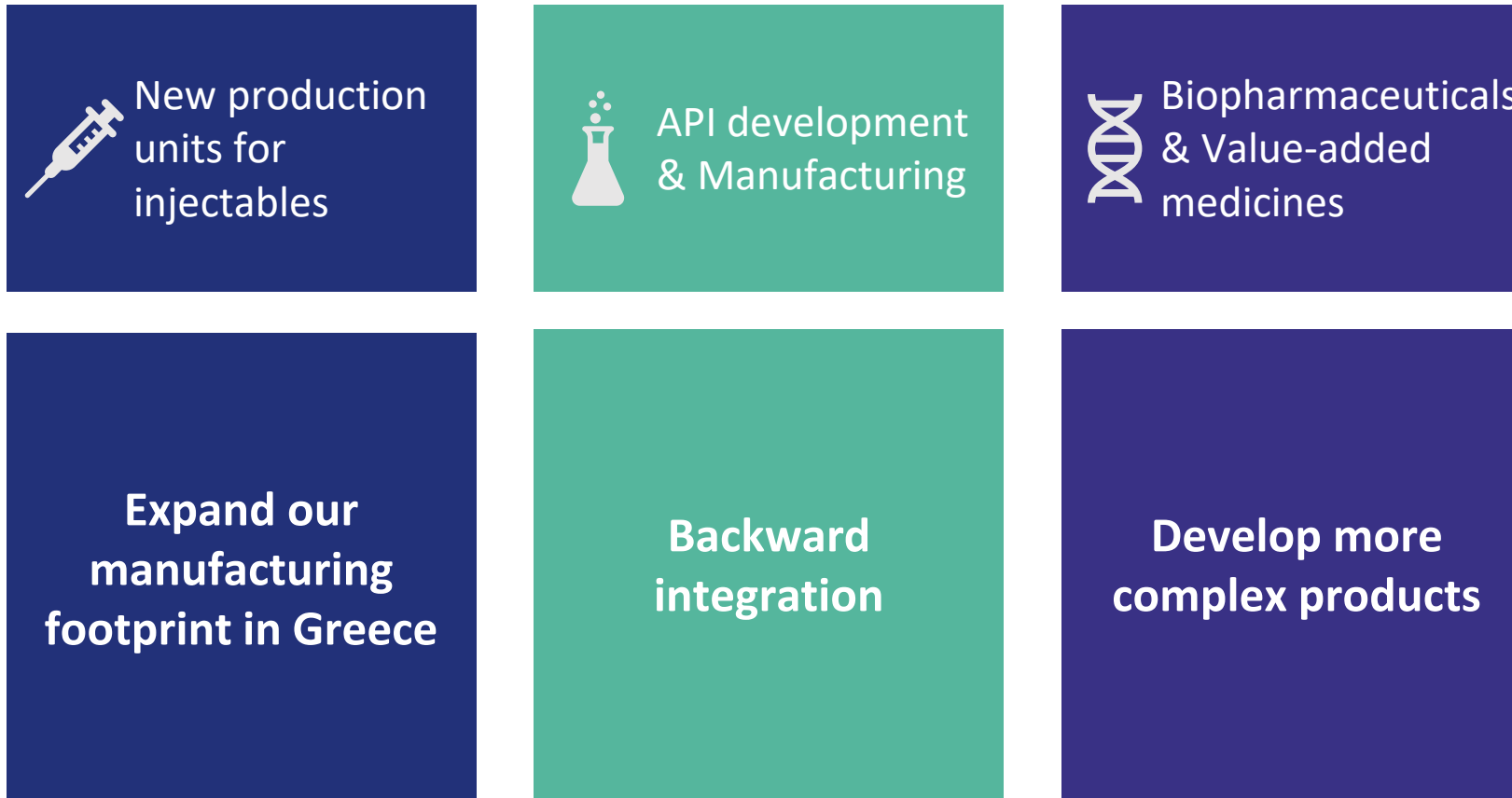
 **57%**
of employees
below 40

 **4**
manufacturing
plants

 **84%**
of annual
production exported

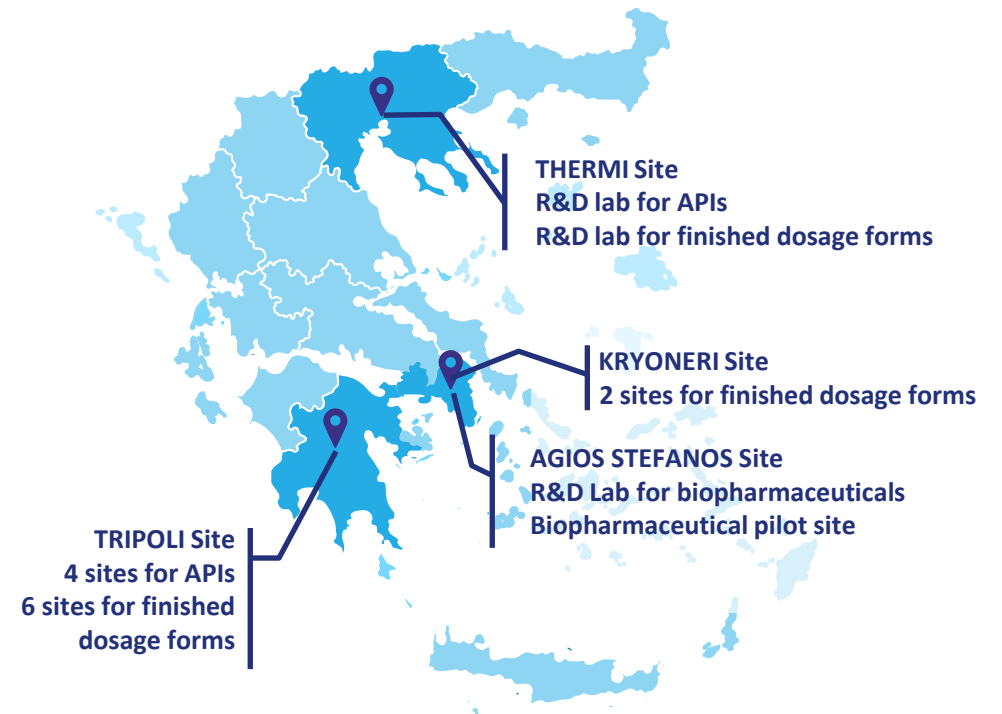
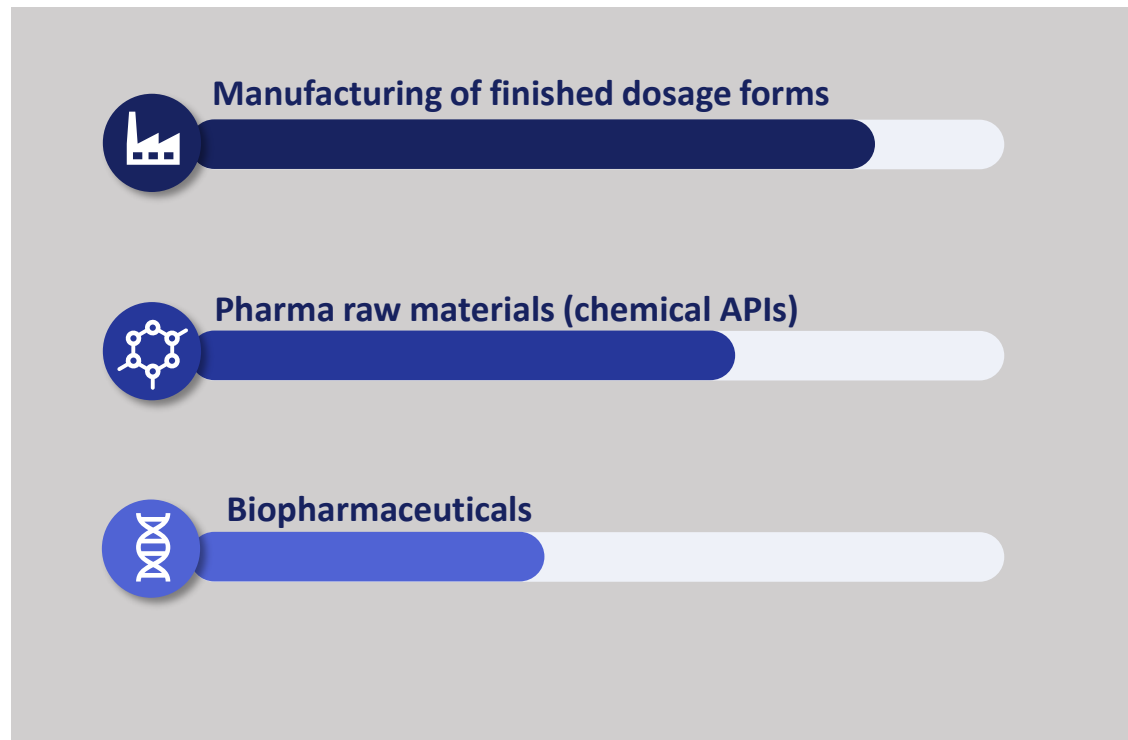
 **5.4%**
of net turnover
expenses in R&D*

The 3 pillars of our expansion strategy



Our 7-year investment plan

Total value: €356.000.000



Manufacturing of finished dosage forms



New workshops in our Kryoneri site:



Sterile solutions in Form/Fill/Seal bags

Single/double/triple-chamber bags



Sterile solutions in glass vials (additional lines)

1-100ml vials



Freeze-dried powders (additional lines)

+100m² of lyophilization capacity



Prefilled syringes/Auto-injectors



New manufacturing campus in Peloponnese (Tripoli):



Injectable Antibiotics



Oncology products

Liquid and freeze-dried formulations

Manufacturing of chemical APIs







Therapeutic areas covered:

- ▶ **Sterile Antibiotic APIs**
- ▶ **Cytotoxic APIs**
- ▶ **General Purpose APIs**

Capacity to produce 200 tons of APIs

Investments in R&D – small molecules



	R&D Center I (Kryoneri site)	R&D Center II (Thermi site)
	34 scientists	55 scientists (inaugurated in 2022)
	Finished Dosage Forms	APIs Finished Dosage Forms
	600 m ²	2.400 m ²
	Analytical development (Wet Chemistry, HPLC, GC) Microbiology, Formulation Development	Analytical development (Wet chemistry, HPLC, GC, LC/MS, GC/MS) Microbiology, NMR, Synthetic Process Development, Formulation Development

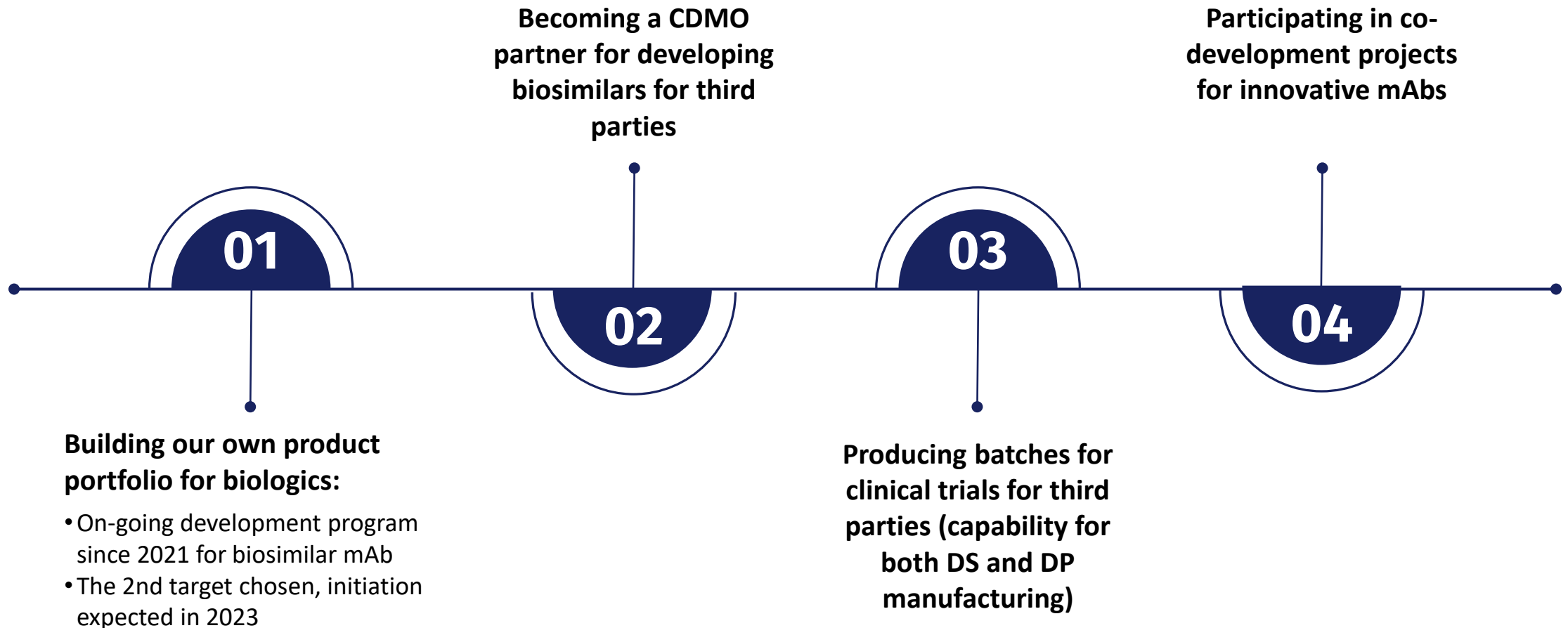
Biopharmaceuticals: A new era for DEMO



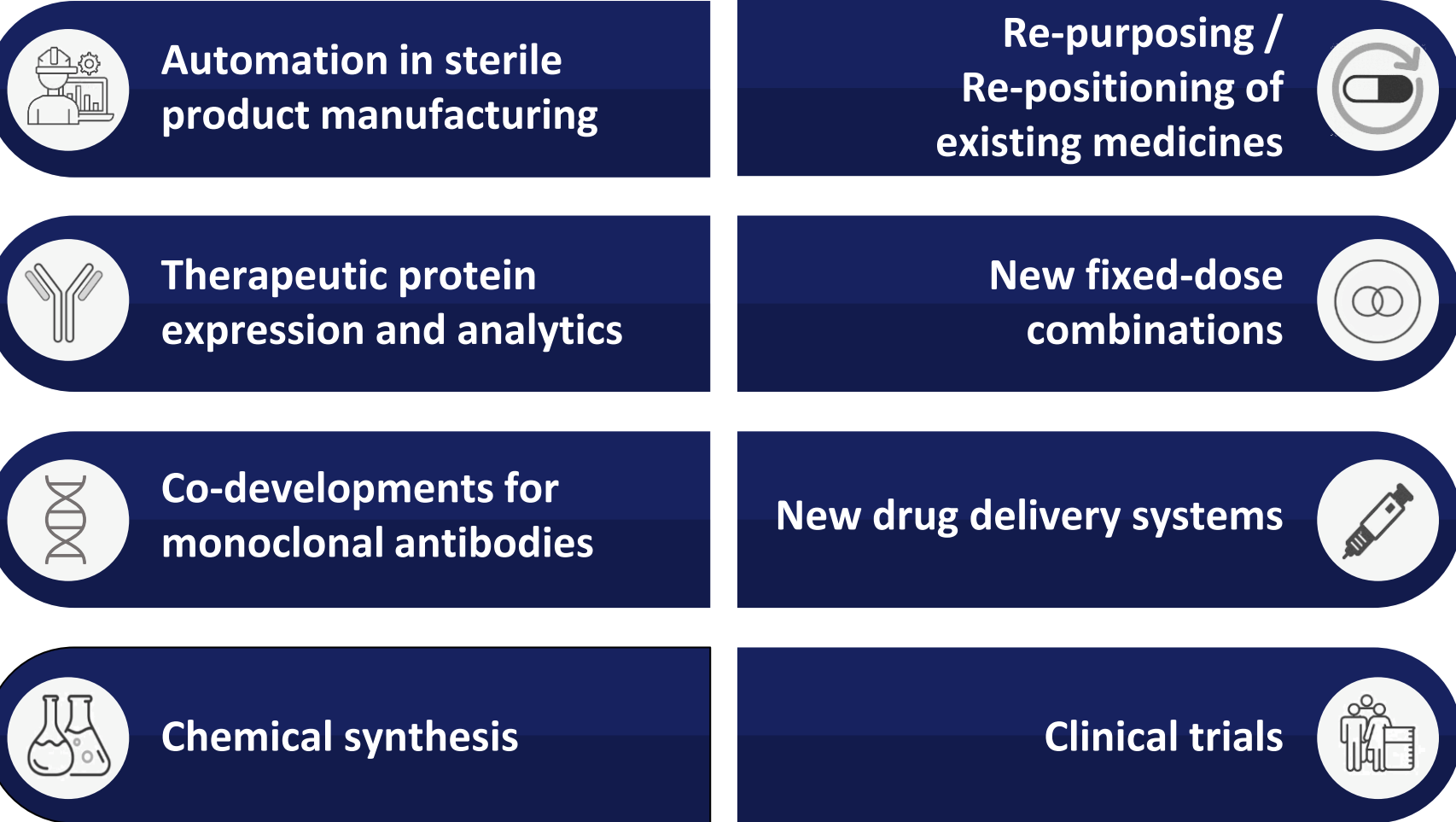
GMP Facility for biotech R&D activities and production under construction at Agios Stefanos:

- 4.000 sq.m. monoclonal antibody manufacturing facility
- Mid-size bioreactors (4 x 2.000L)
- R&D lab able to develop biosimilars from cell line to Drug Product
- Fill & finish site with capabilities for vials, pre-filled syringes and pens

Our targets in biotech



Synergy areas





Thank you



OFET

GROUP OF PHARMACEUTICAL COMPANIES



Pharmaceutical Laboratories S.A.

- Pharmaceutical Products
- Nutritional Supplements
- Diagnostics
- 350 Employees



- WHC
- Dental Care
- Ophthalmology
- 250 Employees



- Extraction of bioactive ingredients from plants
- Wide range of extracts, enriched fractions, pure compounds and essential oils.



- Annual Financial turnover :
 - ~ 125 Million Euro
 - 80% internal market
 - 20 % exports in 66 countries

Key Figures for the Group

- 125 mil EUR Revenue for 2022.
- Sustainable CAGR of > 10% over the past 10Y
- UNI-PHARMA ranks in the top 15 Pharma production companies based in Greece in terms of Revenue with presence in 65 countries all over the world with own brands
- And ranks 1st in units (IQVIA Sales 2022)
- Over 120 mil EUR invested over the past 10 Years in 4 Pharma Production sites and an ongoing CAPEX of additional 30 mil EUR.
- ~ 600 employees in total



Core Therapeutic Areas

- Cardiovascular System
- Metabolism
- Diabetes
- Thyroid diseases
- Inflammation
- Analgesia



OFET

GROUP OF PHARMACEUTICAL COMPANIES



Collaborative Research Activity

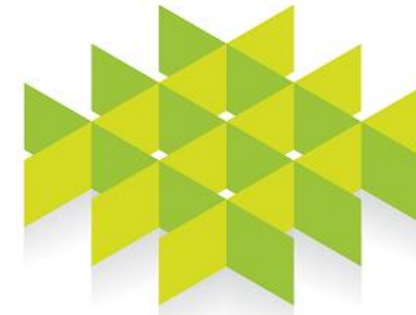


- Establishment of a scientific network of more than 30 research groups from Academia
 - allows us to run a multitude of research projects in diverse areas, leading to innovative products and patentable subject-matter
 - 8 national co-financed research projects
 - 19 own funded research projects
 - Sponsorship to 26 research groups through "KLEON TSETIS" Foundation in the period 2018- 2022
 - Total funding of 366K€ via "KLEON TSETIS" Foundation
- Total Research Budget over 8 M€



Industrial Property Management

- More than 100 patents historically
- More than 35 OFET's products are patent protected currently
- 39 national and 6 European patents are currently in force
- 3 of them (injectable paracetamol, iron polymaltose and iron casein aspartylate) are granted in 60 states worldwide.
- 15 national and 11 international patent applications are currently under examination



OFET

GROUP OF PHARMACEUTICAL COMPANIES



Pharmaceutical Laboratories S.A.



Core Research Areas

- **Drug Repositioning** – Repositioning of known active substances in new therapeutic areas, through Phase II and III clinical trials.
- **Advanced Drug Delivery Systems- Nanotechnology** - Development of innovative nanocarrier systems as a novel oral drug delivery platform.
- **Medical Devices** – A portfolio of more than 150 products and constantly expanding technologies & applications
- **Exploitation of Greek plant biodiversity** – Characterization of plant derived bioactive ingredients and exploration of a multitude of biological targets.
- **Connected Diagnostics** – Joint venture platform which has already gained access to an innovative immunodiagnostic technology
- **Industry 4.0** – Digital transformation of Operations- ranging from process automation and continuous manufacturing to M2M integrated supply chain
- **Biotechnology** – upstream & down stream processing targeting peptides at first and then progressing to proteins & MAB's.



OFET

GROUP OF PHARMACEUTICAL COMPANIES





Leading to the Future

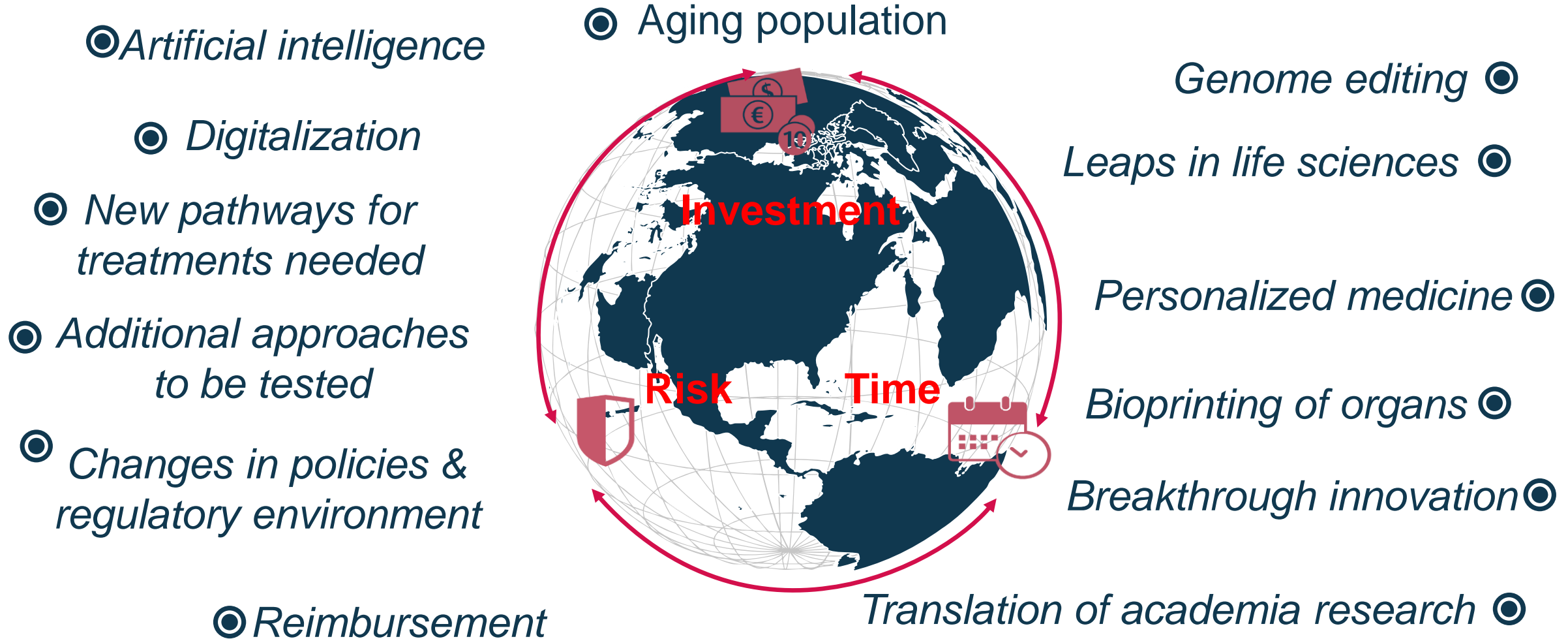
Innovation in Clinical practice and Research





Patient access to breakthrough therapies is full of challenges

World and science is changing fast. VUCA is the new norm.





Greek healthcare is at a crossroad of change...

- Economic crisis shifted burden from Primary to Secondary care
- Limitations in public pharma budget
- Low spending in R&D (51mil in 2018)
- Lack of modernized digitalized hospital equipment and IT infrastructure
- Low utilization of digital health & absence of legal framework

Issues

Prospects

COVID vaccination entry to digital



Healthcare at the heart of R&R EU Fund

- 1 Green Transition (37%)
- 2 Digital Transformation (20%)
- 3 Smart, sustainable and inclusive growth
- 4 Social and territorial cohesion
- 5 Health, economic, social and institutional resilience
- 6 Policies for the next generation, children and youth

Greece 2.0
NATIONAL RECOVERY AND RESILIENCE PLAN
€ 31 bn

3.3 Improve resilience, accessibility and sustainability of healthcare

1,5 bil.

More efforts for HC improvement

- | foundation of ODIPY | RCT offices in hospitals |
- e-prescription in hospitals | e-patients records



At Bayer Hellas, we have a vision for laying the foundations for the future of healthcare in Greece

Create an ecosystem for the transformation of healthcare in the future through **enabling research & innovation** and **empowering HCPs, patients and researchers** for better health.



Advancing Medical Education

Familiarizing with clinical research & innovation through the early steps of medical education:

- Raise awareness around the value of clinical research & innovation
- Provide the “tools and ammunitions” to excel
- Share diverse perspectives on career opportunities

Leveling up Clinical Practice

Creating awareness, framework and opportunities for adopting innovation

- Fast adoption of innovative healthcare services
- Build up health literacy on patient safety and raise awareness on healthcare transformation
- Enhance HCPs/patients engagement for improved disease management

Empowering clinical research

Build framework for continuous improvement and research optimization

- Empowering clinical researchers
- Adopting digital innovation in clinical research
- Raise awareness among patients on benefits of clinical research
- Optimizing clinical trials approval framework



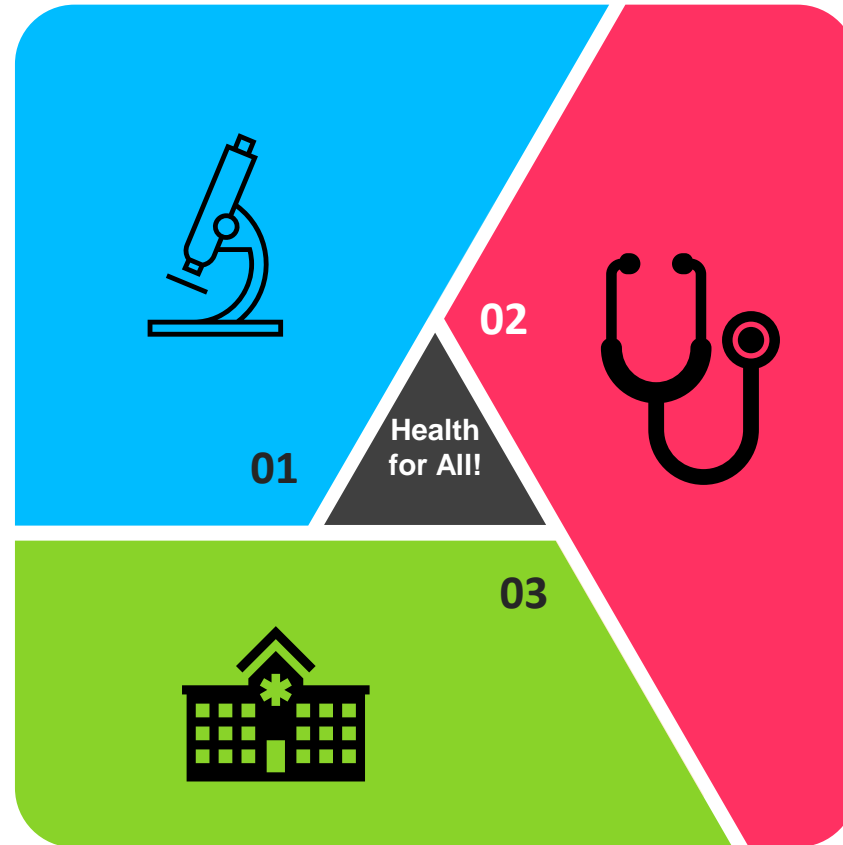
Technology can upgrade and accelerate the entire value chain, from research and development to manufacturing and health management

Clinical research - 01

Automations and tools that allow the analysis of large volumes of data in combination with artificial intelligence solutions, can make clinical research more efficient. In Greece, our priority is to systematically foster skills, capabilities and infrastructure.

NHS - 03

The cost of health care is estimated to increase by an average of 5% in Europe each year. NHS must change with the help of technology in order to be able to meet these challenges, adopting solutions that offer automation, optimization and personalized medicine



02 - Patients

The use of digital technologies can reshape the "patient experience", but also to support early diagnosis and prevention for the benefit of patients. All we have to do is to prepare the health community and patients to adopt efficiently the new technologies



G4A | Level-up – Bring your idea to the next level...

// At Bayer, we recognize the power of Collaboration in Accelerating Innovation. Only this way, we can provide solutions in a world that continuously changes



This year, we offer the opportunity also to university or research teams to evolve



- Researches
- Universities



- Start-ups (Pre-seed, Seed)



The teams or companies will receive...

Practical Rewards

- // **Consulting services** – free accounting, legal advice, PR activities and 6 workshops
- // **Premium mentorship** –1:1 mentorship with Bayer Hellas executives
- // **Coaching and guidance** – for participation in international accelerators or other local contests
- // **Participation in local events** - hat address the local ecosystem
- // **Organizing local events** – Invitation to all NBG + Bayer Hellas events, like Agrifood Day and Digital Health Day
- // **International business trips to pitching events** –G4A pitch event or visit in Berlin

Non-investment monetary Rewards

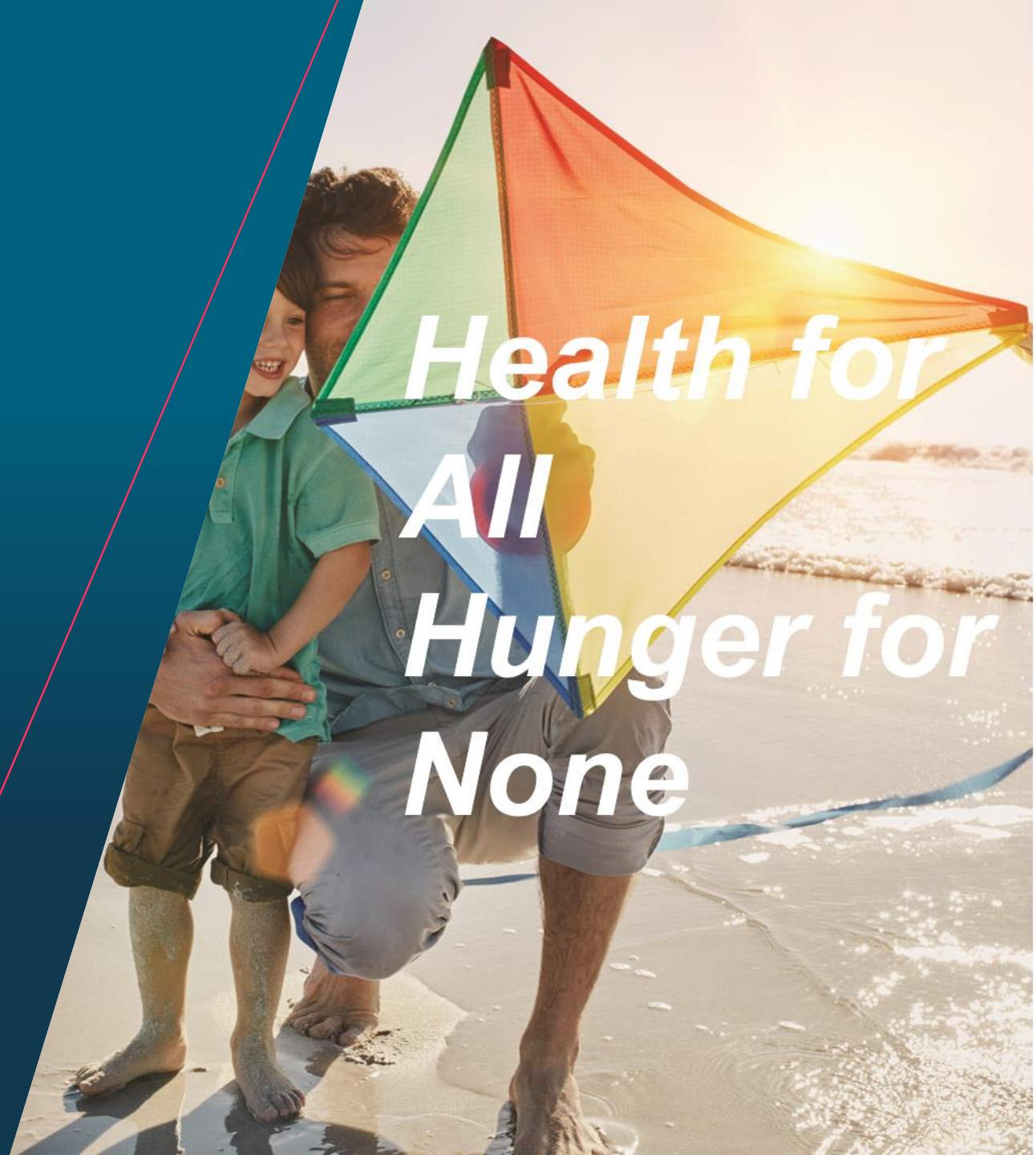
- // **Sponsorship** –monetary competition prizes



Thank you



*Health for
All
Hunger for
None*



3rd Healthcare - Life Sciences meetup, December 15, SEV



ARIS MITSOPOULOS

Vice President RAFARM



Content

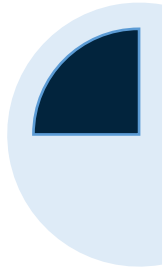
- The opportunity of the Greek Pharmaceutical Industry
- RAFARM - Research & Development

2021-2026

Five years of dynamic
development for the
Greek pharmaceutical
industry



Greece, pharmaceutical industry Hub



Greek pharma industry

Production base utilization

Extroversion and interconnection with international markets

Brain gain

Intensity of investment

Reforms-Investment

Incentives

Clawback balancing



EU policy

New common European strategy

Return of production to Europe

Strengthening regional European supply chains

RRF

RAFARM,



Fully integrated European pharmaceutical company

- Facilities 16,000 m²: three cutting-edge technology production lines, new state-of-the-art Research & Development Center, independent warehouse facilities
- >1,100 approved product licenses

- FDA approved R&D and Sterile facility
- Exports in 60 countries

- 650 people
- New high-skilled jobs



15%

growth in total group
turnover (2021 vs 2020)



exports
>75%
of the production



US F.D.A
approved
R&D and Sterile facility

We evolve beyond the obvious <

Innovation culture and investments

- Investment plan of 65 mil €, 2021-2025
- New state-of-the-art R&D center
- Highly qualified R&D team of 90 scientists (>40% MSc and /or PhD)
- R&D capabilities in complex pharmaceutical products - Expertise in ophthalmics and injectables
- New production lines - Latest technology and robotic mechanical equipment



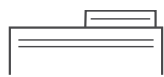
670

Pharmaceutical
products



60

countries



16.000 m²

facilities



650

people



Value Added Medicines – Incremental Innovation

Repurposing: Finding new indications to address unmet medical need

Reformulation: Development of new formulations, alternative ways to administer, new dosage forms & strengths

Fixed Combinations: Combining two or more known substances



We evolve beyond the obvious 

Sterile pharmaceutical products



Ophthalmics

- new technology platforms
- preservative free products
- microsuspensions
- nanoemulsions



Combinations of two substances with innovative technological solutions

Injectables

- colloids





We evolve beyond the obvious
and make a positive impact on people's lives

How far can we get?

The answer is that every day we take a step forward. Every day we build new paths, beyond what is obvious. Our starting point is not visible at first glance. We come up with what is inspiring and different.

We constantly evolve and improve, aiming to lead the way and enhance the quality of people's lives; for the people, society, our planet.

We go beyond the obvious, aiming at a healthier future.

