

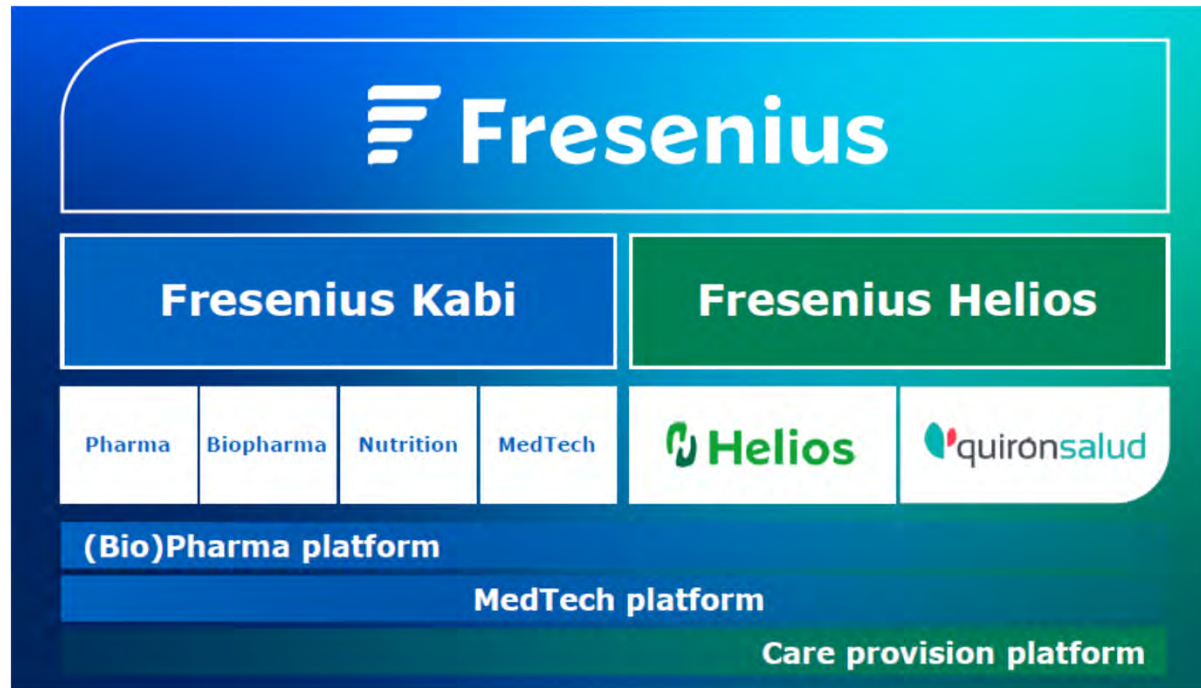
Delivering healthcare innovation to people

Innovation strategy and project selection

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Member of Fresenius SE Innovation Council*

What is Fresenius ?



Fresenius constantly delivered relevant innovations to healthcare since 1912



1912

Foundation of pharmaceutical company
Dr. E. Fresenius

Work with Paul Ehrlich for IV Diluents for Salvarsan



Expansion into **Infusion Solutions, Parenteral and Enteral Nutrition**



1955-70



1980's

Development of Polysulfon fibers for Hemodialysis by Dr. Krick and Dr. Heilmann

Acquisition of US IV Gx producer **APP Pharmaceuticals**

Foundation of a leading portfolio of affordable iv-generic medicines in US and Europe in vials, syringes, bags and bottles

2008



2019



Launch of **first biosimilar** in Europe after acquisition of Merck KGaA biosimilar pipeline

#Future Fresenius:
Establishing an innovation culture for future growth by Michael Sen

>2022



Else Kröner: „Who, if not us ?“

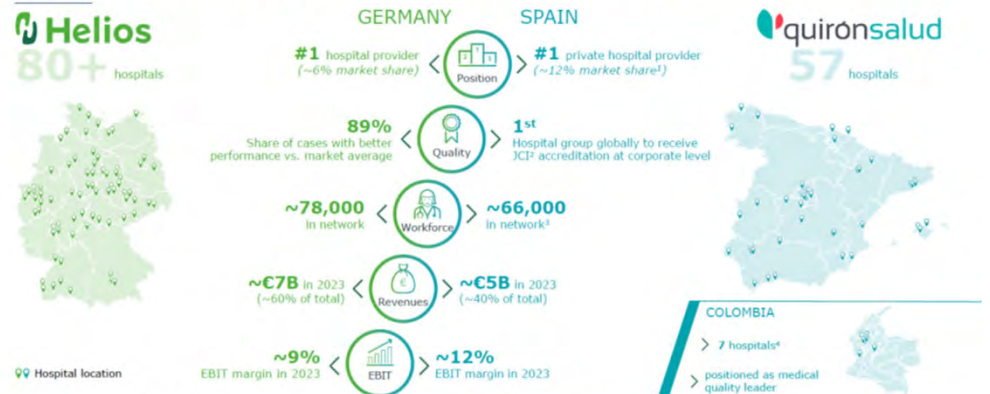
This has made Fresenius a leading healthcare company touching more than 450m patient lives every year

Fresenius Kabi Strong relevance and scale across our 4 business units



¹Including Katranalogenes ²Infusion & Nutrition Systems
Source: IQVIA, Fresenius Kabi internal analysis; market data refers to Fresenius Kabi's addressable markets

Fresenius Helios We are the leading hospital care provider in Germany and Spain



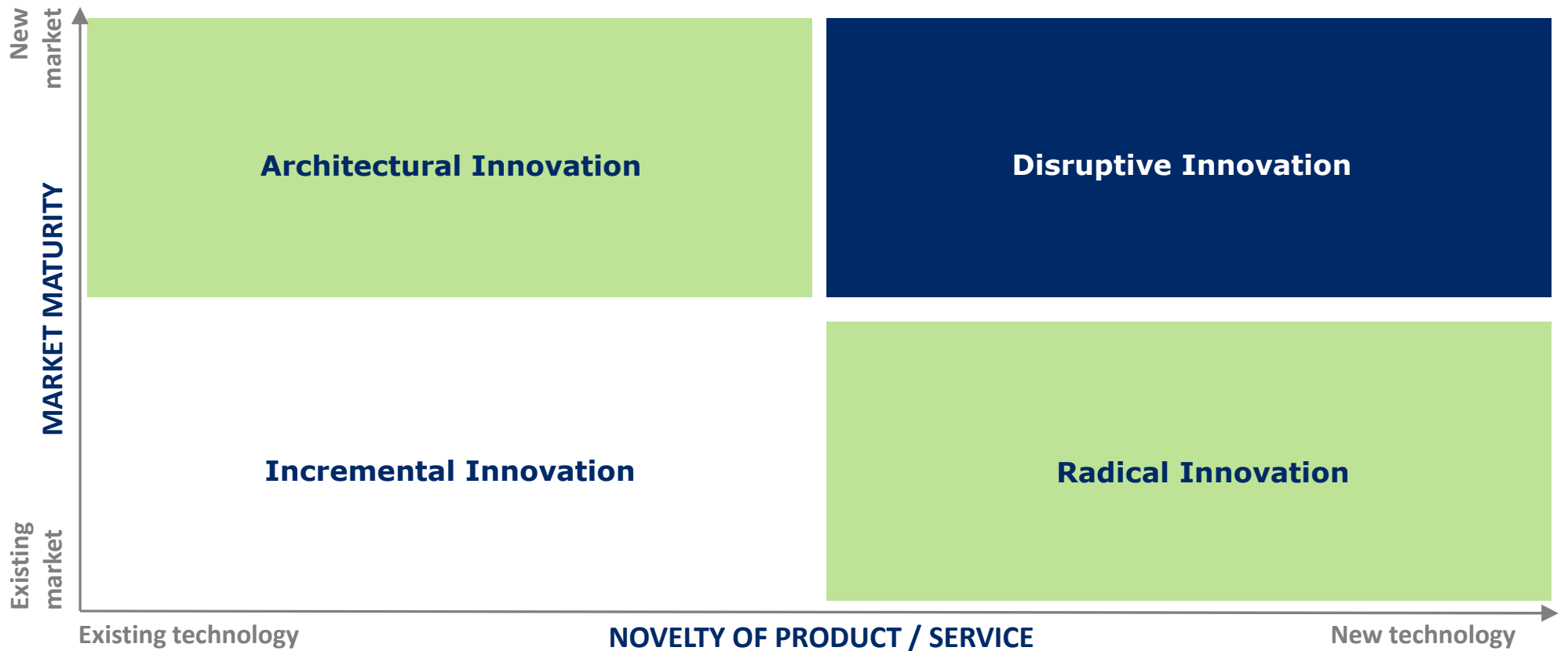
¹ Excludes public-private partnerships (PPP) and Occupational risk prevention centers (ORP) | ² Joint Commission International | ³ Including ~30k employees and ~16k mercantile physicians | ⁴ 7 hospitals in Colombia are included in 37 Quirónsalud hospitals; Clínica Medellín has 2 locations, considered as 2 hospitals | Note: Statements alluding to our leading position refer to our market share based on revenues if not stated otherwise | Source: IQVIA, German Inpatient Quality Indicators (IQ-IQI), German Federal Statistical Office, Annual reports, Krankenhaus Rating Report

Need to create a constant path of innovative products

- Create an innovation culture throughout the company
- Communicate innovation targets clearly and repeatedly
- Optimize structures and processes for funding, decision taking and risk-management



Innovation management depends on choice where to find and solve your "unmet needs"



Incremental innovation: building on existing technologies for existing markets

Typically low risk, lower cost projects

Easier to develop, produce and promote

Decision taking within operating units

Decision criteria:

- Customer interest, competitive environment
- Net present value attractive / pay-back <5.5 yrs
- Can be developed and launched based on existing capacities, capabilities and competencies

Downsides:

- Limited innovation potential, limited commercial value

Examples:

Prefilled syringes



Ready to administer iv pre-mixes



Room temp stable vs. cold storage



Applying new technologies or entering new markets requires a different innovation management concept

Typically high risk, high cost projects with longer lead times

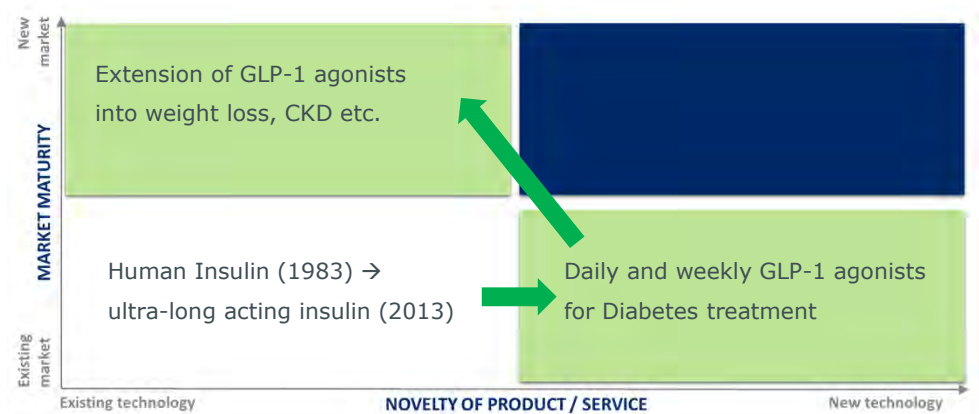
Compatibility with budgets and profitability targets of operating units might be limited

Challenging running business practice might create internal friction

Decision criteria of incremental innovation are not applicable

Project requires more contributors and coordination to deliver on time and budget and to manage risks

Example GLP-1 agonists, e.g. Semaglutide



Implementation of an Innovation Council at Group CEO level

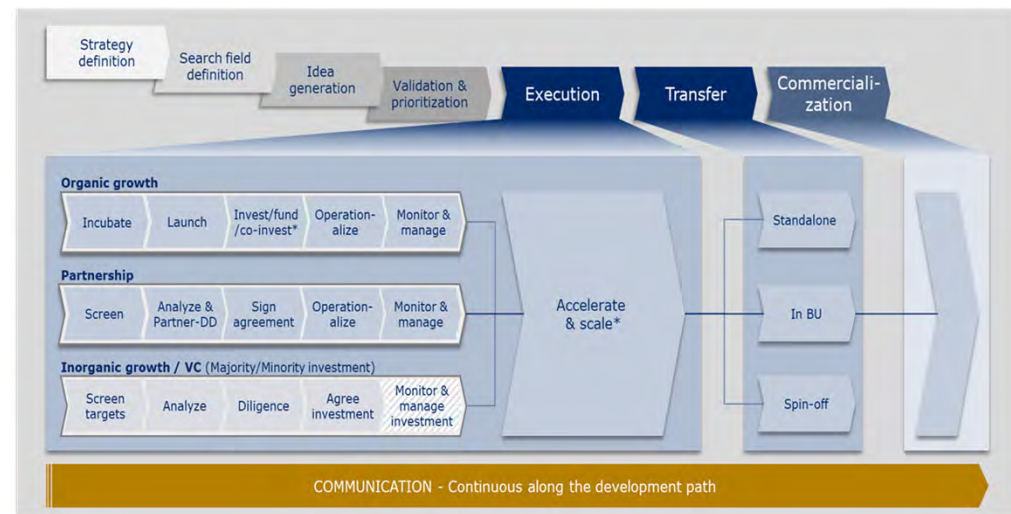
Manage communication, screening and valuation of internal and external innovation ideas

Facilitate swift and structured decision taking across operating units

Secure funding for identified projects of interest in case decision criteria of operating units are not met

Provide alternative project environments (e.g. partnerships, incubator / innovation accelerator models, etc.), if needed

Manage innovation culture and organisational hunger for attractive new ideas



Connecting the dots

Translational research can be a great source for novel ideas and projects

Solving unmet medical and pharmaceutical needs helps a) serving society and b) keeping European industry relevant and competitive



What are we looking for when evaluating projects and ideas ?

Is there a **strategic fit** and is it the **right product** for the company ?

Is the concept sound and properly based on **science, facts and / or evidence** ?

Is the **unmet need relevant** and going to persist ? What is the (anticipated) competitive environment for that need at the anticipated time of launch ?

Can the concept be **IP protected** ?

What are the **unresolved scientific, technical and / or commercial challenges** to realize the concept?

Estimate costs, times, risks, etc. for an indicative business plan

Is there an „**owner**“ of the project idea, who wants to drive this to realization ?

Where do we want to go ?

Addressing the driving forces of tomorrow's healthcare

Multi-faceted health equity

Securing broad access and affordable healthcare



Integrated therapies

Enabling targeted and multimodal treatment options



Human-to-human care

Executing end-to-end clinical pathways with empathic care staff



AI-powered clinical decisions

Supporting efficient, personalized clinical decisions





**Looking forward to deliver
attractive and needed
healthcare solutions also in the
future to society, patients and
stakeholders**

A partner of the Global Health Equity Network

This is Fresenius

OUR MISSION

We save and improve human lives with affordable, accessible and innovative healthcare products and highest quality in clinical care

OUR VISION

We are the trusted, market-leading healthcare company that unites cutting-edge technology and human care to shape next-level therapies

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