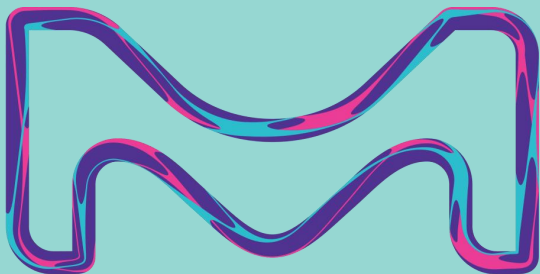


**MERCK KGAA,
DARMSTADT, GERMANY**

**40th annual J.P. Morgan
Healthcare conference**

Belén Garijo, CEO
San Francisco – January 11, 2022



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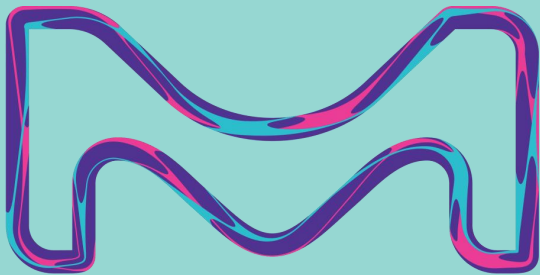


Agenda

- 01** Introduction
- 02** Transforming the company
- 03** Business Update
- 04** Guidance & executive summary

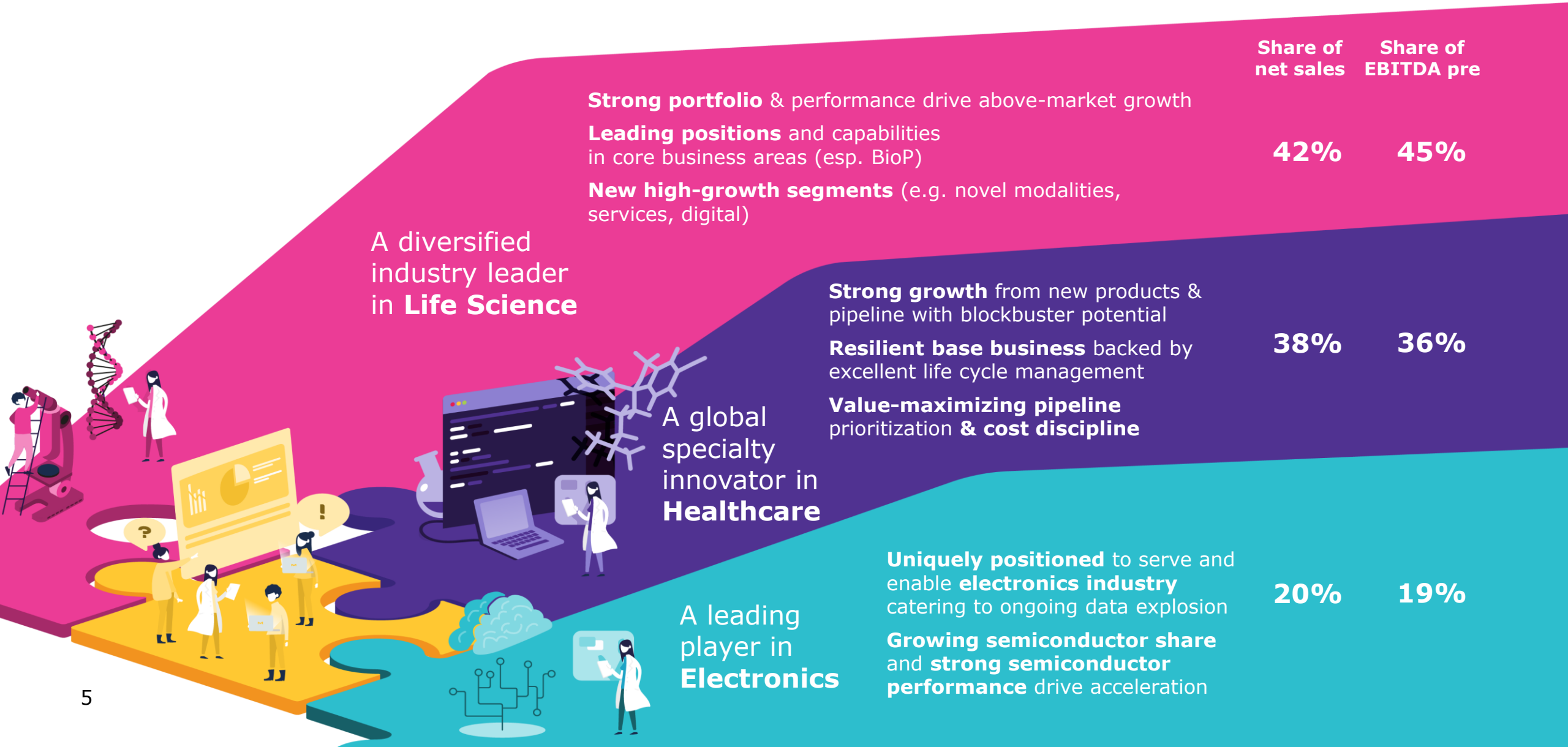


introduction



Group

Leading positions in fastest growing science & technology markets



Group

Accelerated science & tech leadership driving growth

New Strategic Framework		
Direction	Mobilize for growth in the BIG3	Focus on profitable top line growth in BIG3
Frame	Accelerating science & technology leadership	Innovation as key driver for sustainable growth
Foundation	Focused & disciplined capital allocation	No "coffee for all" disciplined and focused investment in Enterprise Planning Units
Values	Continued long-term orientation & sustainability	Continued long-term focus as part of the DNA further reinforced by significant sustainability effort
Drivers	Agility, Diversity, Cost discipline	Strong, diverse, fast, agile & unbureaucratic; cost discipline in non-focus & support areas

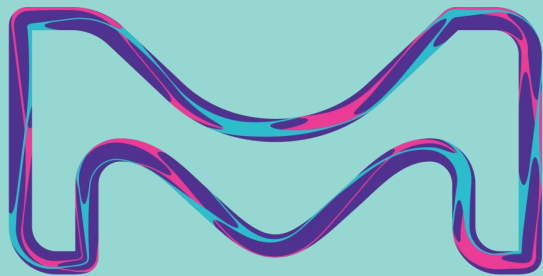
Core pillars

Supporting pillars

company innovation center darmstadt



TRANSFORMING the company



Group

Well positioned to win in high-growth focus areas

Global economy¹



Global GDP
~3% to 4%

End markets¹



Global pharma industry
~4% to 5%



Global life science industry
~5% to 7%



Global electronics industry
~4% to 5%

Focus market areas¹

Oncology ~9% to 12%
Neurology ~3% to 6%

Biologics >10%
Services >10%

Semi materials
~5% to 7%

BIG3

New HC Products

Process Solutions

Semi Solutions

Σ ~4% to 6%

Σ 6% +

Uniquely positioned to address inevitable market trends
Diligent execution of **focused & disciplined investments** plan to **fuel BIG3 growth**

¹ Company estimates of mid-term growth outlook based on industry forecasts and reports from public research institutes (e.g. IMF, IQVIA, EvaluatePharma, Prismark, etc.)

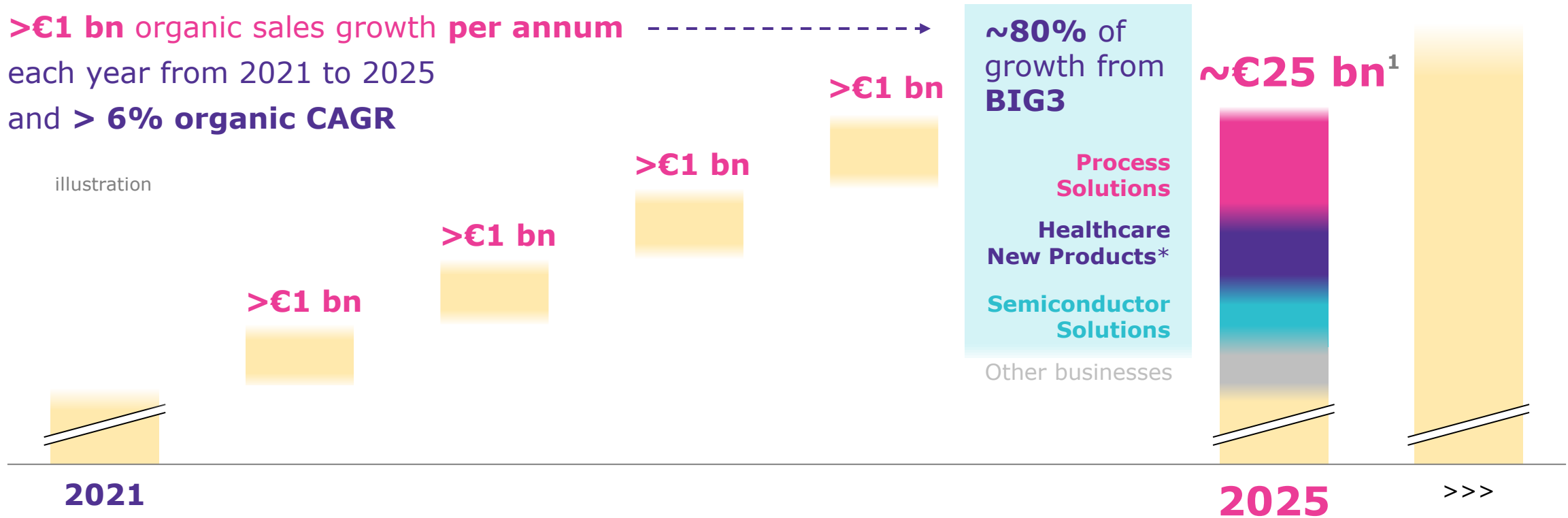


Group

#25by25: delivering €5 bn+ organic additional sales by 2025

>€1 bn organic sales growth per annum
each year from 2021 to 2025
and > 6% organic CAGR

illustration



▶ **Clear commitment to efficient growth**

1) including potential bolt-on M&A

*Updated scope: New Products consist of recent launches (Bavencio®, Mavenclad®, Tepmetko® MET-exon 14) and risk-adjusted launches to come until 2025

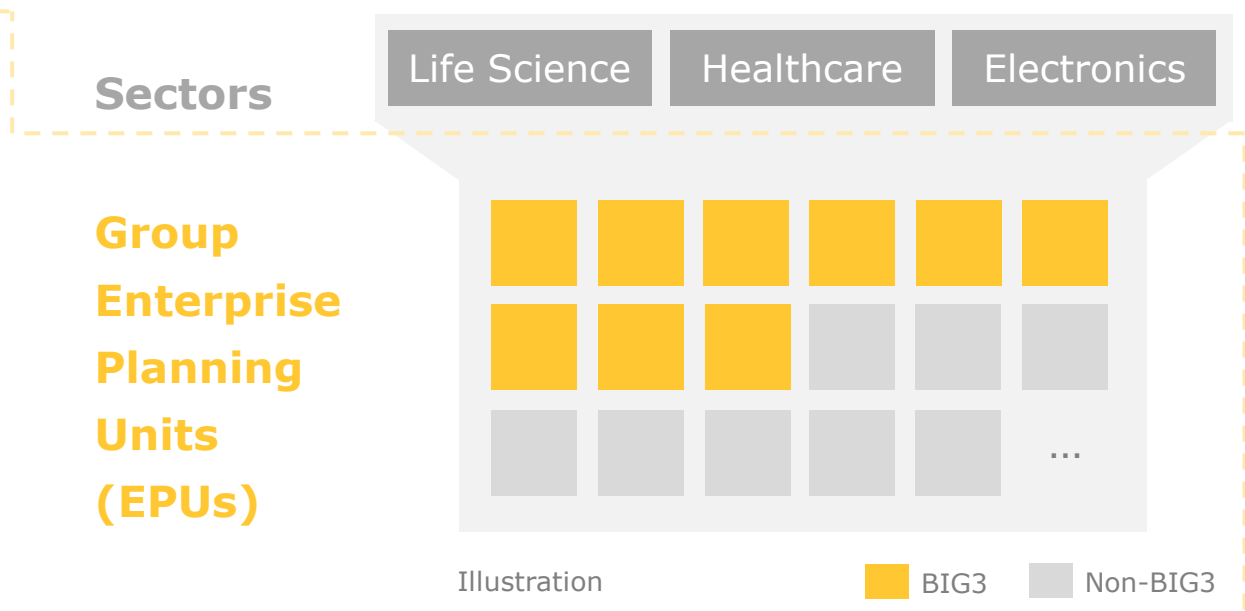
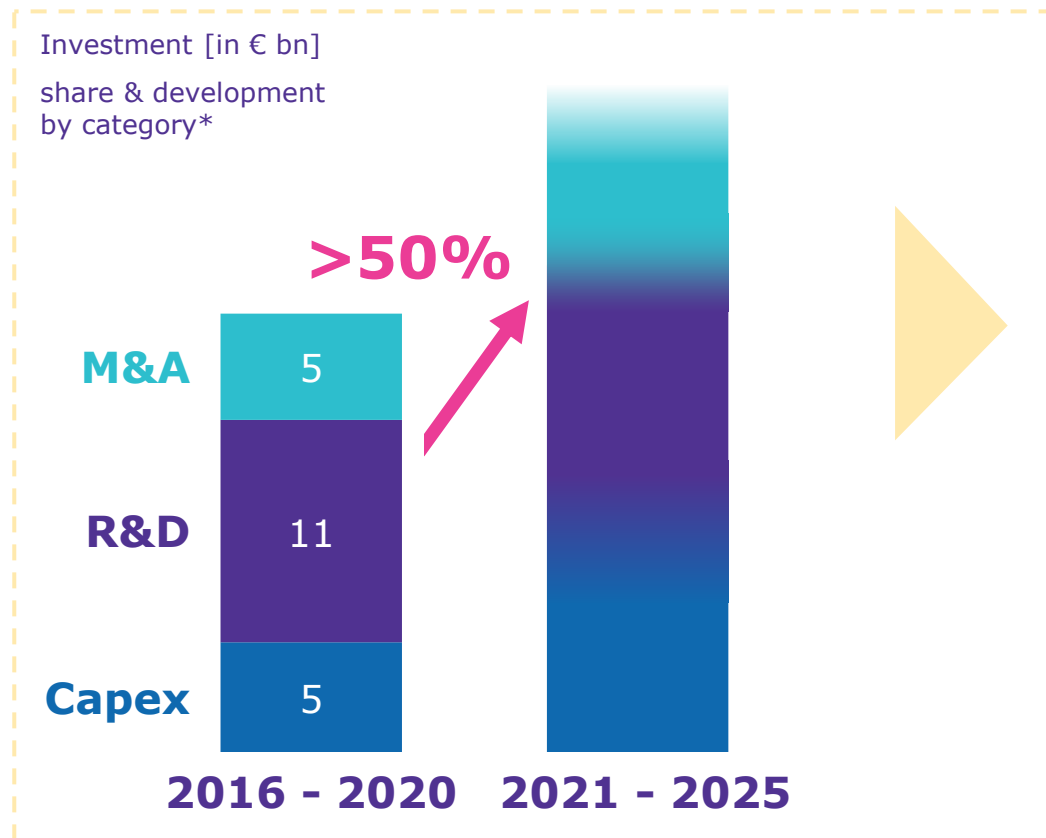


Group

Committing to record investments - targeted @BIG3 growth engines

Leading positions in **growth markets** fuel significant **boost in investment capacity**

Targeted, disciplined & focused capital allocation across **>20 enterprise planning units**

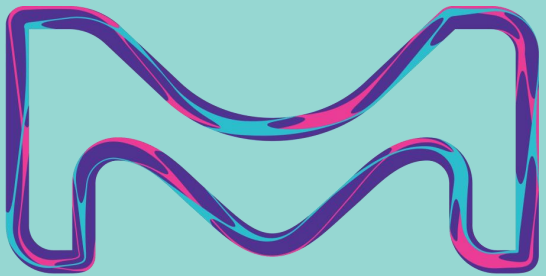


BIG3 consist of **~10 planning units** with a **capital allocation target of >70%** between 2021 and 2025

* >50% statement primarily valid for R&D and CAPEX plan, future M&A purely illustrative as it is deal-dependent



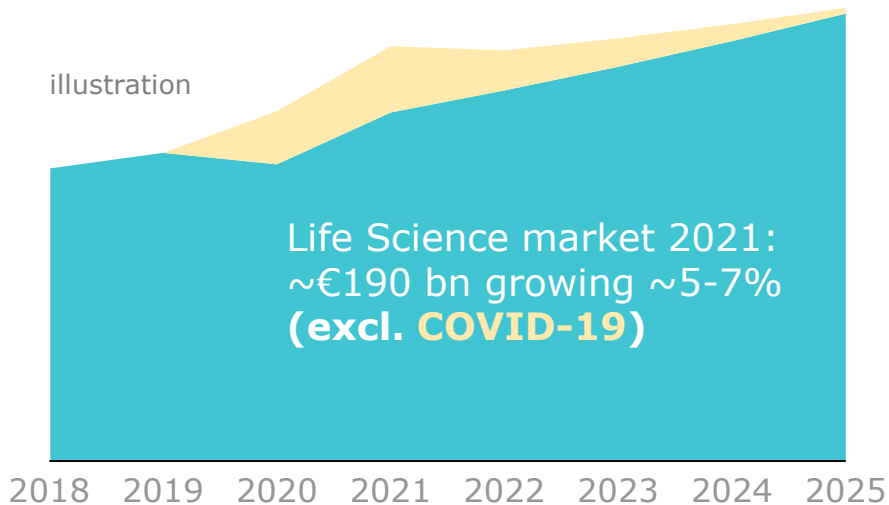
business update



Life Science

Driving growth and expanding leadership in Process Solutions

Robust market with diverse growth pockets, **elevated during pandemic**



- Attractive **base market**, on slightly higher growth trajectory post 2021
- Significant **demand from COVID-19**, expected to decline as pandemic recedes

Life Science will be fully equipped to capture growth opportunities with a **focus on Process Solutions**

- Major **capacity and network expansion** to fuel growth of key product portfolios, **especially bioprocessing**
- Targeted scaling of **high value CDMO/CTO services** across traditional and novel modalities
- **Relevant and diversified** portfolio in **Research and Applied**, not only for cash and resilience, more importantly for **innovation and trend scouting**
- Programmatic **bolt-on M&A** plus rising focus on **China/APAC, innovation, and digital**

► **Upgrading** mid-term financial ambition to **7-10% org. sales CAGR** (incl. fading COVID business)

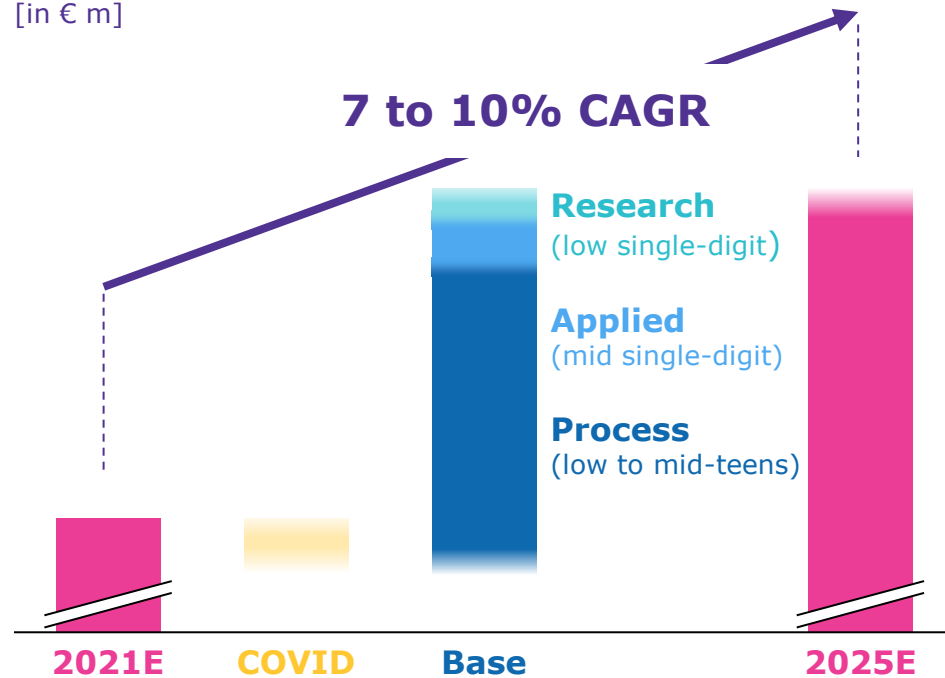


Life Science

Strong growth and improved mid-term outlook

Life Science mid-term sales outlook

[in € m]



Drivers of strong mid-term outlook

- **LS-wide: Above-market performance** with continued positive YoY growth rates **despite expected fading COVID-19 demand**¹
- **Process: Driving ~80% growth** based on three main pillars
 - Capitalizing on strong demand for **products for traditional modalities** via network / capacity expansion and innovation (e.g. BioPharma 4.0)
 - Building scale in **services for all modalities** with a focus on mAbs, hp-APIs, ADCs, viral vectors and mRNA
 - Templating **products for novel modalities**
- **Applied and Research:** Building on strong positions with continued **robust growth** in line with historical trends



Confident to deliver above-market growth despite expected fading COVID-19 business

¹Mid-term organic sales outlook of 7 to 10% CAGR assumes fading COVID-19 related business between two scenarios: A) zero COVID-19 related business in 2025 [implied CAGR of 6 to 9%] and B) COVID-19 related business in 2025 on 2021 level [implied CAGR of 8 to 11%]








Healthcare

Well positioned in a dynamic environment, focused leadership in R&D




Existing market trends unchanged...

- High growth in largest TA Oncology
- Precision medicines to further increase share
- Cost pressure and pricing volatility growing

... well positioned to grow further

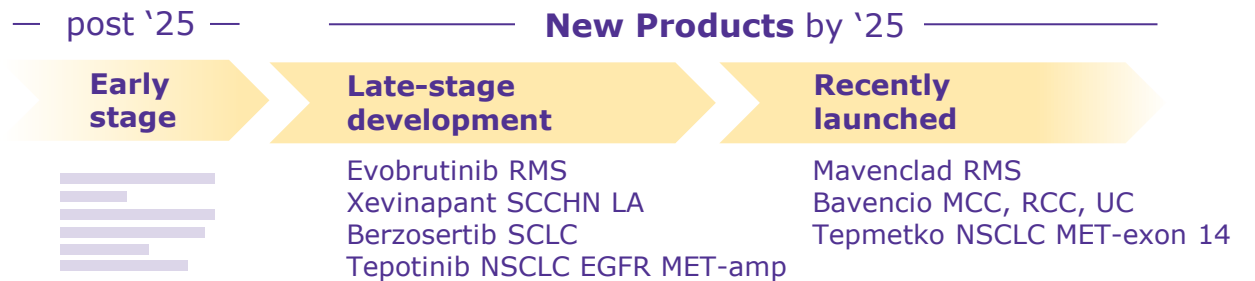
-  Long-term Oncology strategy with diversified clinical portfolio
-  Innovative models of treatment personalization, e.g. in Fertility
-  Diversified geographical sales footprint, lower exposure to potential U.S. pricing reforms
-  Global while local - 18 manufacturing sites and 4 R&D hubs across the globe
-  Broad spectrum of payer types due to TA and geographical variety

Focused leadership in R&D driven by recent launches & pipeline

-  SCCHN
-  Bladder cancer
-  MET driven tumors
-  ...

✓ From correlated to distinct uncorrelated risks

✓ Variety of pathways supported by new modalities e.g. ADCs, Oral ATRi, TIGIT...



Introducing mid-term financial ambition of mid single-digit org. sales CAGR



Boundaries of human progress today will become reality tomorrow: Our sustainability goals

Positive impact through our innovation

- Ensure global access to medicines
- Enable cutting edge technologies
- Support greener production

01

Dedicated to human progress

In 2030, we will advance human progress for >1 bn people through sustainable science & technology

- Sustainable innovations and technology for our customers
- Impact of our technologies and products on health and well-being



Stabilize production and minimize risks

- Actively manage ESG risks
- Training on policies & standards
- Manage sustainability in supply chain

02

Creating sustainable value chains

By 2030, we will integrate sustainability into all our value chains

- Sustainability culture & values
- Sustainable and transparent supply chain
- Securing our social license to operate in all regions



Minimize negative impact through our operations

- Achieve climate neutrality
- Manage water efficiency
- Reduce waste

03

Reducing our ecological footprint

*By 2040, we will achieve **climate neutrality** and **reduce our resource consumption***

- Climate change & emissions
- Water & resource intensity



Outlook: On the path towards climate neutrality 2040



SBTi commitment letter signed

- Aiming for **climate neutrality** (scope 1-3 emissions) **by 2040**
- **Lower scope 1&2 GHG² emissions by 50%** by 2030 vs. 2020 baseline
- **Source 80% of purchased electricity from renewable sources** by 2030
- **Current scope 3 aspiration to reduce 1,500 kt³ CO₂ equivalents** by 2030

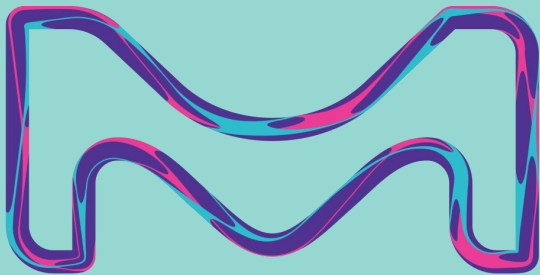
Science-Based Targets initiative (SBTi):

Science-based targets provide a clearly defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proof business growth.

Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, pursuing efforts to limit global warming to 1.5°C.



Guidance and Executive Summary



Full-year 2021 guidance

Net sales:

Organic: +13% to +15% YoY
FX: -1% to -2% YoY
~€19.30 bn to €19.85 bn

EBITDA pre:

Organic: +26% to +29% YoY *(excl Biogen¹)*
FX: -1% to -2% YoY
~€6.00 bn to €6.30 bn

EPS pre:

~ €8.50 to €9.00

¹ Q3 20 reversal of the provision for the patent dispute over Rebif in the amount of ~€365 m; Guidance including Biogen – organic: +17% to +20%



Executive Summary

4 key priorities to deliver on our science & tech ambitions



**Mobilizing for
Efficient growth**



**Leveraging
Innovation
in the BIG3**



**Driving
Culture & Leadership**



**Focusing on
Sustainability**

