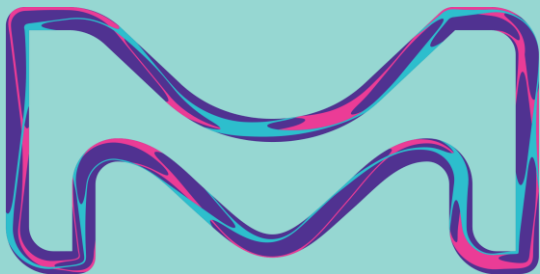


Merck KGaA, Darmstadt,
Germany

Q4 24 Roadshow

Investor Relations

March 2025



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Group is a **VIBRANT SCIENCE AND TECHNOLOGY COMPANY**

Life Science

Diversified industry leader



Healthcare

Global specialty innovator



Electronics

Ecosystem relevant portfolio



Sustainability / ESG

Innovating to elevate humanity



Group

Ready for compelling structural growth



- ✓ **Reacceleration of value compounding**
building on distinct and highly attractive end-market trends
- ✓ **Multiple near-term catalysts to fuel growth uptake**
Life Science and Semiconductor Solutions as key drivers
- ✓ **Truly resilient in a rapidly changing environment**
multi-industry setup with diversified geographic footprint
- ✓ **Strong balance sheet with significant M&A firepower**
patient deal generation, maximizing inorganic opportunities

Group

Three sectors focusing on highly innovative end-markets



Life Science

Diversified industry leader

Process Solutions

Leading product portfolio for bioprocessing, novel templates, chemicals, and formulation materials serving biopharma customers

Science and Lab Solutions

One of the industry's broadest portfolios of consumables for R&D and testing across diverse, attractive customer segments

Life Science Services

Leading contract testing organization and emerging CDMO offering focused end-to-end services across multiple modalities

42%

Sales [% of group]¹



Healthcare

Global specialty innovator

Oncology

Strong presence in mCRC and mUC, promising technologies of ADCs and DNA Damage Response

Neurology & Immunology

Cladribine in gMG PhIII enrollment progressing well; advancing innovation with enpatoran in lupus

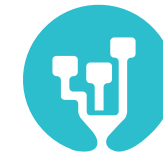
Fertility

Broad portfolio of treatment options, devices and advanced fertility technologies

CM&E *Cardiovascular, Metabolism & Endocrinology*
>90m patients using our medicines for diabetes, thyroid, cardiovascular diseases

40%

Sales [% of group]¹



Electronics

Ecosystem relevant portfolio

Semiconductor Solutions

Integrated innovation leader with one of the strongest portfolios of materials and related equipment and services

Supplying every industry player. Enabling customers to create more complex, smaller and energy-efficient devices

Optronics

Innovative material-related solutions in LC, OLED, AR/VR, and metrology for cutting-edge optical and semiconductor industries

Surface Solutions²

Pigments and active ingredients for automotive, cosmetic & industrial markets

18%

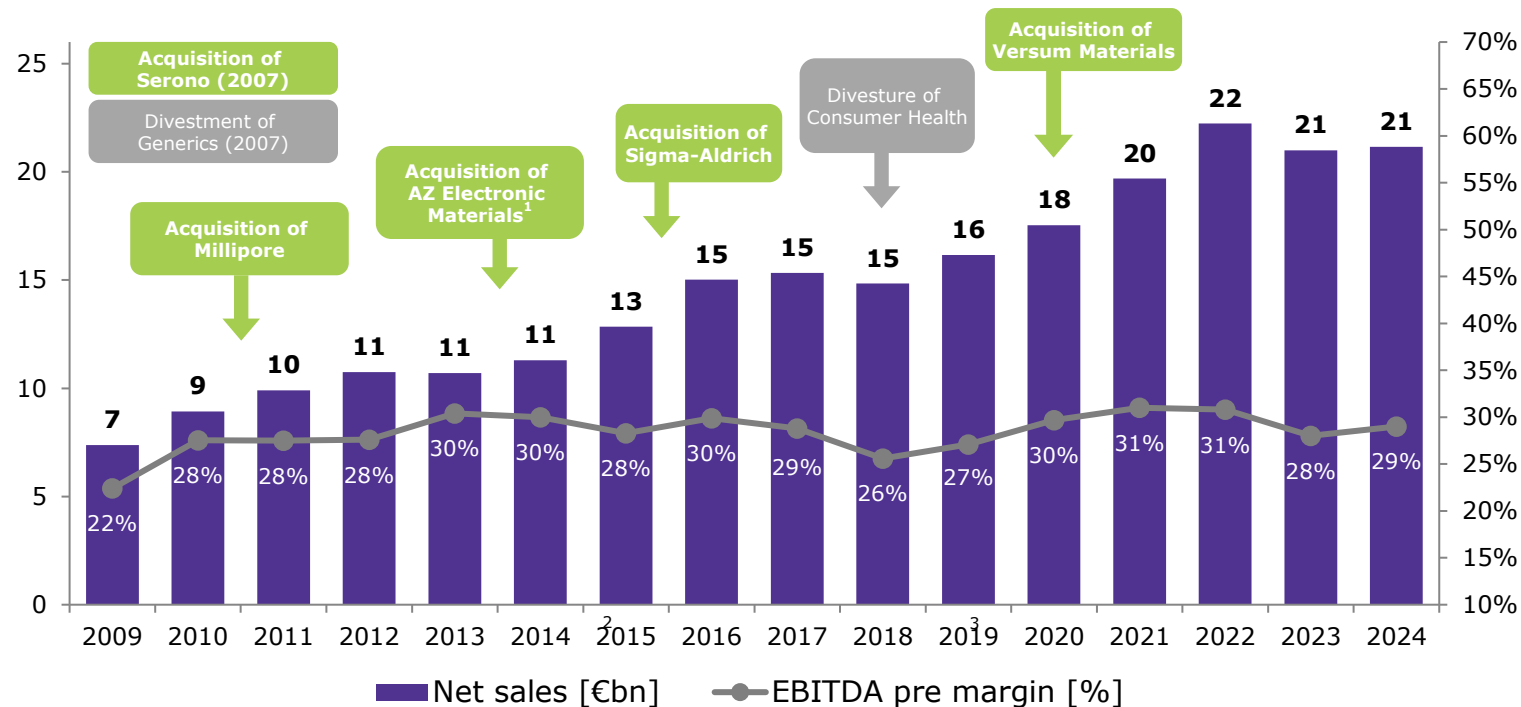
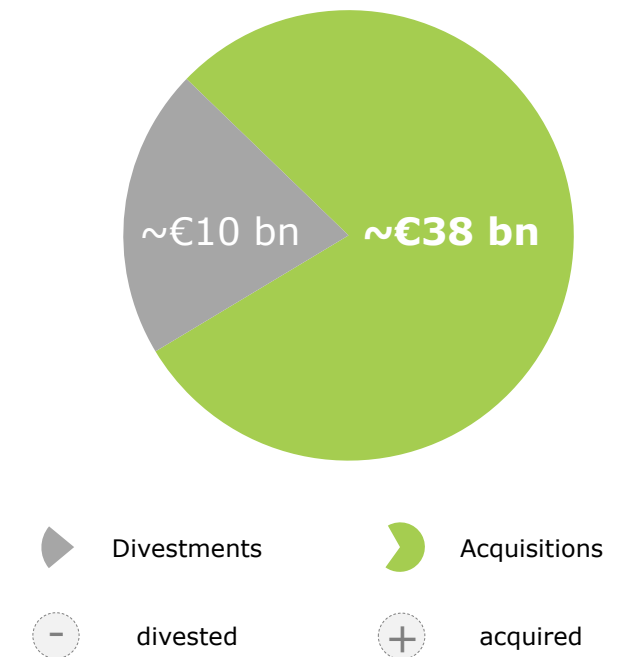
Sales [% of group]¹



Group

Added scale and strengthened attractiveness of portfolio

Long-term growth trajectory

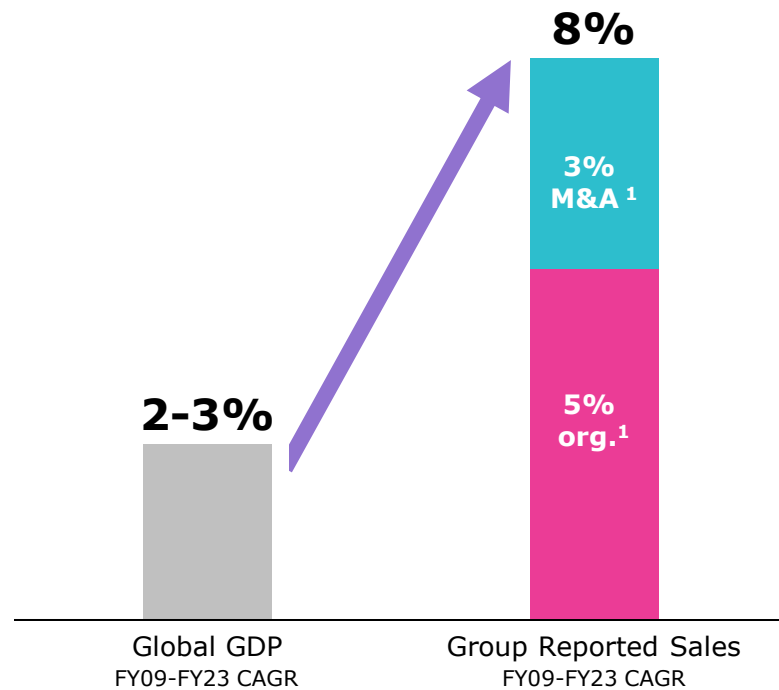
Inorganic volume⁴

¹Included since 2 May 2014; ²2014 EBITDA pre margin adjusted for comparability; ³2018 net sales reflect Consumer Health divestiture (reduction of ~€1 bn net sales p.a.); ⁴2007 - 2024

Group

Company has a proven track record as a Value Compounder

Compounding Growth over 15 years



Demonstrating the critical ingredients for Value Compounding

- ✓ Innovation and leadership driven
- ✓ Attractive markets & megatrends

Organic growth

from Science & Technology innovation focus in attractive and growing markets

- ✓ Significant customer value add
- ✓ High barriers to entry

Expand EBITDA pre margins

operational excellence in markets with high value add for customers

- ✓ Focused and disciplined capital allocation
- ✓ Lowering capital intensity

Strong FCF generation

converting profits into strong cash flow with lower capital intensity




- ✓ Reinvesting for growth
- ✓ Strong M&A track record

M&A and business dev.

disciplined reinvestment into accretive inorganic growth opportunities

Group

Reacceleration of value compounding

	Track record ¹	FY23 → Mid Term	FY24
Organic Growth	5% CAGR	-2% org.  restoring growth rate	2% org.
Expand EBITDA pre	~29% margin	28% margin  margin upside	29% margin
Strong FCF	~14% margin	10% margin  restoring FCF margins	14% margin
M&A and Business Dev.	~3% CAGR	Upside on Deal by Deal basis	



**Accelerating EPS
growth and
returns**

Group

Poised to reach new sales heights

1

Life Science drives org. sales growth in post-COVID world

- Vast majority of bioprocessing customers have reached target inventory levels in '24
- Order intake in PS to continue to improve, LS returning to growth
- Key megatrends intact: robust drug pipelines, healthcare access and novel modalities



Share of net sales¹ **42%**

Share EBITDA pre¹ **42%**

2

Healthcare with a resilient foundation

- CM&E and Fertility provide a solid growth backbone
- Blockbuster products Mavenclad and Erbitux with positive contribution
- Solid early-stage pipeline and clear mandate for accelerated in-licensing



Share of net sales¹ **40%**

Share EBITDA pre¹ **45%**

3

Semi technology leadership propels growth acceleration in Electronics

- Node transitions driving growth in artificial intelligence
- Memory, analog and mature nodes to recover and return to growth
- Growth business in Optronics to balance legacy business



Share of net sales¹ **18%**

Share EBITDA pre¹ **14%**

¹) Based on FY24; Group EBITDA pre excluding Corporate & Others; Sector share percentages are rounded to total 100% and may not represent precise figures. These adjustments are for illustrative purposes only.

Acronym(s): **PS** = Process; **LS** = Life Science; **CM&E** = Cardiomtabolic Care and Endocrinology

Group

Attractive growth ambitions



Life science

7-9% mid-term CAGR

- Market returns to +5-7% growth, China at muted level, but with above average growth mid term
- Focus on growth engines, building critical mass in attractive areas, differentiation through innovation



Healthcare

Slight growth mid-term CAGR, longer-term upside

- CM&E and Fertility as resilient growth backbone
- Oncology and N&I impacted by maturing growth of Bavencio and Mavenclad



Electronics

5-9%¹ mid-term CAGR

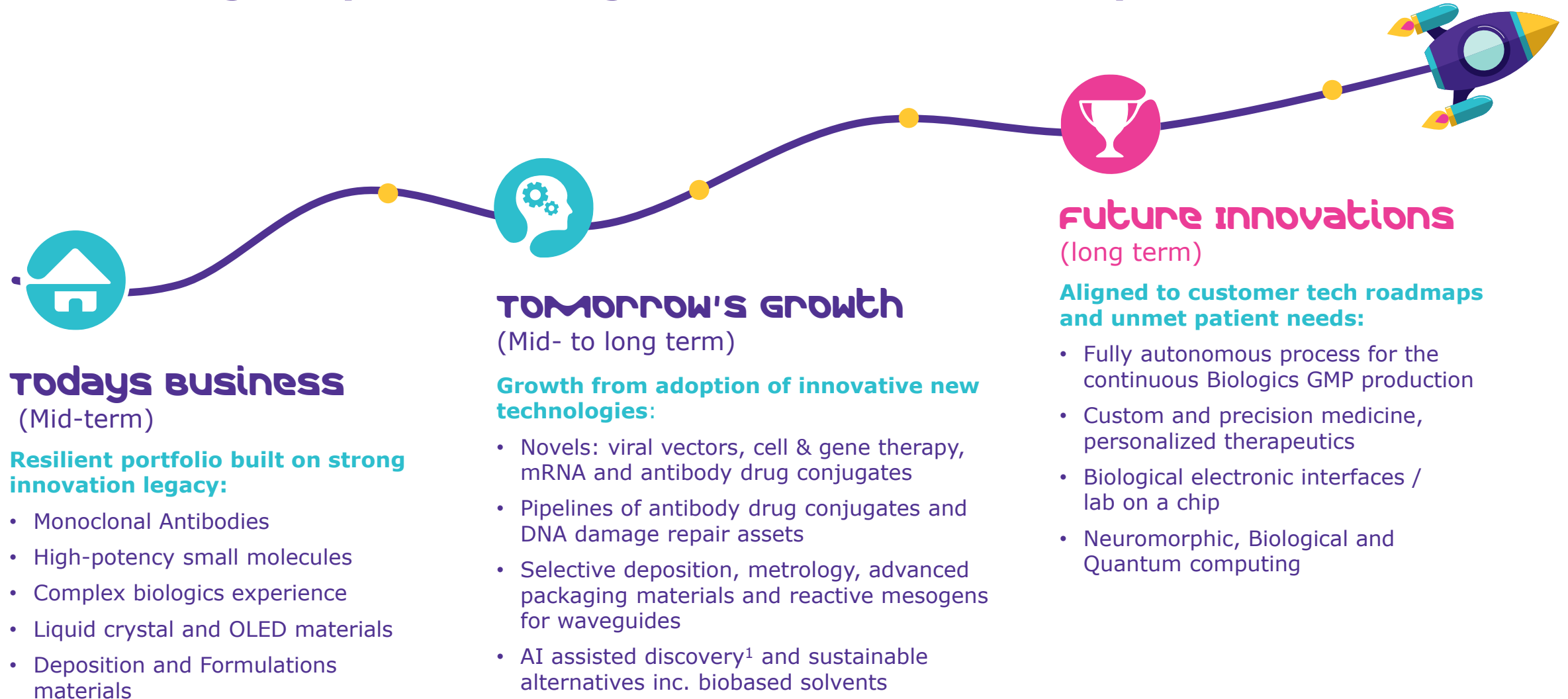
- Pure-play with increased contribution from high-growth Semiconductors driven by AI
- Optronics closer to growth inflection

Acronym(s): **CAGR** = compound annual growth rate; **CM&E** = Cardiometabolic Care and Endocrinology; **N&I** = Neurology and Immunology; **AI** = artificial intelligence
 1) Surface not included in the 5-9% org. growth rate



Group

Innovating to spark future growth across the Group



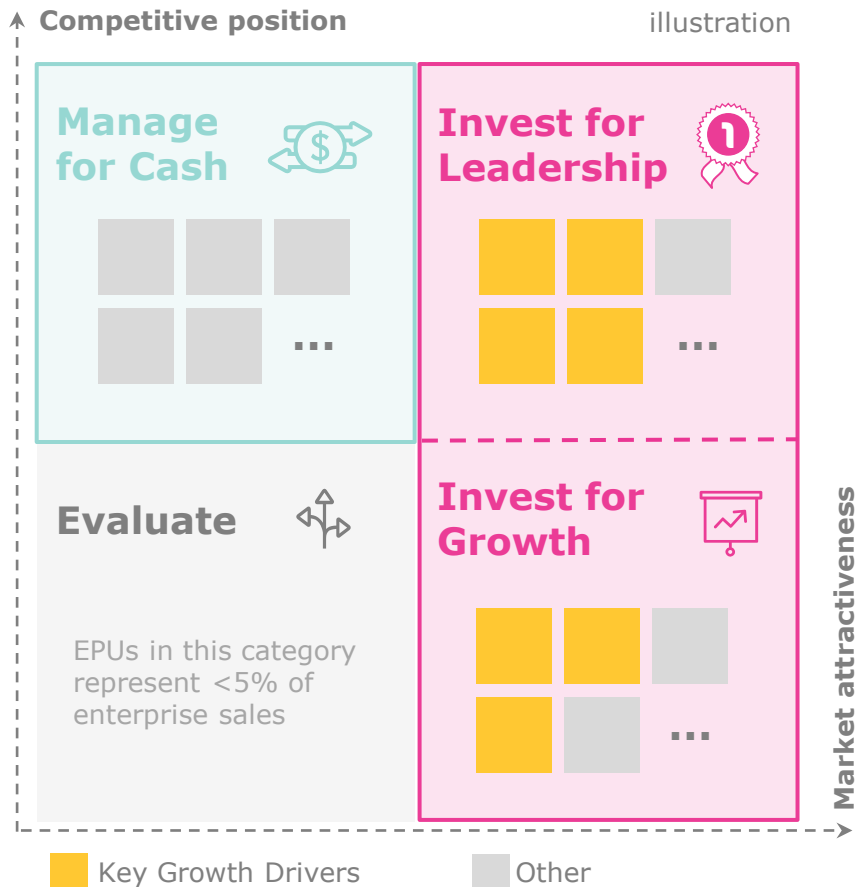
1) Group is leveraging AI to accelerate the discover of new molecules and materials across the business areas
Acronyms: **OLED**: organic light emitting diode; **VV** = viral vector; **AI** = artificial intelligence; **GMP** = Good Manufacturing Practices

Group

Optimized capital allocation through distinct portfolio roles

Roles determined by **thorough analysis** of **markets** and **competitive positions**

Investment focus on businesses with **greatest strengths** and **attractive opportunities**



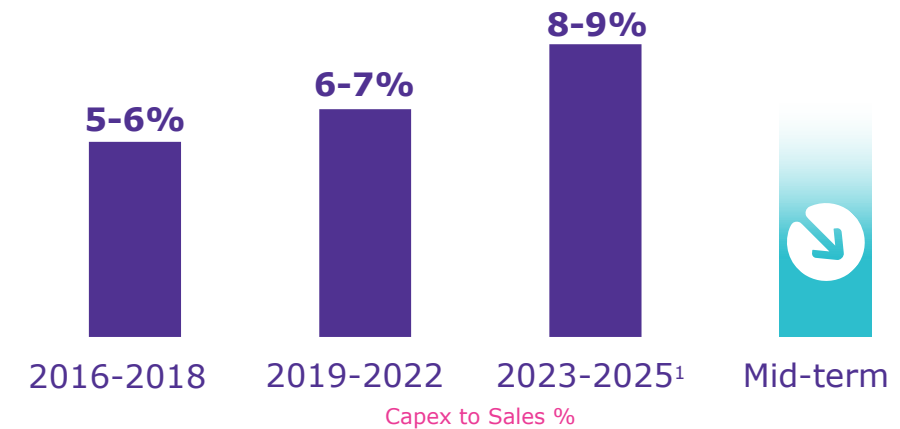
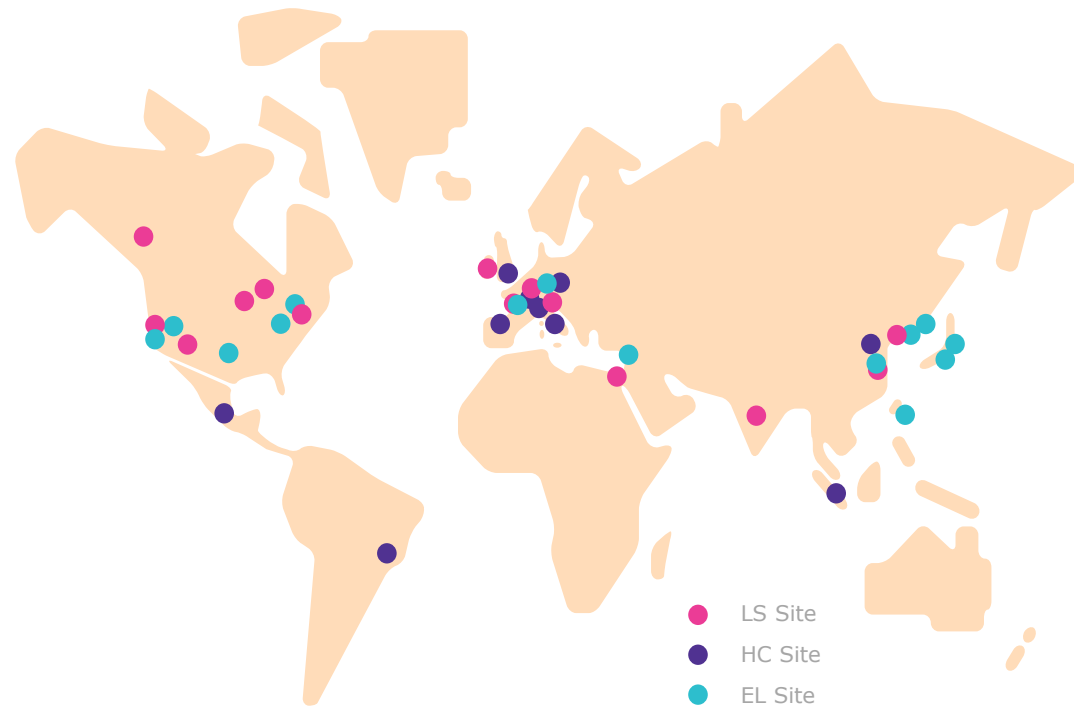
- Segmentation in planning units allows **right level of granularity** in market & competitive analysis (vs. sector level or product level)
- **Enterprise Portfolio Units (EPUs) with different roles** drive balance between **strong cash generation & targeted capital allocation**

- ✓ **Strong, well-positioned portfolio**
- ✓ Enterprise setup allows **boosted investment capacity and optionality** that would be unattainable to 3 standalone businesses
- ✓ **No need for further diversification** (within or across sectors) or target sector ratios

Group

Plan delivered - ready for a new phase of lower capital intensity

Enhanced global footprint in place by end of 2025...



... leading to reduced capital investment needs

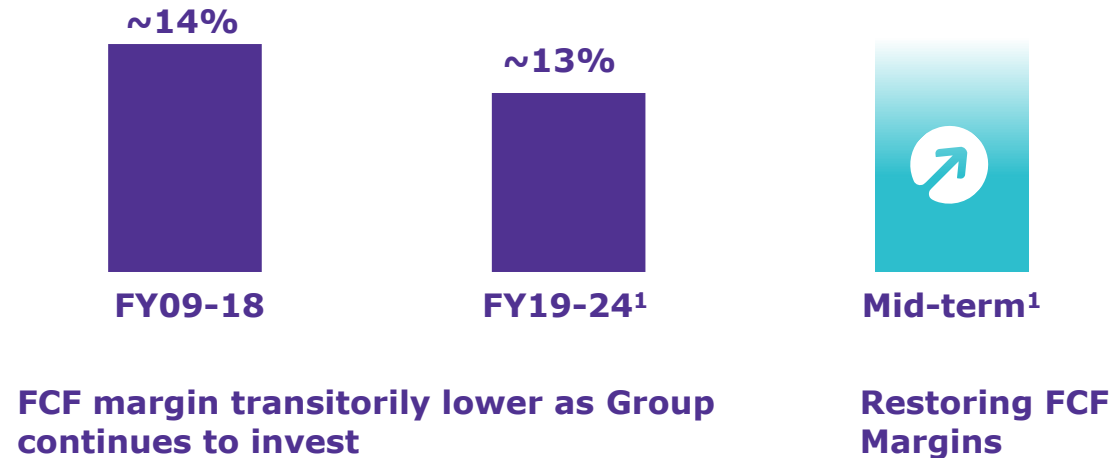
13 1) 2025 includes indicative number based on midpoints of Capex guidance of ~€1.6 to 1.8 bn sales guidance of ~€21.5 – €22.9 bn given in March 2025
 Acronym(s): **EL** = Electronics; **HC** = Healthcare; **LS** = Life Science



Group

Driving enhanced FCF conversion

FCF as % of sales



EBITDA pre margin expansion to improve with higher capacity utilization



Drive incremental gains from process improvements



Digitalization, increased share of digital business to enhance cash generation



Expansion capex to normalize after FY25

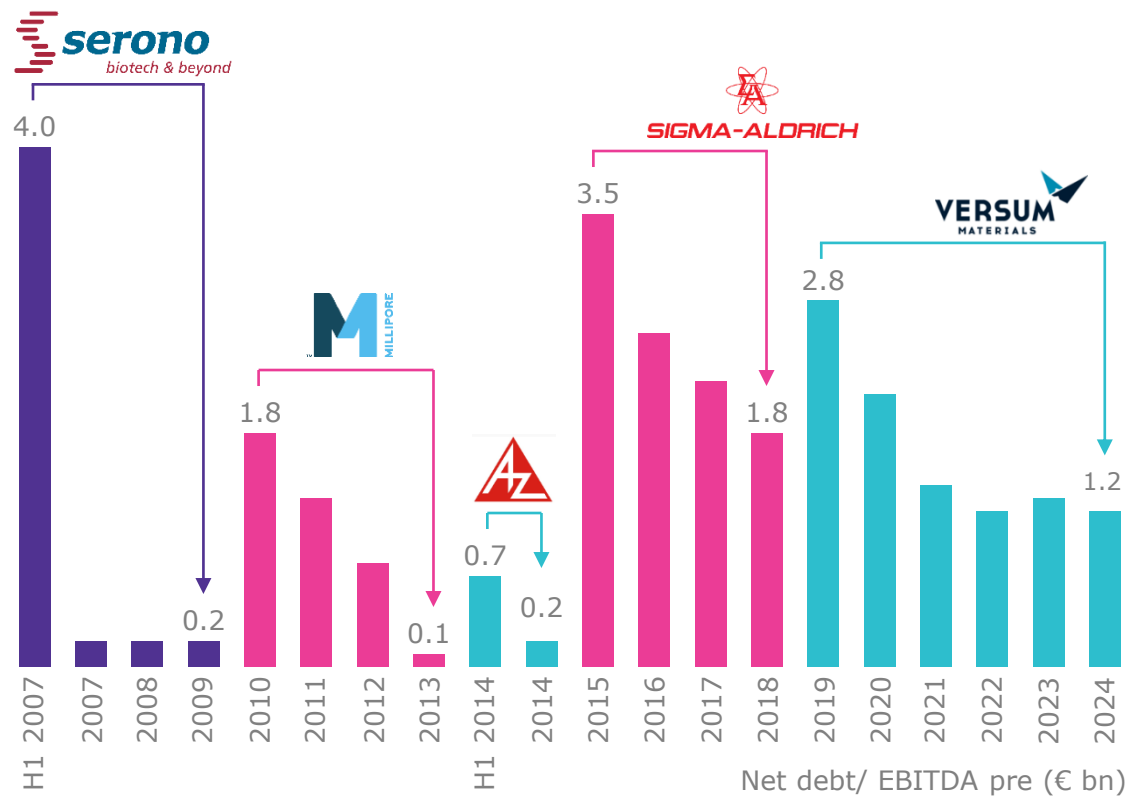


Improved cashflow to drive inorganic growth and fast deleveraging

Acronym(s): **FCF** = free cash flow; 1) mid-term picture as per CMD24 in Oct'24 set against track record of ~13% from 2020-23 and FCF of 10% in 2023

Group

Track record in fast deleveraging enabled by high-quality cash flow



- Resilient sources of cash, especially PS, SLS and Established Portfolio (HC)
- Solid investment grade ratings: Moody's (A3) since 2021, S&P (A) since 2013
- Key Growth Drivers to be further strengthened with CAPEX, R&D and OPEX; financial flexibility is key

Group

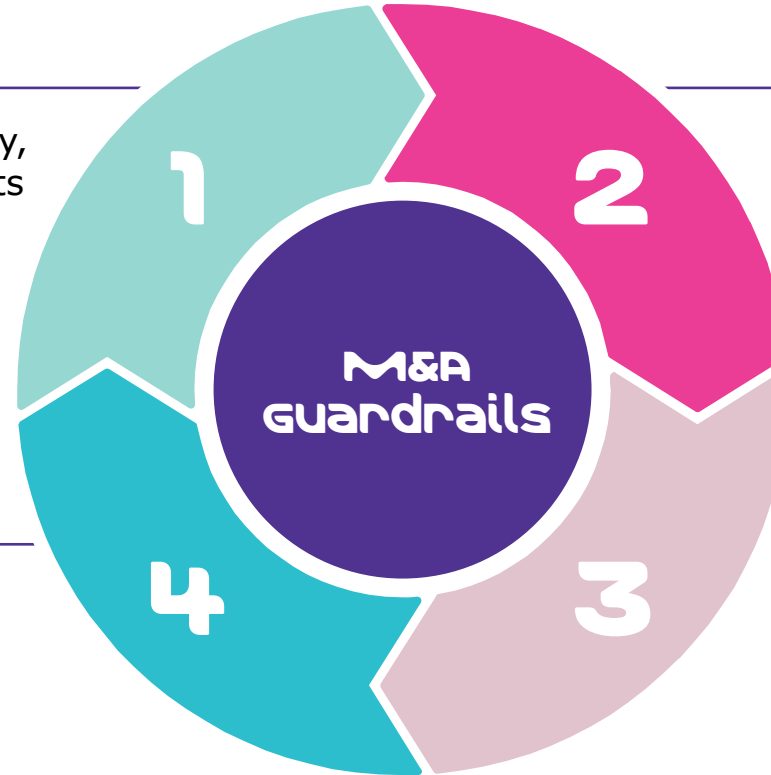
Rigorous application of the Group M&A playbook

Clear Financial criteria

- M&A supports profitable growth strategy, leveraging customer and market insights
- Strong investment grade ratings maintained¹
- IRR above WACC
- EPS pre accretive

Synergies and Integration

- Focus on deals with scope synergies
- Deep operational and financial due diligence to identify synergies and risk
- Processes for post-merger integration with people and culture prioritized



Financial Framework

- Strong financial capacity
- Patient deal origination
- Small or larger acquisitions – no prioritization
- Sustainable dividend policy in place²

Financing Options

- Financing options by priority:

① Cash	③ Hybrid
② Debt	④ Divestments

➤ Compounding value with a patient and disciplined approach to M&A

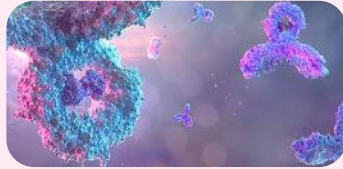
1) Moody's (A3) since 2021, S&P (A) since 2013 2) Dividend Policy: The current dividend constitutes the minimum level, assuming a stable economic environment. While Group aims to continuously develop dividends in line with business performance and earnings progression, dividend growth can deviate, e.g. in times of restructuring or because of significant global economic developments. Group also aims at a target corridor of 20-25% of EPS pre.
Acronym(s): **IRR** = internal rate of return; **WACC** = weighted average cost of capital; **EPS** = earnings per share

Life Science

Leveraging growth in the attractive Life Science market

End Market Growth

Confirming 5-7%¹
Life Science
market growth



Positioned for Key Megatrends

Capturing growth
along the molecule
and modality
journey



Leadership, Innovation and Growth

Mid-term growth aspiration of
a 7-9% org. sales CAGR

Strong clinical pipeline of later-stage **complex molecules & novels**

Global footprint with **large customer base**

Build **critical mass** in portfolio areas, where we set **the gold standard**



Record number of **Biologics FDA approvals** in 2023 and 2024

Portfolio for attractive **Process** markets expanding, e.g. **Novels**

Differentiation through **innovation** (incl. sustainable alternatives)



Emerging tools, NextGen tech for the lab growing at **mid-teens %**

New products/services to serve needs for **digital & automated solutions**

Advancing commercial execution and **go-to-market** approaches



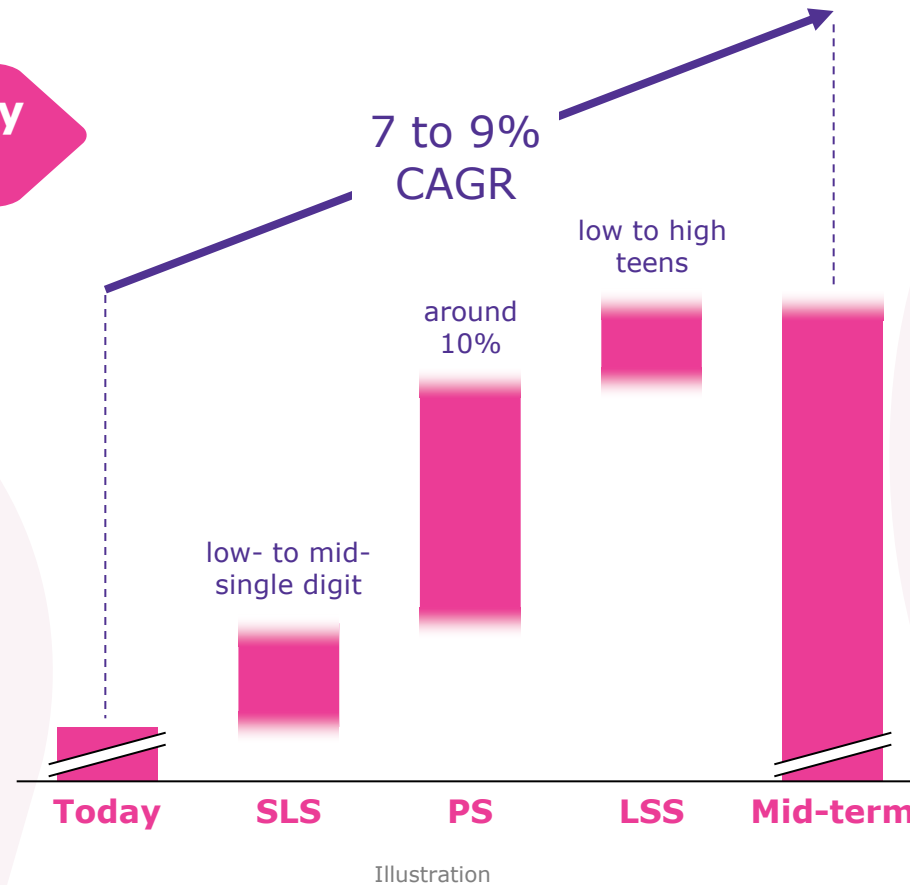
1) Source: Company estimate based on industry forecast over 5-year horizon for the markets we operate in
Acronym(s): **CAGR** = compound annual growth rate; **FDA** = Food and Drug Administration

Above market mid-term growth outlook on business mix, portfolio



Diversified industry leader

Delivering above market growth on business mix, portfolio leadership and execution



Process Solutions

- Strengthening our leading portfolio in normalizing market (e.g. expanding offering for novel modalities)
- Seeing around 10% mid-term growth vs low-teens before on China

Science & Lab Solutions

- Diversified player in resilient and regulated markets
- Mid-term growth prospects intact, managing difficult market conditions

Life Science Services

- CTDMOs as strategic partners across all phases of development
- CDMO with clear focus on Novel Modalities, e.g. mRNA, VV, ADCs

Acronym(s): **SLS** = Science and Lab Solutions; **PS** = Process Solutions; **LSS** = Life Science Services; **CTDMOs** = contract testing, development and manufacturing organization; **CDMO** = contract development and manufacturing organization; **mRNA** = messenger RNA; **VV** = viral vector; **ADCs** = antibody-drug conjugate

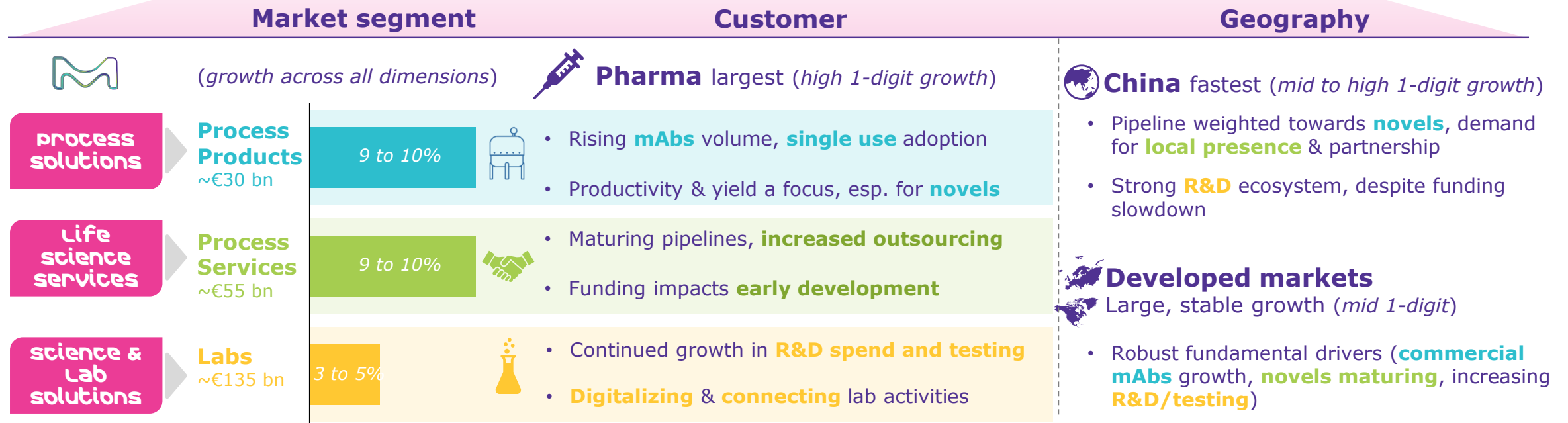


Market

Mid-term growth outlooks remain favorable across segments

Life Science Market¹

2024: ~€220 bn, mid-term CAGR 5 to 7%



Post pandemic needs: **Differentiated** science & technologies **Seamless** customer experience **Holistic** operational excellence

We continuously pursue key growth trends as a **leading diversified life science player**

¹Company estimate based on industry forecast over 5-year horizon for the markets we operate in with *all growth rates marked in italic*; **mAbs** = monoclonal Antibodies



Business Sector Overview

Organizational structure provides customer and portfolio focus

Process Solutions (PS)

Best in class technologies for pharmaceutical manufacturing



Upstream & Downstream
cell culture media, Durapore® filters, etc.



Mobius® single-use
bioreactors, prep systems, etc.



Process Materials
growth factors, transfection reagents, enzymes, fine chemicals



Formulation
GMP buffers, salts, stabilizers

Life Science Services (LSS)

Focused service provider for innovative and complex modalities



BioReliance® CTO
biosafety, characterization, release for mAbs and novels



Novel modalities CDMO
viral vectors, mRNA, antibody drug conjugates



Traditional modalities CDMO
HPAPIs, mAbs

Science & Lab Solutions (SLS)

Broad portfolio of fit for purpose consumables for R&D and testing



Chemistry for lab (Sigma-Aldrich®) and testing (Supelco®)



Biology reagents
media, antibodies, filters, etc.



Milli-Q® ultrapure water systems



Microbiology QA/QC
growth media, automated systems, etc.



Production & regulated materials
high purity chemicals, membrane, antibodies

Customer mix (illustrative)



¹Includes academia, government, hospitals, physicians; Acronym(s): **GMP** = Good Manufacturing Practice, **CTO** = Contract Testing Organization, **CDMO** = Contract Development Manufacturing Organization, **HPAPIs** = High Potency Active Pharmaceutical Ingredients, **mAbs** = monoclonal Antibodies, **mRNA** = messenger Ribonucleic Acid, **QA/QC** = Quality Assurance/Quality Control

Life Science

Enabling tomorrow's medical breakthroughs

Diversified industry leader

- Solidify **our excellent position**
- Being a **trusted partner**
- Enabling **innovative therapies**
- Delivering **attractive growth**

FOCUS ON OUR STRENGTHS

Leveraging our strong positions **within Academia, Biotech and Pharma along the molecule and modality journey**

Capturing growth in selected attractive adjacencies



Expanding **Portfolio Leadership** with durable technology anchors



Enhance **discovery & translational research**



Disciplined approach to attractive **adjacencies**



Shape future of **pharma development & manufacturing**



Programmatic M&A

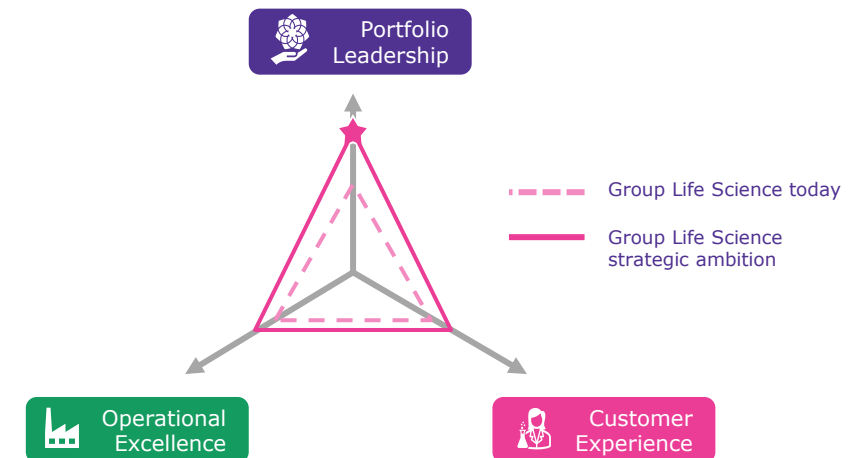


Amplify **Customer Experience** along the end-to-end customer journey



Drive **Operational Excellence** through efficient processes and systems

Build **High-Impact Culture & Capabilities**, embracing **Sustainability**



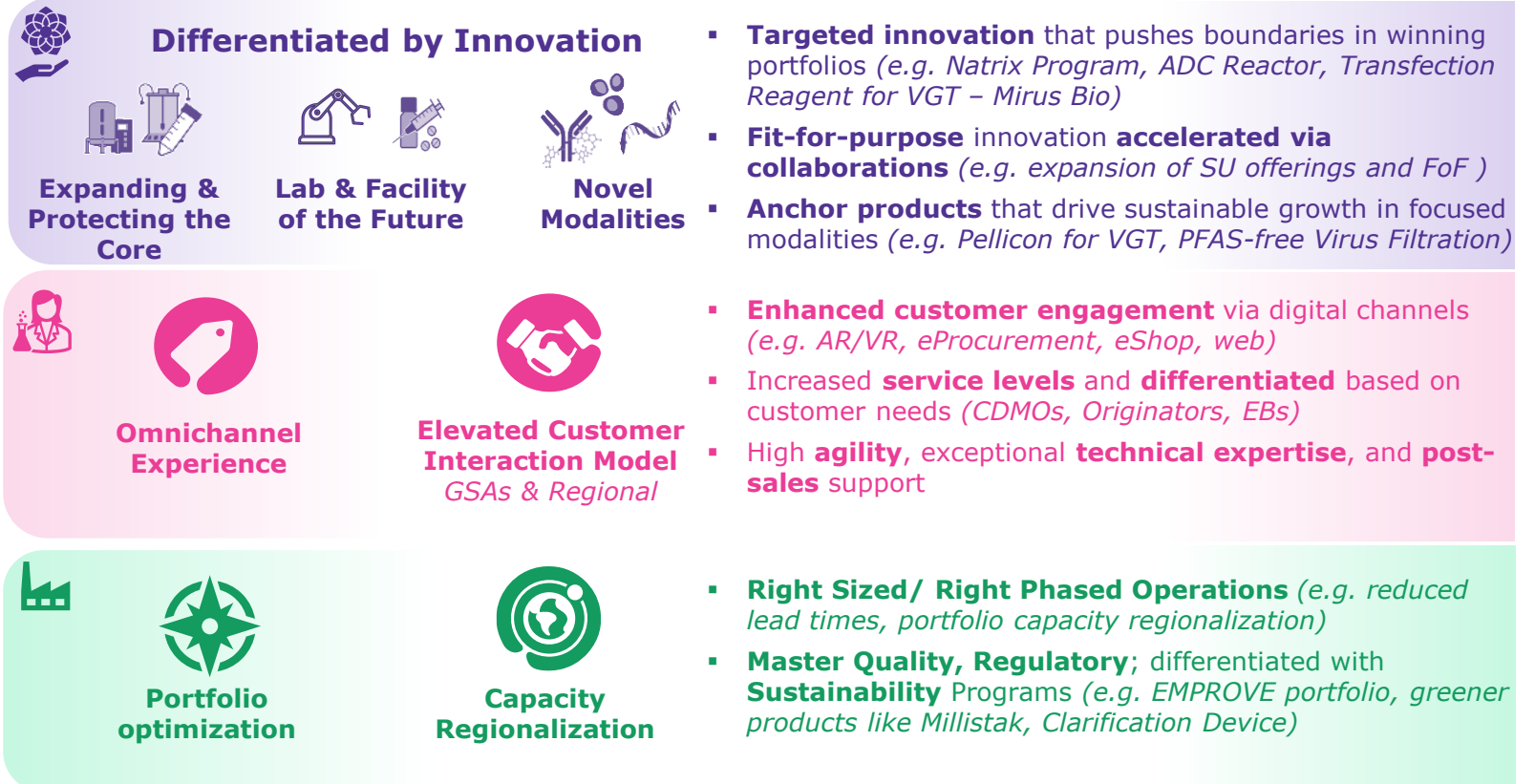
Process Solutions

Building a winning portfolio for sustainable growth and lasting impact to our customers

Life Science Strategy



Highlights



Driving growth through innovation, commercial execution and differentiated service levels

Acronym(s): **FoF**= Facility of the Future; **GSAs**= Global Strategic Accounts, **EB**= Emerging Biotech; **CDMOs**=Contract Development and Manufacturing Organizations

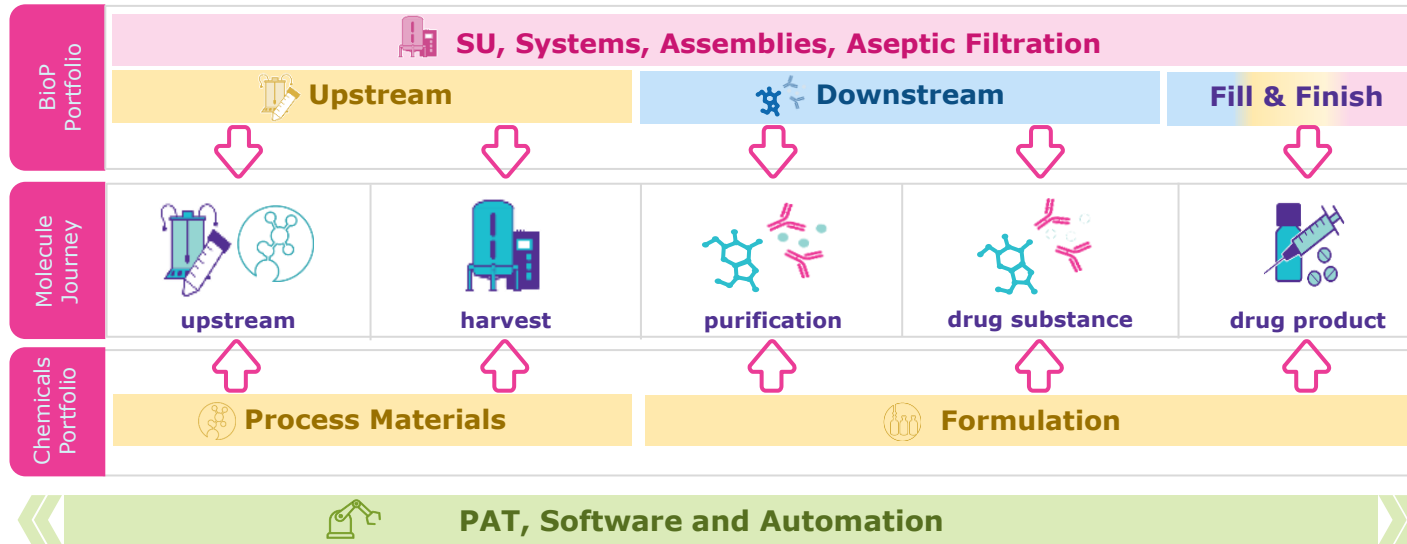
Process Solutions - Overview

Comprehensive product portfolio and diversified customer base

One PS portfolio

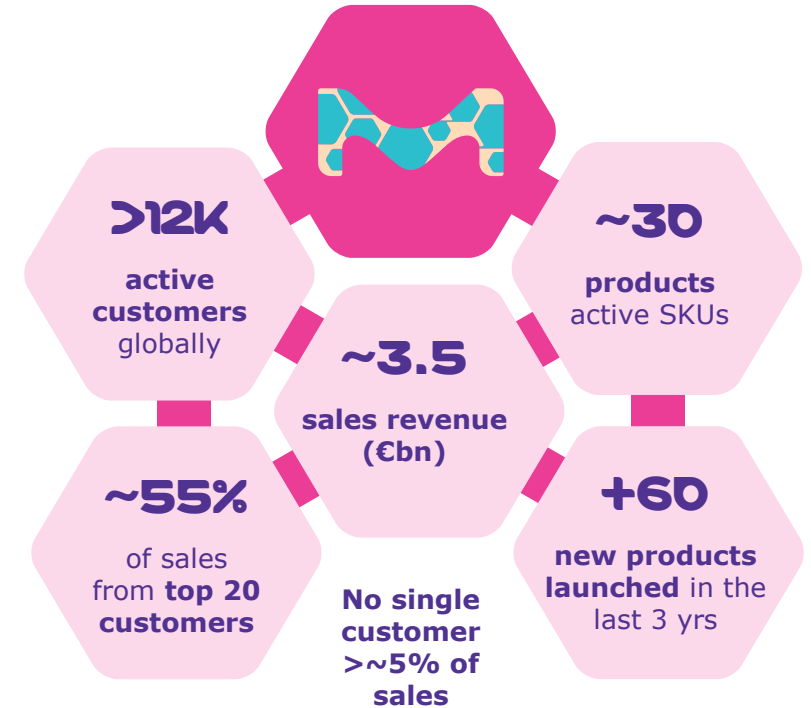
Addressing full value chain from upstream to drug product

Process Solutions



Snapshot

Business in numbers¹



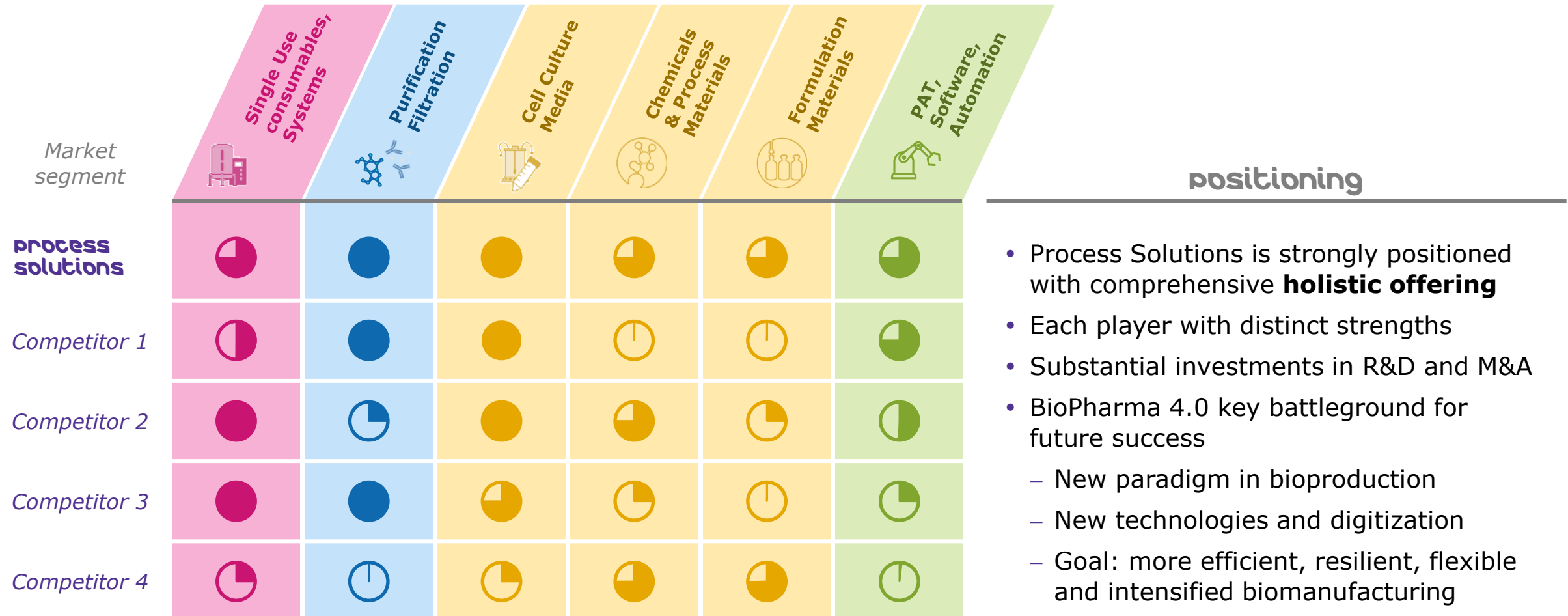
¹Numbers of 2024

Comprehensive product portfolio for bioprocessing operations, novel templates, chemicals, and formulation materials **servicing wide range of biopharma customers**



Process Solutions

Portfolio meeting customer needs across the entire bioprocessing continuum



Sources: company reports, internal assessments

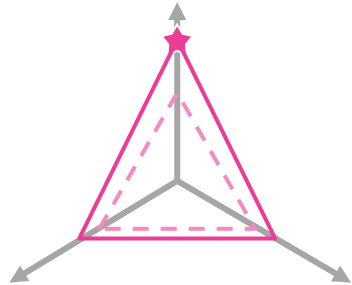


Life Science Services

Focusing efforts and investments on attractive and fast-growing novel modalities to create patient benefit and client value

Life Science Strategy

Portfolio Leadership



Operational Excellence

Customer Experience

--- Group Life Science today

— Group Life Science strategic ambition

Focus areas



Portfolio Leadership



Customer Experience



Operational Excellence

Highlights

CDMO & CTO footprint in select modalities:



ADCs



VVs



mRNA



CTs



mAbs



SM



Global presence across NA, Europe, APAC



Integrated solution from PD to commercial manufacturing & testing



Product/service flywheel



GxP operations across testing & manufacturing



Excellent track record in regulatory audits

- Portfolio focused on **novel and fast-growing modalities**
- **Differentiated capabilities** supported by targeted investments

- Leverage **full Company network**
- **Integrated offers, differentiating manufacturing templates, leading technology platforms**

- **Flawless execution** benefiting from and nurturing **Group quality and regulatory excellence** reputation

Leading CTO and current CDMO footprint providing strong base for focused expansion in attractive segments

Acronyms: CTO = Contract Testing Organization, CDMO = Contract Development Manufacturing Organization, ADCs = Antibody Drug Conjugates, VVs = Viral Vectors, mRNA = messenger Ribonucleic Acid, CTs = Cell Therapies, mAbs = monoclonal Antibodies, SM = Small Molecules, GxP = "good quality" guidelines and regulations, PD = Process development, GMP = Good Manufacturing Practice

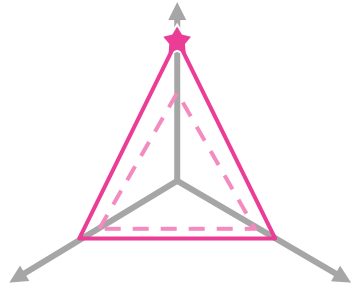


Science & Lab Solutions

Capturing durable growth across diverse market segments

Life Science Strategy

Portfolio Leadership



Operational Excellence

Customer Experience

--- Group Life Science today

— Group Life Science strategic ambition

Focus areas


Portfolio Leadership


Customer Experience


Operational Excellence

Illustrative Highlights

Sustainability

- Green chemistry
- Sust. sterile filtration
- Mercury-free
- Less plastic, electricity

Digitization

- Tech. bricks for QC
- Remote access & mgmt.
- Sample prep automation
- Smart consumables

Enabling customers' productivity & sustainability goals

Seamless buying

- Multi-channel approach incl. e-Commerce platform
- Expanding self-service, procurement solutions

Holistic support

- Strategic relationship and account management; technical sales teams
- Regional customer support

Reaching & engaging diverse customer base

Regionalization

- Tailoring go-to-market to meet local needs
- Expanding in-region portfolio access, fit

Quality & Scale

- Fit for use quality materials and services
- Customization for scaling critical materials

Global supply of high quality, fit-for-use solutions

Targeted investments to address unique customer needs and leverage podium positions

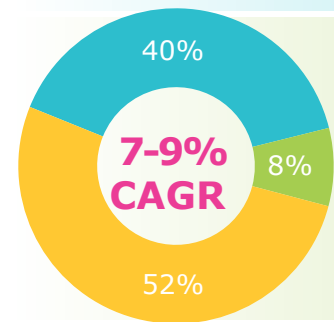
Acronym(s): **QC** = Quality Control



Outlook

All business units contributing to attractive mid-term outlook

Sales split¹



Mid-term outlook

Process Solutions

Around 10%

vs. market of 9-10%



Life Science Services

Low to high-teens growth

vs. market of 9-10%



Science & Lab Solutions

Low to mid single-digit growth

vs. market of 3-5%



Key differentiators

- **Innovation leadership:** factory of the future (BioContinuum™), templates for novels, Group's antibody development templates
- **Right-sized, right-phased capacity and regional expansion:** for single use, filtration, and cell culture media
- **Broad portfolio coverage:** addressing the full value chain from upstream to drug product fill & finish
- **Holistic customer value:** training & problem solving (MLab™ Collaboration Centers), regulatory & filing support (Emprove®)
- **Focused services:** across testing, development, and manufacturing for innovative and complex molecules
- **Contract testing organization:** biosafety testing, product characterization, lot release (BioReliance®)
- **Scaling focused CDMO²:** supporting modalities with high growth & expertise requirements
- **Technology leadership:** deploying innovative process technologies with product development feedback
- **Broad and relevant portfolio:** offerings across chemistry, biology, microbiology, ultrapure water, diagnostic materials
- **Omnichannel engagement** including eCommerce platform, relationship managers and technical teams
- **Diversified footprint, global reach:** sales & growth balanced across regions & customer segments
- **Resilient growth profile** with low volatility, robust & independent drivers across end customers

¹Sales split based on FY 2024; CAGR is organic mid-term ambition, as shown at Capital Markets Day 2024; ²Acronym(s): **CDMO** = Contract Development Manufacturing Organization

Healthcare

Committed to innovation, building on top of a resilient portfolio

End Market Growth

Global Pharma Industry to grow 5-8%¹



Positioned for Key Megatrends

Oncology and N&I at the core. Further de-risked R&D



Leadership, Innovation and Growth

Slight sales CAGR mid-term, solid foundation to step-up long-term

Innovation a critical component to ensure long-term growth

Diversified regional presence a strategic advantage. **US** remains key market

Market impacted by GLP-1 drugs, still major growth potential in other TAs

N&I R&D focus on **mid- to late stage**. Enpatoran in lupus, cladribine in gMG

Broader R&D approach in oncology, focus on ADC space, ATRi and PARPi

External Innovation to boost future successes. Broader modality footprint and open to adjacent areas

CM&E and Fertility resilient **growth backbone mid- and long term**

Proven excellence in commercial execution, incl. launch products

Exciting Oncology and N&I pipeline. Derisking via **external innovation**



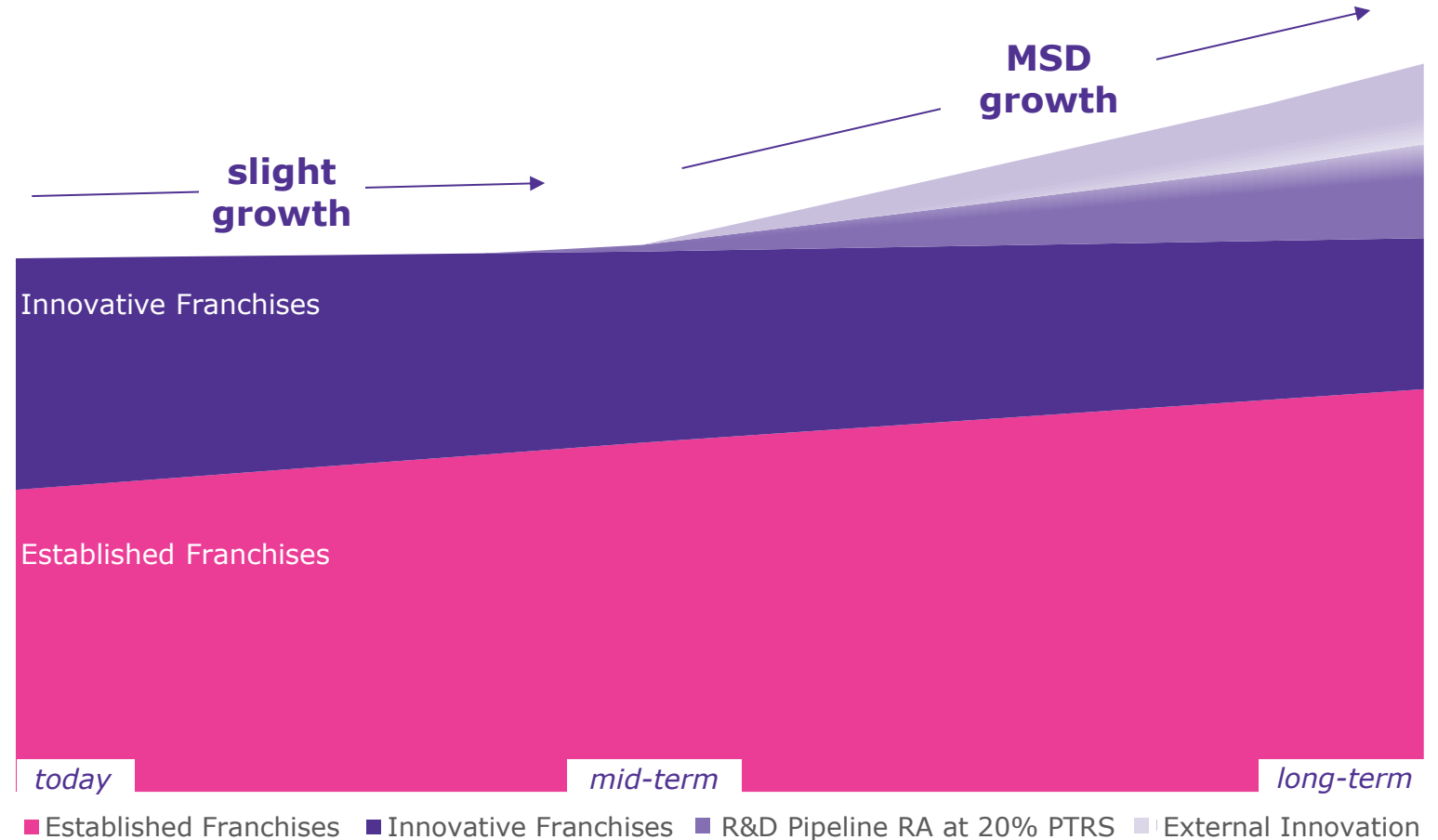
1) From IQVIA Global Use of Medicines 2024 Report from January 2024, global medicine market using invoice price levels

Acronym(s): **GLP-1** = Glucagone-like Peptide 1; **TAs** = Therapeutic Areas; **N&I** = Neurology and Immunology; **CLE** = cutaneous lupus erythematosus; **SLE** = systemic lupus erythematosus; **ADC** = antibody-drug conjugate; **ATRi** = ATR = Ataxia Telangiectasia and Rad3-related protein; **PARPi** = PARP1 = Poly [ADP-ribose] polymerase 1; **CM&E** = Cardiovascular Metabolism & Endocrinology; **CAGR** = compound annual growth rate

Healthcare

Resilient product portfolio as base for attractive LT growth potential

Healthcare sales, illustrational graph applying CAGR based growth rates



Future growth drivers incl. pimicotinib in TGCT, enpatoran in CLE/SLE, cladribine capsules in gMG

Resilience of commercialized products driven by Established Franchises CM&E and Fertility

Acronym(s): **TGCT** = tenosynovial giant cell tumor; **CLE** = cutaneous lupus erythematosus; **SLE** = systemic lupus erythematosus; **CM&E** = Cardiovascular Metabolism & Endocrinology; **gMG** = generalized myasthenia gravis; Established Franchises = Commercialized products CM&E + Fertility + Other; Innovative Franchises = Oncology + N&I, dark purple color indicates currently commercialized products; **RA** = risk-adjusted; **PTRS** = Probability of technical and regulatory success; **External innovation** = External licensing, partnering and M&A activities
Visualization based on mid-term and long-term CAGR, not single year performance.

Established Franchises – CM&E

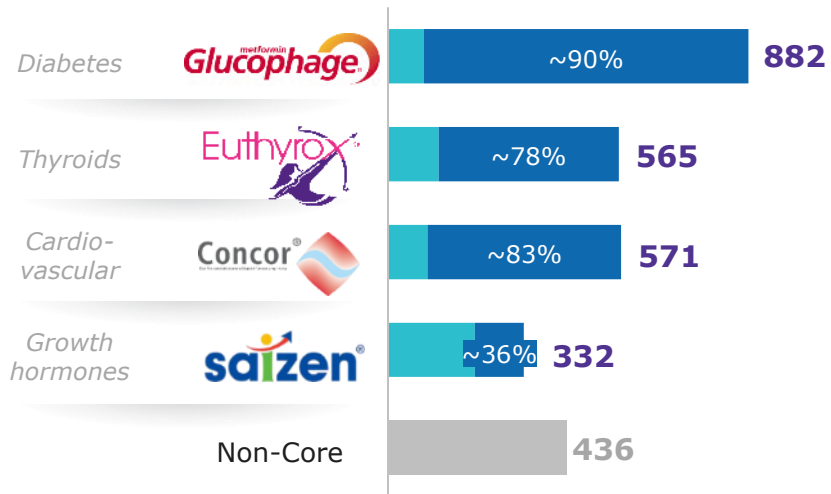
Diversified leadership positions, growth driven by developing markets

CM&E Sales €2.8bn in FY 2023 (~4% CAGR '18-23)⁶

Position

Sales by Core Brands in m€⁶

Markets: ■ Mature ■ Developing



Value Market Share (ex US & ex JP)

M³

~25%

~48%

~11%

~21%

CAGR 2018 - 2023

M⁶ Market⁴

~4% ~4%

~9% ~6%

~4% ~5%

~7% ~5%

~ -4% NA

mid-term growth CAGR

M

● ○ ○

● ● ●

● ● ○

● ○ ○

● ○ ○ ● ● ●
Low Mid High
single digit growth

#1 Worldwide¹
Volume (ex US & ex JP)

Glucophage most used biguanide and non-insulin medicine

Euthyrox most used thyroid treatment

Concor most used beta-blocker

#3 Worldwide²
Value (ex US & ex JP)

Saizen with a unique device & digital health ecosystem

Mature ■ Developing ■
~80%

Sales by Region^{5, 6} excl. Non-core

Increasing diagnose & treatment rates to further drive growth in developing Markets

30 Based on internal analysis by Merck KGaA, Darmstadt, Germany using data from the following sources: **1** IQVIA Analytics Link – based on Volumes MAT Q1 2024: **Glucophage** within BIG (Biguanides – ATC A10J) / NIM (Non-Insulin-Medication – ATC A10H-S) market; **Concor** within BB Market (ATC C7A, C7B); **Euthyrox** within LT4 (Thyroid ATC H3A) market (each for 74 countries ex US & ex JP) **2** IQVIA Analytics Link – based on Values (EURO) MAT Q1 2024: **Saizen** within GH (Growth Hormones ATC H4C) market in 46 countries where available (ex US & ex JP) **3** IQVIA Analytics Link – based on Values FY 2023 (74 countries ex US & ex JP): **Glucophage** within BIG market (Biguanides – ATC A10J); **Concor** within BB-Plain Market (ATC C7A); **Euthyrox** within LT4 (Thyroid ATC H3A) market - based on 49 countries across Europe, APAC, MEAR, LATAM and China (ex US & ex JP); **Saizen** within GH (Growth Hormones ATC H4C) market in 46 countries where available (ex US & ex JP); **4** IQVIA Analytics Link & IQVIA MIDAS[®] – based on Values FY 2018 and FY 2023 (74 countries ex US & ex JP): **Glucophage** within BIG market (Biguanides – ATC A10J); **Concor** within BB-Plain Market (ATC C7A); **Euthyrox** within LT4 (Thyroid ATC H3A) market - based on 49 countries across Europe, APAC, MEAR, LATAM and China (ex US & ex JP); **Saizen** within GH (Growth Hormones ATC H4C) market in 46 countries where available (ex US & ex JP). **Each of the above sources reflect estimates of real-world activity. Copyright IQVIA. All rights reserved. 5** Core Brands (excl. Non-Core) in Developed Markets reflect the following countries: NA, EU5, BeNeLux, DACH, Nordics, JP, AUS, HK, SK, TW, SG - Emerging remains rest of world. **6** based on reported sales 2018 and 2023, including an ~80m EUR adjustment in 2018 of in the meantime divested biosimilar business

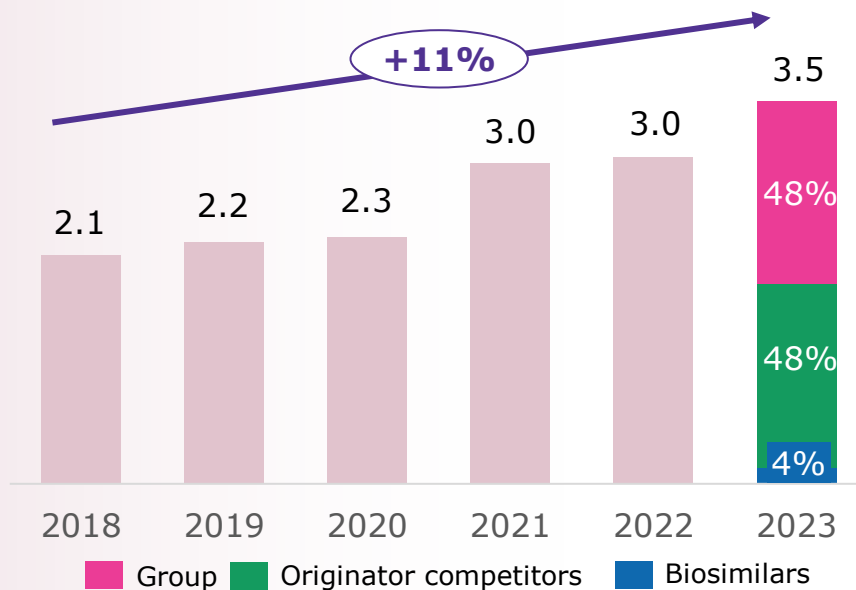
From: Capital Markets Day 2024 – 2024.10.17



Established Franchises - Fertility

Expanding on our leadership position

Global Gonadotropin market in € bn¹



GONAL-f world's most prescribed r-hFSH treatment²

Pergoveris, the only recomb. FSH+LH product in the market

Complemented by a complete portfolio offering
(Ovidrel rhCG, Cetrotide GnRH antagonist, Crinone progesterone, etc.)

Growing coverage, e.g. early access process for Pergoveris in Greater-Bay Area in China under way

Capacity expansion of our Fertility production network to cater for constantly growing demand

- **Growing prevalence of infertility** (delayed parenthood and lifestyle habits)
- **Increasing awareness and access to treatment**

MSD growth CAGR mid-term



Innovative Franchises – Commercialized assets

Competitive pressures moderated by Erbitux + staggered Mavenclad LOE

ERBITUX[®] CETUXIMAB mCRC, SCCHN

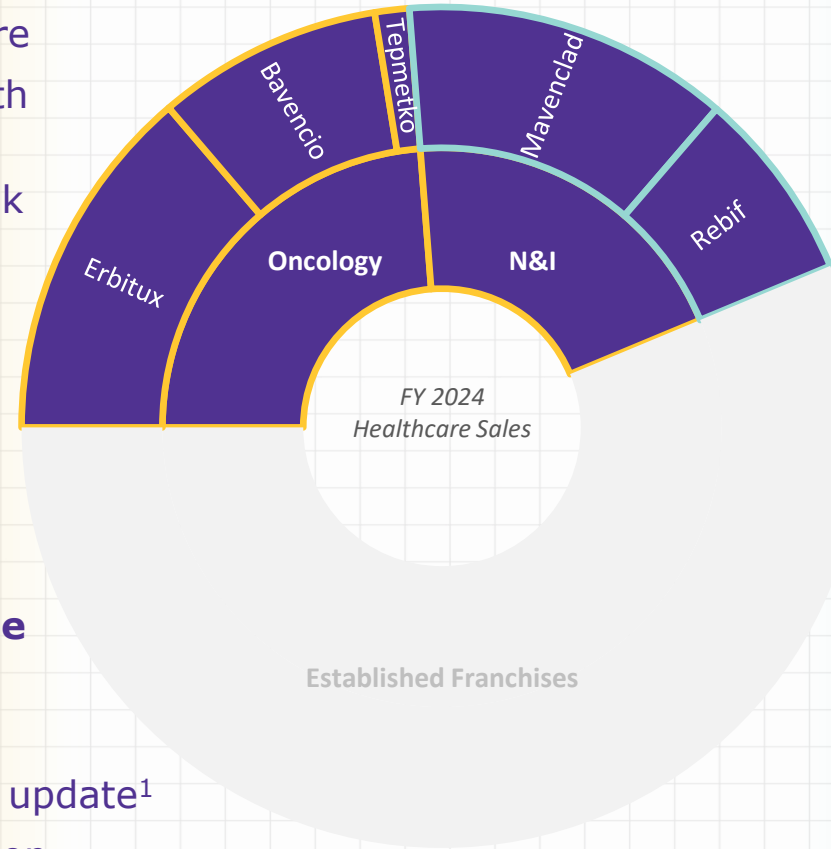
- Leading in mCRC continuum of care
- **Backbone therapy of choice** with more than 200 active trials
- Blockbuster product, stable outlook

BAVENCIO[®] avelumab UC, RCC, MCC

- Established position in 1L mUC
- **Strong value proposition** in competitive market
- Differentiated patient benefit through quality of survival, given **more benign safety profile**

TEPMETKO[®] tepotinib METex14 NSCLC

- Enhanced profile with recent label update¹
- Low-teens growth in niche indication



MAVENCLAD[®] cladribine tablets RMS

- Most prescribed HE oral in dynamic market² across US + EU
- **Blockbuster product** amid maturing growth profile
- LOE base case: US Q4 2026; EU staggered from Q3 2027 to 2030 depending on SPCs granted

Rebif[®] (interferon beta-1a) RMS

- Well established clinical profile
- >2m patient-year experiences³
- Decline in line w/ interferon market

1) FDA full approval dated Feb 15, 2024 <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-tepotinib-metastatic-non-small-cell-lung-cancer>; 2) Based on IQVIA dynamic market data; 3) internal database, data on file



Innovative Franchises – R&D N&I

Regaining momentum in N&I innovation, with careful risk control

Cladribine capsules

Immune reconstitution therapy



High efficacy oral drug aiming at a “treat to target” regimen in generalized myasthenia gravis (gMG)

Largely de-risked:

- Well-characterized compound with signal of clinical benefit¹; direct to Phase III accepted by regulators
- Highly reliable, standard and reproducible study endpoint (MG-ADL)
- Two active drug arms versus placebo and incl. interim analysis, to maximize the success rate

Study: MyClad (NCT06463587), registrational **Phase III** study; recruitment ongoing, 1st patient started in Sep-2024



Internal innovation



External innovation

1) Rejdak K, et al. *Eur J Neurol.* 2020;27:586–9

Acronym(s): **N&I** = Neurology and Immunology; **TLR** = Toll-like receptor; **MG-ADL** = myasthenia gravis activities of daily living; **PoC** = Proof of concept; **CTLA** = cytotoxic T-lymphocyte-associated protein; **OX40L** = OX40 ligand

Enpatoran

Selective and potent dual TLR7/8 inhibitor



Oral therapy with steroid-sparing potential in cutaneous- and systemic lupus erythematosus

Phase II read out and derisked:

- Totality of data (both cohorts) and the safety profile support further development
- Cohort A (CLE and cutaneous SLE) read out in Q3-2024: Positive PoC, with clinically meaningful efficacy (all doses) and good safety profile
- Cohort B (SLE): promising responses in pre-defined patient subgroups

Study: WILLOW (NCT05162586), PoC study (**Phase II**) in CLE and SLE; full readout completed in Q1-2025

Next to follow: **M5542** (anti-CTLA/OX40L) in T-cell-mediated autoimmune diseases (Phase I)



Innovative Franchises – R&D Oncology + External Innovation

Executing early oncology strategy, with de-risked late-stage

Pimicotinib

Highly selective and potent inhibitor of CSF-1R



Oral therapy for TGCT, a rare, locally aggressive tumor with **Phase III** study (25wk) read out in Nov-2024.

- **Study met the primary endpoint¹** and showed clinically meaningful improvements in all key secondary endpoints
- **Additional risk sharing** via contractual set-up (full rights in China, optionality RoW)

Study: MANEUVER (NCT05804045), **Phase III** double-blind study in TGCT run by our partner Abbisko.

Early- and mid- stage assets

Including ATRi, PARPi, and ADCs



DDRs: Testing hypotheses for tuvusertib (ATRi) and M9466 (PARP1i) in **Phases II and I**

ADCs: two TOPO1 ADCs in the pipeline this year², with up to 4 more to follow in the next 3 years

- M9466 (PARP1i) **partially de-risked** by addressing clinically validated target

Clear criteria for external innovation

- Preferred deals in our existing areas of expertise in Oncology and N&I
- Open to commercially attractive adjacent areas with underserved populations
- Relatively de-risked assets e.g., via established PoC and/or risk sharing

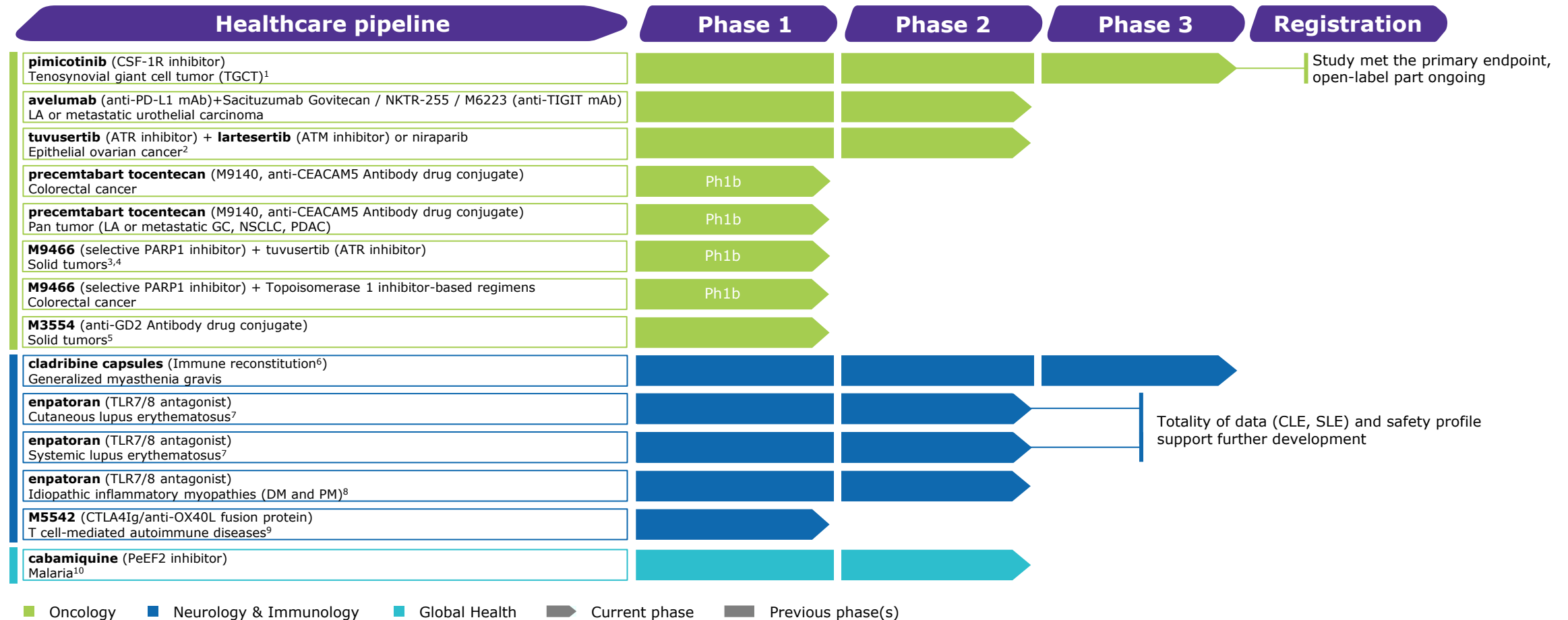
50% of future launches sourced externally

1) Phase III data: objective response rate (ORR) at Week 25 of 54.0%, compared with 3.2% for placebo ($p < 0.0001$) based on RECIST v1.1 per Blinded Independent Review Committee (BIRC); 2) Precentbart tocentecan (M9140): anti-CEACAM5 exatecan ADC, M3554: anti-GD2 exatecan ADC.

Acronym(s): **TGCT** = Tenosynovial giant cell tumor; **CSF1R** = Colony stimulating factor 1 receptor; **RoW** = rest of world; **DDR** = DNA damage response; **ATRi** = ATR = Ataxia Telangiectasia and Rad3-related protein; **PARP1i** = PARP1 = Poly [ADP-ribose] polymerase 1; **ADC** = antibody-drug conjugate; **TOPO1** = topoisomerase I

Company pipeline

March 06, 2025



Ph1a: phase 1a, dose finding; Ph1b: phase 1b, dose escalation/expansion and signal seeking; LA: Locally advanced GC: Gastric Cancer; NSCLC: Non small-cell lung cancer; PDAC: Pancreatic ductal adenocarcinoma

¹ Group entered a license agreement with Abbisko Therapeutics Co. Ltd, Shanghai, China, for pimicotinib (ABSK021), which grants a license to commercialize pimicotinib in mainland China, Hong Kong, Macau and Taiwan, with an option for rest of world. ² Includes studies (phase I/II) in collaboration with/ sponsored by external partners, e.g. US National Cancer Institute (NCI). ³ As a single agent and in combination with tuvusertib (ATRI); study includes patients with castration-resistant prostate cancer (CRPC) and epithelial ovarian cancer (EOC). ⁴ Group entered a collaboration with Jiangsu Hengrui Pharmaceuticals Co. Ltd., China, including an exclusive license worldwide (ex-China) to develop, manufacture and commercialize M9466/HRS-1167. ⁵ Patients with soft tissue sarcoma (STS) and glioblastoma. ⁶ Putative mechanism. ⁷ Clinical trial passed futility analysis. ⁸ Dermatomyositis and Polymyositis. ⁹ Study in healthy volunteers. ¹⁰ In combination with pyronaridine in two studies, either in participants with acute uncomplicated malaria, or as chemoprevention in participants with asymptomatic malaria infection.



Healthcare catalysts

Q1 2025

Q2 2025

Q3 2025

Q4 2025

Enpatoran
(Oral TLR7/8 inhibitor)



Read-out - Phase II study: Cohort B (SLE)
(Cohort A read out positively in Q3-2024)

- SLE cohort: primary endpoint not met
- Promising responses in pre-defined patient subgroups
- Totality of data (both cohorts) and safety profile support further development

Precentabart tocentecan
(Anti-CEACAM5 ADC)

Recommended Phase II dose for M9140;
efficacy read out mCRC (PhIb expansion)

Pimicotinib¹
(CSF-1R antagonist)

Read-out of Part 2 of Phase III study in
TGCT

M0324
(MUC1xCD40)

Initiation of Phase I study

Tuvusertib
(ATR inhibitor)

Winner selection for Phase II PoC study
(+ niraparib vs. + lartesertib)

■ Oncology
■ Immunology

¹⁾ Study sponsor: Abbisko Therapeutics Co, Ltd. Company entered a license agreement with Abbisko Therapeutics Co. Ltd, Shanghai, China, for pimicotinib (ABSK021), which grants a license to commercialize pimicotinib in mainland China, Hong Kong, Macau and Taiwan, with an option for rest of world.

Acronym(s): **TLR** = toll-like receptor; **SLE** = Systemic lupus erythematosus; **ADC** = Antibody-Drug Conjugate; **ATR** = Ataxia Telangiectasia and Rad3-related protein; **CSF-1R** = Colony Stimulating Factor 1 receptor; **CD40** = cluster of differentiation, **MUC1** = mucin 1; **TGCT** = Tenosynovial giant cell tumor; **PoC** = Proof of Concept; **mCRC** = Metastatic Colorectal Cancer

Electronics

Compounding growth faster as AI enabler with ecosystem relevance

End Market Growth

Reconfirming
mid-term MSI
growth of 5-7%^{3,4}



Positioned for Key Megatrends

Above market
growth extended to
+200 to +400 bps
due to AI upside³



Leadership, Innovation and Growth

Raising mid-term org. sales
CAGR⁵ aspiration to 5-9%
(Semis +7 to +11% with ~80% of sales)

AI drives demand for **Adv. Logic** chips,
HBM chips and **HI**

Power efficiency and electrification
drive analog device demand

Immersive communication devices
need new **display technologies**

3D-Densification¹ drives
more materials per wafer

Complex architectures like **GAA**² need
more value-added **material innovations**

Materials IntelligenceTM is driving
improved **sustainability** and **yields**

Broad portfolio addresses
key **high-value process** steps

Customer intimacy, driven by
localization, data and digital

**Continuous operational
excellence**

**Enhanced cycle
management**



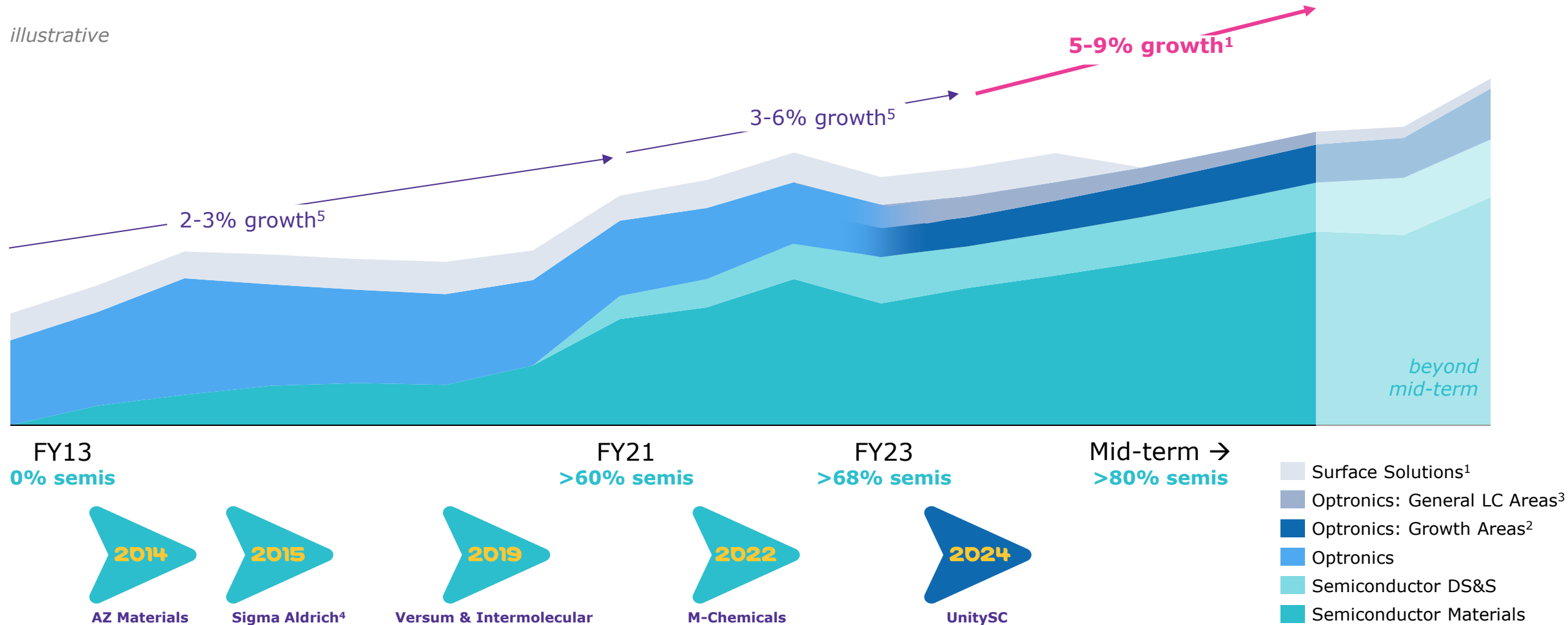
1) 3D-Densification involves packing more components into a smaller space through smaller feature sizes, vertical stacking, advanced transistors, and innovative packaging techniques; 2) the most significant node type transition since planar transistors gave was to FinFET in 2012; 3) Market growth of Semiconductors indicative of underlying growth in the Electronics industry; 4) Company estimates for Million Square Inches of Silicon Wafers growth of +5 to +7% based on industry forecasts; 5) Mid-term ambition excluding Surface Solutions, and reflecting the core business of Display and Semiconductor Solutions
Acronym(s): **AI** = artificial intelligence; **HBM** = High-Bandwidth Memory; or stacks of DRAM; **HI** = Heterogeneous Integration; **GAA** = Gate All Around



Electronics

Transformation complete: accelerating growth as a pure-play

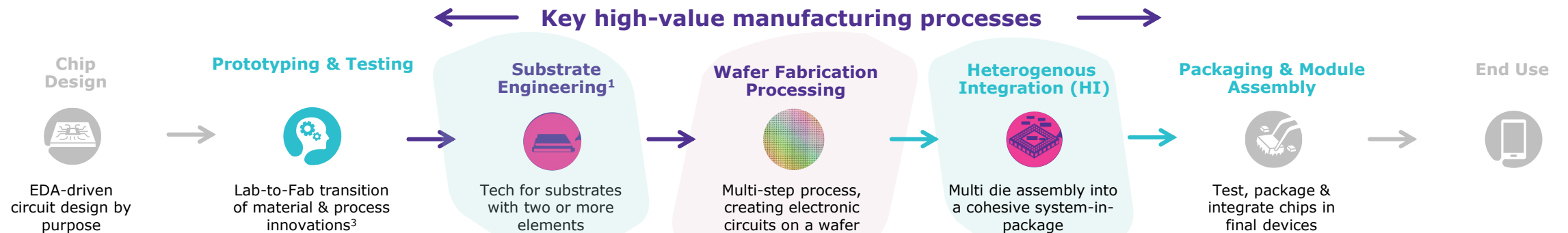
illustrative



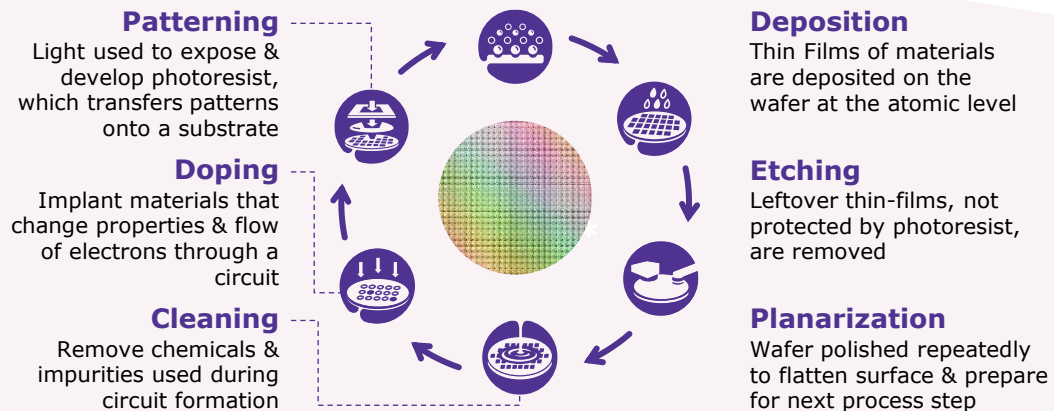
Semiconductor Solutions

Company is a critical enabler of the Semiconductor Ecosystem

Materials, Delivery Equipment and Metrology & Inspection enable key process steps



Key materials and DS&S processes



Key metrology & inspection processes

Packaging chipllets has moved toward front-end processes:

TSV² formation
vertical electrical connection that passes through the silicon die or wafer to allow stacking of chipllets in 2.5 & 3D

Hybrid Bonding
Directly connect chips using copper-to-copper bonds, enhancing electrical conductivity, increasing interconnect density & reducing interconnect length



- New **3D-metrology instruments** needed to drive **yield** by:
- Measure extensive 3D structures **super-fast** with **nanometer accuracy**
 - Examine bow, warp and **bonding** delamination defects
 - Measure defects** on transparent carriers / **compound substrates**

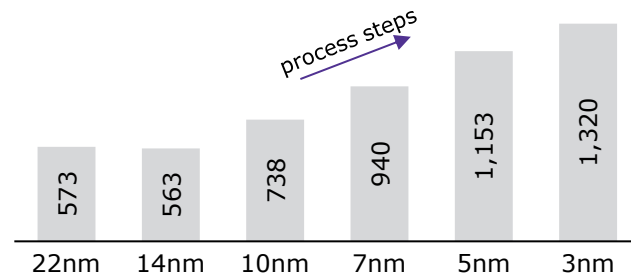


Semiconductor Solutions

Company creates more customer value per wafer

1) Miniaturization¹: more process steps^{2,3}, more materials

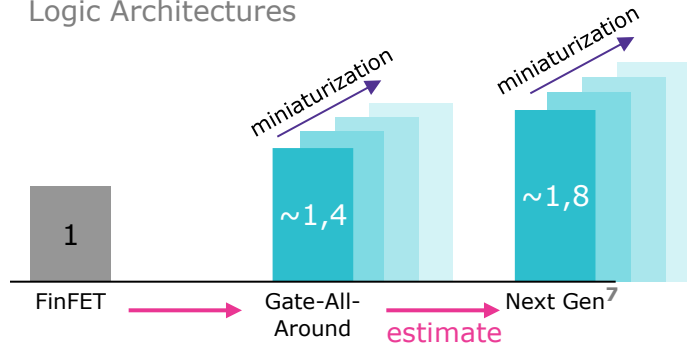
FinFET logic nodes



Number of process steps on logic node sizes (nm = node) within the FinFET architecture

2) Vertical stacking creates complexity⁵ and more value⁶

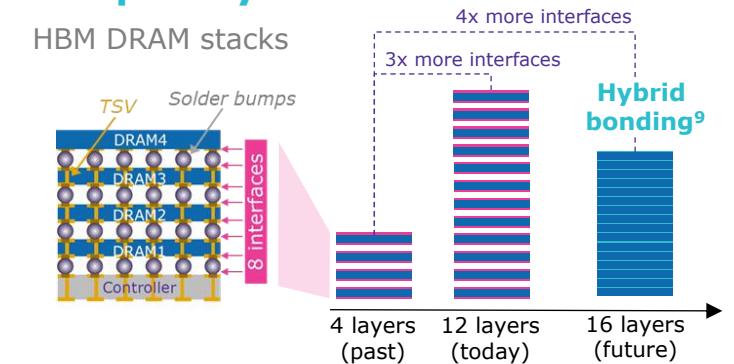
Logic Architectures



ALD benefits disproportionately from transition to GAA⁷; 3D Nand also benefits from vertical stacking as each layer needs more materials (across 100s of layers)

3) HI⁸ interconnect density and complexity drives even more value

HBM DRAM stacks



Each & every interconnect and component must be measured in HBM and HI, quickly and in high volume manufacturing, driving the need for metrology and inspection tools alongside front-end materials



Customers need Electronic's Materials Intelligence™ and Metrology Tools to advance their technology roadmaps...

...and we also leverage these competences into automotive, industrial IoT and related markets, solving customers innovation challenges such as **power efficiency** with offerings for **compound semiconductors** and **other analog applications**



...contributing to **outperformance of MSI⁴ by +200 to +400 basis points**

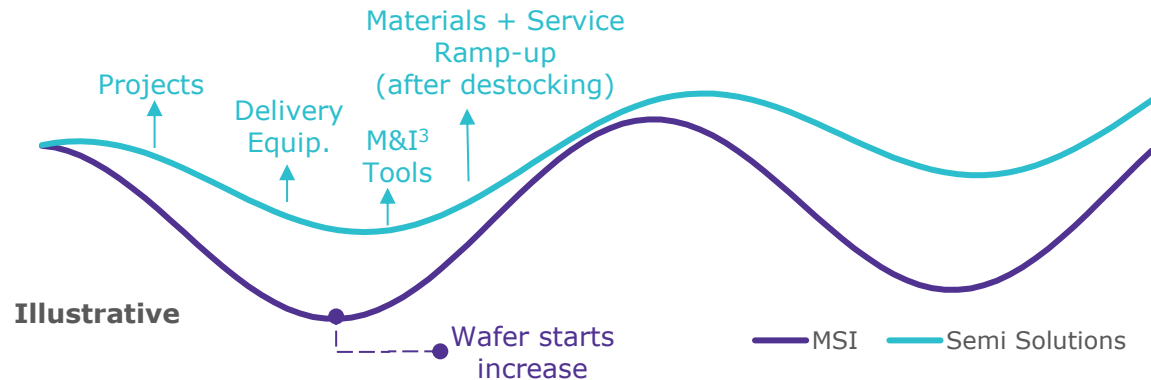
1) Evolution within transistor technology generation; 2) Process steps including: lithography, deposition, etching, doping, cleaning, patterning & planarization; 3) Bardon et al., DTCO including sustainability, IEEE/IEDM, 2020; 4) MSI = million square inches silicon wafers; 5) Source: TechInsights (IC Knowledge & Group est.); 6) index to last FinFET node with process steps as proxy for value 7) ALD = atomic layer deposition, Next Gen Architecture features: CFET, back-side power, embedded DRAM 8) Heterogenous Integration of multiple chiplets into higher-level assembly, or system-in-package, enabling functionality & improved operating characteristics 9) Future sophistication via Hybrid Bonding (2x interconnect density) & other stacked chiplets drive further customer value from HI



Semiconductors

Strategic partner to customers with comprehensive portfolio

Resilient business model with partial semi cycle hedge



Comprehensive portfolio across semi Ecosystem

	Thin-film	Spec. Gases	Patterning & Cleans	Planarization	DS&S ²	Heterogenous Integration	Compound Semis
Company Electronics	●	●	◐	◐	●	◐	◐
Comp A	◐	◐	◐	●	◐		◐
Comp B	◐	○	◐	◐	○		
Comp C	●	●	○	○	◐		
Comp D	○	○	●	◐	○	◐	
Comp E	Materials & Materials Delivery Equipment						
Comp F						●	◐
Comp G						●	◐

Metrology & Inspection Tools⁴

Many other regional or single product players. ● Good ◐ Medium ◑ Minor ○ n.a.

41

- 1) MSI = million square inches of silicon wafers; 2) DS&S includes large fab projects, material delivery equipment and fab services;
3) M&I = Metrology & Inspection tools; 4) M&I tools reside in Optronics and serve semiconductor customers

Strategic partner to industry

- ✓ Customer engagement at **strategic and executive level**
- ✓ **Synergistic business model** across projects, delivery systems & service, materials and metrology & inspection tools
- ✓ Enhanced **business visibility** and market intelligence
- ✓ **Innovation** and **growth** engine with industry **leading margins**

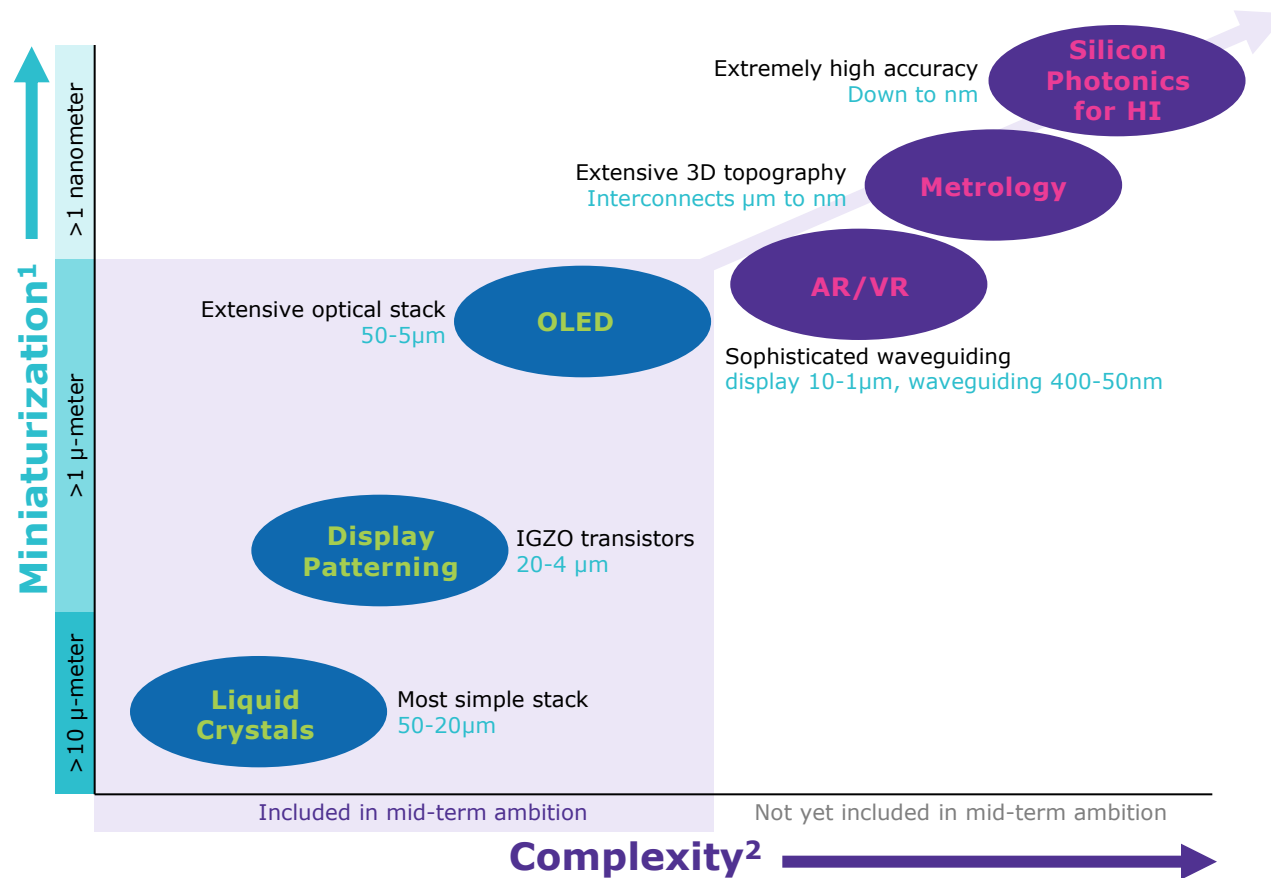
Our competitive offering further enables **outperformance of MSI¹ by +200 to +400 bps** over the cycle



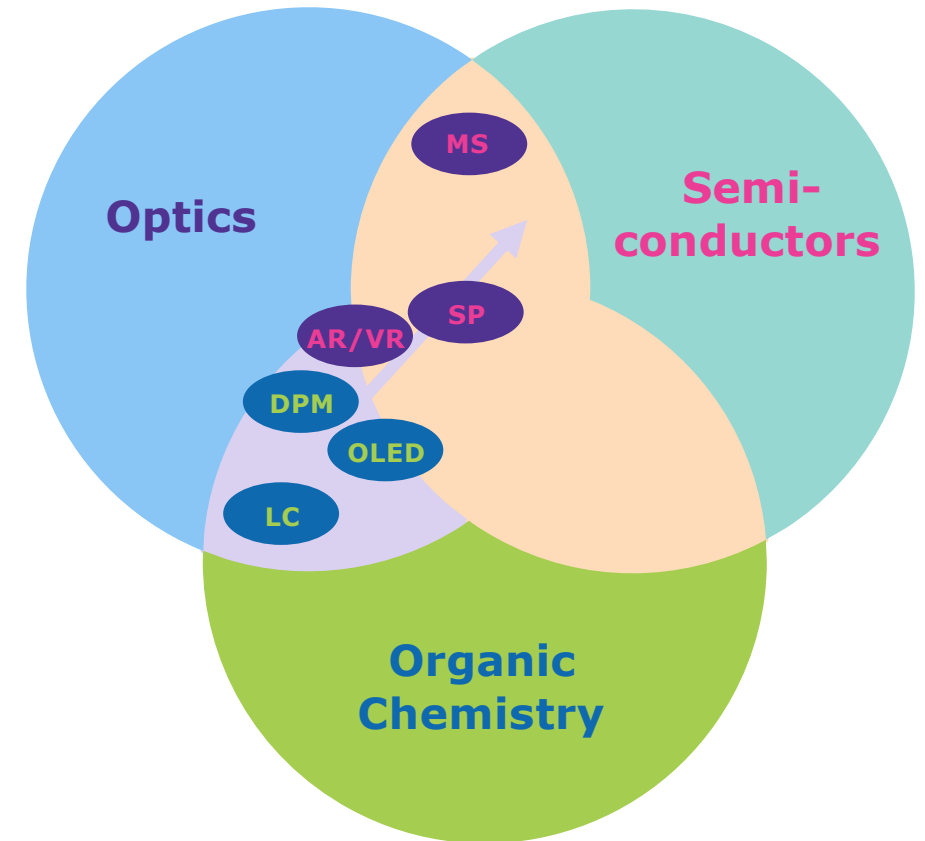
Optronics

Complexity and miniaturization needs driving growth areas

Group to deploy **Materials Intelligence™** amid **increasing complexity**

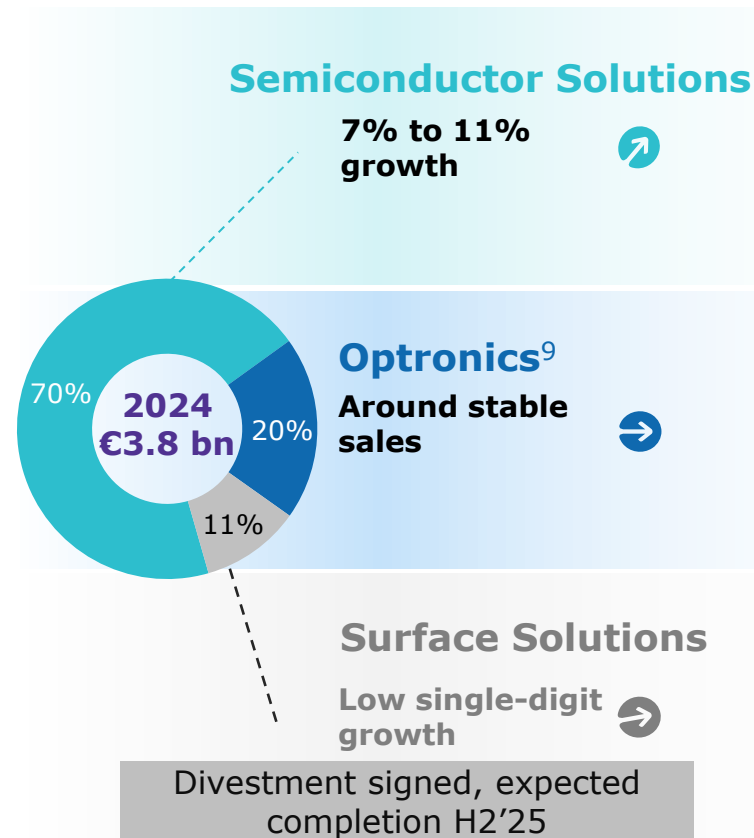


Semiconductor and light-based technologies converge into **Optronics**



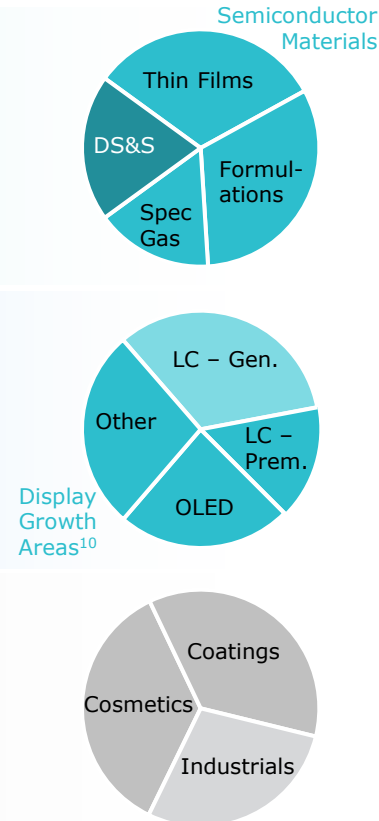
Leveraging portfolio transition to enable **5% to 9%⁸ growth CAGR**

Sales split



Mid-term outlook¹

Business Split²



Fundamental growth drivers

- Continued market growth due to technological advances that generate, transfer, store and process more data (AI / ML, 5G, Big Data and cloud, IoT) serving customers in **Logic, Memory, Analog and Packaging**
- 5 to 7%** market growth³
- Outperform market by **+2% to +4% (total 7-11%)**: more material per wafer, comprehensive portfolio and strategic partner to customers
- Driven by trends towards **more devices, complex & demanding form factors** and **miniaturization** (inc. mobile, AR & VR)
- 2 to 5% growth of LCD area⁴, amid continual price pressure; general applications market decreasing, with growth opportunities in premium
- 10 to 15% growth of total OLED area⁴ with slight to moderate market share gains
- Further upside⁵ from AR/VR, Silicon Photonics & Metrology
- Balanced exposure to **coatings, cosmetics** and **industrials** markets
- Drivers: rising living standards, higher disposable income in growing markets & higher demand for high value products at reasonable prices
- Light vehicle recovery delayed with shortages; expected to reach 2019 levels around 2024 as shortages ease⁶; electric transition issues remain
- Relevant cosmetics end markets already well above 2019 levels; market expects continued structural growth⁷

1) growth rates are organic CAGRs; 2) indicative only; 3) Source: Company estimate based on industry forecasts related to million square inches of silicon wafers;

4) Source: Omdia Display Market Outlook, Q1 2023; 5) Upside not included in mid-term ambition; 6) Sources: LMC Automotive Light Vehicles Forecast, June 2023;

7) Sources: Euromonitor BPC (Beauty & Personal Care) May 2023; 8) mid-term ambition excludes Surface Solutions; 9) Growth areas in Optronics include LC premium applications, OLED and new technologies. as the general LC business declines in light of continuous price pressure and competition.

Sustainable innovation drives future business growth

Reducing the upstream footprint of products for customers

supplier of
choice

Reducing impact with environmental progress, ahead of schedule:

- Scope 1+2 emissions reduced by -50% vs. 2020
- Circularity rate increased by 5.3 vs. 2020
- Water intensity reduced by -26% vs. 2020

Green Speed app quantifies impact for sustainable product-scaling:

- Resource and carbon footprint reduction in our production
- Product carbon footprint under development

enabler &
Multiplier

Targeting customer centric innovations

Strategic approach to make the future portfolio more sustainable

- R&D Sustainability Scorecard roll-out completed, data quality check in 2024
- M-Spot Portfolio Assessment in implementation
- Collaboration with customers for targeted development of more sustainable products

More sustainable products for our customers

Reducing costs

- Lower resource consumption
- Avoidance of environmental taxes

Driving growth

- More sales of sustainable products offering additional benefits
- Gaining additional share of wallet with enhanced customer intimacy



3,270 more sustainable Life Science products brought to market¹

1) Average growth rate of +30% for sustainable products in Life Science from 2020 to 2024

We are committed to three overall sustainability ambitions

01

Dedicated to human progress

In 2030, we will achieve human progress for more than one billion people through sustainable science and technology.

Our focus areas



Sustainable innovations and technologies for our customers



Impact of our products on health and wellbeing

Focus
SDGs



02

Partnering for sustainable business impact

By 2030, we will fully integrate sustainability into our value chains.

Our focus areas



Sustainability in our ways of working & decision making



Our people and communities: providing a diverse and inclusive environment



Sustainable and transparent supply chain

Focus
SDGs



03

Reducing our ecological footprint

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

Our focus areas



Climate change and emissions



Water and resource intensity

Focus
SDGs



Clear metrics to drive execution towards 2030 ambition

Goal	Metric	2024 (2023)	Target
1	Percentage of newly published patent families with positive sustainability impact	34% (29% ¹)	n.a.
	People treated with our Healthcare products*	184 mio (177 mio)	1 bn people ambition ²
	Pharma products enabled by Life Science*	424 mio (310 mio) ³	
2	Percentage of women in leadership positions	39% (39%)	Gender parity by 2030 ⁴
	Percentage of relevant suppliers covered by valid sustainability assessment*	75%/94% (66/94) ⁵	73%/92% by 2025
	Environment, Health and Safety (EHS) Incident Rate	2.2 (2.4) ⁶	As low as possible
	Violations of Global Social and Labor Standards Policy	57 (60) ⁷	n.a.
	Lost Time Injury Rate (LTIR)	1.2 (1.3) ⁸	<1.0 by 2025
3	Greenhouse gas emissions Scope 1+2*	1,085 kt (1,463 kt)	-50% by 2030 ⁹
	Scope 3 intensity: kg Greenhouse gas emissions per € gross profit	0.41 (0.36)	-52% intensity by 2030 ⁹
	Percentage of purchased electricity from renewable sources	52% (51%)	80% by 2030
	Circularity Rate	69.2% (67.8%)	70% by 2030 ¹²
	Reduction of m ³ water intake per €m revenues by 2030	-26% (-27%)	-50% by 2030 ⁹
	Wastewater quality: no harmful emission residues	20% (10% of sites)	100% completion by 2030 ¹⁴

*LTIP relevant

¹restated 2023 according to change in LexisNexis®-PatentSight® methodology
²incl. all 3 sectors +praziquantel don.
³additional products have been identified in 2024 that use LS products and technologies in their production process

⁴considers room for non-binary people
⁵by a)number, b)supplier spent
⁶incidents + severity vs. man-hours
⁷confirmed violations

⁸accidents with min. 1 day of missed work per 1 mio. man-hours
⁹vs 2020 base line, 2023 restated due to ESRS reporting
¹²excluding waste-to-energy
¹⁴emissions below scientific threshold



Diverse human capital: Thinking, talking, and leading differently



Focus areas	Indicator	Status 2024 (2023)	Aspirations
Gender	Percentage of women in leadership globally	39% (39%)	Gender parity until 2030
Culture & Ethnicity	Percentage of underrepresented ethnic colleagues in US leadership	24% (23%)	Increase to 30% until 2030
	Percentage of nationals from Asia, Latin America, Middle East & Africa in leadership	18% (17%)	Increase to 30% until 2030
Inclusion	Inclusive Leadership Programs and participation of leaders across all business	95% (92%)	Participation of all leaders by 2026
Women in global work force:		44% (44%)	



¹ The estimated difference in pay after accounting for differences in actual pay that are due to legitimate reasons (source: Mercer)

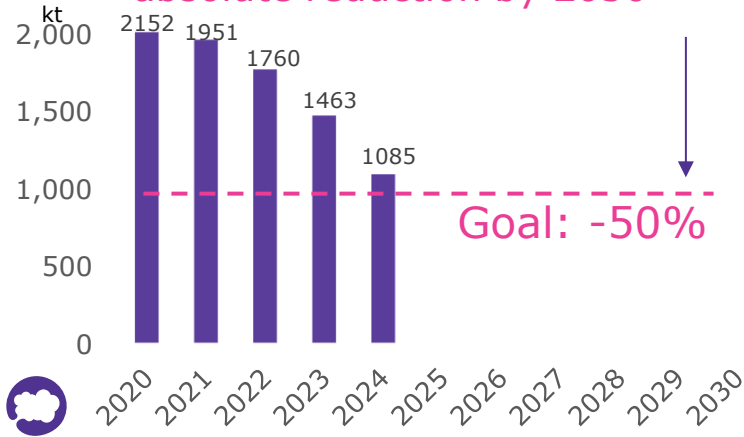
² End of year 2023 data globally except North America



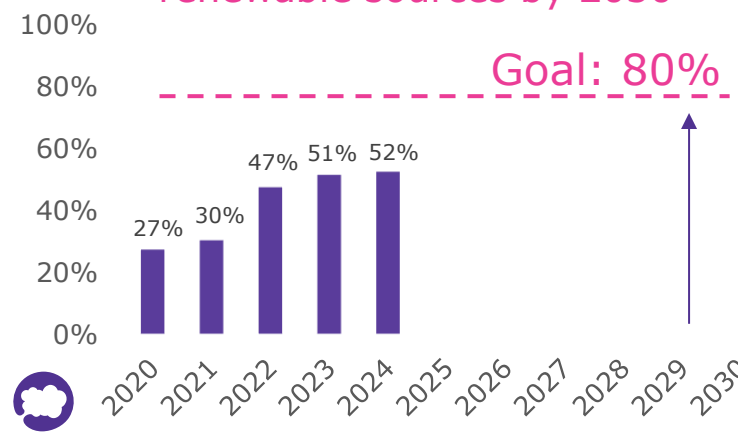


Responsible use of natural resources

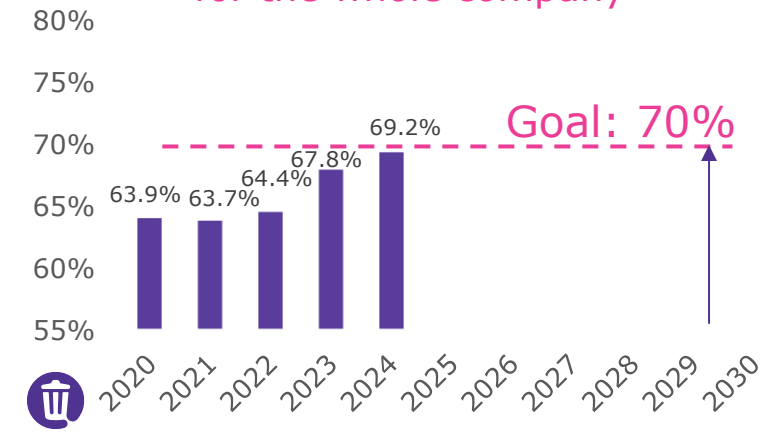
Scope 1+2 GHG emissions: -50% absolute reduction by 2030^{1,2,4}



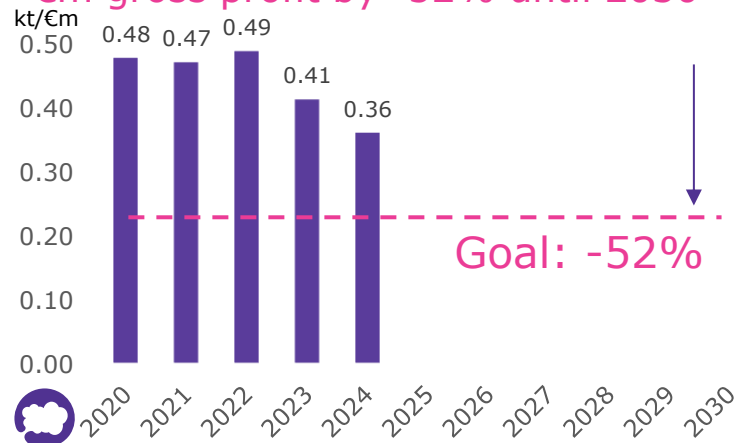
80% of purchased electricity from renewable sources by 2030



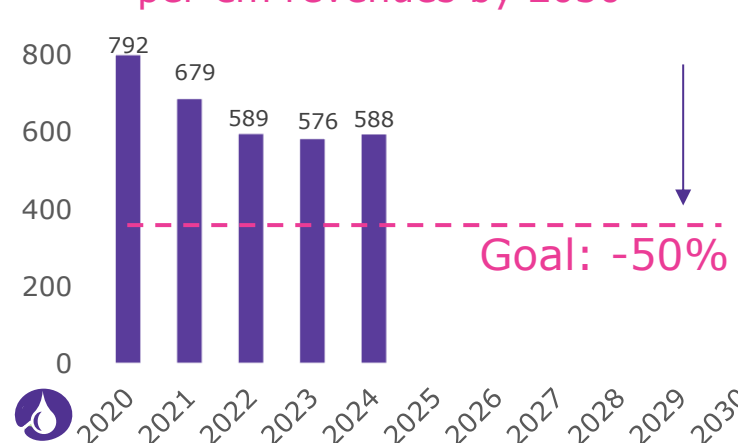
Circularity Rate⁴ of 70% for the whole company



Reduction of kt Scope 3 GHG emissions per €m gross profit by -52% until 2030^{1,2,4}



-50% reduction of m³ water intake per €m revenues by 2030¹



Environmental targets on track !

- Investments and initiatives show positive results
- Sc. 1+2 reduction by halve close to target
- Water quality initiatives progressing: 20% of relevant sites with zero emissions³
- Improved circularity and water targets on track



Group

Full-year 2025 guidance

Net sales:

Organic: +3% to +6% YoY

FX: -1% to +2% YoY

~€21.5 – €22.9 bn

EBITDA pre:

Organic: +3% to +8% YoY

FX: -2% to +1% YoY

~€6.1 – €6.6 bn

2025 business sector guidance¹

Net sales

EBITDA pre

Life Science

- Organic: +2% to +7% YoY
- FX: 0% to +3% YoY
- ~€9.1 bn to €9.8 bn

- Organic: +2% to +9% YoY
- FX: -1% to +2% YoY
- ~€2.6 bn to €2.9 bn

Healthcare

Net sales

EBITDA pre

- Organic: +1% to +5% YoY
- FX: -2% to +1% YoY
- ~€8.3 bn to €8.9 bn

- Organic: +3% to +9% YoY
- FX: -3% to 0% YoY
- ~€3.0 bn to €3.3 bn

Electronics

Net sales

EBITDA pre

- Organic: +2% to +6% YoY
- FX: 0% to +3% YoY
- ~€3.8 bn to €4.2 bn

- Organic: +3% to +9% YoY
- FX: +2% to +5% YoY
- ~€1.0 bn to €1.1 bn



Additional financial guidance 2025

Further financial details

Corporate & Other EBITDA pre	-€550 m to -€600 m
Interest result ²	~ -€110 m to -€150 m
Effective tax rate	~ 21% to 23%
Capex on PPE ¹	~ €1.6 to 1.8 bn
Hedging	FY 2025 overall hedge ratio ~ 50% EUR/USD hedging @ ~ 1.08
2025 Ø EUR/USD assumption	~ 1.03 to 1.07

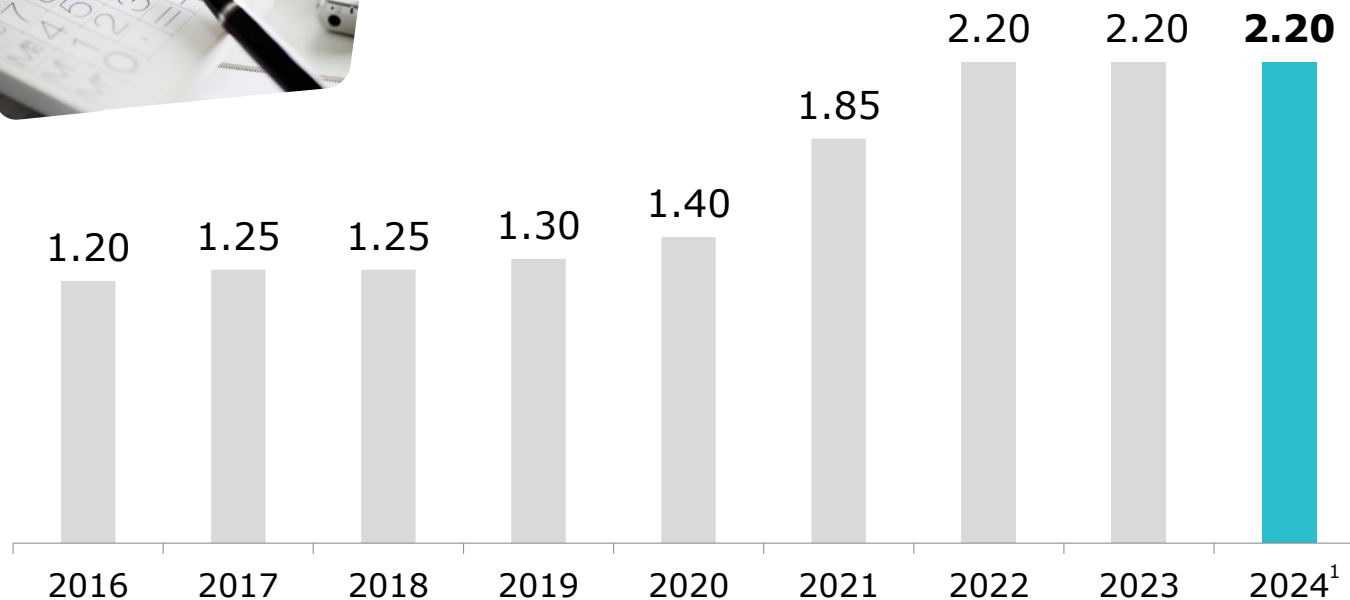
1) Based on gross additions to Property, Plant and Equipment (PPE) on balance sheet (excl. leasing) in fiscal year to reflect planned Capex expansion more accurately

2) Excludes the impact from deals that are signed and not yet completed

Stable dividend signals confidence in future growth

Dividend¹ development 2016 -2024

2024 dividend



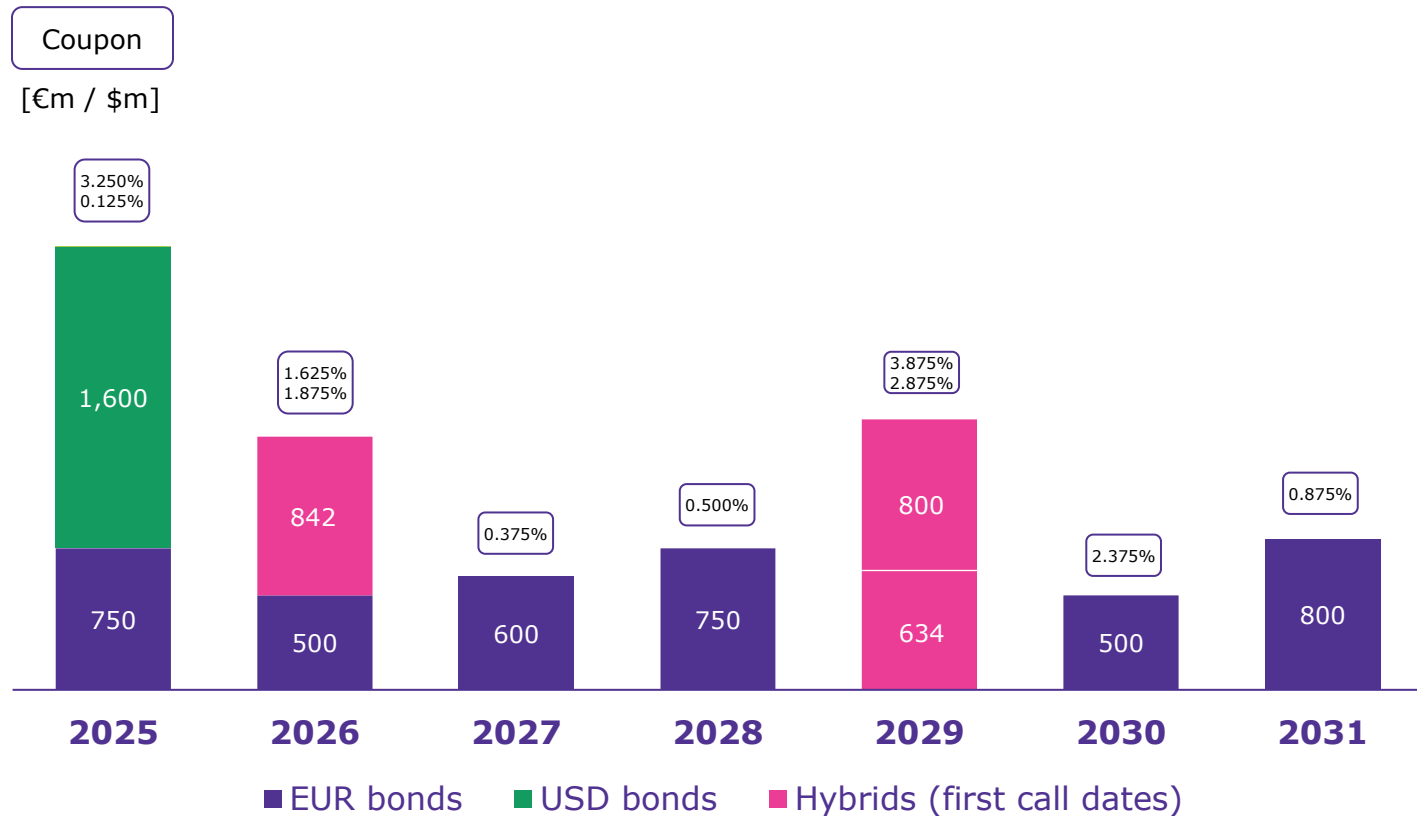
- Resilient company performance supports stable dividend in FY24
- Allows for dividend proposal¹ of €2.20 per share for 2024
- Dividend yield² of 1.6% with payout ratio of 25.5% in 2024

Dividend Policy:

The current dividend constitutes the minimum level, assuming a stable economic environment. While Company aims to continuously develop dividends in line with business performance and earnings progression, dividend growth can deviate, e.g. in times of restructuring or because of significant global economic developments. Company also aims at a target corridor of 20-25% of EPS pre.

Credit details

Maturity profile as of December 31, 2024



Credit rating information

	LT Rating	Last LT Rating Change	Outlook	ST Rating
MOODY'S	A3	21.10.21	Stable	P-2
S&P Global	A	29.05.13	Stable	A-1



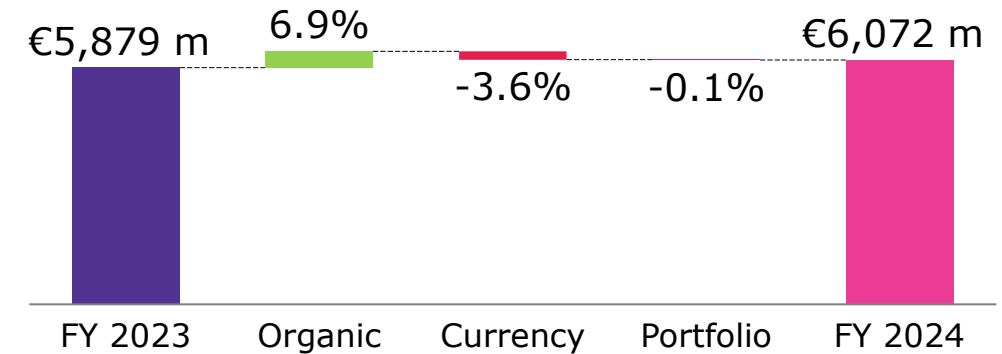
Healthcare and Electronics drive return to profitable growth

FY YoY Net Sales

	Organic	Currency	Portfolio	Total
Life Science	-3.3%	-0.7%	0.1%	-3.9%
Healthcare	7.0%	-2.0%	0.0%	5.0%
Electronics	4.6%	-1.4%	0.2%	3.4%
Group	2.0%	-1.3%	0.1%	0.8%

- Life Science: sales down -3.3% org., driven by SLS org. sales up +0.2%; LSS sales down -9.4% org.; and PS org. sales down -6.4%, mitigated by sequential growth across the year
- Healthcare: sales up +7.0% org., driven by +8.5% growth in CM&E; +12.7% growth in Oncology; +2.3% growth in N&I and +0.8% growth in Fertility
- Electronics: sales up +4.6% org., driven by; +7.8% growth in Semiconductor Solutions particularly in AI and adv. nodes; with Display down -3.5%

FY YoY EBITDA pre



- Life Science: -6.3% decline in EBITDA pre, on lower sales volumes
- Healthcare: EBITDA pre up +22.7%, as sales rise, and R&D spend is temporarily lower
- Electronics: +6.9% org. growth in EBITDA pre with operational leverage on higher sales
- All business sectors facing FX headwinds

Acronym(s): **SLS** = Science & Lab Solutions; **LSS** = Life Science Services; **PS** = Process Solutions; **CM&E** = Cardiology Metabolism & Endocrinology; **N&I** = Neurology & Immunology; **AI** = Artificial Intelligence; **R&D** = Research & Development; **FX** = Foreign exchange 1) COVID related sales in Q3'23 benefitted from an end-of-contract payment in a low- to mid-double-digit €m amount; Totals may not add up due to rounding



FY 2024: Overview

Key figures

[€m]	FY 2023	FY 2024	Δ
Net sales	20,993	21,156	0.8%
EBITDA pre	5,879	6,072	3.3%
Margin (in % of net sales)	28.0%	28.7%	0.7pp
EPS pre	8.49	8.63	1.6%
Operating cash flow	3,784	4,586	21.2%

[€m]	Dec. 31, 2023	Dec. 31, 2024	Δ
Net financial debt	-7,500	-7,155	-4.6%
Net working capital	5,093	5,171	1.5%
Employees	62,908	62,557	-0.6%

Comments

- Sales up +1% with organic growth overcompensating FX headwinds
- Strong sales growth from HC and EL partially compensated by moderate sales decline in LS
- EBITDA pre growth and margin expansion in HC and EL overcompensate LS decline
- Growth in EPS pre slightly lower than EBITDA pre, reflecting higher D&A
- OCF up higher than EBITDA pre, driven by higher D&A, lower LTIP cash out, lower cash taxes and PY UDC / HC outlicensing
- NWC around stable YoY
- Net financial debt significantly down YoY, even after acquisitions¹



FY 2024: Reported figures

Reported results

[€m]	FY 2023	FY 2024	Δ
EBIT	3,609	3,645	1.0%
Financial result	-125	-108	-13.4%
Profit before tax	3,484	3,536	1.5%
Income tax	-650	-751	15.5%
<i>Effective tax rate (%)</i>	18.7%	21.2%	2.5pp
Net income	2,824	2,777	-1.7%
EPS (€)	6.49	6.39	-1.5%

Comments

- EBIT slightly up, driven by top-line and margin expansion in both HC and EL; LS lower on top- and bottom-line
- EBIT also includes one-time impairments related to HC R&D
- Slight improvement to financial result mainly due to higher cash balances and lower hedging costs
- Effective tax rate increased to 21%, around the bottom end of the guidance range due to initial pillar 2 effect
- EPS growth partially reduced by higher taxes than prior period

Cash flow statement

FY 2024 – cash flow statement

[€m]	FY 2023	FY 2024	Δ
Profit after tax	2,834	2,786	-48
D&A	1,880	2,134	254
Changes in provisions	188	62	-126
Changes in other assets/liabilities	-755	-309	446
Other operating activities	-223	-24	199
Changes in working capital	-141	-63	78
Operating cash flow	3,784	4,586	802
Investing cash flow	-1,889	-3,050	-1,161
thereof Capex on PPE	-1,789	-1,675	114
Financing cash flow	-1,732	-985	747

Cash flow drivers

- Profit after tax slightly lower on higher taxes
- D&A up on higher PPE and one-time impairments in relation to HC R&D
- Higher provisions in prior year due to efficiency programs and HC R&D
- Less negative delta in other assets & liabilities with lower bonus payouts and taxes compared to prior year
- Other op. activities in prior year incl. Biosimilars milestone payment, HC outlicensing and the UDC patent effect
- Investing and Financing cash flow delta mainly driven by proceeds from short-term investments and M&A spend¹

Adjustments in FY 2024

Adjustments in EBIT

[€m]	FY 2023		FY 2024	
	Adjustments	thereof D&A	Adjustments	thereof D&A
Life Science	122	34	220	86
Healthcare	8	10	134	160
Electronics	140	42	112	29
Corporate & Other	207	1	104	3
Total	477	87	570	277

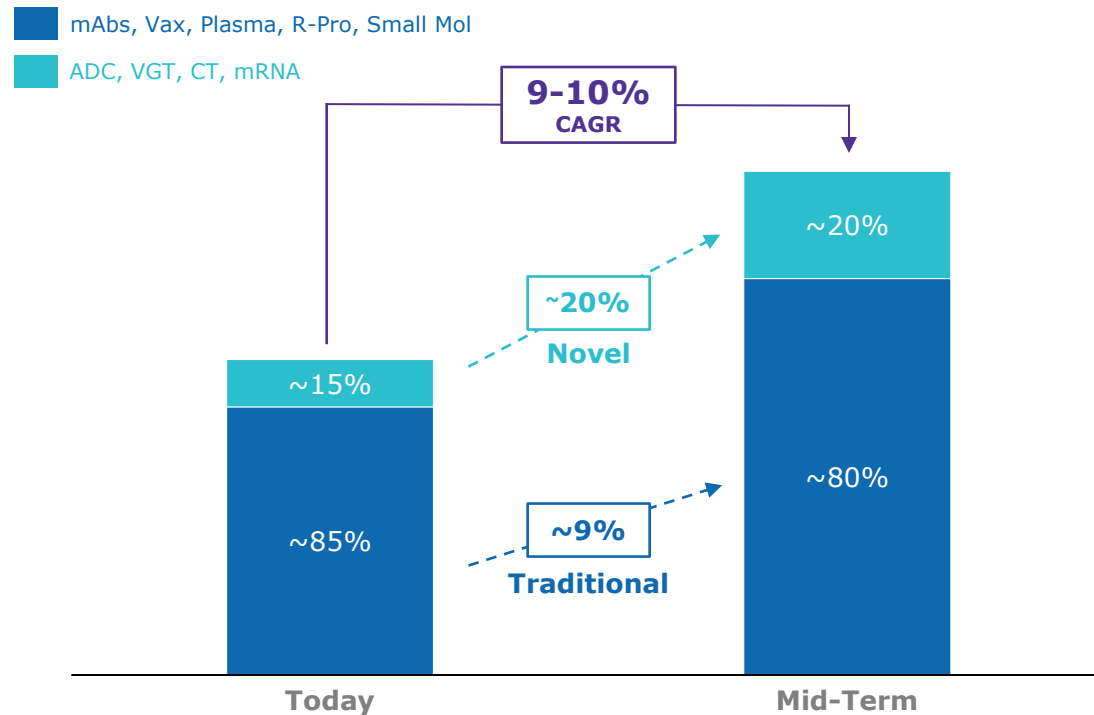


Process Solutions - Market

Participating in a structurally intact and attractively growing Biopharma market

Novels driving growth

Process products market in € bn



Diversified customer base

By type, geography, modality



Customer segments

Pharma & Biotechs largest customer group, continue to provide the backbone for growth



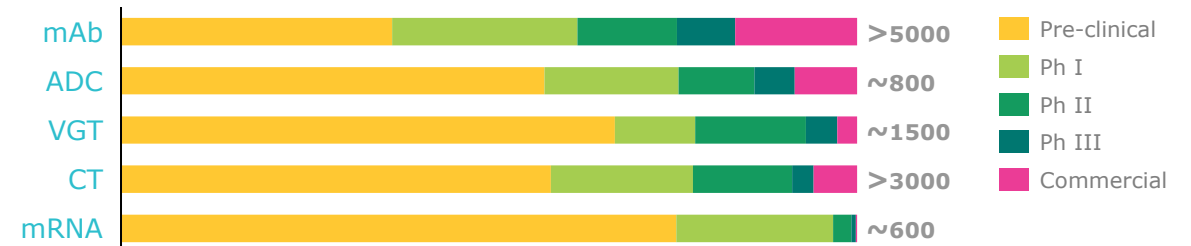
Geography

Asia becoming a breeding-ground for biopharmaceutical companies



Pipeline & on-market

Robust pre-clinical funnel in multiple modalities



Continued market attractiveness driven by traditional modalities paired with expected higher growth in novel modalities amid strong pipelines

Source: internal market models, Evaluate Pharma, Pharmacircle; Acronyms: **mAbs** = monoclonal Antibodies (incl. monoclonal antibodies, recombinant antibodies), **Vax** = Vaccines, **R-Pro** = Recombinant Protein, **mol** = molecule, **ADC** = Antibody Drug Conjugate, **VGT** = Viral Gene Therapy (incl. Gene Therapy, Genome Editing, Oncolytic Virus), **CT** = Cell Therapy incl. Cell Therapy, Gene-Modified Cell Therapy), **mRNA** = messenger Ribonucleic Acid, **Ph** = phase

Process Solutions – Innovation

Enabling customers' evolution towards Factory of the Future

Customer goals	Today <i>mAbs: Templated process Novels: Need for template</i>	Future Facility of the Future <i>(mAbs leading, finally all modalities)</i>	Innovation examples
Run the process	Batch mode	Intensified and continuous	Mobius® Bioreactors and Cell Retention Systems, Cellvento® CHO Cell Media & Feeds, Natrix® Q Micro
Monitor the process	Manual, offline testing	Real-time release testing	Procellics™ Raman Analyzer, MAST® Auto sampling Solution
Control the process	Some automation	Predictive & Adaptive	Common Control Platform® Software, Bio4C ACE™ Software
Optimize the process	Paper-based, siloed	Cloud-based, prescriptive	ProcessPad™



Cutting-edge innovation amplified by technology bolt-ons and partnerships paving the way towards sustained leadership







Acronym(s): **mAbs** = monoclonal Antibodies,

Life Science Services – Overview

Focus on novel modalities to provide unique value proposition to clients and propel future growth

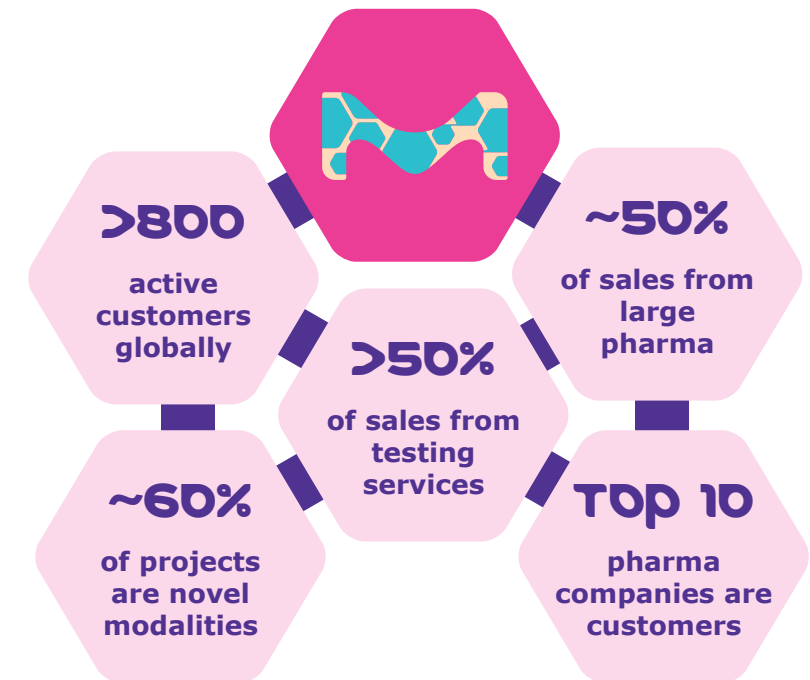
Capabilities

Serving customers along their molecule journey

	CDMO			CTO	Focus	Value proposition
	Dev.	DS	DP	Testing		
 ADCs	✓	✓	✓	✓	Potent conjugates	Integrated supplier: payload to conjugation
 VVs	✓	✓	✓	✓	All virus types	Capacity and scale, with full service offering
 mRNA	✓	✓	✓	✓	mRNA	One-stop shop and technical track record
 CTs				✓	All cell types	Scalability, flexibility, and expertise across cell types
 mAbs	✓	✓		✓	Single use molecules	Templated speed and flexibility in single use
 Small molecules	✓	✓			Complex and high potent	Flow chemistry and highly potent synthesis

Snapshot

Business in numbers¹



¹Numbers of 2024






Well established CTO with comprehensive service offering and emerging CDMO focused on novel modalities with unique value proposition

✓ Available ✓ Limited Services ¹ Based on FY 2023 Acronym(s): **CTO** = Contract Testing Organization, **CDMO** = Contract Development Manufacturing Organization, **Dev.** = Development, **DS** = Drug Substance, **DP** = Drug Product, **ADCs** = Antibody Drug Conjugates, **VVs** = Viral Vectors, **mRNA** = messenger Ribonucleic Acid, **CTs** = Cell Therapies, **mAbs** = monoclonal Antibodies



SLS – Portfolio

Broad portfolio consisting of five specialized portfolio units and franchises enabling a presence across workflows

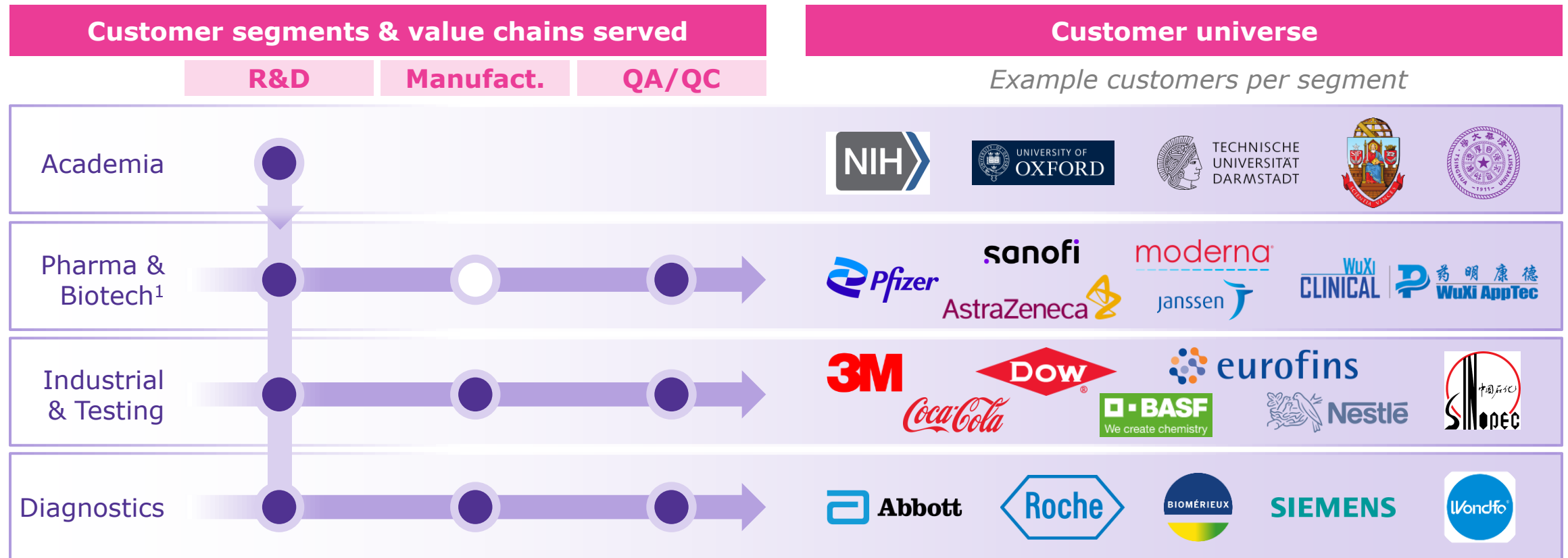
	Chemistry	Biology	DxRm	BioM	Lab Water
	<p>Full value chain offers across segments enabled by technology-centric portfolio units</p>				
<p>Key products Not comprehensive</p>	<ul style="list-style-type: none"> Specialty chemicals Chrom. & solvents Reference materials Digital solutions (ChemisTwin™, Synthia™) 	<ul style="list-style-type: none"> Multiplex kits Filtration tools Cell biology kits Antibodies 	<ul style="list-style-type: none"> Lateral flow membrane Critical raw materials Custom products & solutions 	<ul style="list-style-type: none"> QC and sterility testing instruments and kits Filters and plates Culture & growth media 	<ul style="list-style-type: none"> Lab water systems Consumables Services 
<p>Sales split</p>	<p>30% - 40%</p>	<p>25% - 35%</p>	<p>10% - 20%</p>	<p>5% - 15%</p>	<p>5% - 15%</p>

Trusted, innovative brands with podium positions – driven by high-quality, customer- and application-focus, and deep sales expertise

Acronym(s): **DxRm** = Diagnostics & Regulated Materials, **BioM** = Biomonitoring, **Chrom.** = Chromatography, **QC** = Quality Control

SLS – Customers & Value Chains

Serving full value chains of diverse customer segments with key customers including global leaders in their fields










Innovative portfolio and broad footprint enabling to serve customers across value chains meeting needs of leading companies and organizations

¹ Biopharma manufacturing applications addressed by Process Solutions and Life Science Services; Acronym(s): **R&D** = Research & Development, **QA/QC** = Quality Assurance/Quality Control

SLS – Key Trends & Initiatives

Addressing key industry & macroeconomic trends with innovative solutions and targeted investments

Secular trends	Industry trends			Macroeconomic trends		
						
	Digitalization & Automation	Regulatory stringency	Sustainability across value chain	Population growth & ageing	Localization in emerging mkts.	Dual sourcing & increased competition
SLS offering & plans						
	Solutions automating QA/QC & improving lab productivity	Broad QA/QC portfolio and high-quality raw materials	Integration of sustainability into all products & operations	Investment in capacity to meet demand across portfolios	Balanced global footprint; regional growth initiatives	Reputation, product quality and service level to ensure differentiation
	✓	✓	✓	✓	✓	✓
Most relevant customer segments	Pharma & Biotech	Pharma & Biotech	All segments	All segments	All segments	All segments
	Industrial & Testing	Diagnostics				



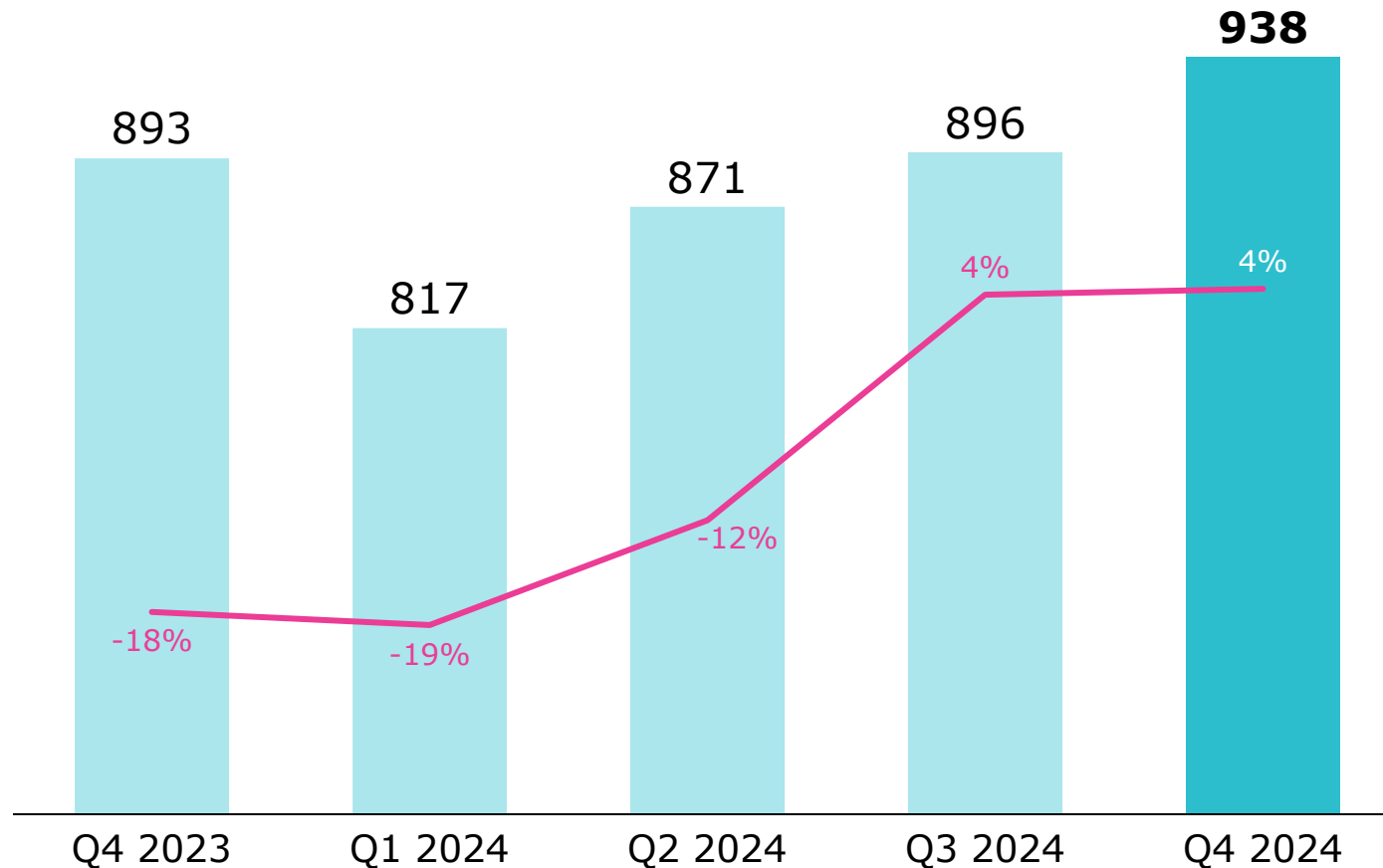
Well positioned to **deliver durable growth** in a changing market environment

Acronym(s): **SLS** = Science & Lab Solutions, **QA/QC** = Quality Assurance/Quality Control



Process Solutions: Returning to growth, highest in six quarters

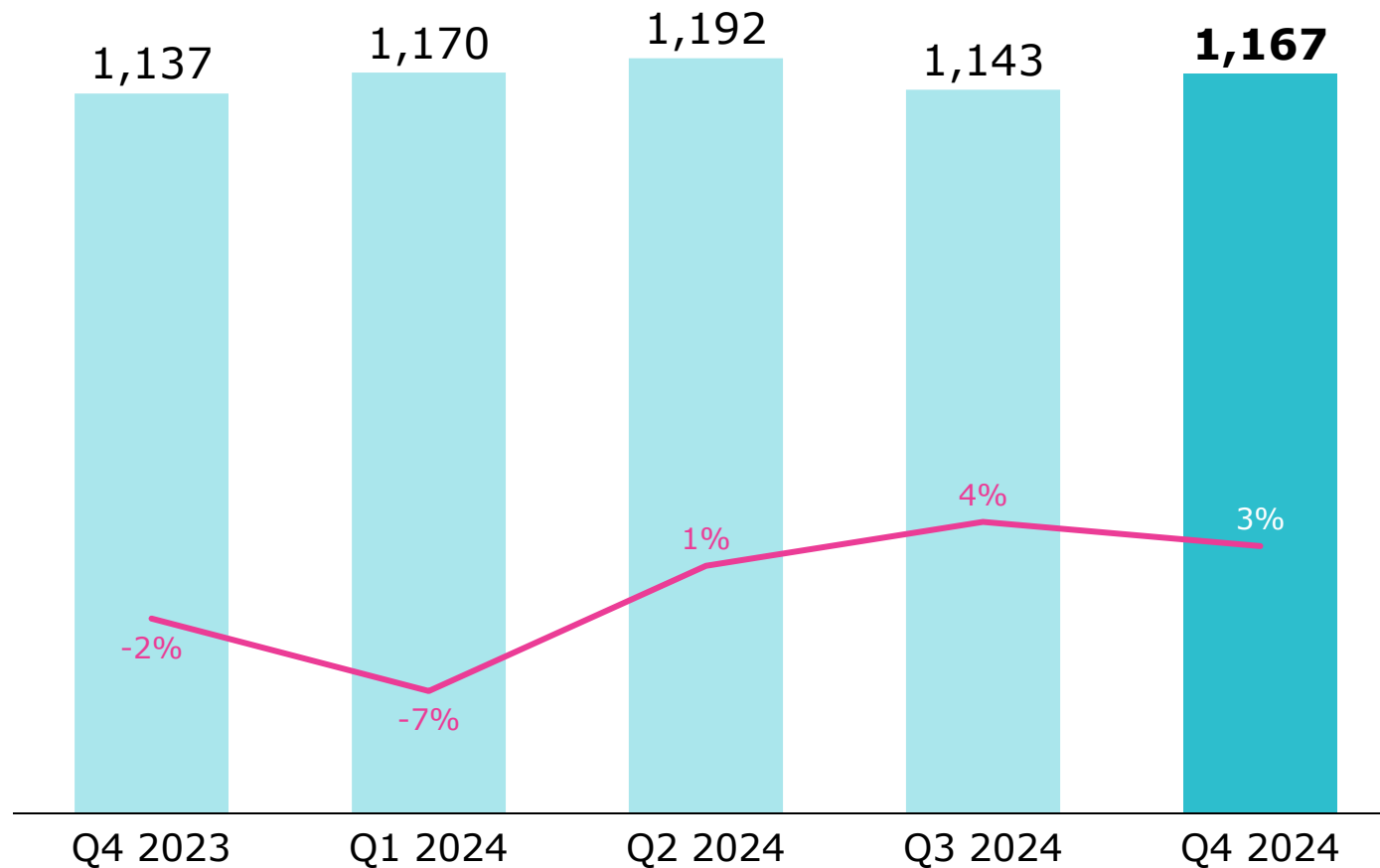
Sales development [€m] - org. growth [%] YoY



- **Org. sales rise** with improving volumes on higher activity levels; **sales up +5% sequentially**, third quarter of sequential growth
- **Order intake**, accelerating from positive trend already seen in first 9M, up **sequentially at +low-teens in Q4**
- Book-to-bill >1
- **Varied regional recovery pace** with **NA returning to org. growth** (up mid-single-digits)
- All major regions **have grown sequentially** across the year

Science & Lab Solutions: Moderate YoY growth

Sales development [€m] - org. growth [%] YoY

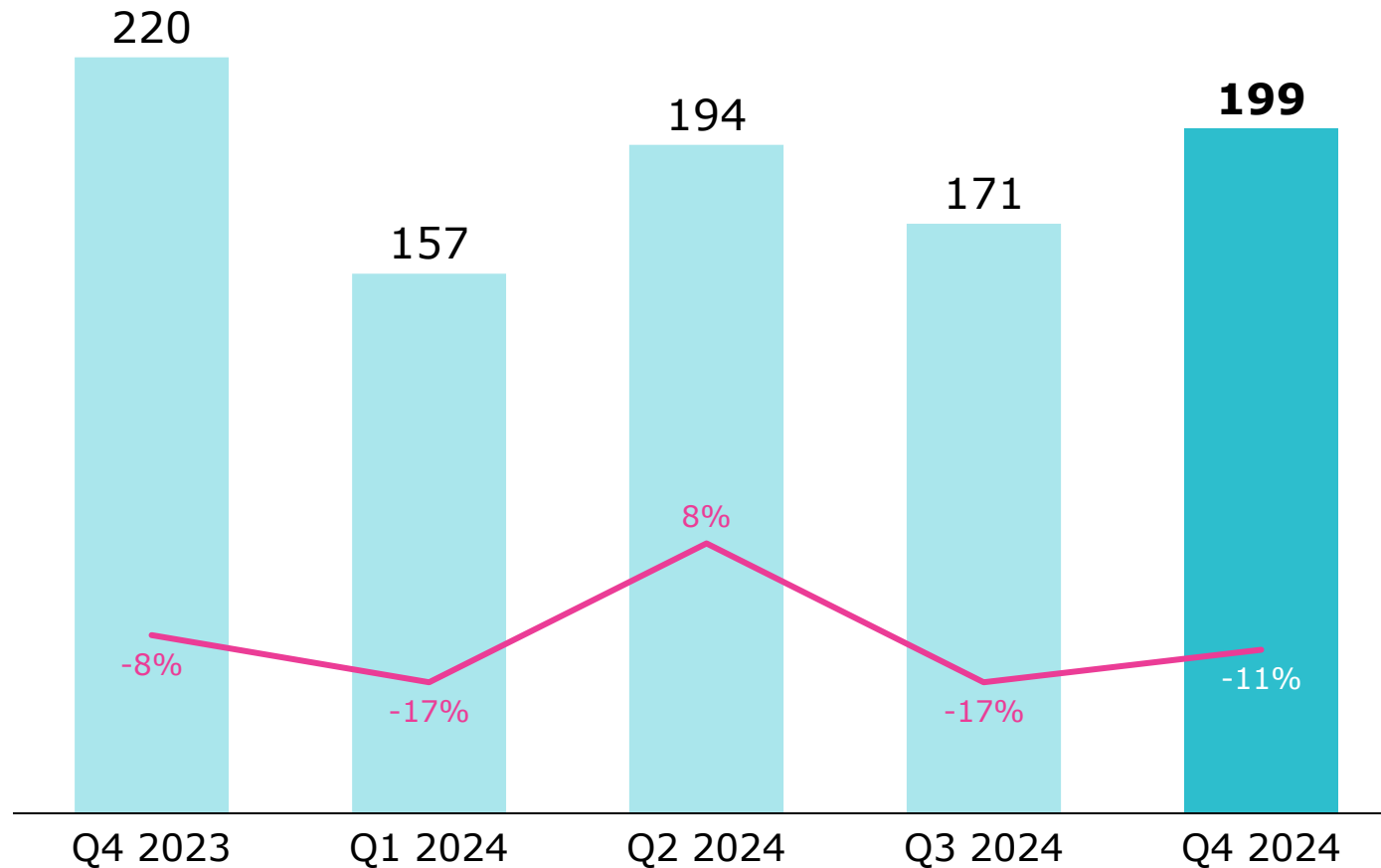


- **+3% org. sales growth** year-over-year; excluding SAP impact still slight growth
- **Biomonitoring and Lab Water Solutions up** org. low teens and mid-single-digits respectively
- **Diagnostics & Regulated Materials** and **Biology** around stable; **Chemistry** up low-to mid-single-digits
- Of the main regions **Europe and APAC were up in low-to mid-single digits**, NA down in the low-to mid-single digit



Life Science Services: strongest quarter of year, down against high comp

Sales development [€m] - org. growth [%] YoY



- **Sales down** against high comparable
- **Contract testing up** low-single-digit percentage org.
- **CDMO down**, with high comparable in prior year period
- **Sales down in major regions**, APAC was down slightly, Europe and the US were down mid-teens and high-single-digits, respectively

FY Life Science: Accelerating QoQ growth in Q4 improves YTD performance

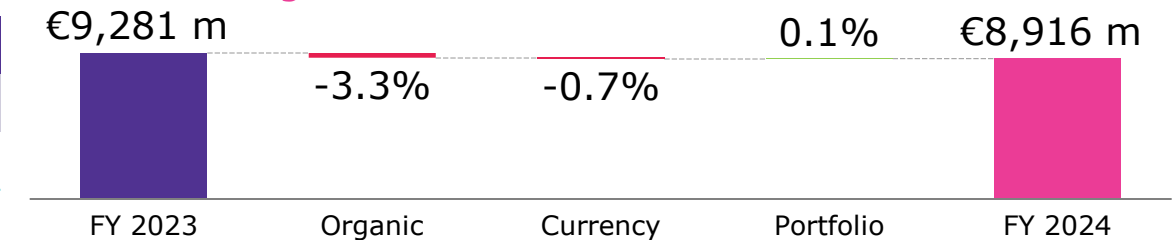
Life Science P&L

[€m]	IFRS		Pre	
	FY 2023	FY 2024	FY 2023	FY 2024
Net sales	9,281	8,916	9,281	8,916
M&S	-2,245	-2,238	-2,232	-2,213
Admin	-425	-441	-372	-382
R&D	-396	-388	-393	-387
EBIT	1,850	1,507	1,972	1,727
EBITDA	2,731	2,455	-	-
EBITDA pre	2,820	2,589	2,820	2,589
(in % of net sales)	30.4%	29.0%	30.4%	29.0%

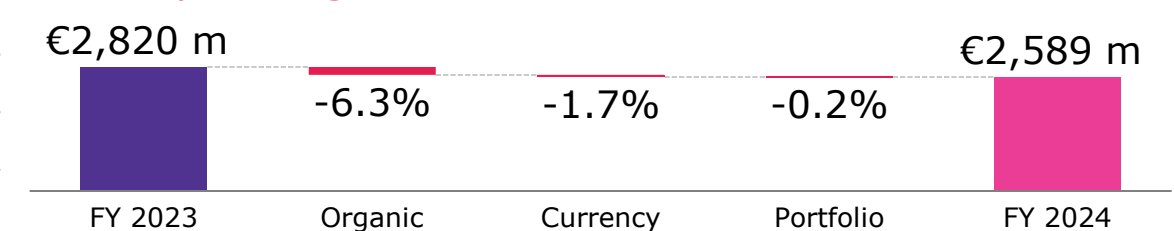
Comments

- Process Solutions: sales down -6% org., driven by COVID-19 non-repeats and customer destocking; Q4'24 reflects 2nd quarter of gradual return to growth with +low-teens sequential growth in order bookings
- Science & Lab Solutions: Sales flat, in light of weaker pharma spend and soft academic funding, mainly in the US, also in China
- Life Science Services: Sales down -9% org. with customer streamlining effect and COVID-19 non-repeats; strong growth in Contract Testing

Net sales bridge



EBITDA pre bridge



- Stable M&S on lower sales reflecting cost programs and efficiencies
- R&D expenses around stable, innovation remains a priority focus
- EBITDA pre down YoY mainly on lower volumes with negative mix effects amid underutilization impacting the gross margin
- LS EBITDA pre margins improved sequentially across the year, at reduced pace (+220bps in Q1, +50 bps in Q2, +30 bps in Q3, +10 bps in Q4), reflecting cost discipline and strong operational execution

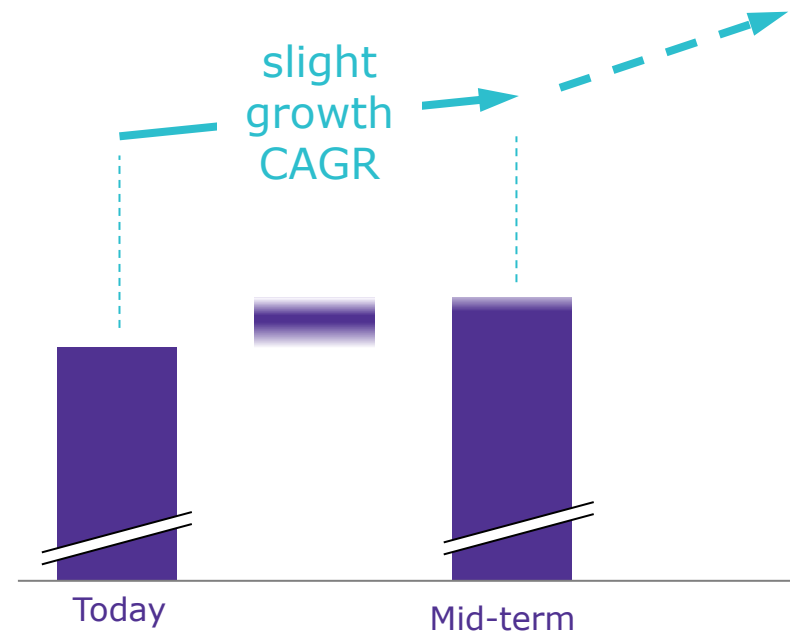
Healthcare

Solid growth in CM&E and Fertility, long-term growth led by innovation



Global specialty innovator

Ambition: Return to MSD growth CAGR long-term, supported by External Innovation



Illustration

Mid-term growth drivers

- CM&E and Fertility portfolio as **resilient backbone** leveraging regional diversification
- Within the **Innovative Franchises** growth of Bavencio[®] and Mavenclad[®] maturing
- Pimicotinib¹ launch opportunity

Long-term growth led by innovation

- **Expanding in N&I**, developing cladribine capsules in gMG and enpatoran in lupus
- **Executing Oncology strategy** with early phase DNA damage assets and ADCs

1) Sponsor: Abbisko Therapeutics Co. Ltd., Company holds exclusive license rights to commercialize in China, Hongkong, Macau and Taiwan with option for ROW
 Acronym(s): **MSD** = mid-single digit; **CM&E** = Cardiovascular Metabolism & Endocrinology; **N&I** = Neurology and Immunology; **gMG** = generalized myasthenia gravis; **ADC** = antibody drug conjugate



Oncology

Pimicotinib - phase III asset with 2024 readout

Pimicotinib¹

(Novel, highly selective and potent inhibitor of CSF-1R)

Target indication: TGCT, a rare tumor of the joints that causes swelling, pain, stiffness; seriously affecting quality of life



Phase III data:

- The study met the primary endpoint with an objective response rate (ORR) at week 25 of **54.0%** compared with 3.2% for placebo (p< 0.0001)
- Statistically significant and clinically meaningful improvements also seen in all key secondary endpoints, including pain and stiffness
- Well-tolerated, with no evidence of cholestatic hepatotoxicity

Ongoing PhIII study: MANEUVER, double-blind study in TGCT run by our partner Abbisko, Part 2 (Open-label study)

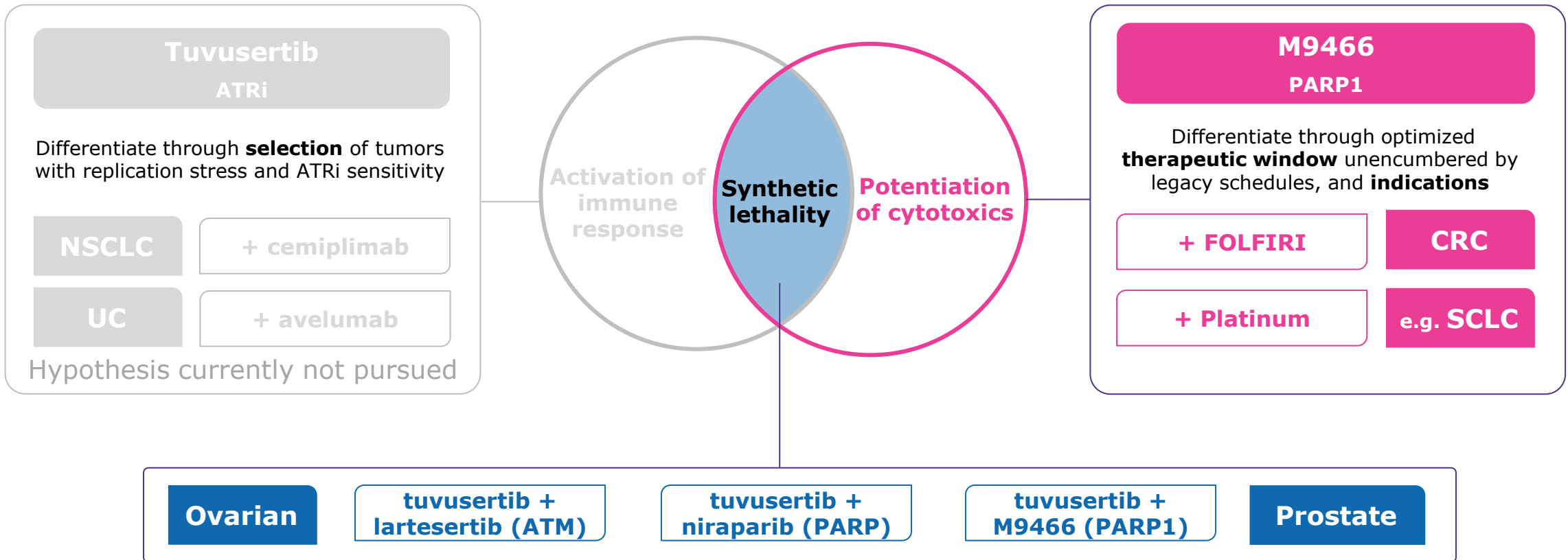
Next milestone: readout of Part 2 (24 weeks)

¹ Group entered a license agreement with Abbisko Therapeutics Co. Ltd, Shanghai, China, for pimicotinib (ABSK021), which grants a license to commercialize pimicotinib in mainland China, Hong Kong, Macau and Taiwan, with an option for rest of world.

Acronym(s): **CSF-1R** = colony stimulating factor -1 receptor , **TGCT** = tenosynovial giant cell tumor, **OS** = overall survival, **ORR** = objective response rate
RECIST = response evaluation criteria in solid tumors

DNA damage response

Key pillars of DDR strategy: tuvusertib and M9466



Acronym(s): **NSCLC** = non-small cell lung cancer, **UC** = urothelial carcinoma, **CRC** = colorectal cancer, **SCLC** = small cell lung cancer, **FOLFIRI** = fluorouracil-folinic acid-irinotecan



DNA damage response

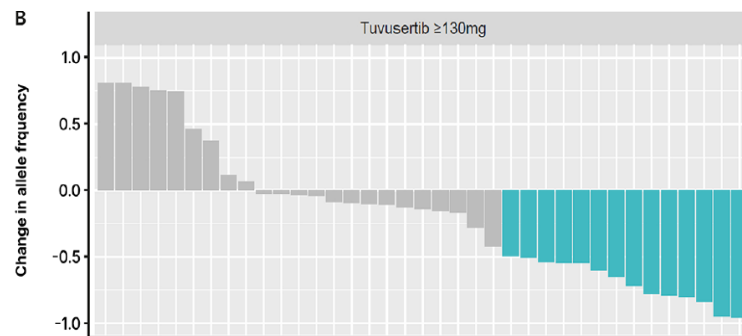
Tuvusertib monotherapy profile enables combination potential

Achieves strong target coverage

Tuvusertib dosing regimen	C _{av} fold for pCHK1 IC ₉₀	% of time typical patient above pCHK1 IC ₉₀
130 mg QD	19 x IC ₉₀	100 %
180 mg QD	36 x IC ₉₀	100 %
180 mg 2w on/1w off		71 %

Demonstrates molecular responses

Molecular response in Ph1 pts (>50% VAF reduction in ctDNA), n=37	38%
---	-----



Tuvusertib
ATRi

Compares favorably on safety

	Tuvusertib	Camonsertib#
	180 mg QD, 2w on/1w off (N=63)*	160 mg QD, 3d on/4d off (N=34)
Grade ≥ 3 haematological adverse events (%)		
Anaemia (%)	16.4	26.5
Neutropenia (%)	3.2	14.7
Thrombocytopenia (%)	0	5.9
Leading to treatment discontinuation (%)	3.6**	not reported
Leading to dose reduction (%)	10.7	17.6
Transfusion	25	32.4

*Dose escalation (n=7) + preliminary data from dose expansion (n=56)

** Based on first 28 participants; discontinuation unrelated to M1774

E. Fontana et al. ESMO TAT Mar 2022, oral presentation #202

Acronym(s): **IC90** = 90% inhibitory concentration, **ctDNA** = circulating tumor DNA, **C_{av}** = average plasma concentration, **VAF** = variant allele frequency

DNA damage response

M9466: next-gen PARP1i key to realizing combination potential

M9466: 2nd gen PARP inhibitor with trapping activity

- PARylation inhibition and PARP trapping are key for PARPi mechanism of action
- Preclinically, PARPi efficacy is tied to PARP1 inhibition, while PARP2 inhibition may be more associated with off-target effects

Enzyme inhibition of PARP1/2*

IC50 (nM)	M9466	Olaparib
PARP1	2.03	1.9
PARP2	94.3	1.1
Ratio PARP2/PARP1	46.5	0.6

DNA Trapping activity of PARP1/2*

IC50 (nM)	M9466	Olaparib
PARP1	2.49	30.98
PARP2	>10,000	11.7
Ratio PARP2/PARP1	>4,000	0.4

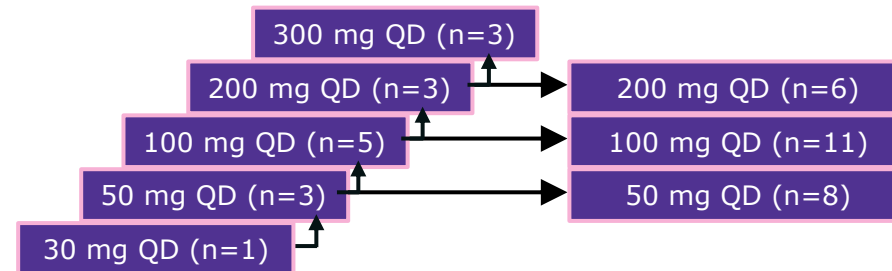
* Jiangsu Hengrui data on file



Hengrui: Ph1 study of M9466/ HRS-1167

Dose escalation:
pts with solid tumors

Dose expansion: pts with BRCA1/2, PALB2, or RAD51C/D mutations



NCT05473624

Company, next steps: enabling combinations

	Combination partner	Indication	Proof of concept
1	+ tuvusertib	CRPC, Ovarian	2027
2	+TOP1	CRC	2027
3	+ platinum	tbd, e.g. SCLC	2027

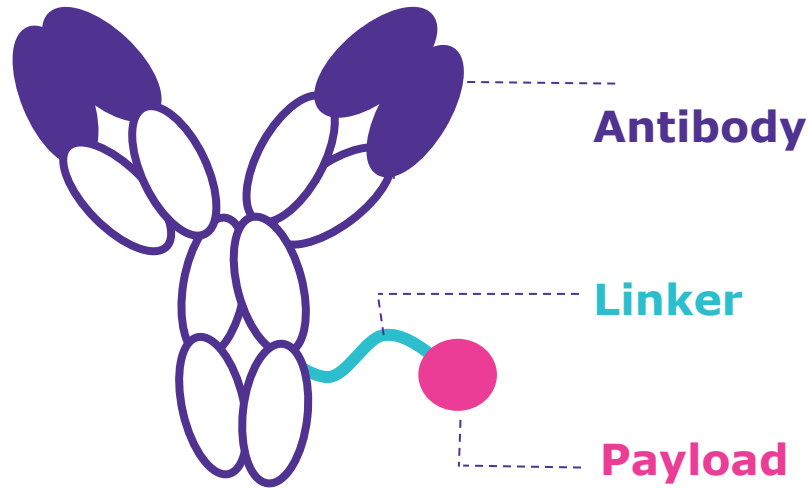
Acronym(s): **IC50** = 50% inhibitory concentration, **CRPC** = castrate-resistant prostate cancer, **CRC** = colorectal cancer, **SCLC** = small cell lung cancer, **TOP1** = topoisomerase I

*M9466 is also known as HRD-1167 in development by Jiangsu Hengrui Pharmaceuticals Co. Ltd., China



Oncology - ADCs

Group's ADC technology addresses the limitations of first-gen ADCs



First generation ADCs

- Unfavorable target **expression**
- Suboptimal **half-life** and internalization
- **Unstable** linkers, unspecific cleavage
- Undefined **mixtures** from conjugation step
- **Too potent** and **toxic** payloads
- **Tumor-resistant** payloads

Low therapeutic windows

Group's ADC Platform

- Mono & **bispecific** internalizing binders
- Designed physiochemical properties
- **Tumor-specific** linker cleavage
- **Site-specific** conjugation technologies
- **Next-generation** cytotoxic and immune-mod. payloads
- DNA-alkylators and **TOP1 inh.** fit with DDR ambitions

Improved therapeutic benefits


Many opportunities to enhance targeted **delivery of chemotherapy** to tumor cells. Group HC pipeline includes **several pre-clinical (e.g. M7152)** and **2 clinical assets (precentabart tocentecan/ M9140, and M3554).**

Acronym(s): **ADC**=Antibody-drug conjugates; **DDR**=DNA damage response



Oncology - ADCs

Precentabart tocentecan (M9140): Developing First-in-Class ADC in CEACAM5-positive tumors

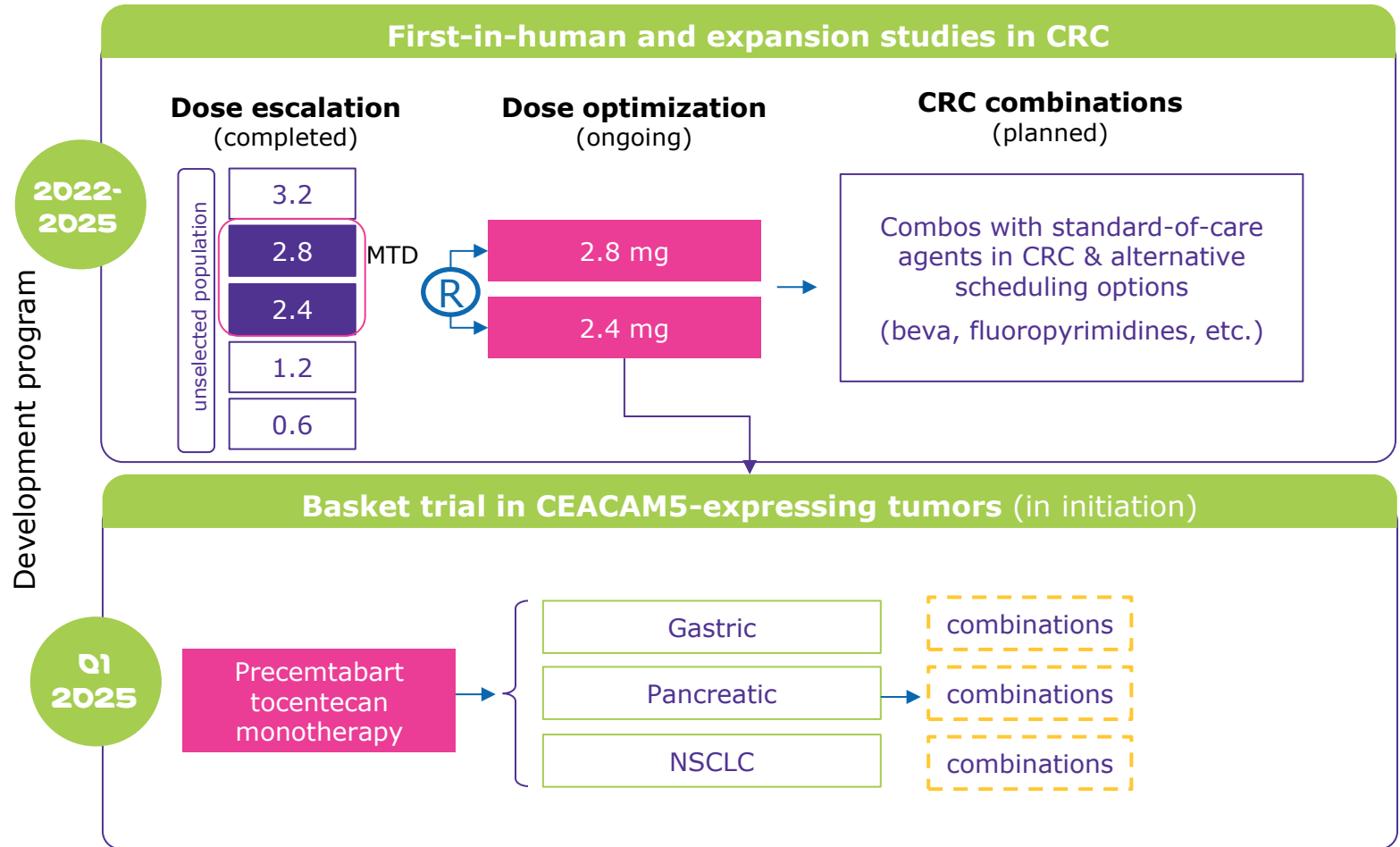


Precentabart tocentecan

- Highly specific for CEACAM5
- TOP1i payload (exatecan)
- DAR: 8

Tumor type	CEACAM5 expression
Colorectal	> 90%
Pancreatic	>80%
Gastric	~ 80%
NSCLC nsq	35%

Acronym(s): **CEACAM5** = carcinoembryonic antigen-related cell adhesion molecule 5, **CRC** = colorectal cancer, **NSCLC** = non-small cell lung cancer, **MTD** = maximum tolerated dose

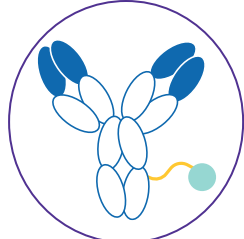


Pre-clinical space

Enhancing our position as a major ADC player

ADC priorities

- Maximize exatecan platform
- Embark into immune agonist ADCs
- Deliver next-gen cytotoxins and targeted payloads (including protein degraders)
- Expand to novel antigens (recent collaboration with Caris)



Organic ADC portfolio growth in the next 3 years

M3554 (GD2)

M9140* (CEACAM5)

Step 1: ADCs with exatecan warhead

- M7152 (NaPi2b)**
- M0251 (EGFRxMUC1)**
- M7437****
- M0121****

Step 2: ADCs with next-gen payloads

- ADC with STING**
- ADC with cytotoxin 2**
- ADC with degrader**

Acronym(s): **ADC** = antibody-drug conjugate, **GD2** = disialoganglioside, **CEACAM5** = carcinoembryonic antigen-related cell adhesion molecule 5, **NaPi2b** = sodium-dependent phosphate transport protein 2B, **EGFR** = epidermal growth factor receptor, **MUC1** = mucin 1, **STING** = stimulator of interferon genes, **CLDN** = claudin 18.2

*Precentabart tocentecan. **Programs from an undisclosed collaboration.



N&I - Enpatoran

Targeted inhibition of important lupus mediator aiming for improved efficacy with low infection risk

- **For lupus patients, precise intervention for improved efficacy at low infection risk remains an unmet need in lupus**
- Enpatoran is an oral small molecule inhibitor of TLR7/8
- There is **evolving genetic evidence for TLR7 as a critical driver of lupus pathologies**

Inhibition of TLR7/8, an important lupus mediator is expected to result in

- broad inhibition of lupus-relevant effectors
- with potential for improved efficacy compared to strategies targeting single effectors (pDC, IFN, B-cells)
- at low risk of infection

- Innovative PhII in CLE and SLE initiated in H1 2022 and **read out in Q3 2024** (cutaneous) **and Q1 2025** (systemic):

Totality of data (both cohorts) and the safety profile support further development

- Readout in Cohort A (~100 patients, cutaneous): Positive PoC, with clinically meaningful efficacy (all doses) and good safety profile
- Readout in Cohort B (~350 patients, systemic): promising responses in pre-defined patient subgroups, in particular in cutaneous manifestations, although primary endpoint not met

N&I - Enpatoran

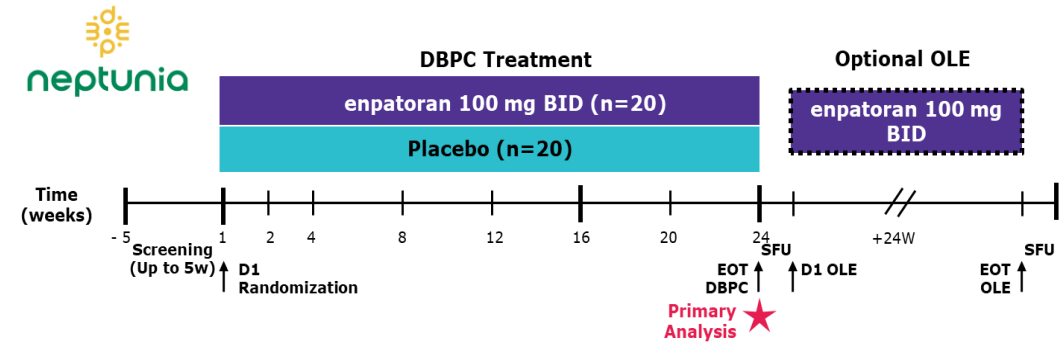
Expansion into myositis, First-in-Class Potential

Development Rationale

- **G7 prevalence of 100 – 120K**
- Debilitating autoimmune disease, characterized by muscle weakness, fatigue and disability
- **Patients show lupus-like patterns** of immune activation and TLR7/8 expression
- **High unmet need for effective treatment options:** Large proportion of patients refractory to SoC high dose CS/immunosuppressants



Neptunia Study



- PoC study in dermatomyositis and polymyositis
- Started in early 2023, ongoing

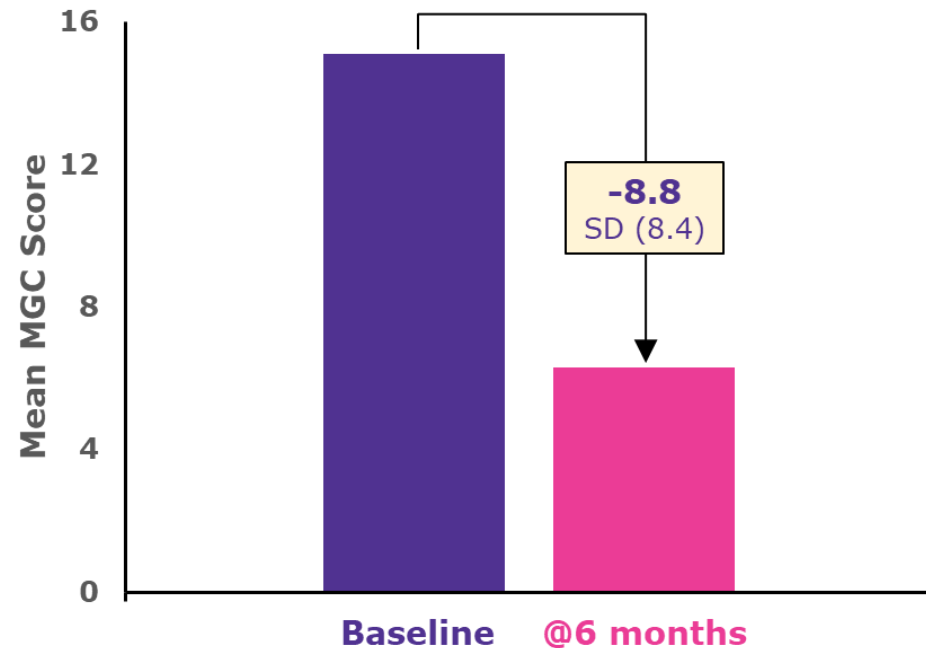
➤ **An oral therapy with novel MoA and potential for a steroid-sparing effect could be transformative for myositis patients**



N&I - Cladribine

Cladribine – going beyond multiple sclerosis

s.c. Cladribine Open Label Study in MG



Development Rationale

- **Myasthenia gravis** is a neuromuscular disease with high unmet need
- There is potential for a **highly differentiated therapy** that can deliver high efficacy and convenience with an oral short-course treatment cycle
- Initial supportive clinical data available

Phase III clinical study (MyClad)

- Global study with **strong US presence** and sizable population from **Asia**
- Recruitment ongoing
- Primary completion: mid-2028

Acronym(s): **SD**=Standard Deviation; **MG**=Myasthenia Gravis
Redjak K et al. Eur J Neurol 2019. <https://doi:10.1111/ene.14124>.

FY Healthcare: Strong growth supported across franchises

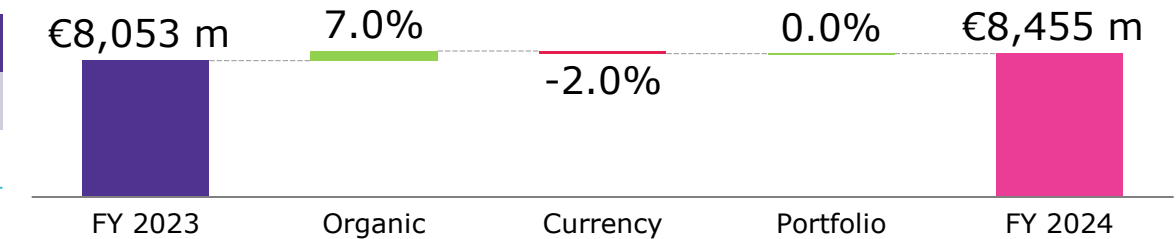
Healthcare P&L

[€m]	IFRS		Pre	
	FY 2023	FY 2024	FY 2023	FY 2024
Net sales	8,053	8,455	8,053	8,455
M&S	-1,668	-1,713	-1,639	-1,710
Admin	-314	-313	-294	-301
R&D	-1,657	-1,503	-1,655	-1,493
EBIT	2,225	2,481	2,233	2,615
EBITDA	2,545	3,021	-	-
EBITDA pre	2,543	2,995	2,543	2,995
(in % of net sales)	31.6%	35.4%	31.6%	35.4%

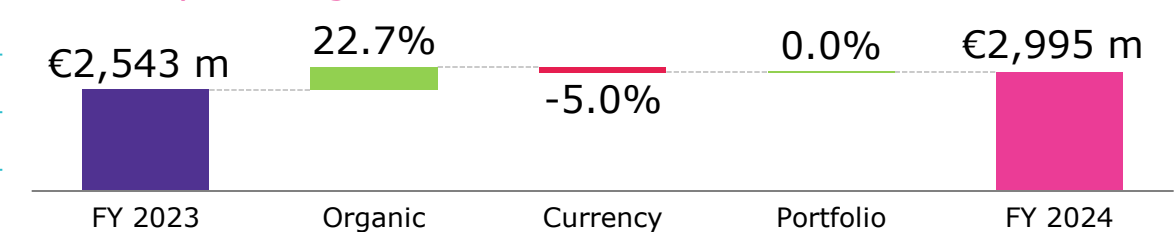
Comments

- Oncology growing in all regions, up +13% org.; driven by Erbitux[®] (+16% org.), Bavencio[®] (+5% org.) and Tepmetko[®] (+43% org.)
- Slight growth in N&I franchise of +2% org. as Mavenclad[®] growth (+12% org.) overcompensates Rebif[®] decline (-11% org.)
- CM&E up +8% org. with strong growth across all regions and therapeutic areas; Fertility up +1% org. despite tough comps as competitor stock-outs moderate

Net sales bridge



EBITDA pre bridge



- M&S growing slower than topline, creating operational leverage
- R&D as % sales lower due to lower spending envelope in the second half and higher sales growth; planned to gradually recover in '25
- EBITDA pre margin expansion driven by strong sales momentum, full Bavencio rights (since Q3'23) and a lower R&D spending; overcompensating mid-DD Xevinapant termination provision from Q2



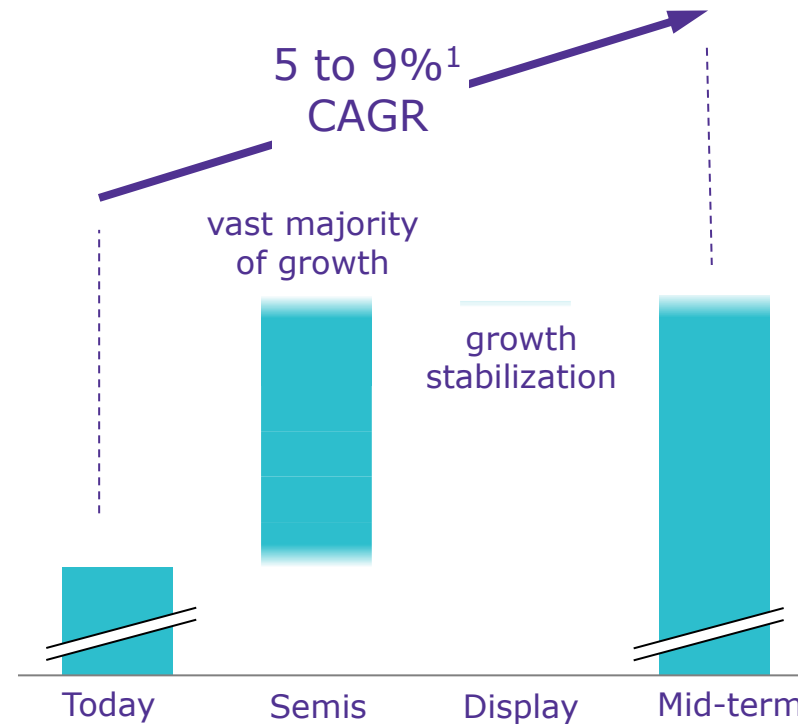
Electronics

Accelerating growth by enabling AI and advanced nodes



Ecosystem
relevant portfolio

Pure-play Electronics
business accelerates
growth with more
gravity in Semis



Illustration

Semiconductors

CAGR of 7% to 11% driven by +200 to +400bps² growth above MSI (5% to 7%)

Display

Around stable as growth areas balance declining LCD business beyond 2025

Growth drivers

- High-growth Semiconductors business now ~80% of sales³
- Thin-film portfolio enabling AI and advanced nodes
- OLED, AR/VR and optical 3D metrology⁴ drive growth areas in Optronics

1) Mid-term ambition excludes Surface Solutions, which is assumed to be divested in H2'25; 2) Basis points; 3) ~80% =76% of Electronics excluding Surface Solutions, based on sales in FY23 and ~78% based on H1'24; 4) deal signed to acquire UnitySC on 18.07.2024, not included mid-term ambition at this point with AR/VR upside also in longer-term



Semiconductor Solutions

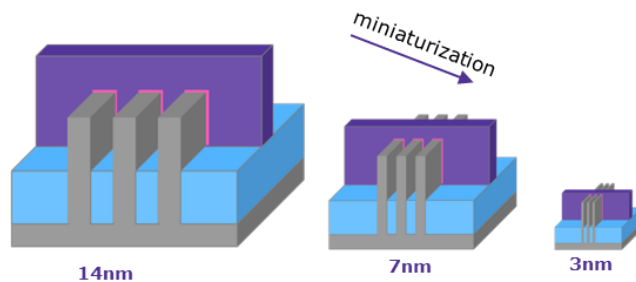
Tech roadmap needs more powerful chips; powerful chips are driven by the ability to **think** (logic) and **remember more** (memory), **faster**

Advanced logic needs more transistors in the same footprint to think more, processing is faster when nodes are smaller



Miniaturization increases transistor density

Example: FinFET nodes

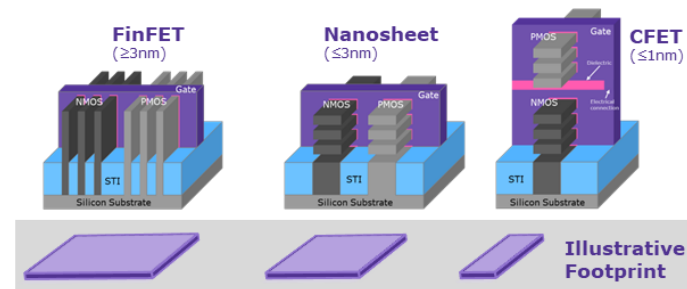


Simple miniaturization has limits, to continue we need more complex architectures that stack vertically



3D architectures for logic and memory drive **complexity**

Example: Logic Architectures

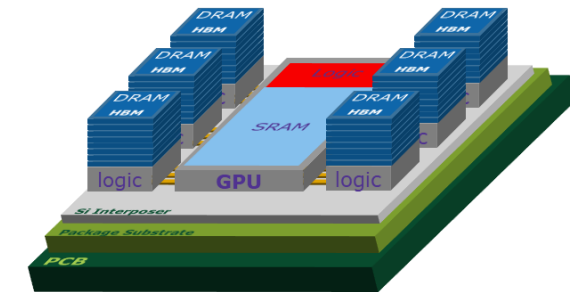


Heterogeneous Integration of chiplets lowers energy intensity and speeds up performance



Advanced 2.5D and 3D packaging to boost **system performance**

Example: AI Accelerators



Materials and DS&S

Metrology

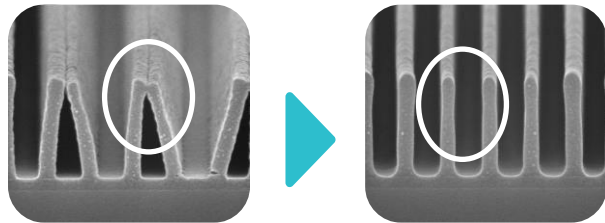
Electronics delivers significant value add concerning miniaturization, stacking and complexity

Semiconductor Solutions

Enabling tech roadmaps with **Materials Intelligence™** & **Metrology Tools**

Miniaturization: reaching the **limitation of getting smaller**

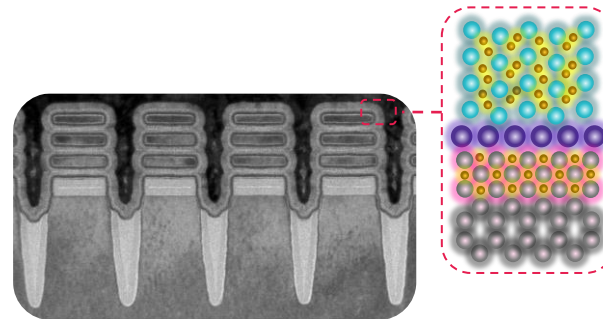
As **lines get narrower** and closer together in adv. chips, patterned lines tend to **"stick together"** during processing due to **surface tension**.



Company **EUV¹ rinse materials** offer ultra low surface tension to prevent collapse.

Vertical stacking and complexity: **precision at the atomic level**

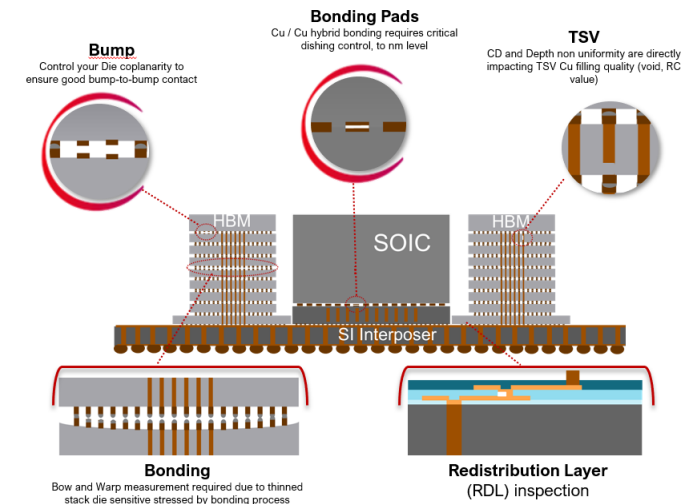
New logic architectures like nanosheet² stack lateral silicon sheets on top of each other with the gate wrapped around. Materials require **precision deposition** (placement) **at the atomic level**



Company **Thin-Film technologies** like ALE / ALD / CVD³ allow materials to be precisely added and removed **without line of sight**

Heterogenous Integration **requires metrology to help yields**

HBM and chiplets are **susceptible to cascade failure** where one bad interconnect or chip could result in **the whole package being rendered useless**



Company 2.5 and 3D Metrology and Inspection tools **measure each and every interconnect / component** during high volume manufacturing to **enhance quality and yield**.

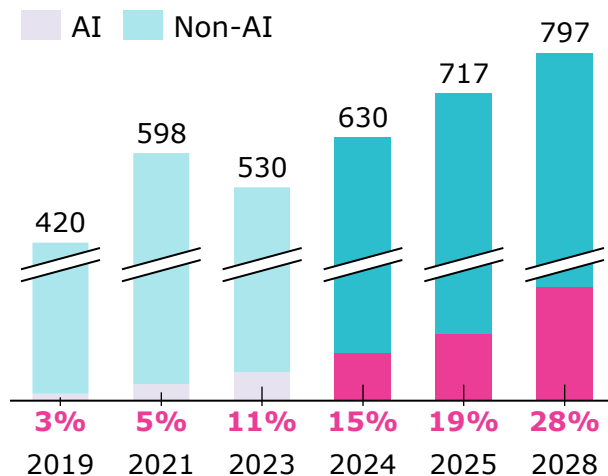
Electronics delivers highly innovative solutions for complex customer problems



Semiconductor Solutions

Enabling AI and adv. nodes, outgrowing the wider Semi market

AI segment outpaces the semiconductor market¹



CAGR (24-28):

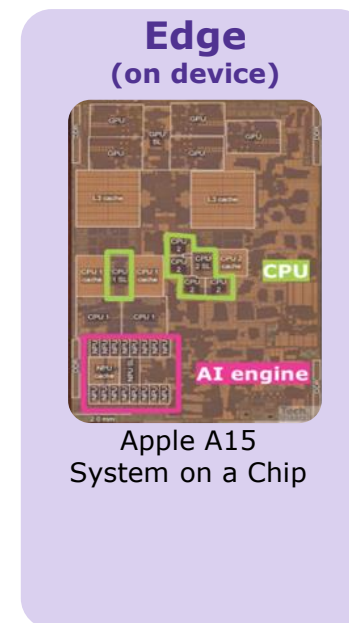
Semi growth: **MSD**

MSD

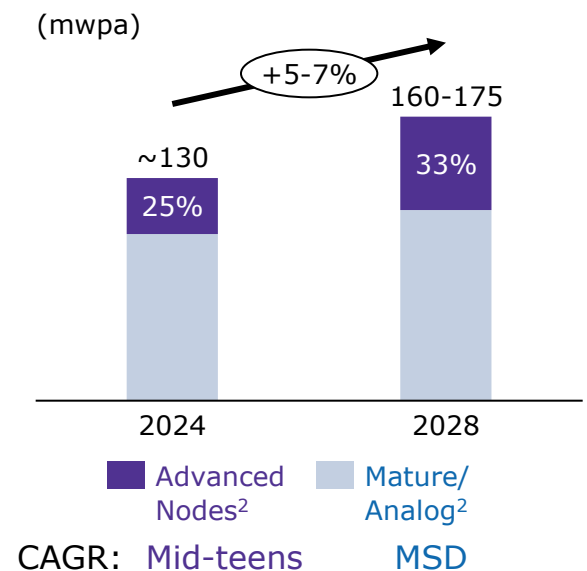
AI growth: **Mid-20s**

Mid-20s

AI at the Edge will be the bigger opportunity



Faster growth in adv. nodes^{3,4}, where Group is prominent



AI has high value, but volume still small

15% of semiconductor market size¹

small % of all produced devices^{1,2}

Group with >50% sales in advanced nodes

Outgrowing the market by +200 to +400 basis points³



Semiconductor Solutions

Strategic Partner to semiconductor manufacturers globally



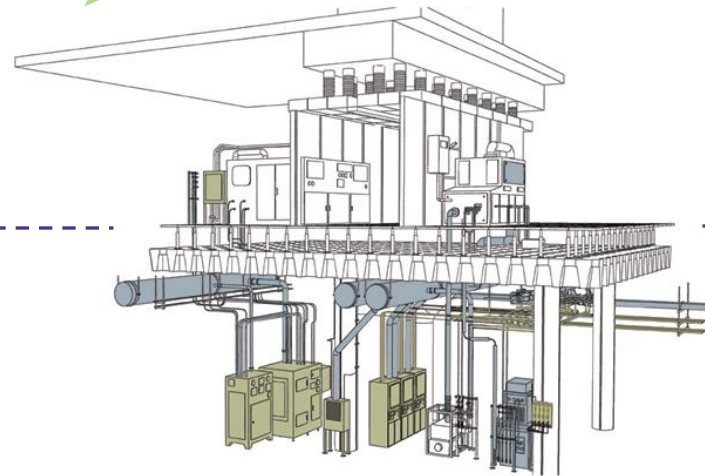
semiconductor Materials

Winning in the fab¹
with process owners

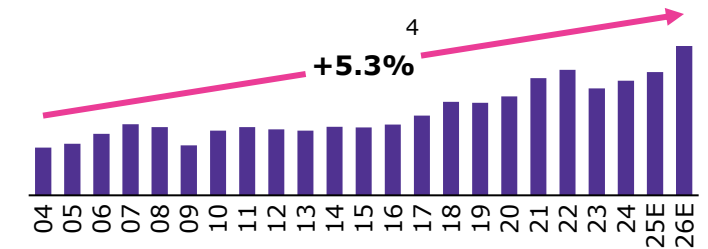


Delivery systems & services

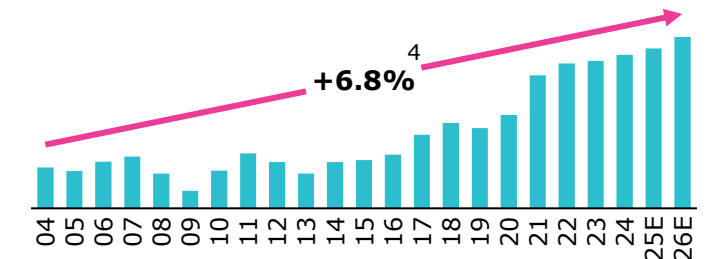
Winning in the sub-fab¹
with facility engineers



Fab¹ material market ²



Fab¹ equipment market ³



One fab address = two customers: buying cycles, interfaces & nature of business fundamentally different, but ... **combined, highly synergistic**



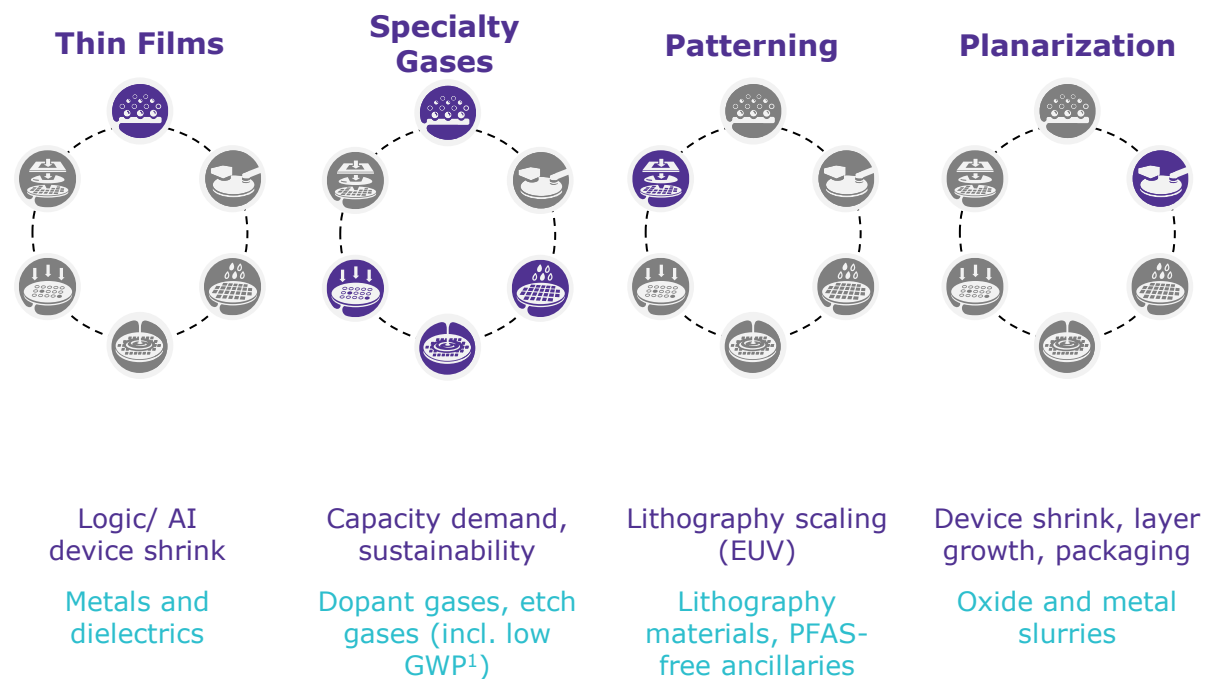
Semiconductor Solutions

Comprehensive materials portfolio across all relevant technologies

Advanced materials mission critical to wafer process steps



Broad technology families required for current and future wafer processing applications



A portfolio that allows Semiconductor Solutions to innovate and grow with key industry players



Semiconductor Solutions

Trusted player in safe and reliable **delivery of hazardous materials**

Highly synergistic business model providing partial hedge to semiconductor cycle



Fab projects

- **Drivers:** construction capex for new fab buildings
- **Relevance:** understanding of long-term capacity plans & material volume needs
- **What:** designing bulk spec gas delivery systems
- **How:** managing construction and installation



Gas & chemical delivery

- **Drivers:** customer WFE¹ spend
- **Relevance:** customer engagement on how materials are delivered to the fab
- **What:** design and manufacture systems for: spec. gases, CVD²/ALD⁴ materials, CMP⁴ slurries & cleans; Systems store gas / chemical containers and control material delivery parameters to fabs
- **How:** with customer's fab process control and monitoring systems



MEGASYS & in-fab service





- **Drivers:** fab utilization rate (wafer starts / MSI³)
- **Relevance:** leading indicator to material consumption levels
- **What:** provide delivery systems maintenance, materials inventory management, QA⁴ & new installations
- **How:** contracts with 18 customers' fabs; >500 global employees + ~100 field service technicians



Semiconductor Solutions

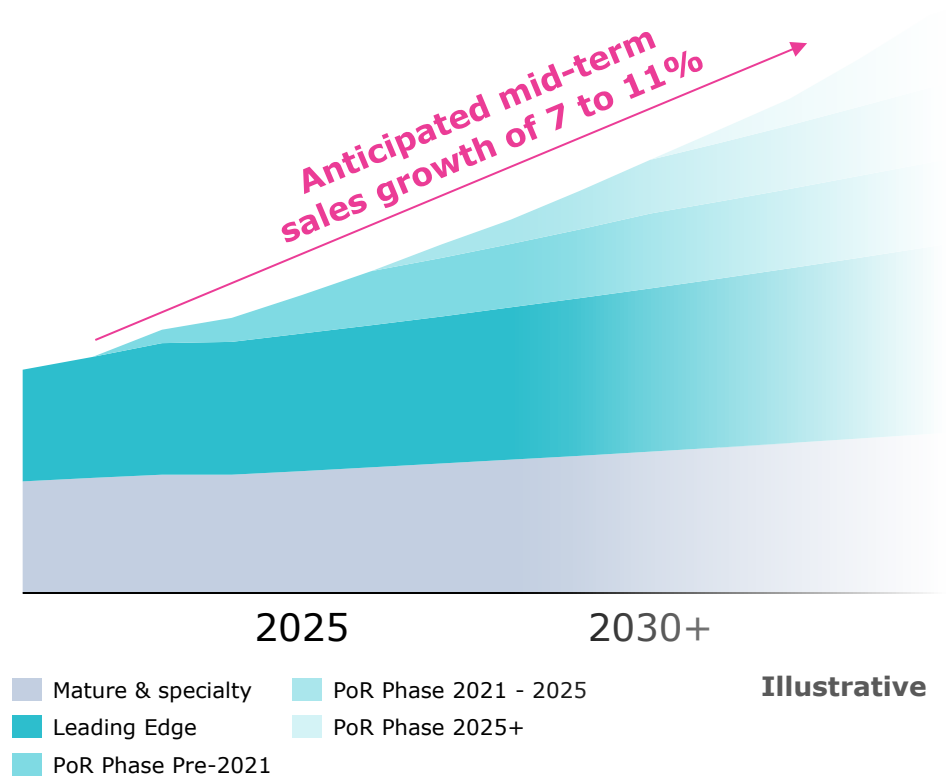
Innovation pipeline aligned to tech roadmap enables future growth

Innovation focus on winning new Process of Records with annuity income

-  Typical **2-6 year material development cycle** from identification to commercialization, with patented IP
 -  Materials are developed with customer R&D, technical and manufacturing teams, aligned to their tech roadmap
 -  After material **validation** and demonstrated **proof of concept**, customer **specifies** a novel material in a **PoR**¹
 -  As customers execute the roadmap and ramp-up production of new chips, Group **generates respective materials sales**
- Additionally, partnerships are formed with OEMs² via BKMs² where processes are defined as a current standard
- ~7-8% of sales in R&D with the majority in Semiconductor Solutions; includes dedicated portfolio of mass production tools at Intermolecular³ accelerating lab-to-fab transition



Attractive pipeline of semi materials and the equipment needed to deliver them



Company delivers highly innovative solutions for complex customer problems

1) **PoR** = Process of Record, which are documents and/or systems that specify a series of operations that a semiconductor wafer must process through;
 2) working with original equipment manufacturers or tool makers (OEMs) sets standard across multiple material applications via Best Known Methods (BKMs)
 3) Acquired in 2019, Intermolecular is at the heart of Electronics R&D activities offering R&D services including AI material and molecule discovery, located in Silicon Valley



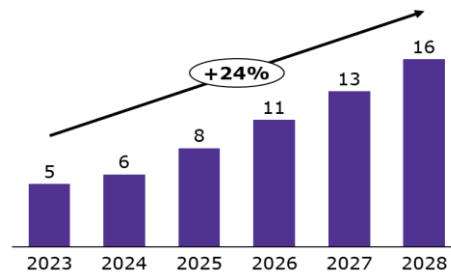
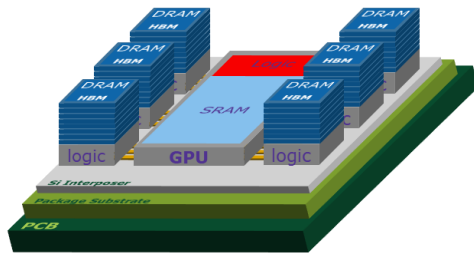
Semiconductor Solutions

Advanced metrology and inspection tools enable two key megatrends

1. Heterogenous Integration for AI & Advanced Nodes

AI Accelerator Chip

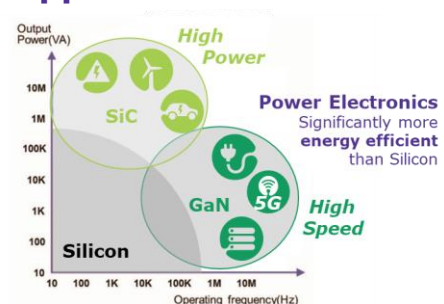
2.5D / 3D Wafer Volume¹



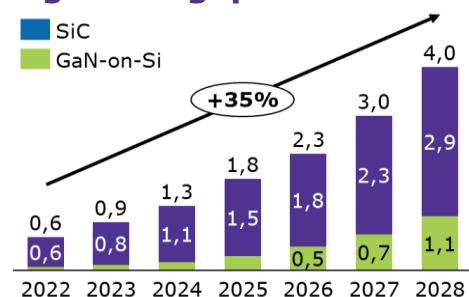
Putting components as close together as possible increases energy efficiency. Heterogenous Integration **increases transistor and interconnect density in tandem** to drive ever more powerful chips via HBM and SiP

2. Compound / High Bandwidth Semiconductors

Applications⁴



High bandgap Wafer Volume²



Compound semiconductors are **required to drive electrification** via power electronics; Replacing Si with SiC / GaN can **save up to 7% of worldwide electricity consumption³**, driving sustainability

New advanced 3D optical metrology is key for customer technology roadmaps

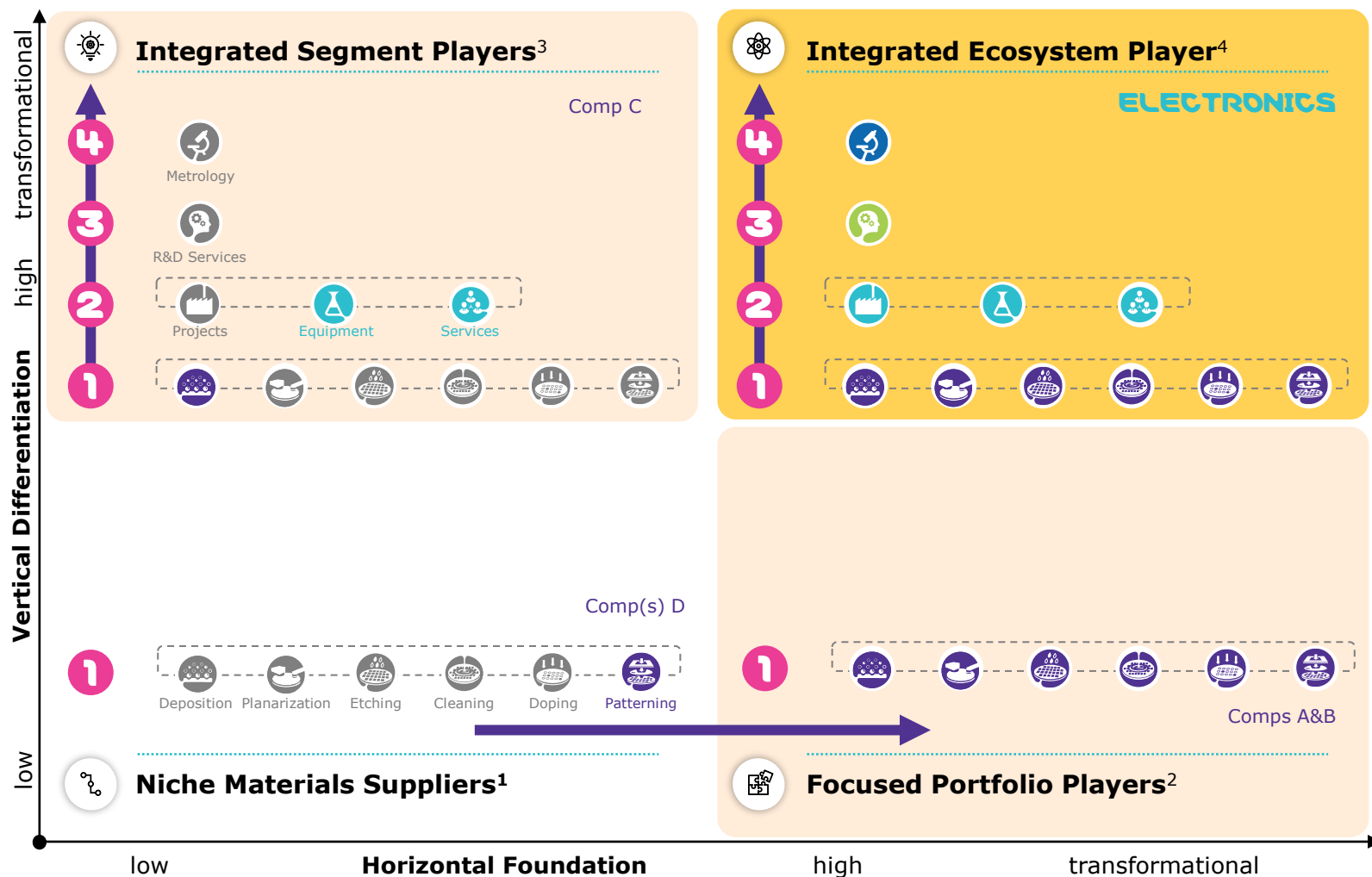
- ✓ In HI **each & every interconnect, substrate and package** must be non-destructively measured
- ✓ HBM & SiP are **susceptible to cascade failure** where few bad interconnects can render the **whole package useless**
- ✓ Tools that can **inspect at super-fast speed** with nanometer accuracy are required for **high volume manufacturing**
- ✓ Adv. optical technology can **detect defects in transparent substrates, SiC, GaN** and other compound wafers used in power electronics
- ✓ Compound wafers are notoriously **difficult to handle** and have additional metrology challenges

Electronics combination of Materials Intelligence™, optical capabilities and 3D optical metrology yields broad ecosystem value



Semiconductor Solutions

Company perfectly positioned as integrated player



Electronics has four layers of integration

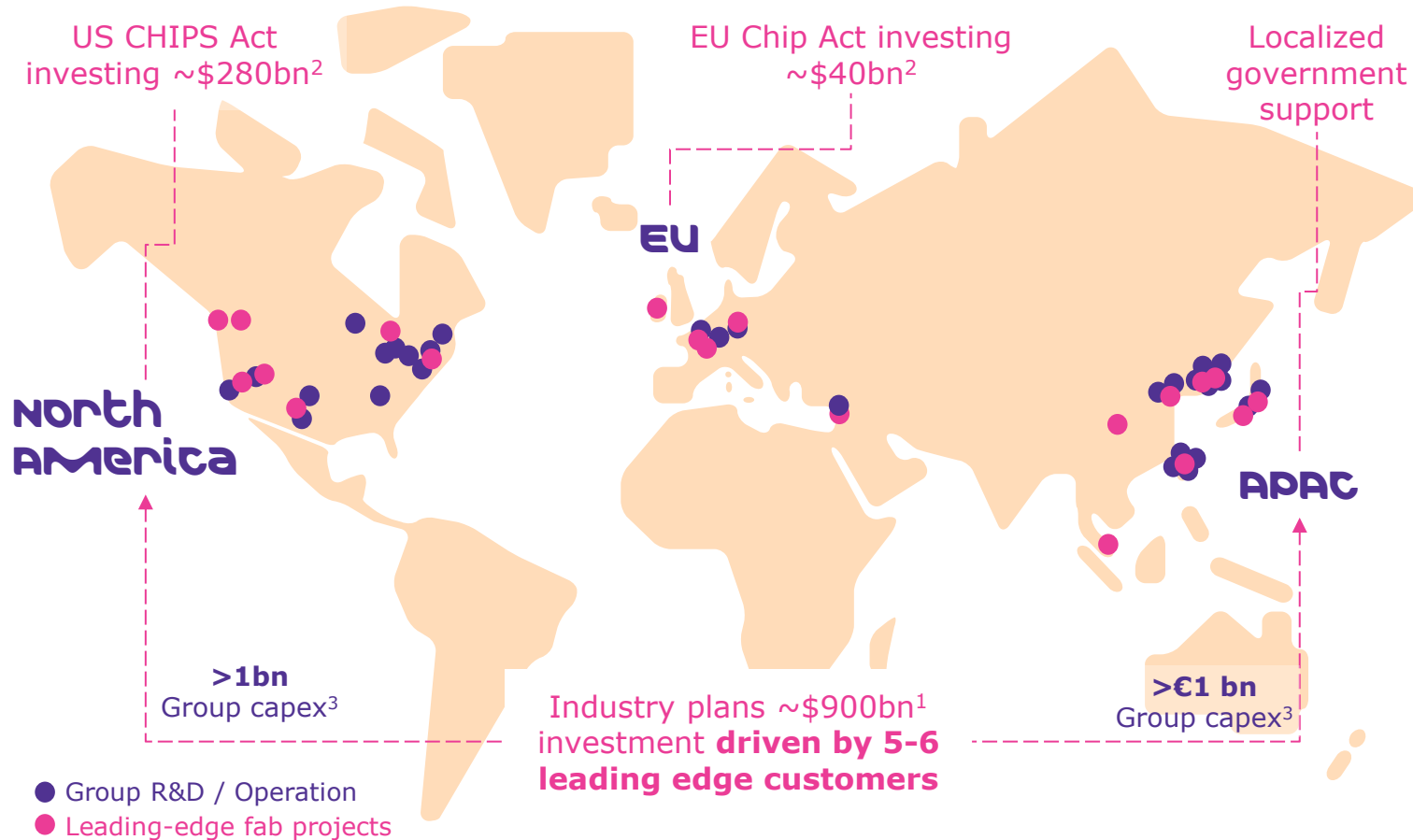
- 1 **Materials**
- 2 **Delivery Systems & Services⁵**
- 3 **R&D Services (Intermolecular)**
- 4 **Process & Control and Metrology**



Semiconductors Solutions

The local partner to global customers

Global powerhouses driving semiconductor investment

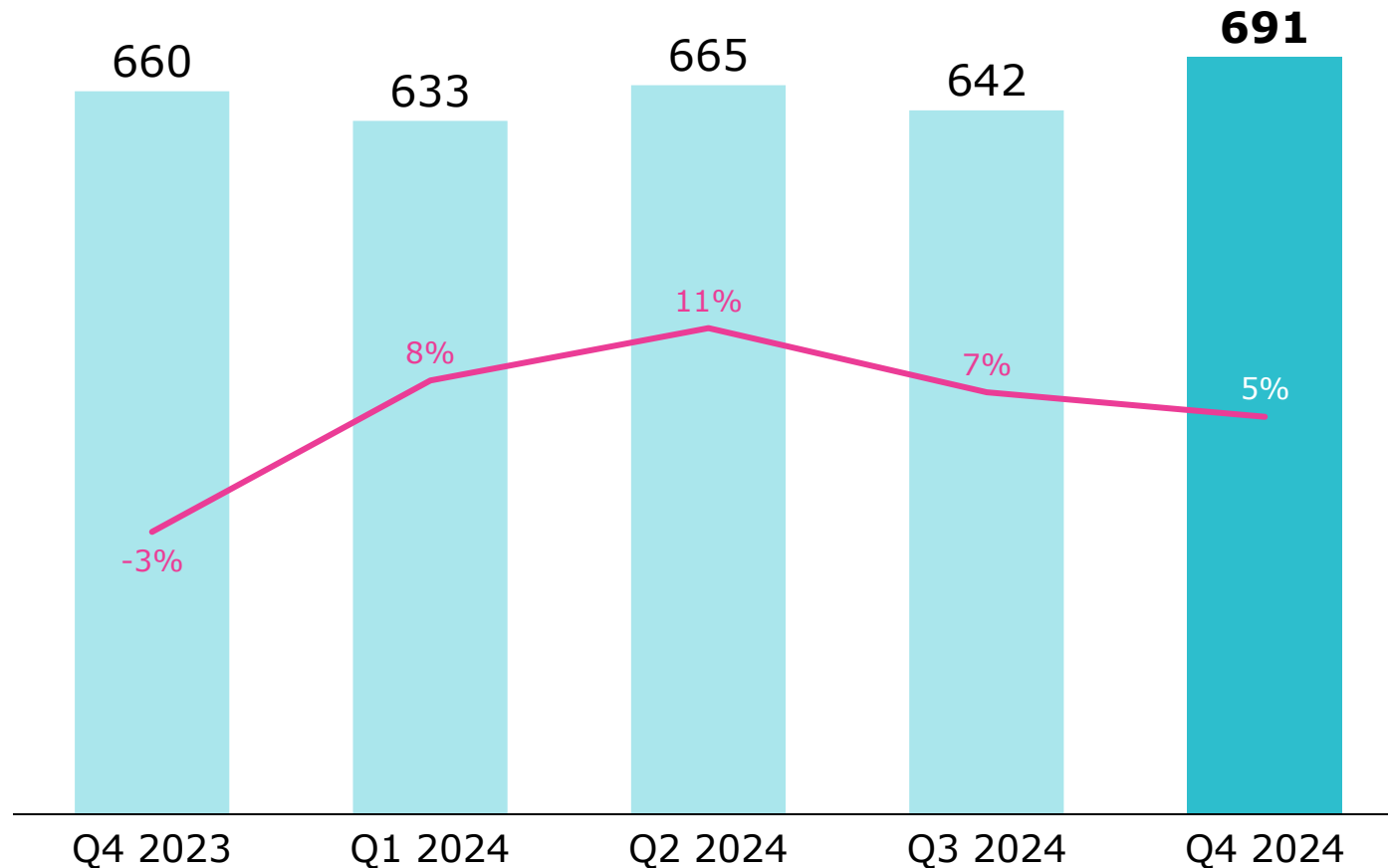


Smart localization strategy

- ✓ **Innovation partner to leading-edge customers**
- ✓ **Local partner to global customers supporting regional powerhouses**
- ✓ **Network of R&D and production close to customers and innovation hubs**
- ✓ **Alternative production sites provide global resilience**

Semiconductor Solutions recovery pace tempers in the near-term

Sales development [€m] - org. growth [%] YoY



- **Overall**, continued org. sales growth (+5%) in Semiconductor Solutions in Q4
- FY24 +8% org. sales growth in line with new +7% to +11% mid-term guide¹
- **Semi Materials** with low- to mid-teens growth across each quarter of the year
- Demand for adv. nodes / AI driving considerable thin-films growth with customers at high UT well into '25
- Pockets of growth in mature nodes with significant geographical variance
- Yet to see significant rebound in wider market (mature logic, memory, analog)
- **DS&S** down in Q4'24 amid customer fab delays with consequential phasing effect

Electronics FY: Strong AI-driven semiconductor materials growth

Electronics P&L

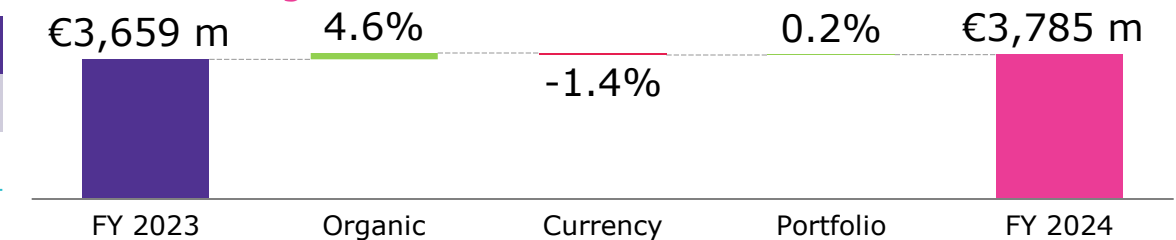
[€m]	IFRS		Pre	
	FY 2023	FY 2024	FY 2023	FY 2024
Net sales	3,659	3,785	3,659	3,785
M&S	-591	-568	-588	-566
Admin	-147	-166	-118	-133
R&D	-297	-297	-297	-296
EBIT	248	360	387	472
EBITDA	816	887	-	-
EBITDA pre	913	970	913	970
(in % of net sales)	25.0%	25.6%	25.0%	25.6%

Comments

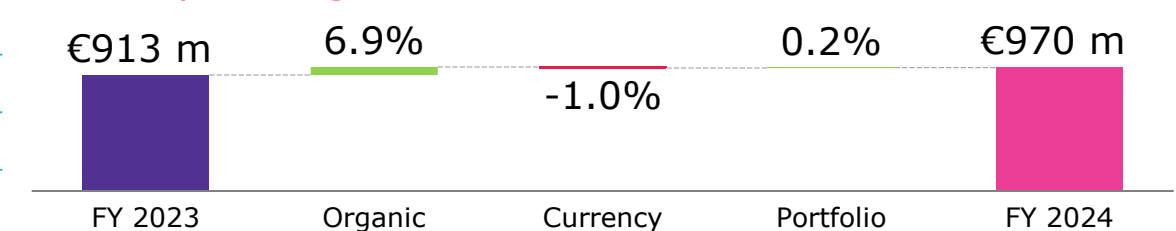
- Semiconductor Solutions: sales up +8% org.; with sustained demand for materials for adv. nodes, tempered by a gradual wider market recovery
- Delays to customer fabs impacts DS&S project scheduling with some projects phased into at least '25
- Display Solutions: down -3% org. in line with prior mid-term guide as general LC decline is faster than contribution from Display growth areas
- EL org. sales, excl. Surface, up ~5% already, in line with bottom end of new +5% to +9% mid-term guide ahead of wider market recovery
- M&S costs down in absolute terms as sales rise, reflecting cost efficiencies and stringent cost discipline
- Industry leading R&D investment stable, reflecting continued investment to drive future growth
- EBITDA pre margin stable, fully compensating the impact from the UDC patent agreement; excluding this agreement the underlying performance is up by >200 basis points supported by '24 efficiency program



Net sales bridge



EBITDA pre bridge



Company's ownership structure

Shareholders of Merck KGaA , Darmstadt, Germany

- Shareholders hold ~30% of Company's total capital
- Share capital is divided into 129,242,251 bearer shares and one name share without nominal value
- Listed at German Stock Exchange's Prime Standard, member of the DAX 30
- Only bearer shares entitled to vote at Company's Annual General Meeting: **one share, one vote**

Supervisory Board

Its Chairman leads AGM, representing interests of Company's shareholders:

- Approving financial statements of Company
- Working together with Executive Board, receiving reporting on progress regarding business and financial development at Company, Containing 16 members: **8 employee representatives; 2 delegates from E. Merck KG , Darmstadt, Germany + 6 independent & elected shareholder representatives**
- 2 committees: **Nomination and Audit Committee**

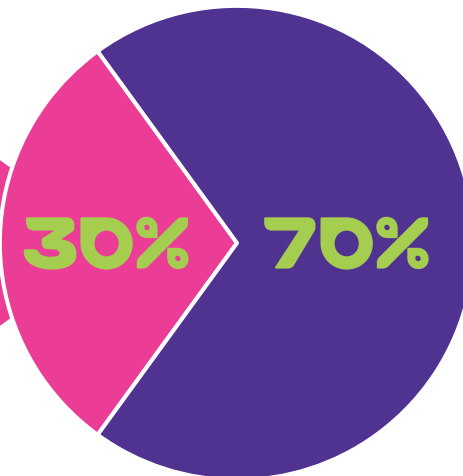
Nomination Committee
Defines criteria and makes proposals for new candidates

Audit Committee
Control systems, external auditing, financial statements

Finance Committee
financial statements, external auditing

Personnel Committee
Executive board members, contracts, compensation

R&D Committee
research activities of all sectors: HC, LS, EL



E. Merck KG , Darmstadt, Germany Partners' Meeting & Family Board

- E. Merck KG, Darmstadt, Germany KG (99.9% Family) holds ~70% of Company's total capital
- These 70% of the total capital are **not entitled to vote** at Company's AGM
- A Family Board represents the entrepreneurial interests of the Family (elected by partners' meeting)

Board of Partners

Elected by Family Board, and takes over some duties of a usual Supervisory Board:

- Appointment, dismissal and supervision of Executive Board members of Company
- Approves extraordinary business transactions and annual financial statements of E. Merck KG, Darmstadt, Germany
- Contains **5 members of the Family Board and 4 external members** of the business community
- 3 committees: **Finance, Personnel and R&D Committee**



Changes for the proposed compensation system from 2026

Current system (since 2021)

Profit sharing:

- 3-years performance period
- Minimum threshold €0.75 bn profit after tax

Long-term incentive:

- TSR DAX 50%, EBITDA pre margin 25%, Organic sales growth 25%
- Sustainability factor x0.8-1.2

Malus and Claw back:

- for LTIP, Malus for Profit sharing

Pensions:

- Defined direct contribution pension

Share ownership guideline:

- 1/3 net payment profit sharing in share
- 4-year holding period

New: 2026 compensation system

Profit sharing:

- 1-year performance period
- Minimum threshold €1.5 bn profit after tax

Long-term incentive:

- TSR DAX 30%, EBITDA pre margin 25%, Organic sales growth 25%
- Sustainability factor 20%

Malus and Claw back:

- For LTIP and Profit sharing

Pensions:

- Cash pension substitute

Share ownership guideline:

- 200/100% of base salary
- For duration of Ex. Board membership

Caps remain unchanged: Max. cap €11.5/9.5 mio, LTIP 250% of individual grant, Profit sharing individual absolute capped amount

Fixed compensation remains unchanged

Transparency on sustainability progress following major standards



External stakeholders assess our engagement



Since 2022, Company is receiving a **MSCI ESG¹ Rating of AAA.**



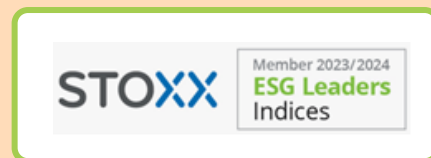
Company received a Sustainalytics ESG¹ Risk **Rating of 15.5**, corresponding to a **low risk** of material financial impacts from ESG factors.



Since 2008, Company is part of **FTSE4Good Index**, measuring the performance of companies with strong ESG¹ practices (top 10%).



In the ISS corporate ESG¹ ranking Company achieved **prime status** and B ranking, putting us in the 1st decile.



Since 2019, the Company share is **included in STOXX Global ESG¹ Leaders Index**, a sustainability index based on key environmental, social and governance criteria.



Company received gold status in 2023, stating Company is among the **top 5% of companies.** **EcoVadis** annually examines ~75,000 suppliers from 160 countries.



CDP² Climate: 2023, we scored "**A-**" (2022: B). **CDP² Water:** 2023, we received a "**B**" (2022: B).



Ranked **7th** in the 2024 **Access to Medicine Index** with special recognition for R&D capacity building, access plans and the fight against schistosomiasis.

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DATE	EVENT
March 6, 2025	Q4 2024 Earnings release
April 25, 2025	Annual General Meeting
May 15, 2025	Q1 2025 Earnings release
August 7, 2025	Q2 2025 Earnings release
October 16, 2025	Capital Markets Day
November 13, 2025	Q3 2025 Earnings release

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