



MERCK KGAA, DARMSTADT, GERMANY

# PROOF OF CONCEPT FOR VALUE CREATION

MEET MANAGEMENT 2016

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# Agenda

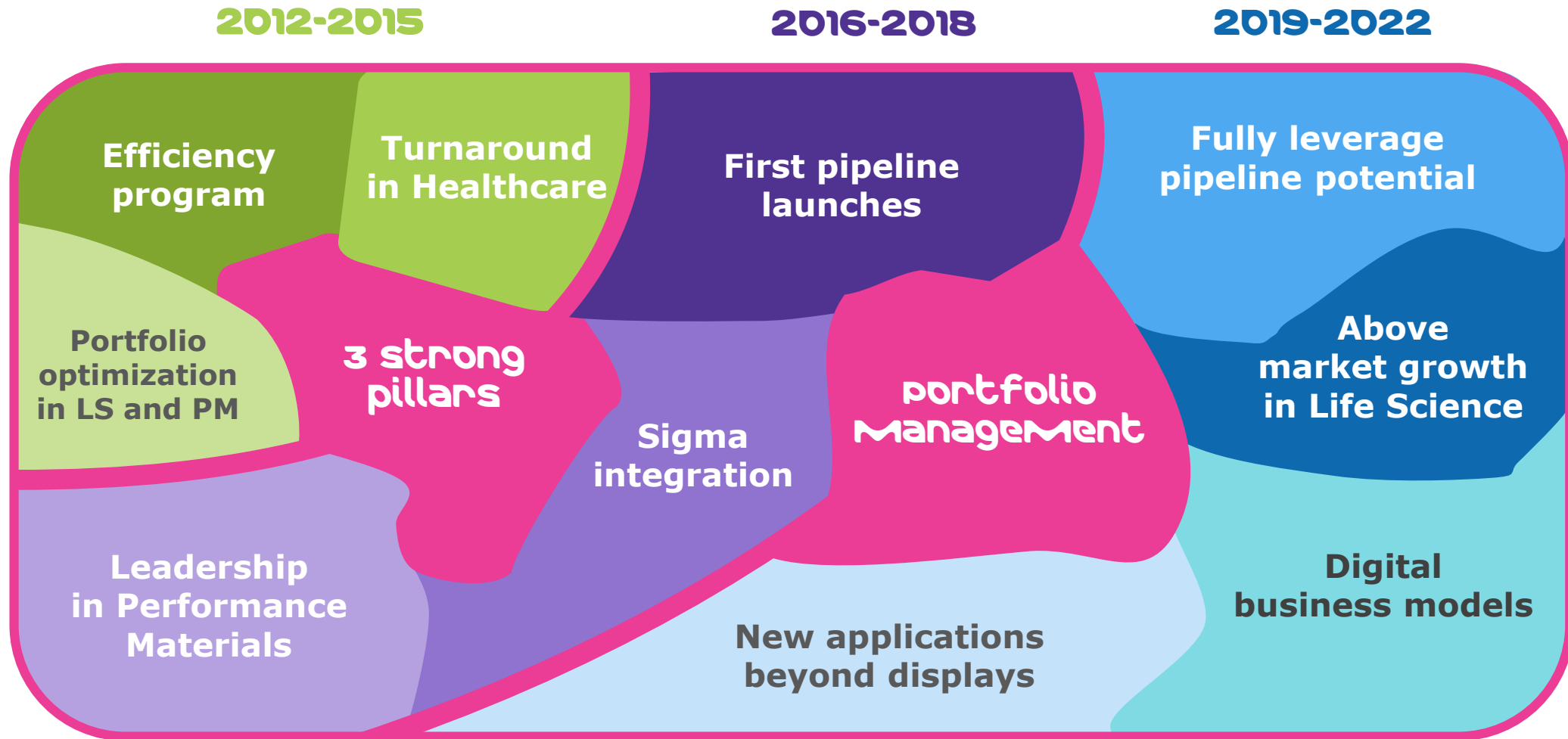
- 01** Strategic roadmap
- 02** Time for execution
- 03** Framework for long-term value creation
- 04** Executive summary



01

# STRATEGIC ROADMAP

# Group Strategic roadmap 2016-2022





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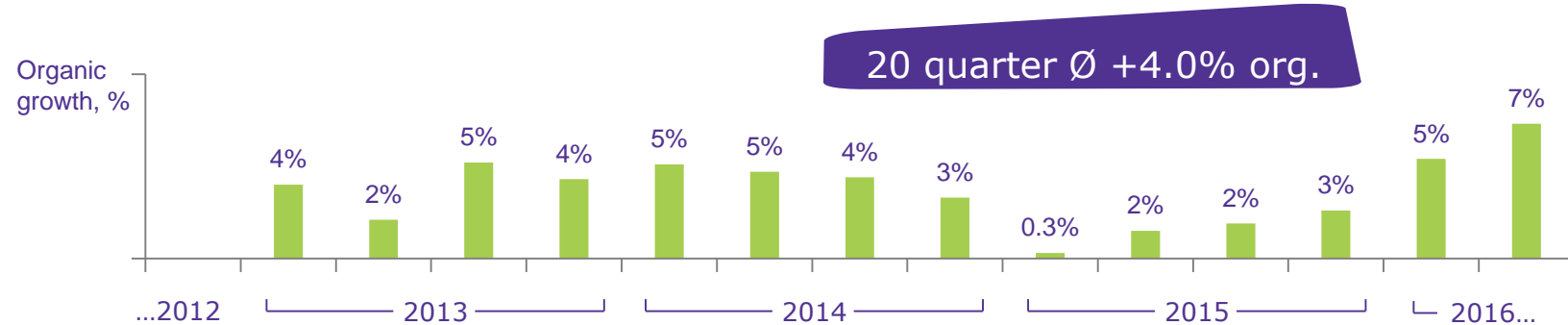
**TIME FOR EXECUTION**

# Healthcare

## Operational excellence drives healthy growth of existing businesses

Organic growth for 20 consecutive quarters

### Historic organic sales growth development



Commitment to at least stable organic sales until 2018

### Qualitative organic sales growth guidance per product/franchise until 2018

**rebif®:** Sales decline in line with interferon market

**oncology:** Stable sales

**fertility:** Mid single-digit growth

**endocrinology:** Low single-digit growth

**general medicine:** Mid to high single-digit growth

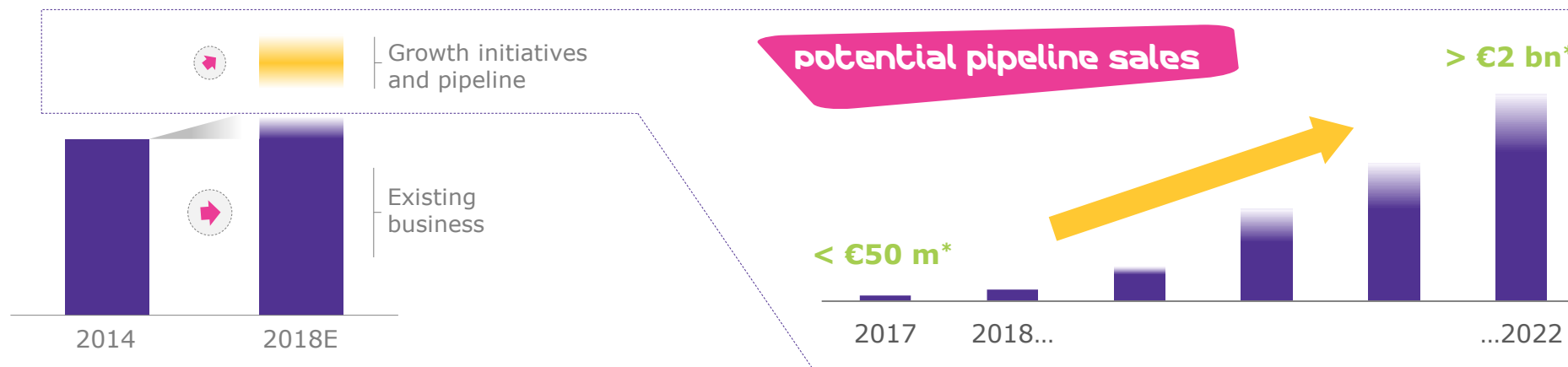
**consumer health:** Mid single-digit growth



# Healthcare

## Well on track to deliver the pipeline

Deliver the pipeline



Increase R&D spending

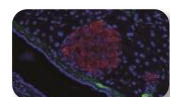
### Key investments



**Avelumab**



**BTK – inhibitor**



**TGF-beta trap**

### R&D costs in 2017 expected to exceed 2016

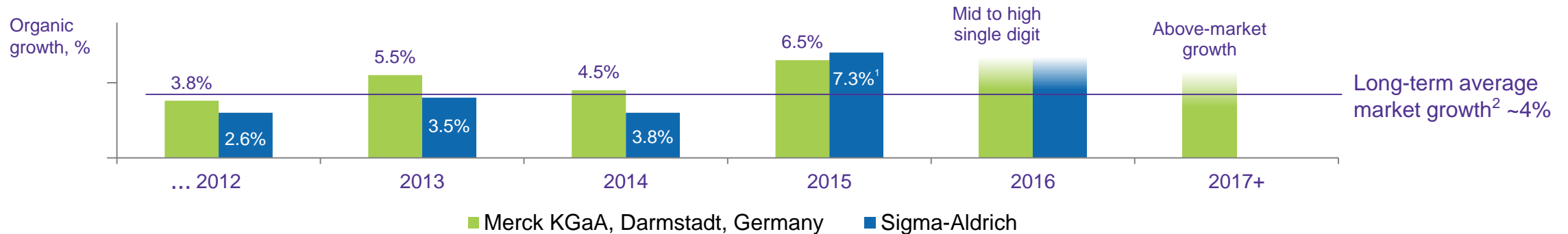
Main moving parts:

- Phase III progress of avelumab
- Regular prioritization in view of market dynamics
- Active partnering of selected pipeline assets (e.g. BTK-i)

# Life Science

## Above-market growth to be enhanced by top-line synergies

### Merck KGaA, Darmstadt, Germany and Sigma-Aldrich organic growth rates versus market growth



### Sources of market outperformance

#### 1 Portfolio composition

- Exposure to biopharma
- Highest share of consumables
- Broad product offering

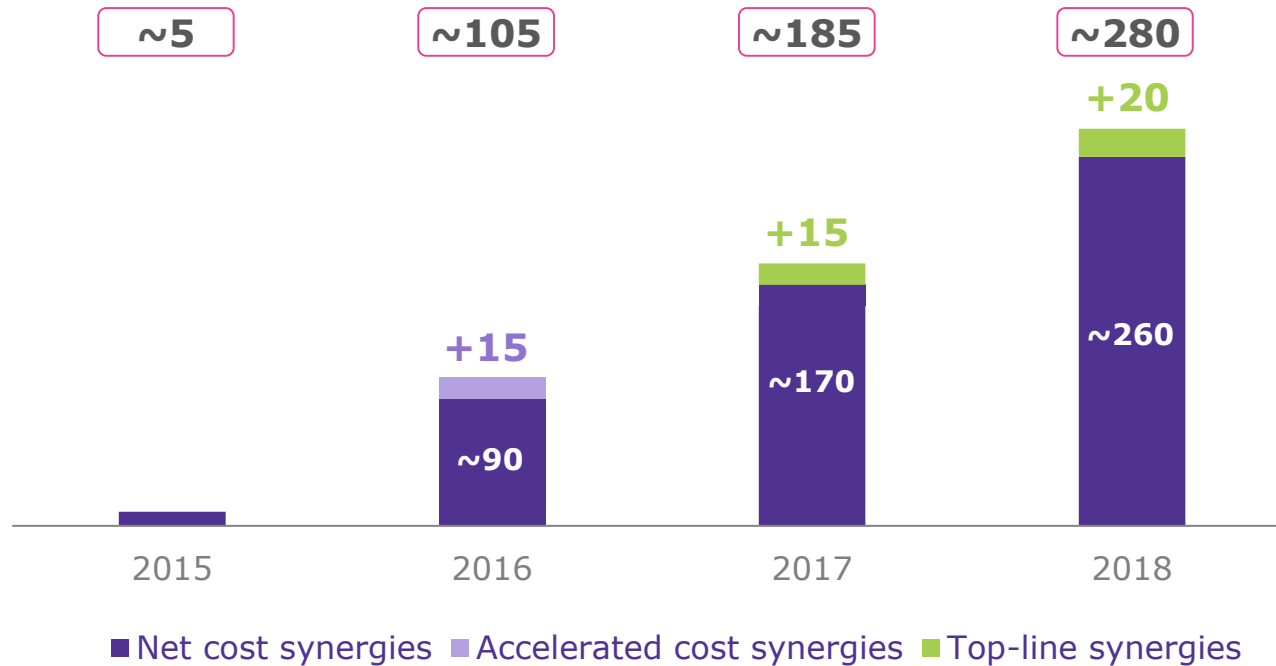
#### 2 Top-line synergies

- Best in class eCommerce
- Excellent service capabilities
- Global reach

## Life Science

# Synergy upgrade driven by fast 2016 execution and top-line synergies

EBITDA pre impact of synergy ramp-up [€m]



**Synergy upgrade of ~10% confirms strong integration capabilities**

Sources

### Cost synergy update (for 2016)













- **faster** implementation of synergy measures in all areas
- **2016** expected total cost synergies of **~€105 M**
- Integration costs remain unchanged at ~€400 m

### Top-line synergies (from 2017)

- Strong eCommerce and **IT capabilities** applied to our products
- Extensive **portfolio** and **customer** complementarity in Process and Applied Solutions
- Leverage **regional** Group Asia and Sigma North America footprint
- Expecting **~50-100 bps** in additional **sales growth** with average EBITDA pre margin

# Performance Materials

## The four pillars are set for future profitable growth

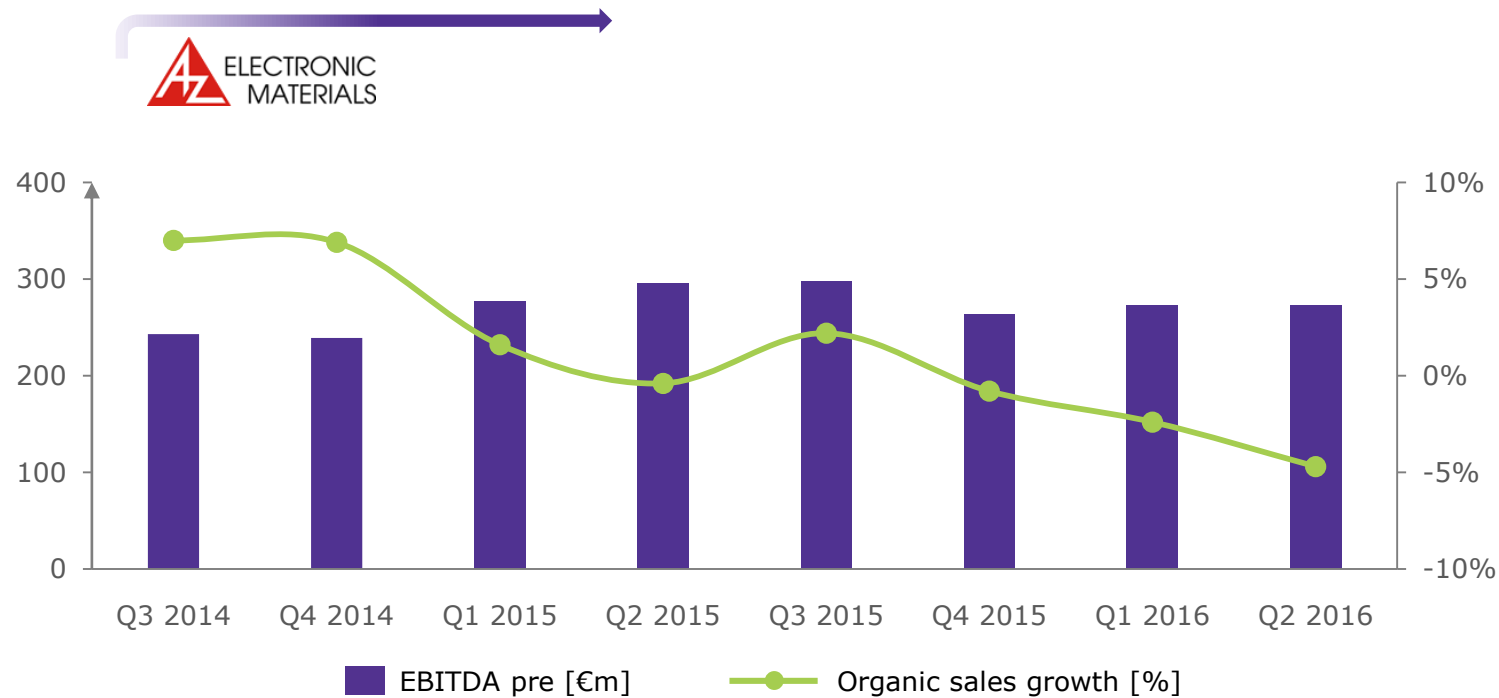
Business unit	% sales	Mid-term growth trend	Driver
 <b>Display Materials</b>	 ~50-60%		<ul style="list-style-type: none"> <li>• SA-VA to launch in 2017</li> <li>• LC-Windows expected from 2018</li> <li>• LC market share assumed to normalize</li> </ul>
 <b>Pigments and Functional Materials</b>	 ~15-20%		<ul style="list-style-type: none"> <li>• Uptake of new Meoxal coatings</li> <li>• Strong growth of technical functionals and active cosmetic ingredients</li> </ul>
 <b>Integrated Circuit Materials</b>	 ~15-20%		<ul style="list-style-type: none"> <li>• Benefit from increasing complexity and more layers (3D chip architecture)</li> </ul>
 <b>Advanced Technologies</b>	 ~5-10%		<ul style="list-style-type: none"> <li>• OLED capacity expansion</li> <li>• Platform for continuous innovation</li> </ul>

**Well-founded medium-term low to mid single-digit growth profile**

# Performance Materials

## Four pillar strategy diversifies profit profile

Absolute EBITDA pre and organic sales growth development



### Strong profitability

- Leading market positions in all segments
- Strong customer relations
- Diversified profit pool from four high-margin businesses
- Continuous innovation improves product mix (SA-VA in 2017)
- Active cost management and supply chain optimization

**Diversified portfolio and leading market positions provide earnings stability**



03

**FRAMEWORK FOR LONG-  
TERM VALUE CREATION**

# Deleveraging

## Regaining financial flexibility through swift deleveraging

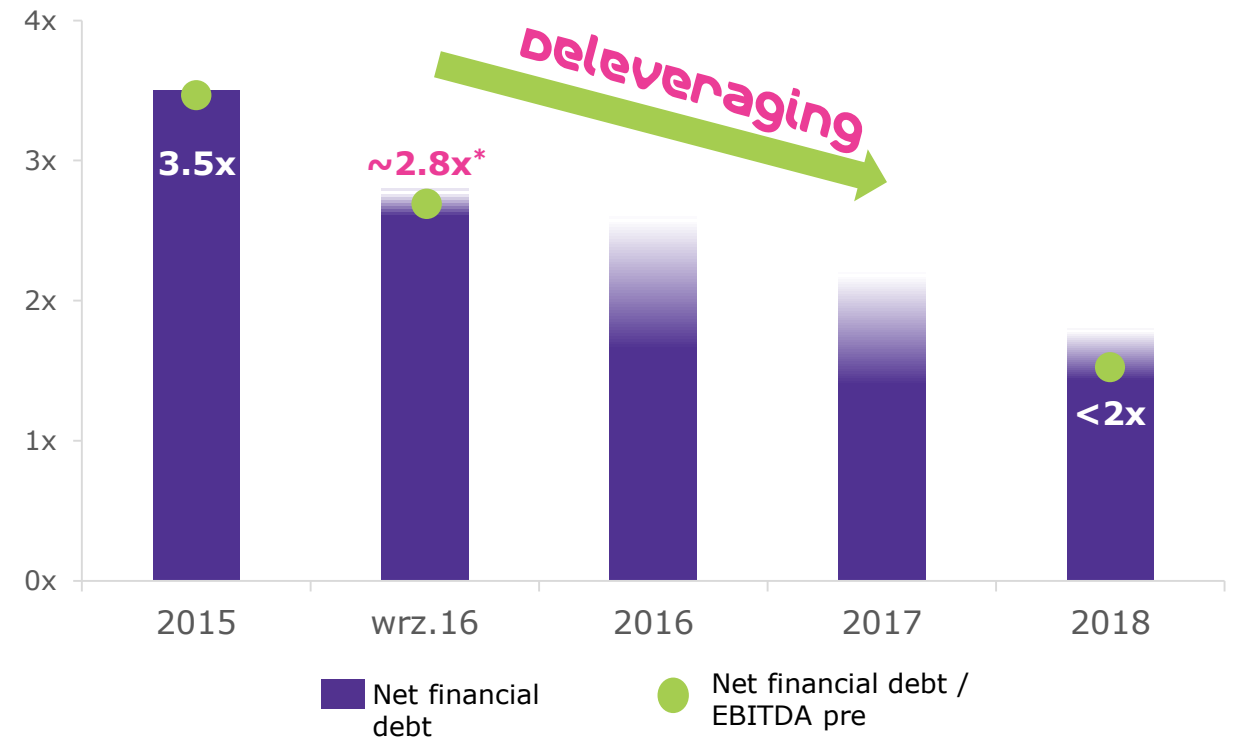
### Swift deleveraging

- Strong focus on absolute EBITDA pre improvement
- Tighter net working capital management
- Disciplined capex spending, while preparing the ground for profitable growth
- Conservative dividend payouts – aiming for 20-25% of EPS pre
- Improving structures and processes

**No acquisitions >€500 m in the next 2 years, unless financed by divestments**

### Net financial debt and leverage development

[Net financial debt/  
EBITDA pre]



# Processes & Systems

## Supporting value generation through operational excellence

### 1 Processes

- Shared Service platforms
- Continuous standardization
- Efficiency gains



### Analytics 3

- Big data enables linking of internal & external data sets
- Predictive analytics

### 2 Systems

- Harmonization of ERP systems
- Digital solutions as platform to support processes



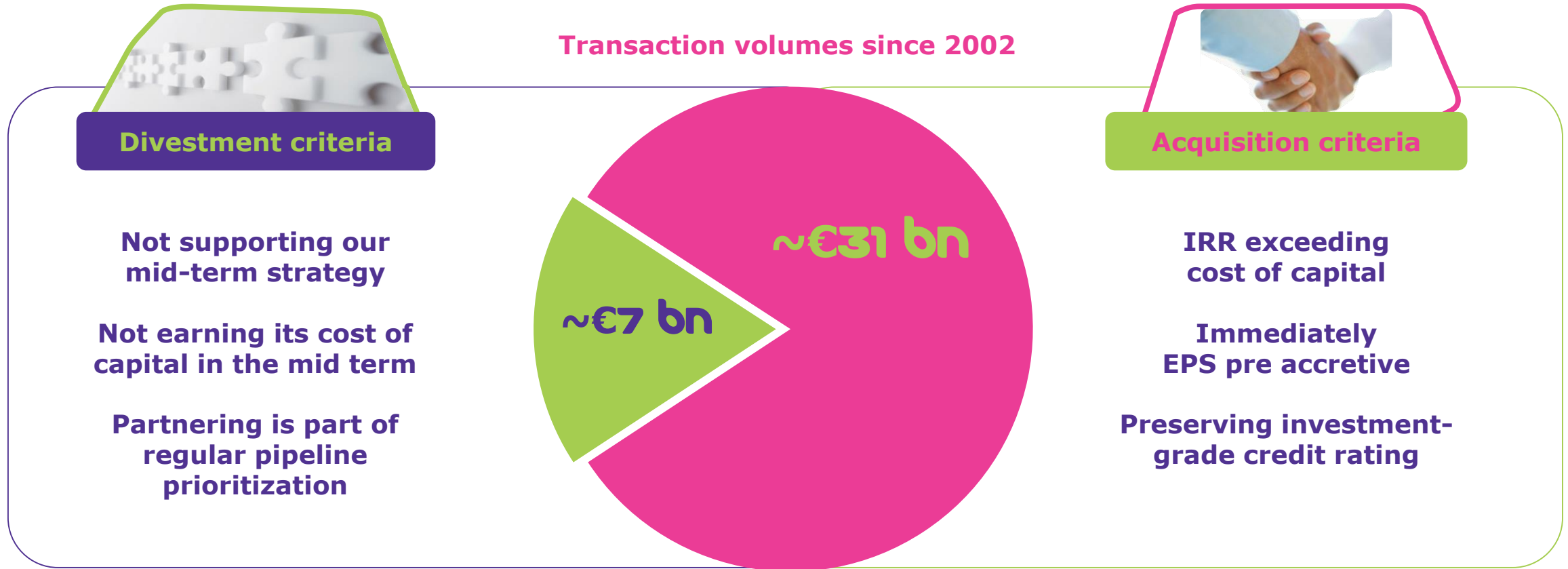
### Cost discipline 4

- Cost consciousness as part of our DNA
- Close monitoring of spending, e.g. travel & entertainment



# Portfolio & Strategy

## Active portfolio management is part of our DNA



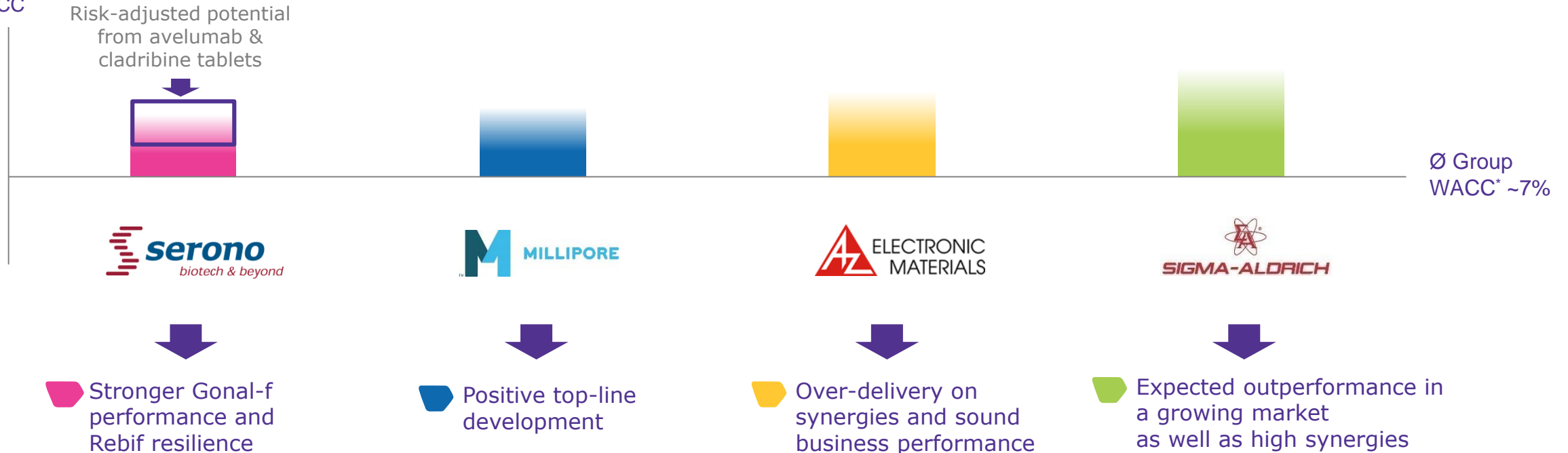
**Diversification is a strategic cornerstone, but we have no set business composition**

# Portfolio management

## Our past acquisitions have been financially attractive

### Comparison of IRR versus WACC of past major M&A projects

Delta of internal rate of return (IRR) over WACC





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## EXECUTIVE SUMMARY

## Executive summary

# Well set for near-term priorities and long-term value creation

**Near-term**  
operational priorities  
progressing



Maximize existing business and invest in pipeline success



Manage Sigma integration and generate above-market growth



Drive leadership through continuous innovation

**Long-term**  
strategic framework  
for value creation

Regaining financial flexibility by strong cash generation and swift deleveraging

Further improving processes and systems while focusing on cost discipline

Continue to actively manage the portfolio and generate value through M&A

