



Science for a Better Life  
**A Global Leader in  
Health & Nutrition**

//////////

**Investment Case**

November 2021 / Bayer AG





# Cautionary Statements Regarding Forward-Looking Information

This presentation may contain forward-looking statements based on current assumptions and forecasts made by Bayer management.

Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at <http://www.bayer.com/>.

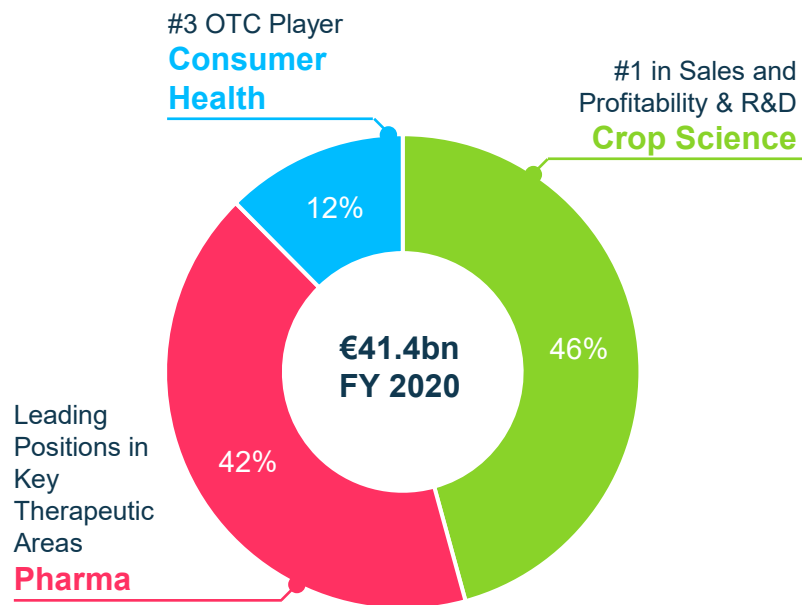
The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.



# Bayer: A Global Leader in Health and Nutrition

Well Positioned to Create Value in Growing Markets using Science to Address Societal Megatrends

## Bayer Group Sales



<sup>1</sup>Source: Company Estimates

<sup>2</sup>Source: IQVIA MIDAS MAT Q3-20

<sup>3</sup>Source: Nicholas Hall & Company DB6

## Market Size

### Crop Science



~€100bn<sup>1</sup>

### Pharmaceuticals



~€1,000bn<sup>2</sup>

### Consumer Health



~€150bn<sup>3</sup>



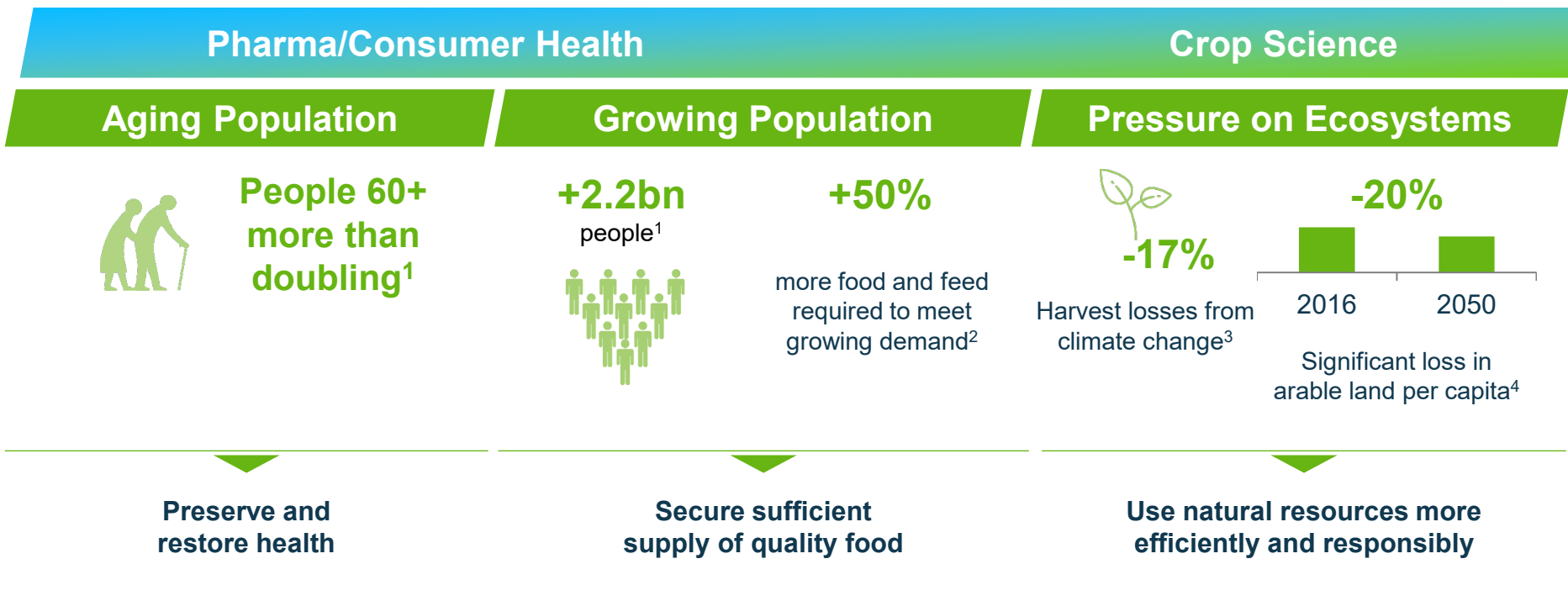
# Global Megatrends in Health & Nutrition

Attractive Macro Drivers of Our Strategy and Underpin the Need for Innovation

**Megatrends through 2050**

**Societal Needs**

**Our Mission**



**We leverage science to address these societal needs – and help people and the planet thrive**



Science For A Better Life

<sup>1</sup> UNDESA 2017 (United Nations Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision)

<sup>2</sup> FAO 2017, (FAO Global Perspective Studies)






<sup>3</sup> Nelson et. al, (2014); FAO 2016 "Climate change and food security"

<sup>4</sup> FAOSTAT (accessed Oct 30, 2018) for 1961-2016 data on land, FAO 2012 for 2030 and 2050 data on land, and UNDEDA 2017: World Population Prospects for world population data



# Leadership and Innovation Set the Course for Our Future Growth

## Key Growth Drivers

-  Long-term megatrend tailwinds are propelling growing demand in the Life Sciences
-  Number one position in Ag inputs and leading positions in key Pharma and Consumer categories
-  World-class innovation: technological breakthroughs driven by the bio-revolution
-  Accelerated transformation and further efficiency gains in our operations
-  Focus on sustainability to create new value

## Crop Science Innovation Pipeline

Annual R&D Investment:

€2.0bn

Key Current Launch Products:



Key Mid-/Late-Stage Pipeline Opportunities:

- **Short Stature Corn** 
- **Soybean Herbicide Trait Stack with Five-Tolerances** 
- **New Mode of Action Herbicide**

## Pharmaceuticals Innovation Pipeline

Annual R&D Investment:

€2.7bn

Key Current Launch Products:



Key Mid-/Late-Stage Pipeline Opportunities:

- Finerenone**
  - Non-diabetic CKD
  - Heart Failure
- Factor XI(a) portfolio**
  - Thrombo-embolic diseases
- Elinzanetant** (KaNDy NT-814)
  - Vasomotor symptoms during menopause
- P2X3 Receptor Antagonist**
  - Multi-indication opportunity

Note: Subject to regulatory approvals and pending registrations. Represents a subset of the pipeline.

<sup>1</sup> In collaboration with Sumitomo



# Profitable Growth Expected in the Mid-Term

Anticipate €43-45bn Sales and €5bn in Annual Free Cash Flow by 2024 for the Group

— At constant currencies<sup>1</sup> — At ,month-end Sep'21 rates<sup>2</sup> At ,month-end Dec' 20 rates<sup>3</sup>

1

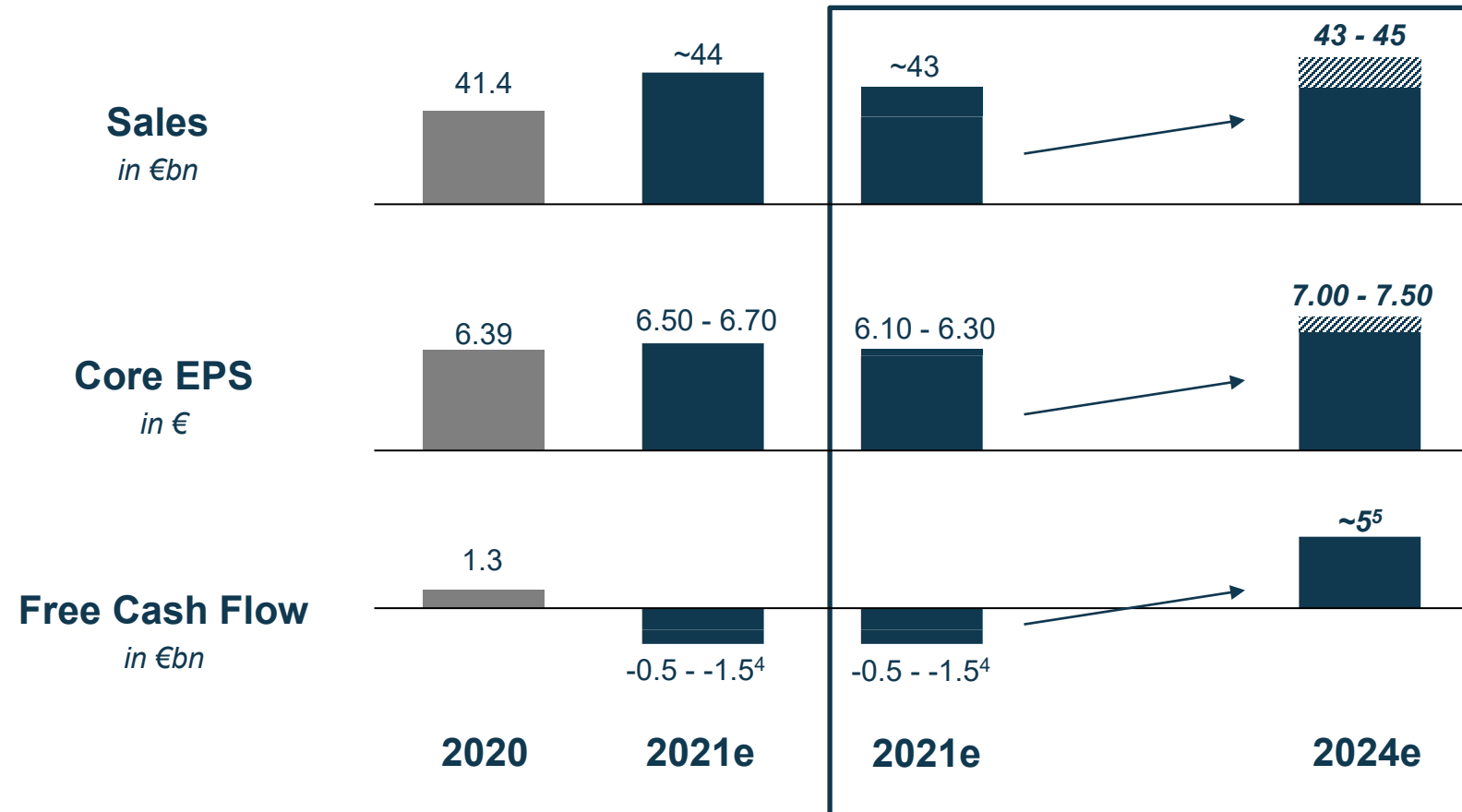
Enable growth

2

Drive profitability

3

Focus on cash



<sup>1</sup> Reflects our 2021 plan at the average actual currencies for 2020 <sup>2</sup> Currency assumptions based on month-end September 2021 spot rates (1 EUR)=1.16 USD, 6.26 BRL, 7.49 CNY, 130 JPY, 23.8 MXN, 84.3 RUB

<sup>3</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB

<sup>4</sup> Settlement payouts of ~€5.5bn included <sup>5</sup> Settlement payouts and special items of ~€1bn included

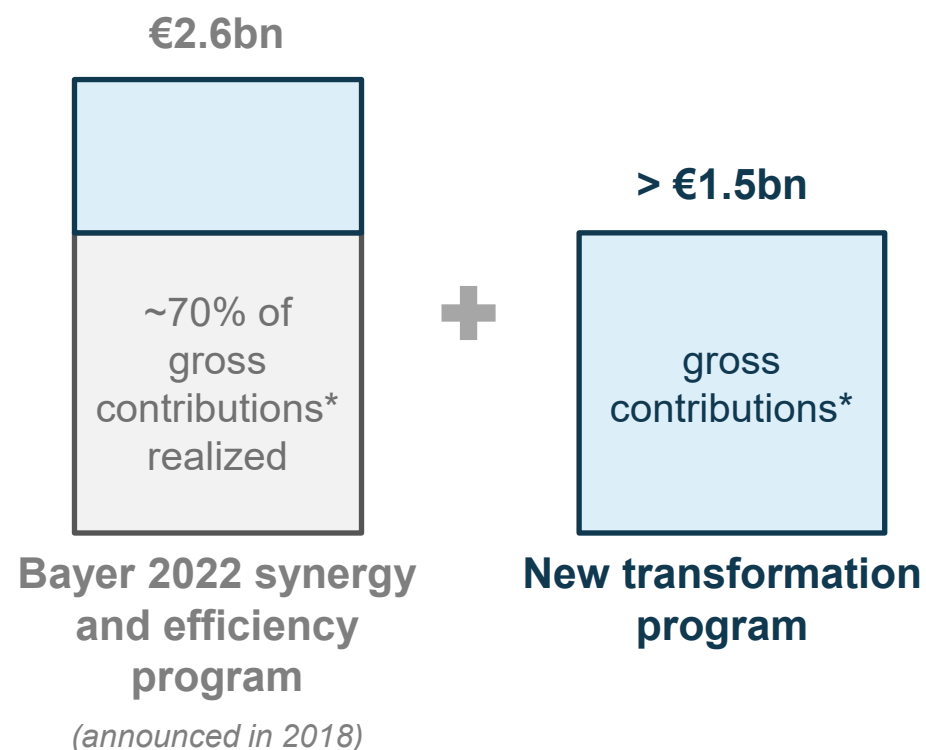
/// = Indicates corridor between high- and low case



# New Transformation Program with Gross Contributions of >€1.5bn

Expect Partial Reinvestment to Drive New Opportunities; Remainder to Drive Margin Expansion

## Transformation programs



## Delivery

- Implementation of **Bayer 2022 ahead of plan**
- We **accelerate our transformation** to become leaner and more agile
  - Divisions and Enabling Functions
  - Improving our go-to-market models
  - Strengthening our digital and data capabilities
  - Structural measures and optimization of external spend
- Going forward, we will keep you updated and **jointly implement and track** both programs

\* Gross contributions will be partially re-invested to fuel growth and are included in our guidance for 2021-24  
Note: One-time costs in same magnitude as for Bayer 2022 (1.7x the total contribution)



# Focus on Cash Generation Now Embedded in Incentive Plans

Improvements Expected from Sales Growth, Working Capital & Divestments; Litigation Pay-outs and One-Time Costs for Transformation Mitigating Factors



## Improve Free Cash Flow

Optimize **working capital** focusing on overdue management, inventory and payables; prioritizing **CapEx**



## Adapt incentive scheme

Free Cash Flow integrated as a key performance metric in our **short-term incentive** plan for all managerial employees



## Capital Employed / Divestments

Optimization of **fixed asset** portfolio, for example sale of property

**Sale of businesses / brands** below division level (e.g. ES professional)



## Litigation pay-outs & special items

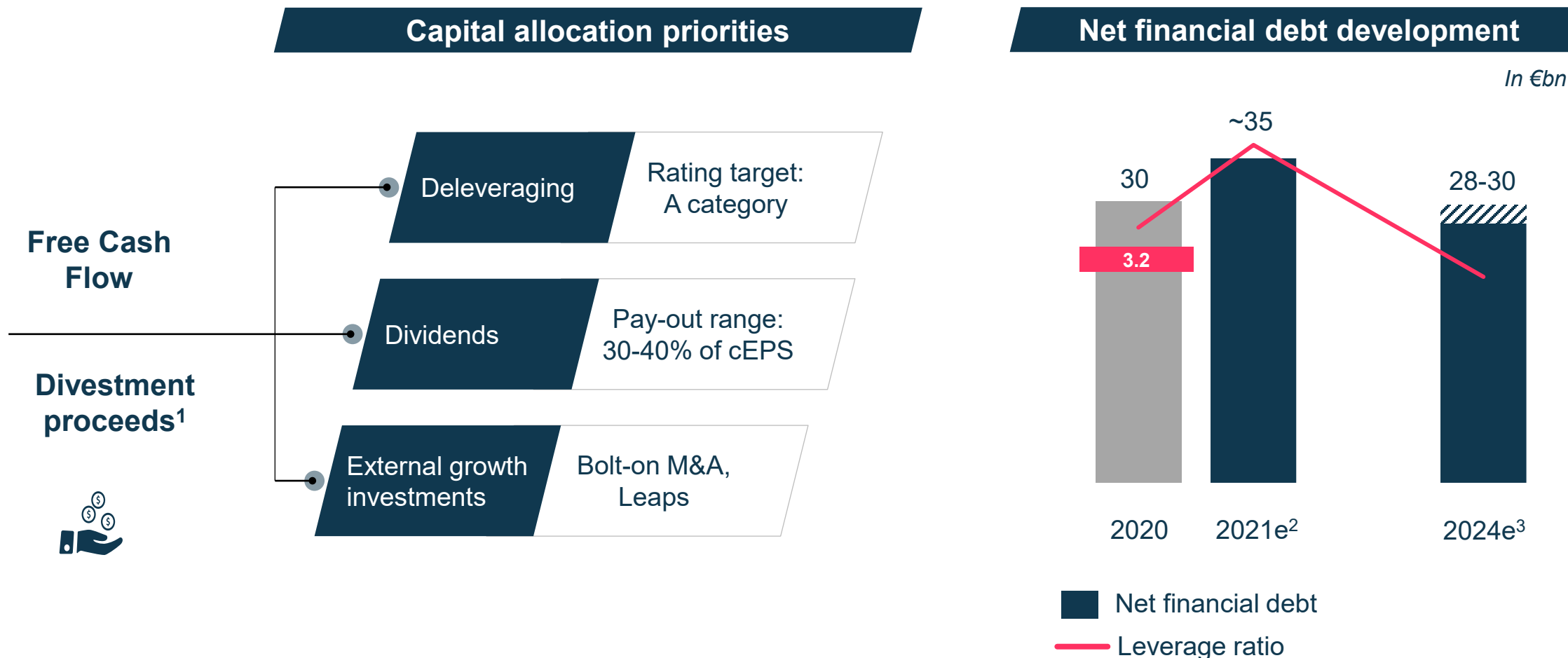
Our Free Cash Flow is impacted by **litigation** pay-outs and cash-effective **one-time costs** for transformation





# Disciplined Capital Allocation to Delever, Pay Dividends and Invest

Expect Net Debt to Increase in 2021 with Planned Settlements and Return to €28-30bn by 2024



<sup>1</sup> From non-strategic divestments below divisional level and sale of other fixed assets <sup>2</sup> Currency assumptions based on month-end September 2021 spot rates (1 EUR=) 1.16 USD, 6.26 BRL, 7.49 CNY, 130 JPY, 23.8 MXN, 84.3 RUB <sup>3</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB

/// = Indicates corridor between high- and low case



# Ambitious Measurable Targets for Sustainable Development

2030 Targets in Line with UN SDGs and Our Vision; **Health for All, Hunger for None**

## Help more PEOPLE thrive: Drive growth in underserved regions



Support **100m<sup>1</sup> smallholder farmers** in LMIC<sup>2</sup>



Provide **100m<sup>1</sup> women** in LMIC with **access to modern contraception**



Expand **access to self-care for 100m<sup>1</sup> people** in underserved<sup>3</sup> communities



## Decrease ECOLOGICAL footprint: Drive growth through sustainable resource use



**Climate neutrality at own sites + reduced emissions in our supply chain**

// 42%<sup>1</sup> reduction target for Scope 1 & 2<sup>4</sup>

// 12.3%<sup>1</sup> reduction target for Scope 3<sup>4</sup>

**+ Net Zero emission target until 2050** in line with long term goal of Paris Agreement (Scope 1, 2 & 3)<sup>4</sup>

**Established a Sustainability Council comprised of highly renowned experts to provide advice and review progress on sustainable business strategy and social innovation in consultation with our CEO and Boards**

<sup>1</sup> LMIC: low and middle income countries - All countries included in the World Bank list as per 1 July 2019.

<sup>2</sup> Baseline(2019). Numbers reflect people; preliminary figures; pending external audit : ~42m smallholder farmers; ~38m women; ~41m people; 3.7m tCO<sub>2</sub>e for Scope 1&2; 10m tCO<sub>2</sub>e for Scope 3.

<sup>3</sup> Underserved : Economically or medically.

<sup>4</sup> Scope 1: emissions from own operations; Scope 2: emissions from purchased energy; Scope 3: emissions along the value chain



# Investment Thesis

## Key Takeaways

**1**

**We are a global leader in Health & Nutrition that addresses societal megatrends**

**2**

**We are well-positioned to shape disruption in the bio-revolution**

**3**

**We expect to translate innovation into profitable mid-term growth**

**4**

**We expect to improve our profitability by accelerating our transformation**

**5**

**We have disciplined capital allocation priorities: delever, pay dividends and invest**

**6**

**We have integrated sustainability in our business strategy and incentive systems**



Science for a Better Life  
**Shaping the Future  
of Agriculture**



**Investment Case**

November 2021 / Bayer AG





# Shaping the Future of Agriculture

- 1 Market & Position
- 2 Strategy
- 3 Operational Performance
- 4 World-Class Innovation
- 5 Digital Transformation
- 6 New Standards in Sustainability
- 7 Financial Targets

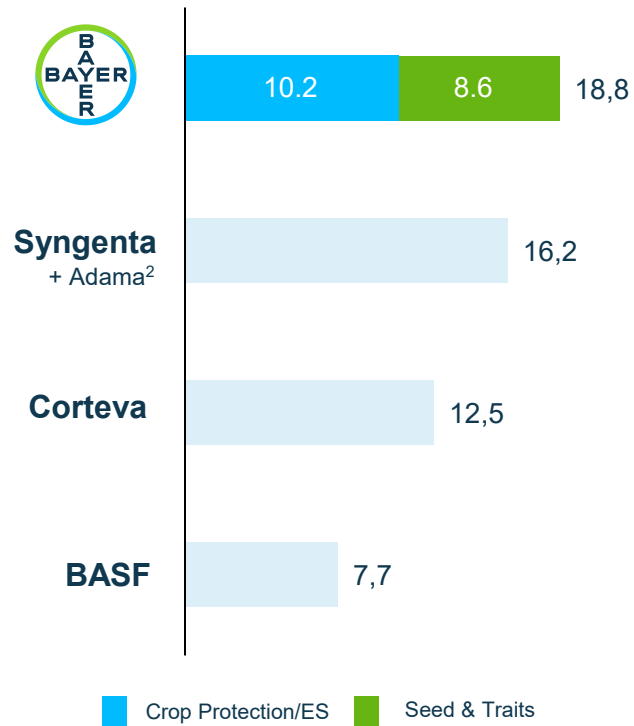


# The Established Leader in Crop Science

Industry Leading Sales, Profitability and Unmatched Investment in R&D to Fund Future Growth

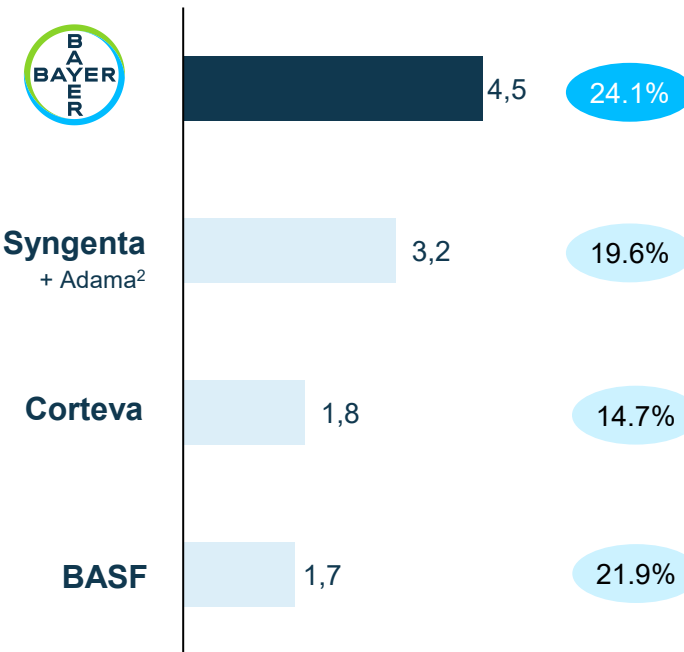
## Largest in Sales

Total Sales<sup>1</sup> (€bn)



## Highest Profitability

EBITDA<sup>1</sup> (€bn) / EBITDA<sup>1</sup> Margin (%)

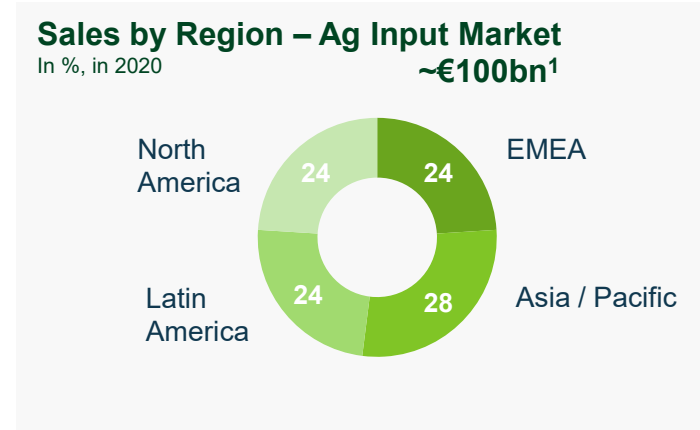
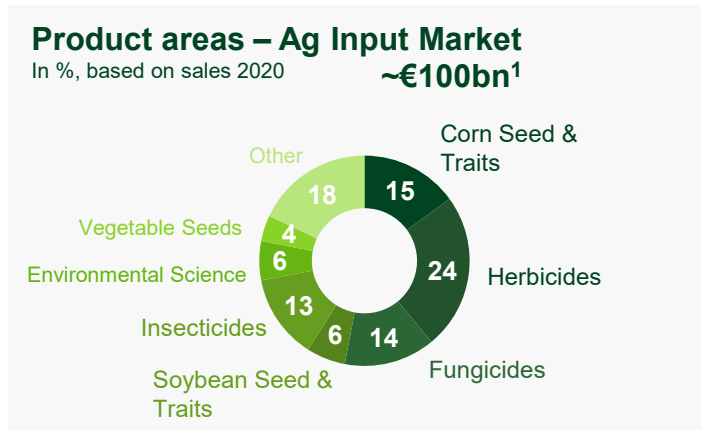
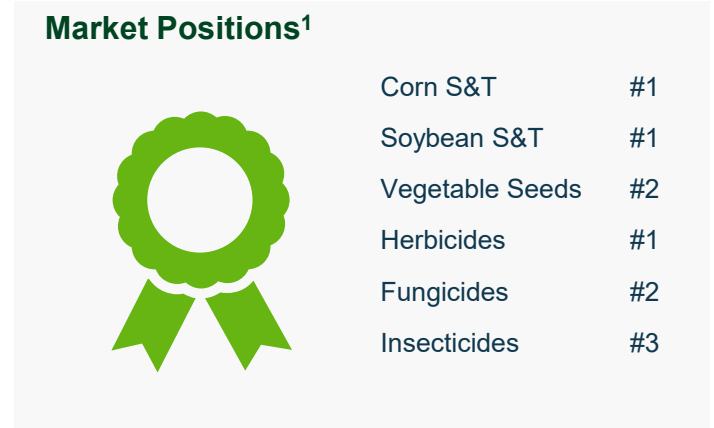
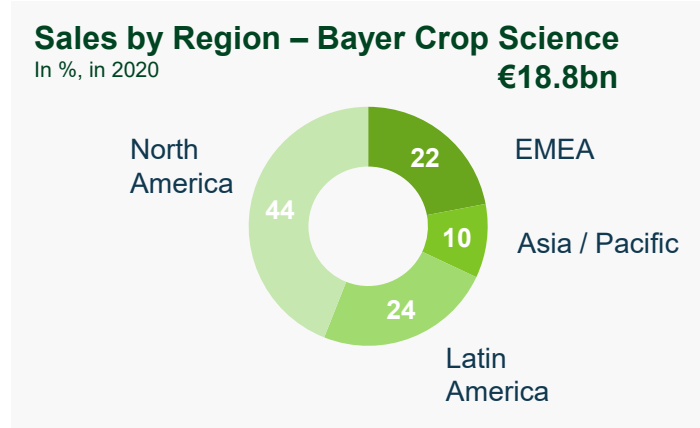
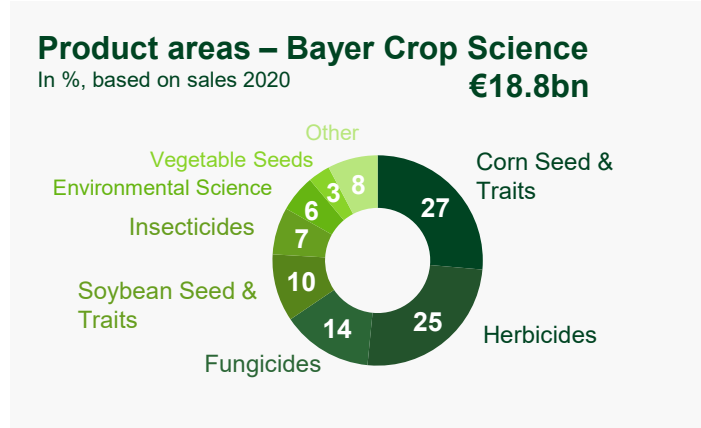


<sup>1</sup> Company information ; exchange rate: FY 2020: ~1.14 USD/EUR. EBITDA before special items. FY2020 sales

<sup>2</sup> Represents the legacy Syngenta results plus Adama



# Global #1 in Seed & Traits with Leading Crop Protection Portfolio



<sup>1</sup> Source: Company estimates. Market positions based on 2019 data.



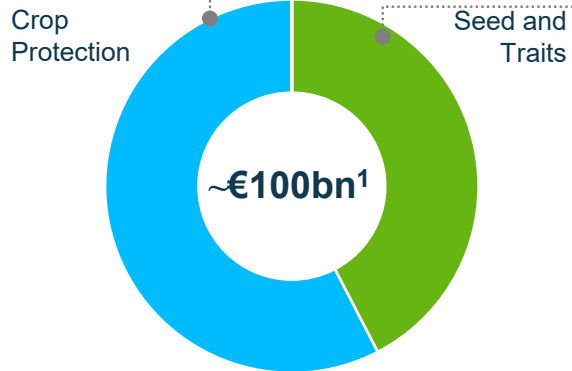
# Megatrends Drive Market Growth and Need for Innovation

Ag Market Remains Attractive with Expected ~3% CAGR<sup>1</sup> to 2030

Expected 10 Yr. Global Ag Input Market Growth Rate

**3%  
CAGR**

2020E Global Ag Input Market



## Demand



**50%**

More food, feed & biofuel<sup>2</sup> needed



**10bn**

World population<sup>2</sup>



**70%**

More meat in developing nations<sup>2</sup> needed

## Supply



**17%**

Harvest losses from climate change<sup>2</sup>



**12m**

Ha of agricultural land loss annually



**20%**

Reduction in arable land per capita<sup>2</sup>

<sup>1</sup> Source: Company estimates. Total of ~€100bn includes ~€6bn value of Environmental Science; graph does not.

<sup>2</sup> Source: FAO 2017, The Future of Food and Agriculture, by 2050





# Four Core Pillars Anchor our Vision to Shape Agriculture

Plan to Out-Perform the Market and Expand Leadership in Innovation, Digital and Sustainability

1



***Accelerate operational performance***

2



***Deliver world-class innovation***

3



***Pioneer the digital transformation***

4



***Set new standards in sustainability***



# A Clear Plan to Accelerate Growth and Outperform the Market

## 2021: Transition

## 2022-2024: Acceleration

Sales Growth<sup>1</sup>

~ 9%

EBITDA Margin<sup>2</sup>

~23%

Sales Growth<sup>1,4</sup>

3% to 5%

EBITDA Margin<sup>3</sup>

27% to 29%

2024e

1

Deliver growth in crop protection sales through new products, integrated offerings

2

Grow corn seed & traits with annual portfolio refresh and new insect traits

3

Upgrade the Americas to next-gen soybean trait technology

4

Implement new vegetable seeds strategy and launch new traits in cotton to drive growth

5

Achieve planned 2022 synergies in 2021; accelerate with new efficiency program until 2024

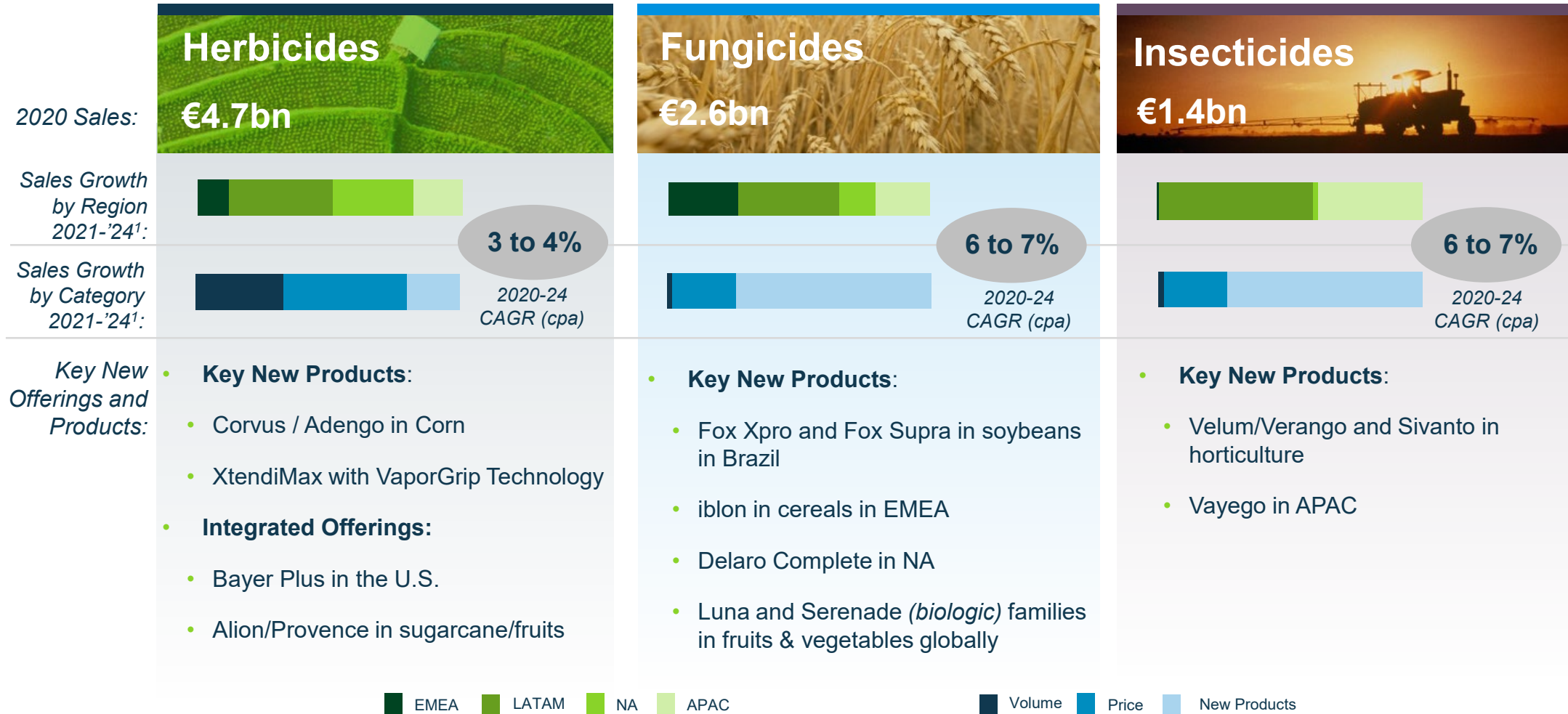
<sup>1</sup> Currency and portfolio adjusted

<sup>2</sup> Before special items. Currency assumptions based on month-end September 2021 spot rates (1 EUR=) 1.16 USD, 6.26 BRL, 7.49 CNY, 130 JPY, 23.8 MXN, 84.3 RUB <sup>3</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 8.00 CNY, 127 JPY, 24.4 MXN, 91.9 RUB <sup>4</sup> Sales growth projections per March 11,12, 2021 Capital Markets Day

/// Bayer AG /// Investment Case /// November 2021



# Innovation, Integrated Offerings Drive Crop Protection Growth



■ EMEA ■ LATAM ■ NA ■ APAC

■ Volume ■ Price ■ New Products

<sup>1</sup> Company estimates, currency and portfolio adjusted. Sales growth projections per March 11,12, 2021 Capital Markets Day



# Deploying New Corn Hybrids and Traits to Grow Sales

Expect 3-4%<sup>1</sup> Sales CAGR 2020-'24 in Corn Seed & Traits

## Mid-Term Key Growth Drivers in Corn

Deploying >150 new hybrids annually around the globe to grow leading germplasm share in corn key growing regions.



**United States** **#1** Market Pos.

Market Size: ~93m acres

Germplasm Share: >55%

**Argentina** **#1** Market Pos.

Market Size: ~20m acres

Germplasm Share: ~60%<sup>2</sup>

**Mexico** **#1** Market Pos.

Market Size: ~20m acres

Germplasm Share: >65%<sup>2</sup>

**Europe** **#2** Market Pos.

Market Size<sup>3</sup>: ~60m acres

Germplasm Share: ~20%

**Brazil** **#1** Market Pos.

Market Size: ~52m acres

Germplasm Share<sup>1</sup>: ~30%

**South Africa** **#1** Market Pos.

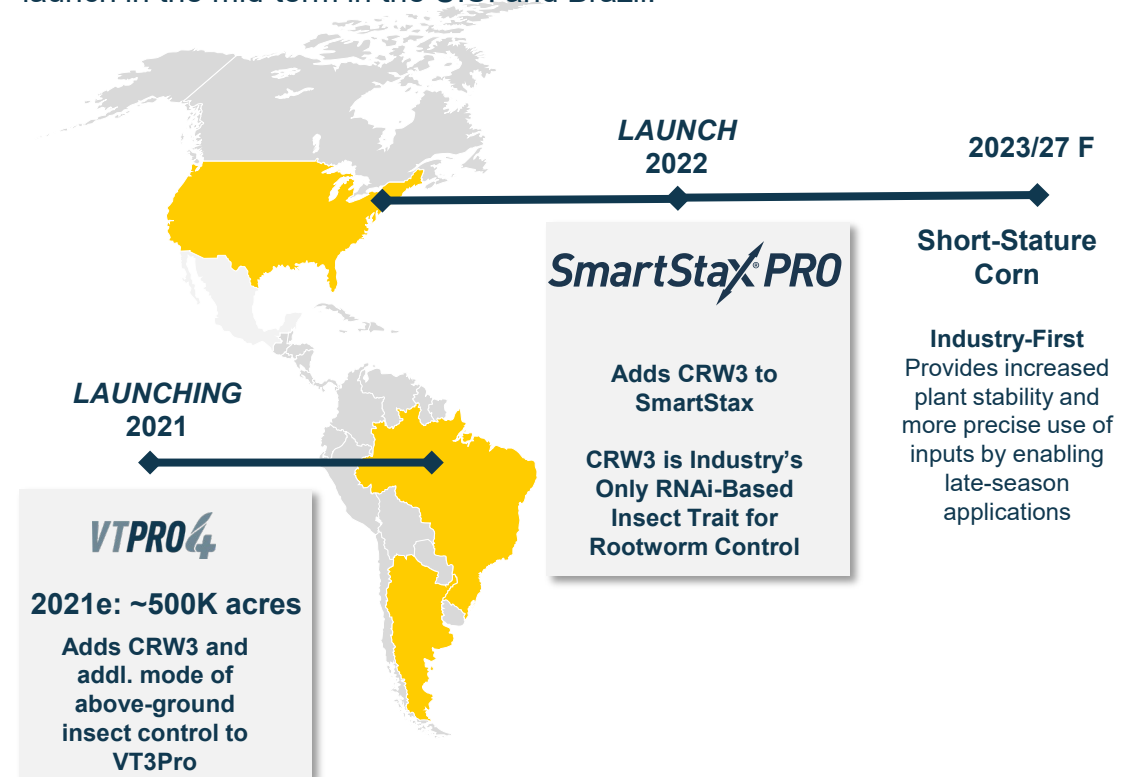
Market Size: ~6m acres

Germplasm Share: >70%

Note: Size of market, market position and germplasm share measured as of 2021.

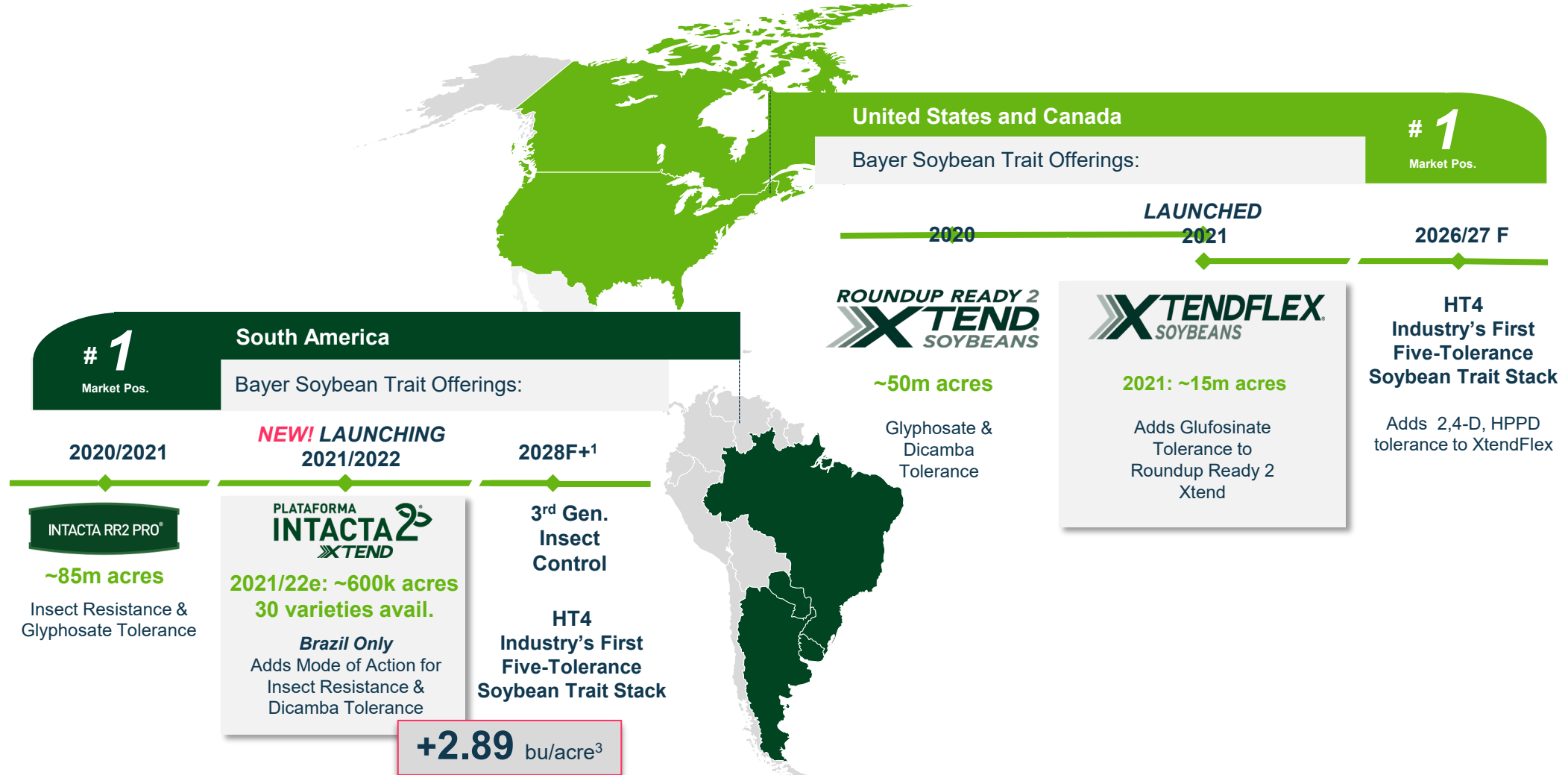
<sup>1</sup> Currency and portfolio adjusted. Sales growth projections per March 11,12, 2021 Capital Markets Day <sup>2</sup> In hybrid corn market only <sup>3</sup>Eu27 +UK, Russia and Ukraine

Launching CRW3 as a part of VTPro4 and SmartStax Pro stacked offerings in the near-term; game-changing short-stature corn expected launch in the mid-term in the U.S. and Brazil.





# Upgrading the Americas to Next-Gen Soybean Trait Technology



<sup>1</sup> Launch timing reflects Brazil

<sup>2</sup> Currency and portfolio adjusted

<sup>3</sup> Compared to similar varieties in checks across 500 locations in 2020/2021 crop year

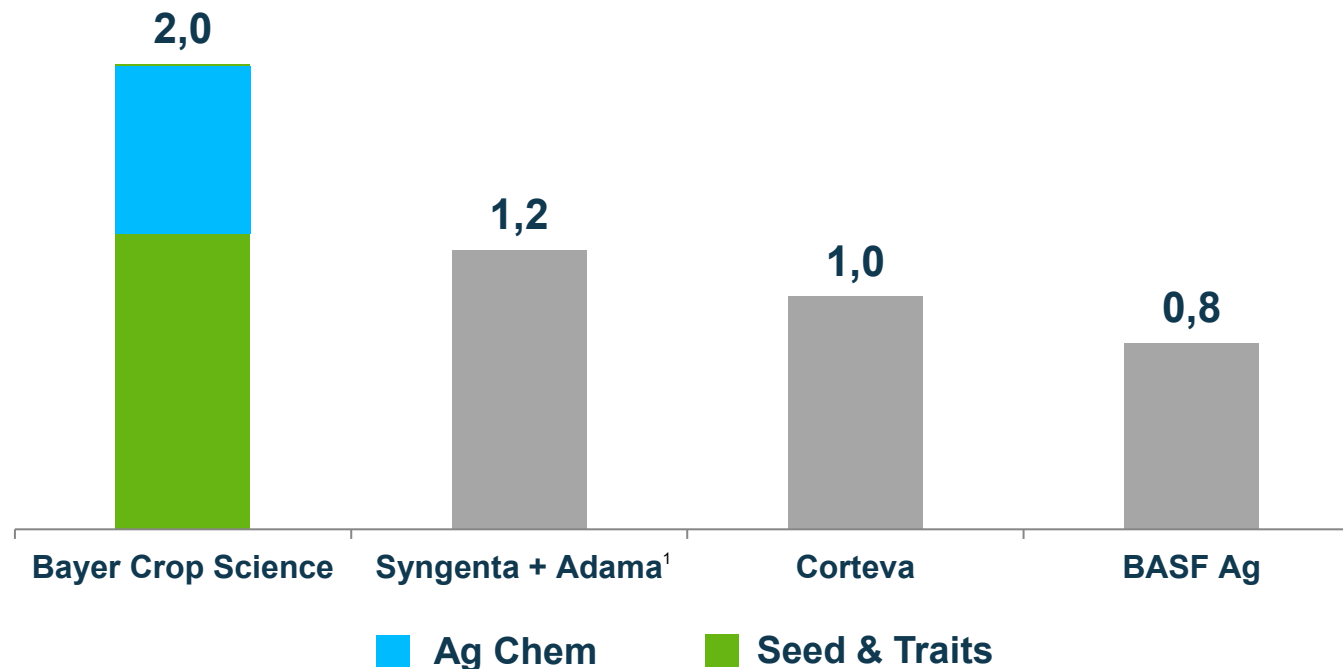
/// Bayer AG /// Investment Case /// November 2021



# R&D Investment Powers Industry-Leading Portfolio

Shaping the Future of Agriculture with Sector's Most Productive Innovation Platform

## Ag R&D Investment (€bn)<sup>3</sup>



**#1 R&D Platform  
in Crop Science**



- Fueled by **~7,100** R&D employees<sup>2</sup> in **>50** countries

<sup>1</sup> Represents the legacy Syngenta results plus Adama. Excludes non-agro business sales of ADAMA (nutritional supplements, aromatic products, industrial products). Syngenta Group formal reporting did not begin until H1 2020.

<sup>2</sup> Includes permanent and temporary employees

<sup>3</sup> Company information ; exchange rate: FY 2019: ~1.14 USD/EUR. 2020 Reported results for all companies except Syngenta = 2019 reported results. Bayer R&D excludes impairment charges.



# Unmatched Innovation Pipeline is Set to Drive Growth

Total Pipeline Peak Sales Potential up to €30bn<sup>2</sup>; ~50% Incremental

	Corn S&T	Soybean S&T	Herbicides	Fungicides	Insecticides	Other, Vegetable Seeds, Environmental Science
<b>Peak Sales Potential</b>	~€10-11bn	~€4-5bn	~€3bn	~€3bn	~€2bn	~€5-6bn
<b>Expected Ongoing Refreshment</b>	<b>150+</b> New Hybrids Commercialized Annually	<b>150+</b> New Varieties Commercialized Annually	<b>35+</b> New Formulation Launches in the next Decade	<b>20+</b> New Formulation Launches in the next Decade	<b>20+</b> New Formulation Launches in the next Decade	<b>~130</b> Vegetable Hybrids/Varieties Commercialized Annually <b>20+</b> New Formulation Launches in the next Decade
<b>Select Planned Product Launches</b>	<b>2021 – 2024</b> SmartStax <sup>PRO</sup> VTPRO <sup>4</sup> Short Stature Corn Hybrids	TENDFLEX <sup>SOYBEANS</sup> PLATAFORMA INTACTA <sup>2</sup> XTEND	INCELO <sup>®</sup> Mateno <sup>®</sup>	DELARO <sup>Complete</sup> iblon <sup>TECHNOLOGY</sup> (Isoflucypram) Fox Supra (Indiflin <sup>®</sup> ) <sup>1</sup> Xivana <sup>(Fluoxapiprolin)</sup> <sup>3</sup>	Plenexos (Spidoxamat) Belt Smart	ThryvON <sup>TECHNOLOGY</sup> Carbon Business Model
	<b>2025 – 2030</b> Short Stature Corn Trait Next Generation Herbicide Tolerance Traits	Soybean Herbicide Trait Stack with Five-Tolerances 3 <sup>rd</sup> Gen. Soybean Insect-Control Trait	New Non-Selective PPO Herbicide <sup>1</sup> New Mode of Action Herbicide	New Fungicide for Asian Soybean Rust <sup>3</sup>	Decis Phoenix Novel Mite Solution	4 <sup>th</sup> Generation Bollgard Cotton Trait Dicamba-Tolerant Canola Trait

Note: Subject to regulatory approvals and pending registrations. Represents a subset of the pipeline. Launches are all approximates.  
<sup>1</sup> In collaboration with Sumitomo <sup>2</sup> Company estimate <sup>3</sup> Products not registered in all jurisdictions.



# Short-Stature Corn Offers Transformational Shift in Production

Anticipated Fit on >220m Acres Enabled by Three Development Approaches

## Field Plots Around the Globe Demonstrate Key Features and Benefits of Short-Stature Corn



### Game-Changing Innovation

- Unparalleled production stability with improved standability in high winds and challenging weather conditions
- Annual yield losses due to stalk lodging in the U.S. range from 5% to 25%<sup>1</sup>



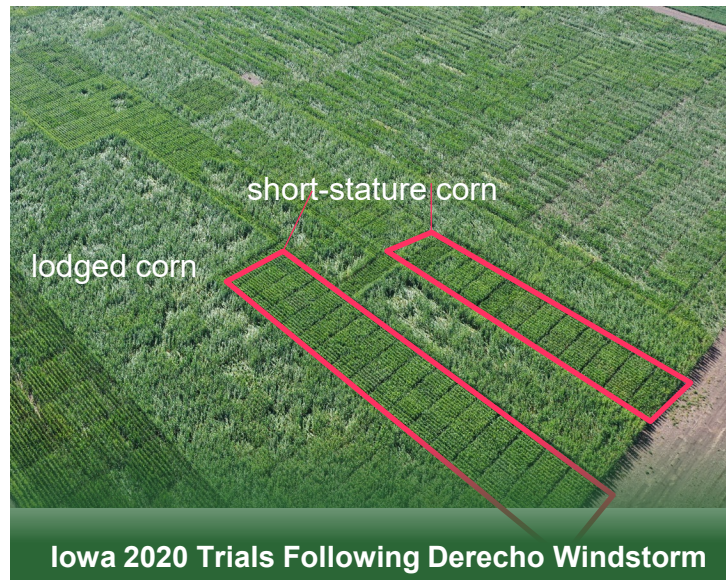
### Digitally Optimized System

- Extended in-season crop access due to shorter height
- Supports tailored solutions with precise in-season crop protection



### More Sustainable Future

- Potential to optimize use of key nutrients like nitrogen, as well as reducing land and water requirements
- Opportunity to plant at higher densities, as evidenced in Vitala commercial beta in Mexico



<sup>1</sup> Purdue University (<http://www.extension.purdue.edu/ay/ay-262.html>)





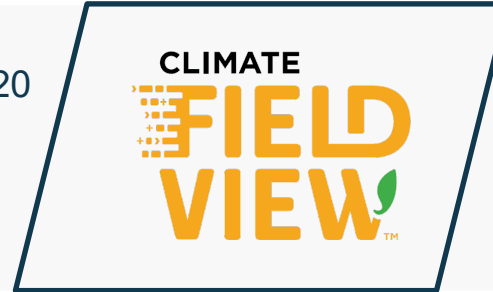
# Digital Platform is Core To Driving Growth

Enabler of Tailored Solutions and New Business Models

**1**

**Expand Industry-Leading Platform**

- NEW** >**180m** subscribed acres in 2020
- #1** brand in digital ag
- Operates in **23** countries



- Largest database** of grower and field trial seed performance data in industry
- >**70** partners on platform

**2**

**Unlock Growth from New Digital Business Models**

**Tailored Solutions**

**Carbon Farming**

**Smallholder Access**

- NEW** Showcasing portfolio strength; increased corn seed volume purchases from U.S. FieldView Plus users, compared to non-users, '18 to '20
- Predicting seed & chemistry performance
- Partnering on outcomes

- Translating unique knowledge of on-farm practice into carbon credits

- Scalable, end-to-end smallholder support through value-chain partnerships & common data foundation



**Envision 100% of 2030 Sales Enabled by Digital Enhancements and Increasingly Based on Partnered Outcomes**



# Setting the Standard for Sustainability and Biodiversity in Agriculture

## Bayer's 2030 Sustainability Commitments

### Advancing a carbon-zero future for agriculture

# 30%

Reduction of field greenhouse gas emitted per kg of crops produced

- Climate-smart practices:
  - No-tillage Highly Productive Crops
  - Cover Crops Precision Agriculture
  - Optimize use of synthetic fertilizers through the use of microbes



### Produce higher-yielding crops with fewer natural resources and inputs

# 30%

Reduction in Crop Protection impact on the environment

- Climate FieldView for precision application of crop protection
- Resistant traits help to reduce crop protection use
- Develop and promote crop protection solutions with lower environmental impact

### Empower 100 million smallholder farmers to access sustainable Ag solutions

# 100m

Smallholders benefit from access to products, services and partnerships

- Enhancing social innovation (e.g. with Better Life Farming)
- Digital transformation with FarmRise
- Introduce new, higher-yielding, resource efficient rice hybrids



# Crop Science Mid-Term Targets

A Clear Plan to Outperform the Market and Expand Industry-Leading Profitability

## Sales / Sales Growth

Actual	cpa	At month-end Dec. 20 rates <sup>2,4</sup>
2020	2021e*	2022-'24e

Crop  
Science

€18.8bn

~ 9%

3% to 5%

## EBITDA Margin (before special items)

	At month end Sep 20 rates <sup>1</sup>	At month-end Dec. 20 rates <sup>2</sup>
2020	2021e	2024e

Crop  
Science

24.1%

~ 23%

27% to 29%

## Divisional Drivers

CAGR cpa  
2020-'24<sup>3,4</sup>

Sales:

- 3-4%** • **Herbicides:** Xtendimax with VaporGrip Xtra recovery, Bayer Plus and other integrated offerings, pricing
- 6-7%** • **Fungicides and Insecticides:** New products like Fox Xpro, iblon, Luna and Vayego, integrated offerings
- 3-4%** • **Corn S&T:** New hybrids, VTPro4 and SmartStax PRO traits
- 1-2%** • **Soybean S&T:** Transition in 2021, then grow thereafter with trait upgrades in the Americas
- 4-5%** • **Vegetable Seeds:** New hybrids/varieties
- 1-2%** • **Other:** ThryvOn Technology, U.S. and Brazil cotton, offset by loss of TSA sales to BASF

cEBITDA:

- Pricing lift from innovation and FX recovery in Brazil, augmented by new cost efficiency program; assumes Dec. 20 currency rates throughout plan.

\*As updated in November 2021  
cpa: currency and portfolio adjusted

<sup>1</sup> Currency assumptions based on month-end Sep 2021 spot rates (1 EUR=) 1.16 USD, 6.26 BRL, 7.49 CNY, 130 JPY, 23.8 MXN, 84.3 RUB

<sup>2</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB

<sup>3</sup> CAGR from 2020 base year.

<sup>4</sup> Sales growth projections per March 11,12, 2021 Capital Markets Day



Science for a Better Life  
**Transforming Pharma  
to Deliver Sustainable  
Long-term Growth**

//////////

**Investment Case**

November 2021 / Bayer AG





# Transforming Pharma to Deliver Sustainable Long-Term Growth

1 Market & Position

2 Strategy

3 Growth Drivers

4 Innovation

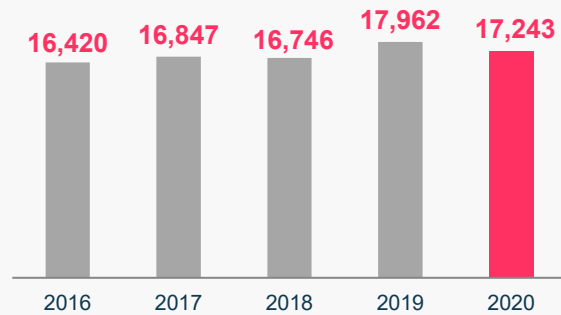
5 Sustainability

6 Financial Targets

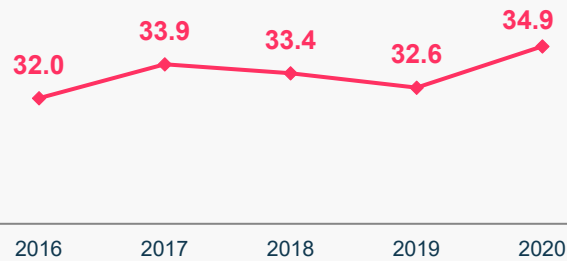


# Pharma: Focused on Therapeutic Areas with High Unmet Needs

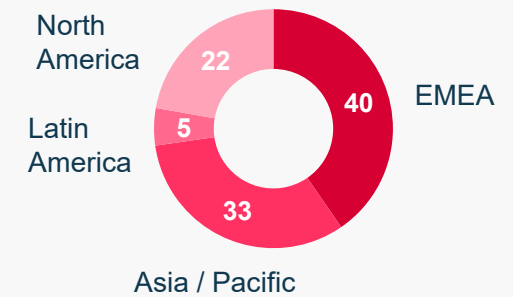
**Sales development**  
In €m



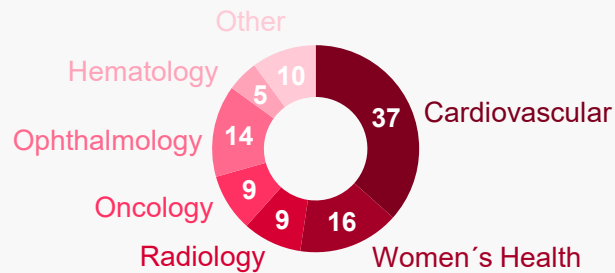
**EBITDA margin development**  
In %, before special items



**Sales by region**  
In %, in 2020



**Therapeutic areas**  
In %, based on sales 2020



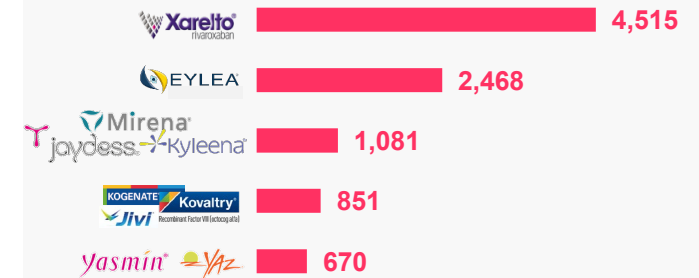
**Leading positions in key therapeutic areas**



- Cardiovascular
- Hematology
- Retinal Diseases
- Women's Health
- Radiology

**Top products**

In €m, based on sales 2020

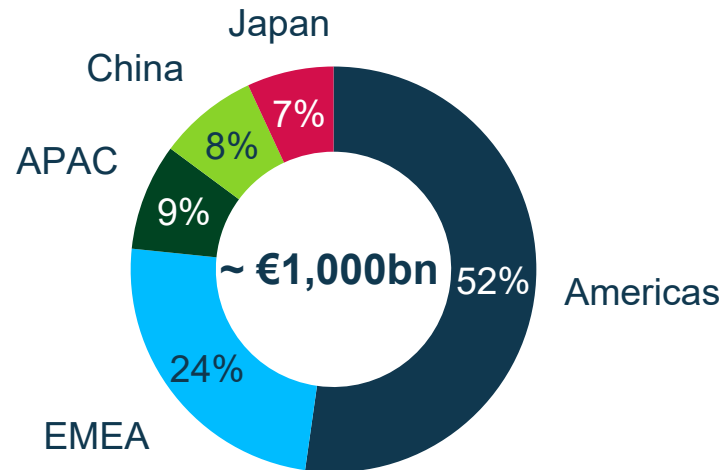




# We are Operating in a Rapidly Changing but Attractive Market Environment Driven by Megatrends and the Bio Revolution

## Pharma Market

### Market Size 2020<sup>1</sup>



### Market CAGR 2020-24e<sup>2</sup>

▶ **4 - 5%**

## Market Dynamics

### Opportunities

- Aging and growing population megatrends
- Rising life expectancy and increased access to healthcare systems
- Accelerated digital transformation across the value chain
- Technological disruption by breakthrough science
- Shift from treatment to prevention and potential cure

### Challenges

- Pressure on pricing
- Declining R&D productivity
- Increased pressure for value and real-world evidence

<sup>1</sup> Source: IQVIA MIDAS MAT Q3-20

<sup>2</sup> Source: IQVIA Market Prognosis as of September 2020



# The Transformation of Pharma is Underway



**Management team focused on improving existing structures and processes**



**Realize full potential of products and pipeline to mitigate LoE impact and return to growth**



**Re-allocate resources and shape financial profile to post LoE future**



**Capitalize and build on investments in breakthrough innovation, espec. C&GT**



**Challenge strategic direction of R&D - enhance focus on external innovation**





# Our Transformation is Guided by Five Strategic Focus Areas

## Strategic Focus Areas

Portfolio and Pipeline



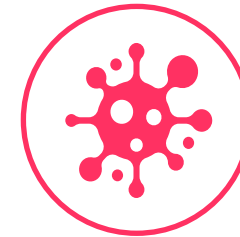
Digital Health



Cell & Gene Therapy



Oncology



China & US



## Key Priorities

- ▶ **Maximize the value** of the current portfolio and **manage the loss of exclusivity** for Xarelto & Eylea
- ▶ **Deliver three new potential blockbusters** from late-stage pipeline
- ▶ **Build digital health solutions** and capitalize on **Cell & Gene therapy platform**
- ▶ **Build an at scale player** in oncology in our areas of focus
- ▶ **Evolve regional strategies in China and the US** to sustain future growth



# We Laid The Foundation for Long-term Growth at Pharma

## Main Building Blocks of Post LoE Growth

### Late-stage Pipeline in CV & WH



PSP ~ €0.5bn



PSP ≥ €1.0bn

**Elinzanetant**  
(KaNDy NT-814)

PSP ≥ €1.0bn

### Oncology



PSP ≥ €1bn



PSP > €0.75bn

**Pipeline**

eg. EGFRexon20 inhib., ATR  
inhib., TTCs

### Cell & Gene Therapy Platform

C&GT platform expected to deliver  
significant sales contributions from  
~2025 onwards



### External Innovation and BD&L

>25 BD&L-transactions signed in 2020  
Enhanced focus on external innovation to replenish pipeline

<sup>1</sup> In collaboration with Merck & Co. Inc., Kenilworth, NJ, USA

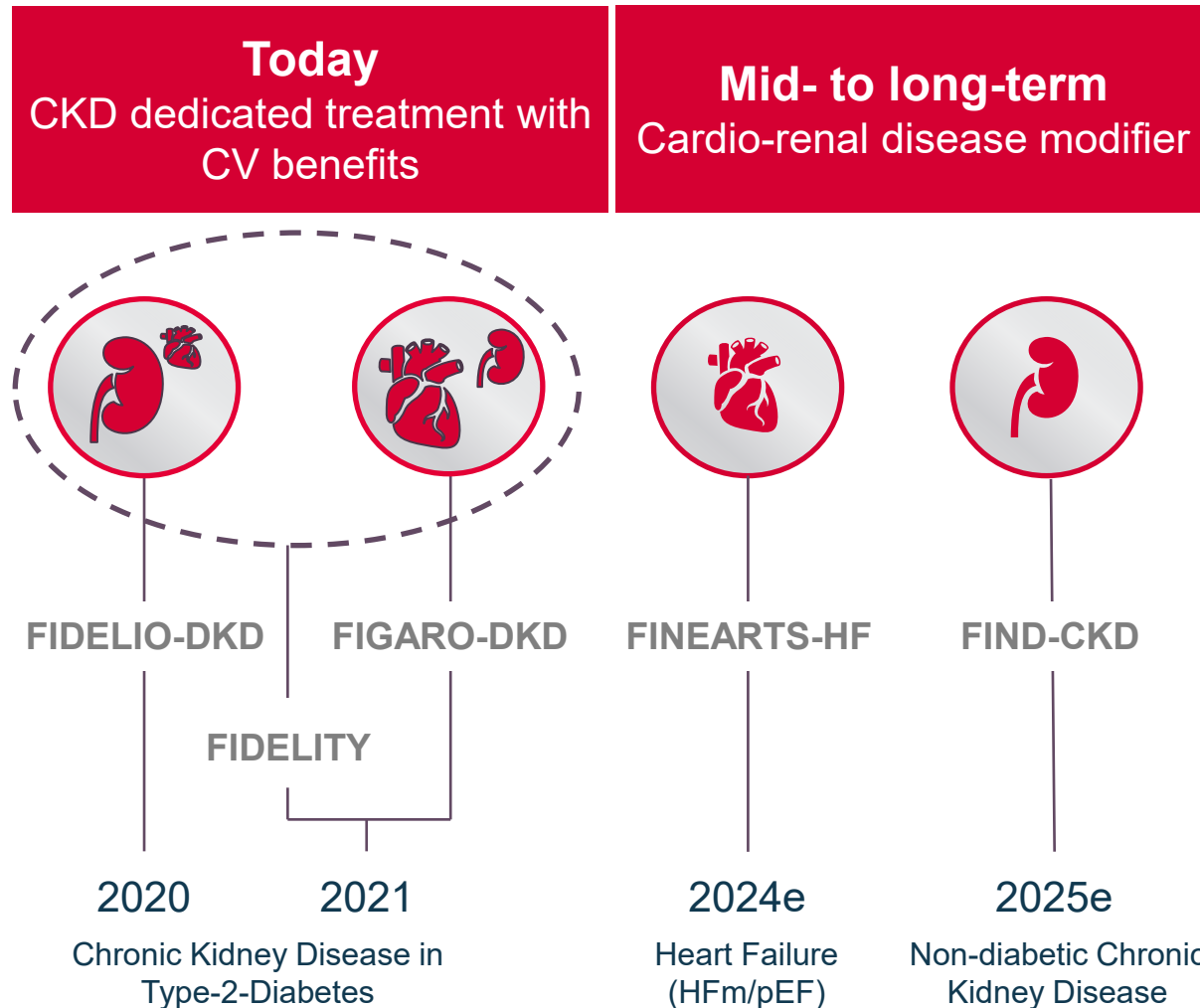
<sup>2</sup> In collaboration with Orion Corporation

PSP = Peak Sales Potential

/// Bayer AG /// Investment Case /// November 2021



# Kerendia may Become a Foundational Cardio-renal Disease Modifier with a Strong Scientific and Clinical Base



- Chronic Kidney Disease in Type-2-Diabetes
  - 160 mio patients
  - Shortens life expectancy by 16 years
  - #1 cause for dialysis / transplants
- Kerendia provides kidney and heart protection for patients along the disease continuum in CKD and T2D
- New drug class on top of existing treatment paradigm
- Launched in the US
- Life-cycle management expanding into heart failure (HFm/pEF) and non-diabetic CKD

Dates indicate primary trial completion according to clinicaltrials.gov



# Global Roll-out of Launch-Products Underway



## Darolutamide (AR-Antagonist)<sup>1</sup>

- Launched in nmCRPC - global roll-out underway
- Differentiated clinical profile - 31% OS benefit & favourable safety profile (ARAMIS)
- Prim. completion of phase III trial in mHSPC with chemo in 2021e (ARASENS)
- New phase III trial in mHSPC without chemo (ARANOTE)
- Peak sales potential  $\geq$ €1bn



## Larotrectinib (TRK-inhibitor)

- First and only selective TRK inhibitor
- Tumor agnostic label - unprecedented clinical benefit in 17 tumor types
- High overall response rate across adults (71%) and pediatric (92%) patients
- CNS efficacy demonstrated
- Peak sales potential  $>$ €750m



## Vericiguat (sGC-stimulator)<sup>2</sup>

- Launched in the US for the treatment of chronic heart failure (HFrEF)
- Absolute risk reduction of 4.2 per 100 patient years for the primary endpoint demonstrated in pivotal VICTORIA trial
- Submitted for marketing authorization in multiple countries worldwide.
- Peak sales potential  $\sim$ €500m (as reported by Bayer)

<sup>1</sup> In collaboration with Orion Corporation

<sup>2</sup> In collaboration with Merck & Co. Inc., Kenilworth, NJ, USA



# We are Targeting to Significantly Expand our Presence in Select Areas of Oncology where One Blockbuster can Build a Franchise

## Key elements to achieve our growth aspiration



*Key sales contributors, graphic illustrative*

- Realize blockbuster potential of NUBEQA
- Expand prostate franchise with NUBEQA and Xofigo
- Continue to execute launch of VITRAKVI
- Expand into IO-combo opportunities with Stivarga
- Accelerate early pipeline projects
- Seek external growth opportunities through BD&L
- Continue to invest in next generation disruptive technologies

# Highlighting Late-/Mid-stage Pipeline Opportunities and Scientifically Appealing Early R&D Assets

## Late-/Mid-Stage Opportunities<sup>1</sup>



### Finerenone

- Non-diabetic CKD
- Heart Failure



### Factor XI(a) portfolio

- Thrombo-embolic diseases



### Elinzanetant (KaNDy NT-814)

- Vasomotor symptoms during menopause



### P2X3 Receptor Antagonist

- Multi-indication opportunity

## Scientifically Appealing Early Assets<sup>1</sup>



### Precision Molecular Oncology

- EGFRex20 inhibitor
- ATR inhibitor



### Targeted Alpha Therapies

- Thorium conjugates



### CAR T-Cell Immuno-oncology

- Collaboration with Atara Biotherapeutics



### Gene Therapy

- AskBio AAV gene augmentation platform



### Cell Therapy

- BlueRock iPSC technology platform

<sup>1</sup> selected examples



# External Innovation to Accelerate Replenishment of Pipeline and Broaden Modalities

## Selected High-Level Overview

### Momentum Significantly Increased

---

>25 **Transactions** signed in 2020

- Deals covering the entire spectrum from **equity investments** (with LEAPS), over **licensing agreements** to **acquisitions**
- **Active portfolio management** taking internal assets outside (eg. Vincer Pharma)

### Strategic Focus

---

- Venturing into **new modalities** (Cell & Gene Therapy)
- Broadening the **Oncology** pipeline (eg. Systems Oncology, Atara)
- Commercial partnerships in **China** (eg. Hua Medicine)
- Deals in the **Digital** Space (eg. R&D: Schroedinger, Exscientia, Recursion; Commercial: OneDrop)
- Continued augmentation of core therapeutic areas: (**WHC**: KaNDy Therapeutics)
- Strengthening the **Cardiovascular** pipeline (Curadev, Broad Institute)



# Our Cell & Gene Therapy Strategy Builds on Four Integrated Platforms to Drive the Next Wave of Innovation at Pharma

## Gene Augmentation



- Industry-leading AAV vector gene augmentation platform
- Monogenic & pathway diseases
- CDMO business (Viralgen) already generates revenues

## Stem Cells



- Creating induced pluripotent stem cells (iPSC) with broad differentiation
- Create an entirely new generation of cellular medicines
- Ph 1 for lead program in Parkinson's disease

## Allogeneic Cell Therapy

### Collaboration with Atara Biotherapeutics

- Next-generation, mesothelin-directed CAR T-cell therapies
- Focus on potential allogeneic, "off the shelf" tumor therapies

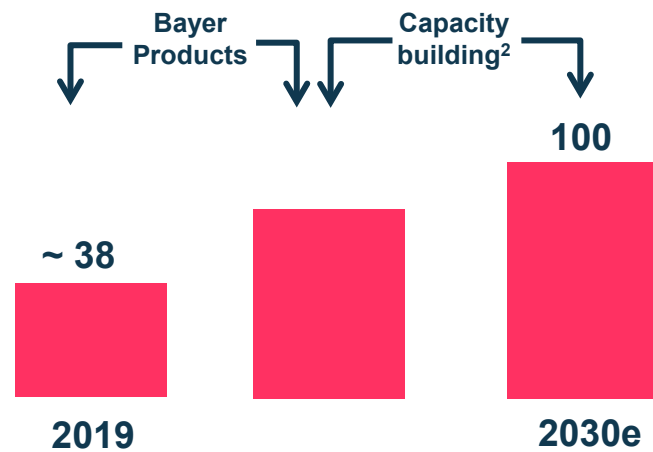
**Gene Editing** as cross-functional enabling technology





# Sustainability is Fully Embedded in our Strategy

## ▶ Providing **100m women** in LMIC<sup>1</sup> with **access to modern contraception**



## ▶ Implementing **patient affordability programs** around the world

We aim to broaden access to our pharmaceutical products to 100m people in low- and middle-income countries

- “Health for All - Hunger for None” are core to our raison d’être at Pharma
- Measurable targets linked to incentive scheme
- Adopting an equitable pricing approach that incorporates country-level affordability.
- Focus on LMIC as priority in terms of pricing flexibility and patient affordability program implementation.

Numbers reflect women using modern contraception (millions) <sup>1</sup> LMIC: low and middle income countries

<sup>2</sup> Capacity building refers to the development of knowledge, skills, commitment, structures, systems and leadership to enable and strengthen self-reliance and resilience of the local health systems and of the key players towards family planning and sexual reproductive health. We aim to do leverage partnerships to create impact at scale.



# Mid-term Targets for Pharma Reflect Limited Impact from the LoE for Xarelto

## Sales / Sales Growth

	act	At constant currencies <sup>1</sup>	At month-end Dec' 20 rates <sup>2</sup>	
	2020	2021e*	2022/2023e <sup>3</sup>	2024e <sup>3</sup>
Pharmaceuticals	€17.2bn	~ 6%	3% to 5%	Low- to mid-single-digit decline

## Divisional Drivers

- Top-line trough due to Xarelto LoE expected in 2024 - returning to growth thereafter *\*as presented at the CMD in March 2021*
- New launches (eg. Nubeqa, Verquvo, Finerenone) to drive growth
- Continued focus on tight expense control
- Investing in new launches

## EBITDA margin (before special items)

	2020	2021e	2022/2023e	2024e
Pharmaceuticals	34.9%	~32%	32% to 34%	Above 30%

cpa: currency and portfolio adjusted

\* As in November 2021

<sup>1</sup> Reflects our 2021 plan at the average actual currencies for 2020 <sup>2</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB

<sup>3</sup> Sales growth projections per March 11,12, 2021 Capital Markets Day



Science for a Better Life  
**Winning in  
Consumer Health**



**Investment Case**

November 2021 / Bayer AG





# Winning in Consumer Health

1

Market & Position

2

Strategy

3

Sustainability

4

Financial Targets

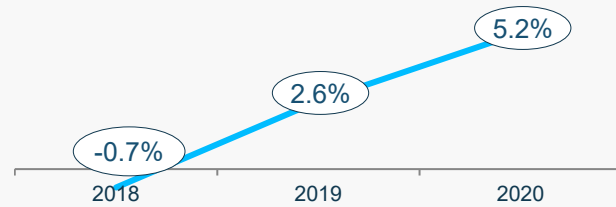


# Consumer Health: A Leading Global OTC Player

## FINANCIALS

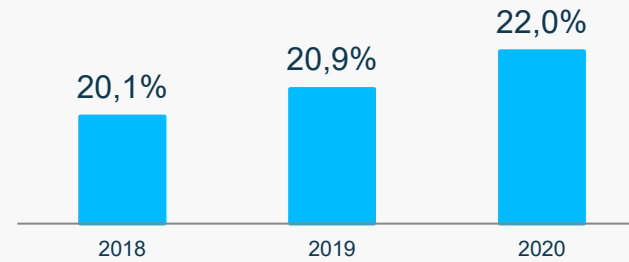
### Sales development

In €m / % yoy cpa



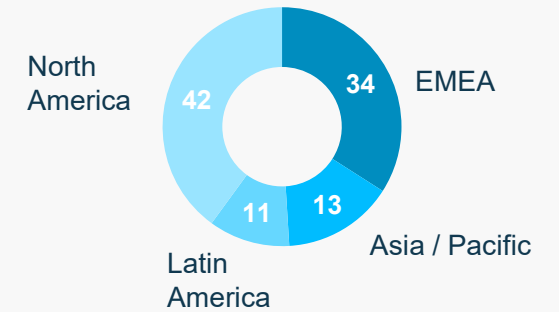
### EBITDA margin development

In %, before special items



### Sales by region: €5.1bn

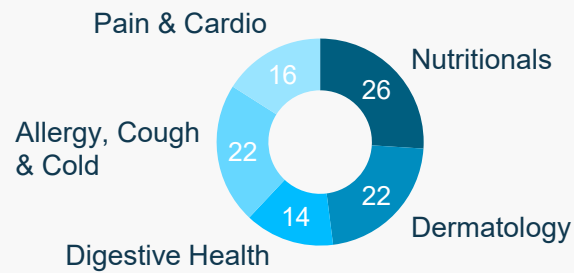
In %, in 2020



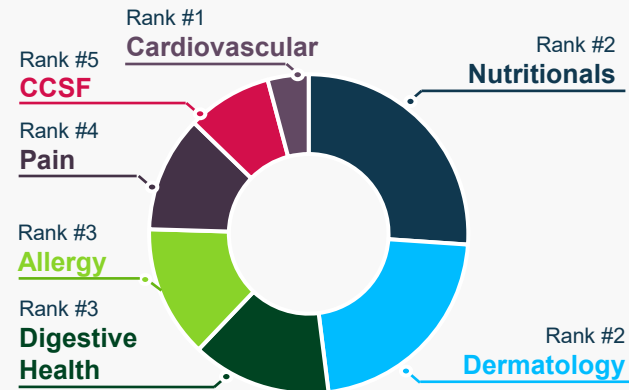
## PRODUCTS

### Sales by categories: €5.1bn

In %, in 2020



### Market positions by category<sup>1</sup>



### Key products

#### Pain & Cardio:



#### Dermatology:



#### Digestive Health:



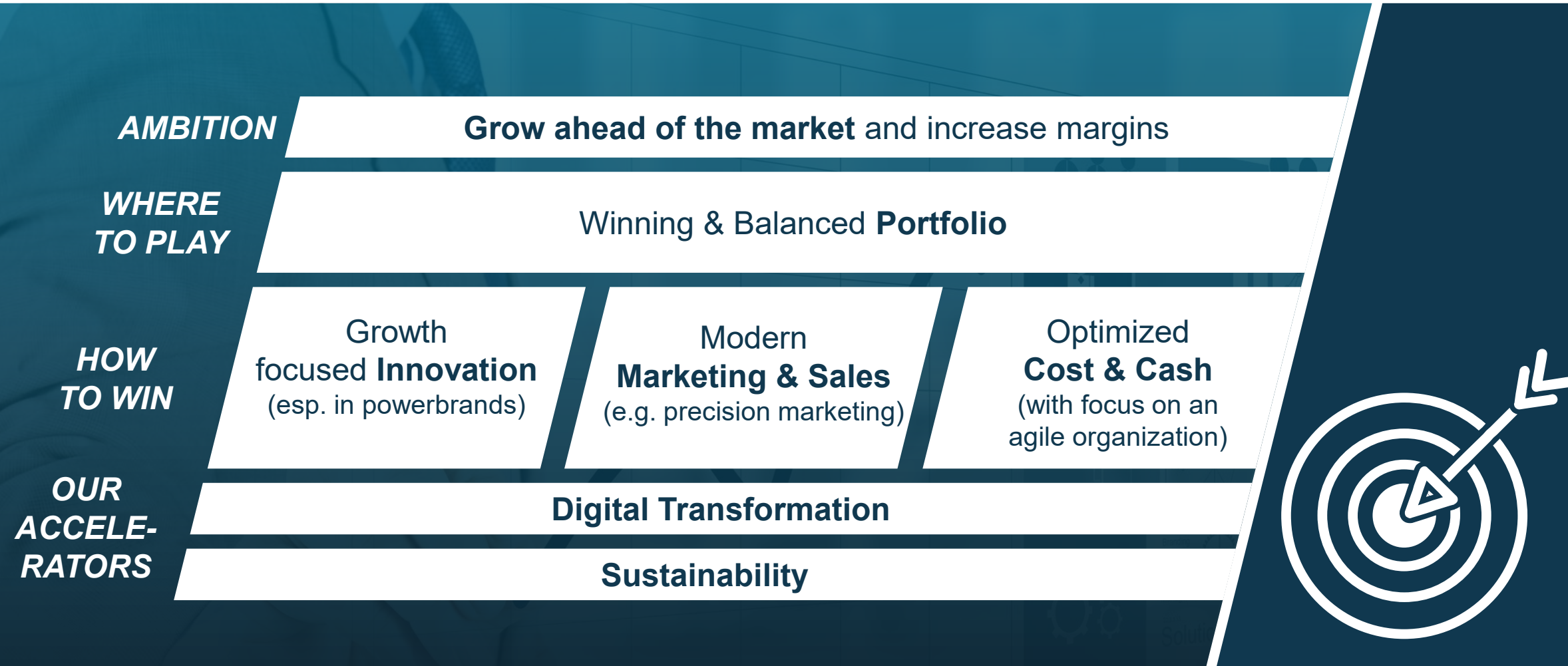
#### Allergy & Cold:



<sup>1</sup> Nicholas Hall & Company DB6 October 2020



# A Multifaceted Plan to Drive Further Growth



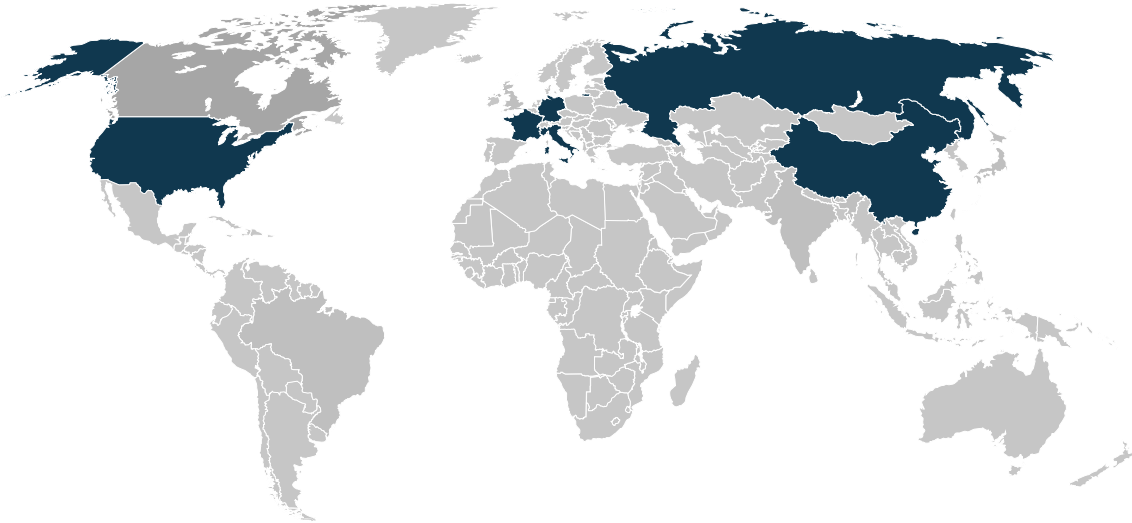


# Driving Disproportionate Growth in Attractive Segments and Markets

Strong positions in 7 out of Top 10 OTC markets



■ Top 5 position



Accelerate growth in fast-growing and profitable markets



USA



CHINA



India



South-East Asia





# Accelerating Growth from Innovation

Iconic Global and Local Brands Built over Decades



Note: xx = Year of brand launch



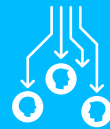


# Modernizing Our Brand Building and Sales Capabilities

**Brands with Purpose**



**From Mass to Precision Marketing**



% Precision marketing<sup>1</sup>

**25%**

2018

**50%**

2020

**80%**

2024 - Ambition

**Accelerating E-commerce**



% Net Sales<sup>2</sup>

**3%**

2018

**7%**

2020

**15%+**

2024 - Ambition

<sup>1</sup> Percentage of digital media which is data-driven precision marketing

<sup>2</sup> Percentage of net sales which is through e-commerce channels



# Taking Bold Steps on Sustainability

**2030 Goal** Expand access to everyday health for 100 million underserved consumers

**Societal** **Environmental**

**Health Literacy** **Accessible Products** **Carbon Neutral Production** **Sustainable Products**

Partnerships & brand purpose activations for underserved



Vitamin Angels, Kirk Humanitarian

Affordable formats, innovations, and go-to-market (GTM) models



Accessible SKUs & relevant GTMs

CO2 reduction: Energy efficiency and renewable energy projects



Removal of ozone depleting liquids from HVAC plants

Sustainable packaging



Baselining of environmental impact of packaging & finding alternatives



# Consumer Health: Sustainable Profitable Growth

## Sales / Sales Growth

	act	At constant currencies <sup>1</sup>	At month-end Dec' 20 rates <sup>2</sup>
	2020	2021e*	2022-'24e <sup>3</sup>
Consumer Health	€5.1bn	~ 6%	3 to 5%

## Divisional Drivers

- Net Sales to grow above market
- cEBITDA improvement through growth acceleration and continued efficiency gains
- Focus on continued Cash Flow improvement

## EBITDA Margin (before special items)

	2020	2021e	2024e
Consumer Health	22.0%	22 - 23%	Mid-20's

\* As updated in November 2021

cpa: currency and portfolio adjusted

<sup>1</sup> Reflects our 2021 plan at the average actual currencies for 2020 <sup>2</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB

<sup>3</sup> Sales growth projections per March 11,12, 2021 Capital Markets Day



# Investment Thesis

## Key Takeaways

**1**

**We are a global leader in Health & Nutrition that addresses societal megatrends**

**2**

**We are well-positioned to shape disruption in the bio-revolution**

**3**

**We expect to translate innovation into profitable mid-term growth**

**4**

**We expect to improve our profitability by accelerating our transformation**

**5**

**We have disciplined capital allocation priorities: delever, pay dividends and invest**

**6**

**We have integrated sustainability in our business strategy and incentive systems**



Science for a Better Life  
**A Global Leader in  
Health & Nutrition**

//////////

**Investment Case**

November 2021 / Bayer AG

