



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

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**Investment Case**

May 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.

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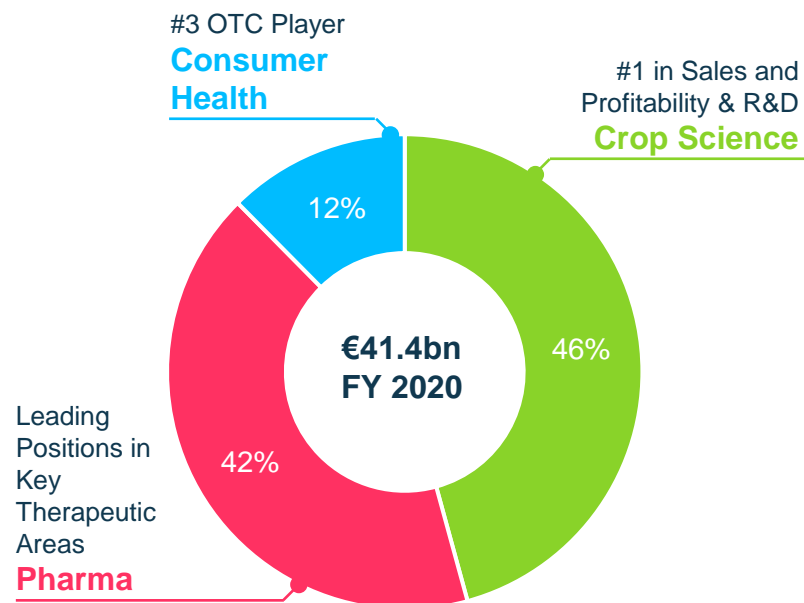
The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.



# 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



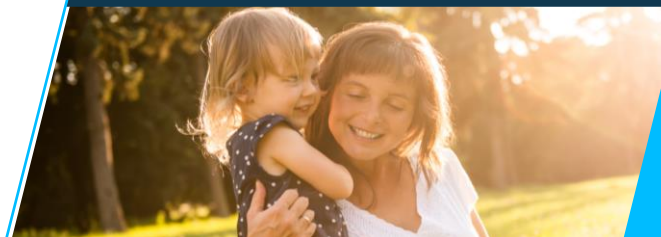
~€100bn<sup>1</sup>

### 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**

## Pharma/Consumer Health

## Crop Science

### Aging Population



**People 60+ more than doubling<sup>1</sup>**

>20% of total population<sup>1</sup>

**Preserve and restore health**

### Growing Population

**+2.2bn people<sup>1</sup>**



**+50%**

more food and feed required to meet growing demand<sup>2</sup>

**Secure sufficient supply of quality food**

### Pressure on Ecosystems



**-17%**

Harvest losses from climate change<sup>3</sup>

**-20%**

2016 2050

Significant loss in arable land per capita<sup>4</sup>

**Use natural resources more efficiently and responsibly**

**We leverage science to address these societal needs – with the ultimate goal to improve people's lives**



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** *SmartStax<sup>PRO</sup>*
- **Soybean Herbicide Trait Stack with Five-Tolerances** *DELARO Complete*
- **Fox Supra (Indiflin®)<sup>1</sup>**

## Pharmaceuticals Innovation Pipeline

Annual R&D Investment:

€2.7bn

Key Current Launch Products:



Key Mid-/Late-Stage Pipeline Opportunities:

- Finerenone**
  - CKD in T2 Diabetes Patients
  - 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 Dec' 20 rates<sup>2</sup>

1

Enable  
growth

**Sales**  
in €bn

41.4

42 - 43

40 - 41

43 - 45

2

Drive  
profitability

**Core EPS**  
in €

6.39

6.10 - 6.30

5.60 - 5.80

7.00 - 7.50

3

Focus  
on cash

**Free Cash Flow**  
in €bn

1.3

-3 - -4\*

-3 - -4\*

~5\*\*

2020

2021e

2021e

2024e

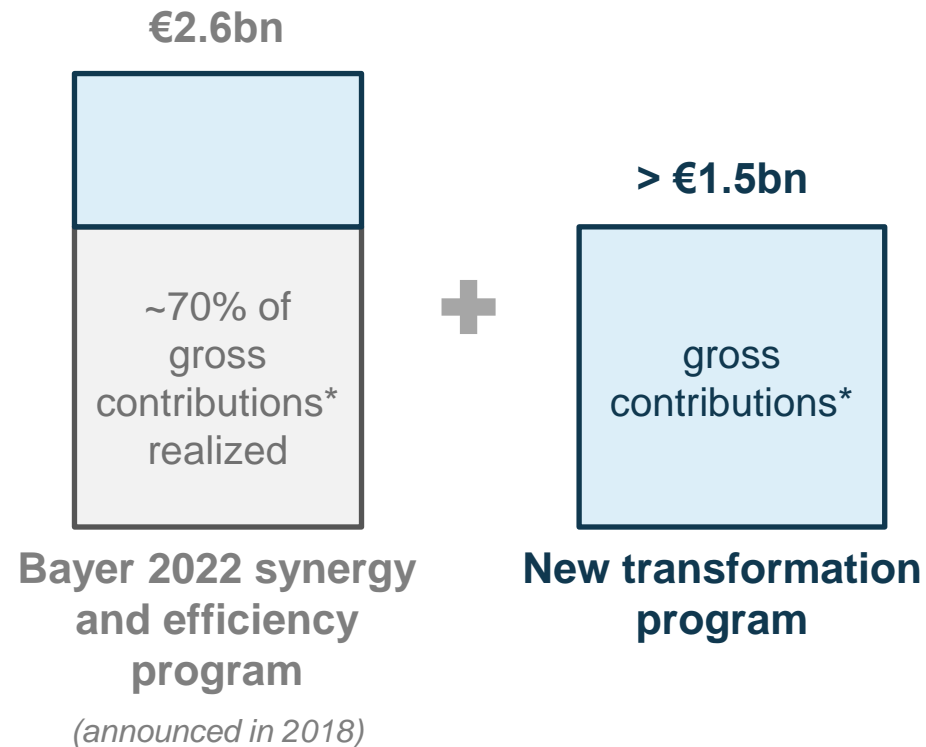
<sup>1</sup> Reflects our 2021 plan at the average actual currencies for 2020 <sup>2</sup> Currency assumptions based on month-end December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB  
\* Settlement payouts of ~€8bn included, \*\* Settlement payouts and special items 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

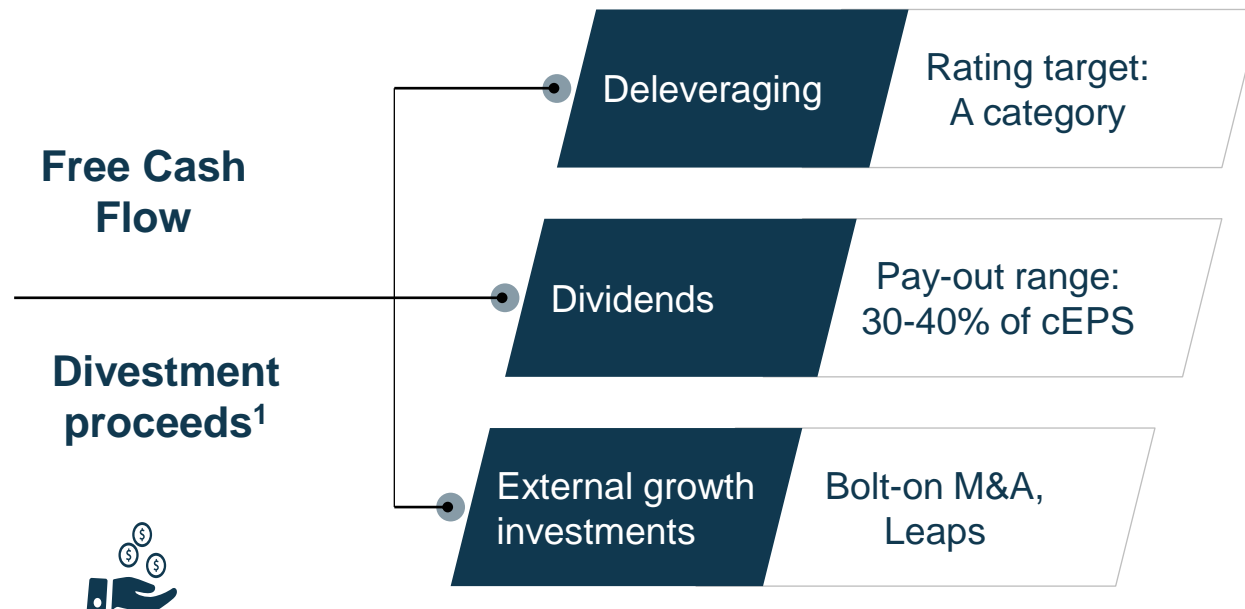




# Disciplined Capital Allocation to Delever, Pay Dividends and Invest

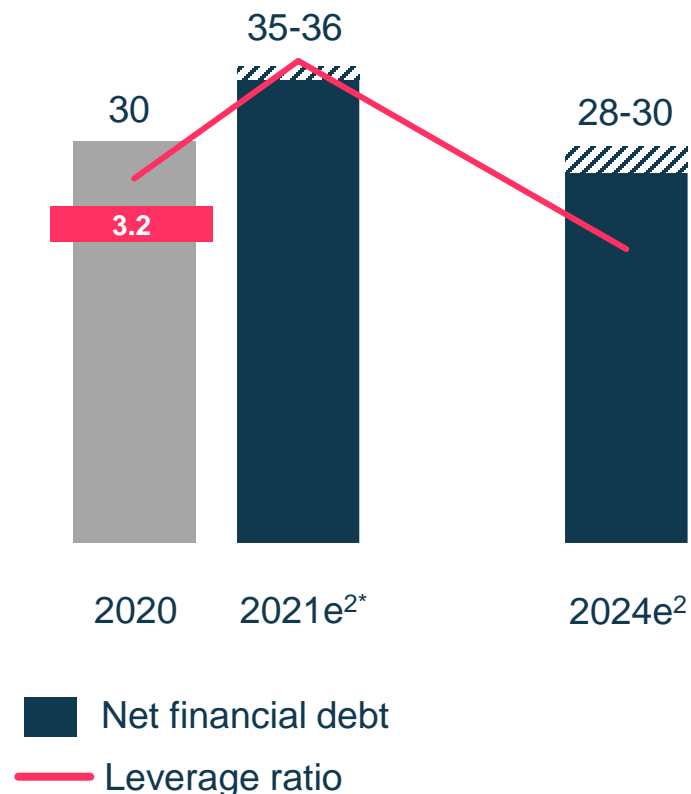
Expect Net Debt to Increase in 2021 with Planned Settlements and Return to €28-30bn by 2024

## Capital allocation priorities



## Net financial debt development

In €bn



<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 December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 24.4 MXN, 91.5 RUB  
 \* incl. expected currency impact of ~€1bn (Impact is calculated as difference to constant currencies) ▨ = 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

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## Investment Case

May 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

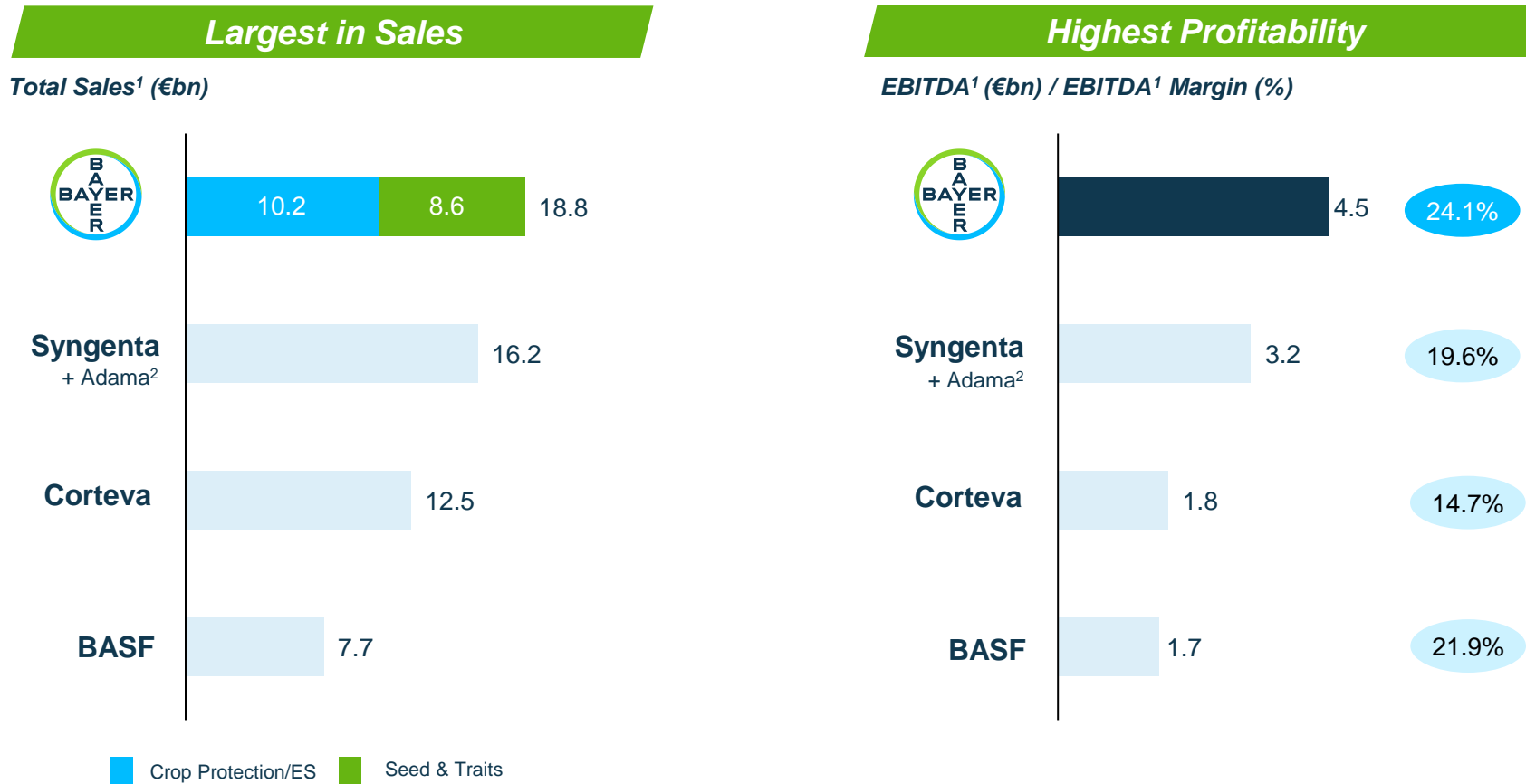
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Financial Targets



# The Established Leader in Crop Science

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



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

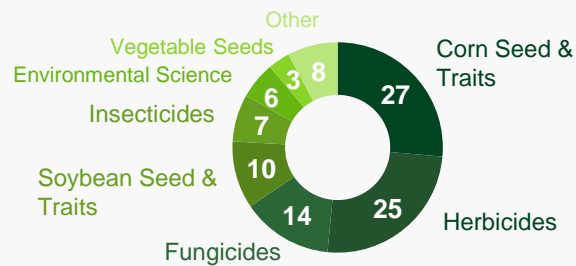
<sup>2</sup> Represents the legacy Syngenta results plus Adama



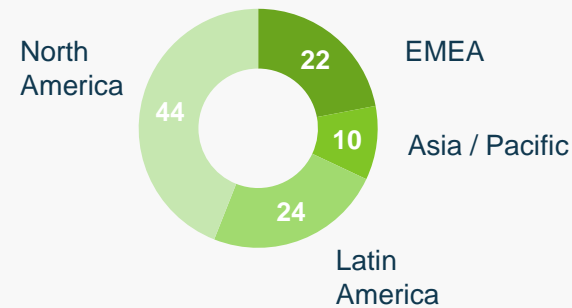


# Global #1 in Seed & Traits with Leading Crop Protection Portfolio

## Product areas – Bayer Crop Science In %, based on sales 2020 €18.8bn



## Sales by Region – Bayer Crop Science In %, in 2020 €18.8bn

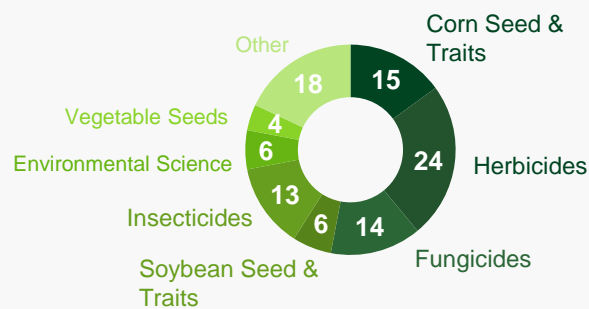


## Market Positions<sup>1</sup>

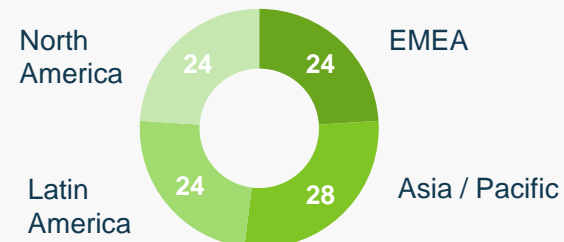


Corn S&T	#1
Soybean S&T	#1
Vegetable Seeds	#2
Herbicides	#1
Fungicides	#2
Insecticides	#3

## Product areas – Ag Input Market In %, based on sales 2020 ~€100bn<sup>1</sup>



## Sales by Region – Ag Input Market In %, in 2020 ~€100bn<sup>1</sup>



## Key Products

### Crop Protection:

Xpro

FOX

SERENADE

CLIMATE  
FIELDVIEW

Luna

VELUM  
TOTAL

vayego

ADENGO»

CORVUS

Roundup  
POWERUP

XTENDIMAX  
Weed-S

### Seed & Traits:

DELTA PINE

Seminis  
grow forward

De Ruiter

ROUNDUP READY 2  
XTEND  
SOYBEANS

DEKALB

SmartStax  
Bt COMPLETE

ASGROW

INTACTA RR2 PRO

<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

Crop Protection

Seed and Traits

~€100bn<sup>1</sup>

## Demand



**50%**

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



**10<sub>bn</sub>**

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>



**12<sub>m</sub>**

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>	EBITDA Margin <sup>2</sup>	Sales Growth <sup>1</sup>	EBITDA Margin <sup>2</sup>	
~ 2%	~23%	3% to 5%	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 December spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 8.00 CNY, 127 JPY, 24.4 MXN, 91.9 RUB



# Innovation, Integrated Offerings Drive Crop Protection Growth



<sup>1</sup> Company estimates, currency and portfolio adjusted.



# Deploying New Corn Hybrids and Traits to Grow Sales

Expect 3-4%<sup>2</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: ~91m acres

Germplasm Share: >50%

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

Market Size: ~20m acres

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

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

Market Size: ~48m acres

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

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

Market Size: ~18m acres

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

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

Market Size<sup>1</sup>: ~60m acres

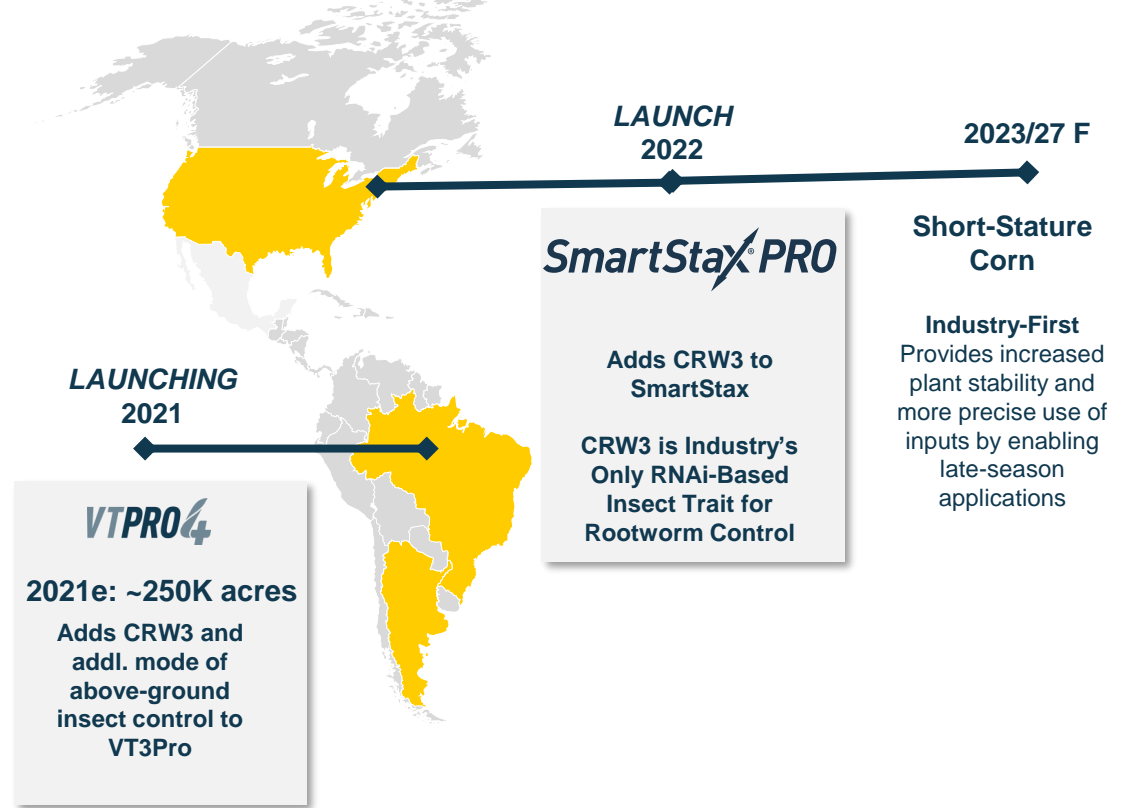
Germplasm Share: ~20%

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

Market Size: ~6m acres

Germplasm Share: >70%

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.



Note: Size of market, market position and germplasm share measured as of 2020.

<sup>1</sup> Eu27 +UK, Russia and Ukraine <sup>2</sup>In hybrid corn market only

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

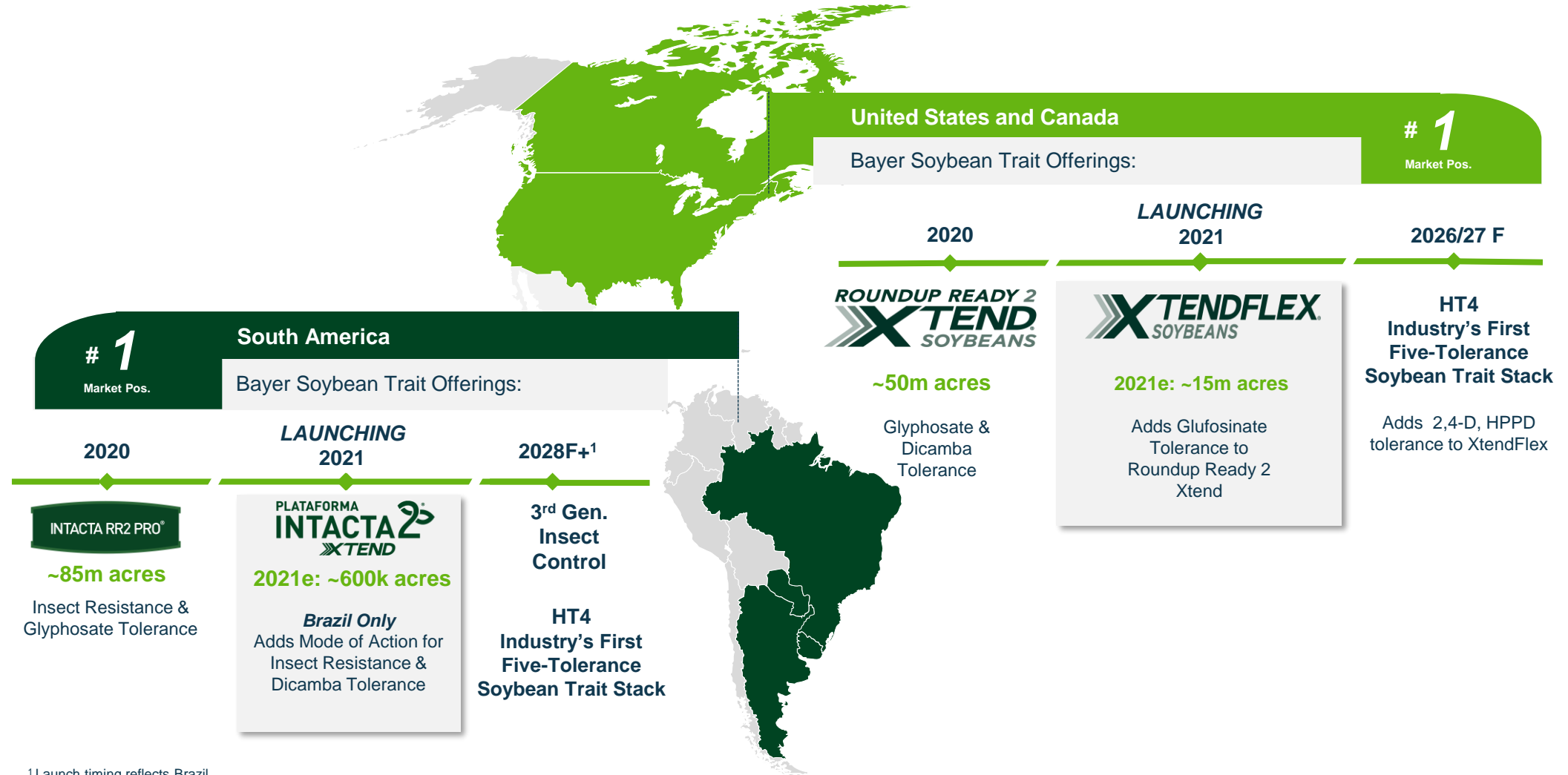
/// Bayer AG /// Investment Case /// May 2021





# Upgrading the Americas to Next-Gen Soybean Trait Technology

Expect 1-2%<sup>2</sup> Soybean S&T Sales CAGR 2021-'24, After Stabilizing in 2021 Transition Year



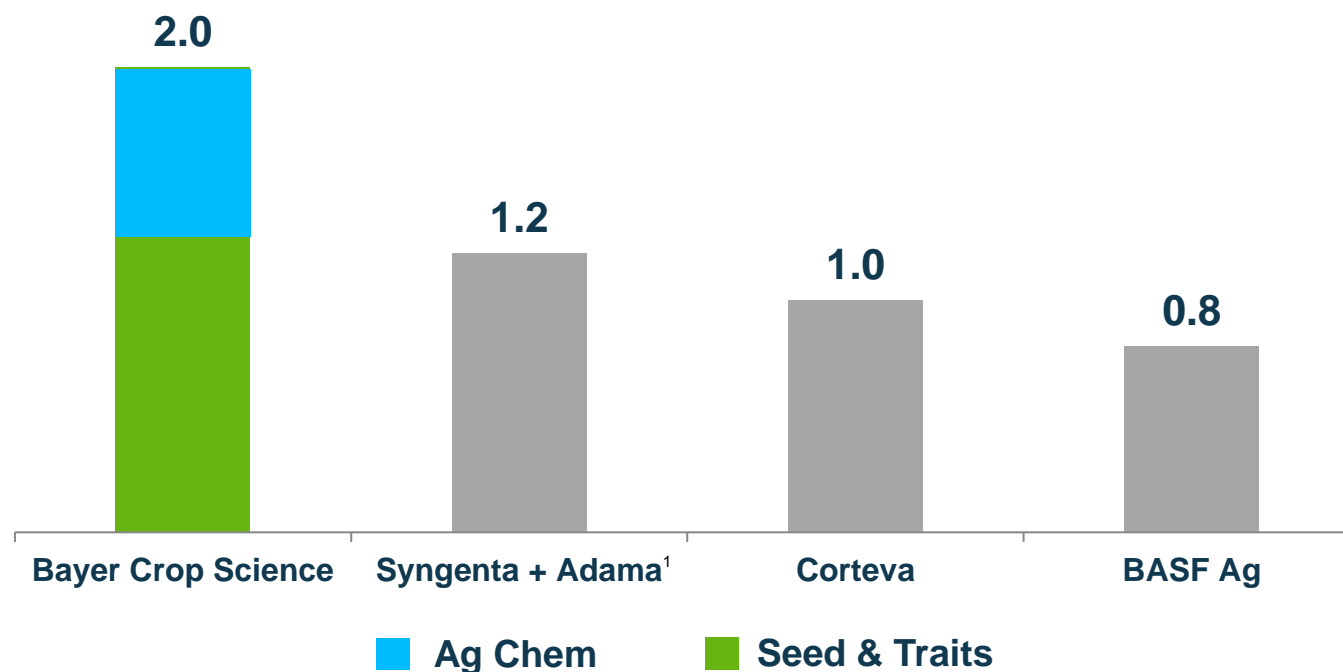
<sup>1</sup> Launch timing reflects Brazil  
<sup>2</sup> Currency and portfolio adjusted



# 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

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

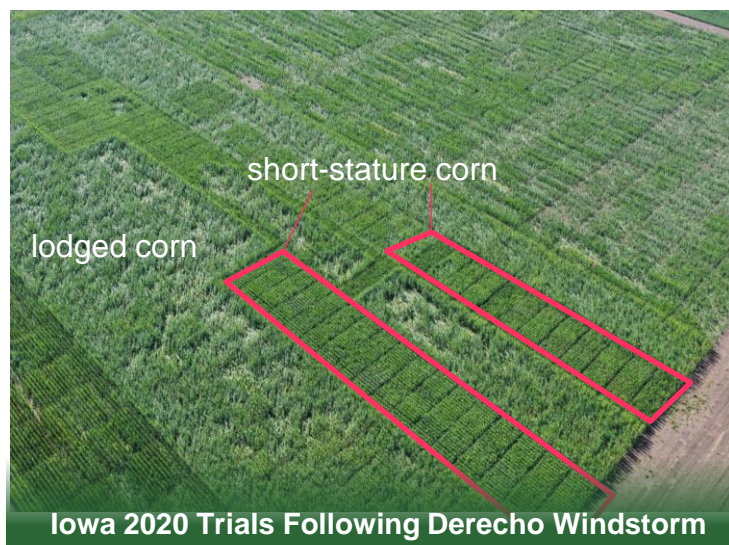
Anticipated Fit on >220m Acres Enabled by Three Development Approaches

## 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**

- **~150m** subscribed acres in 2020
- **#1** brand in digital ag
- Operate in **23** countries

CLIMATE  
**FIELD  
VIEW**

- **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**

- Showcasing portfolio strength
- Predicting seed & chemistry performance
- Partnering on outcomes

**Carbon  
Farming**

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

**Smallholder  
Access**

- 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**

<sup>1</sup> Includes sales projections from outcome based business models and carbon models only. Additional sales volumes of seed or crop protection as a result of tailored recommendations not considered in the estimate, nor are increased sales to smallholder farmers.



# 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

Crop  
Science

## Sales / Sales Growth

Actual	cpa	At month-end Dec. 20 rates <sup>1</sup>	
2020	2021e	2021e	2022-'24e
€18.8bn	~ 2%	~€18bn	3% to 5%

## EBITDA Margin (before special items)

		At month-end Dec. 20 rates <sup>1</sup>	
2020	2021e		2024e
24.1%	~ 23%		27% to 29%

## Divisional Drivers

CAGR cpa  
2020-'24<sup>2</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
- Decline in 2021, then 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.

cpa: currency and portfolio adjusted

<sup>1</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>2</sup>CAGR from 2020 base year.



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

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**Investment Case**

May 2021 / Bayer AG





# Transforming Pharma to Deliver Sustainable Long-Term Growth

1

Market & Position

2

Strategy

3

Growth Drivers

4

Innovation

5

Sustainability

6

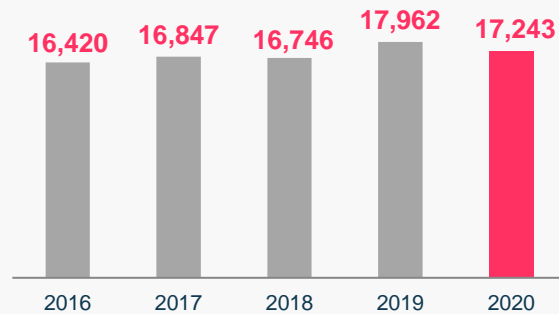
Financial Targets



# Pharma: Focused on Therapeutic Areas with High Unmet Needs

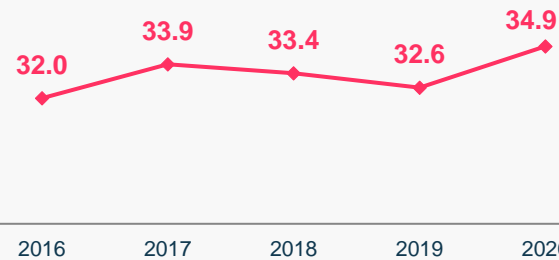
## Sales development

In €m



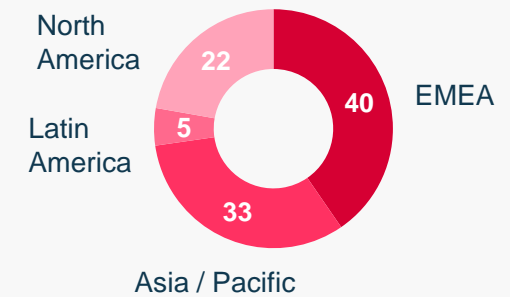
## EBITDA margin development

In %, before special items



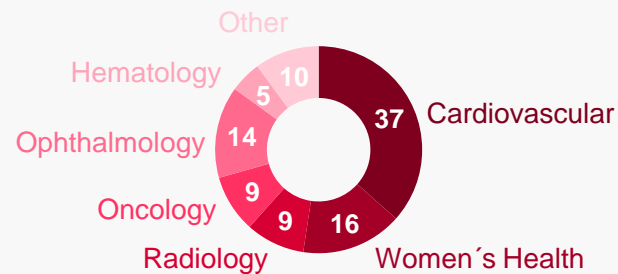
## Sales by region

In %, in 2020



## Therapeutic areas

In %, based on sales 2020



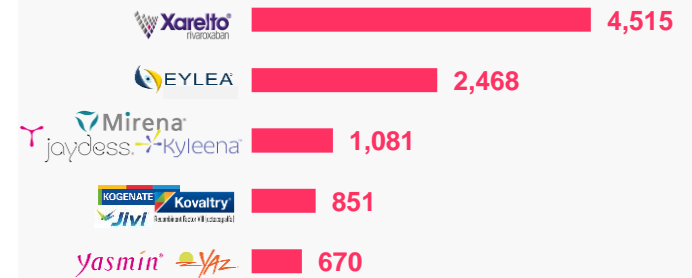
## Leading positions in key therapeutic areas



Cardiovascular  
Hematology  
Retinal Diseases  
Women's Health  
Radiology

## Top products

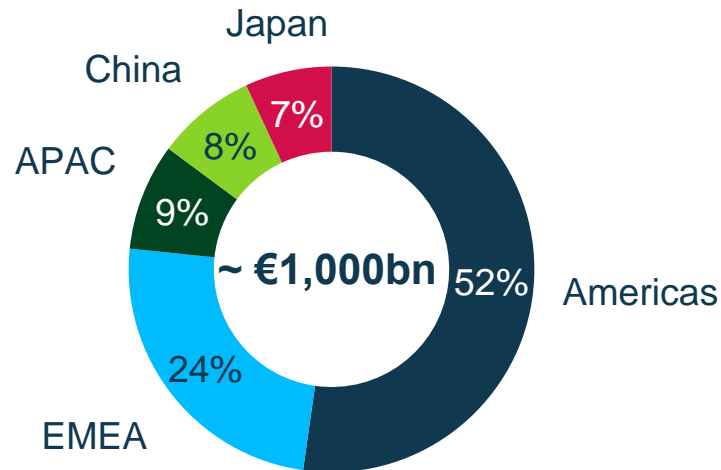
In €m, based on sales 2020



# 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



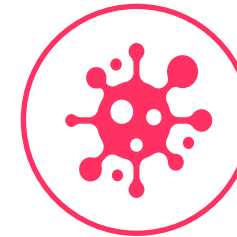
Digital Health



Cell & Gene  
Therapy



Oncology



China & US

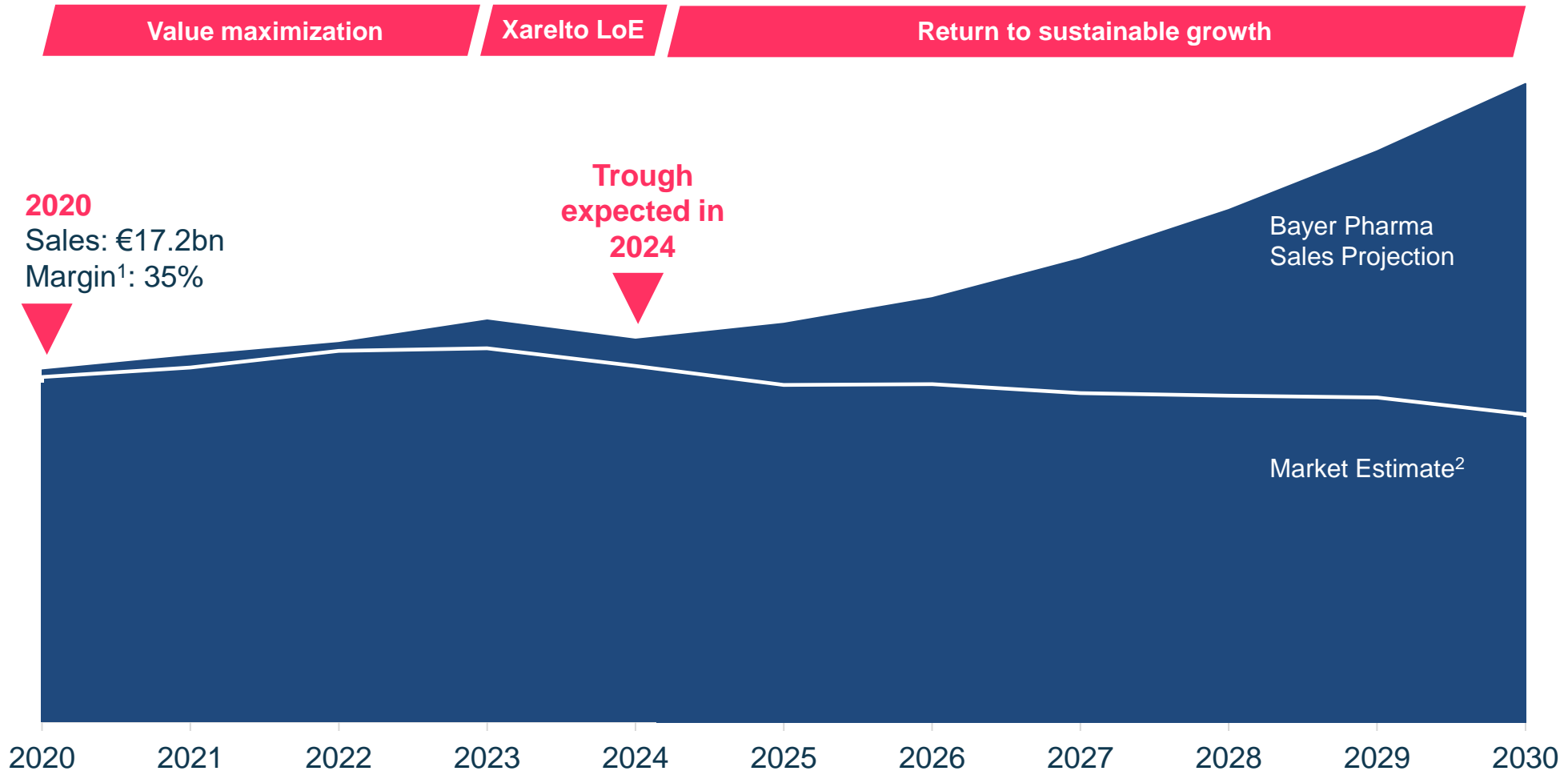


## Key Priorities

- ▶ **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



# Bayer's Long-Term Sales Projection Reveals Limited LoE Impact and Return to Sustainable Long-term Growth



<sup>1</sup> EBITDA margin before special items

<sup>2</sup> Consolidated estimates from seven major banks as of Jan. 2021

Graphic illustrative



# 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

### Finerenone

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  
PSP = Peak Sales Potential

# Global Roll-out of Three 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 ~€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

- CKD in T2 Diabetes Patients
- 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. Vincera 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

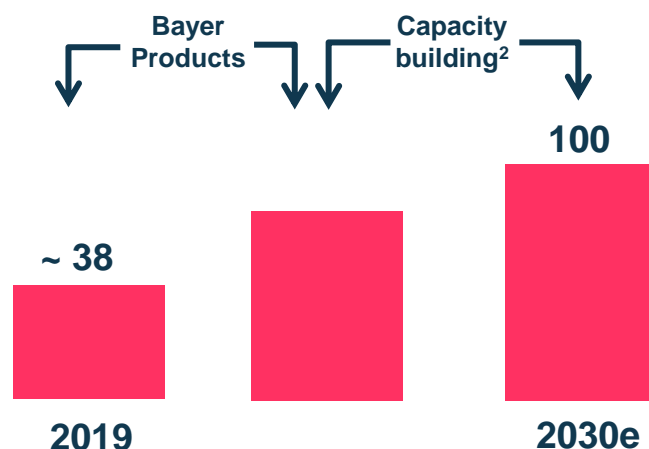
- Next-generation, mesothelin-directed CAR T-cell therapies
- Focus on potential allogeneic, "off the shelf" tumor therapies

**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 Xarelto LoE

Sales / Sales Growth					Divisional Drivers
	act	At constant currencies <sup>1</sup>	At month-end Dec' 20 rates <sup>2</sup>		
	2020	2021e	2021e	2022/2023e	2024e
Pharma- ceuticals	€17.2bn	~ 4%	~ €17.5bn	3% to 5%	Low- to mid-single-digit decline
EBITDA margin (before special items)					
	2020	2021e	2021e	2022/2023e	2024e
Pharma- ceuticals	34.9%	~32%	~32%	32% to 34%	Above 30%
<ul style="list-style-type: none"><li>• Top-line trough due to Xarelto LoE expected in 2024 - returning to growth thereafter</li><li>• New launches (eg. Nubeqa, Verquvo, Finerenone) to drive growth</li><li>• Continued focus on tight expense control</li><li>• Investing in new launches</li></ul>					

- Top-line trough due to Xarelto LoE expected in 2024 - returning to growth thereafter
- New launches (eg. Nubeqa, Verquvo, Finerenone) to drive growth
- Continued focus on tight expense control
- Investing in new launches

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



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

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**Investment Case**

May 2021 / Bayer AG





# Winning in Consumer Health

1

Market & Position

2

Strategy

3

Sustainability

4

Financial Targets

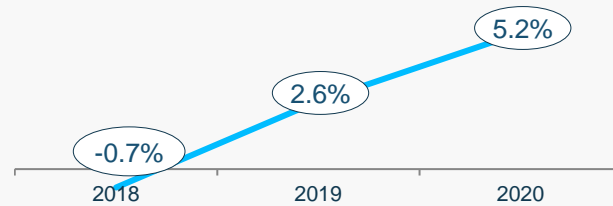


# Consumer Health: A Leading Global OTC Player

## FINANCIALS

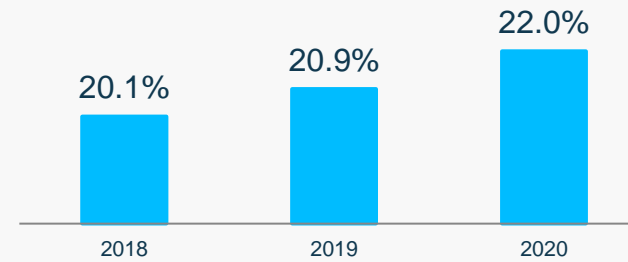
### Sales development

In €m / % yoy cpa



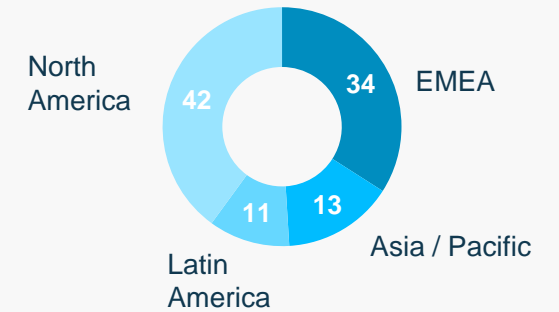
### EBITDA margin development

In %, before special items



### Sales by region: €5.1bn

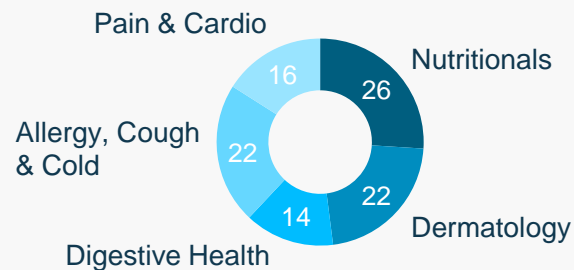
In %, in 2020



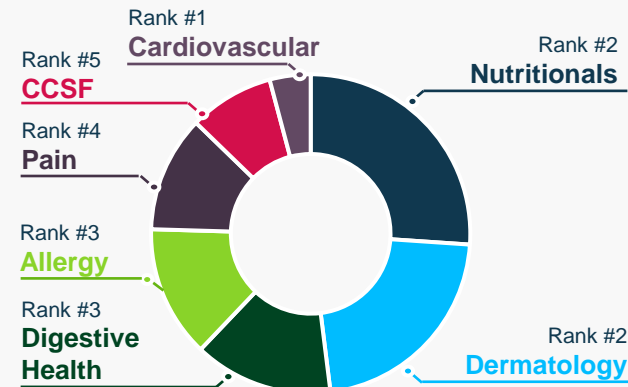
## PRODUCTS

### Sales by categories: €5.1bn

In %, in 2020



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



### Key products

#### Pain & Cardio:



#### Dermatology:



#### Digestive Health:

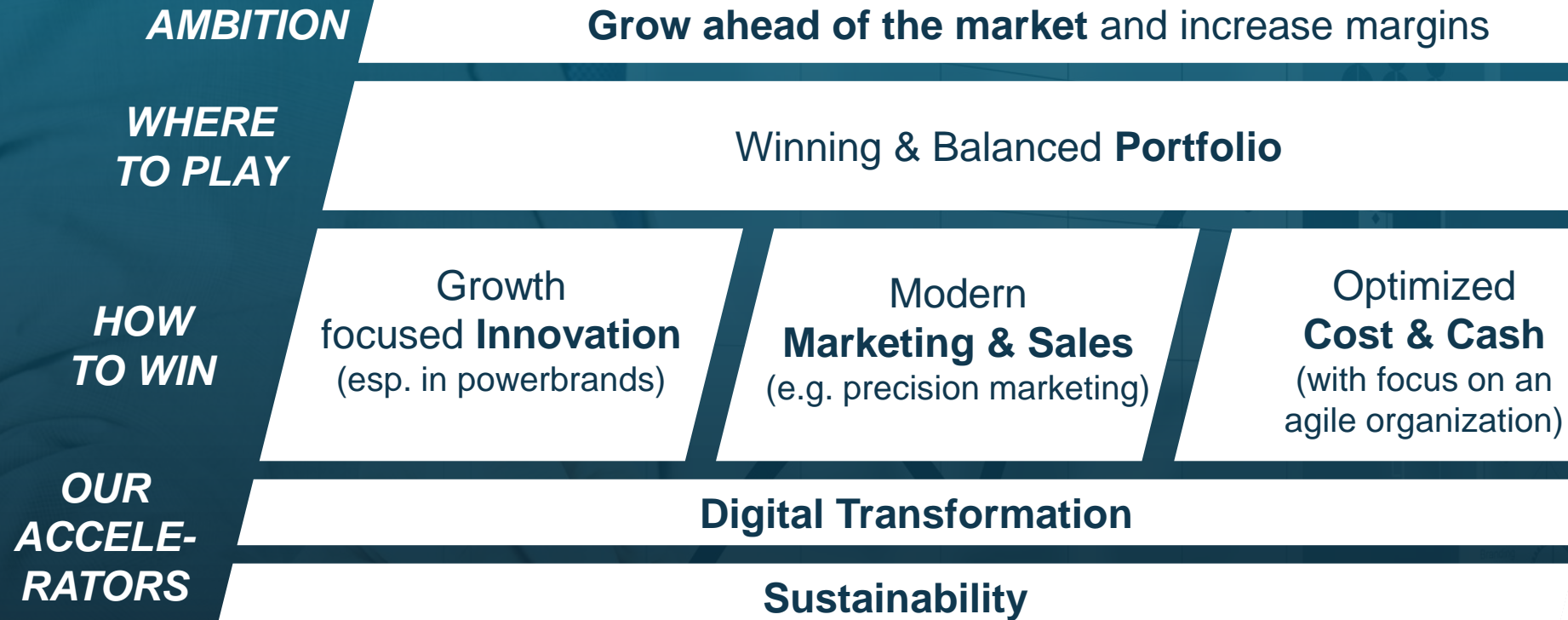


#### Allergy & Cold:



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

# A Multifaceted Plan to Drive Further Growth

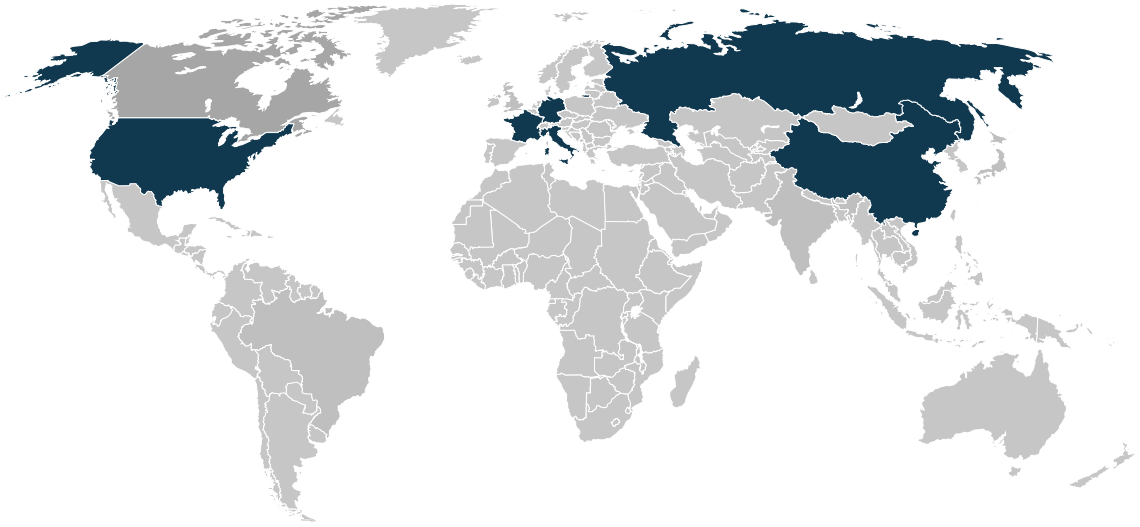


# Driving Disproportionate Growth in Attractive Segments and Markets

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

/// Bayer AG /// Investment Case /// May 2021

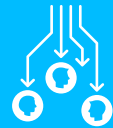


# Modernizing Our Brand Building and Sales Capabilities

**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

Partnerships & brand purpose activations for underserved



Vitamin Angels, Kirk Humanitarian

#### Accessible Products

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



Accessible SKUs & relevant GTMs

#### Carbon Neutral Production

CO2 reduction: Energy efficiency and renewable energy projects



Removal of ozone depleting liquids from HVAC plants

#### Sustainable Products

Sustainable packaging



Baselining of environmental impact of packaging & finding alternatives





# Sustainable Profitable Growth

## Sales / Sales Growth

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

## EBITDA Margin (before special items)

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

## Divisional Drivers

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

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



# 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

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## Investment Case

May 2021 / Bayer AG

