



Company Profile

Fiscal 2019



As of February 27, 2020





Agenda

// Introduction

// Financial Key Data

// Our Divisions & Enabling Functions

// Research & Development

// Our Identity



Introduction



Our Business Areas

Crop Science



// Innovative chemical & biological crop protection, seeds & traits, digital technologies & services

Pharmaceuticals



// Prescription products for cardiology, women's health care, oncology, hematology, ophthalmology, radiology and other areas

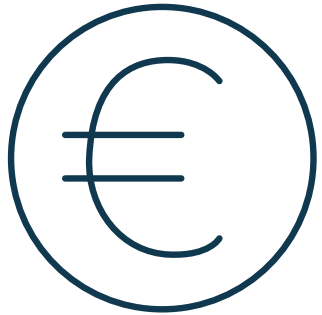
Consumer Health



// Non-prescription medicines in the categories of dermatology, nutritional supplements, pain, cardiovascular risk prevention, digestive health, allergy, and cough & cold.

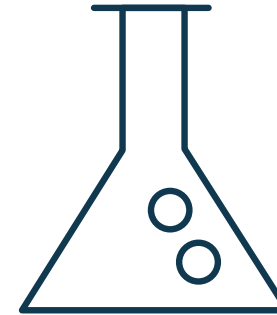


Bayer Group Key Data



Full-year sales

€**43.5** billion



Investment in
research
& development

€**5.3** billion



Employees

103,824



Countries

87

As of December 31, 2019; employees in full-time equivalents



Bayer Group Structure

Board of Management

Crop Science

Pharmaceuticals

Consumer Health

Enabling Functions



Board of Management



Werner Baumann*
Chairman



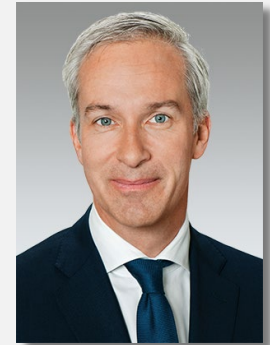
Liam Condon
Crop Science



Wolfgang Nickl
Finance



Stefan Oelrich
Pharmaceuticals



Heiko Schipper
Consumer Health

* Labor Director, Chief Sustainability Officer



Employees

As of December 31, 2019



Bayer Group

103,824 (previous year: 107,894*)

Regions

Europe/ Middle East/Africa of which Germany	46,933 24,953
North America	20,735
Asia/Pacific	22,341
Latin America	13,815

Divisions

Crop Science	33,866
Pharmaceuticals	38,553
Consumer Health	10,400
Service Functions and other	21,005

Functions

Production	40,814
Marketing and Distribution	37,665
Research and Development	16,006
General Administration	9,339

Employees in full-time equivalents

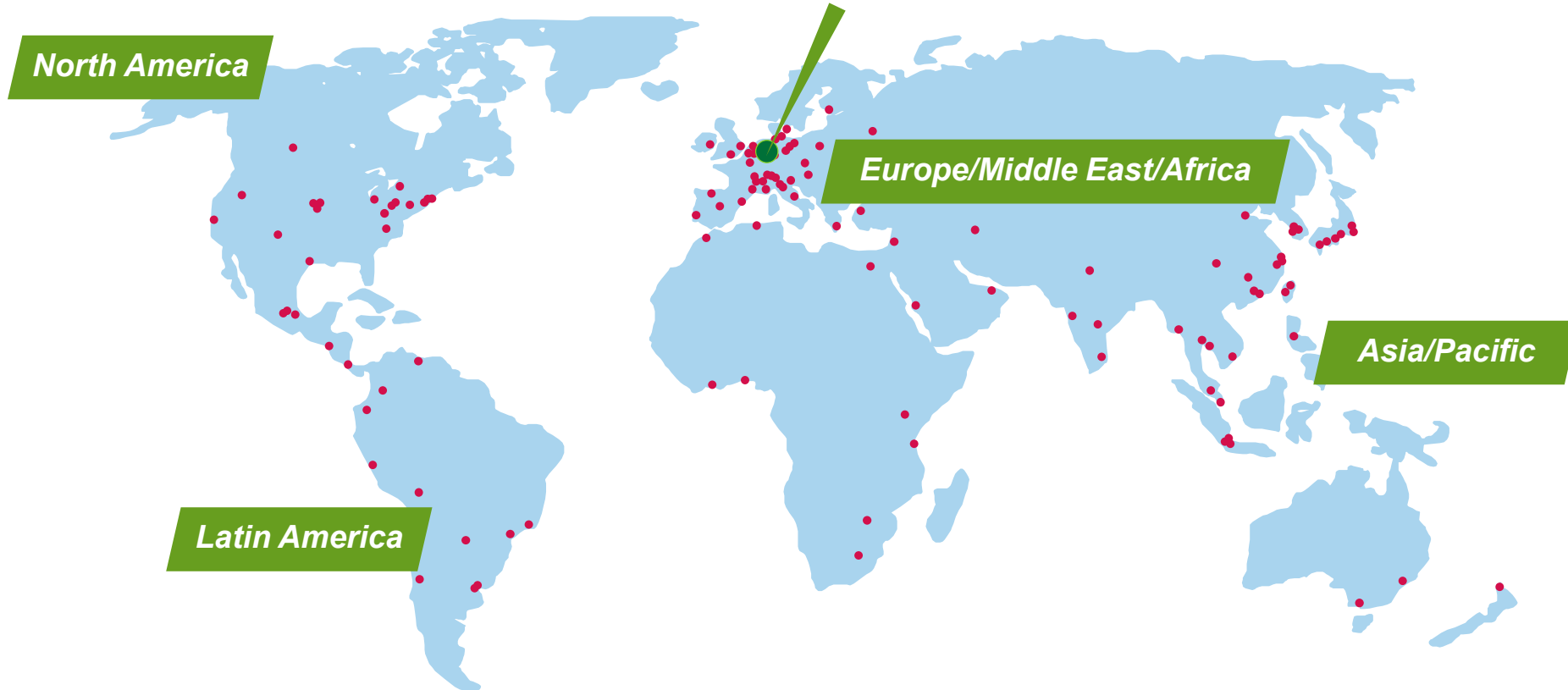
* 2018 figures restated



Key Locations/Regions

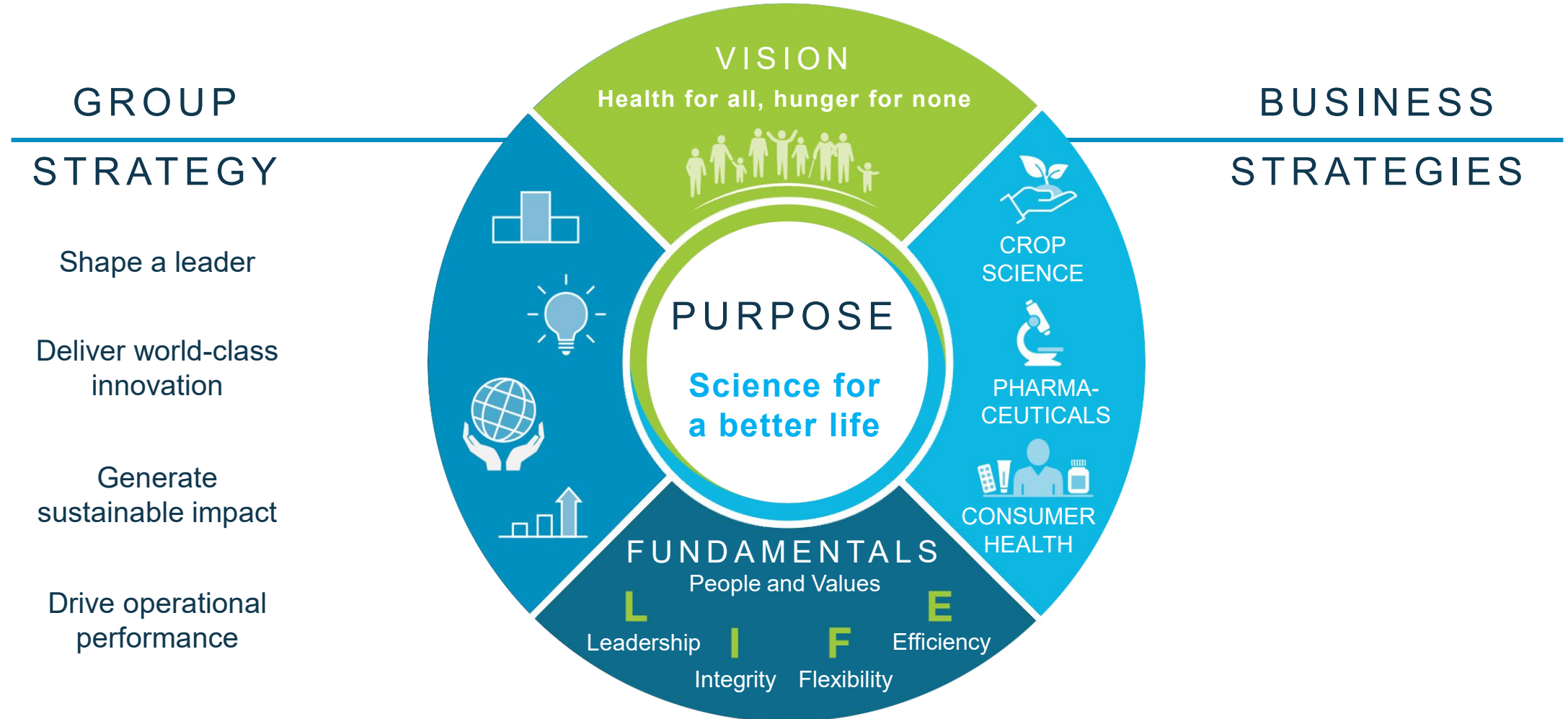


The Bayer Group is a global enterprise with companies in 87 countries.





Our Purpose, Vision and Strategy





Our Purpose: “Science for a better life”



We are a life science company and a global leader in health care and nutrition. Our innovative products support efforts to overcome the major challenges presented by a growing and aging global population. We help prevent, alleviate and treat diseases. We also aim to ensure the world has a reliable supply of high-quality food, feed and plant-based raw materials.

As part of this endeavor, the responsible use of natural resources is always a top priority.

*“Health for all, hunger for none” – putting an end to hunger and helping everyone lead a healthy life, while at the same protecting ecosystems. That’s what we aspire to achieve, guided by our corporate purpose **“Science for a better life.”***



We have an Ambitious Group Vision Laying the Foundation of Everything we do

Bayer serves our most basic human needs - health and food.

We are guided by our purpose, **Science for a Better Life**, striving to prevent and cure disease, improve everyday health and help feed a growing population.

We deliver breakthrough innovations in healthcare and agriculture.

We contribute to a world in which:

- // diseases are not only treated, but effectively prevented or cured;
- // people can take care of their own health more effectively;
- // enough food is produced for all while respecting our planet's natural resources;
- // business growth and sustainability go hand-in-hand.

In short: We contribute to **health for all, hunger for none**.

*Health for
all,
hunger for
none*





Our Strategic Levers are Set to Deliver Benefits for our Society and Attractive Returns for our Shareholders



Shape a leader

We develop a global leader in health and nutrition. We create value with strategy-based resource allocation focused on profitable growth. We position ourselves in attractive areas, in which we can achieve leading positions¹.



Deliver world-class innovation

We innovate at scale to address unmet societal challenges in health and nutrition. We broaden our sources of good ideas, drive disruptive innovation and push the digitalization of our value chain



Generate sustainable impact

We see sustainability as an integral part of our business strategy and operations. Our 2030 targets are in line with the UN Sustainable Development Goals and the Paris Climate Agreement



Drive operational performance

We consistently deliver against our financial targets with a focus on profitable growth and returns

1. The Life Science fields of health and nutrition are characterized by an above-GDP growth trend, being innovation-driven, highly regulated and having a high profitability. We position ourselves in areas, in which we have the ability to achieve leading positions and margins while growing ahead of competition.



We want to Become an Impact Generator, Integrating Sustainability into Business Strategy

Corporate sustainability archetypes

Shareholder maximizer

Focus on financial targets/
short-term shareholder
value



Sustainability as element
of risk mitigation. Focus on
what's legally required

Corporate contributor

Focus on financial targets
and improved external
perception



Sustainability primarily as
PR element to strengthen
relationships with external
stakeholders and mitigate
external risk

Impact generator

Focus on both financial and
sustainability targets



Sustainability as new
business opportunity to drive
growth. Sustainability
integrated within business
strategy and operations

Social innovator

Financial and
Sustainability targets very
closely interrelated



Sustainability an integral
component of corporate
purpose

where we
started

our journey



where we want to be



We want to Leverage our Full Potential in Addressing the World's Urgent Challenges

Ageing & growing world population

with increasing consumption and higher healthcare needs

Unsustainable ecological footprint

Humanity has been consuming and emitting more than nature can recreate. Climate change, water scarcity and a loss of biodiversity among the most pressing challenges of our time

The Sustainable Development Goals (SDGs) of the United Nations provide a shared **blueprint for peace and prosperity for people and the planet by 2030**



As a leading player in health and nutrition, Bayer has unique potential to help addressing many of the core global goals. We're committed to take action. Our ambition is to generate a positive sustainable impact for society and the environment through our business operations



Measurable Group-level Targets for Sustainable Development until 2030

Help more people thrive within planetary boundaries



Support 100m smallholder farmers¹

in low- and middle-income countries (LMIC)



Provide 100m women in low- and middle-income countries with access to modern contraception



Expand access to everyday health for 100m people in underserved communities around the world

Help more people thrive



Making our own operations carbon neutral and working with our suppliers to **reduce emissions across our value chain**

Decrease environmental footprint

Our targets are in sync with the UN Sustainable Development Goals

Foundation of responsibility and good Corporate Governance

- Responsibility along the entire value chain: Leading ethical business-, procurement-, and product stewardship practices
- Clear and measurable targets tied to mgmt. compensation; transparency on actions
- CEO Chief Sustainability Officer; independent external Sustainability Council advising the BoM; sustainability expertise in Sup. Board

¹ A farmer who farms crops on less than 10 ha (FAO definition)



Financial Key Data



Bayer Strategically and Operationally Successful

Fiscal 2019

- // Group sales up by 3.5% (Fx & portfolio adj.) to **€43.5 billion**
- // EBITDA before special items increases to **€11.5 billion** (+ 28.3%)
- // Core earnings per share significantly up by 14.3% to **€6.40**
- // Net income increases to **€4.1 billion** (+ 141.4%) – **€1.6 billion** gain on sale of Currenta stake
- // Free cash flow of **€4.2 billion** above expectations
- // Net financial debt declines to **€34.1 billion**
- // Proposed dividend of **€2.80** per share

* Fx & portfolio adj. = currency- and portfolio-adjusted



Bayer Strategically and Operationally Successful (cont.)

Fiscal 2019

- // Crop Science with solid performance in challenging environment, substantial increase in earnings due to acquired business
- // Pharmaceuticals shows encouraging business development
- // Sales growth at Consumer Health, earnings at prior-year level despite divestments
- // Ongoing portfolio, structural and efficiency measures implemented successfully
- // Glyphosate's positive safety profile confirmed – appeal and mediation proceedings moving forward
- // Outlook for 2020: increase in sales, earnings and free cash flow
- // Ambitious sustainability targets set

* Fx & portfolio adj. = currency- and portfolio-adjusted



Five-Year Summary

	2015	2016	2017	2018	2019
Bayer Group (€ million)					
Sales	46,085	34,943	35,015	36,742	43,545
EBITDA	9,573	8,801	8,563	9,695	9,554
EBITDA before special items	10,256	9,318	9,288	8,969	11,503
EBITDA margin before special items	22.3%	26.7%	26.5%	24.4%	26.4%
EBIT	6,241	5,738	5,903	3,454	4,189
EBIT before special items	7,060	6,826	7,130	6,013	7,007
Income before income taxes	5,236	4,773	4,577	1,886	2,880
Net income (from continuing and discontinued operations)	4,110	4,531	7,336	1,695	4,091
Earnings per share (€) (from continuing and discontinued operations)	4.97	5.44	8.29	1.80	4.17
Core earnings per share (€) (from continuing operations)	6.82	6.67	6.64	5.60	6.40
Net cash provided by operating activities (from continuing and discontinued operations)	6,890	9,089	8,134	7,917	8,207
Free cash flow (€)	3,827	5,806	5,202	4,652	4,214
Net financial debt	17,449	11,778	3,595	35,679	34,068
Capital expenditures (as per segment table)	2,554	2,627	2,418	2,368	2,920

2018 figures restated;
figures for 2015 – 2017 as last reported



Key Data Fiscal 2019

Group by Segments in € Million

Sales

Other/Reconciliation

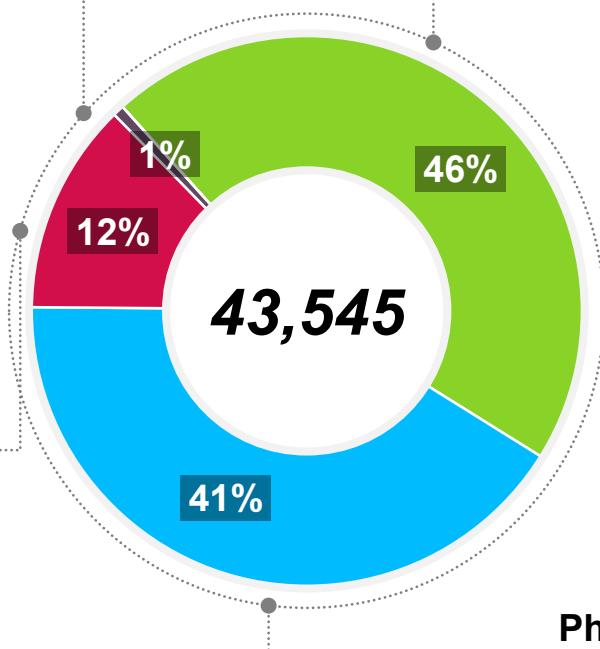
289

Crop Science

19,832
+ 1.4%*

Consumer Health

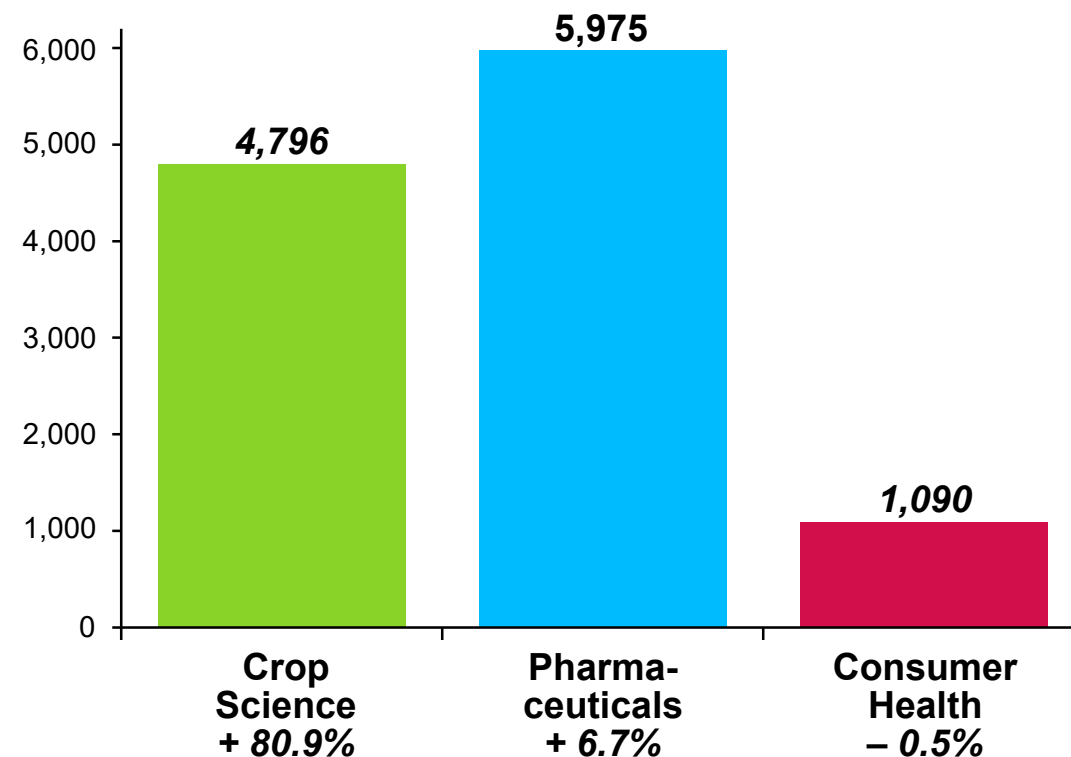
5,462
+ 2.6%*



Pharmaceuticals

17,962
+ 5.6%*

EBITDA before special items



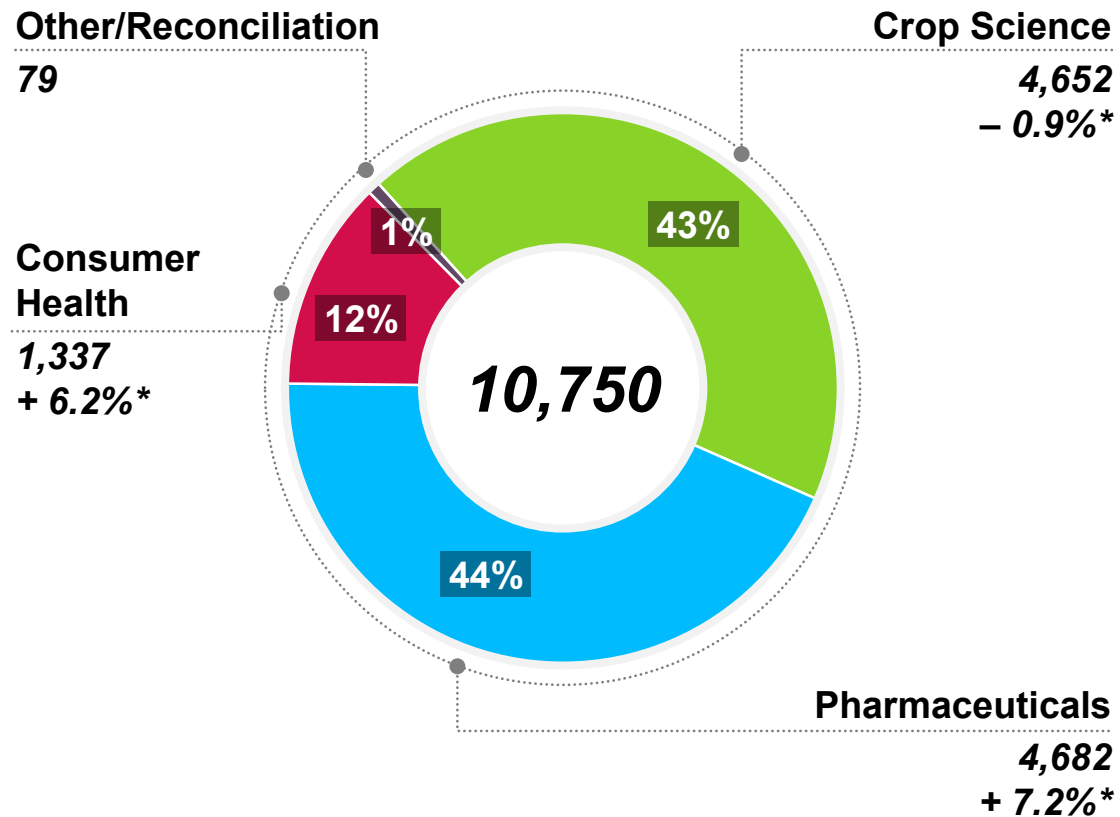
* Year-on-year change currency- and portfolio-adjusted



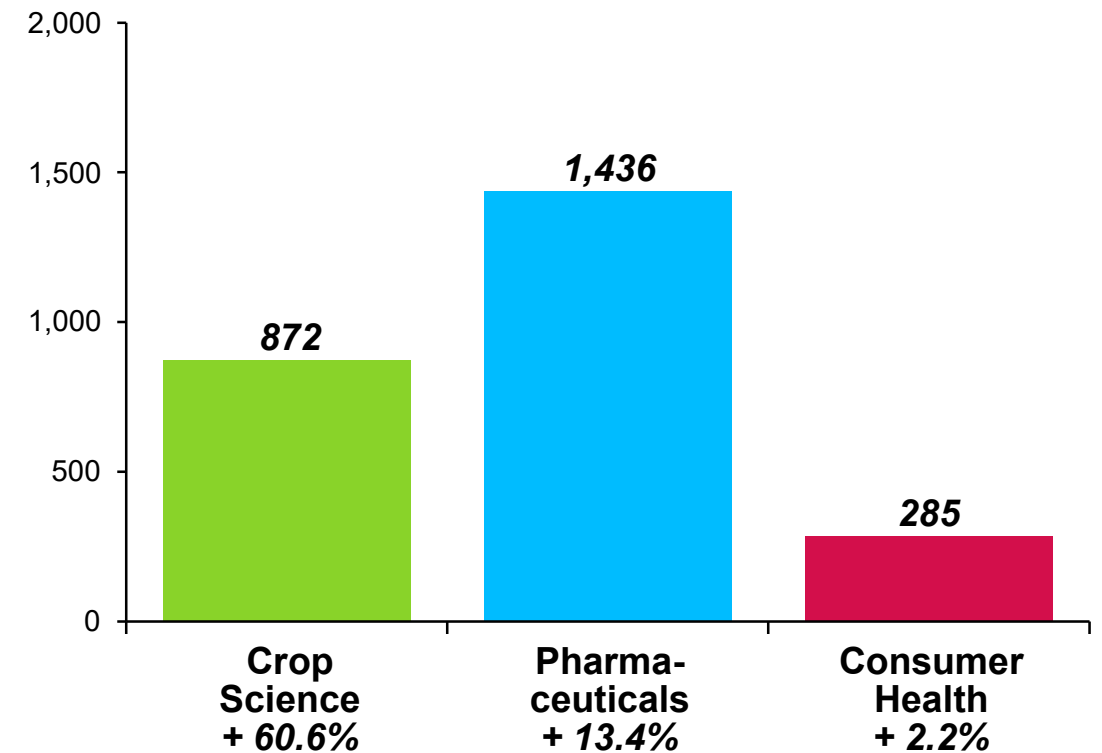
Key Data Q4 2019

Group by Segments in € Million

Sales



EBITDA before special items



* Year-on-year change currency- and portfolio-adjusted



Crop Science – Key Data

Fiscal 2019

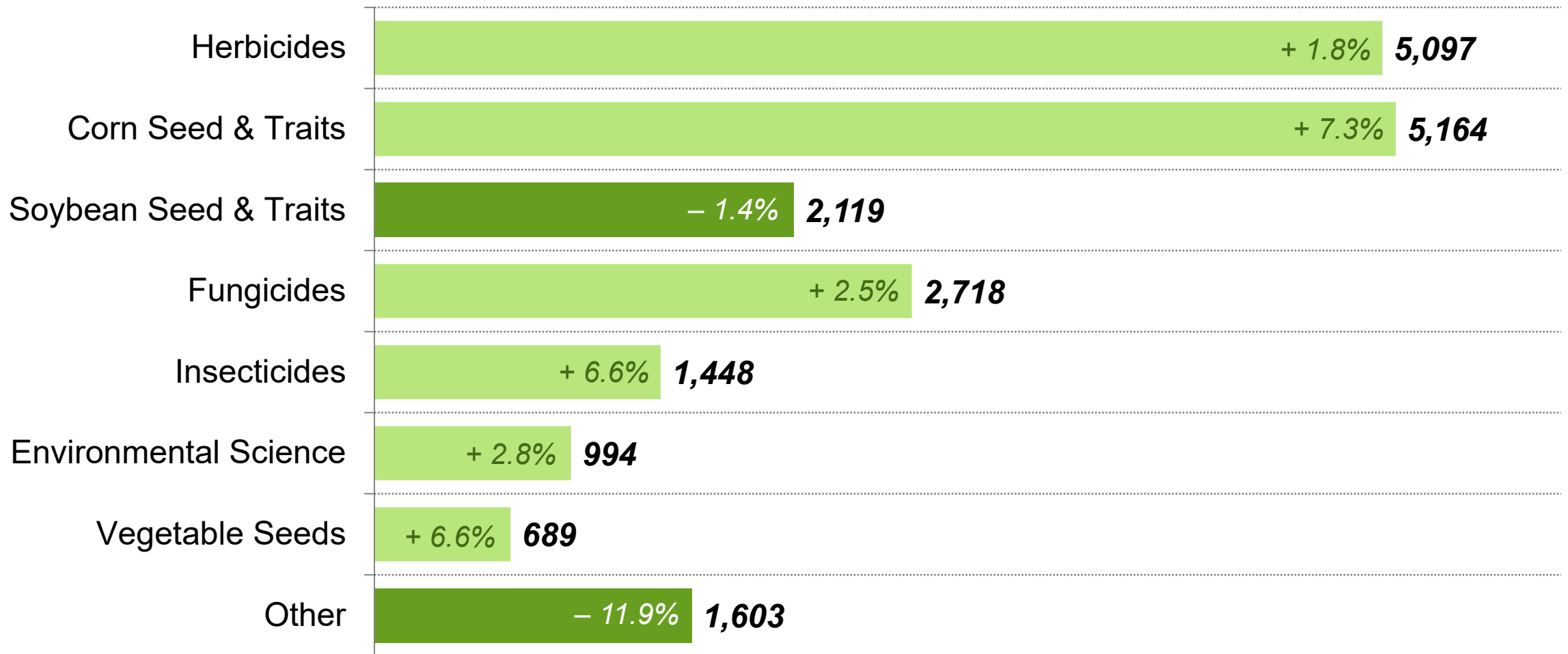
€ million	Q4 2018	Q4 2019	Change %	2018	2019	Change %
Sales	4,661	4,652	– 0.2 (– 0.9*)	14,266	19,832	+ 39.0 (+ 1.4*)
Change in sales						
Volume	+ 14.2%	– 1.7%		+ 5.9%	– 0.3%	
Price	+ 1.2%	+ 0.8%		+ 0.2%	+ 1.7%	
Currency	+ 1.3%	+ 0.7%		– 4.3%	+ 1.3%	
Portfolio	+ 89.3%	0.0%		+ 47.2%	+ 36.3%	
EBITDA	(441)	797	•	4,500	3,895	– 13.4
Special items	(984)	(75)		1,849	(901)	
EBITDA before special items	543	872	+ 60.6	2,651	4,796	+ 80.9
EBITDA margin before special items	11.6%	18.7%		18.6%	24.2%	
EBIT	(933)	(453)	+ 51.4	3,138	582	– 81.5
Special items	(984)	(596)		1,841	(1,423)	
EBIT before special items	51	143	+ 180.4	1,297	2,005	+ 54.6
Net cash provided by operating activities	1,549	2,669	+ 72.3	3,743	4,209	+ 12.4

* Fx & p adj. = currency- and portfolio-adjusted



Crop Science: Sales by Strategic Business Unit

Fiscal 2019 (Sales in € Million, Change in % vs. Fiscal 2018 Fx & p adj. *)



* Fx & p adj. = currency- and portfolio-adjusted



Crop Science: Pro-Forma Sales by Strategic Business Entity¹

Fiscal 2019

€ million	Q4 2018	Q4 2019	Change %		2018	2019	Change %	
			Reported	Fx adj.*			Reported	Fx adj.*
Crop Science	4,511	4,568	+ 1.3	+ 1.0	19,332	19,585	+ 1.3	– 1.4
Herbicides	1,125	1,195	+ 6.2	+ 5.3	5,014	5,034	+ 0.4	– 1.4
Corn Seed & Traits	1,036	1,100	+ 6.2	+ 4.0	4,871	5,164	+ 6.0	+ 1.5
Soybean Seed & Traits	651	587	– 9.8	– 8.6	2,378	2,119	– 10.9	– 14.5
Fungicides	753	788	+ 4.6	+ 6.0	2,643	2,718	+ 2.8	+ 2.5
Insecticides	366	380	+ 3.8	+ 4.3	1,346	1,448	+ 7.6	+ 6.6
Environmental Science	228	235	+ 3.1	+ 1.0	955	991	+ 3.8	– 0.1
Vegetable Seeds	91	157	+ 72.5	+ 70.7	670	689	+ 2.8	+ 1.1
Other	261	126	– 51.7	– 49.3	1,455	1,422	– 2.3	– 6.0

¹ The unaudited pro-forma data is presented as if both the acquisition of Monsanto and the associated divestments had already taken place as of January 1, 2018. Sales of Monsanto are presented in periods as per the Bayer fiscal year. One-time effects of business operations, the accounting for discontinued operations and the recognition and measurement of sales from certain business transactions have been adjusted in line with our accounting. Due to this simplified procedure, they explicitly do not reflect sales according to IFRS or IDW RH HFA 1.004.

* Fx adj. = currency-adjusted



Pharmaceuticals – Key Data

Fiscal 2019

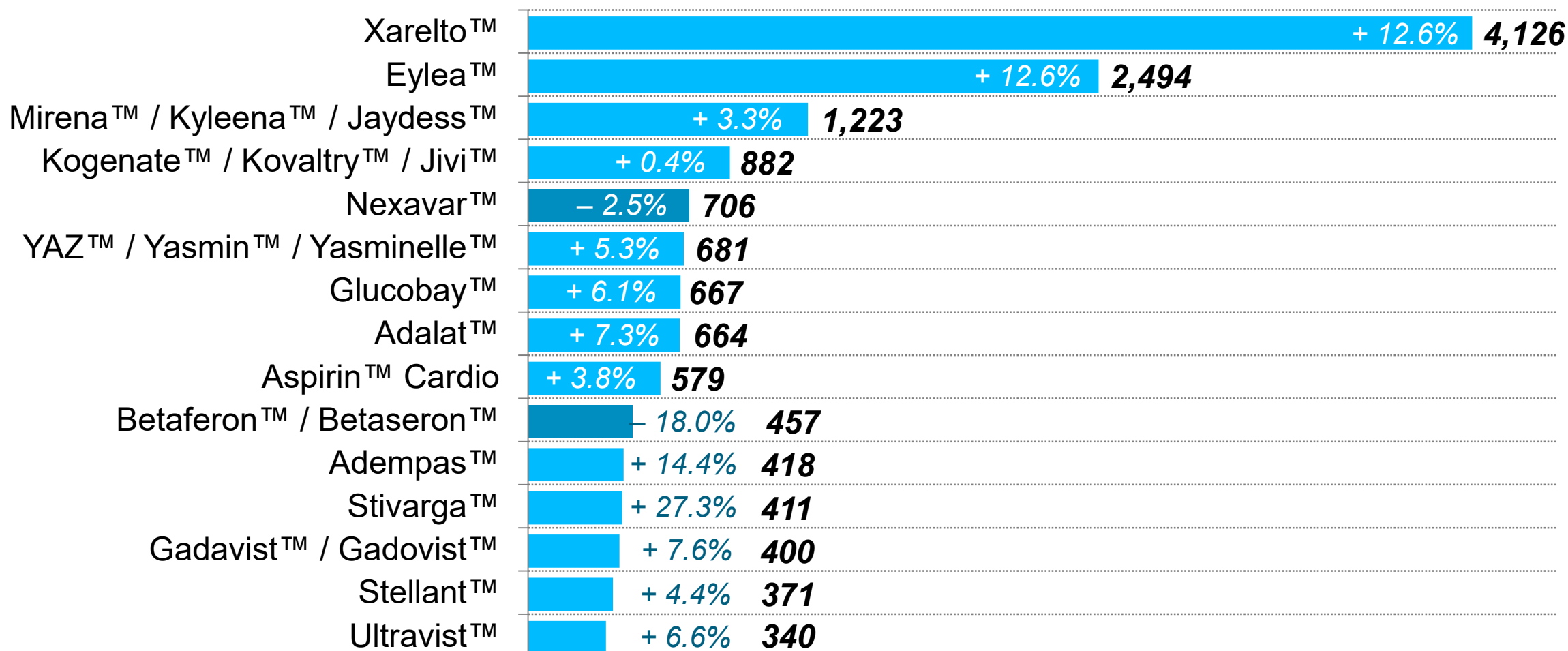
€ million	Q4 2018	Q4 2019	Change %	2018	2019	Change %
Sales	4,291	4,682	+ 9.1 (+ 7.2*)	16,746	17,962	+ 7.3 (+ 5.6*)
Change in sales						
<i>Volume</i>	+ 3.9%	+ 6.3%		+ 5.7%	+ 5.7%	
<i>Price</i>	– 1.3%	+ 0.9%		– 2.3%	– 0.1%	
<i>Currency</i>	– 0.7%	+ 1.9%		– 3.7%	+1.8%	
<i>Portfolio</i>	– 0.1%	0.0%		– 0.3%	– 0.1%	
EBITDA	495	1,478	+ 198.6	4,797	5,951	+ 24.1
<i>Special items</i>	(771)	42		(801)	(24)	
EBITDA before special items	1,266	1,436	+ 13.4	5,598	5,975	+ 6.7
<i>EBITDA margin before special items</i>	29.5%	30.7%		33.4%	33.3%	
EBIT	(302)	1,085	•	3,213	4,762	+ 48.2
<i>Special items</i>	(1,289)	(72)		(1,362)	(137)	
EBIT before special items	987	1,157	+ 17.2	4,575	4,899	+ 7.1
Net cash provided by operating activities	1,587	1,040	– 34.5	4,376	4,523	+ 3.4

* Fx & p adj. = currency- and portfolio-adjusted



Best-selling Pharmaceuticals Products

Fiscal 2019 (Sales in € Million, Change in % vs. Fiscal 2018 Fx & p adj. *)



* Fx & p adj. = currency- and portfolio-adjusted



Consumer Health – Key Data

Fiscal 2019

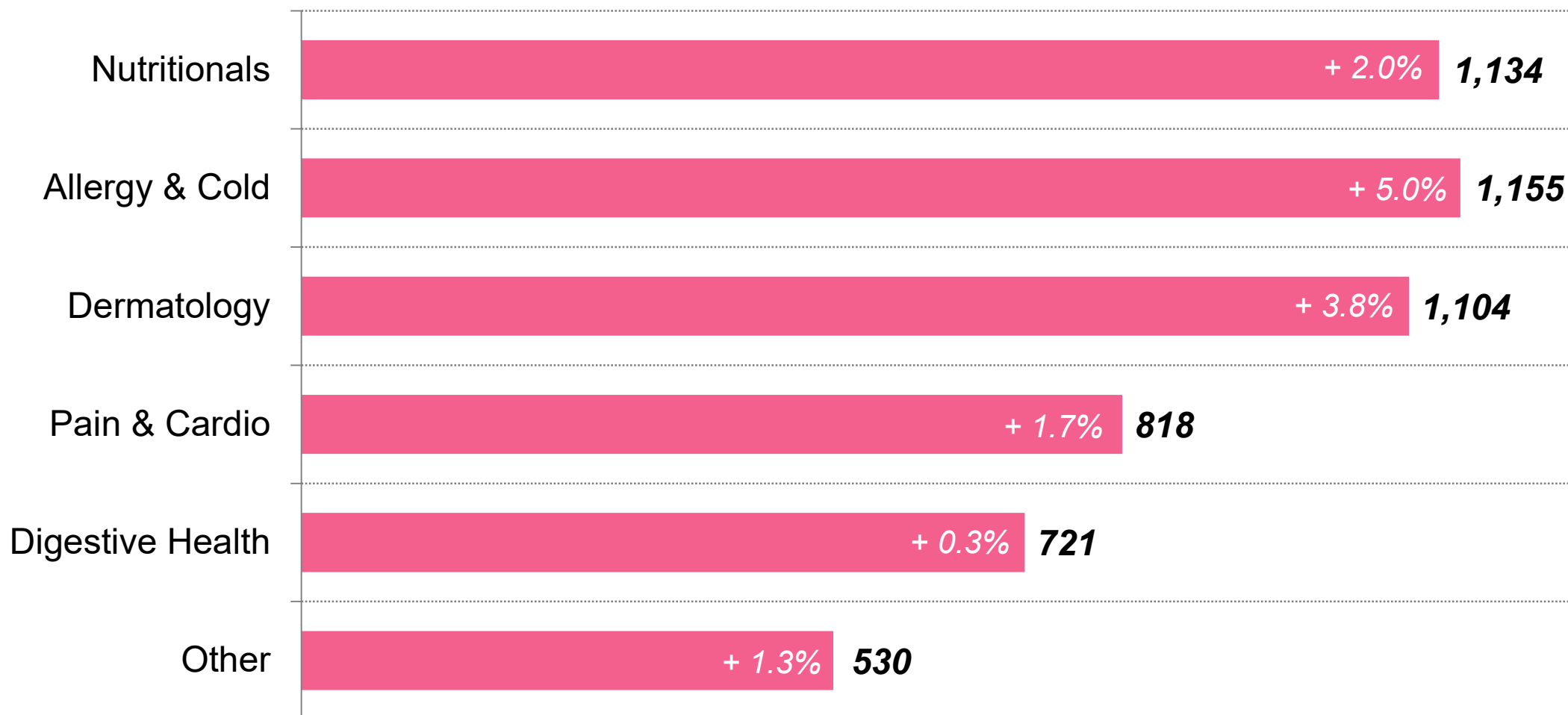
€ million	Q4 2018	Q4 2019	Change %	2018	2019	Change %
Sales	1,331	1,337	+ 0.5 (+ 6.2*)	5,450	5,462	+ 0.2 (+ 2.6*)
Change in sales						
<i>Volume</i>	– 3.1%	+ 3.0%		– 1.5%	+ 0.9%	
<i>Price</i>	+ 1.4%	+ 3.2%		+ 0.8%	+ 1.7%	
<i>Currency</i>	– 1.5%	+ 1.4%		– 5.7%	+ 1.2%	
<i>Portfolio</i>	– 1.7%	– 7.1%		– 0.6%	– 3.6%	
EBITDA	211	251	+ 19.0	1,035	1,303	+ 25.9
<i>Special items</i>	(68)	(34)		(61)	213	
EBITDA before special items	279	285	+ 2.2	1,096	1,090	– 0.5
<i>EBITDA margin before special items</i>	21.0%	21.3%		20.1%	20.0%	
EBIT	(2,607)	360	•	(2,077)	713	•
<i>Special items</i>	(2,781)	161		(2,776)	(18)	
EBIT before special items	174	199	+ 14.4	699	731	+ 4.6
Net cash provided by operating activities	196	236	+ 20.4	727	841	+ 15.7

* Fx & p adj. = currency- and portfolio-adjusted



Consumer Health: Sales by Category

Fiscal 2019 (Sales in € Million, Change in % vs. Fiscal 2018 Fx & p adj. *)



* Fx & p adj. = currency- and portfolio-adjusted



Key Data – Fiscal 2019

Group by Region, € Million

Sales (by market)

Latin America

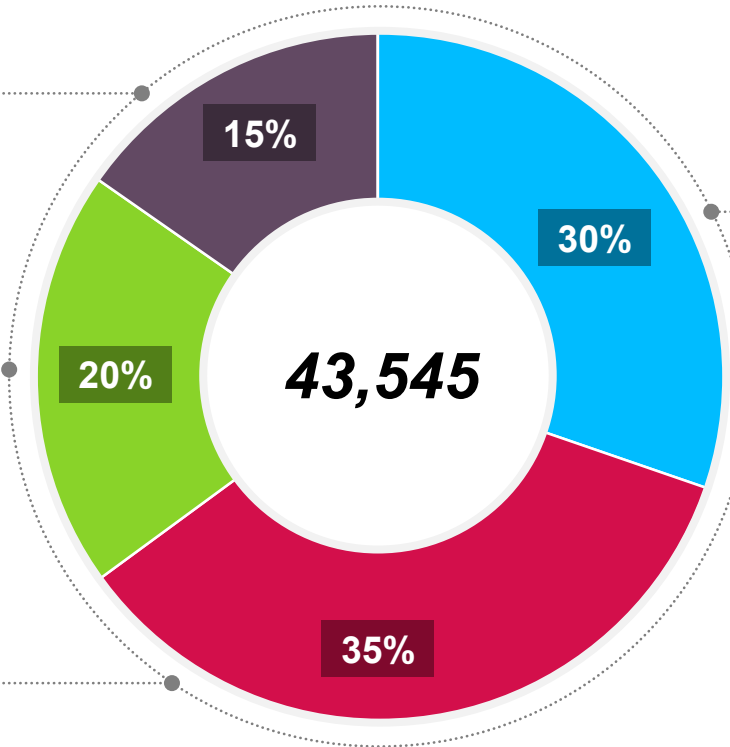
6,663
+ 9.0%*

Asia/Pacific

8,610
+ 7.4%*

North America

15,087
– 0.8%*



Europe/Middle East/Africa

13,185
+ 2.4%*

* Year-on-year change currency-adjusted



Target Attainment 2019

	Forecast 2019 ¹	Target Attainment	Forecast 2019 ¹	Target Attainment
	Nominal	Nominal	Currency-adjusted	Currency-adjusted
Group sales	~ €43.5 billion	€43.5 billion	~ €43 billion	€43.0 billion
			~ 4% increase (Fx & p adj.)	3.5% increase (Fx & p adj.)
EBITDA before special items	~ €11.5 billion	€11.5 billion	~ €11.6 billion	€11.5 billion
Core earnings per share	~ €6.35	€6.40	~ €6.45	€6.47

Fx & p adj. = currency- and portfolio-adjusted

¹ Issued in October 2019; based on original forecast for 2019 excluding discontinued operations (Animal Health & Currenta); nominal forecast based on closing rates on September 30, 2019.



Forecast for 2020

	2019 figures in € billion	2019 figures Fx & p adj. change (%)	2020 forecast in € billion	2020 forecast Fx & p adj. change (%)
Sales	43.5	+ 3.5	44 to 45	+ 3 to 4
Crop Science	19.8	+ 1.4		~ + 4
Pharmaceuticals	18.0	+ 5.6		+ 3 to 4
Consumer Health	5.5	+ 2.6		+ 2 to 3
Margin (%) (pro forma)				
EBITDA before special items (pro forma)	11.5	26.4		~ 28
Crop Science	4.8 (4.7)	24.2 (23.8)		~ 26
Pharmaceuticals	6.0 (5.9)	33.3 (32.6)		~ 33
Consumer Health	1.1 (1.1)	20.0 (20.9)		22 to 23
Financial result (core)¹	(1.6)		~ (1.5)	
Tax rate (core)²	22.5%		~ 23%	
Free cash flow	4.2		~ 5	
Net financial debt	34.1		~ 27	
Special items in EBITDA	(1.9)		~ (0.9)	
	€		€	
Core EPS	6.40		7.00 to 7.20	

Fx & p adj. = currency- and portfolio-adjusted

¹ Financial result before special items

² (Income taxes + special items in income taxes + tax effects on adjustments)/(core EBIT + financial result + special items in financial result)



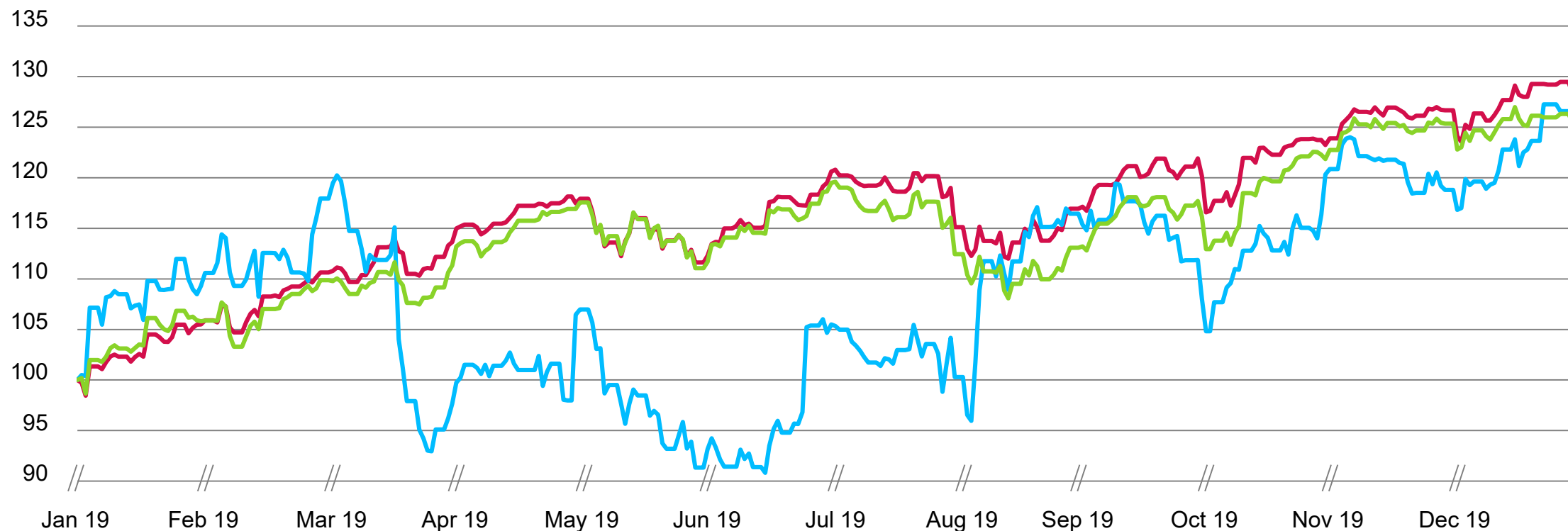
Performance of Bayer Stock (Indexed) – 12 Months

Bayer stock + 25.9%

DAX + 25.5%

DJ EURO STOXX 50 + 28.2%

Indexed in %; 100 = Xetra closing price on December 31, 2018;
source: Bloomberg





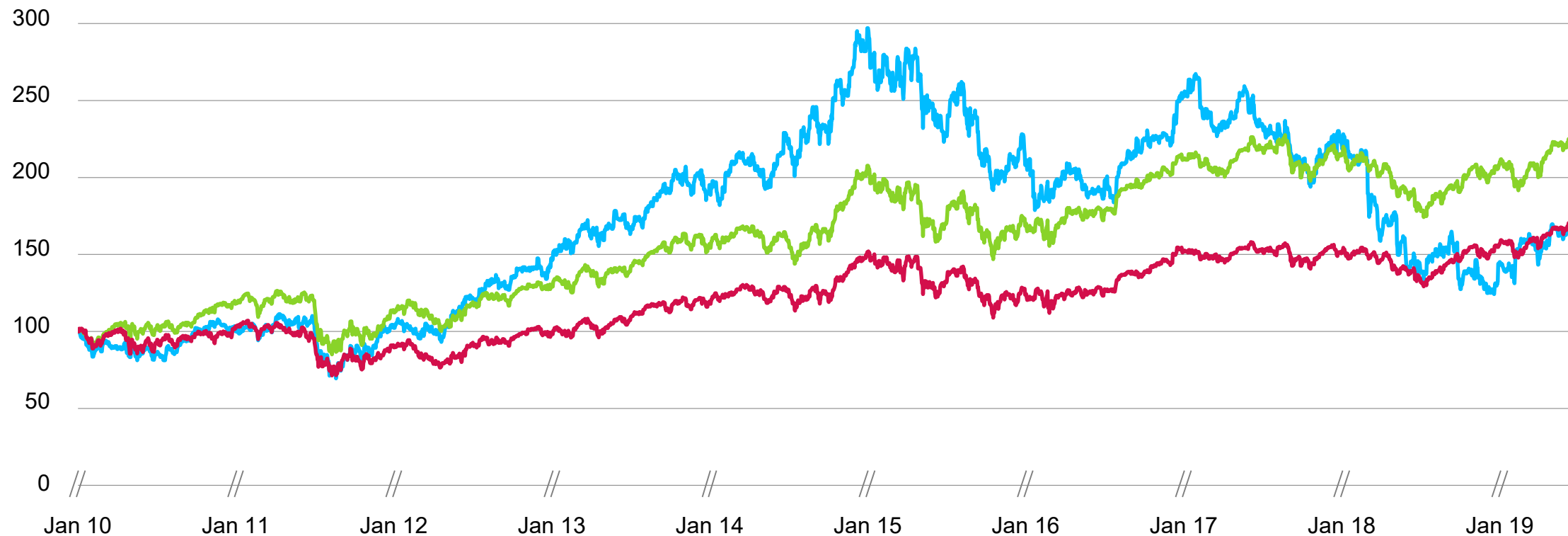
Performance of Bayer Stock (Indexed) – 10 Years

Bayer stock + 72.3%

DAX + 122.4%

DJ EURO STOXX 50 + 69.2%

Indexed in %; 100 = Xetra closing price on January 1, 2010;
source: Bloomberg

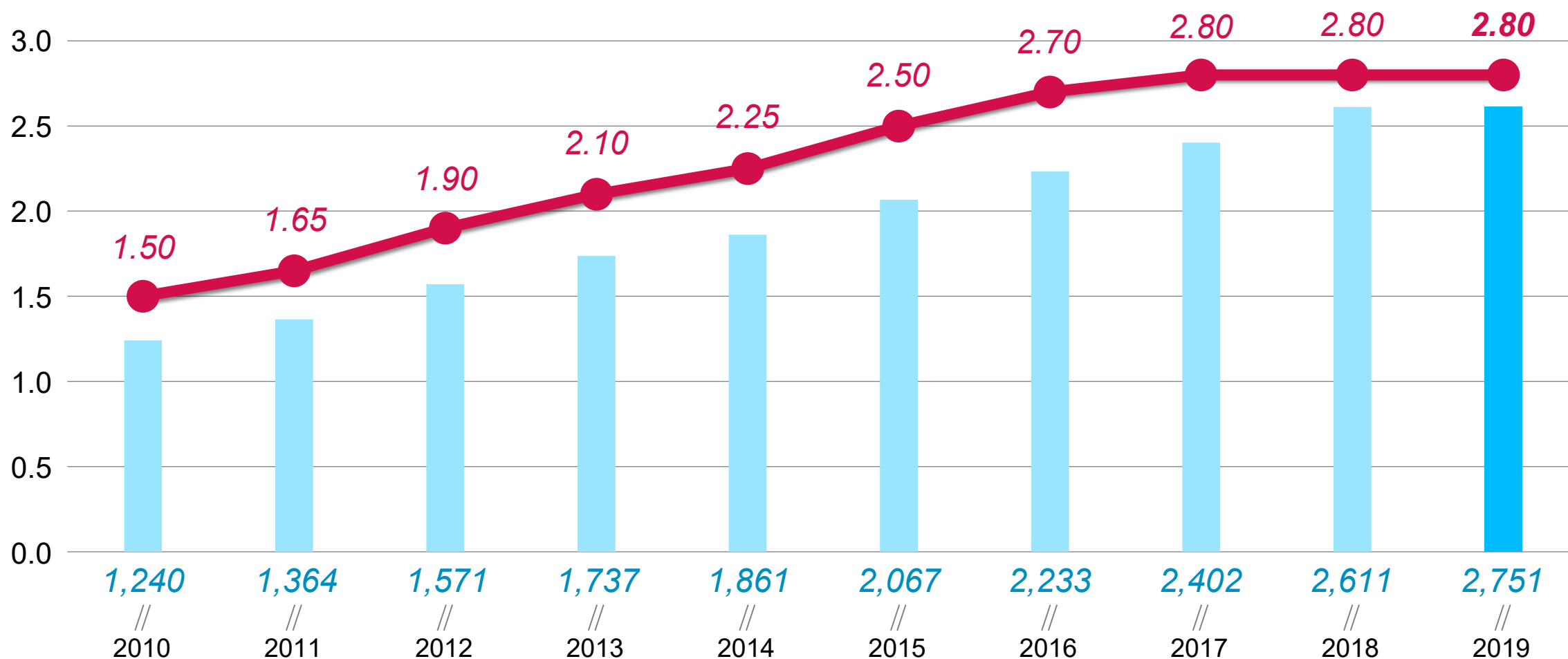


Historic share prices have been adjusted by corporate actions



Dividends per Share and Total Dividend Payments

Dividends per Share in € (Red); Total Dividend Payments in € Million (Blue)





Our Divisions & Enabling Functions



Crop Science



Headquarters

Monheim (Rhineland, Germany)

Number of employees*

33,866

Sales 2019

€19,832 million

Division Head

Liam Condon

* As of December 31, 2019, in full-time equivalents



Crop Science

Strategy

Shaping agriculture to benefit farmers, consumers and our planet

Our Mission as the industry leader



Deliver world-class
innovation



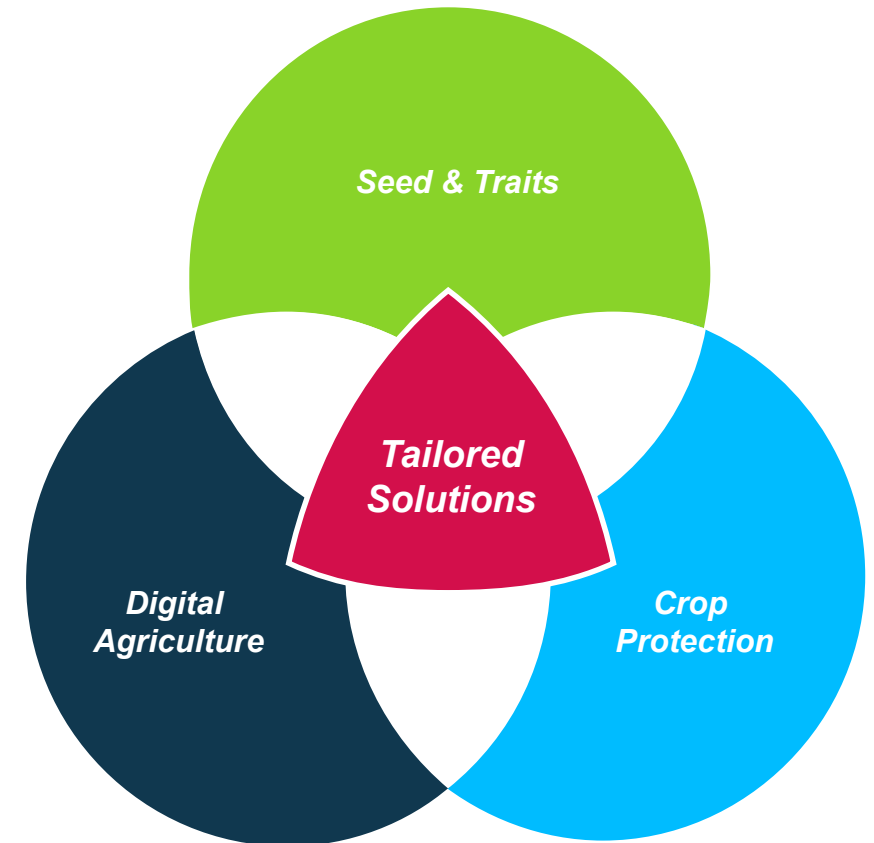
Pioneer the **digital
transformation**



Set new
standards of
sustainability



*Future opportunity to drive operational excellence
through output-based business models*



*Tailored solutions are key to sustainably managing resources
and improving productivity*



Crop Science

Business Areas



Chemical & Biological Crop Protection

- // Herbicides
- // Fungicides
- // Insecticides
- // SeedGrowth



Seeds & Traits

- // Seeds for broad acre crops (e.g. corn, soybeans, cotton, canola / oilseed rape, rice)
- // Vegetable seeds (e.g. tomato, cucumber, capsicum, broccoli)
- // Traits



Digital Technologies & Services

- // Data platform that measures agronomic performance and gives farmers the option to share with multiple partners
- // Advanced insights that recommend the efficient and sustainable use of crop inputs
- // Precision technologies enable better compliance with regulatory requirements



Environmental Science

- // Weed & pest control products for non-agricultural application in 6 strategic market segments with high impact on better life (Professional Pest Management, Industrial Vegetation Management, Vector Control, Turf & Ornamentals, Forestry, Consumer Lawn & Garden)
- // Specialty Actives business



Crop Science

Top Products



Chemical & Biological Crop Protection

Herbicides

// Adengo™
// Alion™
// Atlantis™
// Corvus™
// Roundup™

Fungicides

// Fox™
// Luna™
// Nativo™
// Serenade™
// Xpro™

Insecticides

// BioAct™
// Confidor™
// Movento™
// Sivanto™

SeedGrowth

// Gaucho™



Seeds & Traits

Corn

// Dekalb™
// SmartStax™
RIB
Complete™
// VT Double
PRO™
// VT Triple Pro™

Soybean

// Asgrow™
// Intacta
RR2PRO™
// Roundup Ready
2 Xtend™
// Roundup Ready
2 Yield™

Vegetables

// Seminis™
// DeRuiters™

Other

// Bollgard II™
// Bollgard™ II
XtendFlexBollgard™
// Deltapine™



Crop Science

Top Products



Environmental Science

- // Esplanade™
- // Fludora Fusion™
- // Maxforce™
- // Specticle™



Digital Technologies & Services

- // Climate FieldView™
- // Climate FarmRise™



Pharmaceuticals



Headquarters

Berlin

Number of employees*

38,553

Sales 2019

€17,962 million

Division Head

Stefan Oelrich

* As of December 31, 2019, in full-time equivalents



Pharmaceuticals

Innovation for Patients with Diseases with High Medical Need

- // Innovation is a cornerstone of our corporate purpose “Science for a better life” and a core element of our strategy.
- // We strongly focus on disease mechanisms and further deepening our disease understanding. We approach targets in a modality-agnostic manner, going beyond small molecules and biologics.
- // We complement our comprehensive in-house expertise with the know-how of excellent partners from academia and industry to speed up innovation.
- // Digital transformation is another key driver of our new R&D Innovation Strategy. We strive to diversify our business and to tap into the potential of big data and digital technology.





Pharmaceuticals

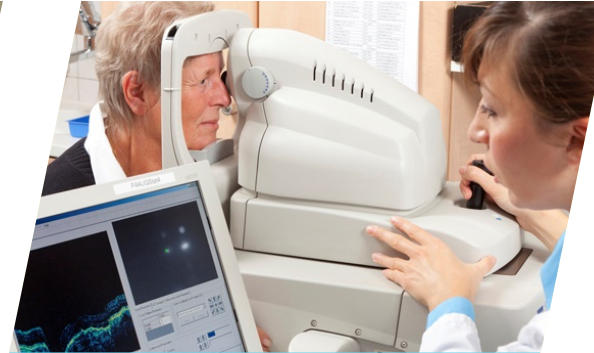
Business Areas



Cardiovascular diseases



Oncology



Ophthalmology



Gynecology



Hemophilia



Radiology



Other illnesses

- // Multiple sclerosis
- // Infections
- // Diabetes
- // Erectile dysfunction
- // Testosterone deficiency



Pharmaceuticals

Top Products



Cardiovascular diseases

// *Adalat*[™]
// *Adempas*[™]
// *Aspirin*[™] Cardio
// *Xarelto*[™]



Oncology

// *Aliqopa*[™] *
// *Nexavar*[™]
// *Nubeqa*[™] *
// *Stivarga*[™]
// *Vitrakvi*[™]
// *Xofigo*[™]



Ophthalmology

// *Eylea*[™]



Gynecology

// *Mirena*[™]/*Jaydess*[™]/*Skyla*[™]/*Kyleena*[™]
// *YAZ*[™]/*Yasmin*[™]/*Yasminelle*[™]

* Approved in the USA only



Pharmaceuticals

Top Products



Hemophilia

// *Kogenate™/
Kovaltry™/
Jivi™*



Radiology

// *Gadovist™*
// *MEDRAD Stellant™*
// *Primovist™*
// *Ultravist™*



Other illnesses

Multiple sclerosis

// *Betaferon™/
Betaseron™*

Infections

// *Avalox™/Avelox™*
// *Cipro™/Ciprobay™*

Diabetes

// *Glucobay™*

Erectile dysfunction

// *Levitra™*

Testosterone deficiency

// *Nebido™*



Consumer Health



Headquarters

Basel (Switzerland)

Number of employees*

10,400

Sales 2019

€5,462 million

Division Head

Heiko Schipper

* As of December 31, 2019, in full-time equivalents



Consumer Health

Business Areas



Pain and Cardio



Allergy and Cough & Cold



Digestive Health



Nutritionals



Dermatology



Consumer Health

Top Products



Pain and Cardio

// Aleve™

// Aspirin™



Allergy and Cough & Cold

// Afrin™

// Alka-Seltzer Plus™

// Aspirin™ Complex

// Claritin™



Digestive Health

// Alka-Seltzer™

// Iberogast™

// Miralax™

// Rennie™



Consumer Health

Top Products



Nutritionals

// *Berocca™*

// *Elevit™*

// *One A Day™*

// *Redoxon™*

// *Supradyn™*



Dermatology

// *Bepanthen™*

// *Canesten™*

Enabling Functions



Number of employees 2019

16,568*

-
- // deliver business-supportive processes in order to disburden the divisions*
 - // driven by customer and employee requirements*
 - // e.g. Human Resources, Procurement, Controlling, or Engineering & Technology*

* Enabling Functions and country platforms, as of December 31, 2019 in full-time equivalents



Research & Development



Innovation at Bayer

Addressing Unmet Market Needs

Challenges

Our world faces enormous challenges including a changing climate, limited natural resources and a growing population. Agriculture is part of the solution, helping farmers not only to grow enough but to grow better for our planet and its people.

Higher life expectancy and demand for innovative drugs increase cost pressure on the health care industry.

Global efforts to reduce healthcare costs increases need for access to self-care products and solutions.

Our Approach

// **Crop Science**

Combining modern science with farmers' ingenuity. Our goal is to put innovation at their fingertips to help nourish our growing world and maintain natural resources.

// **Pharmaceuticals**

Developing innovative treatments which offer added value for patients in areas with a high medical need.

// **Consumer Health**

Developing innovations that enable consumers to take better care of their health and well-being.

Innovation Highlights

Important launches:

- // Vayego™
- // Tivant™
- // Fox™ Xpro
- // XtendFlex™



Important launches:

- // Jivi™
- // Kyleena™
- // Vitrakvi™
- // Nubeqa™



Important launches:

- // Canesten™ Athlete's Foot applicator



In line with our purpose “Science for a better life”



Bayer's Success is Based on Excellence in Research & Development

Continuous Investment in R&D Projects

Input

Other
€16 million

Crop Science
€2,344 million

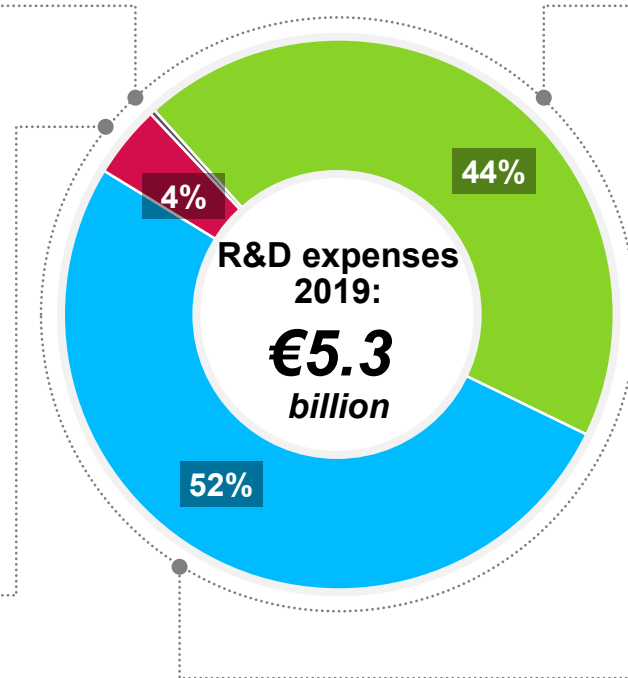
R&D staff:
7,800 FTE

Consumer Health
€230 million

R&D staff:
670 FTE

Pharmaceuticals
€2,752 million

R&D staff:
7,500 FTE



Output

// Crop Science

55 projects in seeds & traits, crop protection and digital agriculture pipelines, including more than 450 of new hybrids and varieties commercialized annually

// Pharmaceuticals

50 projects in clinical development. Significant peak sales potential of key late-stage pipeline assets

// Consumer Health

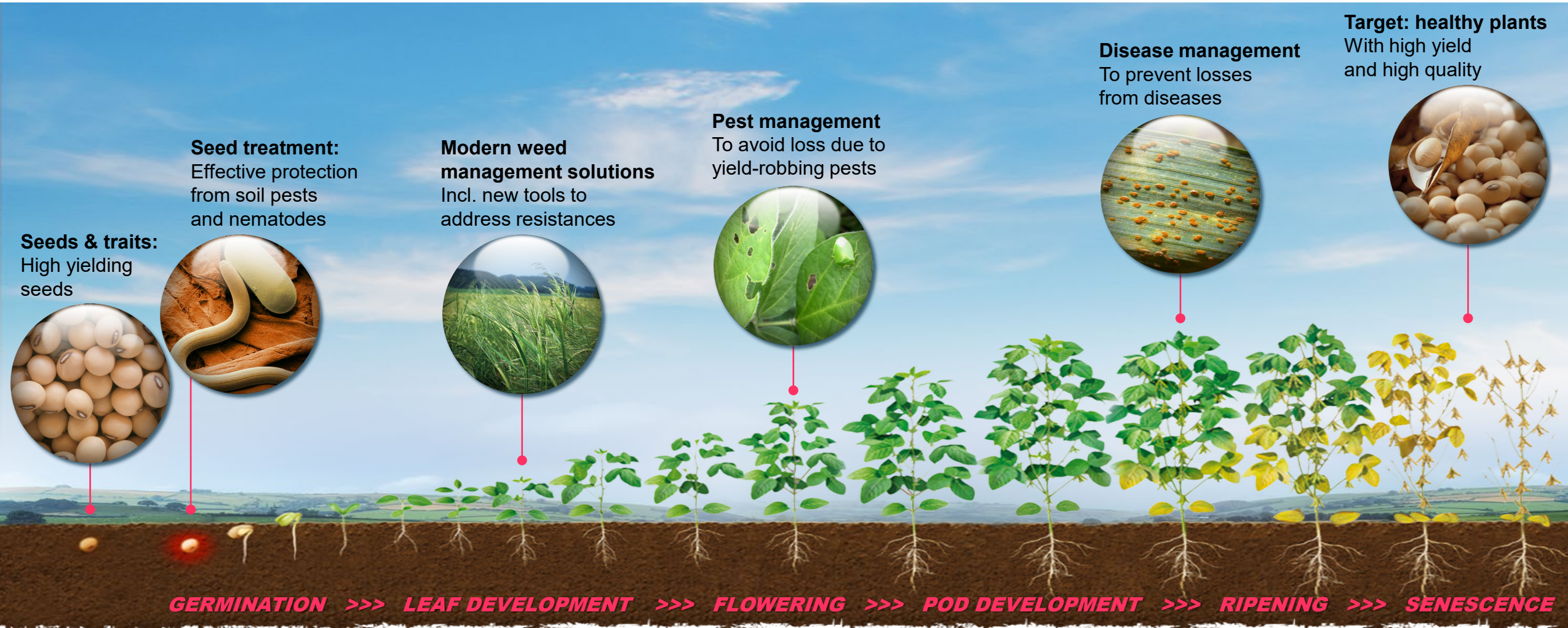
Over 30 new products developed from new delivery forms and formulations in 2019

As of December 31, 2019



Crop Science: Research & Development

Tailored Solutions Along the Plant's Life Cycle



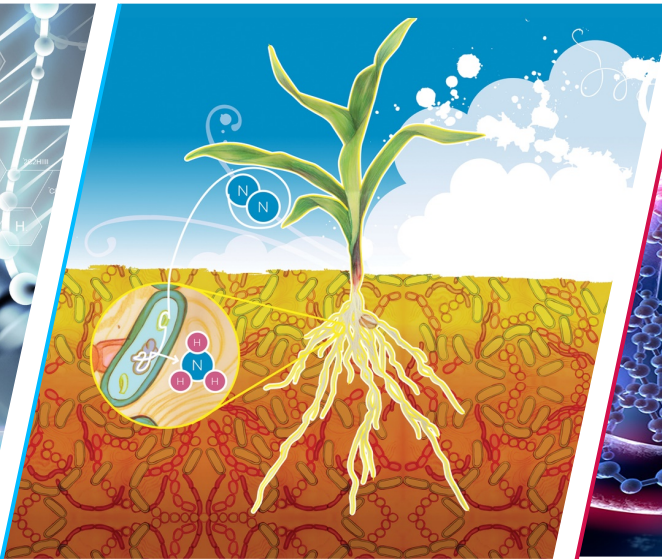


Crop Science: Research & Development

Researching Break-Through Technologies



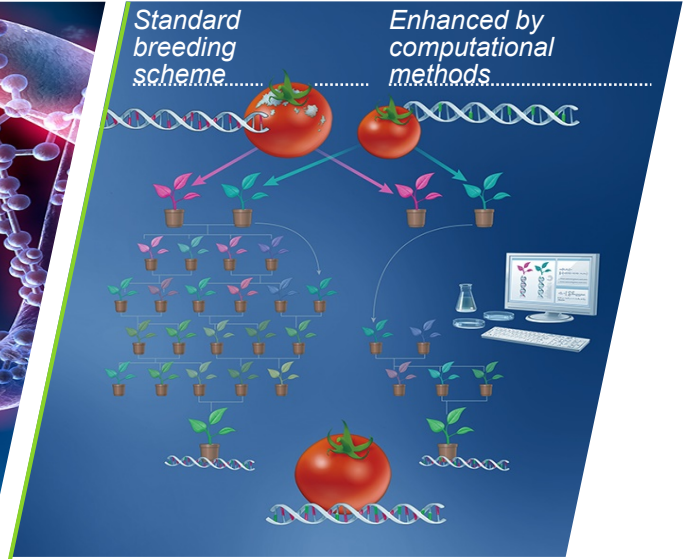
// Small Molecule
Discovery



// Plant Microbiome



// Gene Editing

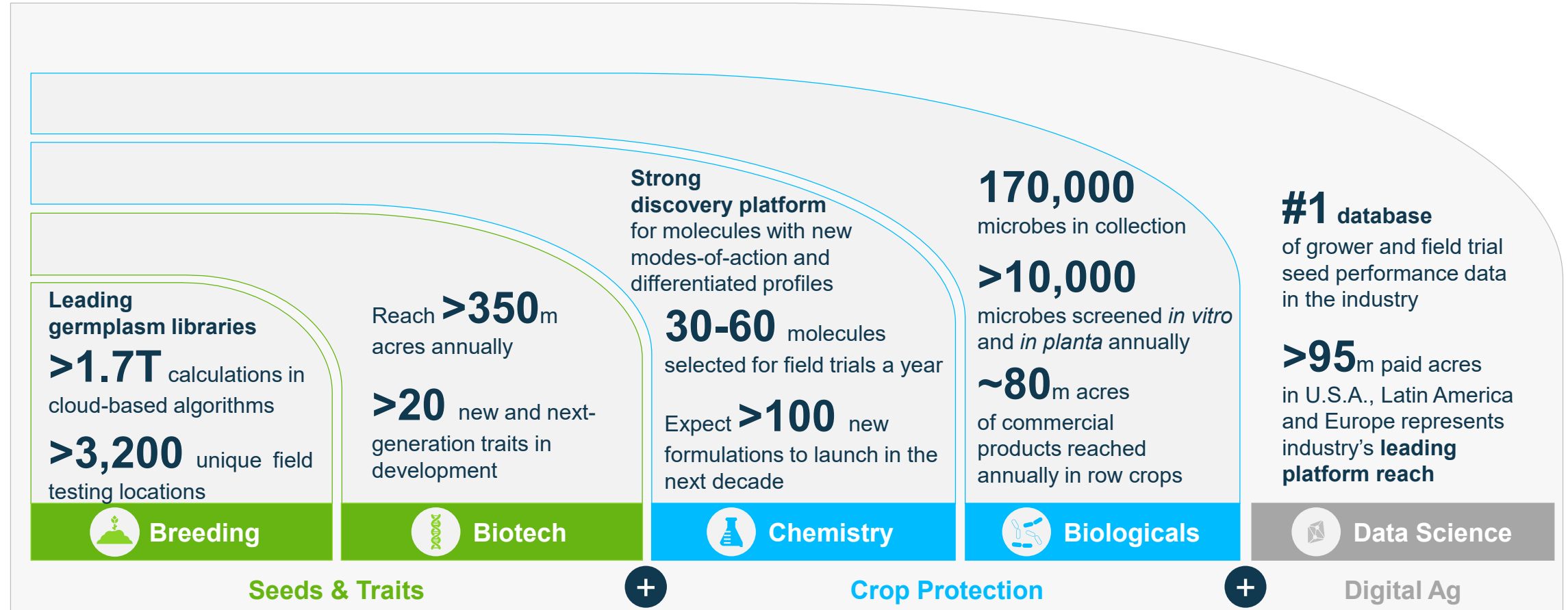


// Precision Breeding



Crop Science: Research and Development

Extensive Germplasm and Biotech Foundation, Leadership in Chemistry and Biologicals, and Data Science Optimization Serve as Innovation Engine to Accelerate Benefits for Farmers



Best positioned to discover, combine and tailor solutions for growers



Crop Science: Research and Development

Advancing Agriculture with a Decade of Transformative Products

Select Planned Product Launches¹

Expected Ongoing Refreshment		2020	2021	2022	2023	2027	2028	2029	2030
Herbicides	35+ New Formulation Launches in the Next Decade	New Soybean Selective Herbicide Mixtures New Autumn Herbicides for Cereals				New Non-Selective PPO Herbicide ²	New Mode of Action Herbicide		
Corn	150+ New Hybrids Commercialized Annually	FieldView Advanced Seed Scripting FieldView Seed Advisor		SmartStax ^{PRO} trait		3 rd , 4 th and 5 th Generation Herbicide Tolerance Traits Short Stature Corn Hybrids/Trait			
Soybeans	150+ New Varieties Commercialized Annually					FieldView Seed Placement		4 th and 5 th Generation Herbicide Tolerance Traits	
Fungicides	20+ New Formulation Launches in the Next Decade	  (isoflucypram) for Cereals		Fox Supra (Indiflin®) for Soybeans ²				New Fungicide for Asian Soybean Rust	
Insecticides	20+ New Formulation Launches in the Next Decade	 (tetraniliprole) for Corn, Rice, Horticulture and Other Crops				Novel Mite Solution			
Other, Vegetables, Environmental Science, Seed Growth	~150 20+ Vegetable Hybrids/Varieties Commercialized Annually New Formulation Launches in the Next Decade					3 rd Gen BioRise Microbial Seed Treatment Lygus & Thrips Control Cotton Trait			

¹ Subject to regulatory approvals and pending registrations. Represents a subset of the pipeline. Launches are all approximates.

² In collaboration with Sumitomo.



Pharmaceuticals: Research & Development

Drug discovery activities focus on three therapeutic areas

Cardiovascular

- // Heart Diseases
- // Vascular Diseases
- // Lung Diseases
- // Kidney Diseases
- // Acute Organ Disorders



Oncology

- // Oncogenic Signaling
- // Targeted Alpha Therapies
- // Immuno-Oncology



Gynecology

- // Uterine Fibroids
- // Polycystic Ovary Syndrome
- // Endometriosis



Cardiovascular Diseases and Oncology with a great potential for **breakthrough impact** on the lives of patients

Leading R&D position in **Gynecological Therapies**

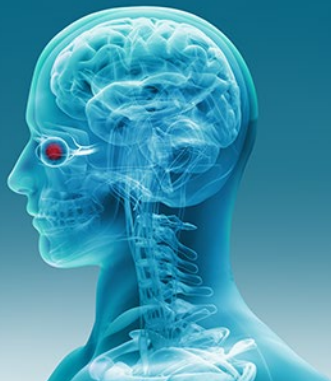


Pharmaceuticals: Research & Development

Additional focused research activities together with external partners

Ophthalmology

- // Together with the **Johns Hopkins Wilmer Eye Institute**, we search for innovative treatments
- // R&D of new delivery technologies for eye diseases



Hemophilia

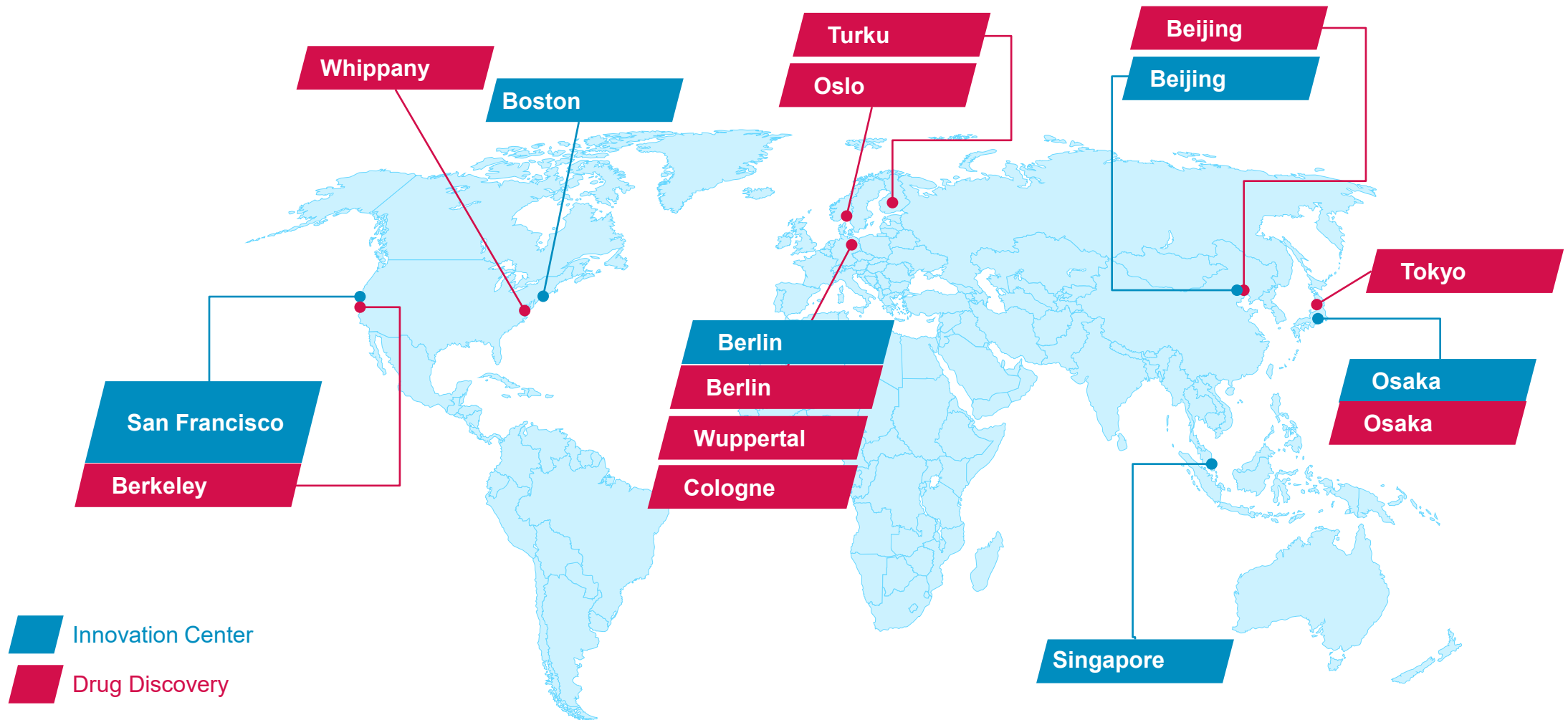
- // Evaluate the potential of gene therapy for hemophilia patients together with **Ultragenyx Pharmaceutical Inc.**
- // Investigate and develop new therapeutic approaches for hemophilia





Pharmaceuticals: Research and Development

Our global drug discovery network is complemented by Innovation Centers facilitating external collaborations





Pharmaceuticals: Research and Development

Collaboration is a strategic priority and part of our innovation strategy

Joint Labs

- // Joint Labs: e.g. German Cancer Research Center (DKFZ), Broad Institute, Brigham and Women's Hospital & Massachusetts General Hospital



Consortia

- // Innovative Medicines Initiative
- // Structural Genomics Consortium SGC



Arm's Length

- // Accelerator: e.g. Grants4-Initiatives 
- // Incubator: CoLaborator 
- // Acquisition: BlueRock Therapeutics 

Research Collaborations

- // Multiple projects: e.g., Evotec, Tsinghua University, Vanderbilt University, MD Anderson, Kyoto University, Arvinas, Dewpoint Therapeutics



License Agreements

- // Pipeline assets: Loxo-195, Vericiguat, FXI-Antisense
- // Launched products: Nexavar, Stivarga, Vitrakvi, Eylea, Adempas, Nubeqa





Pharmaceuticals: Research & Development

Overview Development Portfolio (as of December 2019)





Consumer Health: Development

Aligned to the desires and needs of consumers

Focus on:

- // New formulations
- // New delivery forms
- // Solutions for specific customer requirements
- // New packaging designs
- // New technical applications
- // New medical devices
- // Rx-to-OTC switches



Example: Canesten™ Athlete's Foot applicator

- // The new **Canesten™ Athlete's Foot** unique new applicator fulfills several unmet needs
 - // Makes access hard-to-reach areas easy
 - // On-off switch to control flow-rate and prevent mess
 - // No need to touch affected areas with bare fingers
 - // Grooves on the back to scratch that itch!
- // Developed in collaboration with a trusted external packaging partner
- // Won in the "Functionality & Convenience" category of the German Packaging Awards



Our Identity



Corporate History



Company founded by F. Bayer and J.F. Weskott in Wuppertal

1863

Corporate headquarters established in Leverkusen

1912

Re-establishment of Farbenfabriken Bayer AG

1951

Lanxess AG is spun off from the Bayer Group

2005

Takeover of Schering AG, Berlin, Germany

2006

Takeover of the Consumer Care business of Merck & Co., Inc., USA

2014

Bayer MaterialScience an independent company under the name "Covestro"

Sept 2015

Monsanto Acquisition

June 2018



Our LIFE Values Serve as Reference for Desired Behaviors at Bayer



Leadership	Integrity	Flexibility	Efficiency
<ul style="list-style-type: none">// Play to win// Lead with purpose// Grow yourself and others	<ul style="list-style-type: none">// Act sustainably and be a role model// Build trust and be inclusive// Collaborate and connect	<ul style="list-style-type: none">// Create value with the customer// Innovate and experiment// Go digital	<ul style="list-style-type: none">// Be accountable// Be lean and fast// Be courageous and empower others



An Employer With Many Strengths





Our Employer Brand

- // With its employer brand Bayer is strengthening its profile in the competition to attract and retain the right talents.
- // Bayer's qualities as an employer are summed up as "Passion to innovate | Power to change."
- // Numerous national and international awards underline Bayer's reputation as employer.

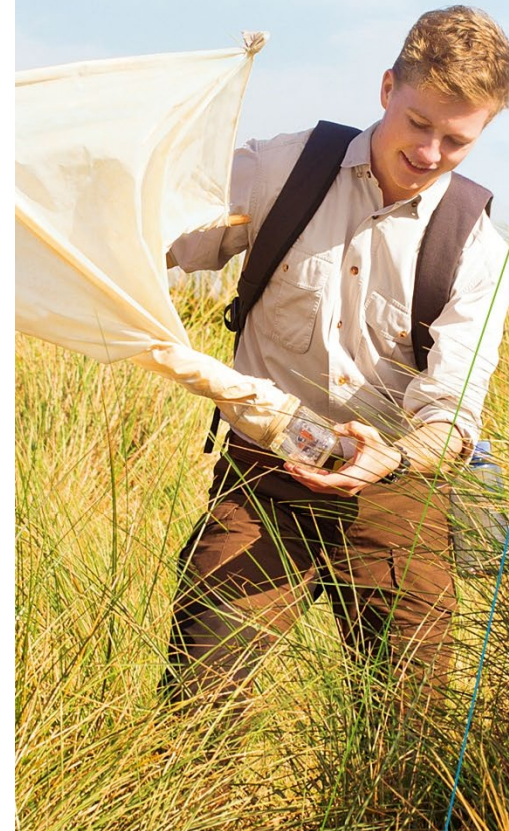


Passion to
innovate

Power to
change

At Bayer you're expected to be. We encourage you to question the status quo and constantly think beyond the obvious. We foster open discussions, sharing knowledge across our community and partnering with external networks.

We always start by listening – because our customers are at the heart of everything we do. At Bayer you have the opportunity to be part of a culture where we value the passion of our employees to innovate and give them the power to change.



Science for a **better life**



Our Employer Brand

Four Key Promises



1

// At Bayer you have the freedom and the license to question the status quo and think ahead.



2

// At Bayer you can engage in open and inspiring work with people who share your passion to turn pioneering ideas into life-changing solutions.



3

// At Bayer our ideas are inspired by society's most fascinating challenges to enhance the lives of many, and our thinking is driven by our customers' needs.



4

// At Bayer you are empowered to make an impact by being part of a leading company that has the power and endurance it takes to improve life – not only in today's but also in tomorrow's world.



Societal Engagement



With the means of Bayer's foundations...

- // ... we reward outstanding achievements by young researchers, for example with the "Early Excellence in Science Award."
- // ... we honor leading scientists in the life sciences through internationally renowned scientific prizes such as the "Otto Bayer Award" and the "Hansen Family Award."
- // ... we support teachers and regional educational initiatives with tailored programs and assist trainees and students through international scholarships.
- // ... we promote social innovation in sub-Saharan Africa through programs such as the "Lifting the Base of the Pyramid Ecosystem Fund."
- // ... we support volunteerism by our employees, who contribute their time to social, cultural or athletic programs at our sites around the world.



Through the engagement of Bayer AG...

- // ... we contribute to public health projects for patients with no or only very limited access to medical care.
- // ... we cooperate with the World Health Organization in the fight against tropical diseases and support many other nonprofit health programs with pharmaceutical products, for example in family planning.
- // ... we support agricultural development projects for smallholders to ensure better usage of farmland and thus safeguard their livelihood.
- // ... we provide professionalized emergency aid in the form of product donations and financial support following natural disasters and epidemics.
- // ... we awaken children's enthusiasm for science with special extracurricular learning opportunities such as the Baylabs near our company sites.

Sports and Culture



Sports

- // Bayer – one of Germany's biggest sport patrons and sport sponsors
- // Support for professional, recreational, and disabled sports
- // Sponsorship of individual athletes, teams, promoters, and sports associations



Culture

- // Social responsibility through cultural involvement
- // High-caliber program of events in the areas of music, dance, theater and art
- // stARTacademy: innovative and long-term sponsorship program for gifted young artists



Forward-Looking Statements

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

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*Thank you for
your attention!*

