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

Investment Case
April 2022 / Bayer AG
Cautionary Statements Regarding Forward-Looking Information

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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

- #3 OTC Player
  
  Consumer Health

- #1 in Sales and Profitability & R&D
  
  Crop Science

- Leading Positions in Key Therapeutic Areas
  
  Pharma

- €44.1bn FY 2021

Market Size

- Crop Science
  
  ~€100bn\(^1\)

- Pharmaceuticals
  
  ~€1,000bn\(^2\)

- Consumer Health
  
  ~€150bn\(^3\)

1Source: Company Estimates
2Source: IQVIA MIDAS MAT Q3-20
3Source: Nicholas Hall & Company DB6

// Bayer AG // Investment Case // April 2022
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 – with the ultimate goal to improve people’s lives

2 FAO 2017, (FAO Global Perspective Studies)
3 Nelson et. al, (2014); FAO 2016 “Climate change and food security”
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 Mid-/Late-Stage Pipeline Opportunities:**
  - Short Stature Corn
  - Soybean Herbicide Trait Stack with Five-Tolerances
  - Fox Supra (Indiflin®)

### Pharmaceuticals Innovation Pipeline

- **Annual R&D Investment:** €3.1bn
- **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

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

1 In collaboration with Sumitomo
New Transformation Program with Gross Contributions of >€1.5bn
Expect Partial Reinvestment to Drive New Opportunities; Remainder to Drive Margin Expansion

<table>
<thead>
<tr>
<th>Transformation Programs</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>€2.6bn gross contributions*</td>
<td>• Bayer 2022 program successfully concluded</td>
</tr>
<tr>
<td>&gt; €1.5bn gross contributions*</td>
<td>• We accelerate our transformation to become leaner and more agile</td>
</tr>
<tr>
<td>Bayer 2022 synergy and efficiency program (announced in 2018)</td>
<td>• Divisions and Enabling Functions</td>
</tr>
<tr>
<td>New transformation program</td>
<td>• Improving our go-to-market models</td>
</tr>
<tr>
<td></td>
<td>• Strengthening our digital and data capabilities</td>
</tr>
<tr>
<td></td>
<td>• Structural measures and optimization of external spend</td>
</tr>
</tbody>
</table>

* Gross contributions will be partially re-invested to fuel growth and are included in our guidance for 2022-24
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

ES: Environmental Science
Disciplined Capital Allocation to Delever, Pay Dividends and Invest

Expect Net Debt to Return to €28-30bn by 2024

**Capital allocation priorities**

- **Deleveraging**
  - Rating target: A category

- **Dividends**
  - Pay-out range: 30-40% of cEPS

- **External growth investments**
  - Bolt-on M&A, Leaps

**Net financial debt development**

- **2021**: €33bn
- **2022**:
  - €33-34bn
- **2024**:
  - €28-30bn

**Currency assumptions**

1. From non-strategic divestments below divisional level and sale of other fixed assets
2. Currency assumptions based on month-end Dec 2021 spot rates (1 EUR=) 1.13 USD, 6.31 BRL, 7.98 CNY, 126 JPY, 91.5 RUB
3. Currency assumptions based on month-end Dec 2020 spot rates (1 EUR=) 1.23 USD, 6.37 BRL, 7.98 CNY, 126 JPY, 91.5 RUB

- Indicates corridor between high- and low case
Sustainability is Integral to Our Values, Strategy and Operations

We intend to create bold impact and generate sustainable business opportunities

Megatrends

Aging Population
- Preserve and restore health

Growing Population
- Secure sufficient supply of quality food

Pressure on Ecosystems
- Use natural resources more efficiently and responsibly

Societal Needs

Preserve and restore health

Secure sufficient supply of quality food

Use natural resources more efficiently and responsibly

Our Vision: Health for all, hunger for none

Help more people thrive

Decrease ecological footprint

Impact

Sustainable Growth

Long-term business growth through sustainable innovation
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
April 2022 / 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
The Established Leader in Crop Science

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

**Largest in Sales**

<table>
<thead>
<tr>
<th>Company</th>
<th>Total Sales (€bn)</th>
<th>Crop Protection/ES</th>
<th>Seed &amp; Traits</th>
<th>Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer</td>
<td>11.2</td>
<td></td>
<td></td>
<td>20.2</td>
</tr>
<tr>
<td>Syngenta + Adama</td>
<td>16.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corteva</td>
<td>13.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASF</td>
<td>8.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Highest Profitability**

<table>
<thead>
<tr>
<th>Company</th>
<th>EBITDA Margin (%)</th>
<th>EBITDA Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer</td>
<td>4.7</td>
<td>23.2%</td>
</tr>
<tr>
<td>Syngenta + Adama</td>
<td>3.2</td>
<td>19.6%</td>
</tr>
<tr>
<td>Corteva</td>
<td>2.2</td>
<td>16.5%</td>
</tr>
<tr>
<td>BASF</td>
<td>1.4</td>
<td>16.8%</td>
</tr>
</tbody>
</table>

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1 Company information; exchange rate: FY 2021: ~1.18 USD/EUR. EBITDA before special items. FY2021 sales (except for Syngenta + Adama)

2 Represents the legacy Syngenta results plus Adama of FY 2020

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© Bayer AG Investment Case April 2022
Global #1 in Seed & Traits with Leading Crop Protection Portfolio

Product areas – Bayer Crop Science
In %, based on sales 2021
€20.2bn

Product areas – Ag Input Market
In %, based on sales 2020
~€100bn

Sales by Region – Bayer Crop Science
In %, in 2021
€20.2bn

Sales by Region – Ag Input Market
In %, in 2020
~€100bn

Market Positions

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

Key Products

Crop Protection:

Seed & Traits:

Digital:

Source: Company estimates. Market positions based on 2020 data.
Megatrends Drive Market Growth and Need for Innovation

Ag Market Remains Attractive with Expected ~3% CAGR\(^1\) to 2030

**Demand**
- 50% More food, feed & biofuel\(^2\) needed
- 10\(\text{bn}\) World population\(^2\)
- 70% More meat in developing nations\(^2\) needed

**Supply**
- 17% Harvest losses from climate change\(^2\)
- 12\(\text{m}\) Ha of agricultural land loss annually
- 20% Reduction in arable land per capita\(^2\)

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\(^1\) Source: Company estimates. Total of ~€100bn includes ~€6bn value of Environmental Science; graph does not.

\(^2\) Source: FAO 2017, The Future of Food and Agriculture, by 2050
Purpose  Shaping agriculture for the benefit of farmers, consumers and the planet

Strategy

Win by being more grower centric

Health for all, hunger for none

Vision

Operational Performance
World Class Innovation
Digital Transformation
New Standards in Sustainability

Strategic Ambition

Perform
Grow above market and deliver strong returns

Transform
Achieve 100% digitally enabled sales by 2030

Win by being more grower centric
A Clear Plan to Accelerate Growth and Outperform the Market

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
Progressing from Volume to Value with Our Crop Protection Vision

Leading Portfolio

Convergence of Advances in Small Molecules, Biology and Biotechnology Innovation with Digital Technology to Create New Value and Sustainable Productivity

Today

Future

Enhanced by Digital Farming Solutions

Leadership in value, treated area AND exceptionally low crop protection environmental impact

2018 Crop Protection Environmental Impact of Crop Protection

Industry Leading CP Development

- >15 new AIs launched in the past 15 years; 8 AI in development and 2 launching in 2022

Advances in Formulation Technology

- Leadership in formulation technology enables lower volumes with equivalent or better efficacy; drone-specific formulations for safety and precision

New Insights and Precision Application with Digital Tools

- Crop specific digital application timing to optimize disease control and yields

- Showing and sharing value of fungicide applications with growers’ data

1 Note: Environmental impact study conducted by University of Denmark; other multinationals consists of combination of four multinationals.

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1 Note: Environmental impact study conducted by University of Denmark; other multinationals consists of combination of four multinationals.
Herbicides: Focused on Unlocking Greater Flexibility

Herbicide sales in 2021: **€5.3bn**, Pipeline Peak Sales Potential of ~**€3bn**

**Mateno Complete**

- Pyroxasulfone
- Diflufenican
- Aclonifen NEW

**New Herbicide Molecule**

- First new mode of action in post emergence weed control in 30 years

- Potential to build on #1 position in global herbicides¹

- Allows use in various market segments, beyond traditional nonselective use

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1 Internal estimates

**PSP of >€50m**

*Registration and launch expected in time for 2022 season*

**Untreated Control**

**Mateno Complete**

**Glyphosate Standard 1**

**Mix Partner + New Herbicide**

Product concept with new active
Fungicides: New Innovations Drive our Growth Potential

Fungicide sales in 2021: €2.9bn, Pipeline Peak Sales Potential of ~€4bn

- Offers unrivaled control of Asian Soybean Rust
- Builds on #1 position in soybean fungicides in LATAM

**Fox Supra**

- Includes next-gen technology Indiflin, with Prothioconazole

**DELARO Complete**

- Prothioconazole
- Trifloxystrobin
- Fluopyram

**Xivana**

- Powered by Fluoxapiprolin

- New global horticulture fungicide with best-in-class MoA; delivers outstanding protection of grapes, potatoes and vegetables
- Higher, longer-lasting efficacy above established standards

**PSP of >€400m**

Expected to launch in 2022 in Brazil

**PSP of >€100m**

Launched in the U.S. in 2021

**PSP of >€150m**

Expected to launch in 2022 in Australia (grapes)

Use in soybeans in Frankenmuth, Michigan, 2019

Typical use rates: potatoes, vegetables [g/ha]

1 In collaboration with Sumitomo; 2 Internal estimates; 3 BASF Orkestra Ultra
Insecticides: New Launches Drive our Global Expansion

Insecticide sales in 2021: **€1.4bn**, Pipeline Peak Sales Potential of ~**€2bn**

- **Diamide insecticide** with active ingredient Tetraniliprole
- Expansion in Asia Pacific; recently launched in key markets like China and Vietnam and **now registered in 21 countries**
- Use in key crops; **corn, rice, potatoes, fruits & nuts and vegetables**

**vayego**

- Fast-acting and long-lasting control of all important **caterpillars** and selected **beetles** and **sucking pests**

Peak Sales Potential ~**€300m**

- **Spidoxamat**² is suitable for application in arable and horticulture crops (soybeans, cotton, fruits and vegetables)
- Regulatory submissions in key markets planned in 2022, **approvals expected starting in 2024**

**Plenexos**

- First **ketoenol insecticide** expected to offer both **foliar and soil uses** against key sucking pests (aphids, white flies)

Peak Sales Potential >**€300m**

- Spidoxamat - Foliar

**Operational Performance**
Biologics Create New Value; Enable Crop Management Benefits
Leveraging the Power and Sustainability Derived from Microbes

<table>
<thead>
<tr>
<th>SeedGrowth</th>
<th>Foliar &amp; Soil applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Yield</td>
<td>Insecticide</td>
</tr>
<tr>
<td>Soy Yield</td>
<td>Fungicide</td>
</tr>
<tr>
<td>Nematicide</td>
<td>Soilborn Disease/Pest</td>
</tr>
<tr>
<td>Fungicide</td>
<td>Crop Performance Enhancers</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

### In-licensed / Commercial Products

- **BioRise**: TagTeam<sup>1</sup>, Optimize<sup>3</sup>, Poncho® Votivo<sup>3</sup>, Integral® Pro<sup>2</sup>, TagTeam<sup>3</sup>, JumpStart<sup>3</sup>

### Business Opportunities

- **Reduction of environmental impact** of Crop Protection
- **Maximizing yield potential** of high value germplasm
- **Increasing nitrogen use efficiency**
- **Use in Tailored solutions** to leverage our full portfolio, combining biologicals, chemistry, germplasm and digital to deliver new grower value

### Vibrant Innovation Ecosystem

- **In-licensed/ Commercial products**: >20
- **In-licensed/ Commercial products**: >20
- **Purpose**: >10 Pipeline Candidates<sup>5</sup>
- **Purpose**: >30 Assets under evaluation for new collaborations or in-licensing opportunities

### Operational Performance

**Reaching >60m acres in row crops and high value horticulture and vegetables acres**

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<sup>1</sup> Also sold under Acceleron® and Torque® brand names; <sup>3</sup> 3rd party product from BASF; <sup>4</sup> In-licensed from Novozymes

4 75-100 growers polled in each of seven countries (Europe, Brazil, US) for potato, tomato and grapes, Bayer Market Research 2020, <sup>5</sup> Includes early research and collaborations
Deploying >250 Corn Hybrids in 2021 to Expand Leading Position

Foundational to Expected Growth in Our > €5bn Global Annual Corn Seed & Trait Sales

**Mid-Term Key Growth Drivers in Corn**

**NEW**

Superior-performing Bayer branded hybrids capture #1 brand share position in the U.S. in 2021.

**Launching CRW3 as a part of VTPro4, SmartStax Pro and VT4Pro stacked offerings in the near-term; game-changing short-stature corn expected launch in the mid-term in the U.S. and Brazil.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Pos.</th>
<th>Market Size</th>
<th>Germplasm Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>#1</td>
<td>~93m acres</td>
<td>&gt;55%</td>
</tr>
<tr>
<td>Argentina</td>
<td>#1</td>
<td>~20m acres</td>
<td>~60%¹</td>
</tr>
<tr>
<td>Mexico</td>
<td>#1</td>
<td>~20m acres</td>
<td>&gt;65%¹</td>
</tr>
<tr>
<td>Brazil</td>
<td>#1</td>
<td>~52m acres</td>
<td>~30%¹</td>
</tr>
<tr>
<td>South Africa</td>
<td>#1</td>
<td>~6m acres</td>
<td>~70%</td>
</tr>
<tr>
<td>Europe</td>
<td>#2</td>
<td>~60m acres</td>
<td>~20%</td>
</tr>
<tr>
<td>South Africa</td>
<td>#1</td>
<td>~6m acres</td>
<td>~70%</td>
</tr>
</tbody>
</table>

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

¹ In hybrid corn market only; "Eu27" +UK, Russia and Ukraine

SmartStax® PRO corn products will be commercially available for the 2022 growing season.

VT4PRO with RNAi Technology is not currently available for commercial sale or commercial planting. Commercialization is dependent on multiple factors, including successful conclusion of the regulatory process. The information presented herein is provided for educational purposes only and is not and shall not be construed as an offer to sell.
Upgrading the Americas to Next-Gen Soybean Trait Technology

### United States and Canada

**Bayer Soybean Trait Offerings:**

- **Glyphosate & Dicamba Tolerance**
- **Glufosinate Tolerance**
- **Roundup Ready 2Xtend**
- **2,4-D, HPPD tolerance to XtendFlex**
- **Insect Resistance & Glyphosate Tolerance**

### South America

**Bayer Soybean Trait Offerings:**

- **Glyphosate & Dicamba Tolerance**
- **Glufosinate Tolerance**
- **Roundup Ready 2Xtend**
- **2,4-D, HPPD tolerance to XtendFlex**
- **Insect Resistance & Glyphosate Tolerance**
- **3rd Gen. Insect Control**
- **HT4 Industry’s First Five-Tolerance Soybean Trait Stack**

---

1. Launch timing reflects Brazil
2. Currency and portfolio adjusted
3. Compared to similar varieties in checks across 500 locations in 2020/2021 crop year

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<table>
<thead>
<tr>
<th>Year</th>
<th>Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>Glyphosate &amp; Dicamba Tolerance</td>
</tr>
<tr>
<td>2021</td>
<td>Glyphosate &amp; Dicamba Tolerance, Glufosinate Tolerance, Roundup Ready 2Xtend</td>
</tr>
<tr>
<td>2022</td>
<td>Glyphosate &amp; Dicamba Tolerance, Glufosinate Tolerance, Roundup Ready 2Xtend, 2,4-D, HPPD tolerance to XtendFlex</td>
</tr>
<tr>
<td>2028</td>
<td>Glyphosate &amp; Dicamba Tolerance, Glufosinate Tolerance, Roundup Ready 2Xtend, 2,4-D, HPPD tolerance to XtendFlex, Insect Resistance &amp; Glyphosate Tolerance, 3rd Gen. Insect Control, HT4 Industry’s First Five-Tolerance Soybean Trait Stack</td>
</tr>
</tbody>
</table>

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2.89 bu/acre

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1 Launch timing reflects Brazil
2 Currency and portfolio adjusted
3 Compared to similar varieties in checks across 500 locations in 2020/2021 crop year
4 Bayer AG Investment Case April 2022
Multiple Traits in Late-Stage Development for Cotton Farmers

Leading Innovation for Cotton Growers Driving Growth in >€500m¹ Cotton S&T Business

1st generation

- First-ever biotech trait for piercing and sucking insect control

HT4 Cotton

- Glyphosate
- Dicamba
- Glufosinate

4th generation

- Season-long protection with multiple modes of action for key lepidopteran pests

³Stewarded Commercial Launch in 2022 in the U.S.

ADVANCED to Phase 3

Control

HT4 Cotton

2x 5-way tank mix at V3 stage in US2020 field trial in Scott, MS

2019 Rocky Mount NCSU Results

¹2021 cotton seed & trait sales for Bayer Crop Science

³ThryvOn™ Technology has received full approval for planting in the United States but, as of the date this material was published, is pending approval in certain export markets. Specific plans for commercialization depend upon regulatory approvals and other factors.
Unmatched R&D Investment Powers Industry-Leading Portfolio

**Ag R&D Investment (€bn)**

- **Bayer Crop Science**
  - 2.0

- **Syngenta + Adama**
  - 1.2

- **Corteva**
  - 1.0

- **BASF Ag**
  - 0.9

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1. 2021 reported results, company information; exchange rate: FY 2021: ~1.18 USD/EUR
2. 2020 reported results, represents the legacy Syngenta results plus Adama, includes capitalized development costs
3. Includes permanent and temporary employees

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#1 R&D Platform in Crop Science

>7,100 R&D employees

>100 key collaborations; partner of choice
Pipeline with Up to €30bn Peak Sales Potential Delivering for Farmers

Eight Projects Advance, Eight New Formulations Launch and Hundreds of Seed Deployments in 2021

>500
New hybrids and varieties deployed across corn, cotton soybeans and vegetables

>300
New crop protection registrations

8
New formulations launched

2
New actives advanced

5
New trait projects advanced across corn, soybeans and cotton

Value of Up to €30bn in Cumulative Peak Sales Potential

~50% Incremental

Cumulative contribution of projects reaching PSP (in %)

~ 40%
By 2031

~ 40%
2032-35

~ 20%
2036+

Cumulative PSP by SBE

Other
Insecticides
Fungicides
Herbicides
Soy S&T
Corn S&T

1 Represents non-risk adjusted estimated peak sales for the combined breeding, biotech, crop protection and environmental science pipelines, as well as new business models and new value areas. PSP = Peak sales potential  SBE = Strategic Business Entity
Short-Stature Corn Offers Transformational Shift in Production
Anticipated Fit on >220m Acres and Estimated Incremental Peak Sales Potential of ~€1bn for NA

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%¹

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

¹ Purdue University (http://www.extension.purdue.edu/ay/ay-262.html)
Three Generations of Soybean Herbicide Tolerance Traits

Technologies Provide Solutions to Address Farmer’s Needs, Herbicide Resistance Challenges

3 herbicide tolerances
- Glyphosate
- Dicamba
- Glufosinate

HT4
Fourth-Gen Phase 3
Expected 2027 launch

5 herbicide tolerances
- Glyphosate
- Dicamba
- Glufosinate
- HPPD
- 2,4-D

HT5
Fifth-Gen Phase 2
Expected 2027 launch

6 herbicide tolerances
- Glyphosate
- Dicamba
- Glufosinate
- HPPD
- 2,4-D
- PPO

Always read and follow label instructions. Products not registered in all jurisdictions.

/// Bayer AG /// Investment Case /// April 2022
Digital Farming Solutions Underpin and Enhance Our Ability to Bring Transformational Solutions to Agriculture

**Our Positive Impact on Agriculture**

- Increase **yield** and improve **profitability**
- Leverage information to **manage risk** and address **variability**
- Manage fields down to the square meter, to farm more **efficiently** and **sustainably**
- Seamlessly collect, visualize and analyze data to enable **more informed decisions**

**Three Core Value Drivers**

- **Franchise Value**
- **Downstream Value**
- **Platform Value**
Climate FieldView Provides Unmatched Visualization, Analysis and Insights to Enable Growers to Enhance Productivity

**Climate FieldView**

- >180m subscribed acres
- #1 brand in digital ag\(^1\)
- Operates in 23 countries
- Largest database of grower and field trial seed performance data in industry
- >70 partners on platform

---

\(^1\) according to Kynetec December 2021 FieldView Brand Tracker
**Digital Unlocks Scalable Climate-Smart Business Models**

Carbon Markets Valued at >$200bn/year\(^1\) and Growing with Consumers’ Demand for Sustainability

`FIELDVIEW` has the potential to streamline the way carbon is measured, verified and reported, to enable scalable, climate-smart business models

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**Carbon Initiative**

- \(~2,500\) participating farmers in Brazil and the U.S. alone
- 10 countries covered
- 1.5m acres globally

- Long-term program providing annual incentives to Climate FieldView enrolled growers for verified and validated climate-smart practices like no-till and cover cropping

- Ranked **#1** in the U.S., scoring very high in terms of grower trust\(^2\)

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**Enables 3 Expected Downstream Revenue Opportunities**

- **Carbon Services**
  - Project Carbonview, collaboration with Bushel, The Andersons, and built on Amazon Web Services cloud infrastructure, expected to track carbon emissions across ethanol chain

- **Product sales**
  - CHS Inc., largest Ag Coop in the U.S., agreed to be our carbon program provider, providing advice to growers moving to sustainable practices.

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\(^2\) Forward Group Research Carbon Credit Program Perceptions & Evaluation, July 2021
Enabling New Digital Platforms in Ag

Opens Access to Participate in Broader B2B AgTech Value Pools; Expanding into Digital Marketplaces

• Combines Bayer’s ag expertise and leading digital farming platform with Microsoft’s cloud technology and unrivaled B2B solutions, to enhance digital infrastructure

• Cloud-based set of digital tools and data science solutions for agriculture and adjacent industries

• Seeking to create and commercialize off-the-shelf opportunities for other companies to enter and innovate directly in ag and other industries.

• Solutions to address farming operations, sustainable sourcing, manufacturing and supply chain improvement, and ESG monitoring and measurement

---

Orbia: First Digital Ag-Marketplace

• JV between Bayer and Bravium1
• Connects growers, input providers and grain traders to a network to expand their reach, secure financing, redeem rewards, purchase and sell inputs

• Established in 2019 in Brazil
• Main agricultural marketplace with largest loyalty program
• >300 distributors with inputs such as pesticides, seeds and fertilizers
• >185,000 registered growers
• Covers ~70% of planted area

---

1 Brazil-based marketing agency.
Setting the Standard for Sustainability and Biodiversity in Agriculture

Bayer’s 2030 Sustainability Commitments

**Advancing a carbon-zero future for agriculture**

- Climate-smart practices:
  - No-tille
  - Cover Crops
  - Optimize use of synthetic fertilizers through the use of microbes

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

- 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**

- Enhancing social innovation (e.g. with Better Life Farming)
- Digital transformation with FarmRise
- Introduce new, higher-yielding, resource efficient rice hybrids
Science for a Better Life
Pharmaceuticals: Driving Continued Long-term Growth

Investment Case
April 2022 / Bayer AG
Pharmaceuticals: Driving Continued Long-Term Growth

1. Market & Position
2. Strategy
3. Growth Drivers
4. Innovation
We are Operating in a Rapidly Changing but Attractive Market Environment Driven by Megatrends and the Bio Revolution

*Pharma Market*

**Market Size 2021**

- Japan: 7%
- China: 12%
- APAC: 6%
- EMEA: 27%
- Americas: 48%
- Total: $1,180bn

**Market CAGR 2021-25**

- 4 - 5%

*Source: IQVIA Market Prognosis as of September 2021*

*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
Bayer Pharmaceuticals Holds Strong Positions in Areas of High Unmet Medical Needs, Generating Growth and Attractive Returns

Bayer Pharmaceuticals – Sales and EBITDA margin before special items 2011-2021

Sales
[€bn]

EBITDA margin before special items

**Sales of top products**

<table>
<thead>
<tr>
<th>Product</th>
<th>Sales [€m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xarelto</td>
<td>4,735</td>
</tr>
<tr>
<td>Eylea</td>
<td>2,918</td>
</tr>
<tr>
<td>Maxalt</td>
<td>1,170</td>
</tr>
<tr>
<td>Adalat</td>
<td>823</td>
</tr>
<tr>
<td>Jiajnix</td>
<td>763</td>
</tr>
</tbody>
</table>

**Sales by therapeutic area**

<table>
<thead>
<tr>
<th>Therapeutic Area</th>
<th>Sales [€m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular*</td>
<td>725</td>
</tr>
<tr>
<td>Ophthalmology*</td>
<td>168</td>
</tr>
<tr>
<td>Hematology*</td>
<td>105</td>
</tr>
<tr>
<td>Oncology</td>
<td>85</td>
</tr>
<tr>
<td>Radiology*</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
</tr>
<tr>
<td>Women’s Health*</td>
<td>36</td>
</tr>
</tbody>
</table>

* Market leading positions

**Margin corridor 30-35%**

**Sales CAGR 6.3%**

1) as reported in the respective fiscal years
Solid topline growth after COVID-19 related restrictions in prior year

Flagship products performed particularly well, contributing ~60% to higher sales:
- Eylea™ +19%
- Xarelto™ +6%

Successful launch of Kerendia™ and continued rollout of Nubeqa™ and Verquvo™

Lower earnings reflect continued investments into R&D and marketing of new products
Our Strategy is Geared Towards Continued and Sustainable Long-term Growth, also Addressing Loss of Exclusivity of Major Products

<table>
<thead>
<tr>
<th>Strategy Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capture the value</strong> of the current portfolio and <strong>manage LoE</strong> for Xarelto &amp; Eylea</td>
</tr>
<tr>
<td><strong>Grow new potential blockbusters</strong></td>
</tr>
<tr>
<td><strong>Build digital health solutions</strong></td>
</tr>
<tr>
<td><strong>Capitalize on Cell &amp; Gene therapy platform</strong></td>
</tr>
<tr>
<td><strong>Build an at scale player</strong> in oncology in our areas of focus</td>
</tr>
<tr>
<td><strong>Evolve regional strategies in China and the US</strong> to sustain future growth</td>
</tr>
</tbody>
</table>
Over the Last Three Years we Successfully Launched Four New Drugs and Strengthened Pipeline and Technologies

Main Building Blocks of Post LoE Growth

Late-stage Pipeline in CV & WH

- **Verquvo** (vericiguat) tablets
  - PSP ~ €0.5bn
  - launched in 2021

- **Kerendia** (finerenone)
  - PSP ≥ €1.0bn
  - launched in 2021

- **Elinzantant** (KaNDy NT-814)
  - PSP ≥ €1.0bn
  - potential launch in 2025

Oncology

- **NUBEQA** (darolutamide) tablets
  - PSP ≥ €3bn
  - launched in 2019

- **VITRAKVI** (larotrectinib)
  - PSP > €0.75bn
  - launched in 2019

- 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

- >40 BD&L transactions signed since 2020
- Enhanced focus on external innovation to replenish pipeline

---

1 In collaboration with Merck & Co. Inc., Kenilworth, NJ, USA
2 In collaboration with Orion Corporation
PSP = Peak Sales Potential

© Bayer AG /// Investment Case /// April 2022
Capturing the Full Commercial Potential of Market Leading Therapies

New indications & label updates in 2021

- Pediatric VTE: approved in EU, Japan, Canada (EINSTEIN Jr) and the US (EINSTEIN Jr & UNIVERSE)
- Symptomatic peripheral artery disease (VOYAGER PAD): label update approved both in the EU & US
- European Patent Office confirmed patent protection for once-daily treatment until 2026

Guidance FY2022
Higher volumes to largely offset 12 months impact of VBP2 in China

2 Phase III studies with high-dose formulation (initiated 2020)

- PHOTON (DME)
- PULSAR (neov. AMD)

Goal: Prolongation of injection intervals

Prefilled syringes launched in 2020 in EU and JP

Guidance FY2022
Mid-single digit growth

Apr. 2024 → Jan. 2026
+ 21 months
Kerendia is a Game Changer for CKD and Type 2 Diabetes Patients

Next milestone in renal disease treatment, continuing our RAAS-centric treatment history

**Largest clinical program**
with unparalleled data

**Novel MOA** intensifies RAAS inhibition (gold-standard for treatment)

**Treatment continuity** for HCPs with trust in RAASi for CV and kidney outcomes

**Characteristics of CKD/T2D**

- 160m patients globally
- Shortens life expectancy by 16y
- #1 cause for dialysis/transplants

**Successful launch trajectory**

- Full global rights including the US
- Broad early adoption following US launch in Q3 2021
- Updated ADA guidelines
- Approved in EU in Feb. 2022

Phase III trials in 2 additional indications (HFpEF, non-diabetic CKD) with results in 2024/25

---

1 13,171 patients early in DKD progression
Kerendia sets the stage for a long-term cardio-renal vision and targets to deliver blockbuster potential

Unmet Needs

Need for RAASi intensification
Need for earlier use in disease progression
Need for disease modification and outcomes

Kidney Dedicated

Establish Kerendia as the next gen RAASi for CKD/T2D

CardioRenal Disease Modifier

Heart failure (HFpEF)

Non-diabetic CKD

Phase III studies:

- FIDELIO-DKD
- FINEARTS-HF
- FiND-CKD

(2020/2021)
(2024E)
(2025E)

Dates indicate primary trial completion according to clinicaltrials.gov

Bayer AG /// Investment Case /// April 2022
We are Targeting to Significantly Expand our Presence in Selected Areas of Oncology where One Blockbuster can Build a Franchise

Key elements to achieve our growth aspiration

- Continue to build strong prostate cancer franchise with NUBEQA and Xofigo
- Realize >€3bn peak sales potential of NUBEQA
- 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

Key sales contributors, graphic illustrative
Prostate Cancer is at #2 of the Most Common Cancer Types in Men Worldwide with Significant Unmet Medical Need

Estimated number of new cases in 2020, worldwide, males, all ages

Characteristics of Prostate Cancer

- Usual onset: age >50 years
- Diagnostic method: PSA testing, tissue biopsy, medical imaging
- Prognosis: long-term survival in early-stage, significant higher morbidity in late-stage

# Two Highly Consistent Phase 3 Studies Confirm Nubeqa’s Strong Clinical Profile in Prostate Cancer Treatment

<table>
<thead>
<tr>
<th>Study</th>
<th>Efficacy</th>
<th>Selected secondary endpoints</th>
<th>Tolerability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAMIS nmCRPC</td>
<td>Metastasis free survival prolongation by 22.0 months, 59% risk reduction (HR=0.41, p&lt;0.001)</td>
<td>Overall survival 31% risk reduction (HR=0.69, p=0.003)</td>
<td>favourable tolerability profile</td>
</tr>
<tr>
<td>ARASENS mHSPC</td>
<td>Overall survival 32.5% risk reduction (HR=0.675, p&lt;0.0001)</td>
<td>Time to castration resistant PC 64% risk reduction (HR=0.357, p&lt;0.0001)</td>
<td></td>
</tr>
</tbody>
</table>

**ARASENS strengthens** the efficacy promise from ARAMIS

**ARASENS confirms** the tolerability profile of ARAMIS

**Potent efficacy**

**Tolerability similar to control arm**

**Delivering strong survival benefit and favourable tolerability**¹

**Darolutamide**

**Potential to become foundational therapy in PC**

¹ compared to control arm
We Are Committed to Make Nubeqa Available to a Broad Spectrum of Prostate Cancer Patients

Patient progression in prostate cancer

<table>
<thead>
<tr>
<th>(Neo-)Adjuvant early-stage</th>
<th>Nonmetastatic mid-stage</th>
<th>Metastatic late-stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Neo-)Adjuvant early-stage</td>
<td>Nonmetastatic mid-stage</td>
<td>Metastatic late-stage</td>
</tr>
<tr>
<td>G7 Drug treated epidemiology estimates:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>~145k</td>
<td>BCR(^4) ~85k</td>
<td>nmCRPC(^3) ~46k</td>
</tr>
<tr>
<td>~145k</td>
<td>BCR(^4) ~85k</td>
<td>nmCRPC(^3) ~46k</td>
</tr>
<tr>
<td>~145k</td>
<td>BCR(^4) ~85k</td>
<td>nmCRPC(^3) ~46k</td>
</tr>
<tr>
<td>Darolutamide (Nubeqa) Phase 3 study program:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DaSL-HiCap 2028</td>
<td>ARAMIS 2019</td>
<td>ARASENS 2022</td>
</tr>
<tr>
<td>DaSL-HiCap 2028</td>
<td>ARAMIS 2019</td>
<td>ARASENS 2022</td>
</tr>
<tr>
<td>DaSL-HiCap 2028</td>
<td>ARAMIS 2019</td>
<td>ARASENS 2022</td>
</tr>
<tr>
<td>Planned to be started in H2 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned to be started in H2 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned to be started in H2 2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ARi’s\(^6\) moving into earlier segments

ARi

---

1 Metastatic castration resistant prostate cancer  2 Metastatic hormone sensitive prostate cancer  3 Non-metastatic castration resistant prostate cancer  4 Biochemical relapse  5 G7: US, EU, JP  6 Androgen receptor inhibitor

* Not label generating; supports ARANOTE submission

---

~10-15 years
Nubeqa With the Chance to Become a Foundational Drug to Treat Prostate Cancer – Peak Sales Potential of >€3bn

**Efficacy**
- Highly efficacious ARi\(^1\)
- Very consistent set of data from two Phase 3 studies
- First to show more than 30% risk reduction of death in nmCRPC and mHSPC

**Safety**
- Well tolerated safety profile
- Limited potential for drug-interactions
- Early data indicate limited blood-brain barrier penetration

**Lifecycle Management**
- Approved in nmCRPC in the US (2019), Europe + Japan (2020) and China (2021)
- Become agent of choice in prostate cancer
- Combination opportunities

---

\(^1\) Androgen receptor inhibitor

---

**Strong launch performance in nmCRPC**

- **Weekly TRx (US)**
  - **Sales 2021:** ~€220m

- **Planned submissions for mHSPC label extension**
  - **ARASENS primary endpoint met**
  - **ARASENS at ASCO GU**
Our Innovation Engine is Delivering

1. Global R&D organization
2. Collaborations, in-licensing, M&A: Elinzanetant (Impax), Kerendia (BIO), AskBio, BlueRock, Mammoth Biosciences
3. CGT: VIVIDION Therapeutics
4. SMOL

- Committed and experienced new leadership team
- Advancing leading cell and gene therapy business
- World leading science added through new platforms
- Unlocking value for patients in the highest need areas
External Innovation to Accelerate Replenishment of Pipeline and Broaden Modalities
Selected High-Level Overview

Momentum Significantly Increased

>40 Transactions signed since 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)
Elinzanetant Addresses High Unmet Needs for Non-hormonal Treatment of Vasomotor Symptoms in Menopausal Women

**Elinzanetant**
- A first-in-class, non-hormonal, once-daily, oral neurokinin-1,3 receptor antagonist
- Differentiated, double mode of action
- Well tolerated - no serious AEs related to treatment
- Efficacy data compare well with BSC

**Typical Vasomotor Symptoms During Menopause**
- Sleep disturbance
- Hot flashes
- Night sweats

About 16m women in the U.S. and another 16m in Europe suffer from menopause symptoms

**Reduction in moderate/severe VMS per day from baseline (Phase IIb results)**

<table>
<thead>
<tr>
<th></th>
<th>Week 4</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>-2.7</td>
<td>-4.7</td>
</tr>
<tr>
<td>Elinzanetant, 120 mg OD</td>
<td>-6.7 (P&lt;0.001)</td>
<td>-7.8 (P=0.009)</td>
</tr>
</tbody>
</table>

Phase III study started in 2021, data expected in H1 2023
Significant Progress Has Been Achieved in Anti-coagulation Therapy but Medical Need Still Exists

- Heparin and VKAs were the only anticoagulants available for most of the 20th century
- Guidelines now prefer New Oral Anticoagulants (NOACs) over VKAs for many indications
- NOACs are contraindicated in ESRD patients and in patients with mechanical heart valves
- Need remains for anticoagulants with a reduced bleeding risk especially in specific patient populations

Fredenburgh and Weitz, JTH 2020; DOI: 10.1111/jth.15126
Bayer Has a World Leading Factor XI(a) Portfolio – Next Class of Anticoagulation Drug Candidates with Disruptive Potential

<table>
<thead>
<tr>
<th>Asset</th>
<th>Mode of Action</th>
<th>Comprehensive Phase IIb Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXI-Antisense (IONIS-LICA)</td>
<td>Antisense technology prevents FXI expression</td>
<td><strong>• RE-THINc ESRD</strong></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Antisense diagram" /></td>
<td>Data to be presented in 2022</td>
</tr>
<tr>
<td></td>
<td><strong>Hepatocyte</strong> → <strong>Blood (Plasma)</strong></td>
<td>Reduction of thrombotic events in end-stage renal disease patients on hemodialysis</td>
</tr>
<tr>
<td>FXIa-Antibody (Osocimab)</td>
<td>Antibody binds FXIa to block further interaction and activity</td>
<td><strong>• CONVERT ESRD</strong></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Antibody diagram" /></td>
<td>Data to be presented in 2022</td>
</tr>
<tr>
<td></td>
<td><strong>Hepatocyte</strong> → <strong>Blood (Plasma)</strong></td>
<td>Prevention of thromboembolic events in ESRD patients on hemodialysis who are at risk for thromboembolic events</td>
</tr>
<tr>
<td>Oral FXIa Inhibitor</td>
<td>Small molecule blocks activity of FXIa</td>
<td><strong>• PACIFIC study program</strong></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Small molecule diagram" /></td>
<td>Data to be presented in 2022</td>
</tr>
<tr>
<td></td>
<td><strong>Hepatocyte</strong> → <strong>Blood (Plasma)</strong></td>
<td>Data to be presented at ACC on April 3, 2022</td>
</tr>
</tbody>
</table>
Hereditary Factor XI Deficiency is Associated with Lower Risk for Cardiovascular and Venous Thromboembolic Events

- Subjects with hereditarily reduced levels of blood coagulation factor XI have a reduced risk of thrombotic disorders without suffering the risk of spontaneous bleeds.
- Factor XI inhibition could achieve greater anti-coagulation without increased bleeding risk.

Preis et al., Blood (2017); Georgi et al, Stroke (2019)
Advancing Leading CGT Platform with Strong Clinical Pipeline

Example: Two-pronged approach to deliver transformative therapies to treat Parkinson’s

Diverse tech platforms and capabilities

- AAV platform (AskBio and Bayer established)
- BlueRock’s iPSC
- CAR-T
- Gene-editing (+ Mammoth)

CDMO business with strong momentum

Industry leading CGT clinical pipeline

- 7 clinical projects
- >15 projects at pre-clinical stage

1 Pluripotent stem cell-derived dopaminergic neurons

Successful administration of first dose of DA01\(^1\) to a Parkinson’s disease patient in open-label Phase 1 clinical study

Ongoing recruitment and evaluation of patients in the US for AskBio’s Phase 1b clinical study to assess safety and preliminary efficacy

Photo: Dr. Viviane Tabar, Chair of the Department of Neurosurgery, Memorial Sloan Kettering Cancer Center

\(^1\) Pluripotent stem cell-derived dopaminergic neurons
Bayer Pharmaceuticals: Overview Development Portfolio (as of March 1, 2022)

### Phase I (23)
- Elnusertib (ATR Inhibitor)
- Regorafenib* (multi-Kinase Inhibitor)
- SLFN12 Complex-Inducer
- mEGFR Inhibitor
- Peglatanam Corticetan (PSMA-Targeted Thorium Conjugate)
- HER2-TTC (HER2-Targeted Thorium Conjugate)
- Bapotulimab (ILDR2 lb Antibody)
- ANR Inhibitor
- ATA2271 (Mesothelin CAR-T Cell Therapy)
- Congestive Heart Failure Gene Therapy
- Mosiquat (sGC Activator)
- ßknaptan (Vasopressin V1a Receptor Antagonist)
- sGC Activator 4
- P2X4 Inhibitor
- BDKRB1 Receptor Antagonist
- Paboctocogene Carmaravovec (FVIII Gene Therapy)
- Pompe Disease Gene Therapy
- Parkinson’s Disease Gene Therapy
- Parkinson’s Disease Cell Therapy
- sGC Activator 3
- ADRA2C Antagonist
- Zabedosertib (IRAK4 Inhibitor 1)
- IRAK4 Inhibitor 2

### Phase II (14)
- Regorafenib* (combi Nivolumab)
- Regorafenib* (combi Pembrolizumab)
- Asundoxan (FXIa Inhibitor)
- Fesomersen (FXI-LICA)
- Osoimab (anti-FXIa Antibody)
- Pecavaptan (Dual Vasopressin Receptor Antagonist)
- Runcaciguat (sGC Activator)
- Adrenomedullin Pegol (PEG-ADM)
- TASK Channel Blocker
- High Relaxivity Contrast Agent (HRCA)

### Phase III (10)
- Darolutamide (AR Inhibitor)
- Copanlisib (PDK Inhibitor)
- Finerenone (MR Antagonist)
- Alferocet 8mg
- High Relaxivity Contrast Agent (HRCA)

---

### Selection of major Pharma development portfolio projects in clinical Phase I to III

- **ONCOLOGY**
- **CARDIOVASCULAR DISEASES**
- **WOMEN’S HEALTH**
- **OTHERS**

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* Regorafenib is a Bayer compound developed solely by Bayer. In 2011, Bayer entered into an agreement with Onyx Pharmaceuticals, Inc. under which Onyx will receive royalty on any future global net sales of regorafenib in oncology.
Winning in Consumer Health

1. Market & Position
2. Strategy
3. Sustainability
Consumer Health: A Leading Global OTC Player

**FINANCIALS**

**Sales development**
% yoy cpa

- 2019: 2.6%
- 2020: 5.2%
- 2021: 6.5%

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

- 2019: 20.9%
- 2020: 22.0%
- 2021: 22.5%

**Sales by region: €5.3bn**
In %, in 2021

- North America: 39%
- Latin America: 11%
- EMEA: 16%
- Asia / Pacific: 34%

**PRODUCTS**

**Sales by categories: €5.3bn**
In %, in 2021

- Pain & Cardio: 20%
- Allergy, Cough & Cold: 21%
- Digestive Health: 28%
- Nutritionals: 15%
- Dermatology: 15%

**Market positions by category**

1. Pain & Cardio: Rank #3
2. Allergy & Cold: Rank #1
3. Digestive Health: Rank #1
4. Cardiovascular: Rank #3
5. Nutritionals: Rank #3

**Key products**

- Pain & Cardio: ASPIRIN, ALEVE
- Dermatology: BEPANTHEN, CANESTEN
- Digestive Health: MiraLAX, REBOX, IBEROGAST
- Allergy & Cold: CLARITIN
- Nutritionals: NUTRITIONALS, REDOXON

---

1. Source: Net Sales FY2021, TABS Market Share MAT Aug 2021

---

1 Bayer AG /// Investment Case /// April 2022
A Multifaceted Plan to Drive Further Growth

**AMBITION**
- Grow ahead of the market and increase margins

**WHERE TO PLAY**
- Winning & Balanced Portfolio

**HOW TO WIN**
- Growth focused Innovation (esp. in powerbrands)
- Modern Marketing & Sales (e.g. precision marketing)
- Optimized Cost & Cash (with focus on an agile organization)

**OUR ACCELERATORS**
- Digital Transformation
- Sustainability
Driving Disproportionate Growth in Attractive Segments and Markets

Strong positions in 7 out of Top 10 OTC markets

Accelerate growth in fast-growing and profitable markets

Top 5 position

USA
CHINA
India
South-East Asia
Accelerating Growth from Innovation

Iconic Global and Local Brands Built over Decades

Note: xx = Year of brand launch

1898 1930 1934 1940
ASPIRIN  Alka-Seltzer  Redoxon  ONE A DAY
1943 1950 1983 1992
Bepanthen  Iberogast  elevit  Claritin

Strategy: Growth-Focused Innovation
Modernizing Our Brand Building and Sales Capabilities

### Brands with Purpose

**From Mass to Precision Marketing**

<table>
<thead>
<tr>
<th>% Precision marketing&lt;sup&gt;1&lt;/sup&gt;</th>
<th>2018</th>
<th>2021</th>
<th>2024 - Ambition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>58%</td>
<td>80%</td>
</tr>
</tbody>
</table>

### Accelerating E-commerce

<table>
<thead>
<tr>
<th>% Net Sales&lt;sup&gt;2&lt;/sup&gt;</th>
<th>2018</th>
<th>2021</th>
<th>2024 - Ambition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3%</td>
<td>10%</td>
<td>15%+</td>
</tr>
</tbody>
</table>

---

<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

Health Literacy
Partnerships & brand purpose activations for underserved

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

Environmental

Carbon Neutral Production
CO2 reduction: Energy efficiency and renewable energy projects

Sustainable Products
Sustainable packaging

Partnerships & brand purpose activations for underserved

Accessible Products
Accessible SKUs & relevant GTMs

Environmental

Carbon Neutral Production
Removal of ozone depleting liquids from HVAC plants

Sustainable Products
Baselining of environmental impact of packaging & finding alternatives

3 Sustainability

Vitamin Angels, Kirk Humanitarian

Accessible SKUs & relevant GTMs

Removal of ozone depleting liquids from HVAC plants

Baselining of environmental impact of packaging & finding alternatives
Science for a Better Life

Sustainability @Bayer

Investment Case

April 2022 / Bayer AG
Sustainability is Integral to Our Values, Strategy and Operations

We intend to create bold impact and generate sustainable business opportunities.

Megatrends

Societal Needs

Impact

Sustainable Growth

Pharmaceuticals

Growing Population

Pressure on Ecosystems

- Aging Population
  - Preserve and restore health

- Growing Population
  - Secure sufficient supply of quality food

- Pressure on Ecosystems
  - Use natural resources more efficiently and responsibly

Our Vision: Health for all, hunger for none

Help more people thrive

Decrease ecological footprint

Long-term business growth through sustainable innovation
Sustainable Innovation as Foundation for Business Opportunities

Co-Shaping the Bio-Revolution
We are among the companies that help to shape the ongoing bio-revolution. Our extensive knowledge of human and plant science, supported by our expertise in regulatory processes and a global footprint ultimately bring innovations from labs to market.

Sustainable Solutions in Agriculture
We develop solutions with improved sustainability profiles: seeds/traits and related farming practices (e.g. short stature corn, direct seeded rice), crop protection products & irrigation systems (e.g. lower environmental impact), digital farming and precision agriculture, climate-smart practices.

Breakthrough Technologies in Pharmaceuticals
We foster innovation and portfolio extension in important therapeutic areas with an increasingly strong setup in the cell & gene sphere and the potential to meet undruggable targets.

Better Access to Health & High-Quality Nutrition
Our access targets bear chances of meaningful inclusive growth with recipients as potential future market participants while addressing global megatrends in health and nutrition.
Ambitious Measurable Targets for Sustainable Development

Our 2030 Targets are in line with UN SDGs and the Science Based Targets Initiative

**Decrease ECOLOGICAL footprint**
- Climate neutrality at own sites + reduced emissions in our supply chain
  - 42% reduction target\(^1\) for Scope 1 & 2
  - 500m € CapEx for emission reduction
  - 50m-200m € OpEx for offsetting projects
  - 12.3% reduction target\(^2\) for Scope 3
- **Net Zero emission target until 2050** in line with Paris Agreement (Scope 1, 2 & 3)

**Help more PEOPLE thrive**
- **Support** 100m smallholder farmers in LMIC\(^3\)
- **Provide** 100m women in LMIC\(^3\) with access to modern contraception
- **Expand** access to self-care for 100m people in underserved\(^4\) communities
- Gender parity at all leadership levels & targets for further diversity dimensions

**CS:** -30% greenhouse gas emissions produced by key crops in the main regions we serve and -30% environmental impact of crop protection

**CH:** Sustainable production and transition to circular options (reduce, recycle, reuse, replace)

**PH:** Increase the availability and affordability of our products in LMIC via equitable pricing and patient affordability programs, with the ambition of reaching an additional pool of 100m patients

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\(^1\) By 2029 from a 2019 base year is in line with limiting global warming to 1.5 C°

\(^2\) By 2029 from a 2019 base year is in line with limiting global warming to below 2 C°

\(^3\) LMIC: low and middle income countries - all countries included in the World Bank list as per 1 July 2019

\(^4\) Underserved: economically or medically

We Take Broad Climate Action Along the Value Chain

- 42% less CO₂ in our own operations¹ by 2029
- 12.3% less CO₂ in the value chain² by 2029
- 30% less greenhouse gas emissions³ by 2030
- Net Zero by 2050

Reduce Emissions

Offset remaining emissions with increasing share of removals

Generate certified digitally-enabled carbon assets⁴ with farmers

Carbon Reduction

Carbon Removal

Climate Resilience

Offsetting & Carbon Assets

Support Resilience

In supply chains

Of farmers on climate change impacts

Integrate climate into risk and opportunity management following TCFD recommendation

¹Scope 1 + 2, ²Scope 3, ³30% less in our farming customers’ in-field GHG emissions per kg of crop yield in the most emitting cropping systems in the regions we serve
⁴Offsets and in-sets
We are on track in our decarbonization journey

**42% less CO₂ in our own operations by 2029 & Net Zero by 2050**

- **Reduced emissions by 11.5%** or around 410,000 tons compared to 2020
  - Reduction mostly due to **increase of renewable energy share to approx. 25%** of total purchased energy
  - Additionally, offsetting of 300,000 metric tons of greenhouse gas emissions

**12.3% less CO₂ in the value chain by 2029**

- Reduced emissions by 0.6% or 50,000 tons vs. prior year
  - Collaboration with CDP Supply Chain Initiative, TfS and WBCSD to standardize calculation for product-related carbon footprint

**30% less greenhouse gas emissions by 2030**

- Continued efforts in **Carbon Initiative**: 17 months since launch in 2020, >2,600 growers enrolled in 10 different countries, >1.4M acres added & 500,000 tons of carbon sequestered in soil
  - Innovative, profitable and tailored solutions through integrated environmental metrics in field trials
  - Active partner in advancing carbon neutrality in ag (e.g., EU Carbon+ Farming Coalition, Global Soil Health Program)

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1. Find our offsetting approach [here](https://www.bayer.com/en/sustainability/climate-protection);
2. equivalent to 42% reduction
3. equivalent to 12.3% reduction
4. Equivalent to 30% reduction
5. WBCSD: World Business Council for Sustainable Development
6. 30% less in our farmers’ in-field GHG emissions per kg of crop yield in the most emitting cropping systems in the regions we serve; baseline calculated based on 2020 data
Support 100m Smallholder Farmers
Accessing smallholders improves lives and creates business opportunities

Challenges
- ~550 M Smallholder Farmers worldwide
- Lack of access to new technologies
- Limited access to knowledge
- Limited productivity of their crops
- Climate change
- Exposure to the markets, price volatility and fluctuations
- Hunger & malnutrition
- Additional challenges caused by Covid-19
- >50% of population in developing countries

How to get there
- Commercial operations:
  Regional commercial strategies focused on smallholders’ needs
- Value-Chain-Partnerships:
  ‘Better Life Farming’ centers and integration into other value chain ecosystems
- Digital Solutions:
  Digital Incubator & Innovation Hub in APAC
- Portfolio Differentiation:
  Better & affordable crop protection products, tailored to local farmer needs
- License-to-Operate & Biotech Approvals:
  Large regulatory approval pipeline in Africa and APAC to enter new markets

Progress
- Commercial Forecast & Initiatives
  - 2019 (baseline)
  - 2020
  - 2021
  - 2030
  - 100

Progress in 2021:
- Strong business expansion in regions
- Key initiatives continued (e.g. partnerships, rapid Better-Life-Farming expansion, piloting of new digital ventures)

Numbers reflect people (millions)
Access for 100m Women to Family Planning

Catalyst for important societal and economic impact

Challenges

• >200 million women in developing regions who want to avoid pregnancy are not using safe and effective family planning methods, central to women’s empowerment

• Reducing poverty, protecting maternal and child health, driving economic development, and achieving sustainable development

• Gender inequality is still high, teenage pregnancy and maternal death are serious health concerns, especially in LMICs

• The need to provide reproductive supplies and services will further increase

• By 2030, an additional 130 million women in LMICs will have entered reproductive age

How to get there

• Additional supply capacity, most importantly for long-acting contraceptives: >400m€ investment into Costa Rica and Finland facilities

• Capacity building1, e.g. cooperation with urban health project ‘The Challenge Initiative’ (TCI)

• Route to women in rural areas and humanitarian settings in cooperation with partners (e.g. UNFPA)

• Long-term: Innovation, e.g. non-hormonal contraceptive technologies

Progress

Progress in 2021:

// Two partnerships integrated: TCI & UNFPA Egypt
// Major funding cut by UK government to UNFPA’s supplies partnership

Numbers reflect women using modern contraception (millions)

1 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 leverage partnerships to create impact at scale.
Access to Self-Care for 100m People in Underserved Communities

Everyday health as the first and last line of care

**Challenges**

- **Ageing population, a rise in lifestyle related diseases** and a constantly increasing level of healthcare costs
- Expanding access to self-care solutions helps with **early intervention and lowers healthcare costs** for society
- Consumers are **4-6 times more likely** to purchase, protect, champion or trust **brands with a strong purpose**

**How to get there**

- **Appropriate Portfolio**: adapting our science-based portfolio to design everyday health solutions with the underserved in mind, from formula to pricing
- **Deeper Penetration**: meeting low-income consumers where they shop to bridge the physical gap
- **Self-Care Education** initiatives form the basis for shaping behavioral change to empower consumers to manage their own health better
- **Partnerships and Initiatives**, e.g. the Nutrient Gap Initiative
- Activating our trusted **OTC brands** and **end-to-end value chain**
- Focus on **high impact markets**: US, LATAM, ASEAN, METAP

**Progress**

Progress in 2021:

- Growth driven by partnership initiative
- 13 million additional people were already reached in India

Numbers reflect people (millions)

1 We successfully integrated the consumer business in India, which was previously managed by a third party. India is reported separately and will be included in 2024.
Strong Governance Measures Accompany our Strategy

Our CEO is Chief Sustainability Officer

Established Governance Bodies
  • Supervisory Board ESG Committee advises & monitors management, systematically assesses contribution to SDGs
  • External Sustainability Council\(^1\) as institutionally anchored independent expert advisory

Sustainability Goals Part of Compensation
  • Group-wide goals (access & scope 1-3 targets) have a 20% weighting in the long-term incentive
  • Additional qualitative goals are reflected in the short-term incentives

Focus on Transparency\(^2\) Engagement and Reporting
  • Group Positions\(^3\) published on important sustainability matters
  • Science Collaboration Register launched
  • Reporting in line with sustainability frameworks (SASB, TCFD)

Group-Wide Regulations as Mandatory Framework
  • BASE\(^1\) principles guide our interactions with all stakeholders

Sustainability as Integral Part of Bayer Processes
  • Gradual integration in processes of functions & divisions such as Strategic Planning (e.g. internal CO2 price of €100 per metric ton for CAPEX projects), Risk Management, Procurement, Research & Development and Human Resources

\(^1\) https://www.bayer.com/en/sustainability/sustainability-council
\(^3\) https://www.bayer.com/en/sustainability/position-biodiversity
\(^4\) https://www.bayer.com/en/sustainability/base
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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