

# Q2 2023

/////////  
**Investor Call**

August 8<sup>th</sup>, 2023





# Cautionary Statements Regarding Forward-Looking Information

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

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

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

# *CEO Remarks*



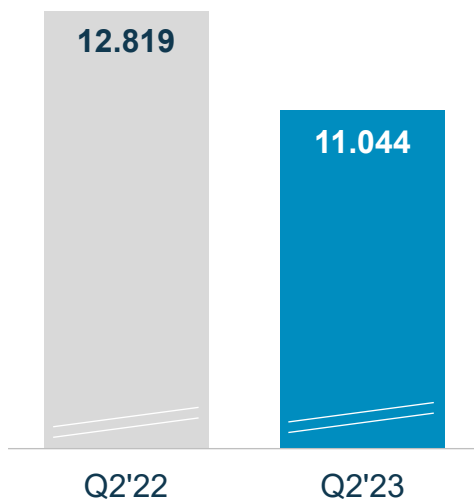


# Q2 2023: Group Performance

## NET SALES

in m€, Δ% yoy

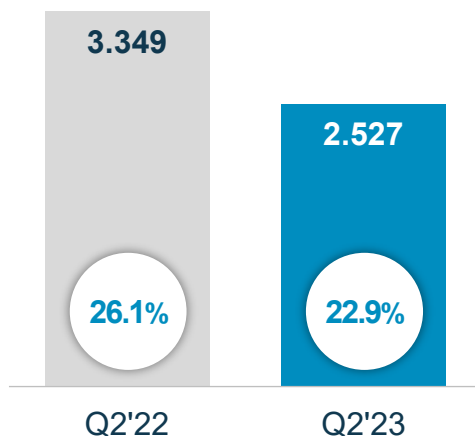
**-14%**  
(-8% cpa)



## EBITDA

in m€,  
before special items

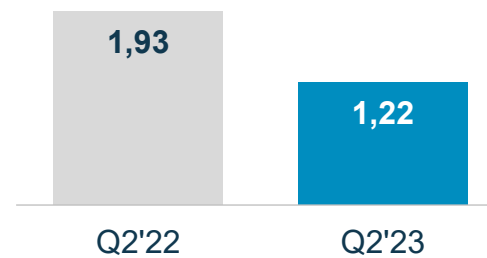
**-25%**



## CORE EPS

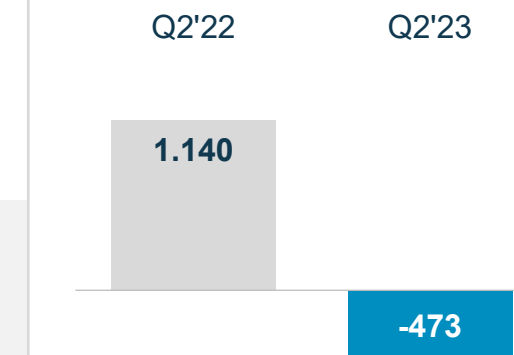
in €, Cont. Operations

**-37%**



## FREE CASH FLOW

in m€



Currency headwind of €553m



Mainly glyphosate decline and inflation



Lower Crop Science contribution



Lower earnings and higher Trade WoC





# FY 2023: Group Outlook

in €

	FY OUTLOOK (as of May 2023) at constant currencies <sup>1</sup>	FY OUTLOOK (NEW) at constant currencies <sup>1</sup>
<b>Net Sales</b>	<u>51bn</u> – 52bn	<b>48.5bn – 49.5bn</b>
<b>EBITDA</b> (before special items)	<u>12.5bn</u> – 13bn	<b>11.3bn – 11.8bn</b>
<b>Core EPS</b>	<u>7.20</u> – 7.40	<b>6.20 – 6.40</b>
<b>Free Cash Flow</b>	~ 3bn	~ 0bn
<b>Net Financial Debt</b>	32bn – <u>33bn</u>	~ 36bn

## Key Assumptions

- Representing sales growth of **-2% to -3% cpa**
- Including **portfolio effects** of -€500m in sales
- Latest FX estimate at ~ **€1.7bn headwind** for sales; FX effect on earnings not material <sup>2</sup>
- Including expected settlement payouts of **€2-3bn**

<sup>1</sup> Reflects our 2023 plan at the average actual currencies for 2022.

<sup>2</sup> Currency assumptions based on month-end June 2023 spot rates (1 EUR=) 1.09 USD, 5.30 BRL, 7.90 CNY. Impact is calculated as difference to constant currencies.



# HY1: Core Business Grows 5%; Glyphosate Sales Decline ~€1.8bn



Volume  
-11%

Price  
+3%

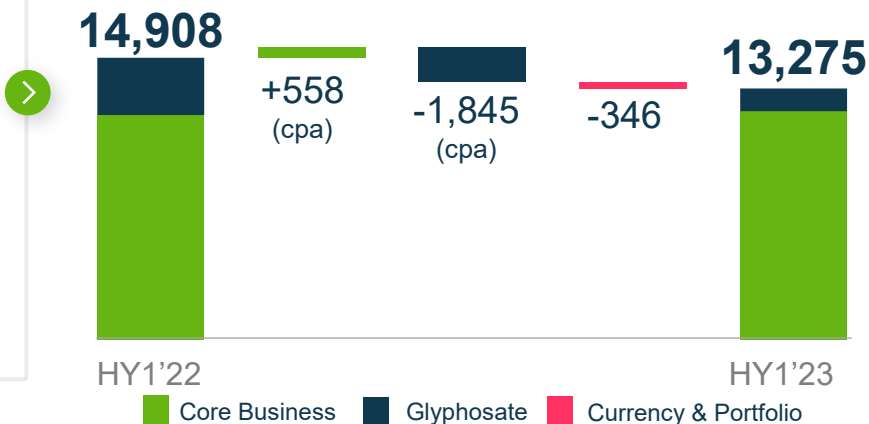
Currency  
-1%

Portfolio  
-2%

## Net Sales

In m€

**-11%**  
(-9% cpa)

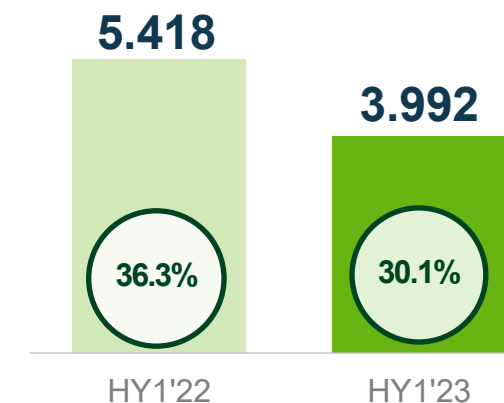


## EBITDA

m€, before special items

○ EBITDA Margin before special items

**-26%**



## Crop Science HY1 2023

- > **Core Business sales +5%**, with **+10% price**, mostly in corn, other herbicides, fungicides and insecticides, partially offset by **-5% volumes**, particularly from lower fungicide volume in EMEA and LATAM and lower planted cotton and soybean acres/license revenues in the U.S.
- > **Glyphosate-based herbicide sales -61%** with **-25% price**, as generic pricing reverts to historic avg. and **-36% volume** due to retail channel destocking of inventory and reduced demand due to dry weather in key markets

- > Margin reverts to 2021 level as glyphosate prices normalize and currency and inflation weigh on earnings
- > Strong pricing in core business partially compensates



# Core Business Growth Still Strong in Revised FY23 Outlook; Glyphosate Sales to Normalize to 2020 Levels (updated Aug 2023)

	Sales Growth <sup>1</sup> (cpa)	EBITDA Margin <sup>1</sup> (before special items)
<b>Crop Science FY 2023 Outlook</b> (revised Aug 2023)	~ -5%	~ 21%

## Key Assumptions

### Sales

- **Core Business** expected to grow **5-to-7%**, or more than €1.0bn. Corn is expected to be the leading contributor with double-digit sales growth mainly driven by price, while insecticides and fungicides are expected to accelerate in LATAM in HY2, recovering from unusually low volumes in prior year due to drought conditions.
- **Glyphosate-based herbicide** sales expected to decline by roughly half, or more than €2.3bn, normalizing back to 2020 levels.

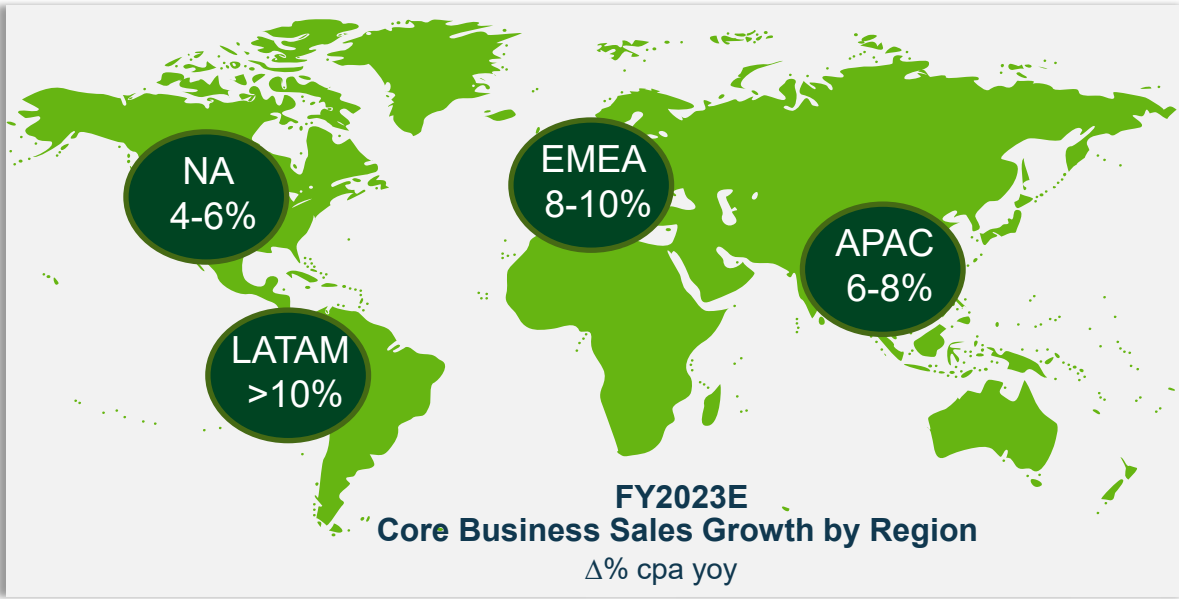
### EBITDA

- Strong pricing in the core business and cost savings more than offset by glyphosate pricing declines and incremental inflation

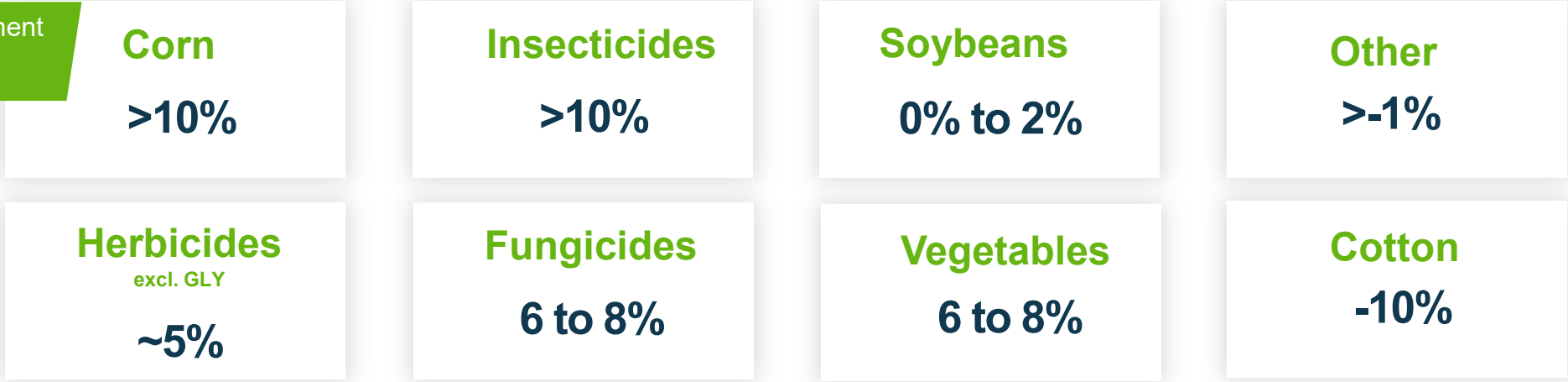
<sup>1</sup> Reflects our 2023 plan at the average actual currencies for 2022; not incl. portfolio effect of ~ -€0.4bn in net sales; Sales growth rates in Key Assumptions cpa = currency and portfolio adjusted, Core business refers to Crop Science business excl. glyphosate-based herbicides.



# Global Growth in Core Business, Powered by Innovation-Driven Pricing



## FY 2023E Sales Growth by Segment Δ% cpa yoy







# Industry Leading Corn Platform to Drive Mid-term Growth

€11bn of Peak Sales Potential in Pipeline; Generating New Traits and >250 New Hybrids Deployed Annually

**Corn Rootworm 3 Launch Success Continues**  
*Industry's only RNAi-based Rootworm Trait*

Expected in **2024**



**1m** acres in 2023e

**>12m** acres in 2022/23

Launched in 2020/21 in Brazil & Argentina



SmartStax PRO Competition  
Roots from July 19, 2023 following early July windstorm in Palo Alto, CA

**PREC/EON**  
SMART CORN SYSTEM



**NA**

> 300 on-farm trials on 30,000 U.S. acres

**LATAM**

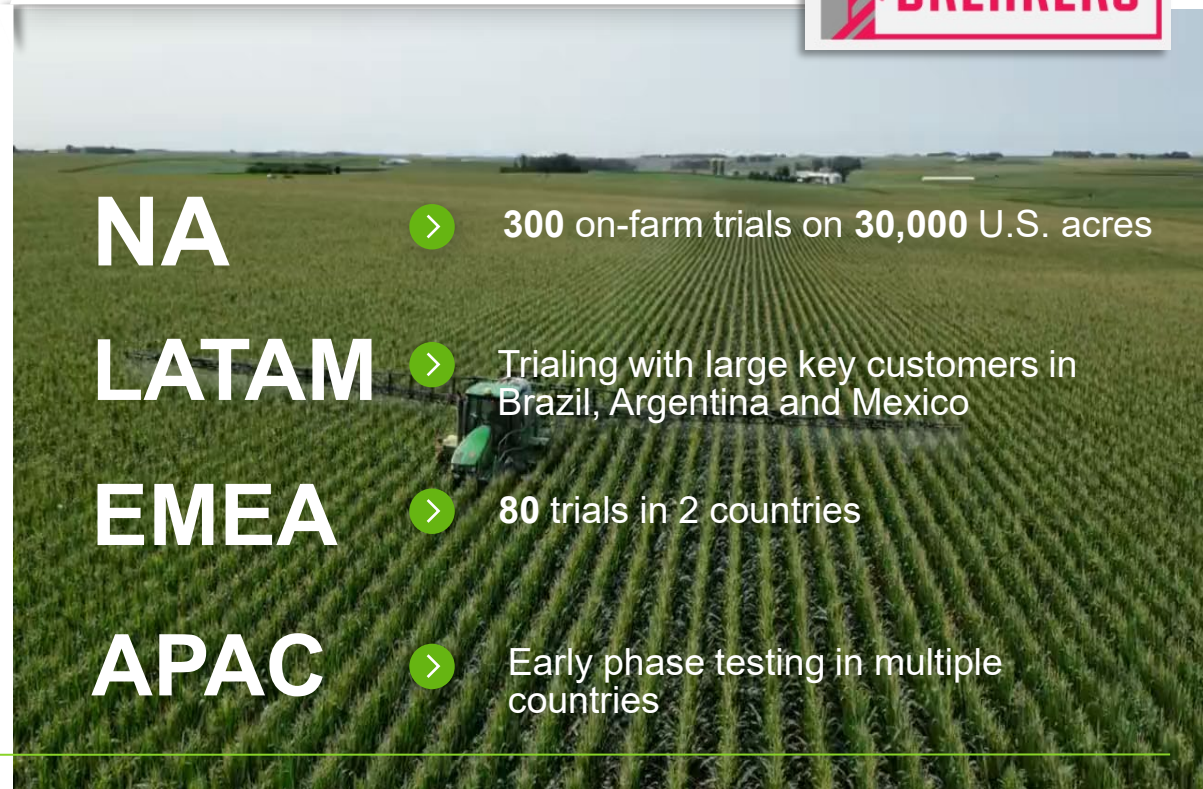
> Trialing with large key customers in Brazil, Argentina and Mexico

**EMEA**

> 80 trials in 2 countries

**APAC**

> Early phase testing in multiple countries



Industry Leading Pipeline

Next-Gen corn insect control traits<sup>1</sup>

>€1bn PSP

>220m Global Acres

>€1.5bn Global PSP Opportunity



# Strong Performance of Launch Assets, China Business with Improved QoQ Performance

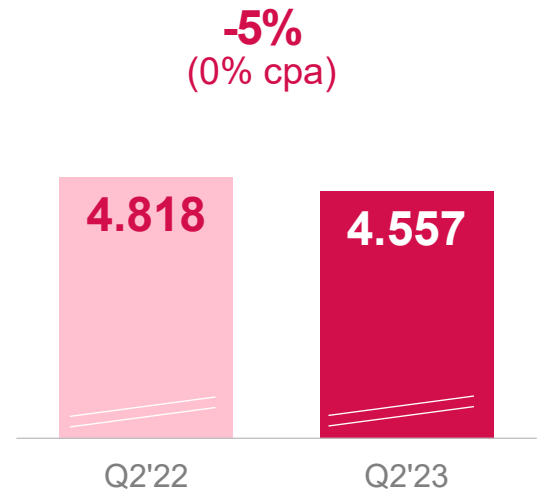


## Pharmaceuticals Q2 2023

- Volume +1%
- Price -1%
- Currency -5%
- Portfolio -1%

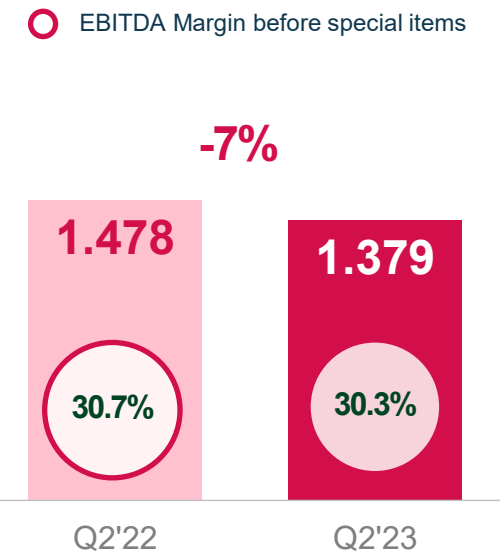
### Net Sales

m€, Δ% yoy



### EBITDA

m€, before special items



- > **Nubeqa** (+96%) and **Kerendia** (+250%) continue strong growth
- > **Radiology** (+7%) benefiting from volume growth and price increases
- > **Xarelto** declining slightly (-3%) due to loss of exclusivity in some regions and pricing headwinds; **Eylea** (+6%) with continued volume growth
- > **China business** showing improvement from very weak Q1, continued VBP pressure on **Adalat**
- > Ongoing growth investments in R&D, particularly early-stage and asundexian's PIII program
- > Prior year benefited from sales of non-core businesses



# Revised FY23 Outlook Driven by Slower Topline Dynamics, Product Mix and Faster R&D Progress (**updated** Aug 2023)

	Sales Growth <sup>1</sup> (cpa)	EBITDA Margin <sup>1</sup> (before special items)
Pharmaceuticals FY 2023 Outlook	~ 0%	~ 28%

## Key Assumptions

### Sales

- Accelerated growth from **Nubeqa** and **Kerendia** to exceed €1bn, **Eylea** expected to more than offset increasing price pressure through higher volumes, with sales growing low single digits
- **China** with softer than previously anticipated overall post-pandemic recovery while volume-based procurement continues to weigh on Adalat
- Xarelto to decline mid-single digit driven by ongoing pricing headwinds and expired patents in various non-EU markets
- HY2 to be above HY1 in top and bottom line

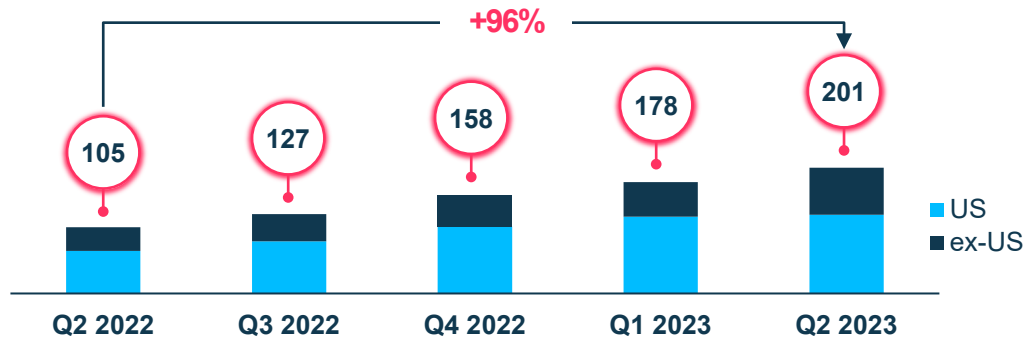
### EBITDA

- Lowered margin guidance driven by adapted topline outlook, adverse product mix effects and higher R&D spend largely related to continued strong patient recruitment of asundexian's PIII program

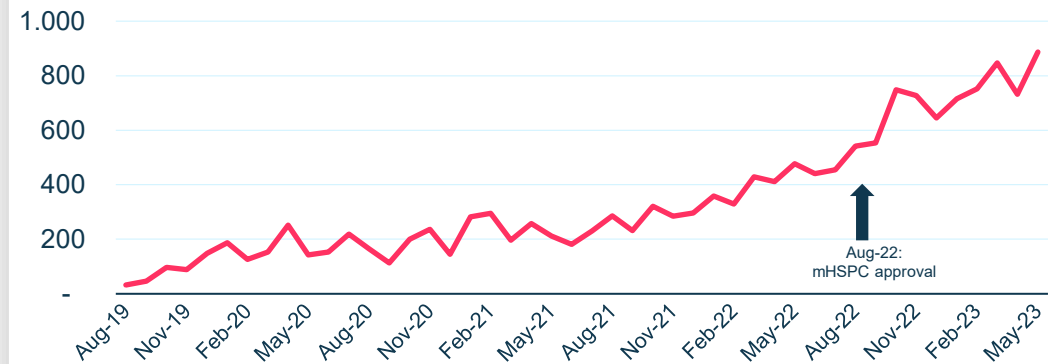


# Nubeqa Sales nearly Doubling Again in Q2, Now at #3 of Pharma's Top-Selling Medicines

**Global sales development** (€m, cpa growth rates)



**US launch performance** (monthly NBRx)<sup>1</sup>



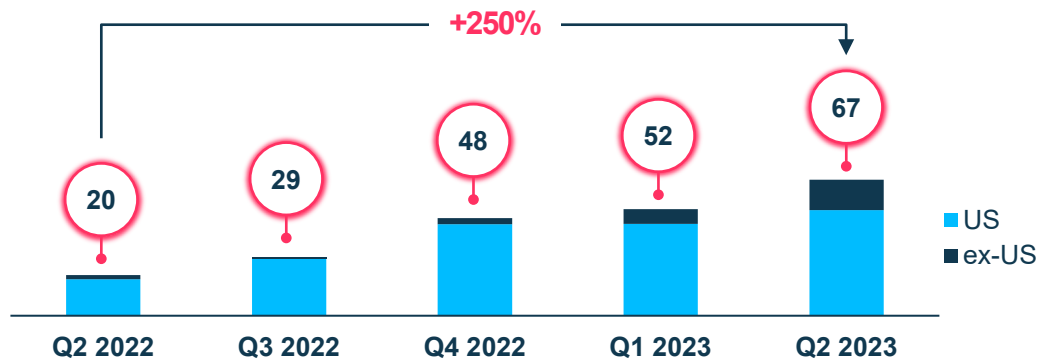
- // US continues to be key growth driver, being #1 in 2nd generation ARIs<sup>2</sup> for nmCRPC<sup>3</sup> and #2 in mHSPC<sup>4</sup> in its indications<sup>5</sup>
- // Additional approvals and strong launch momentum also drive sales dynamics in non-US regions, particularly China
- // Nubeqa approved in more than 86 countries today (mHSPC approvals in 62 markets)

<sup>1</sup> Source: IQVIA, May 2023, <sup>2</sup> ARI: Androgen Receptor Inhibitor, <sup>3</sup> nmCRPC: non-metastatic castration resistant prostate cancer, <sup>4</sup> mHSPC: metastatic hormone sensitive prostate cancer, <sup>5</sup> adjusted to reflect nmCRPC and mHSPC only

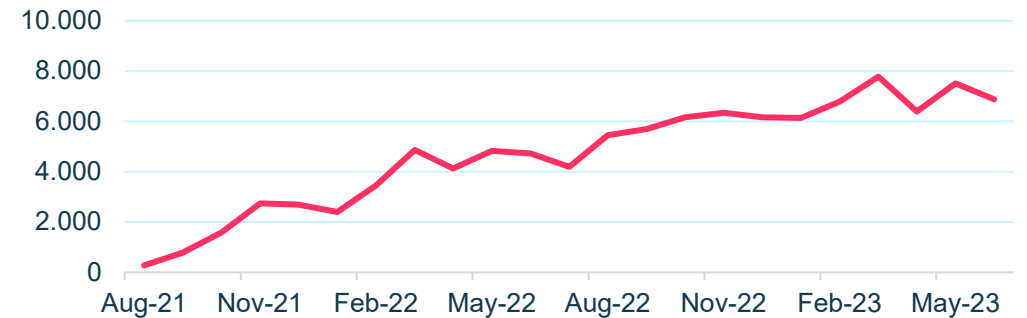


# Kerendia Continues Strong Launch Dynamics, non-US Growth led by China

### Global sales development (€m, cpa growth rates)



### US launch performance (monthly NBRx)<sup>1</sup>

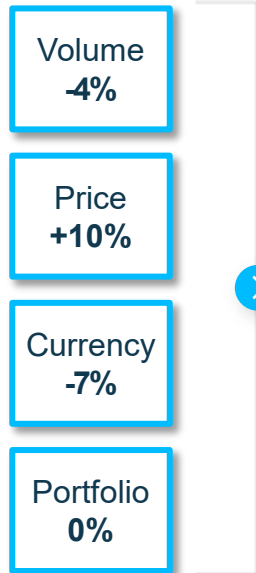


- // Continued US market uptake with broad utility and relevance across GPs and specialists
- // Non-US regions with growing contributions, particularly China due to NRDL listing in March 2023 and label extension of indication to early stages of CKD/T2D in May
- // Announcement to start Phase III study FINE-ONE in adults with CKD and type 1 diabetes (T1D)

<sup>1</sup> Source: IQVIA, National NBRx, June 30, 2023



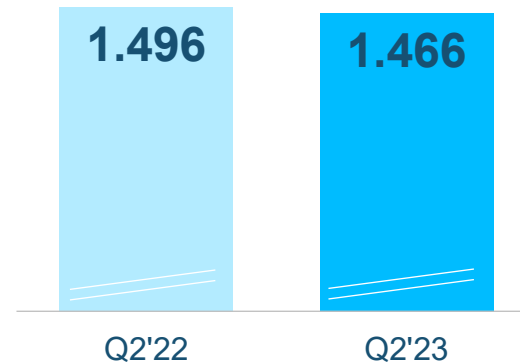
# Continued Growth in Competitive Environment



## Net Sales

m€, Δ% yoy

**-2%**  
(+5% cpa)

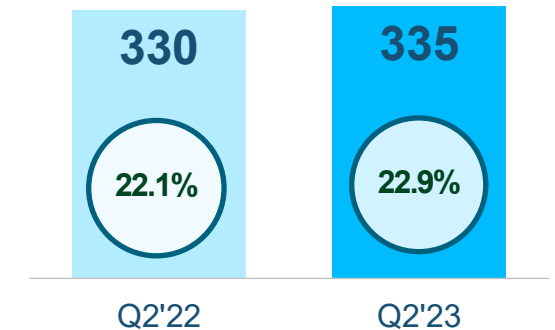


## EBITDA

m€, before special items

○ EBITDA Margin before special items

**+2%**



## Consumer Health

Q2 2023

- Further expansion of Bepanthen Derma in **Dermatology** (+11%)
- **Cough & Cold** (+12%) driven by still elevated cold & flu incidences
- **Pain & Cardio** (+10%), particularly strong in LATAM & Asia Pacific
- Supply constraints, particularly for **Digestive Health** (0%)
- Operational productivity programs and active pricing compensate cost inflation and currency effects
- Continued investments into innovation

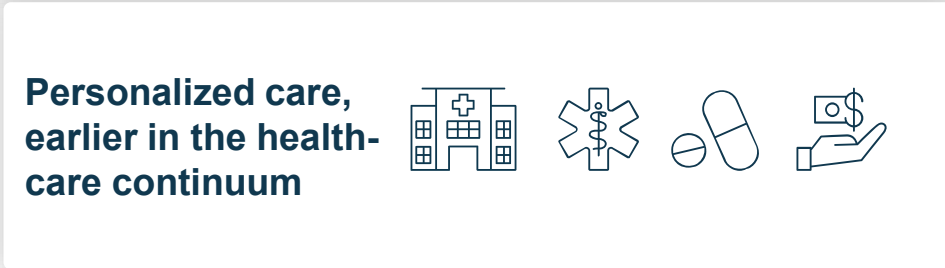


# New Precision Health Unit to Enhance Personal Health

## Empowering self-care throughout the consumer journey



> *As healthcare landscape & consumer behavior is changing...*



> *...we enable superior health outcomes with personalized solutions*



- **Multiplication of consumer touch-points** through entire health journey
- **Fully embedded into business operations**

# Q&A *Session*





# Q2 2023



## Appendix



August 8<sup>th</sup>, 2023





# FY 2023: Group Other KPIs (as of Aug. 2023)

in €

	FY OUTLOOK (as of May 2023) at constant currencies <sup>1</sup>	FY OUTLOOK (NEW) at constant currencies <sup>1</sup>
<b>Special Items (EBITDA)</b>	~ - €1.0bn	~ - €1.0bn
<b>Core Depreciation</b>	~ - €1.6bn	~ - €1.6bn
<b>Core Financial Result</b>	~ - €1.9bn	~ - €1.9bn
<b>Core Tax Rate</b>	~ 23%	~ 23%
<b>Reconciliation <sup>3</sup> (cEBITDA)</b>	- €0.7bn to - €0.8bn	~ - €0.5bn

## Key Assumptions

- **Special items (EBITDA)** primarily driven by ongoing restructuring programs
- **Core depreciation:** Formerly guided for “as depreciation and amortization (clean)” (2023e: - €4.0bn) and “of which for intangible assets (clean) (2023e: - €2.4bn)”
- **Reconciliation (cEBITDA)** includes catch ups in long-term incentive provisions based on estimated share price of now about €51 at year-end
- No material FX effect based on latest estimate <sup>2</sup>

<sup>1</sup> Reflects our 2023 plan at the average actual currencies for 2022.

<sup>2</sup> Currency assumptions based on month-end June 2023 spot rates (1 EUR=) 1.09 USD, 5.30 BRL, 7.90 CNY. Impact is calculated as difference to constant currencies.

<sup>3</sup> Reconciliation reported as “All Other Segments” and “Enabling Functions and Consolidation”



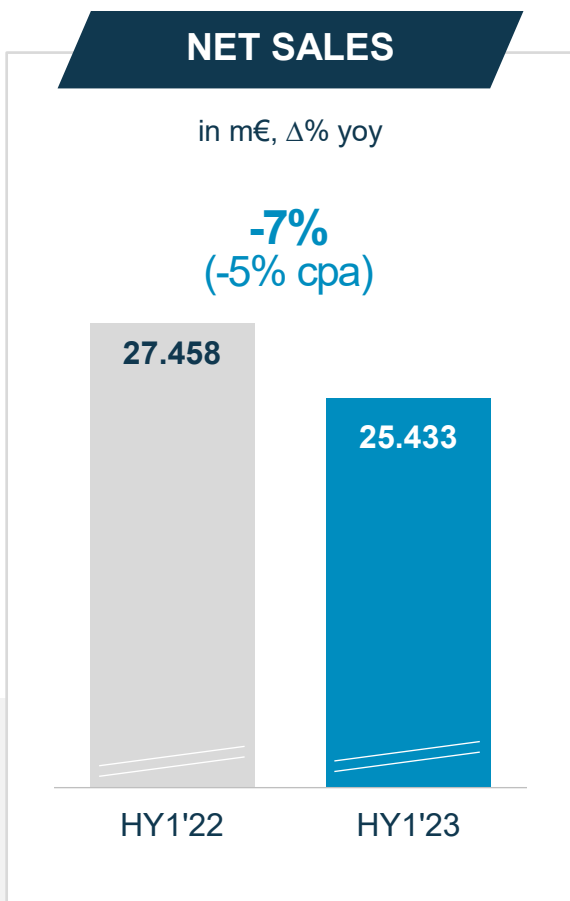
# Updated Divisional Outlook Full Year 2023

	Sales Growth as of May, cpa <sup>1</sup>	EBITDA Margin before special items <sup>1</sup>	Sales Growth revised Aug, cpa <sup>1</sup>	EBITDA Margin before special items <sup>1</sup>
 <b>Crop Science</b>	~ +1.5%	~ 25%	~ -5%	~ 21%
 <b>Pharmaceuticals</b>	~ +1%	> 29%	~ 0%	~ 28%
 <b>Consumer Health</b>	~ +5%	~ 23%	~ +5%	~ 23%

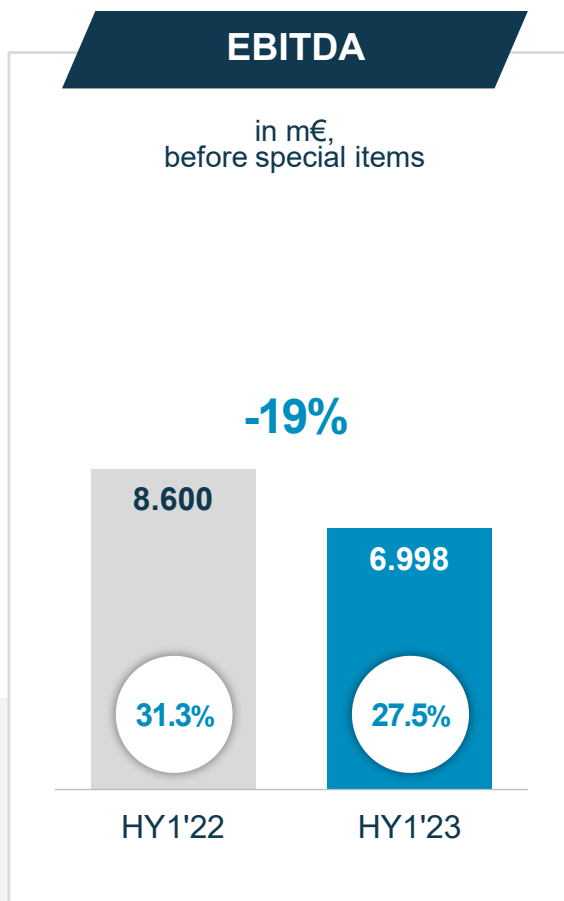
<sup>1</sup> Reflects our 2023 plan at the average actual currencies for 2022; cpa: currency and portfolio adjusted



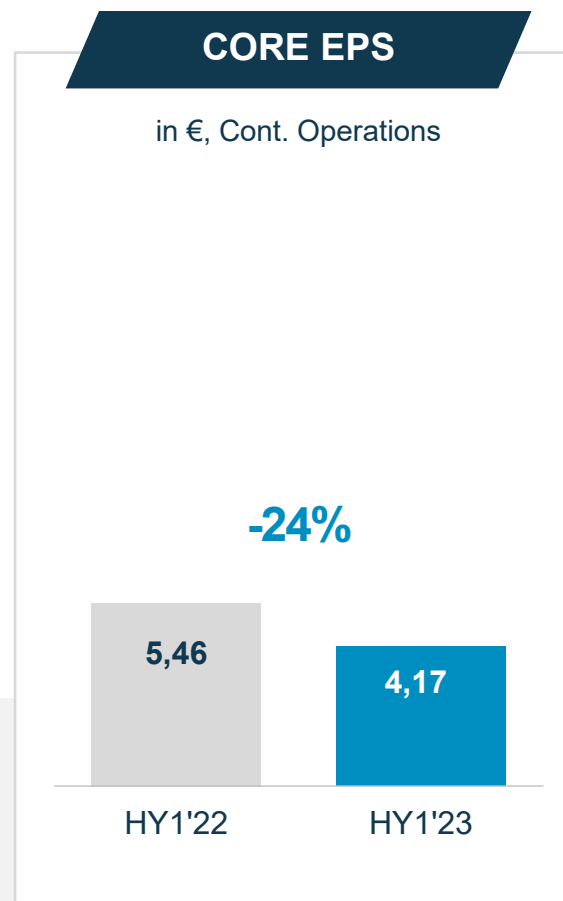
# HY1: Group Performance



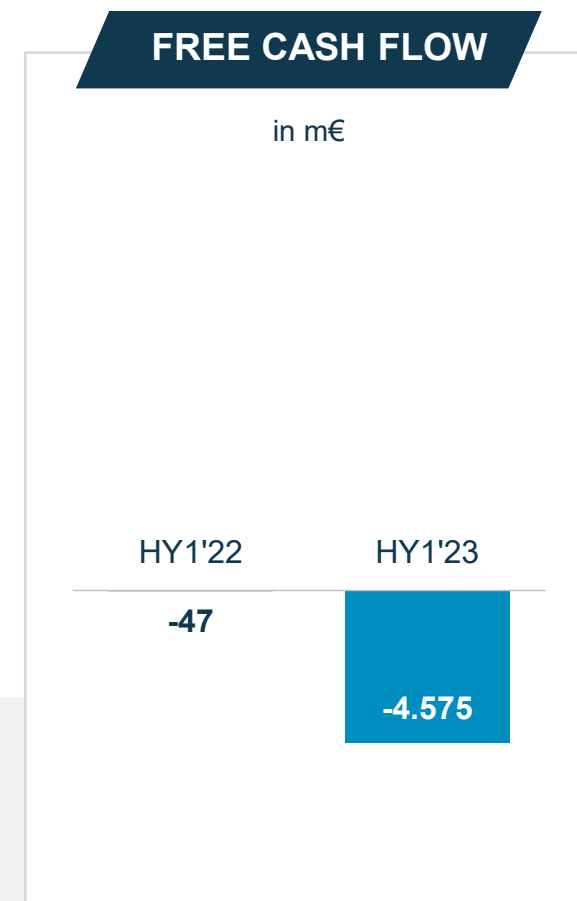
**i** Currency headwind of **€451m**



**i** Currency headwind of **€124m**



**i** Lower divisional contributions



**i** Lower earnings and higher Trade WoC





# Q2 2023: Core EPS to EPS Bridge





# Q2 2023: Summary

[€ million, if not specified]	Crop Science		Pharmaceuticals		Consumer Health		Reconciliation		Group	
	Q2 22	Q2 23	Q2 22	Q2 23	Q2 22	Q2 23	Q2 22	Q2 23	Q2 22	Q2 23
<b>Sales</b>	<b>6,461</b>	<b>4,924</b>	<b>4,818</b>	<b>4,557</b>	<b>1,496</b>	<b>1,466</b>	<b>44</b>	<b>97</b>	<b>12,819</b>	<b>11,044</b>
<b>Sales by region:</b>										
Europe / Middle East / Africa	1,255	973	1,878	1,789	462	448	44	97	3,639	3,307
North America	3,056	2,273	1,149	1,171	611	594	1	0	4,817	4,038
Asia / Pacific	704	651	1,550	1,356	238	228	0	0	2,492	2,235
Latin America	1,446	1,027	241	241	185	196	-1	0	1,871	1,464
<b>EBITDA</b>	<b>1,701</b>	<b>666</b>	<b>1,559</b>	<b>1,304</b>	<b>327</b>	<b>328</b>	<b>-936</b>	<b>33</b>	<b>2,651</b>	<b>2,331</b>
Special items	-48	-59	81	-75	-3	-7	-728	-55	-698	-196
<b>EBITDA before special items</b>	<b>1,749</b>	<b>725</b>	<b>1,478</b>	<b>1,379</b>	<b>330</b>	<b>335</b>	<b>-208</b>	<b>88</b>	<b>3,349</b>	<b>2,527</b>
EBITDA margin before special items [%]	27.1%	14.7%	30.7%	30.3%	22.1%	22.9%	-472.7%	90.7%	26.1%	22.9%
<b>EBIT</b>	<b>-258</b>	<b>-2,207</b>	<b>1,206</b>	<b>1,047</b>	<b>239</b>	<b>239</b>	<b>-1,018</b>	<b>-35</b>	<b>169</b>	<b>-956</b>
Special items	-1,369	-2,353	-10	-75	-3	-7	-729	-55	-2,111	-2,490
EBIT before special items	1,111	146	1,216	1,122	242	246	-289	20	2,280	1,534
EBIT margin before special items [%]	17.2%	3.0%	25.2%	24.6%	16.2%	16.8%	-656.8%	20.6%	17.8%	13.9%
<b>Operating cash flow, continuing</b>	<b>2,551</b>	<b>338</b>	<b>35</b>	<b>442</b>	<b>116</b>	<b>52</b>	<b>-598</b>	<b>-348</b>	<b>2,104</b>	<b>484</b>
Free operating cash flow <sup>1</sup>	2,270	4	-213	176	76	13	-579	-315	1,554	-122
<b>Free cash flow</b>									<b>1,140</b>	<b>-473</b>
<b>EBITDA before special items</b>									<b>3,349</b>	<b>2,527</b>
Core depreciation <sup>2</sup>									-392	-406
<b>Core EBIT</b>									<b>2,957</b>	<b>2,121</b>
Core financial result									-565	-544
Core taxes & minorities									-499	-382
Core tax rate									20.6%	23.7%
<b>Core Net Income</b>									<b>1,893</b>	<b>1,195</b>
No. of shares [million]									982.42	982.42
<b>Core EPS [€]</b>									<b>1.93</b>	<b>1.22</b>



# Q2: Core Business Flat, Glyphosate Sales Decline €1.2bn



Volume  
-15%

Price  
-3%

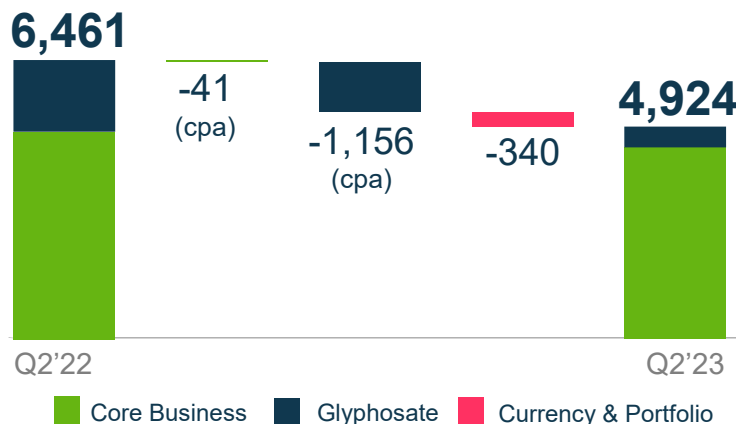
Currency  
-3%

Portfolio  
-2%

## Net Sales

m€, Δ% yoy

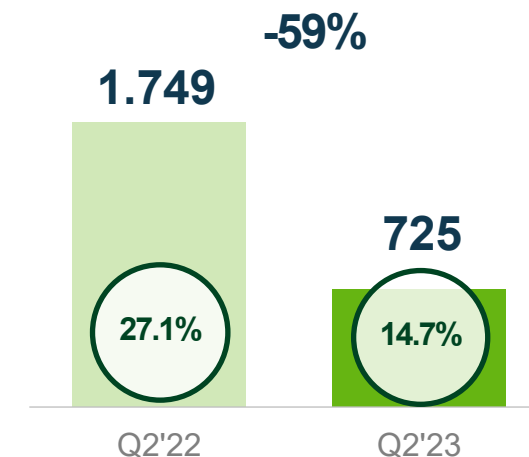
**-24%**  
(-19% cpa)



## EBITDA

m€, before special items

○ EBITDA Margin before special items



## Crop Science Q2 2023

- > **Core Business down 1%** with **+7% price** and **-8% volumes**, particularly from lower U.S. cotton and soybean acres/license revenues and lower fungicide & insecticide volumes due to adverse weather
- > **Glyphosate-based herbicides sales -70%** **equally driven by price and volume**, as prices reverted to historic avg., retailers reduced channel inventory and dry weather impacted demand in key markets

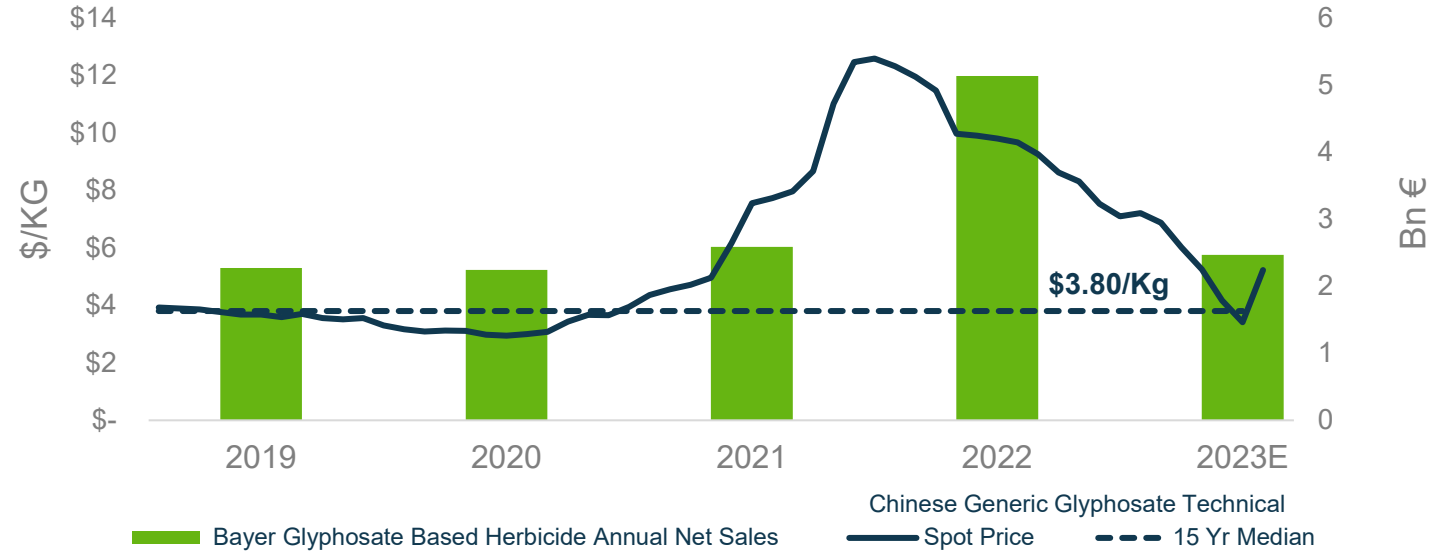
- > Glyphosate sales decline, volume loss in core business, currency and inflation weigh on earnings
- > Strong pricing in core business and ongoing efficiencies partially compensate



# Glyphosate-Based Herbicides Sales Reverting to 2020 Levels



Branded Glyphosate-Based Herbicide Sales Rapidly Normalizing as Generic Reference Price Reverts to Historical Median



## Crop Science Glyphosate

### Market Trends:

- > U.S. retailers destocking channel inventory and generic suppliers reducing inventories in China
- > Generic Chinese glyphosate technical reference spot price reverted to 15-year historical median price mid-year
- > Chinese generic production capacity normalizing

### Our Strategy:

- > Maintain supply for ~40% global glyphosate market, with focus on the over-the-top markets in the Americas
- > Maintain a brand premium over generic price for glyphosate-based herbicides at the retail level
- > Focus on low-cost manufacturing and operating model





# Headwinds on Xarelto and China Business Largely Balanced by Strong Performance of Launch Assets, Eylea and Radiology

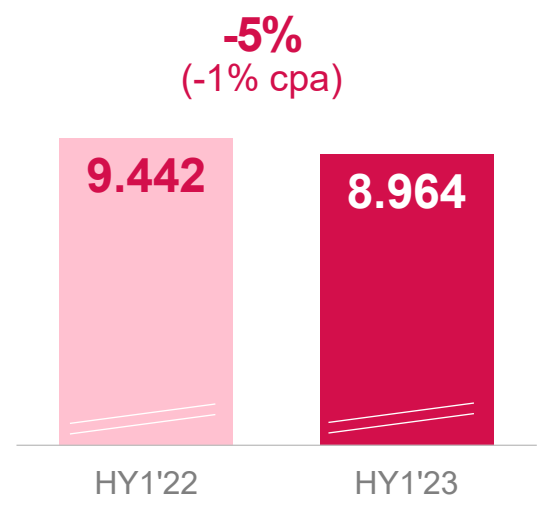


## Pharmaceuticals HY1 2023

- Volume -1%
- Price -1%
- Currency -3%
- Portfolio -1%

### Net Sales

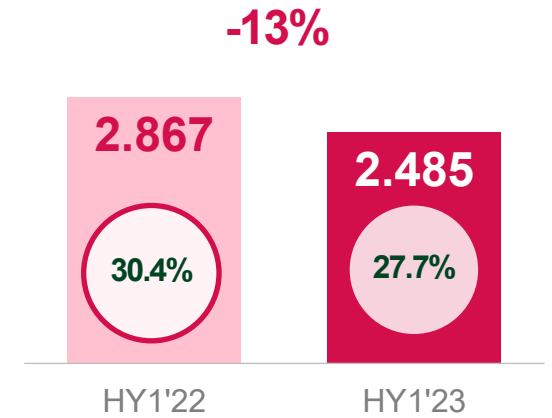
m€, Δ% yoy



### EBITDA

m€, before special items

○ EBITDA Margin before special items

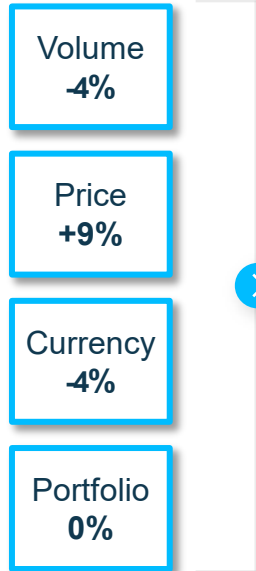


- > **Nubeqa** (+110%) and **Kerendia** (+290%) continue strong launch trajectory
- > **Eylea** (+5%) with higher volumes more than offsetting price pressure
- > **Radiology** (+8%) benefiting from volume growth and price increases
- > **Xarelto** (-8%) recovering from weak Q1; China business held back by COVID dynamics on top of VBP pressure on **Adalat**

- > Ongoing growth investments in R&D, particularly early-stage and asundexian's PIII studies
- > Changes in product mix, inflation and PY benefits from sales of non-core businesses weigh on margin



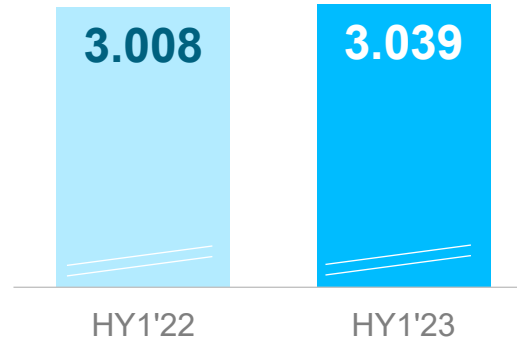
# Continued Growth in all Regions



## Net Sales

m€, Δ% yoy

**+1%**  
(+5% cpa)

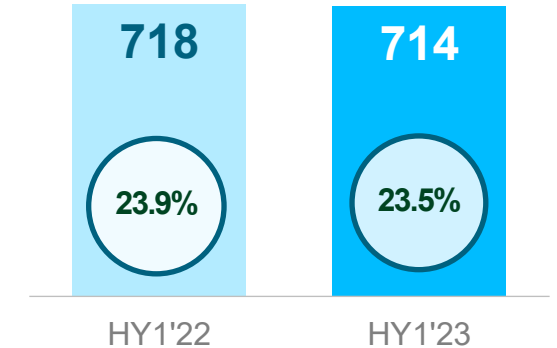


## EBITDA

m€, before special items

○ EBITDA Margin before special items

**-1%**



## Consumer Health HY1 2023

- > Bepanthen continuing to support **Dermatology** (+11%)
- > **Cough & Cold** (+14%) driven by elevated cold & flu incidences
- > **Digestive** (-1%) facing temporary supply constraints
- > **Nutritionals** (-5%) registered demand normalization on overall high level
- > Operational productivity programs and active pricing compensate cost inflation
- > Continued investments into innovation



# HY1 2023: Core EPS to EPS Bridge





# HY1 2023: Summary

[€ million, if not specified]	Crop Science		Pharmaceuticals		Consumer Health		Reconciliation		Group	
	HY1 22	HY1 23	HY1 22	HY1 23	HY1 22	HY1 23	HY1 22	HY1 23	HY1 22	HY1 23
<b>Sales</b>	<b>14,908</b>	<b>13,275</b>	<b>9,442</b>	<b>8,964</b>	<b>3,008</b>	<b>3,039</b>	<b>100</b>	<b>155</b>	<b>27,458</b>	<b>25,433</b>
<b>Sales by region:</b>										
Europe / Middle East / Africa	3,388	3,270	3,713	3,560	953	964	99	152	8,153	7,946
North America	7,417	6,455	2,169	2,281	1,192	1,206	1	2	10,779	9,944
Asia / Pacific	1,328	1,283	3,085	2,661	490	472	0	0	4,903	4,416
Latin America	2,775	2,267	475	462	373	397	0	1	3,623	3,127
EBITDA	5,416	3,915	2,996	2,368	697	701	-1,166	-335	7,943	6,649
Special items	-2	-77	129	-117	-21	-13	-763	-142	-657	-349
<b>EBITDA before special items</b>	<b>5,418</b>	<b>3,992</b>	<b>2,867</b>	<b>2,485</b>	<b>718</b>	<b>714</b>	<b>-403</b>	<b>-193</b>	<b>8,600</b>	<b>6,998</b>
EBITDA margin before special items [%]	36.3%	30.1%	30.4%	27.7%	23.9%	23.5%	-403.0%	-124.5%	31.3%	27.5%
<b>EBIT</b>	<b>2,770</b>	<b>112</b>	<b>2,408</b>	<b>1,853</b>	<b>523</b>	<b>521</b>	<b>-1,320</b>	<b>-469</b>	<b>4,381</b>	<b>2,017</b>
Special items	-1,324	-2,649	38	-117	-21	-13	-764	-142	-2,071	-2,921
EBIT before special items	4,094	2,761	2,370	1,970	544	534	-556	-327	6,452	4,938
EBIT margin before special items [%]	27.5%	20.8%	25.1%	22.0%	18.1%	17.6%	-556.0%	-211.0%	23.5%	19.4%
<b>Operating cash flow, continuing</b>	<b>164</b>	<b>-3,026</b>	<b>1,059</b>	<b>1,149</b>	<b>429</b>	<b>235</b>	<b>-274</b>	<b>-1,424</b>	<b>1,378</b>	<b>-3,066</b>
Free operating cash flow <sup>1</sup>	-307	-3,619	662	656	361	171	-237	-1,346	479	-4,138
<b>Free cash flow</b>									<b>-47</b>	<b>-4,575</b>
<b>EBITDA before special items</b>									<b>8,600</b>	<b>6,998</b>
Core depreciation <sup>2</sup>									-766	-801
<b>Core EBIT</b>									<b>7,834</b>	<b>6,197</b>
Core financial result									-984	-819
Core taxes & minorities									-1,488	-1,282
Core tax rate									21.6%	23.6%
<b>Core Net Income</b>									<b>5,362</b>	<b>4,096</b>
No. of shares [million]									982.42	982.42
<b>Core EPS [€]</b>									<b>5.46</b>	<b>4.17</b>

# Q2 2023

//////////  
**Innovation  
Appendix**

August 8<sup>th</sup>, 2023



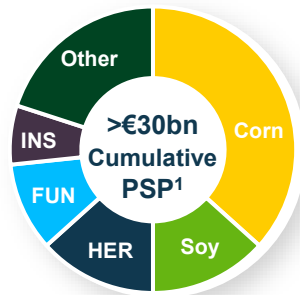


# Crop Science Innovation Summit Recap – NY, June 20, 2023



## Delivering a Portfolio of Blockbuster Products

- PRECEON Smart Corn System >€1.5b
- Next Gen Fungicide >€1.2b
- Next Gen Corn Insect traits >€1b
- 4<sup>th</sup> & 5<sup>th</sup> Gen Soy HT traits >€1b
- 3<sup>rd</sup> & 4<sup>th</sup> Gen Soy insect traits >€0.8b
- New Herbicide >€0.8b
- Hybrid Wheat ~€0.7b
- Plenexos insecticide ~€0.5b



## More than Doubling our Accessible Markets by 2030



## Evolving from Products to Outcome-Based Systems and Solutions



Powered by Industry Leading Innovation Engines



# Crop Science: Seed & Traits and Digital R&D Pipeline (Annual Update Feb 2023)

	Phase I	Phase II	Phase III	Phase IV	PSP
CORN SEED & TRAIT	Corn Disease Shield - NA 2nd Generation Seed Density Digital Tool - NA	5th Generation Lepidoptera Protection 5th Generation Herbicide Tolerance w/ (RHS2) <b>Digital Disease Mgmt. – NA</b> <b>Seed Placement Digital Tool - NA</b>	Short Stature Corn – Biotech Trait <sup>3</sup> 4th Generation Coleoptera Protection	Short Stature Corn – Breeding Approach 4th Generation Lepidoptera Protection <b>Seed Density Digital Tool – EMEA</b> <b>Seed Density Digital Tool – LATAM</b>	~€11bn
	Annual Germplasm Upgrades	Annual Germplasm Upgrades	Annual Germplasm Upgrades	Annual Germplasm Upgrades	
SOYBEAN SEED & TRAIT	Digital Disease Mgmt. - NA	Seed Placement Digital Tool – NA <b>4th Generation Insect Protection</b>	3rd Generation Insect Protection 2nd Generation Soy Cyst Nematode resistance 4th Generation Herbicide Tolerance (HT4) (Adds 2, 4-D and HPPD tolerance) <b>5th Generation Herbicide Tolerance</b> (Adds PPO tolerance )	Vistive Gold Xtend	~€4bn
	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	
VEGETABLES and OTHER <sup>4</sup> Including Carbon Model	Canola/OSR Digital Disease Mgmt. - NA	Wheat Digital Disease Mgmt. - EMEA	Canola Dicamba Tolerance Sugarbeets 2nd Generation Herbicide Tolerance <sup>2</sup> Cotton 4th Generation Herbicide Tolerance (HT4) (5 tolerances – Adds 2, HPPD and PPO) Cotton 4th Generation Insect Protection	Lygus and Thrips Control (ThryvOn Technology) - <b>Stewarded Commercial Launch</b>	~€6bn
	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	
	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	
	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	
	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	
	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	
	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	

**€21bn  
PSP**

- Breeding
- Trait
- Digital Model
- advanced to next phase

Projects listed here and included in the peak sales potential by segment do not include projects funded by our LEAPS investments; includes all advancements made in FY'22, updated Feb'23

PSP = Peak Sales Potential, 50% incremental; Expected to reach 30% of PSP by 2032, 80% of PSP by 2037 and remainder in 2038+; **Note that products are excluded from the pipeline PSP typically the year following launch**

<sup>2</sup> In collaboration with KWS; <sup>3</sup> In collaboration with BASF; <sup>4</sup> "Other" category includes seeds and traits, such as cotton, canola, wheat, OSR, rice, vegetable seeds and sugarbeets, plus carbon and digital Models



# Crop Science: Crop Protection R&D Pipeline (Annual Update Feb 2023)

€9bn  
PSP

	Phase I	Phase II	Phase III	Phase IV	Life Cycle Management <sup>1</sup>	PSP	
SEED GROWTH <sup>2</sup>			New Seed Treatment ✓ New Seed Treatment ✓		INS FUN ready mixture ✓ Redigo FS 25 ✓		
				Plenexos ✓ ✓ ✓	Vayego Duo ✓ Velum LCM ✓ Rice Plant Hopper ✓	~€2bn	
	INSECT. FUNGIC.	New Fungicide ✓	New Fungicide ✓	New Fungicide <sup>3</sup> ✓ ✓ ✓		Luna Flexx ✓ Super Nativo ✓ ✓ Delaro Forte ✓	~€3bn
	HERBICIDES	New AI Development New Herbicide ✓ New Herbicide ✓ ✓ New Herbicide ✓		New Herbicide ✓ ✓ ✓ New Herbicide ✓ New Herbicide <sup>3</sup> ✓		Non-Selective Glyphosate LCM ✓ Selective Merlin Flexx / Adengo LCM ✓ Balance Flexx LCM ✓ Convintro ✓ New over-the-top herbicide ✓ Mateno Complete ✓ Council Family ✓ Ronstar One ✓ Mesosulfuron LCM ✓	~€4bn

Corn 
 Soybeans 
 Fruits and vegetables 
 Cereals, oilseed rape, sugarbeets, cotton and rice 
 Biological 
 Small Molecule

<sup>1</sup> Shown here is a subset of Bayer's total life cycle management activities; focused on new formulation developments which have the potential to bring significant innovation to customers compared to currently marketed product; Products shown may not yet be fully registered in all jurisdictions; includes all advancements made in FY'22, updated Feb'23; <sup>2</sup> SeedGrowth is currently reported within other SBEs; <sup>3</sup> 3<sup>rd</sup> party collaboration

PSP = Peak Sales Potential, 50% incremental; Expected to reach 30% of PSP by 2032, 80% of PSP by 2037 and remainder in 2038+; **Note that products are excluded from the pipeline PSP typically the year following launch.**

advanced to next phase Selection of projects listed here and included in the peak sales potential by segment do not include projects in early research or discovery





# Pharmaceuticals: R&D Developments (since last update on April 26, 2023)

Phase I	Phase II	Phase III	Commercial
<ul style="list-style-type: none"> <li>Announcement to present <b>Bemdaneprocel</b> (Parkinson's Disease Cell Therapy) data of Phase I clinical study</li> </ul>		<ul style="list-style-type: none"> <li>Phase transition of <b>Gadoquatrane</b> (High Relaxivity Contrast Agent)</li> </ul>	<ul style="list-style-type: none"> <li>Submission of <b>Aflibercept 8 mg</b> for regulatory approval in China</li> </ul>
<ul style="list-style-type: none"> <li>Phase transition of <b>VVD KEAP1 Act</b> (<i>VVD-13307 aka NRF2 Inh</i>)</li> </ul>		<ul style="list-style-type: none"> <li>Announcement to start Phase III study FINE-ONE with <b>Finerenone</b> in adults with chronic kidney disease and type 1 diabetes</li> </ul>	<ul style="list-style-type: none"> <li>Approval of expanded indication for <b>Kerendia</b> (Finerenone) in China for broad range of patients with chronic kidney disease and type 2 diabetes</li> </ul>

- Oncology
- Cardiovascular+<sup>1</sup>
- Neurology & Rare Diseases
- Immunology
- Others



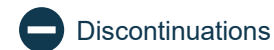
Newsflow



Advancements



Additions



Discontinuations

<sup>1</sup> Including Precision Cardiovascular, Nephrology & Acute Care



# Pharmaceuticals: Pipeline Overview<sup>1</sup> (as of July 31, 2023)

Phase 0 <sup>2</sup>	Phase I	Phase II	Phase III
<b>DGKalpha Inh</b> (BAY 2862789)  ●	<b>Elimusertib</b> (ATR Inhibitor) (BAY 1895344)  ●	<b>Regorafenib</b> (combi Nivolumab) (BAY 734506)  ○ // Solid tumors (recurrent or metastatic)	<b>Copanlisib</b> (PI3K Inhibitor)  ○ // Non-Hodgkin Lymphoma (CHRONOS-4)
<b>PSMA TAC</b> (BAY 3546828)  ●	<b>AhR Inhibitor</b> (BAY 2416964)  ●	<b>Asundexian (FXIa Inhibitor)</b> (BAY 2433334)  ● // Major Adverse Cardiac Events Prevention (PACIFIC-AMI)	<b>Darolutamide</b> (AR Inhibitor)  ○ // Prostate Cancer (mHSPC) (ARANOTE) // Adjuvant Prostate Cancer (DASL-HiCaP) // Prostate Cancer with Biochemical Recurrence after Curative Radiotherapy (ARASTEP)
<b>PSMA SMOL TAC</b> (BAY 3563254)  ●	<b>mEGFR Inhibitor</b> (BAY 2927088)  ●	<b>Zabedoseritib</b> (IRAK4 Inh.) (BAY 1834845)  ● // Atopic Dermatitis (DAMASK)	<b>Finerenone</b> (MR Antagonist)  ○ // Heart Failure (HFmr/pEF) (FINEARTS-HF) // Non-diabetic CKD (FIND-CKD)
<b>VVD STAT3 Inh</b> (BAY 3630914)  ●	<b>DGKzeta Inhibitor</b> (BAY 2965501)  ●	<b>Runcaciguat</b> (sGC Activator) (BAY 1101042)  ● // Non-prolif. Diabetic Retinopathy (NPDR) (NEON-NPDR)	<b>Vericiguat</b> (sGC Stimulator)  ○ // Heart Failure (HFREF) (VICTOR <sup>3</sup> )
<b>Anti-coagulant</b> (BAY 3389934)  ●	<b>CCR8 Ab</b> (BAY 3375968)  ●		<b>Asundexian</b> (FXIa Inhibitor)  ● // Stroke Prevention in Atrial Fibrillation (OCEANIC-AF) // 2 <sup>o</sup> Stroke Prevention (OCEANIC-STROKE)
<b>Next Generation Liver MRI</b> (BAY 3393081)  ●	<b>VVD KEAP1 Act</b> (VVD-13307 aka NRF2 Inh, BAY 3605349)  ●		<b>Elinzanetant</b> (Neurokinin-1,3 Rec Antagonist)  ● // Vasomotor Symptoms (OASIS)
	<b>Congestive Heart Failure rAAV Gene Therapy</b> (AB-1002 aka NAN-101)  ●		<b>Aflibercept 8mg</b> (VEGF Inhibitor)  ○ // Retinal Vein Occlusion (QUASAR)
	<b>sGC Activator Oral</b> (BAY 3283142)  ●		<b>Gadoquatrane</b> (High Relaxivity Contrast Agent)  ● // Magnetic Resonance Imaging (QUANTI-CNS, QUANTI-OBR)
	<b>Anti-a2AP</b> (BAY 3018250)  ●		
	<b>sGC Activator Inhale</b> (BAY 1211163)  ●		
	<b>SEMA 3a</b> (BAY 3401016)  ●		
	<b>Bemdaneprocel</b> (Parkinson's Disease Cell Therapy) (BRT-DA01)  ●		
	<b>Parkinson's Disease rAAV Gene Therapy</b> (AB-1005 aka AAV2-GDNF-PD)  ●		
	<b>Multiple System Atrophy rAAV Gene Therapy</b> (AB-1005 aka AAV2-GDNF-MSA)  ●		
	<b>Pompe Disease rAAV Gene Therapy</b> (ACTUS-101)  ●		
	<b>Huntington's Disease rAAV Gene Therapy</b> (AB-1001 aka BV-101)  ●		
	<b>LGMD2I/R9 rAAV Gene Therapy</b> (AB-1003 aka LION-101)  ●		
	<b>GPR84 Antagonist</b> (BAY 3178275)  ●		

**Submissions**

**Aflibercept 8mg** (VEGF-Inhibitor) ○  
// EU, JP, US<sup>4</sup>: Diabetic Macular Edema (DME)  
// EU, JP, US<sup>4</sup>, CN: Neovasc. Age-rel. Macular Degen. (nAMD)

- Oncology
- Cardiovascular+<sup>5</sup>
- Neurology & Rare Diseases
- Immunology
- Others

- New molecular entity
- Life cycle management

Full pipeline package available for download under:  
<https://www.bayer.com/en/pharma/development-pipeline>

<sup>1</sup> Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit <sup>2</sup> Pre-clinical selected assets on path to IND <sup>3</sup> Conducted by Merck & Co <sup>4</sup> US submission made by Regeneron <sup>5</sup> Including Precision Cardiovascular, Nephrology & Acute Care



