

A large, centered version of the Sanofi logo, featuring the word "sanofi" in a bold, lowercase, sans-serif font. The letter "s" has a purple dot above it, and the letter "i" has a purple dot above it.





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# Results Q3 2024



October 25, 2024



# Forward-looking statements

This document contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, business transformations, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words “expects”, “anticipates”, “believes”, “intends”, “estimates”, “plans”, “potential”, “outlook”, “guidance” and similar expressions. Although Sanofi’s management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis, including post marketing, decisions by regulatory authorities, such as the FDA or the EMA, regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labelling and other matters that could affect the availability or commercial potential of such product candidates, the fact that product candidates if approved may not be commercially successful, the future approval and commercial success of therapeutic alternatives, Sanofi’s ability to benefit from external growth opportunities, to complete capital markets or other transactions and/or obtain regulatory clearances, risks associated with developing standalone businesses, risks associated with intellectual property and any related pending or future litigation and the ultimate outcome of such litigation, trends in exchange rates and prevailing interest rates, volatile economic and capital market conditions, cost containment initiatives and subsequent changes thereto, and the impact that pandemics, political disruption or armed conflicts or other global crises may have on us, our customers, suppliers, vendors, and other business partners, and the financial condition of any one of them, as well as on our employees and on the global economy as a whole. The risks and uncertainties also include the uncertainties discussed or identified in the public filings with the SEC and the AMF made by Sanofi, including those listed under “Risk Factors” and “Cautionary Statement Regarding Forward-Looking Statements” in Sanofi’s annual report on Form 20-F for the year ended December 31, 2023. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

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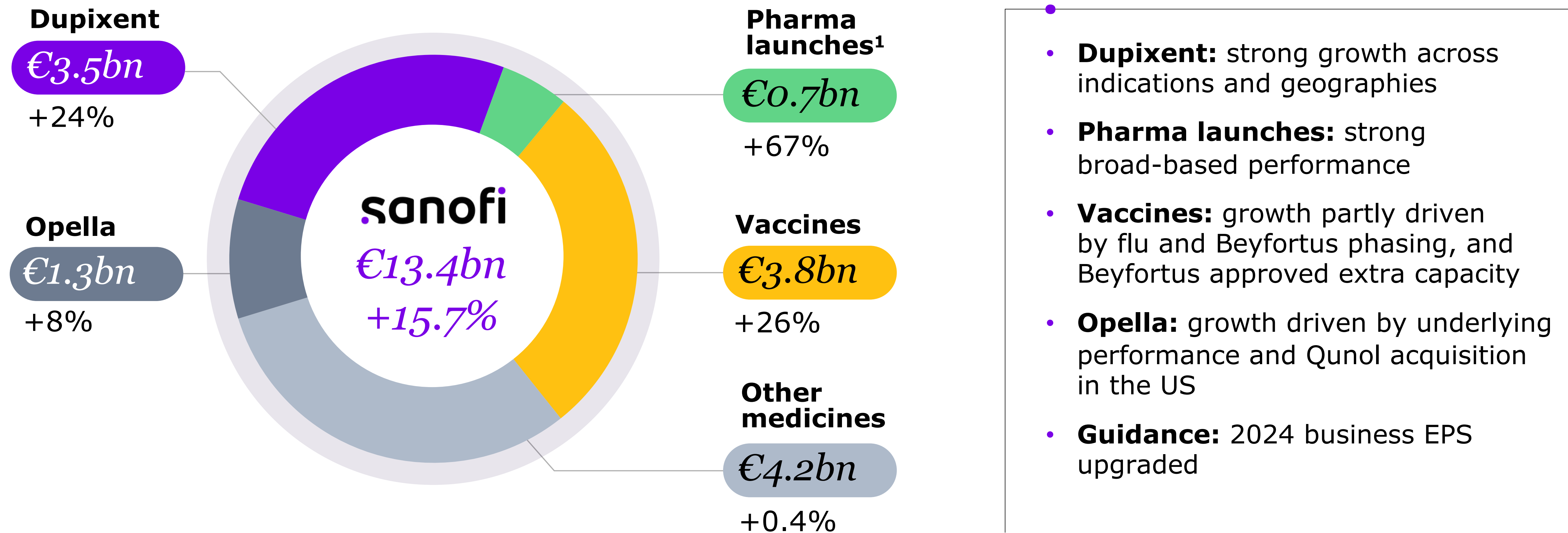


# Agenda

- 01 • **Business**  
Paul Hudson
- 02 • **Finance**  
François Roger
- 03 • **Pipeline**  
Houman Ashrafian
- 04 • **Q&A**  
Presenters and Brian Foard, Olivier Charmeil,  
Thomas Triomphe, Julie Van Ongevalle, and  
Roy Papatheodorou



# Q3: *15.7% sales growth* boosted by vaccines phasing; business EPS guidance raised to reflect strong business performance

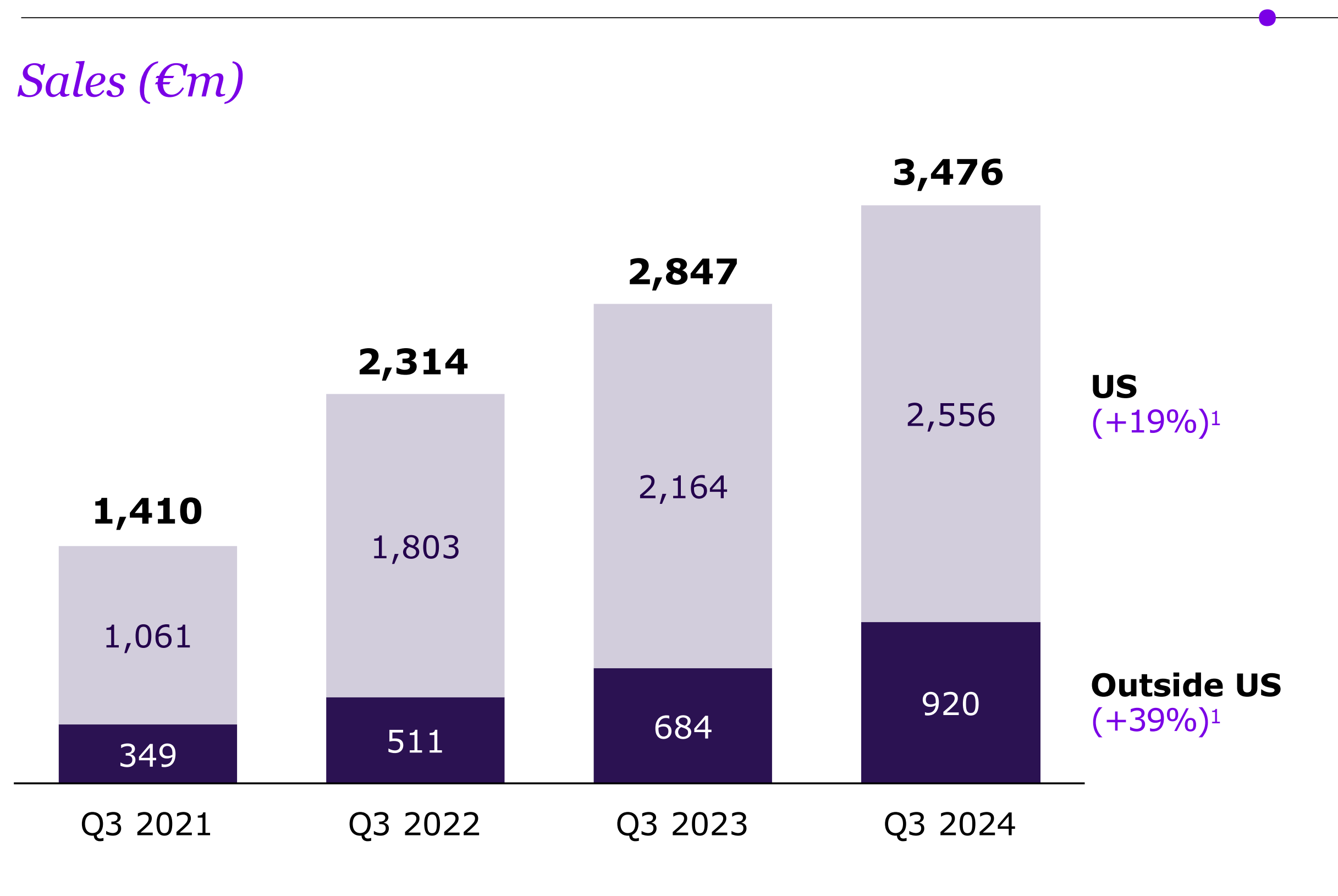


All changes at CER and for Q3 2024 unless stated otherwise. 1. ALTUVIIIIO, Nexviazyme, Rezurock, Sarclisa, Cablivi, Xenpozyme, Enjaymo, Tzield. Opella is the name for the business formerly known as Sanofi Consumer Healthcare.



# Dupixent continues strong growth, on track for *~€13bn in 2024*

## Sales (€m)



## Q3 performance



Global growth of **24%** driven by strong demand



**#1** NBRx market share across ALL approved indications<sup>2</sup>



**>1,000,000** patients on therapy worldwide

## Recent milestones

### Regulatory approvals

- COPD in more than 30 countries
- Chronic rhinosinusitis with nasal polyposis, adolescent (US)

### Positive phase 3 data readouts

- Bullous pemphigoid
- Chronic spontaneous urticaria (Study C)

All growth and Dupixent goal at CER. 1. Represents growth in Q3 2024 from Q3 2023. 2. IQVIA data with internal projection.

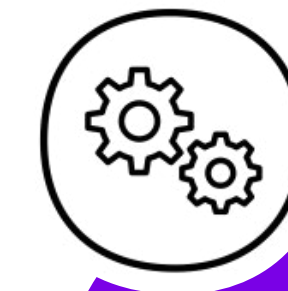
# Dupixent: strong execution to *drive growth*



Drive market growth through *increased penetration* in biologic-eligible patients



Deepen *indication breadth* in launched countries<sup>1</sup>



Transform standard of care in *new indications* (COPD, BP, CSU...)

Ambition to grow sales at low *double-digit CAGR* 2023-30<sup>2</sup>

1. ~30 potential country approvals in 2024-2026 including AD, asthma, CRSwNP, EoE, PN. 2. Growth at CER.

# New launches: contributing close to *€3bn sales* YTD

<i>Sales (€m)</i>	<i>Q3</i>	<i>YTD</i>
<b>Beyfortus</b> <small>(nirsevimab)</small>	645	845
<b>ALTUVIIIIO</b> <small>efanesoctocog alfa</small>	172	452
<b>Nexviazyme</b> <small>(avalglucosidase alfa)</small>	163	483
<b>REZUROCK</b> <small>(belumosudil) tablets</small>	131	338
<b>SARCLISA</b> <small>(isatuximab-irfc)</small>	114	341
<b>Cabliivi</b> <small>caplacizumab-yhdp Injection 110mg</small>	63	176
<b>Xenpozyme</b> <small>(olipudase alfa)</small>	41	113
<b>Enjaymo</b> <small>sutimimab-jome Injection for intravenous use 1000 mg/20 mL</small>	28 <sup>1</sup>	83 <sup>1</sup>
<b>Tzielid</b> <small>(teplizumab-mzwv) Injection   2mg/2mL</small>	15	36
	<b>€1,372m</b>	<b>€2,867m</b>



All changes at CER and for Q3 2024 unless stated otherwise. 1. On October 4, 2024, Recordati announced the acquisition of global rights to Enjaymo. This transaction is expected to close this quarter, subject to customary closing conditions.



# Beyfortus and Fluzone HD establish high-efficacy standards with the *strongest level of evidence* to date



## *Continuing to expand outstanding body of evidence*

- Protection sustained over 180 days<sup>1</sup>: 83% efficacy against RSV hospitalization
- 87% efficacy confirmed by recent BEAR RWE<sup>2</sup>
- Real-world effectiveness consistently exceeding 80% reduction in hospitalization (>75k babies)<sup>3</sup>

new

new

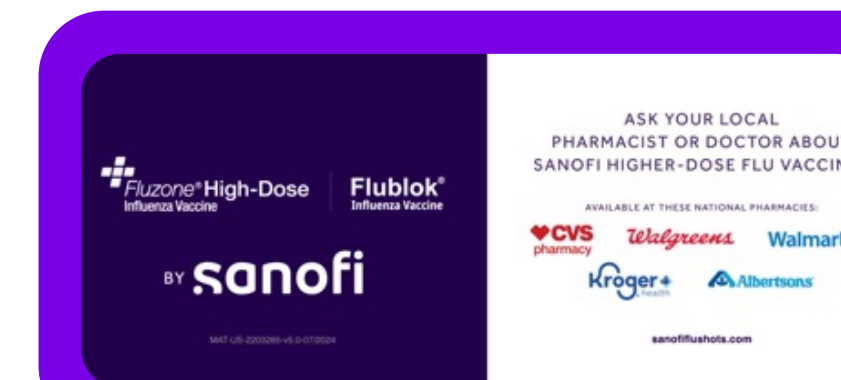
## *Blockbuster status through “All Infant Protection”*

- 2024 supply secured in 20 countries
- Recommendations for All Infant Protection in most launched countries



## *Randomized controlled trials required to substantiate efficacy of influenza vaccines*

- Fluzone HD demonstrated **24.2% superior efficacy vs. standard dose** (32k participants)<sup>4</sup>
- Alternative adjuvanted and mRNA flu vaccines have not demonstrated superior efficacy against standard dose in RCTs (ongoing studies)



*Value of differentiated products supported by partners*

1. Munro, A.P.S., et al. (2024). Efficacy of nirsevimab Over 6 Months: A 180-Day Endpoint Analysis from the HARMONIE Study, a Randomized Phase iiib Trial. SSRN. <https://ssrn.com/abstract=4995419>. 2. Klein NP, et al. Effectiveness of nirsevimab in infants against respiratory syncytial virus (RSV) and RSV-related events. Oral presentation at: American College of Allergy, Asthma & Immunology Annual Scientific Meeting; 26 October 2024; Boston, Massachusetts. BEAR: Beyfortus Effectiveness Against medically attended RSV events in infants. 3. Wick M, et al. RSV Prophylaxis with nirsevimab in infants: systematic review of early real-world evidence on effectiveness and impact. Poster presented at IDWeek on October 17<sup>th</sup>, 2024 in Los Angeles, California. 4. DiazGranados CA, et al. N Engl J Med. 2014.

# Living wage *pledge*

Sanofi ensures a living wage for all its employees, going beyond minimum wage standards

## Methodology established by Fairwage Network<sup>1</sup> to determine living wage levels



 *Aim* > Improve employee health, well-being, and contribute positively to local economies

 *Overcome challenges* > Navigate economic disparities between countries, cost of living variations and complex legal environments

 *Extended commitment* > Advocate for living wage adoption among key supply chain partners



1. Fair Wage Network applies a multi-dimensional approach to drive fair wages standards with companies.



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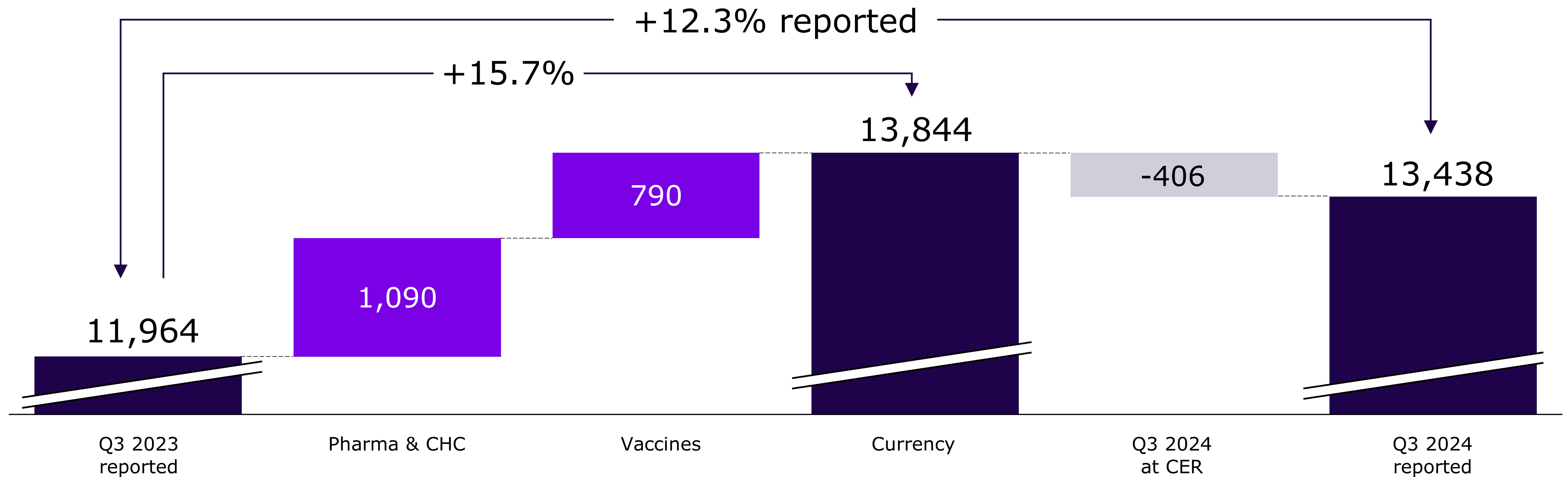
# Finance

*Q3 2024*



# Strong *momentum* further boosted by early vaccines delivery

Sales (€m)



All changes at CER and for Q3 2024 unless stated otherwise.



# Group P&L

<i>(€m)</i>	<i>Q3 2023</i>	<i>Q3 2024</i>	<i>% change</i>
<b>Net sales</b>	<b>11,964</b>	<b>13,438</b>	<b>+15.7%</b>
Other revenues	734	719	-0.7%
<b>Gross profit</b>	<b>8,858</b>	<b>10,074</b>	<b>+17.4%</b>
Gross margin %	74.0% <sup>1</sup>	75.0% <sup>1</sup>	+1.0pp
R&D	(1,663)	(1,852)	+12.7%
SG&A	(2,579)	(2,681)	+6.4%
<b>Operating expenses</b>	<b>(4,242)</b>	<b>(4,533)</b>	<b>+8.9%</b>
<i>% of net sales</i>	<i>35.5%</i>	<i>33.7%</i>	<i>-1.8pp</i>
Other operating income & expenses	(598)	(971)	+65.6%
<b>Business operating income (BOI)</b>	<b>4,028</b>	<b>4,607</b>	<b>+19.9%</b>
Business operating margin	33.7% <sup>1</sup>	34.3% <sup>1</sup>	+0.6pp
Effective tax rate	19.0%	21.0%	+2.0pp
<b>Total business net income</b>	<b>3,196</b>	<b>3,585</b>	<b>+17.5%</b>
Average number of shares, million	1,253.2	1,253.0	
<b>Business EPS</b>	<b>2.55</b>	<b>2.86</b>	<b>+17.6%</b>

## *Sales*

+15.7%; boosted by flu and Beyfortus sales phasing; solid, underlying double-digit growth

## *Gross margin*

+1.0pp, driven by positive mix effect, partly offset by currency and Aubagio comparison base

## *Operating expenses*

R&D: on track for committed increase in 2024  
SG&A: grew substantially less than sales

## *Business operating income*

+19.9%, driven mainly by higher gross profit, operating leverage, offset by higher Regeneron profit share and less capital gains

## *EPS*

+17.6%, driven by higher business net income

All changes at CER and for Q3 2024 unless stated otherwise. 1. Margin at published rate.

# *Business dynamics* to consider for the remainder of 2024

	<i>Sales</i>		<i>P&amp;L</i>	
<i>Q4 2024</i>	<b>Beyfortus</b>	Sales similar to Q3	<b>Other revenues</b>	One-off COVID-19 sales of €400m in Q4 2023
			<b>Costs</b>	Continued step-up in development; increased investments in S&M to support sales and digitalization
<i>FY 2024</i>	<b>Dupixent</b>	Target of ~€13bn	<b>Gross margin</b>	Slightly declining
	<b>Flu</b>	Expect low single-digit decline due to soft vaccination rate	<b>Costs</b>	Step-up in development
	<b>Vaccines</b>	Expect to grow high single-digit	<b>Capital gains (divestments)</b>	~€400m for Biopharma
	<b>GenMed</b>	Divestments ~€300m sales impact	<b>Tax rate</b>	20% (vs. 18%) <sup>1</sup>
			<b>EPS Fx impact</b>	-5.5% to -6.5% <sup>1,2</sup>

**Guidance upgraded earlier in October: 2024 business EPS to grow by at least a low single-digit percentage<sup>3</sup>**



# Sanofi in exclusive negotiation to *sell a controlling stake* of Opella

*Potential transaction for a 50% controlling stake of Opella*

**sanofi**  
~48%

CD&R  
~50%

**bpi**france  
~2%

**Opella.**

*EV €16bn*

*Clear strategy for value creation*

Sanofi to retain a significant stake and a large part of future value creation.

Sanofi to become a pure-play, science-driven biopharma company focused on innovative medicines and vaccines.

Closing of the transaction expected in *Q2 2025<sup>1</sup>* at the earliest.

Expected use of proceeds in line with Sanofi's existing capital-allocation priorities, including *shareholder returns*

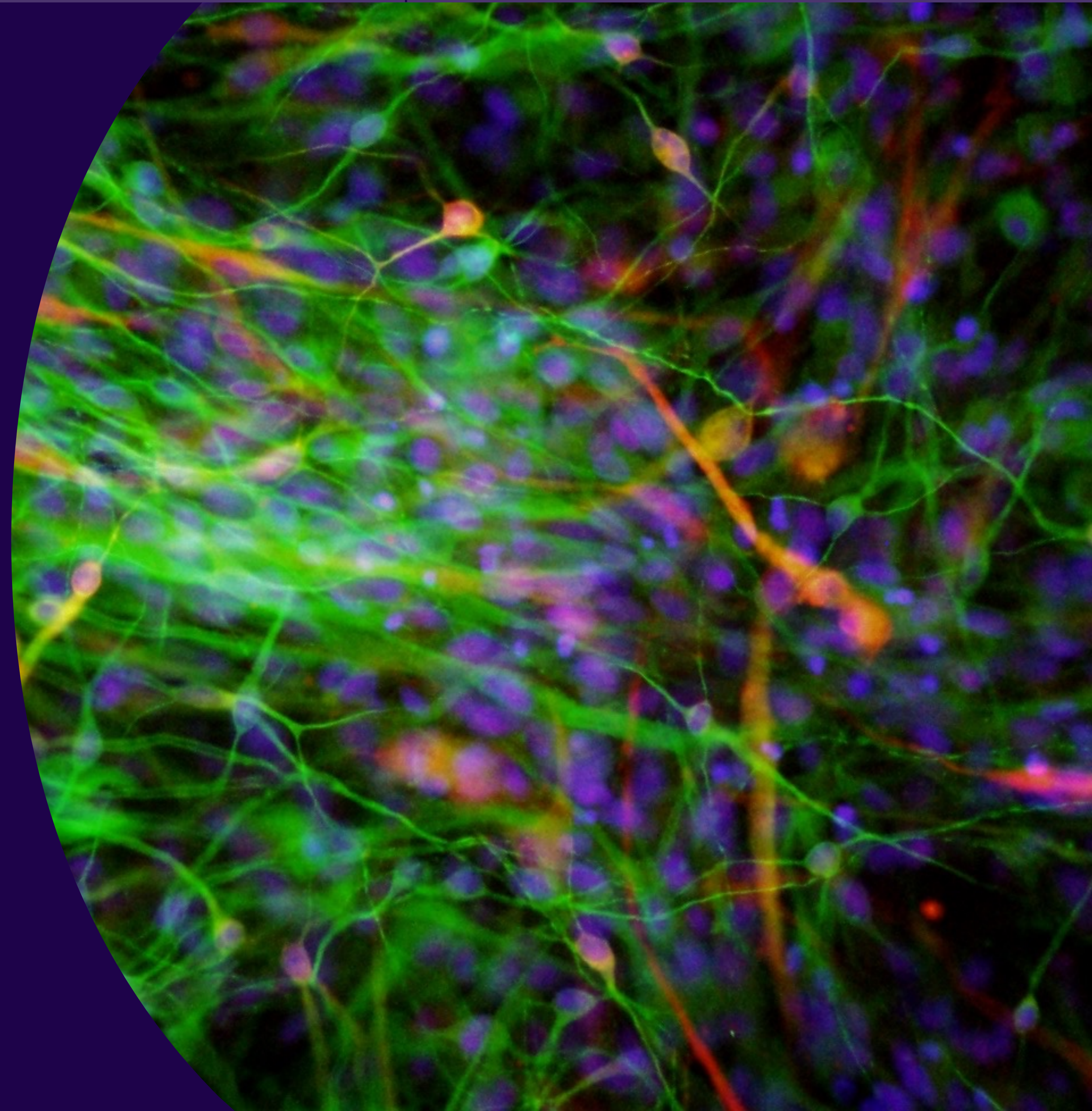
1. The proposed transaction is subject to finalization of definitive agreements, completion of the appropriate social processes and subject to customary closing conditions.



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**Pipeline**





# Pipeline: Q3 *milestones*

## Regulatory approvals

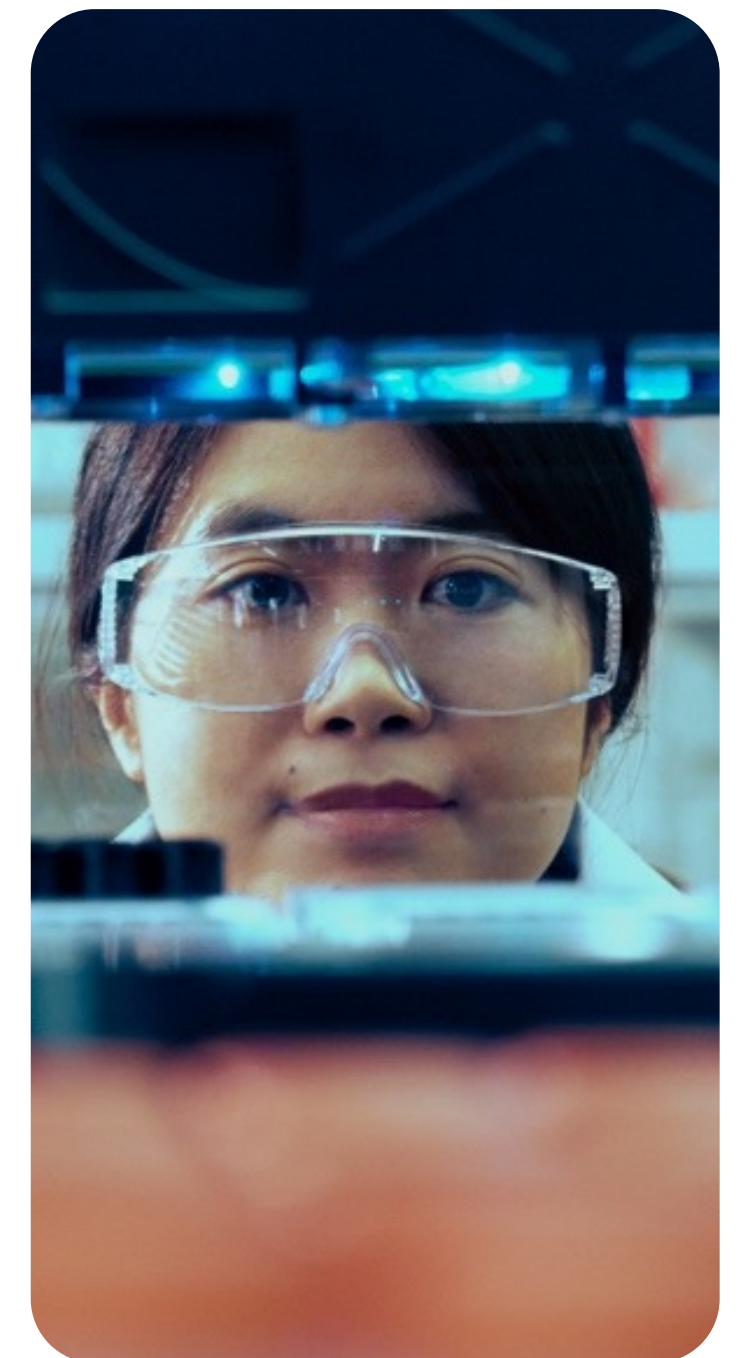
<b>Dupixent</b>	COPD (US, CN), CRSwNP adolescents (US)
<b>Sarclisa</b>	NDMM, TI (US)

## Phase 3 data readouts

<b>Dupixent</b>	CSU (Study C) (primary endpoint met)
	CPUO (primary endpoint not met)
	BP (primary endpoint met)
<b>tolebrutinib</b>	RMS (primary endpoint not met)
	nrSPMS (primary endpoint met)
<b>Sarclisa</b>	NDMM, TE (HD7 study) (primary endpoint met)

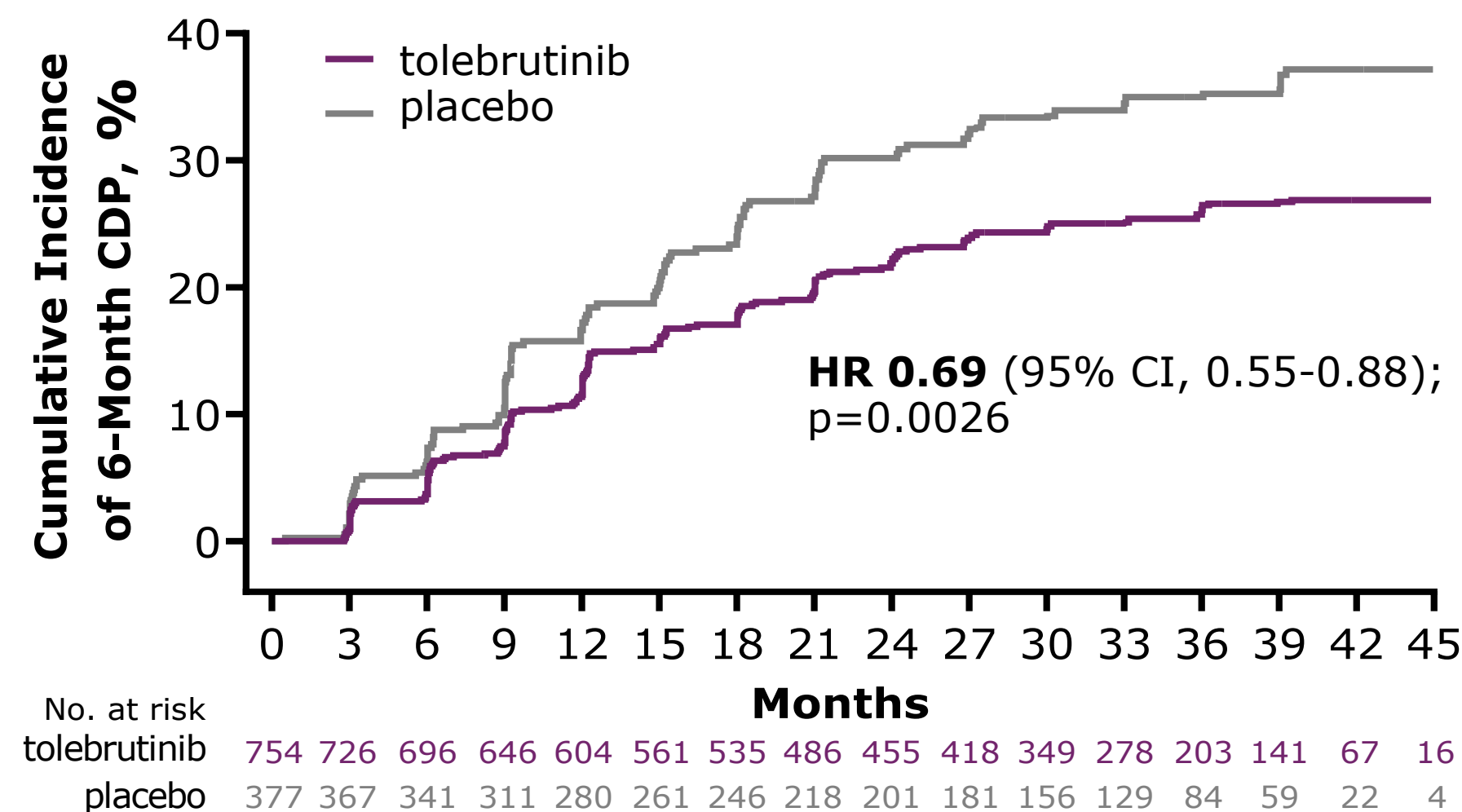
## New business developments

- Equity investment in **MeiraGTx**, a clinical-stage genetic medicine company
- Equity investment in **Ventyx**, a clinical-stage biopharmaceutical company in autoimmune and inflammatory disorders
- Equity investment in **Anaptys**, a clinical-stage biotechnology company focused on immunology therapeutics, including in rheumatoid arthritis and ulcerative colitis
- Equity investment in **Vicore**, a clinical-stage pharmaceutical company in respiratory and fibrotic diseases, including idiopathic pulmonary fibrosis
- Exclusive licensing agreement with **RadioMedix** and **Orano Med**, for the late-stage project, AlphaMedix™ (212Pb-DOTAMTATE) in rare cancers



# tolebrutinib: unprecedented *effect on disability* in nrSPMS

*Primary endpoint met: 31% delay in time to onset of 6-month confirmed disability progression*



- Number of participants who experienced confirmed disability improvement *increased by nearly two-fold with tolebrutinib* vs. placebo (HR 1.88; 95% CI, 1.10 to 3.21; p=0.021)
- tolebrutinib significantly *lowered the annualised rate of new/enlarging T2 lesions* vs. placebo (HR 0.62, 95% CI, 0.43-0.90; p=0.011)
- Liver enzyme elevations have been reported with tolebrutinib and other BTK inhibitors
- Elevations >3x ULN were observed in 4.1% of tolebrutinib participants and they *all occurred within the first 90 days of treatment*
- The vast majority of cases *resolved without sequelae*
- Frequent liver monitoring in the first 90 days has been implemented

US submission planned by *year-end*, followed by EU in *H1 2025*

PPMS phase 3 data readout in *H2 2025*



# amlitelimab: 68-week STREAM-AD phase 2b results confirmed *long-term safety* profile in atopic dermatitis

*No dose dependency in safety observed across dose arms*

n (%) of participants with ≥1 TEAE	Week 0-68 part 2 safety population (n=186)		
	Part 1 treatment group	Pooled amlitelimab	Placebo
		Pooled amlitelimab	Placebo
	Part 2 treatment group	Pooled amlitelimab (n=43)	Placebo (n=15)
		Pooled withdrawal (placebo) (n=128)	
Any TEAE		36 (83.7)	14 (93.3)
Any SAE		2 (4.7)	0
Any TEAE leading to treatment discontinuation		1 (2.3)	0
Any AESI		1 (2.3)	0

- Most reported TEAEs were *mild or moderate in severity*
- Anti-drug antibody levels were generally low

Potential for *differentiated safety* in atopic dermatitis

*Current clinical profile*

- Effective treatment in AD across *both type-2 and non-type 2 pathways*, with broadly moderate-to-severe eligible population
- Potential for convenient *extended dosing* interval up to Q12W
- Potential for therapy-free remission through *durable efficacy* by immune memory
- Potential for *disease modification* confirmed in previous studies



OCEANA phase 3 program *ongoing* in atopic dermatitis

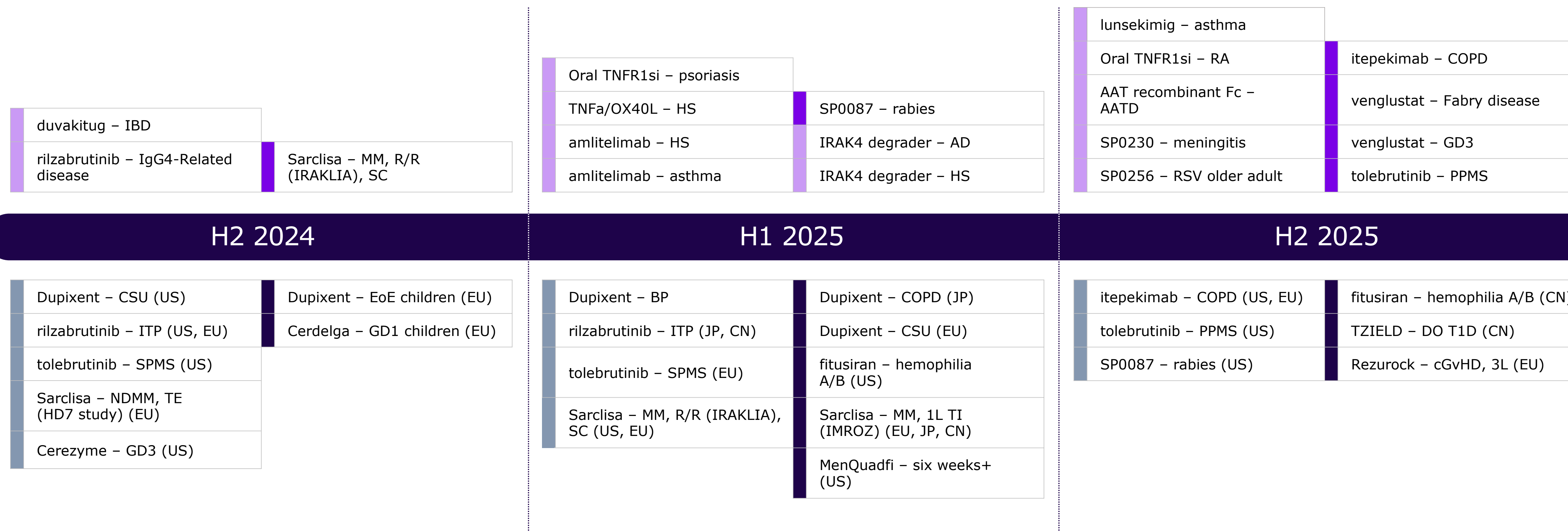
# Immunology: committed to *improve standard of care*

Oral	IRAK4 phase 2		rilzabrutinib phase 2	IRAK4 phase 2			TNFR1si phase 2	rilzabrutinib phase 2				eclitasertib phase 2 in UC	TNFR1si phase 2
				TNFα/ OX40L phase 2				lunsekimig phase 2		lunsekimig phase 2		duvakitug phase 2b	
	amlitelimab phase 3		amlitelimab phase 2					amlitelimab phase 2	itepekimab phase 3				
	Dupixent approved (US, EU, JP, CN)	Dupixent approved (US, EU, JP, CN)	Dupixent approved (JP) sub. (EU)		Dupixent phase 3	Dupixent phase 3		Dupixent approved (US, EU, JP, CN)	Dupixent approved (US, EU, CN) sub. (JP)	Dupixent approved (US, EU, JP)	Dupixent approved (US, EU)	Dupixent phase 2 in UC	Kevzara approved, also PMR/ pJIA/sJIA
	AD	PN	CSU	HS	BP	CPUO	Psoriasis	Asthma	COPD	CRSwNP	EoE	IBD	RA
	<i>Dermatology</i>							<i>Respiratory</i>			<i>Gastroenterology</i>		<i>Rheumatology</i>

Illustrative. For abbreviations, see slide 35.



# Pipeline: *upcoming* news flow



Key pipeline news flow only. For abbreviations, see slide 35.

■ Phase 2 data readout
 ■ Phase 3 data readout
 ■ Regulatory submission
 ■ Regulatory decision

# Q&A session

*To ask a question*

**By zoom**



Click on the  
**Raise hand** icon

Check your audio device  
is well connected

**By phone**



Raise and lower your  
hand: dial \*9

Unmute and mute  
your microphone: dial \*6

**Any problems?**



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# Finance appendices





# Sales *biopharma*

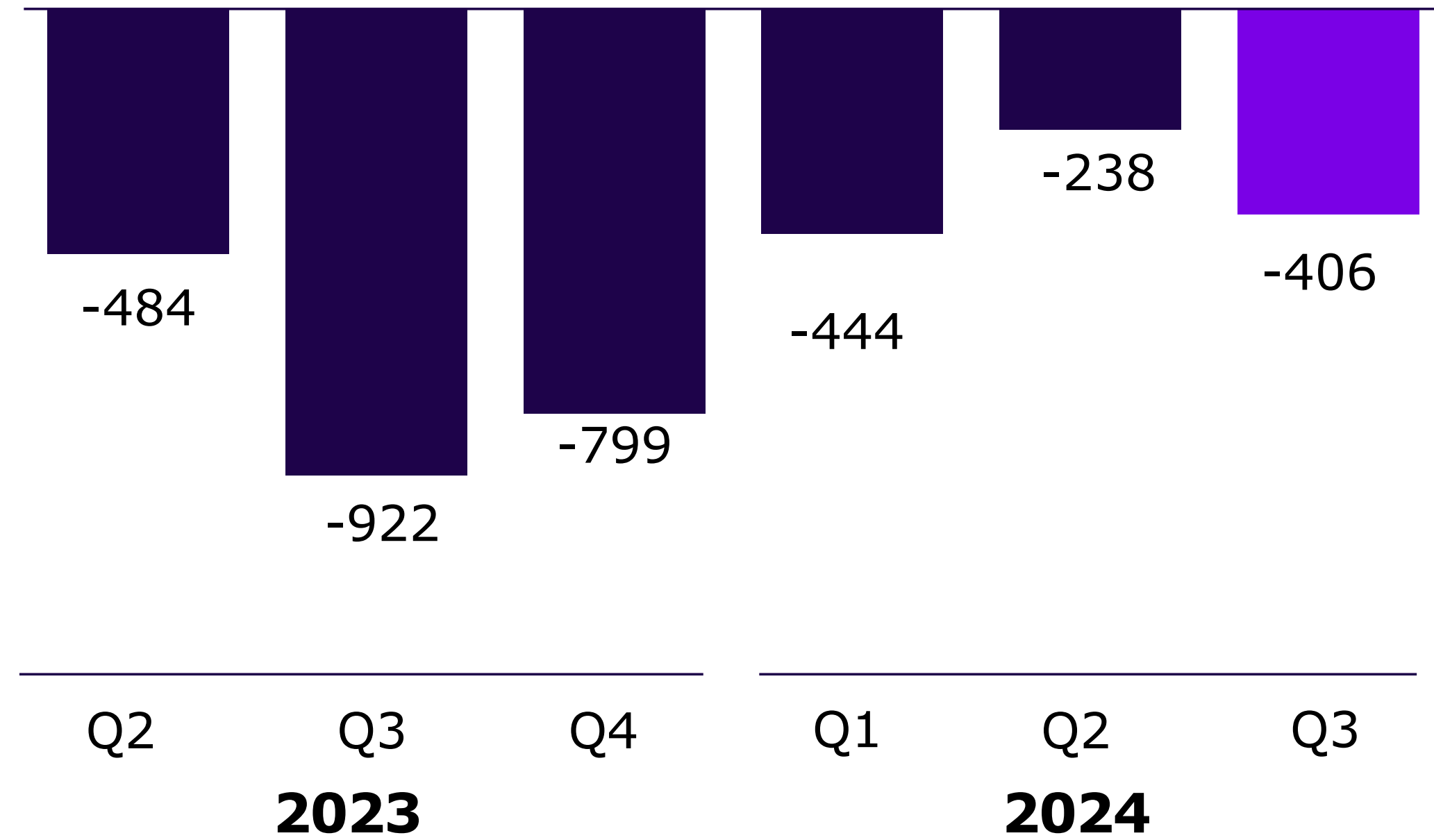
	<i>Q3 2024 (€m)</i>	<i>Change</i>
Dupixent	3,476	23.8%
Influenza vaccines	1,913	10.9%
Polio/Pertussis/Hib vaccines & Boosters	760	2.0%
RSV vaccines (Beyfortus)	645	381.8%
Meningitis, Travel and Endemic vaccines	485	13.1%
Lantus	431	33.8%
Toujeo	303	18.1%
Fabrazyme	253	4.0%
Lovenox	233	-1.2%
Plavix	230	8.3%
ALTUVIIIIO	172	278.3%
Myozyme	168	-7.5%
Cerezyme	164	8.0%
Nexviazyme/Nexviadyme	163	53.6%
Alprolix	148	8.7%
Rezurock	131	57.8%
Praluent	126	10.4%
Thymoglobulin	121	4.1%
Sarclisa	114	23.7%
Kevzara	109	28.7%

All changes at CER and for Q3 2024 unless stated otherwise.

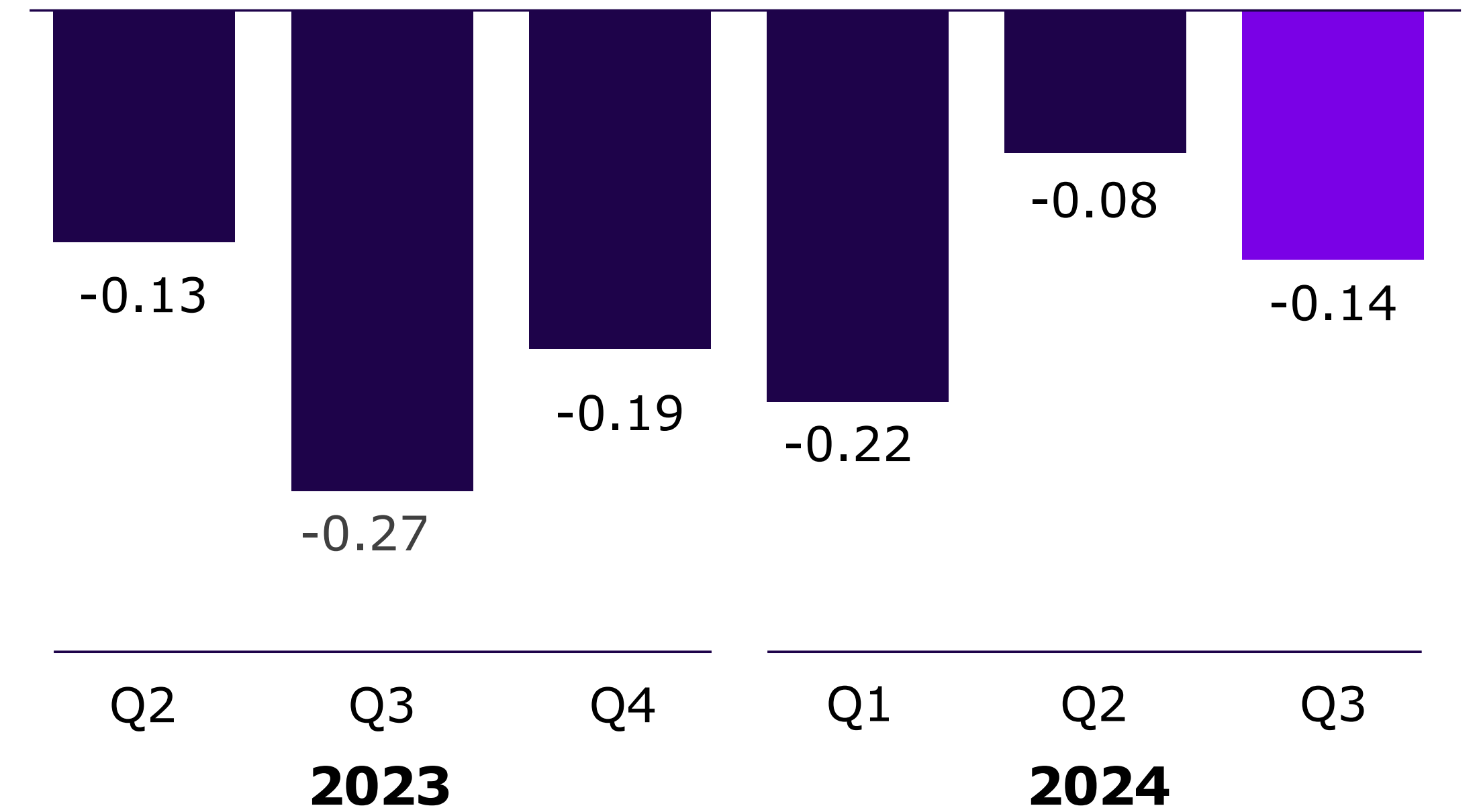


# Currency impact

## *Sales (€m)*



## *Business EPS (€)*



# Currency sensitivity and exposure

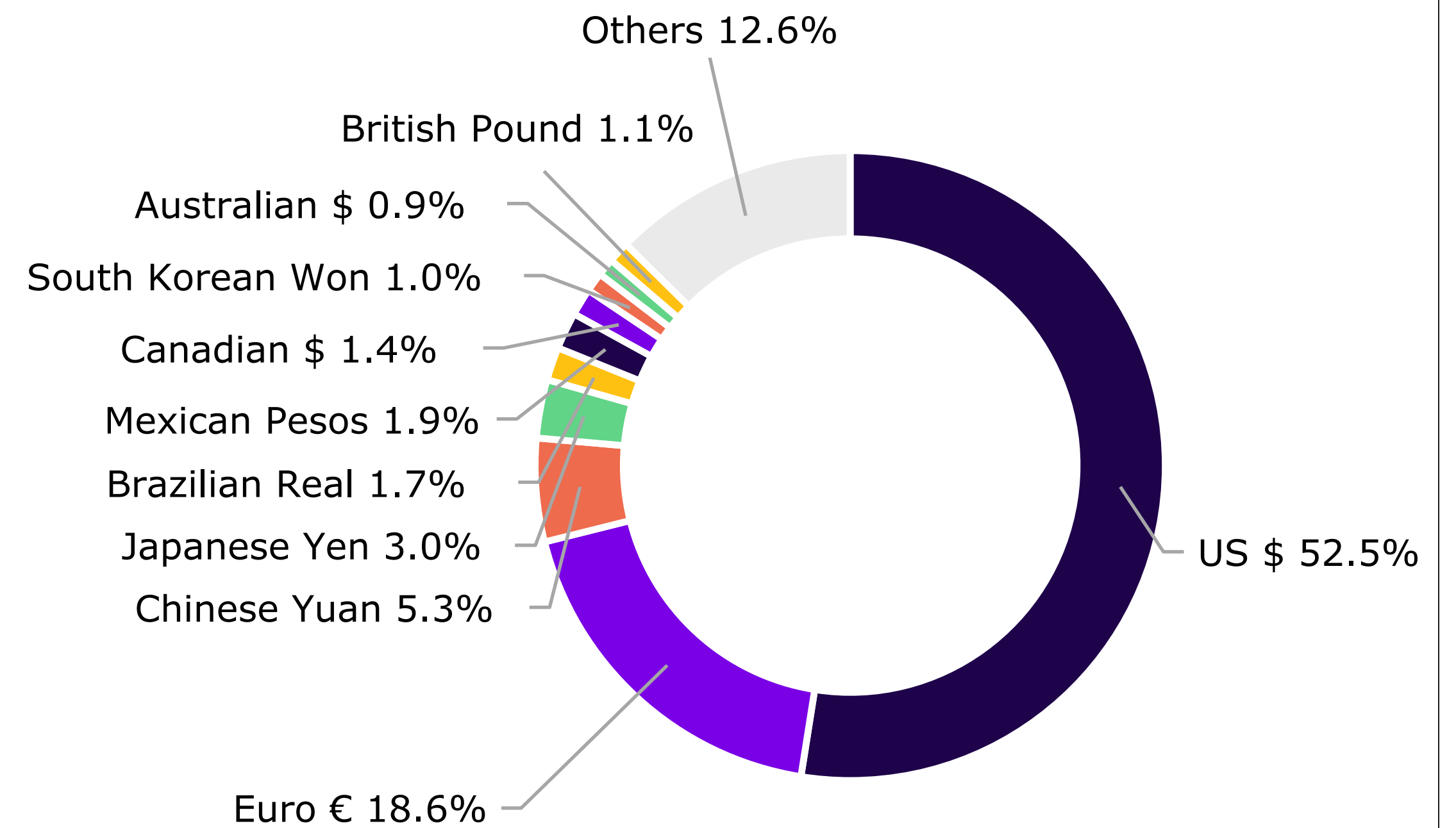
## 2024 business EPS currency sensitivity

Currency	Change	Business EPS sensitivity
US Dollar	+ 0.05 USD/EUR	- EUR 0.17
Japanese Yen	+ 5 JPY/EUR	- EUR 0.02
Chinese Yuan	+ 0.2 CNY/EUR	- EUR 0.02
Brazilian Real	+ 0.4 BRL/EUR	- EUR 0.01
Russian Ruble	+ 10 RUB/EUR	- EUR 0.01

## Currency average rates

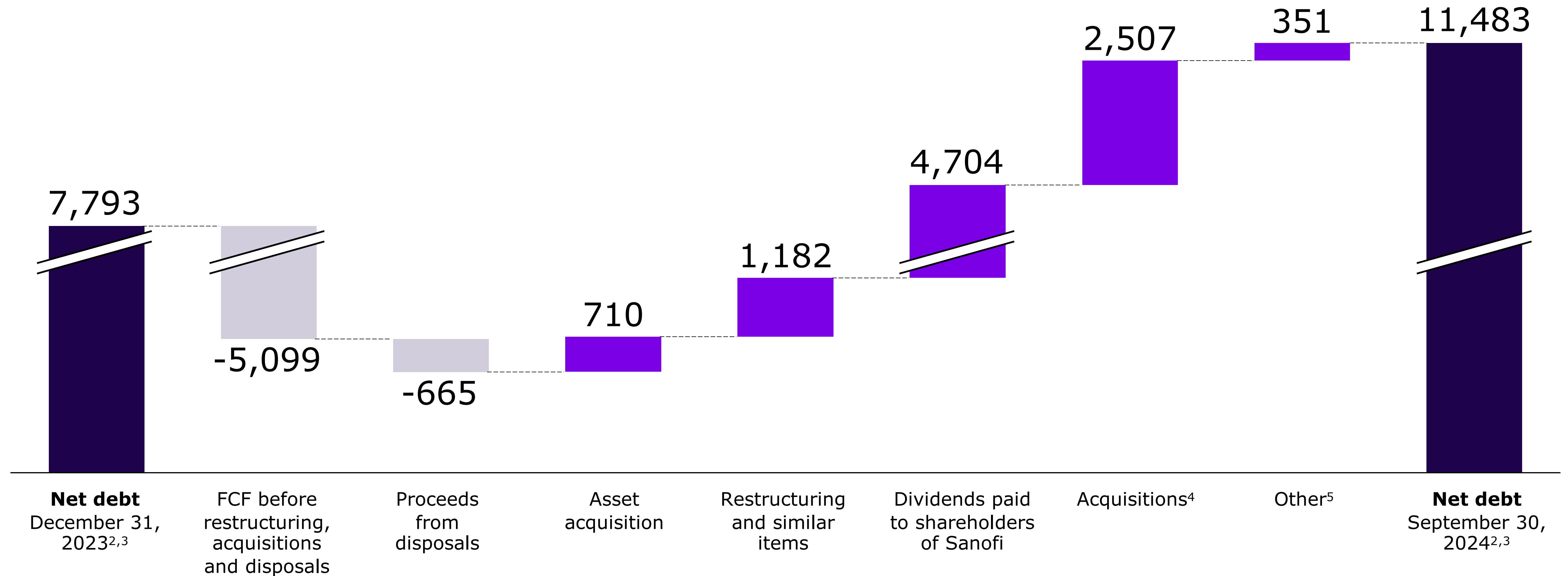
	Q3 2023	Q3 2024	% Change
EUR/USD	1.088	1.099	+1.0%
EUR/JPY	157.211	163.727	+4.1%
EUR/CNY	7.896	7.876	-0.2%
EUR/BRL	5.311	6.095	+14.7%
EUR/RUB	102.548	98.161	-4.3%

## Currency exposure on Q3 2024 sales





# Net debt<sup>1</sup> (€m)

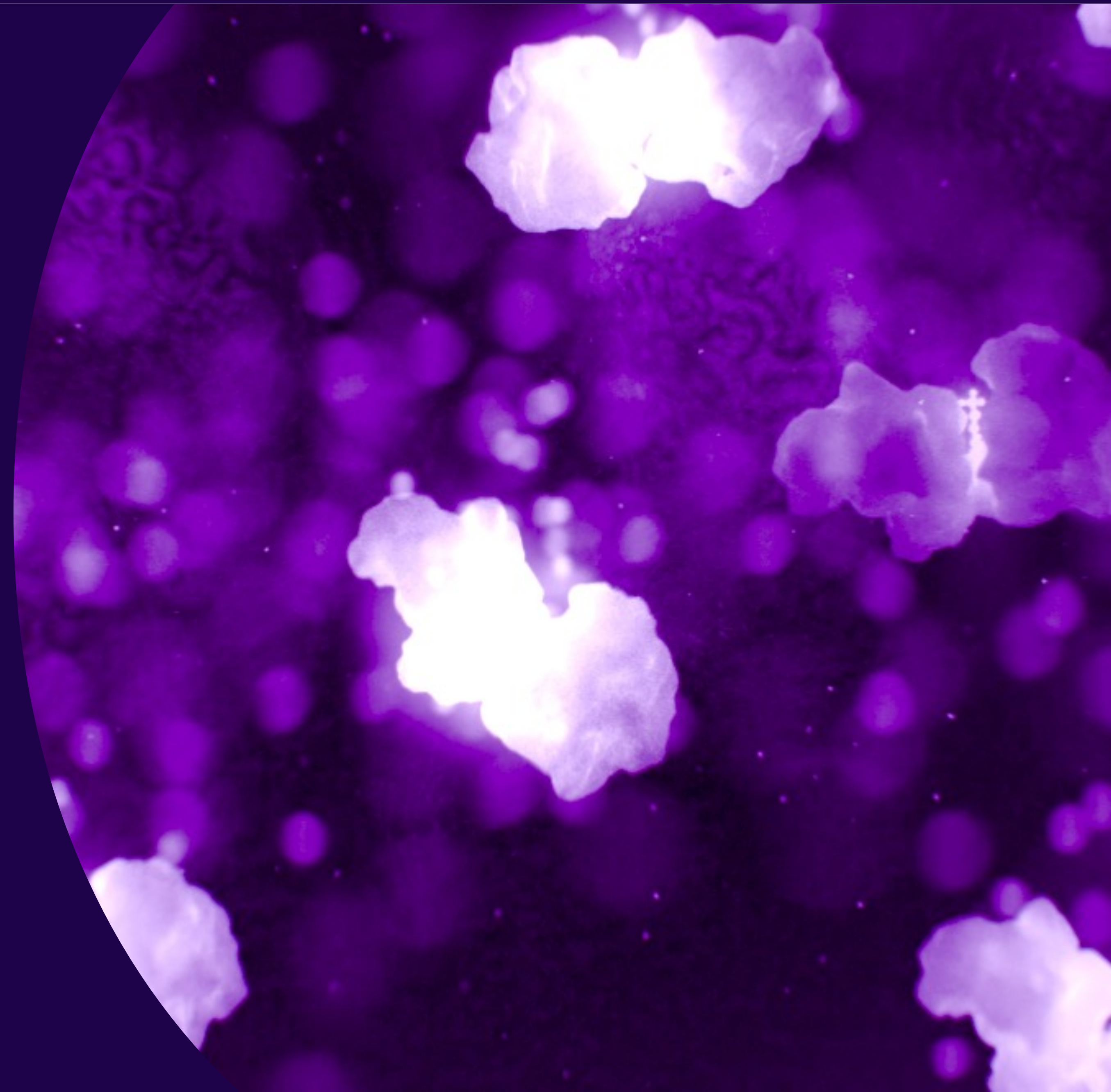


1. Credit ratings reaffirmed: Moody's A1/positive, S&P AA/stable, Scope AA/stable as of September 30, 2024. 2. Including derivatives used to manage net debt: €111m on December 31, 2023 and €101m on September 30, 2024. 3. Effective January 1, 2019, net debt does not include lease liabilities following the first-time application of IFRS16. 4. Includes transaction that are above a cap of €500 million per transaction (inclusive of all payments related to the transaction). 5. Including €302m use of funds from acquisition of treasury shares, -€180m of issuance of Sanofi shares and €229m of other items.

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# Pipeline appendices





# Pipeline: *Q3 changes*

## New in

### *Regulatory*

Submission **MenQuadfi** – Meningitis six weeks+ (US)

### *H2 2024 news flow*

Regulatory submission **Cerezyme** – GD3 (US)

Regulatory decision **Cerdelga** – GD1 children (EU)

### *H1 2025 news flow*

Phase 2 data readout **oral TNFR1si** – psoriasis

Phase 2 data readout **amlitelimab** – asthma

Phase 3 data readout **SP0087** – rabies

Regulatory submission **rilzabrutinib** – ITP (JP, CN)

Regulatory submission **tolebrutinib** – SPMS (EU)

Regulatory decision **MenQuadfi** – six weeks+ (US)

### *H2 2025 news flow*

Regulatory decision **TZIELD** – T1D (CN)

Regulatory decision **Rezurock** – cGVHD, 3L (EU)

### *Designations*

ODD **venglustat** – Fabry, Gaucher (JP)

Priority review **TZIELD** – T1D (CN)

Priority review **Cablivi** – aTTP (JP)

### *Phase 2*

**amlitelimab** – Celiac disease

**lunsekimig** – CRSwNP

## Removed in

### *Regulatory*

Approval **Dupixent** – COPD (US, CN)

Approval **Sarclisa** – NDMM, TI (IMROZ) (US)

### *H2 2024 news flow*

Phase 2 data readout **rilzabrutinib** – wAIHA

Phase 2 data readout **amlitelimab** – asthma

Phase 3 data readout **Dupixent** – CSU (study C)

Phase 3 data readout **Dupixent** – BP

Phase 3 data readout **losmapimod** – FSHD

Phase 3 data readout **tolebrutinib** – RMS

Phase 3 data readout **tolebrutinib** – nrSPMS

### *H1 2025 news flow*

Regulatory submission **losmapimod** – FSHD (EU)

Regulatory submission **Sarclisa** – NDMM, TE (HD7) (US)

Regulatory decision **Dupixent** – COPD (CN)

### *Designations*

ODD **Enjaymo** – CAD (US, EU, JP)

ODD **Nexviadyme** – Pompe (EU)

ODD **losmapimod** – FSHD (US)

### *Phase 3*

**losmapimod** – FSHD

**MenQuadfi** – six weeks+

Phase 3 data readout **Sarclisa** – NDMM, TE (HD7)

Regulatory submission **tolebrutinib** – RMS (US)

Regulatory submission **MenQuadfi** – six weeks+ (US)

Regulatory decision **Dupixent** – COPD (US)

Regulatory decision **Dupixent** – CRSwNP adolescents (US)

Regulatory decision **Sarclisa** – NDMM, TI (IMROZ) (US)

### *H2 2025 news flow*

Phase 2 data readout **oral TNFR1si** – psoriasis

Phase 3 data readout **SP0087** – rabies

### *Phase 2*

**oditrasertib** – MS

# Pipeline: *registration* and *phase 3*

## Registration

<b>Dupixent<sup>A</sup></b>	IL4/IL13 mAb	Chronic obstructive pulmonary disease (JP) Chronic spontaneous urticaria (EU)
<b>fitusiran<sup>1</sup></b>	RNAi targeting anti-thrombin	Hemophilia A and B (US, CN)
<b>Sarclisa</b>	CD38 mAb	MM, 1L TI (IMROZ) (EU, JP, CN)
<b>MenQuadfi<sup>1</sup></b>	Meningococcal ACWY conjugate vaccine	Meningitis six weeks+ (US)

## Phase 3

### Immunology

<b>Dupixent<sup>A</sup></b>	IL4/IL13 mAb	Bullous pemphigoid Chronic pruritus of unknown origin Chronic spontaneous urticaria (US) Eosinophilic gastritis
<b>itepekimab<sup>A</sup></b>	IL33 mAb	Chronic obstructive pulmonary disease
<b>amlitelimab</b>	OX40L mAb	Atopic dermatitis

### Rare diseases

<b>Nexviazyme</b>	Enzyme replacement therapy	Pompe disease infantile onset (US)
<b>venglustat</b>	Oral GCS inhibitor	Fabry disease Gaucher disease type 3
<b>rilzabrutinib</b>	BTK inhibitor	Immune thrombocytopenia

### Other immunology

<b>Rezurock</b>	ROCK2 inhibitor	Chronic lung allograft dysfunction Chronic graft-versus-host disease, 1L
<b>Tzield</b>	CD3 mAb	Type 1 diabetes

### Neurology

<b>tolebrutinib</b>	BTK inhibitor	Relapsing MS Primary progressive MS Non-relapsing secondary progressive MS
<b>frexalimab<sup>B,2</sup></b>	CD40L mAb	Relapsing MS Non-relapsing secondary progressive MS
<b>riliprubart<sup>4</sup></b>	C1s inhibitor	SOC-refractory CIDP IVIg-treated CIDP

### Oncology

<b>Sarclisa</b>	CD38 mAb	MM, 1L TE (HD7) MM, 1L TE (IsKia) Smoldering MM (ITHACA)
	CD38 mAb subcutaneous	MM, relapsed/refractory (IRAKLIA)

### Vaccines

<b>SP0087</b>	Rabies vero cell vaccine	Rabies
<b>SP0282<sup>c</sup></b>	Extraintestinal Pathogenic E. Coli 9-valent vaccine (ExPEC9V)	E. Coli sepsis
<b>SP0125</b>	RSV live attenuated vaccine	RSV toddler

As of September 30, 2024. For collaborations (superscripted by capital letters), see slide 34. For abbreviations, see slide 35. Pediatric and adolescents' indication extensions are not included.  
1. Currently in phase 3 in the EU. 2. Also known as SAR441344. 3. Also known as SAR445088. 4. Also known as SAR445088.



# Pipeline: *phase 2*

## Immunology

<b>Dupixent<sup>A</sup></b>	IL4/IL13 mAb	Ulcerative colitis
<b>itepekimab<sup>A</sup></b>	IL33 mAb	Bronchiectasis
		Alopecia areata
		Asthma
<b>amlitelimab</b>	OX40L mAb	Celiac disease
		Hidradenitis suppurativa
		Systemic sclerosis
		Asthma
<b>rilzabrutinib</b>	BTK inhibitor	Chronic spontaneous urticaria
		IgG4-related disease
<b>frexalimab<sup>B,1</sup></b>	CD40L mAb	Systemic lupus erythematosus
<b>SAR441566</b>	Oral TNFR1 signaling inhibitor	Psoriasis
		Rheumatoid arthritis
		Asthma
<b>lunsekimig<sup>2</sup></b>	IL13xTSLP Nanobody <sup>®</sup> VHH	Chronic rhinosinusitis with nasal polyps
<b>eclitasertib<sup>D,3</sup></b>	RIPK1 inhibitor	Ulcerative colitis
		Atopic dermatitis
<b>SAR444656<sup>E,4</sup></b>	IRAK4 degrader	Hidradenitis suppurativa
<b>SAR442970</b>	TNFαOX40L Nanobody <sup>®</sup> VHH	Hidradenitis suppurativa
<b>duvakitug<sup>F,5</sup></b>	TL1A mAb	Crohn's disease
		Ulcerative colitis

## Other immunology

<b>frexalimab<sup>B,1</sup></b>	CD40L mAb	Type 1 diabetes
<b>riliprubart<sup>6</sup></b>	C1s inhibitor	Antibody-mediated rejection

## Rare diseases

<b>rilzabrutinib</b>	BTK inhibitor	Warm autoimmune hemolytic anemia
<b>SAR447537<sup>7</sup></b>	AAT fusion protein	Alpha-1 antitrypsin deficiency

## Oncology

<b>Sarclisa</b>	CD38 mAb	MM, relapsed/refractory
<b>SAR443579<sup>G</sup></b>	Trifunctional anti-CD123 NK-cell engager	Acute myeloid leukemia

## Vaccines

<b>Fluzone HD<sup>8</sup></b>	Influenza inactivated vaccine	Flu pediatric
<b>SP0218</b>	Yellow fever vero cell vaccine	Yellow fever
<b>SP0202<sup>H</sup></b>	Pneumococcal 21-valent conjugate vaccine	Pneumococcal disease
<b>SP0230</b>	Pentavalent meningococcal ABCWY vaccine	Meningitis
<b>SP0256</b>	RSV mRNA vaccine	RSV older adult

As of September 30, 2024. For collaborations (superscripted by capital letters), see slide 34. For abbreviations, see slide 35. Pediatric and adolescents' indication extensions are not included.

1. Also known as SAR441344. 2. Also known as SAR443765. 3. Also known as SAR443122/DNL758. 4. Also known as KT474. 5. Also known as SAR447189/TEV'574. 6. Also known as SAR445088. 7. Formerly known as INBRX-101. 8. Also known as SP0178.

# Pipeline: *phase 1*

## *Immunology*

<b>SAR444336</b>	Non-beta IL2 Synthorin™	Inflammatory indication
<b>SAR445611</b>	CX3CR1 Nanobody® VHH	Inflammatory indication
<b>SAR445399<sup>1</sup></b>	IL1R3 mAb	Inflammatory indication
<b>SAR446422</b>	CD28xOX40 bispecific Ab	Inflammatory indication

## *Neurology*

<b>SAR446159<sup>1,2</sup></b>	Synuclein/IGF1R mAb	Parkinson's disease
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## *Oncology*

<b>SAR444881<sup>J</sup></b>	ILT2 mAb	Solid tumors
<b>SAR445877<sup>3</sup></b>	PD1/IL15 fusion protein	Solid tumors
<b>SAR445514<sup>G</sup></b>	Trifunctional anti-BCMA NK-cell engager	Relapsed/refractory MM
<b>SAR444200</b>	GPC3/TCR Nanobody® VHH	Solid tumors
<b>SAR445953<sup>K</sup></b>	CEACAM5/Topo1 ADC	CRC
<b>pegenzileukin<sup>4</sup></b>	Non-alpha IL2 Synthorin™	Cancer, in combination

## *Vaccines*

<b>SP0237</b>	Flu mRNA vaccine	Flu
<b>SP0256</b>	hMPV/RSV mRNA vaccine	hMPV/RSV older adult
<b>SP0268</b>	Acne mRNA vaccine	Acne

As of September 30, 2024. For abbreviations see slide 35. For collaborations (superscripted by capital letters), see slide 34. Pediatric and adolescents' indication extensions are not included.  
 1. Also known as MAB212, in-licensed from MAB Discovery. 2. Also known as ABL301. 3. Also known as KD050. 4. Also known as SAR444245.



# Pipeline: *regulatory designations* since 2020

## *Orphan drug designation*

<b>Dupixent</b> – BP, EoE (US)
<b>ALTUVIIIIO</b> – hemophilia A (US, EU)
<b>fitusiran</b> – hemophilia A/B (US, EU)
<b>rilzabrutinib</b> – ITP (US, EU, JP)
<b>Cerdelga</b> – Gaucher (US)
<b>Nexviazyme</b> – Pompe (US, JP)
<b>Xenpozyme</b> – ASMD (US, EU, JP)
<b>venglustat</b> – Fabry, Gaucher (US, EU, JP)
<b>Rezurock</b> – cGvHD (US)
<b>riliprubart</b> – CIDP (US, EU)
<b>Sarclisa</b> – MM (US)

## *Fast-track designation (US)*

<b>itepekimab</b> – COPD
<b>ALTUVIIIIO</b> – hemophilia A
<b>fitusiran</b> – hemophilia A/B
<b>rilzabrutinib</b> – ITP
<b>Nexviazyme</b> – Pompe
<b>Xenpozyme</b> – ASMD
<b>Venglustat</b> – Fabry
<b>AAT recombinant Fc</b> – AATD
<b>CD123 NKCE</b> – AML
<b>Beyfortus</b> – RSV
<b>mRNA RSV OA combo</b> – RSV
<b>RSVt vaccine</b> – RSV
<b>PCV21 vaccine</b> – PCV
<b>Rabies vaccine</b> – rabies

## *Breakthrough therapy designation*

<b>Dupixent</b> – AD (US)
<b>Dupixent</b> – COPD (US)
<b>Dupixent</b> – EoE (US)
<b>Rezurock</b> – cGvHD (US)
<b>ALTUVIIIIO</b> – hemophilia A (US, CN)
<b>fitusiran</b> – hemophilia A/B (US)
<b>Nexviazyme</b> – Pompe (US)
<b>Xenpozyme</b> – ASMD (US)
<b>riliprubart</b> – CIDP (CN)
<b>Beyfortus</b> – RSV (US, CN)

## *PRIME designation (EU)*

<b>Xenpozyme</b> – ASMD
<b>Beyfortus</b> – RSV
<b>RSVt vaccine</b> – RSV

## *SAKIGAKE designation (JP)*

<b>Xenpozyme</b> – ASMD
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## *Priority review*

<b>Dupixent</b> – AD, PN (US, CN), EoE, COPD, CRSwNP adolescents (US)
<b>Kevzara</b> – RA (US)
<b>TZIELD</b> – T1D (CN)
<b>Rezurock</b> – cGvHD (US)
<b>ALTUVIIIIO</b> – hemophilia A (US)
<b>Nexviazyme</b> – Pompe (US, JP, CN)
<b>Cablivi</b> – aTTP (JP)
<b>Xenpozyme</b> – ASMD (US)
<b>Sarclisa</b> – 1L NDMM Ti (US)
<b>Fexinidazole</b> – HAT (US)
<b>Beyfortus</b> – RSV (CN)

## *Accelerated assessment*

<b>Dupixent</b> – PN (CN)
<b>Xenpozyme</b> – ASMD (EU)
<b>Beyfortus</b> – RSV (EU)

# Collaborations

Ref	Name	Developed in collaboration with...
A	<b>Dupixent itepekimab Kevzara</b>	Regeneron
B	<b>frexalimab</b>	ImmuNext
C	<b>ExPEC9V Vaccine</b>	Janssen Pharmaceuticals
D	<b>eclitasertib</b>	Denali
E	<b>SAR444656</b>	Kymera
F	<b>duvakitug</b>	Teva Pharmaceuticals
G	<b>SAR443579 SAR445514</b>	Innate Pharma
H	<b>SP0202</b>	SK bioscience
I	<b>SAR446159</b>	ABL Bio
J	<b>SAR444881</b>	Biond Biologics
K	<b>SAR445953</b>	Pfizer
L	<b>SAR444836</b>	Medicinova
	<b>Beyfortus</b>	AstraZeneca PLC
	<b>ALTUVIIIIO</b>	Swedish Orphan Biovitrum AB (Sobi)



# Abbreviations

<b>AAT</b>	Alpha-1-antitrypsine
<b>AATD</b>	Alpha-1-antitrypsine deficiency
<b>AAV</b>	Adeno-associated virus
<b>Ab</b>	Antibody
<b>AD</b>	Atopic dermatitis
<b>ADC</b>	Antibody drug conjugate
<b>AESI</b>	Adverse event of special interest
<b>AML</b>	Acute myeloid leukemia
<b>ASMD</b>	Acid sphingomyelinase deficiency
<b>aTTP</b>	Acquired thrombotic thrombocytopenic purpura
<b>BCMA</b>	B-cell maturation antigen
<b>BP</b>	Bullous pemphigoid
<b>BTK</b>	Bruton's tyrosine kinase
<b>CAD</b>	Cold agglutinin disease
<b>CD</b>	Cluster of differentiation
<b>CDP</b>	Confirmed disability progression
<b>CEACAM5</b>	Carcinoembryonic antigen cell adhesion molecule 5
<b>cGvHD</b>	Chronic graft-versus-host disease
<b>CIDP</b>	Chronic inflammatory demyelinating polyneuropathy
<b>COPD</b>	Chronic obstructive pulmonary disease
<b>CPUO</b>	Chronic pruritus of unknown origin
<b>CRC</b>	Colorectal cancer
<b>CRSwNP</b>	Chronic rhinosinusitis without nasal polyps
<b>CSR</b>	Corporate social responsibility
<b>CSU</b>	Chronic spontaneous urticaria
<b>EoE</b>	Eosinophilic esophagitis
<b>ExPEC</b>	Extraintestinal pathogenic <i>E. Coli</i>

<b>FSHD</b>	Facioscapulohumeral muscular dystrophy
<b>GCS</b>	Glucosylceramide synthase
<b>GD1</b>	Gaucher disease type 1
<b>GD3</b>	Gaucher disease type 3
<b>GPC3</b>	Glypican-3
<b>HAT</b>	Human African trypanosomiasis
<b>HD</b>	High dose
<b>hMPV</b>	Human metapneumovirus
<b>HS</b>	Hidradenitis suppurativa
<b>IBD</b>	Inflammatory bowel disease
<b>IGF1R</b>	Insulin like growth factor 1 receptor
<b>IL</b>	Interleukin
<b>ILT2</b>	Ig-like transcript 2
<b>IRAK4</b>	Interleukin 1 receptor associated kinase 4
<b>ITP</b>	Immune thrombocytopenia
<b>ITT</b>	Intention to treat
<b>IVIg</b>	Intravenous Immunoglobulin
<b>mAb</b>	Monoclonal antibody
<b>MM</b>	Multiple myeloma
<b>mRNA</b>	Messenger RNA
<b>MS</b>	Multiple sclerosis
<b>NBRx</b>	New to brand prescription
<b>NDMM</b>	Newly diagnosed multiple myeloma
<b>NK</b>	Natural killer
<b>NKCE</b>	Natural killer cell engager
<b>nrSPMS</b>	Non-relapsing secondary-progressive multiple sclerosis

<b>PCV</b>	Pneumococcal conjugate vaccine
<b>pJIA</b>	Polyarticular juvenile idiopathic arthritis
<b>PMR</b>	Polymyalgia rheumatica
<b>PN</b>	Prurigo nodularis
<b>PPMS</b>	Primary progressive multiple sclerosis
<b>Q12W</b>	Every 12 weeks
<b>RA</b>	Rheumatoid arthritis
<b>RCT</b>	Randomized controlled trial
<b>RIPK1</b>	Receptor-interacting serine/threonine-protein kinase 1
<b>RMS</b>	Relapsing multiple sclerosis
<b>RNAi</b>	RNA interference
<b>ROCK2</b>	Rho associated coiled-coil containing protein kinase 2
<b>R/R</b>	Relapsed / refractory
<b>RSV</b>	Respiratory syncytial virus
<b>SAE</b>	Serious adverse event
<b>sJIA</b>	Systemic juvenile idiopathic arthritis
<b>SOC</b>	Standard of care
<b>TEAE</b>	Treatment emergent adverse event
<b>TE</b>	Transplant eligible
<b>TI</b>	Transplant ineligible
<b>TL1A</b>	Tnf-like ligand 1A
<b>TNF</b>	Tumor necrosis factor
<b>TSLP</b>	Thymic stromal lymphopoietin
<b>T1D</b>	Type 1 diabetes
<b>ULN</b>	Upper limit of normal
<b>wAIHA</b>	Warm autoimmune hemolytic anemia

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