

Corporate presentation

May 2026



Advancing promising therapies for rare diseases
With purpose, partnership and performance

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Our vision

We are working toward a future where people and families living with rare diseases, especially those with few or no treatment options, have access to therapies that can transform their lives.



Strategic principles guide our journey

- Acquire and develop programs in rare diseases with high prevalence – partner of choice for in-licensing
- Focus on our core competencies and experience in rare diseases
- Develop pipeline of rare disease programs which have already received significant investment and retain global or regional rights where possible (initially in Europe)
- Partner our programs where it makes strategic sense and target monetization of royalty streams for non-core programs



Two pivotal rare disease programs and a capital efficient model

Setrusumab

Indication:

Osteogenesis Imperfecta (OI)

Current status:

Phase 3 data reported YE 2025; partnered with Ultragenyx. Following further analyses, ongoing regulatory interactions focused on pediatric patients to determine if there is a path forward.

**~\$1Bn market opportunity
EU rights retained by Mereo**

Alvelestat

Indication:

Alpha-1 Antitrypsin Deficiency (AATD-LD)

Current status:

Phase 3 preparations completed; primary endpoints agreed with regulators.

**>\$1Bn market opportunity
Partnering process ongoing**

Vantictumab (early-stage)

Indication:

Osteopetrosis (ADO2)

Current status:

Licensed to āshibio; Mereo retains EU rights. IND planned H2 2026.

No approved therapy – high unmet need



Financial discipline: cash runway into mid-2027

\$36.2M cash and cash equivalents as of March 31, 2026



Experienced management team

Proven track record in rare disease corporate development

Track record of value-creating partnerships



Potential to provide future milestone payments and royalties

- Setrusumab:
 - Acquired from Novartis
 - Partnered with Ultragenyx
 - Mereo retains European rights
- Alvelestat:
 - Acquired from AstraZeneca
- Vantictumab:
 - Licensed to āshibio – Mereo retains European commercial rights
- Non-core programs – a potential to provide milestones and royalties
 - Leflutrozole licensed to ReproNovo
 - Navicixizumab licensed to Feng Biosciences





Addressing patient populations with high unmet needs and significant market opportunities

	Osteogenesis Imperfecta	Alpha-1 Antitrypsin Deficiency	Osteopetrosis
Disease Background	Rare genetic bone condition leading to problems including frequent fractures and skeletal deformities	Rare genetic progressive lung disease characterized by unregulated NE-driven lung destruction	Rare genetic bone disease characterized by dense, brittle bones leading to multiple fractures and significant morbidity
Epidemiology	~60,000 patients across the US & Europe ²	Severe deficiency patient estimates: ~50,000 in North America and ~60,000 in Europe ³	1 in 20,000 incidence in North America and Europe with onset typically in late childhood ⁴
Unmet Need	No FDA/EMA approved therapy. SoC (bisphosphonates) has not been shown to consistently reduce fractures	Augmentation therapy lacks clarity on efficacy and isn't reimbursed across all markets	No FDA/EMA approved therapy
Mereo's Unique Approach	Setrusumab A sclerostin-targeting antibody	Alvelestat An oral neutrophil elastase inhibitor	Vantictumab An anti-FZD antibody

We have achieved key designations available for rare diseases

	Setrusumab for Osteogenesis Imperfecta	Alvelestat for AATD-associated Lung Disease
 <ul style="list-style-type: none"> Orphan Drug Designation Breakthrough Designation Fast-track Designation PRV designation 	✓	✓
	✓ <i>Ultragenyx achieved in 2024</i>	-
	-	✓
	✓	<i>Not relevant</i>
 <ul style="list-style-type: none"> Orphan Designation Prime Designation EUnetHTA advice 	✓	✓
	✓	-
	✓ <i>Official participant in pilot scheme (2019)</i>	-

Late-stage pipeline

Candidate	Preclinical	Phase 1	Phase 2	Phase 3	Partner	Next milestone
Setrusumab Osteogenesis Imperfecta	Orbit (5 - 25 yrs old)					Regulatory interactions
	Cosmic (2 - 6 yrs old)					
Alvelestat AATD-LD					Partnering process ongoing	Potential partnering & Phase 3 initiation
Vantictumab Osteopetrosis						IND in H2 2026 ¹



"It's always a pleasure to come and speak with people who are actually making a difference on the ground and making a difference for people like myself and for others in the community. Because it is what you do that helps us to live the lives that we want and that we deserve."

Thines Ganeshamoorthy, Trustee at the Brittle Bone Society, speaking at an event to mark Rare Disease Day 2023 at Mereo BioPharma.






Setrusumab (UGX143)

Osteogenesis Imperfecta: a rare genetic bone condition with no FDA or EMA approved therapy

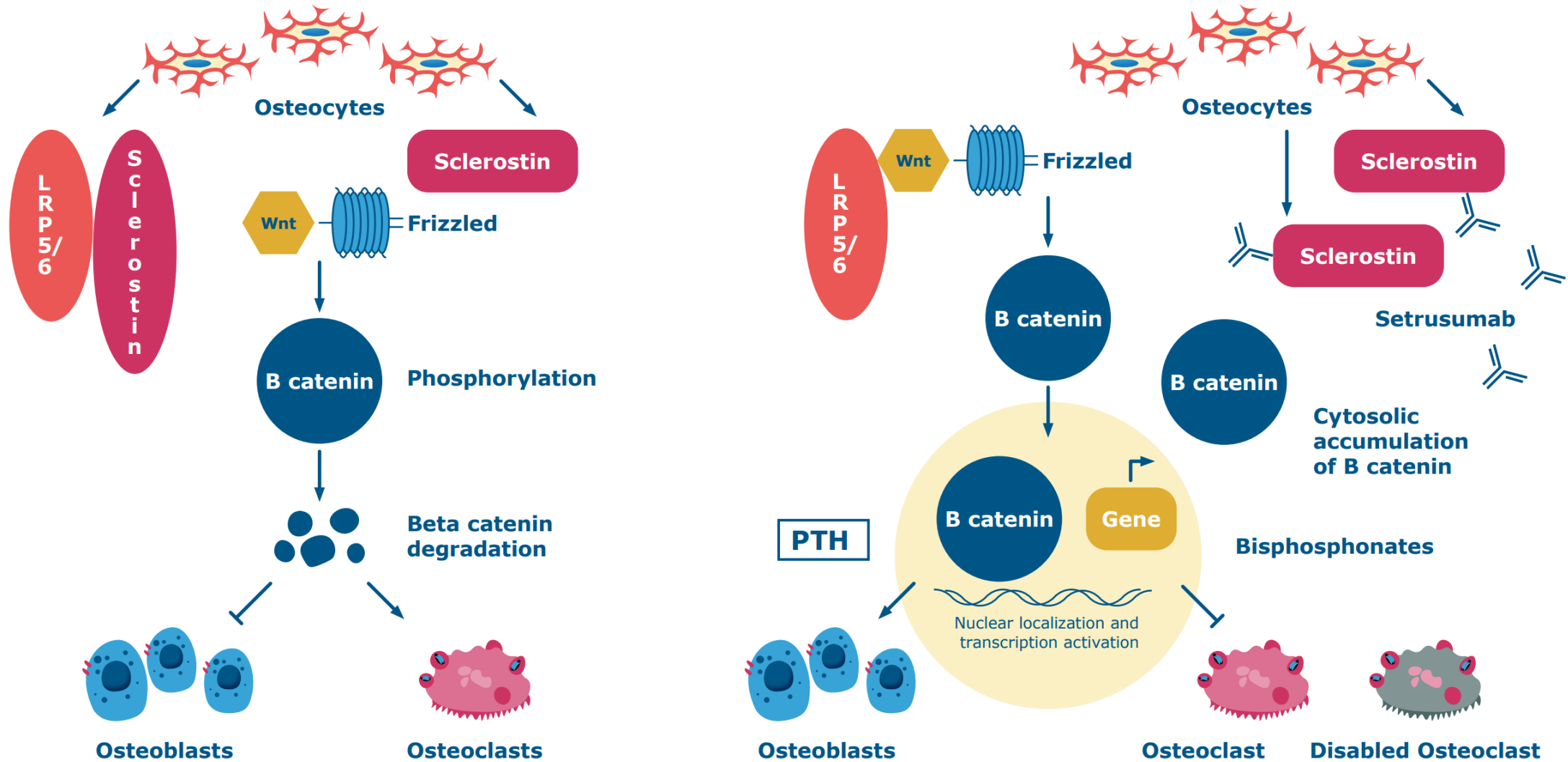


*OIFE Meeting
and AGM
June 2025*

Setrusumab: a >\$1Bn market opportunity in OI

 A serious, but not mysterious condition	 Established community	 Clear need for treatment options
<ul style="list-style-type: none">• 80-90% linked to a mutation in Type I collagen^{2,3} (Type I, III and IV)• Frequent bone fractures, skeletal deformities, pain, respiratory and gastric problems• Affects approximately 60,000 individuals³ (pediatrics and adults) in the US and Europe	<ul style="list-style-type: none">• Well-established Community groups (OIFE + national members and OIF)* are a key source of support and valued resource• OI is a progressive condition, without clear care pathways, especially for adult patients	<ul style="list-style-type: none">• No FDA / EMA approved therapy• Current standard of care (bisphosphonates) has not been shown to reduce fractures

Setrusumab – a well-defined Mechanism of Action



Orbit* & Cosmic** – Phase 3 studies completed



	Objective	Setrusumab vs. placebo 2:1 randomization Double blind	Setrusumab vs. bisphosphonates 1:1 randomization Open label
	Enrollment	158 subjects ages 5 to 25 years with OI Types I, III, or IV	69 subjects ages 2 to 6 years with OI Types I, III, or IV
	Inclusion Criteria	≥1 fracture in prior 12 months or ≥2 or ≥1 long bone in prior 24 months	≥1 fracture in prior 12 months or ≥2 or ≥1 long bone in prior 24 months
	Primary Endpoint	Annualized clinical fracture rate (excluding fingers, toes, face and skull)	Annualized clinical fracture rate (including morphometric fractures)

Patients from both studies currently enrolled in open label extension studies (OLE)

Phase 3 results Setrusumab for osteogenesis imperfecta

Neither study achieved primary endpoint of reduction in AFR¹ compared to placebo (*Orbit*) or bisphosphonates (*Cosmic*)









Both studies demonstrated statistically significant increases in bone mineral density (BMD)

Additional data shows reduction in vertebral fractures and improvements in patient reported outcomes of disease severity, pain/comfort, and daily activities

Subgroup and additional analyses ongoing prior to any planned regulatory interactions

Two randomized Phase 3 studies provide large data set




 Objective	Setrusumab vs. placebo 2:1 randomization, Double blind Follow-up 18-24 months		Setrusumab vs. bisphosphonates 1:1 randomization, Open label Follow-up 18-24 months	
 Enrollment	159 subjects (with ≥ 1 AFR) ages 5 to 25 years with OI Types I, III, or IV		69 subjects (with ≥ 1 AFR) ages 2 to 7 years with OI Types I, III, or IV	
<i>Patient Demographics</i>	Setrusumab (%)	Placebo (%)	Setrusumab (%)	IV-BP (%)
Total N	107 (67.3)	52 (32.7)	34 (49.3)	35 (50.7)
 Type I	43 (40.2)	21 (40.4)	Type I 12 (35.5)	16 (45.7)
 Type III	43 (40.2)	10 (19.2)	Type III 15 (44.1)	13 (37.1)
 Type IV	21 (19.6)	21 (40.4)	Type IV 7 (20.6)	6 (17.1)
 Peds 5 to <12 yo	44 (41.1)	23 (44.2)	Peds 2 to 7 yo 34 (49.3)	35 (50.7)
 Teens 12 to <18 yo	47 (43.9)	21 (40.4)		
 Adults 18 to 26 yo	16 (15.0)	8 (15.4)		

Baseline fractures are comparable between groups in both studies

Orbit: more severe type III/IV patients exited placebo via rescue criteria



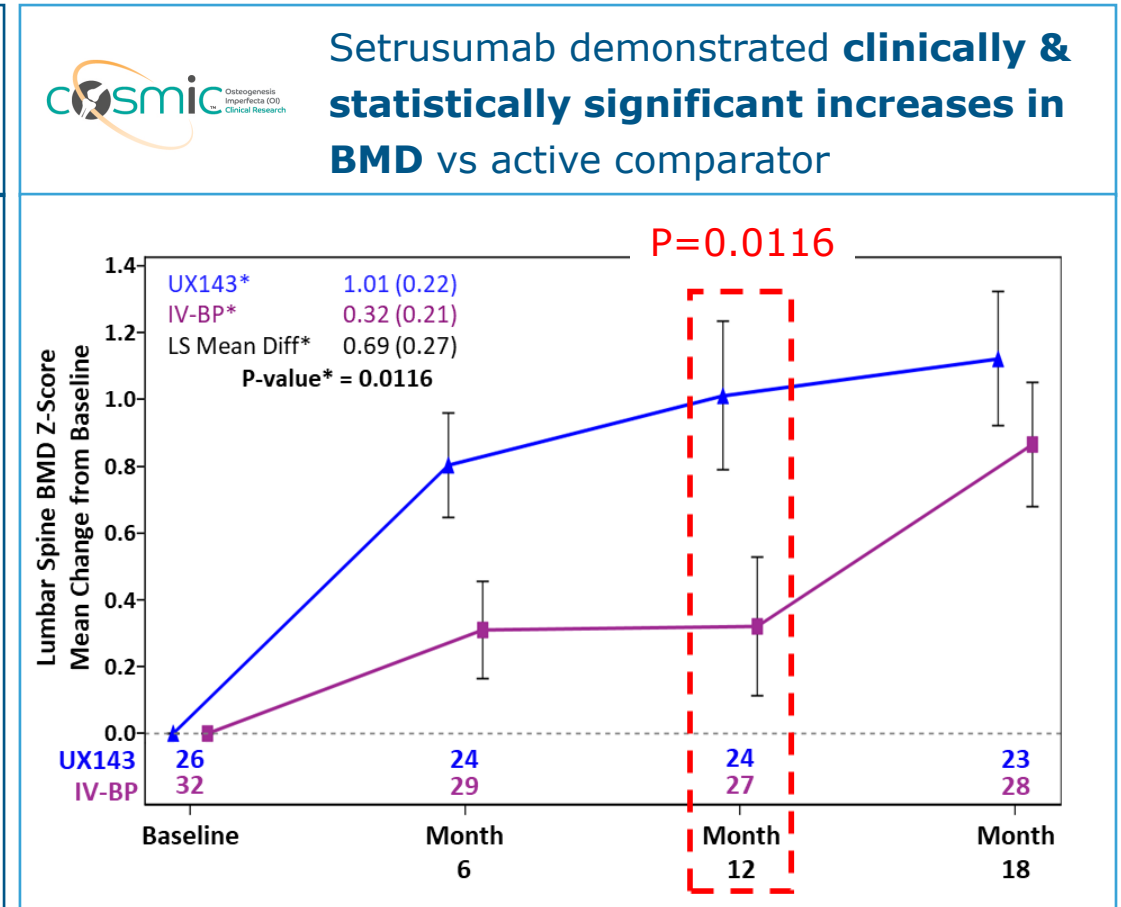
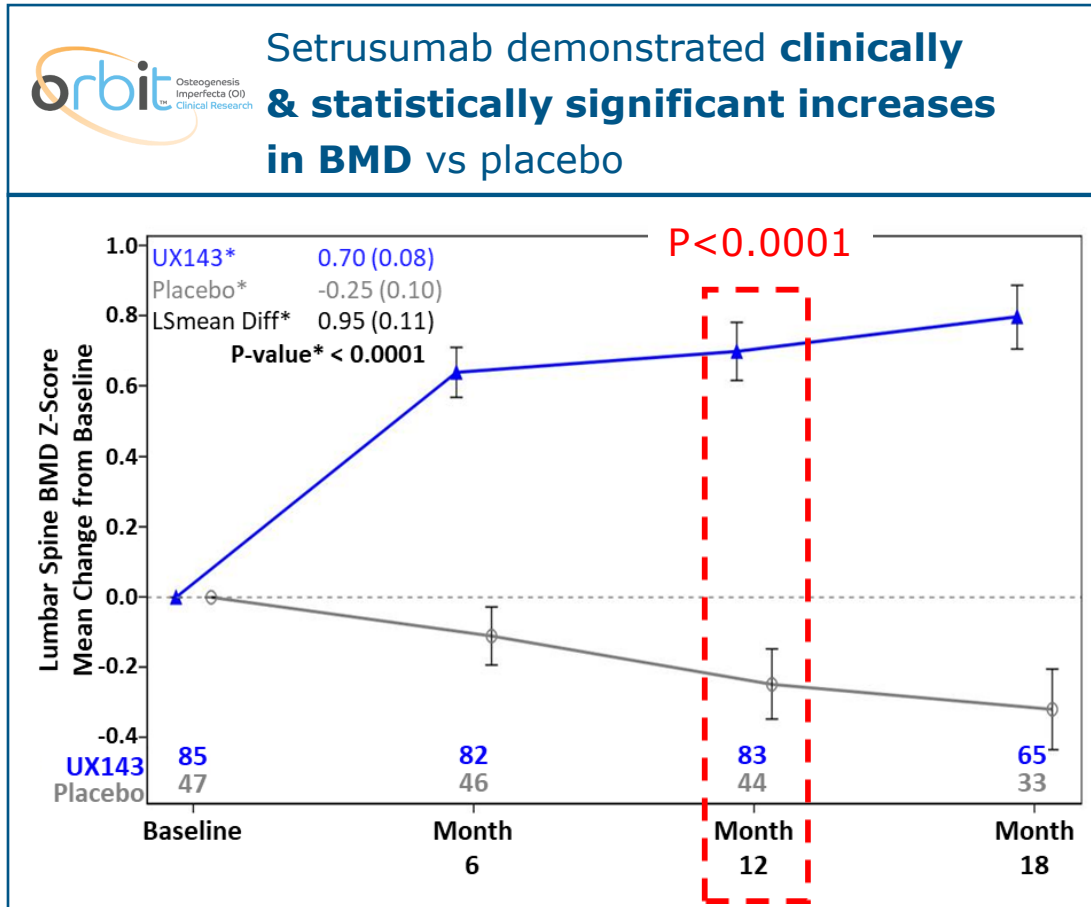
 Objective	Setrusumab vs. placebo 2:1 randomization, Double blind Follow-up 18-24 months		Setrusumab vs. bisphosphonates 1:1 randomization, Open label Follow-up 18-24 months	
	Setrusumab	Placebo	Setrusumab	IV-BP
Baseline Fractures¹				
Mean / Median number of fractures	3.2 / 2.0	3.3 / 2.0	4.1 / 4.0	4.3 / 3.0
Fracture ≤ 3 Pt number (%)	71 (66.4)	35 (67.3)	Fracture ≤ 4 & no FTH 4 (11.8)	4 (11.4)
Fracture > 3 Pt number (%)	36 (33.6)	17 (32.7)	Fracture > 4 or ≥ 1 FTH 30 (88.2)	31 (88.6)

In Orbit, 31 (19.5%) patients met rescue criteria at 12 months primarily due to fractures

- 28 of 31 were more severe Type 3 and Type 4 patients
 - Setrusumab 15/64 **(23%)**
 - Placebo 13/31 **(42%)**
- } A substantially larger number of Placebo patients exited Orbit

Cosmic had no rescue criteria since it was active treatment controlled

Setrusumab is substantially more effective in increasing BMD

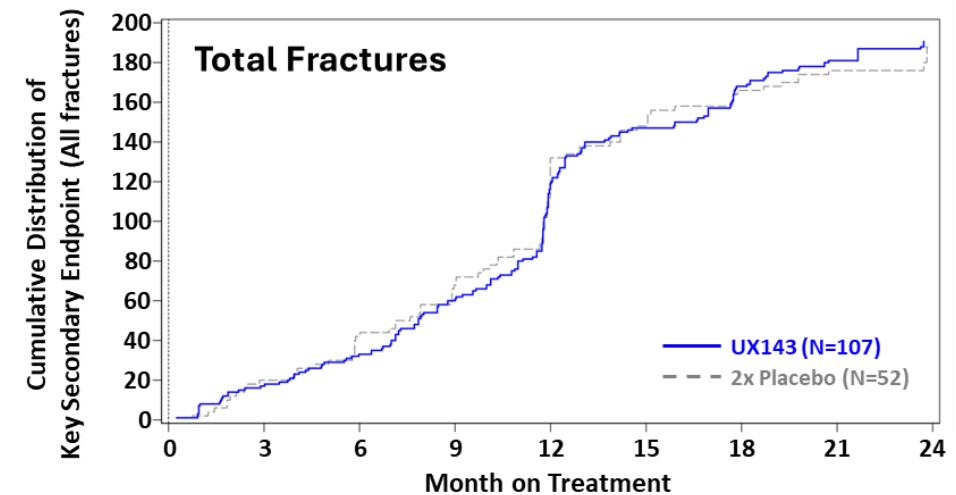
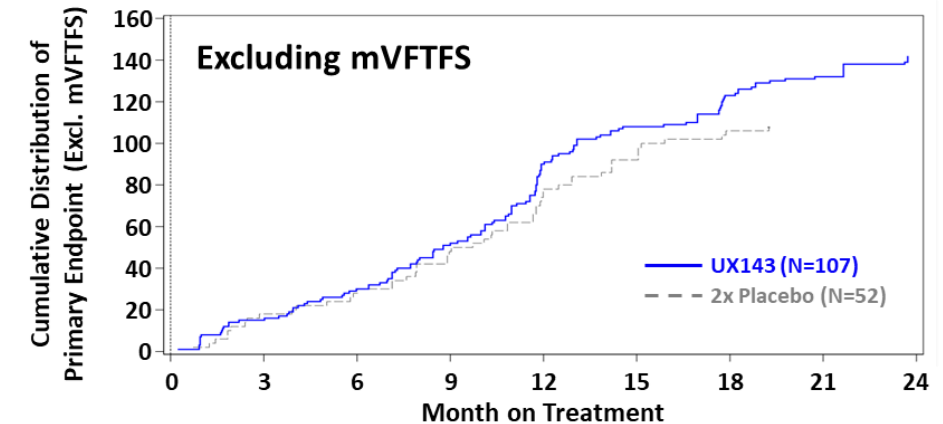


Orbit: Setrusumab patients showed an increase in fractures over a low placebo rate, but were the same as placebo when all fractures were considered (p=ns)



Confirmed fractures by x-ray & skeletal survey

		Primary Endpoint ¹ Excl. mVFTFS	Key Secondary All Fractures
Setrusumab AFR (n=107)	# of fractures	142	191
	Mean (SD, SE)	0.92 (1.16, 0.11)	1.22 (1.29, 0.12)
	Median (Q1, Q3)	0.58 (0.00, 1.53)	0.68 (0.00, 1.82)
Placebo AFR (n=52)	# of fractures	54	94
	Mean (SD, SE)	0.80 (1.48, 0.21)	1.27 (1.96, 0.27)
	Median (Q1, Q3)	0.00 (0.00, 0.93)	0.61 (0.00, 2.02)
Est. ² Setrusumab AFR (95% CI)		0.71 (0.50, 0.99)	1.16 (0.90, 1.50)
Est. ² Placebo AFR (95% CI)		0.55 (0.35, 0.86)	1.12 (0.80, 1.57)
Rate Ratio ² Setrusumab/Placebo (95% CI)		1.28 (0.80, 2.06)	1.03 (0.71, 1.52)
Rate Change ² Setrusumab Placebo (95% CI)		28.14 (-20.21, 105.79)	3.38 (-29.48, 51.54)
<i>P-value</i> ²		<i>0.305</i>	<i>0.865</i>

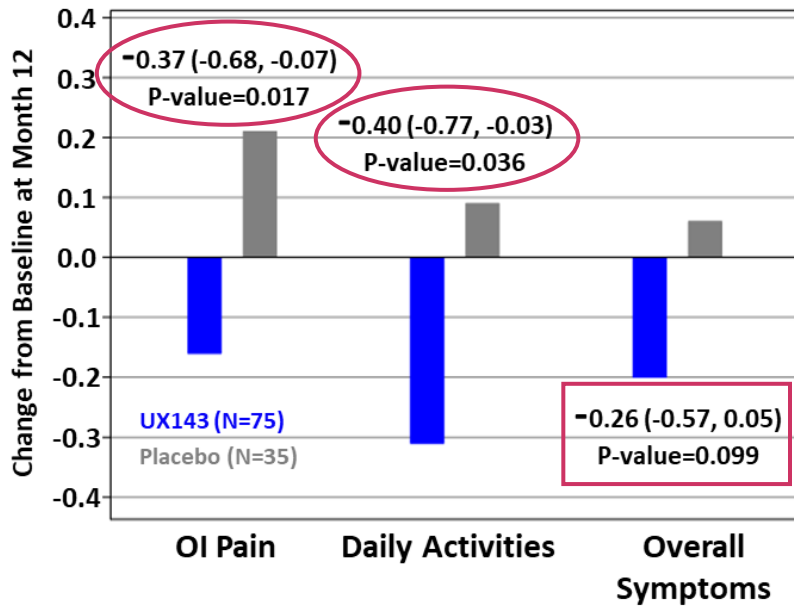


Orbit: In setrusumab patients, disease severity (PGIS) in peds/teens reduced and pain/comfort & sports/activity improved

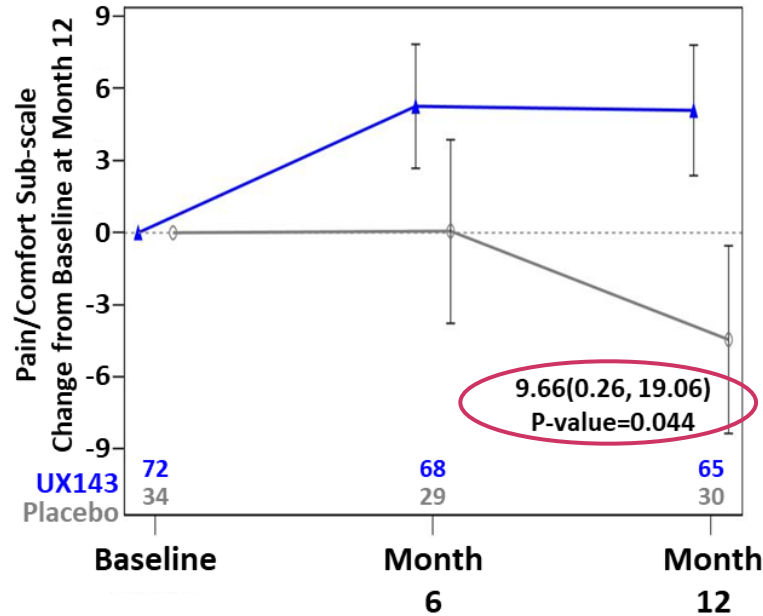


Peds/Teens patients constitute 85% of subjects in Orbit Ph3 study (135/159)

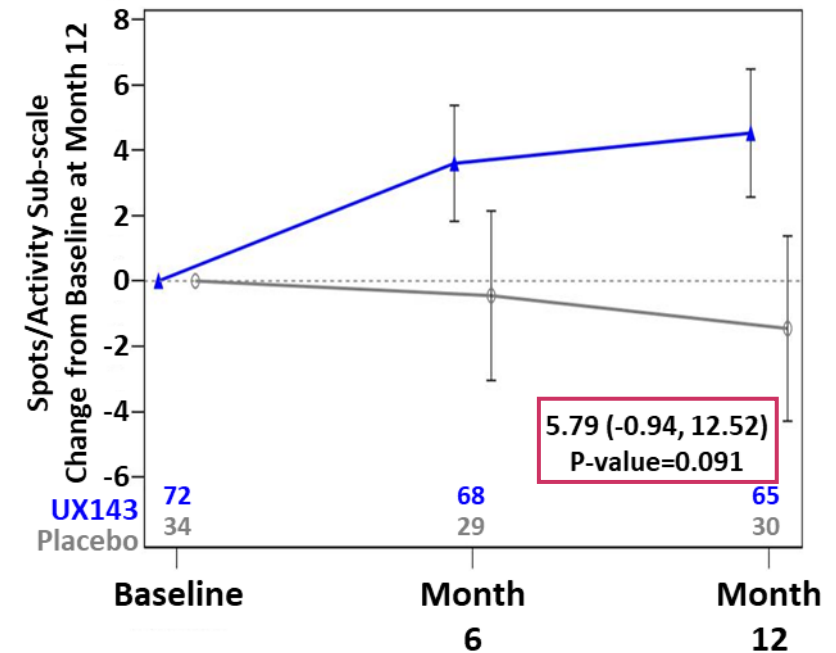
Patient Global Impression Scale of Severity (PGIS)



Pain/Comfort POSNA-PODCI



Sports/Activity POSNA-PODCI

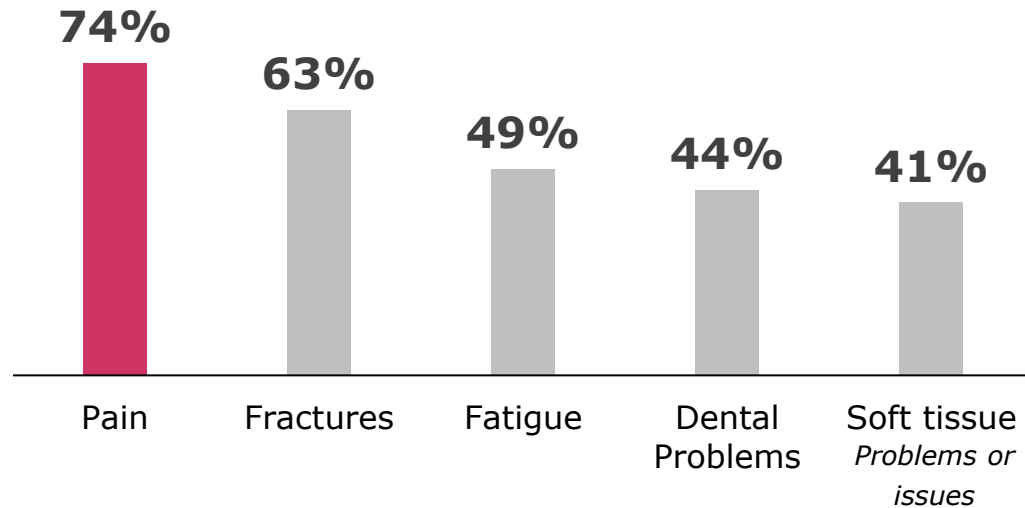


12-month assessment is as randomized and most important as no patients had exited due to rescue criteria

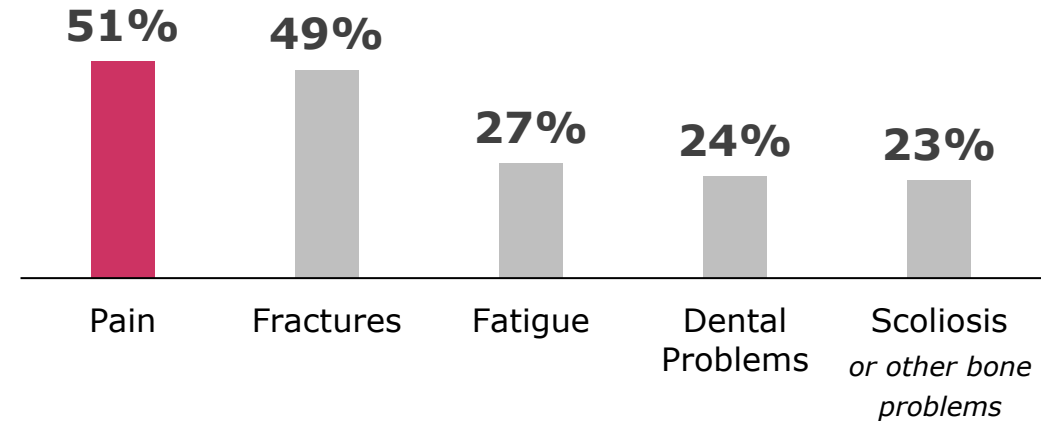
Pain is the most common & impactful sign, symptom or clinical event amongst peds and teens with OI



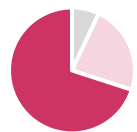
Top 5 clinical events, signs and symptoms in proxy peds & adolescents with OI by prevalence¹



Top 5 clinical events, signs and symptoms in proxy peds & adolescents ranked as mod-to-severe impact¹



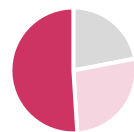
Impact of OI on areas of QoL in children, % of proxy children responding as activity mod-to-severely impacted²



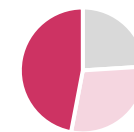
70%
Leisure Activities



52%
Social Life



50%
School attendance



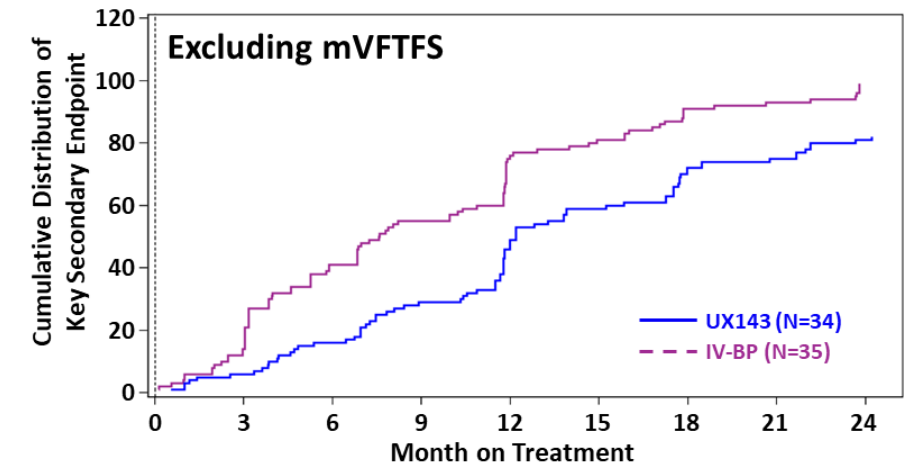
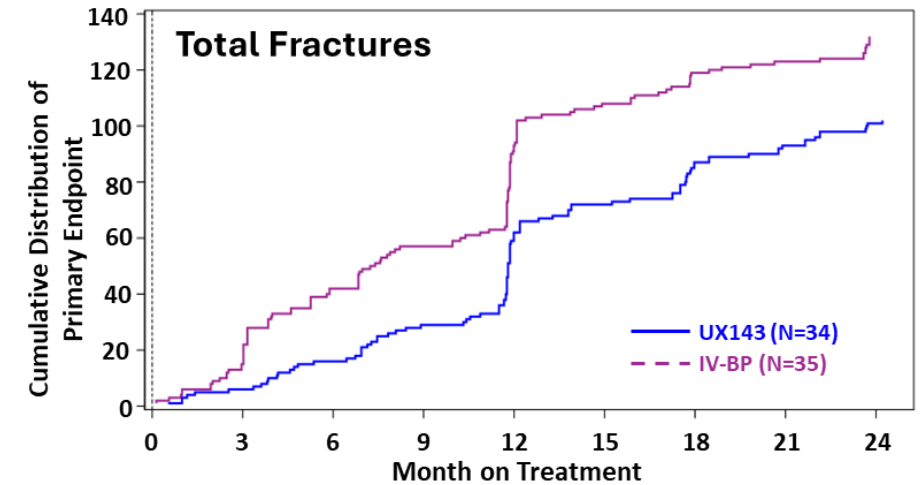
49%
Daily tasks

Cosmic: Setrusumab treatment shows reduced fractures over IV-BP (p=ns)



Confirmed fractures by x-ray & skeletal survey

		Primary Endpoint Total fractures	Key Secondary Excl. mVFTFS
Setrusumab AFR (n=34)	# of fractures	102	82
	Mean (SD, SE)	1.87 (1.69, 0.29)	1.53 (1.53, 0.26)
	Median (Q1, Q3)	2.02 (0.00, 3.04)	1.42 (0.00, 2.53)
IV-BP AFR (n=35)	# of fractures	132	99
	Mean (SD, SE)	2.6 (3.19, 0.54)	1.97 (2.90, 0.49)
	Median (Q1, Q3)	1.38 (0.55, 4.06)	0.67 (0.00, 3.04)
Est. ² Setrusumab AFR (95% CI)		0.91 (0.51, 1.60)	0.68 (0.34, 1.35)
Est. ² IV-BP AFR (95% CI)		1.15 (0.65, 2.04)	0.79 (0.39, 1.61)
Rate Ratio ² Setrusumab/IV-BP (95% CI)		0.79 (0.48, 1.28)	0.86 (0.47, 1.57)
Rate Change ² Favoring setrusumab (95% CI)		-21.27 (-51.75, 28.47)	-14.27 (-53.07, 56.61)
<i>P-value</i> ²		0.338	0.616



1. Radiographically confirmed fractures, excluding morphometric vertebral fractures and fingers, toes, face, and skull;
2. Negative Binomial model

Cosmic: Large (59%) reduction in vertebral fractures on setrusumab (p=0.081)

Despite more severe type III/IV patients on setrusumab (65% setrusumab vs 54% IV-BP)



Radiographically confirmed fractures

	Total Fractures		Vertebral Fractures	
	Setrusumab	IV-BP	Setrusumab	IV-BP
All fractures	102	132	19	46
All fractures (Excluding mV ¹)	84	104	1	18
All fractures (Excluding mVFTFS ²)	82	99	1	18
mVertebral fractures (Tertiary endpoint)	18	28	18	28

Comparing 19 vs 46 vertebral fractures*

	Est. Setrusumab AFR (95% CI)	All Vertebral Fractures
Negative Binomial Model (95% CI)	0.14 (0.04, 0.51)	0.14 (0.04, 0.51)
	Est. IV-BP AFR (95% CI)	0.33 (0.10, 1.12)
	Ratio UX143/IV-BP (95% CI)	0.44 (0.18, 1.11)
	Rate Change favoring Setrusumab (95% CI)	-56.00 (-82.48, 10.53)
P-value		0.081

Comparing 18 vs. 28 mV fractures (Tertiary endpoint)

	Est. Setrusumab AFR (95% CI)	Only Morphometric Vertebral Fractures
Negative Binomial Model (95% CI)	0.15 (0.04, 0.51)	0.15 (0.04, 0.51)
	Est. IV-BP AFR (95% CI)	0.24 (0.07, 0.79)
	Ratio UX143/IV-BP (95% CI)	0.64 (0.26, 1.61)
	Rate Change favoring Setrusumab (95% CI)	-35.87 (-74.43, 60.86)
P-value		0.344

Setrusumab showed:

- **59%** fewer vertebral fractures of all types
- **94%** fewer non-morphometric vertebral fractures

No new safety concerns identified, reported TEAEs are consistent with the anticipated safety profile for setrusumab

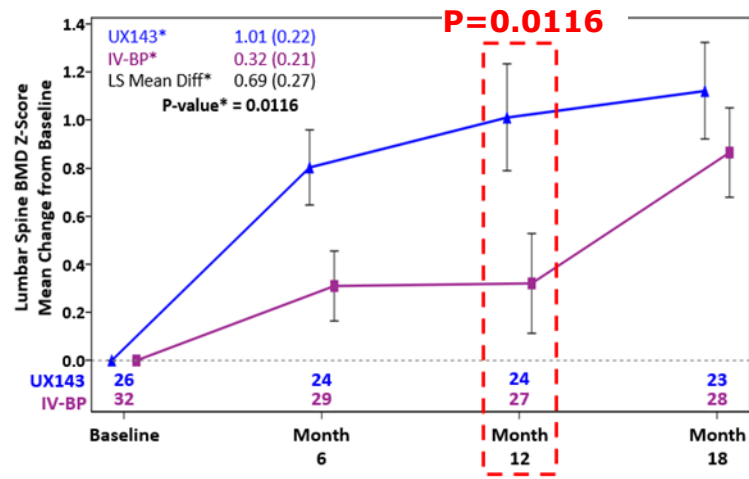


<p>Treatment emergent adverse events (TEAE)</p>	<ul style="list-style-type: none"> • No serious-related TEAEs • Low incidence (<2%) severe-related TEAEs • Low incidence (<3%) TEAE's leading to treatment or study discontinuation 	<ul style="list-style-type: none"> • No serious related TEAEs • Low incidence (<3%) severe-related TEAE • No TEAEs leading to treatment discontinuation or study discontinuation
<p>Adverse events of special interest (AESI)</p>	<ul style="list-style-type: none"> • No ischemic CV Events • No hypersensitivity reactions related to UX143 • One TEAE in neurologic sequelae due to bony overgrowth <ul style="list-style-type: none"> ○ Radial nerve injury following a surgical procedure 	<ul style="list-style-type: none"> • No ischemic CV events • No hypersensitivity reactions related to UX143 • No neurologic sequelae due to bony overgrowth
<p>Deaths</p>	<p>No Deaths</p>	<p>No Deaths</p>

Overall data suggest an impact of setrusumab on OI disease

The largest BMD improvements found in the lumbar spine BMD are associated with **reduced vertebral fractures** and **improved pain and functional outcomes in pediatric patients**

Improved Lumbar Spine BMD
Cosmic (p=0.0116)



Reduced Vertebral Fractures
Cosmic (p=0.081)

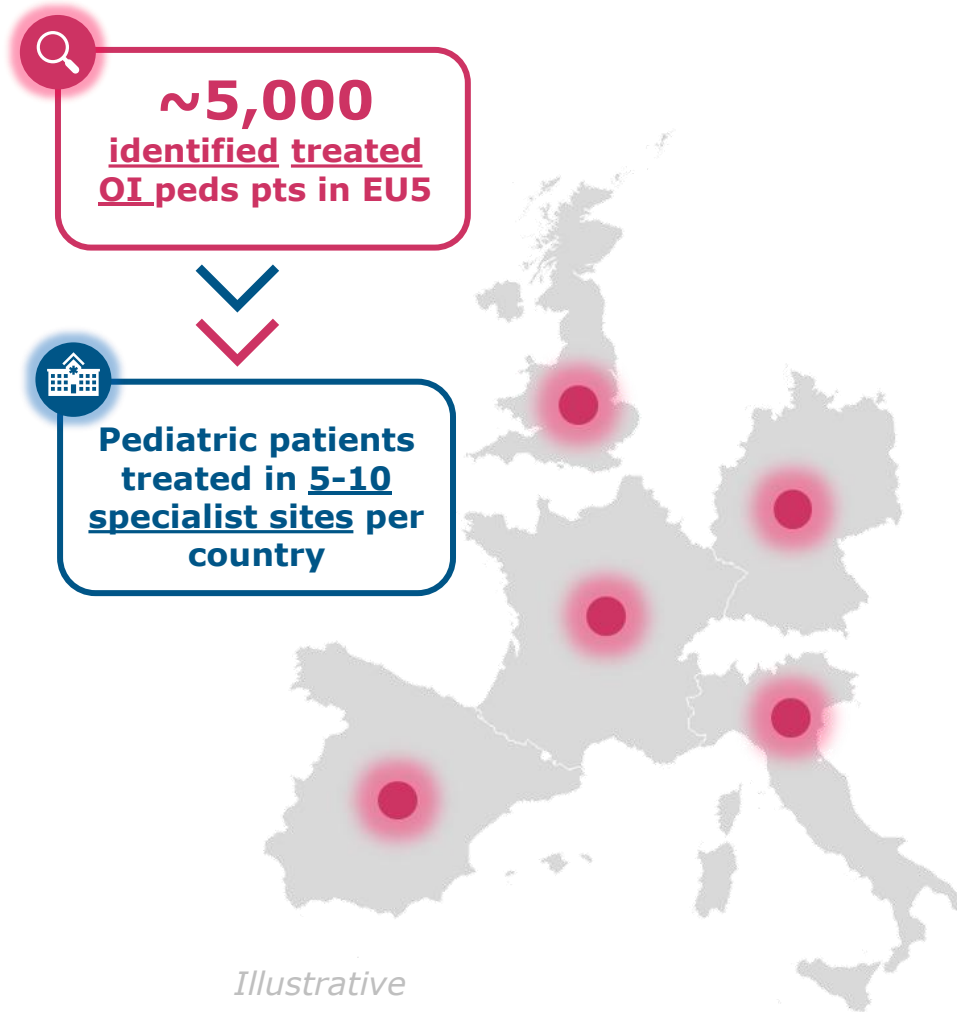
	Vertebral Fractures	
	Setrusumab	IV-BP
All fractures	19	46
All fractures (Excluding mV¹)	1	18

Improved functional outcomes

- ✓ **Decreased bone pain**
 - **Orbit** – peds & teens: PGIS OI Pain (**p=0.017**); POSNA/PODCI (**p=0.044**)
- ✓ **Improved functional ability**
 - **Orbit** – peds & teens: PGIS daily activities (**p=0.036**)
- ✓ **Improved walking ability**

Regulatory interactions initiated based on data analysis completed in pediatric patients

Sizeable pediatric OI opportunity in Europe validated by Crysvita



~3,000 peds pts
With XLH in EU5
according to Kyowa Kirin¹

~\$383M
EMEA 2025 revenue
across peds & adults^{1,2}

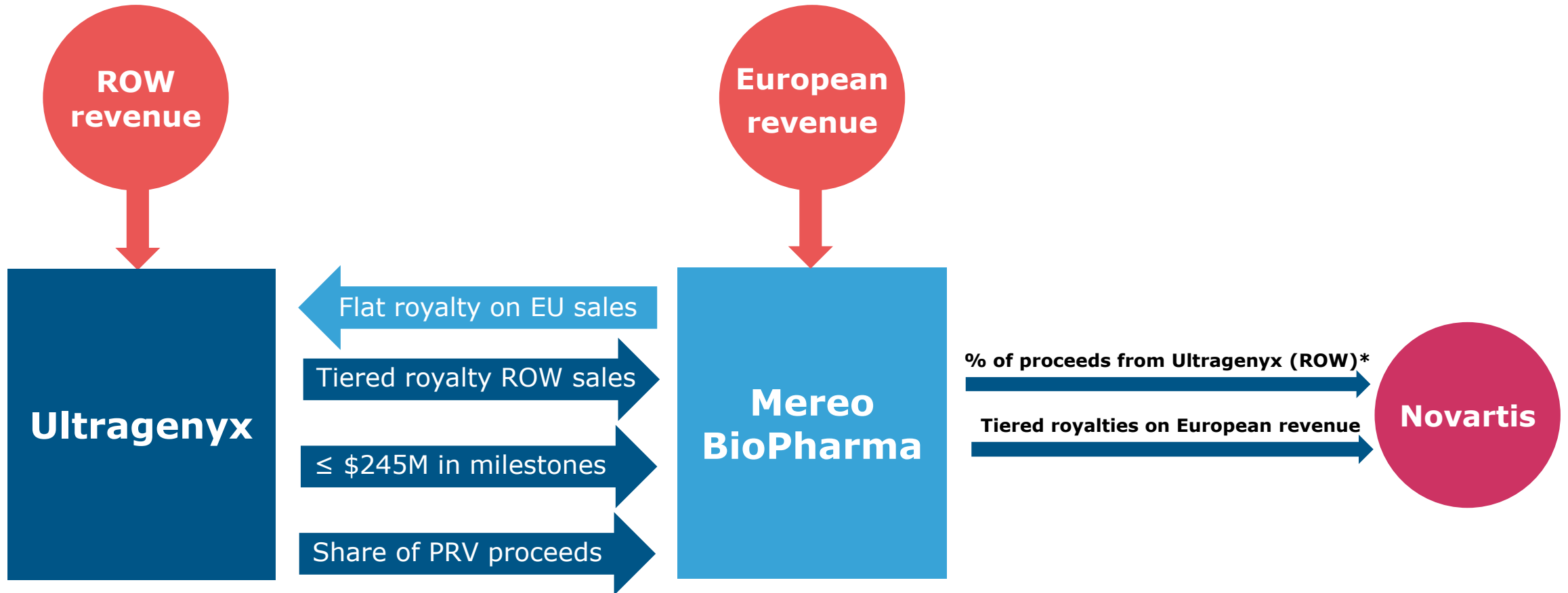
60%-70%
XLH Crysvita Prescription volume
driven by pediatrics³

The Ultragenyx partnership, a highly effective collaboration

- Ultragenyx leads and funds the global development plan, including CMC (Dec 2020)
- Mereo retains European rights (including UK) and Ultragenyx has the USA and Rest of the World rights
- Mereo received \$50M upfront and a \$9m milestone with potential additional \$245M in clinical, regulatory and commercial milestones and shared potential PRV proceeds
- Ultragenyx pays Mereo tiered double digit % royalties on net sales in Ultragenyx territories
- Mereo pays Ultragenyx fixed double digit % royalty on net sales in Mereo territories

Combining the potential European revenue with focused Opex costs, and the cash inflows from milestones and royalties from Ultragenyx = **a compelling business opportunity**

The Ultragenyx partnership – potential attractive cash flows



* Subject to certain deductions with Mereo retaining substantial majority



Alvelestat (MPH966)

Alpha-1 Antitrypsin Deficiency-associated Lung Disease (AATD-LD): a rare progressive lung disease with high unmet need



Alpha 1 UK
Meeting
September
2023

Alvelestat: a potential >\$1bn market opportunity in AATD-LD



A rare progressive disease with high unmet need

- Presents age 20 to 50 with shortness of breath
- ~60-80% of severe patients develop lung disease¹
- Currently treated as COPD and only specific treatment is weekly IV – augmentation therapy
- No specific therapy to slow progression for early-stage lung disease



Alvelestat targets root cause of lung damage

- Lack of AAT → risk of progressive lung damage and early onset emphysema
- Potential to treat early stages of lung disease to delay progression
- Potential efficacy advantage due to sustained NE suppression



Two Phase 2 trials in AATD-LD

ASTRAEUS

- No augmentation
- Established disease
- Median baseline FEV₁: 59%

ATALANTa

- ~50% on augmentation
- Earlier-stage patients
- Median baseline FEV₁: 81%

Total = 162 patients



Significant market opportunity

- Augmentation revenues \$>1Bn in 2023²
- AATD products forecast to reach \$3.2bn by 2031³ partially driven by increasing diagnosis rate
- Europe AAT augmentation not widely reimbursed
- Globally, many early-stage patients not treated

Alvelestat – Extensive dataset with evidence of efficacy in neutrophil driven respiratory disease and large safety database

- **9 completed Clinical studies ~1,200 patients**

- **COPD** (2 studies, n~1,500): In one study (n=615) a >100ml increase in FEV₁ observed in bronchitic subset (n~200, p< 0.01)¹
- **Bronchiectasis** (n=38): >100ml increase in FEV₁ (p= 0.006); numerical improvement St. George’s Respiratory Questionnaire (SGRQ)²
- **Cystic Fibrosis** (n=55): Reduction markers of lung damage (desmosine) p<0.05)³
- **Hospitalized COVID-19** (n=15): Faster 5-day clinical improvement in WHO severity scale⁴
- **Bronchiolitis Obliterans Syndrome** (ongoing, n=13): Improvement biomarkers of lung damage and fibrosis, with signal of FEV1 stabilization)⁵

Phase 2 Bronchiectasis (Stockley et al 2013)

- 60 mg alvelestat or placebo BD for 4 weeks
- 38 randomized, 16 alvelestat, 22 placebo

Spirometry at week 4

Lung Function	Improvement over placebo LSM(SEM)	P Value
FEV ₁	100 mls (34.0)	0.006
SVC	130 mls (74.0)	0.079

SGRQ at week 4

	Improvement over placebo LSM(SEM)*	P Value
Total SGRQ	-5.64 (4.65)#	0.236

*Negative value is improvement for SGRQ

#MCID of > 4 points reached, but high variability and statistical significance not reached

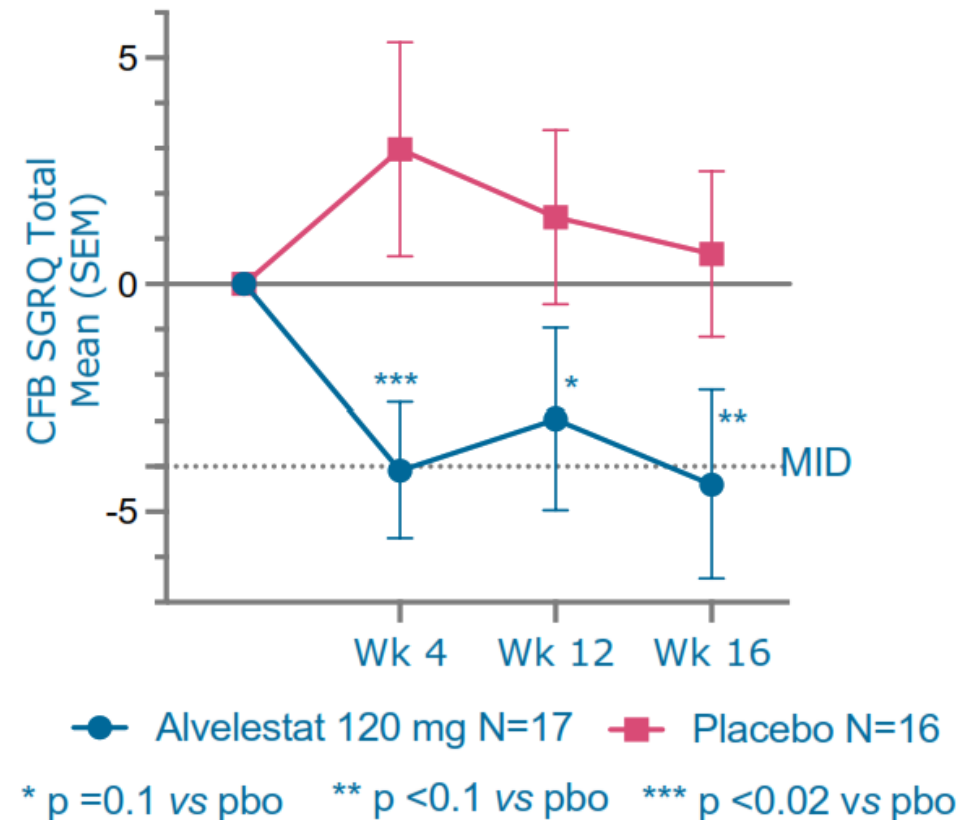
Symptomatic improvement (SGRQ) in AATD patients at early stages of respiratory disease supports Ph3 strategy for earlier intervention prior to FEV₁ decline

- ATALANTa study – Non-augmentation subgroup (median FEV₁ 89.3%). Between group changes at week 12:
 - **SGRQ Total** = 4.7-point improvement (p=0.10)
 - **SGRQ Activity** = 10.0-point improvement (p=0.01)
- Post hoc analysis of ASTRAEUS - earlier stage patients had greatest improvement in **SGRQ Total**

Qualitative validation study completed at several US sites to meet the initial requirements for SGRQ as a primary efficacy assessment in Phase 3.

"The SGRQ is fit for purpose, content valid measure for patients with AATD-LD and is suitable for use as a key COA endpoint"

ATALANTa study (non-augmentation subgroup) – Change in SGRQ Total Score



Decreasing rate of elastin breakdown – Alvelestat is expected to be a long-term disease-modifying therapy going beyond augmentation therapy

Reduction in desmosine for 240 mg alvelestat at 12 weeks **favorable to augmentation therapy**

		Augmentation therapy ¹	Alvelestat (240 mg, ASTRAEUS ²)
Desmosine (absolute reduction from baseline, mean)	Month 3	-0.013 ng/ml ⊖	-0.028 ng/ml ⊖
	Month 48	-0.074 ng/ml	Expect progressive improvement

Long-term effect of alvelestat

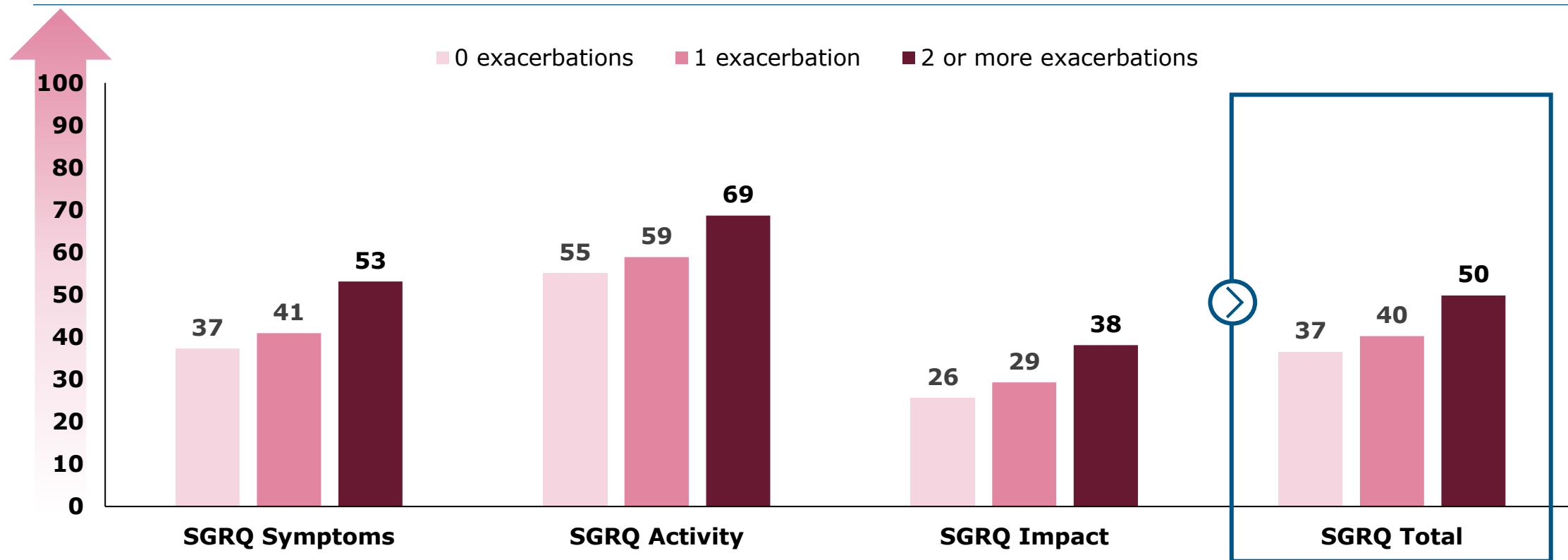


Desmosine levels have been shown to **significantly correlate** with **clinically relevant measures** of disease, and CT Denseverity in AATD-LD (FEV₁, SGRQcity)^{1,2,3}

Disease-modifying

In AATD patients every component of the SGRQ score worsens with exacerbation frequency

SGRQ Components vs. Exacerbation History in last year in AATD Patients, n=2,456¹

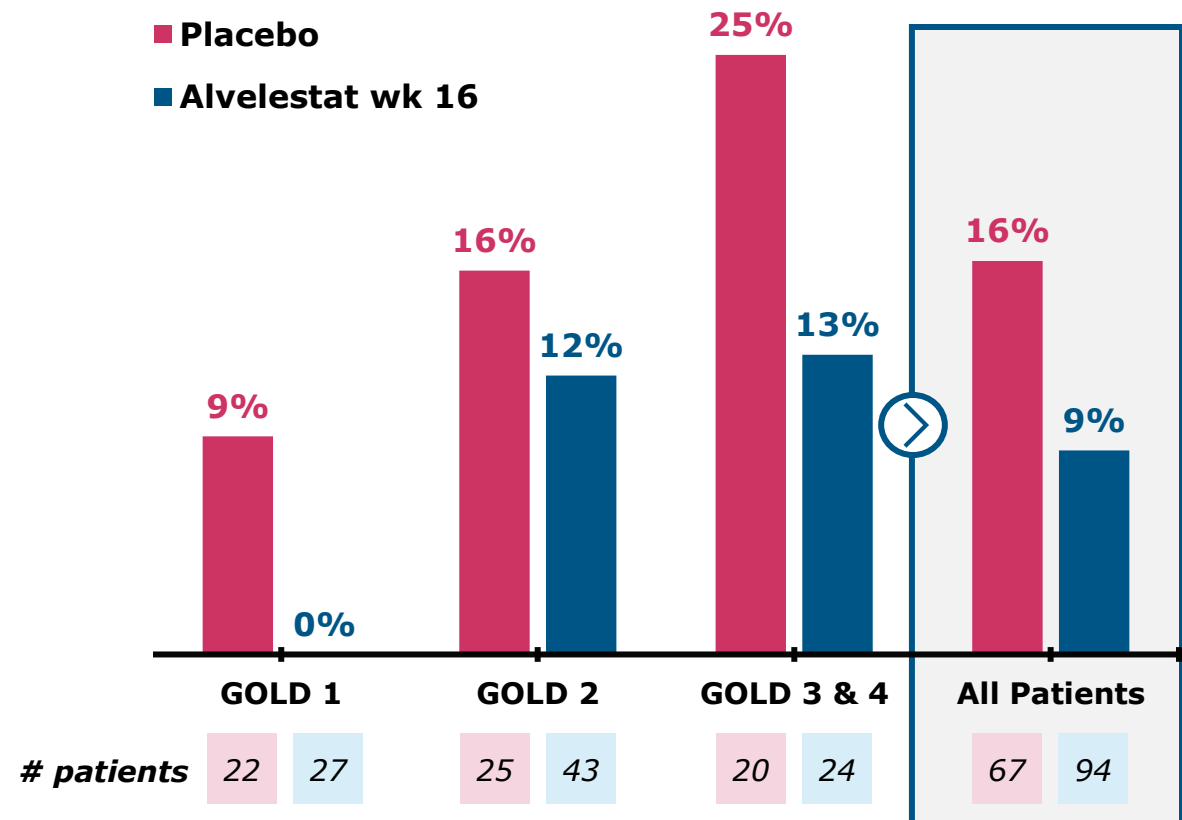


In a separate study of the German registry of patients with AATD², **each component of the SGRQ score correlated significantly with exacerbation frequency** in last 2 years (r values between **0.40 and 0.46**; **p<0.001** for each, n=294)

Preliminary data support a protective effect of alvelestat on acute exacerbations in AATD-LD

- Reduction in acute exacerbations observed in Phase 2 program
 - Effect observed across all levels of GOLD severity¹
 - Effect remains consistent when adjusted for exposure
- Augmentation therapy has not shown benefit on exacerbations:
 - Meta analysis of EXACTLE and RAPID trials showed significant 0.29 per year increase in rate compared to placebo, $p=0.02^2$
- Frequent exacerbations are associated with accelerated lung function decline³

% patients with exacerbations by week 16 ATALANTa + ASTRAEUS combined, all doses n=161



Data from two AATD Phase 2 studies, demonstrated good overall safety vs. placebo and builds on extensive safety database

	Alvelestat 240 mg n=40 (%)	Alvelestat 120 mg n=54 (%)	Placebo n=67 (%)
SAE	3 (7.5)	1 (1.9)	0 (0)
Adverse Events of Special Interest	11 (27.5)	10 (18.5)	18 (26.9)
Infections requiring antimicrobial therapy	10 (25.0)	10 (18.5)	18 (26.9)

Adverse Events of Special Interest

- Across both Phase 2 studies, no discrepancy was observed in number of infections vs placebo
- Single case (240 mg) of prolonged QTc in subject with history of prolonged QTc on concomitant therapy with known QTc effects
- Single case (240 mg) of elevated ALT>5xULN without raised bilirubin; asymptomatic and resolved. No Hy's Law cases.

Adverse events

- Headache was most frequent adverse event, generally mild or moderate and resolving on continued dosing. 3 cases reported as medical important SAEs (240 mg), completely resolved on drug withdrawal.

Including legacy studies, safety database of 1,269 subjects exposed to alvelestat

Well-defined plan for Phase 3 registrational trial in AATD-LD

Clinical Data

Earlier stage severe PI*ZZ patients observed to have **greater response** in SGRQ (Total and activity)
Earlier stage patients (higher FEV₁) may be more likely to **show spirometry benefit**



Phase 3 Design

Early → late stage – Pi*ZZ genotype
Two independent primary endpoints – **SGRQ Total** (FDA) and **lung density by CT** (EMA – p<0.1 may be acceptable)
~220 patients for up to **18 months** (240 mg alvelestat)



Commercial Opportunity

Opportunity for broad label including **earlier stage PI*ZZ** patients who may not be eligible for AAT augmentation
Payors and HCPs **familiar** with SGRQ Total and CT endpoints
Partnering process ongoing – potential range of structures



Broader population
maximizes potential
for **clinical** and
commercial
success







Vantictumab

Osteopetrosis: a rare bone disease with high unmet need



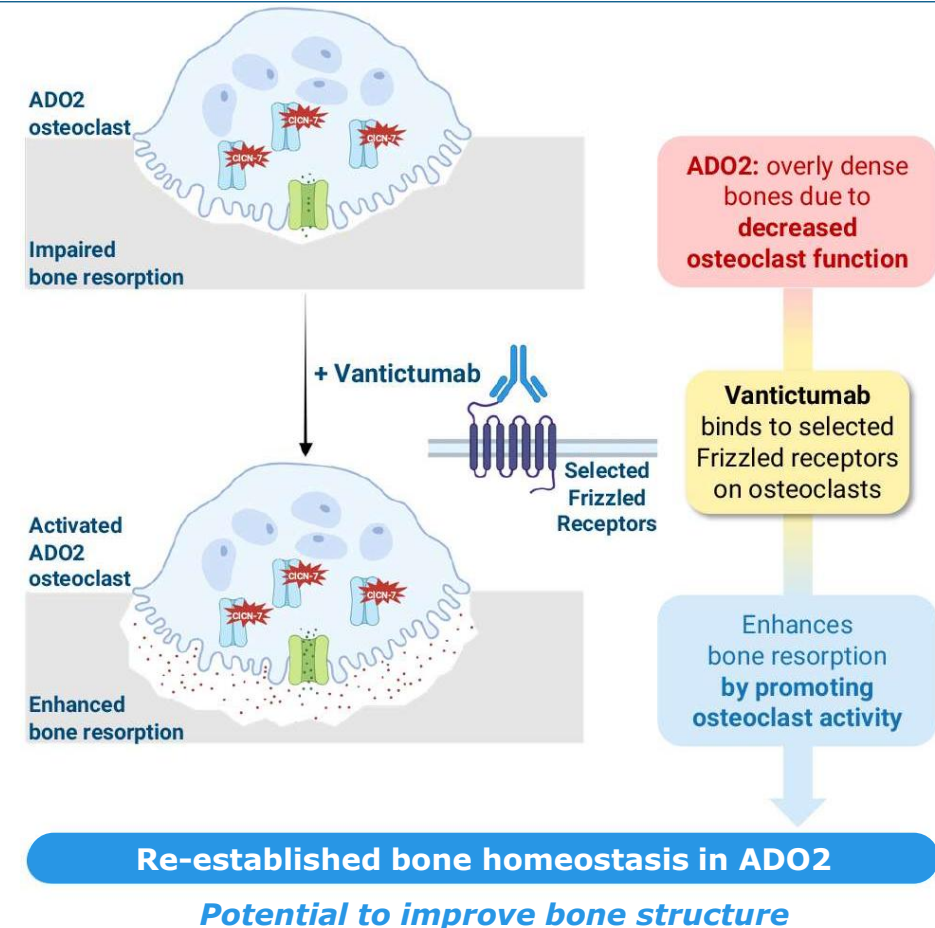
Vantictumab has the potential to address the significant opportunity in underserved rare bone disorder, ADO2

The Unmet Need in ADO2¹

	ADO2 is an inherited metabolic bone disorder characterized by impaired osteoclast function
	Dense, brittle bones lead to multiple fractures, osteomyelitis, bone pain, low blood counts, significant morbidity
	No approved therapy
	1 in 20,000 incidence with onset typically in late childhood

Clear unmet need for a therapy that rescues osteoclast function, improves bone structure, and reduces morbidity

Vantictumab's Potential to Address the Need

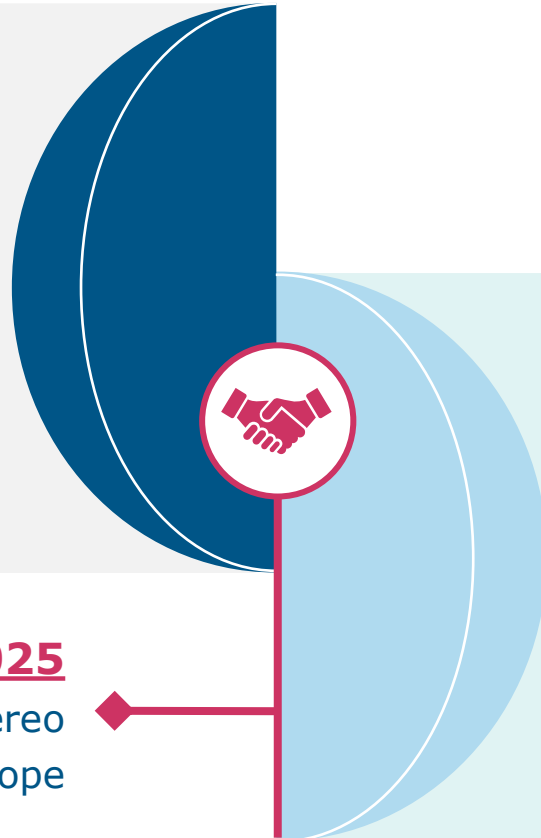


Vantictumab development timelines

2011-2017

Vantictumab investigated ~100 patients in 4 Phase 1a/b oncology trials

Biomarker evidence highlighted **potent impact on osteoclast function & high bone turnover** which led to fragility fractures in some patients¹



VAN sig. decreased areal **BMD** in ADO2 mice and **improved measures of bone structure and quality**²

āshibio

Sept. 2025

pre-clinical data on use of vantictumab in **mouse model of ADO2**²

H2 2026

IND to study vantictumab in patients with ADO2 at **lower doses** than studied previously³

Aug. 2025

Licensed to āshibio with Mereo retaining rights to Europe

Existing clinical data de-risks the program allowing **rapid advancement into clinical development** for ADO2



**Key milestones, other
programs and financials**



Mereo is in a strong position to execute into 2027

Financial discipline delivers cash runway into mid-2027. Following Phase 3 Orbit and Cosmic results, preserving cash through delays and reductions in pre-commercial and manufacturing activities.

Setrusumab

Regulatory interactions and feedback based on the Phase 3 data analysis completed in the pediatric patients

Alvelestat

Partnering process progressing

Potential Phase 3 initiation

Vantictumab

āshibio intend to file IND for a clinical study of vantictumab in patients with ADO2 in H2 2026¹

Other programs could hold future upside

Other current partnerships

Leflutrozone – global rights out-licensed to ReproNovo for further development in infertility in men with low testosterone

- Upfront plus up to \$64 million in milestones and royalties

Navicixizumab – global rights out-licensed to Feng Biosciences for further development in ovarian cancer

- Payments of up to \$300 million in milestones plus royalties

Partnering opportunities

Etigilimab – anti-TIGIT which has completed a Phase 1b basket study in a range of rare tumor types in combination with nivolumab and a Phase 1b/2 investigator led study at the MD Anderson in clear cell ovarian cancer in combination with nivolumab. This study was funded by the Cancer Focus Fund.

Acumapimod – a P38 MAP kinase inhibitor which has successfully completed a Phase 2 study in Acute Exacerbations of chronic obstructive pulmonary disease (AECOPD) in 282 patients

Financial highlights

Cash runway into mid-2027

\$36.2 million as of
March 31, 2026

Cap Table (March 2026)	ADSs (in thousands)
Shareholders > 2% holding	62,741
Shareholders < 2% holding	96,875
Share capital – Issued as of March 31, 2026¹	159,616
Potential Future Dilution:	
Warrants and other equity ²	2,270
Employee share schemes ³	14,982

¹ ADS equivalents of 798,078,829 ordinary shares, with one ADS representing five ordinary shares.

² Assumes a market price of \$4.00 per ADS and cashless exercise. The maximum number of warrants outstanding is 0.9m.

³ Excludes 0.1m ADSs for employee share awards with an exercise price in excess \$8.00; Most employee share awards have an exercise price between ~\$1.00 - \$6.00.



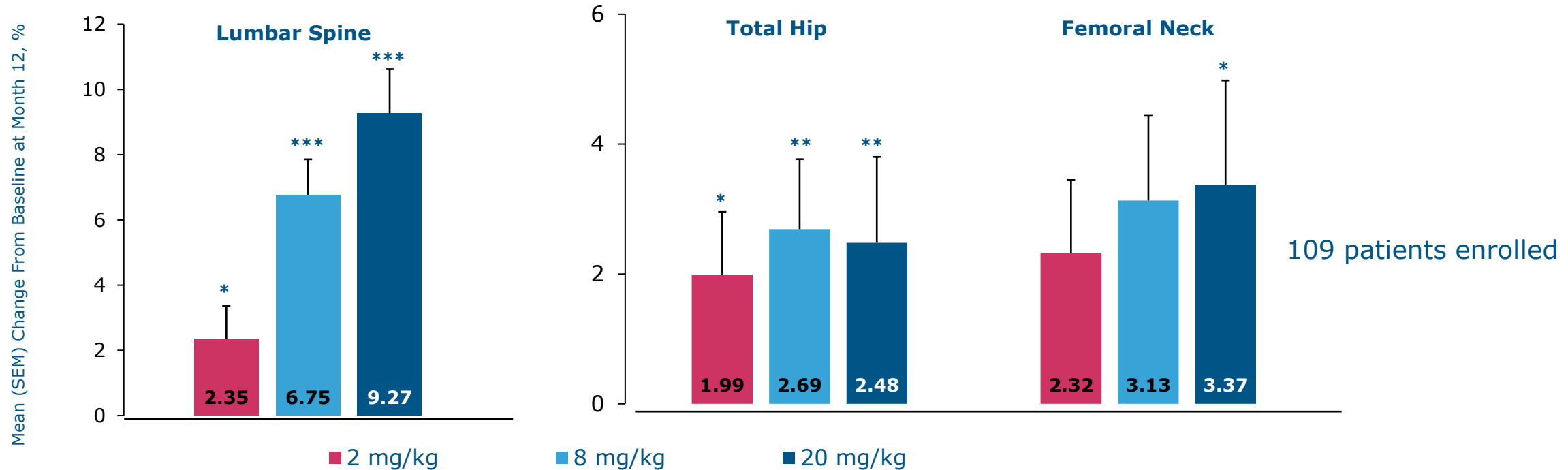
Appendix



OIFE Topical
Meeting
June 2023

Phase 2b ASTEROID study demonstrated increased BMD in adults with OI Type I, III and IV

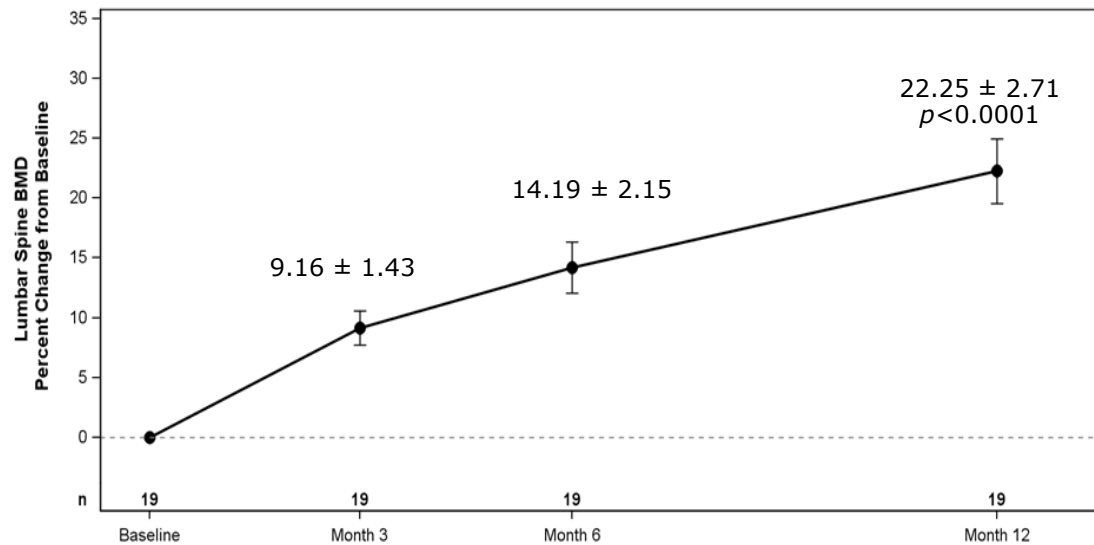
Statistically significant dose-dependent increases in areal BMD by DXA following 12 months of setrusumab therapy



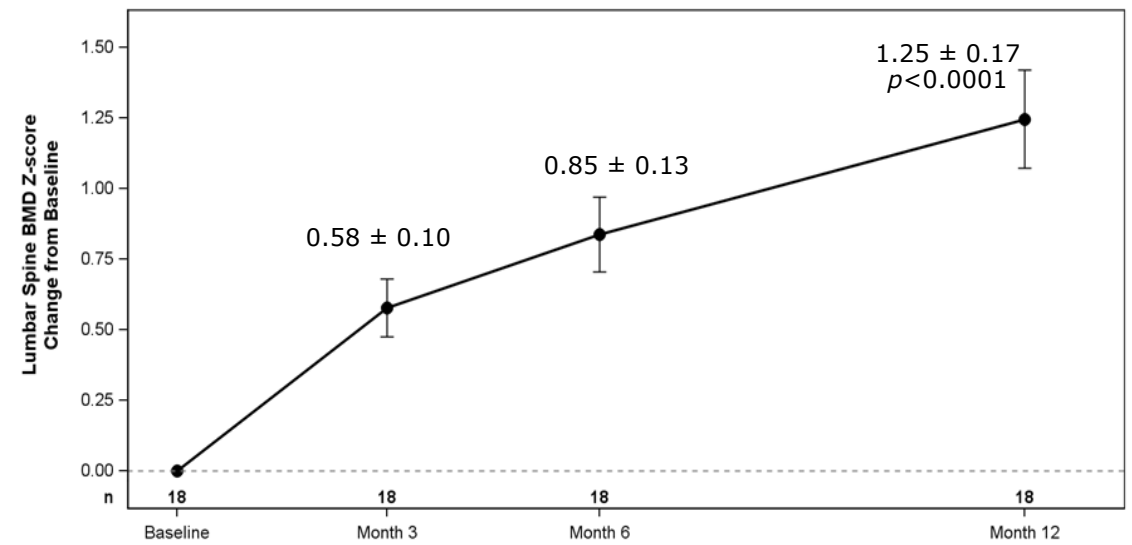
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ vs baseline based on an ANCOVA model with baseline values, treatment group and OI type as covariates. ANCOVA, analysis of covariance; BMD, bone mineral density; DXA, dual-energy X-ray absorptiometry; OI, osteogenesis imperfecta; SEM, standard error of the mean. At the 20 mg/kg dose - increase in failure load ($p = 0.037$) and stiffness at the radius ($p = 0.022$) as measured by finite element analysis (FEA). Increase in trabecular bone score (TBS) - 3D bone architecture, helps predict fracture ($p < 0.001$ at 8mg/kg and 20mg/kg).

Phase 2 Orbit showed increased BMD and Z-score increases¹ Improvements consistent across all OI Types studied

Lumbar Spine BMD¹ % Change from Baseline



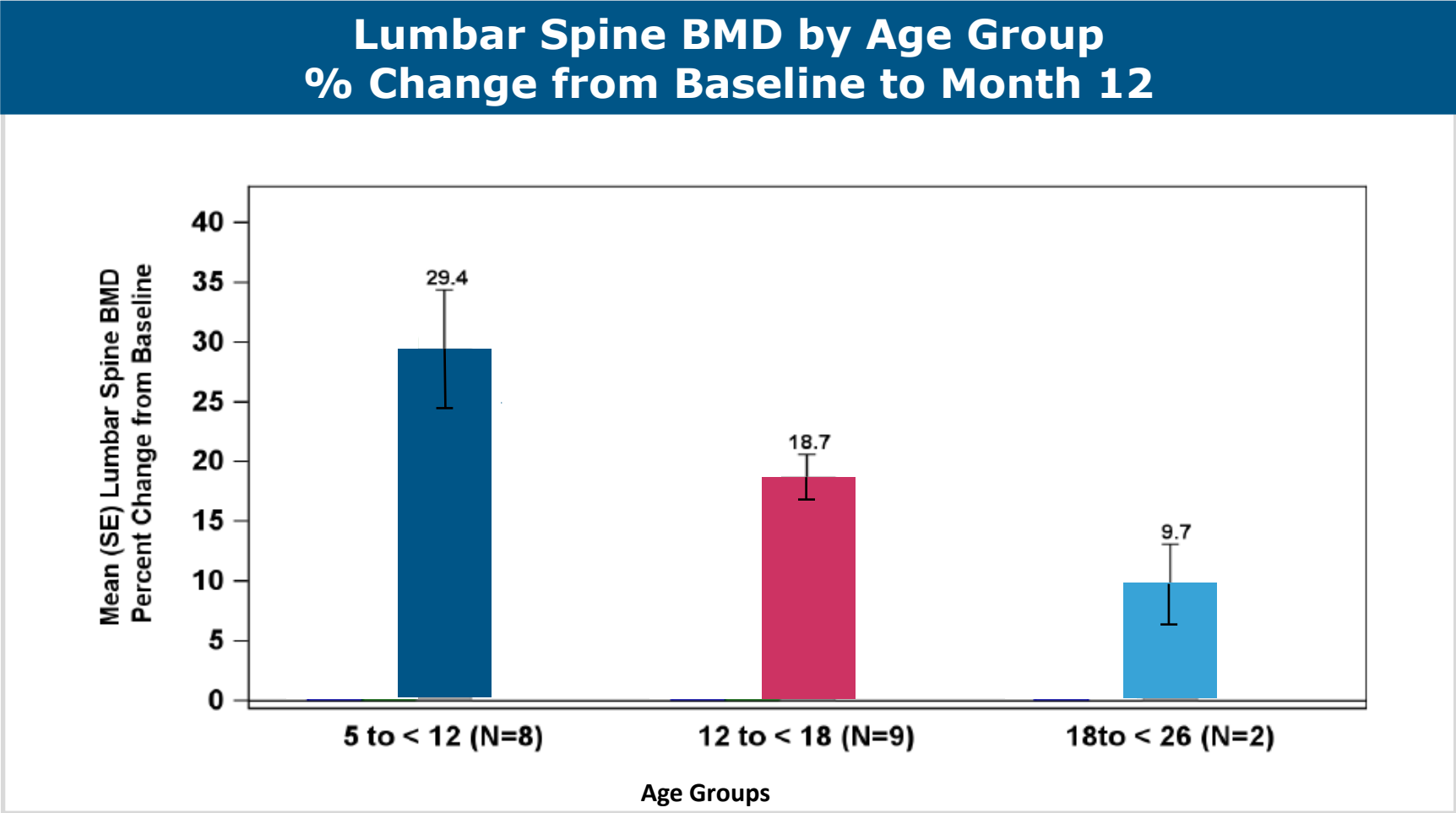
Lumbar Spine BMD¹ Z-Score Change from Baseline



Change in lumbar spine BMD from baseline at 12 months = 22% (p < 0.0001, n = 19) (14% at 6 months)
Change in baseline lumbar spine BMD Z-score at 12 months = +1.25 (p < 0.0001, n = 18) (+0.85 at 6 months)

Orbit Phase 2 – increase in BMD observed in all age groups,^{1,2}

Younger patients showed a 29% increase in BMD at Month 12



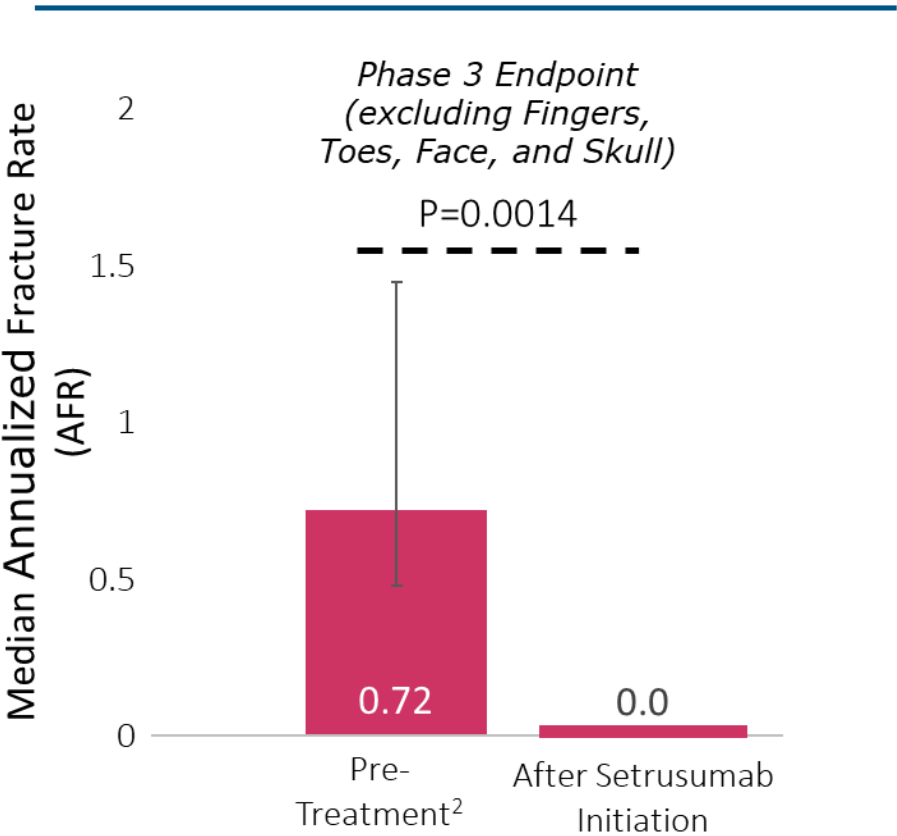
Data consistent with ASTEROID Phase 2 data in adults²



1. Data as of June 2024; 2. Lewiecki EM *et al.* Evaluating Setrusumab for the Treatment of Osteogenesis Imperfecta: Phase 2 Data from the Phase 2/3 Orbit Study. Presented at the American Society for Bone and Mineral Research; October 13–16, 2023; Vancouver, BC, Canada. Abstract/Poster LB SAT-650 48
2. Setrusumab for the Treatment of Osteogenesis Imperfecta: 12-Month Results from the Phase 2b Asteroid Study, Journal of Bone and Mineral research, July 2024

Treatment with setrusumab (mean duration of 16 months) resulted in a 67% reduction in annualized fracture rate (AFR) compared to pre-treatment AFR

Radiographically Confirmed Fractures¹



1: Data as of June 2024; updated clinical fractures includes a mean follow-up of 16 months
2: Pre-Treatment period includes fractures in the two years before screening based on medical record review and patient report, and fractures between screening and first dose



6 y/o male patient with Type IV OI, increased mobility after 17 months on study

Building a foundation for commercial success in Europe



Setting the baseline: Impact / Burden of Disease in OI in Adult and Pediatric patients across Mereo European territory markets

Largest ever burden of disease survey on the impact of OI on patients, physicians and caregivers. Successful collaboration between OIFE, OIF and Mereo. Made possible by the generous contribution of the OI community.



Gemeinsamer
Bundesausschuss



EUROPEAN
MEDICINES
AGENCY

NICE National Institute for
Health and Care Excellence

Regulatory scientific advice & HTA & Payor advice

Scientific advice from GBA & NICE in 2024 – sets our **base framework**



Validated “library” of data sources to answer authorities’ questions: at time of MAA submission and to support ongoing reimbursement

Using existing data sets to provide coordinated data across multiple European treatment centers for OI

Mereo IP strategy

Candidate	European IP Strategy
Setrusumab Osteogenesis Imperfecta	<ul style="list-style-type: none">• Setrusumab antibody (2028)• Use of setrusumab for treating osteogenesis imperfecta (2037)<ul style="list-style-type: none">◦ Possibility of SPC to 2041/2042• Potential additional IP to 2042
Alvelestat AATD-LD	<ul style="list-style-type: none">• Tosylate salt of alvelestat (2030)• Use of alvelestat in patients with AATD who have not responded to AAT treatment (2041 – granted) and broader applications (2041, not yet granted)<ul style="list-style-type: none">◦ Possibility of SPC to extend to at least 2045/2046• Potential additional IP to 2044

Thank you

With a special thank you to members of our community, who generously agreed to be featured in this presentation.

