COACH Trial Interim Topline Week 26 Data

June 9, 2025

Combination treatment with investigational TransCon CNP and TransCon hGH is investigational.
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This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, such as statements regarding TransCon hGH's ability to complement TransCon CNP's holistic treatment of achondroplasia; the potential for the combination of TransCon CNP + TransCon hGH to further transform the treatment of achondroplasia and boost growth ~3x above that observed with CNP monotherapies; the expected timing of Week 52 data from the COACH Trial; our plan to begin a Phase 3 trial in Q4 2025; our planned new trials to support TransCon CNP + TransCon hGH treatment in additional indications such as hypochondroplasia; our ability to become the leader in growth disorders and musculoskeletal health; plans and objectives of management for future operations and commercialization activities; and future results of current and anticipated products and product candidates, are forward-looking statements. These forward-looking statements are based on our current expectations and beliefs, as well as assumptions concerning future events. These statements involve known and unknown risks, uncertainties and other factors that could cause our actual results to differ materially from the results discussed in the forward-looking statements. These risks, uncertainties and other factors are more fully described in our reports filed with or submitted to the Securities and Exchange Commission (SEC), including, without limitation, our most recent Annual Report on Form 20-F filed with the SEC on February 12, 2025, particularly in the sections titled "Risk Factors" and "Operating and Financial Review and Prospects." In light of the significant uncertainties in our forward-looking statements, you should not place undue reliance on these statements or regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all.

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Executive Summary

- COACH is the first clinical trial to evaluate once-weekly TransCon CNP and once-weekly TransCon hGH combination treatment in children with achondroplasia (ACH)
- Interim topline Week 26 data from the Phase 2 COACH Trial demonstrated:
  - For TransCon CNP treatment-naïve cohort, mean annualized growth velocity (AGV) was 9.14 cm/year with an improvement in mean ACH height Z-score of +0.53 over 26 weeks
  - For TransCon CNP-treated cohort, mean AGV was 8.25 cm/year with an improvement in mean ACH height Z-score of +0.44 over 26 weeks
- Children treated with TransCon hGH and TransCon CNP demonstrated accelerated improvement in body proportionality at Week 26, aligning with the increase in linear growth
- Bone age advanced in line with chronologic age
- Safety and tolerability data were consistent with those observed for TransCon hGH and TransCon CNP monotherapies; combination treatment was generally well tolerated, with generally mild treatment-emergent adverse events (TEAEs)

TransCon hGH boosted treatment benefits of TransCon CNP with an observed safety profile consistent with monotherapies

Data on file, Ascendis Pharma 2025.

Expanding the Treatment Paradigm

- TransCon hGH expected to complement TransCon CNP's holistic treatment of achondroplasia, combining distinct modes of action

In achondroplasia, overactive FGFR3 signaling acts as a **BRAKE**, inhibiting bone growth[3,4]

TransCon CNP releases the brake enabling GH to **ACCELERATE** outcomes

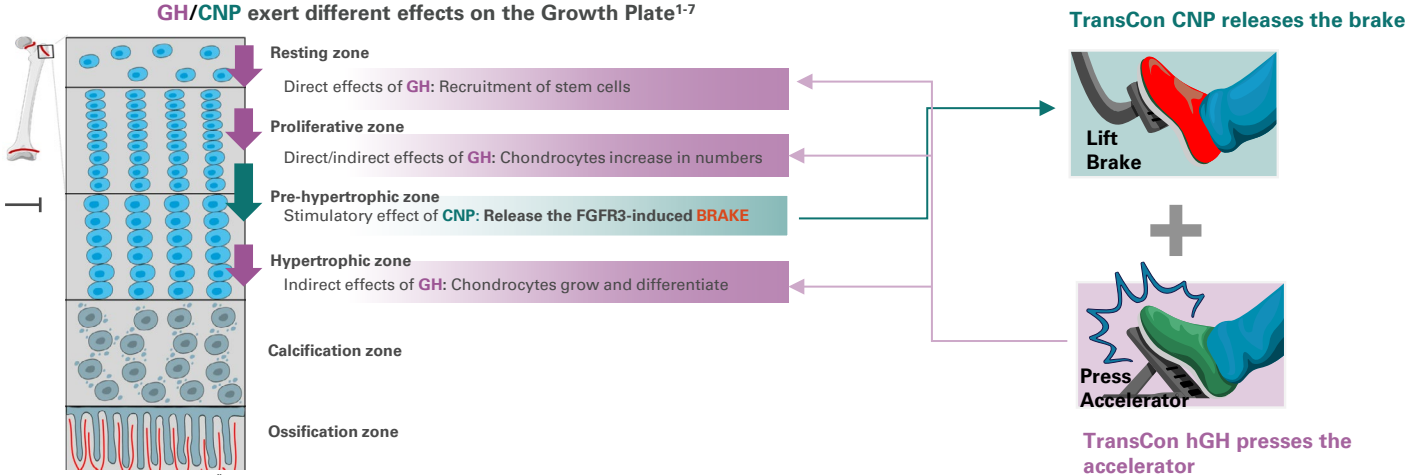
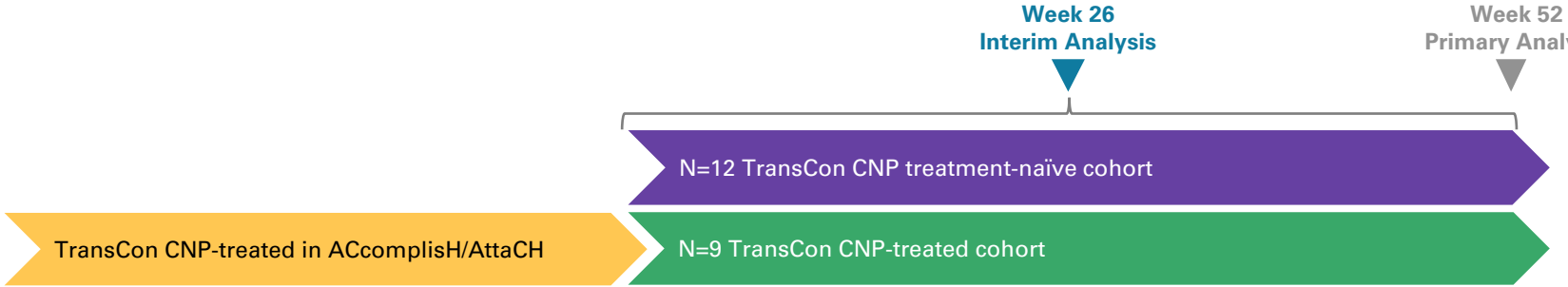


Figure adapted from: Šromová, V, et al. *Cells* 2023, 12, 2576.

The combination of TransCon CNP + TransCon hGH could further transform the treatment of achondroplasia

1. Blum WF, et al. *Endocr Connect.* 2018;7(6):R212-R222. 2. Devesa J, et al. *Clin Med Insights Endocrinol Diabetes.* 2016 Oct 12;9:47-71. 3. Rintz E, et al. *Int J Mol Sci.* 2022; 23(11). 4. Krejci P, et al. *PLoS One.* 2008; 3(12): e3961. 5. Horton WA, et al. *Lancet.* 2007; 370(9582):162–72. 6. Miyazawa T, et al. *Endocrinology.* 2002; 143(9): 3604-10. 7. Yasoda A, et al. *Nature medicine.* 2004; 10(1): 80-6.

First Phase 2 Combination Trial of CNP + hGH in Children with Achondroplasia



Primary Efficacy Objective
- Evaluate effect of combination treatment with TransCon CNP and TransCon hGH on linear growth compared to TransCon CNP alone

Population
- Children with achondroplasia, aged 2-11 years, with open epiphyses

Treatment
- TransCon CNP 100 µg/kg/week + TransCon hGH 0.30 mg hGH/kg/week

Primary Efficacy Endpoint
- Annualized growth velocity (AGV) at Week 52

Secondary Endpoints
- Change from baseline in height Z-score
- AGV over time
- Upper to lower body segment ratio (body proportionality)

Safety Endpoints
- Treatment-emergent AEs, including injection site reactions

Data on file, Ascendis Pharma 2025.

Demographics and Baseline Characteristics (1/2)

Full analysis set at COACH screening	TransCon CNP Treatment-Naïve Cohort (N=12)	TransCon CNP-Treated Cohort (N=9)
Age at screening, years, mean (min, max)	**4.67 (1, 9)**	**7.89 (5, 10)**
Age group, n (%)		
< 5 years	**6 (50.0)**	**0**
5 to < 8 years	**5 (41.7)**	**3 (33.3)**
≥ 8 years	**1 (8.3)**	**6 (66.7)**
Sex, n (%)		
Male	**8 (66.7)**	**6 (66.7)**
Female	**4 (33.3)**	**3 (33.3)**
Genetic variant, n (%)		
1138G>A	**11 (91.7)**	**8 (88.9)**
1138G>C	**0**	**1 (11.1)**
1144G>A	**1 (8.3)**	**0**

Data on file, Ascendis Pharma 2025.

Demographics and Baseline Characteristics (2/2)

Full analysis set at COACH screening	TransCon CNP Treatment-Naive Cohort (N=12)	TransCon CNP-Treated Cohort (N=9)
Age at screening, years, mean (min, max)	4.67 (1, 9)	7.89 (5, 10)
Years of exposure to TransCon CNP 100 µg/kg/wk, mean (range)	Not Applicable	2.56 (2.30, 2.95)
AGV (cm/year), mean (SD)	4.92 (2.18)	5.14 (0.53)
ACH-specific* height Z-score, mean (SD)	0.46 (0.70)	1.28 (0.81)
CDC-based** height Z-score, mean (SD)	-4.46 (0.77)	-4.04 (0.66)
IGF-1 SDS, mean (SD)	-0.63 (1.32)	-0.70 (0.48)

Trial population is representative of children with achondroplasia, except for the observed growth benefit in the TransCon CNP-treated cohort

Data on file, Ascendis Pharma 2025.
*Hoover-Fong JE, et al. US. OrphanetJ Rare Dis. 2021;16(1):522. **CDC Stature for Age Charts, available at: https://www.cdc.gov/growthcharts/who-growth-charts.htm

Overview of Treatment-Emergent Adverse Events

Safety Analysis Set	All Participants (N=21) n (%)
Treatment-Emergent Adverse Event	15 (71.4)
Grade 1 (Mild)	12 (57.1)
Grade 2 (Moderate)	7 (33.3)
Grade 3 (Severe)	1 (4.8)
Grade 4 & 5 (Life-threatening or Death)	0
Treatment Related Adverse Events	7 (33.3)
Adverse Events (AEs) of Interest	
Injection site reactions TransCon CNP	3 (14.3)
Injection site reactions TransCon hGH	4 (19.0)
Symptomatic hypotension	0
Fractures	0
Serious Adverse Events (SAEs)	1 (4.8)
AE that led to discontinuation of study drug	0
AE that led to withdrawal from trial	0
AE that led to death	0

Safety and tolerability data comparable to monotherapies and TEAEs were generally mild

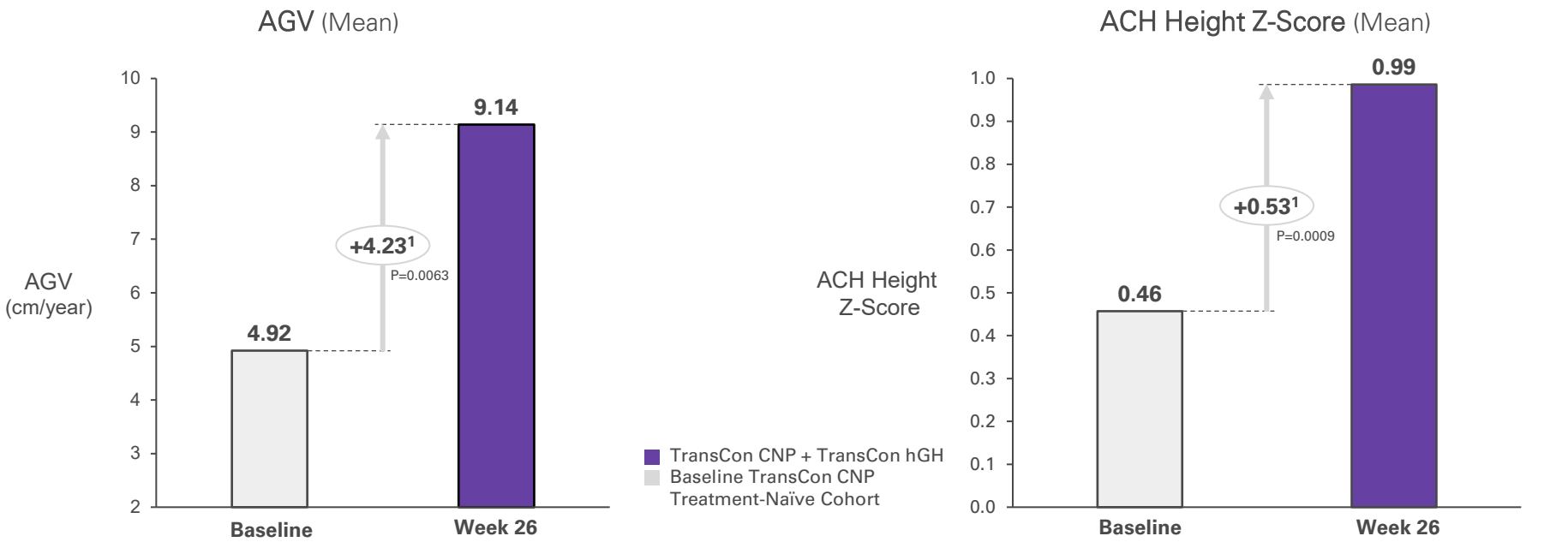
Data on file, Ascendis Pharma 2025. Data cutoff date: 15 May 2025

Safety and Tolerability

- Combination treatment showed safety data consistent with those observed for TransCon hGH and TransCon CNP monotherapies, and was generally well tolerated, with generally mild TEAEs
- Majority of TEAEs were mild (Grade 1) or moderate (Grade 2) and typical for children of these ages
- No TEAEs led to discontinuation of any treatment or withdrawal from the trial and no SAEs were assessed as related to study drugs
- No fractures or other bone-related safety events observed
- No evidence of hypotensive effect
- No deaths were reported
- Injection tolerability was consistent with that observed for TransCon hGH and TransCon CNP monotherapies, with all events adjudicated as mild

Data on file, Ascendis Pharma 2025.

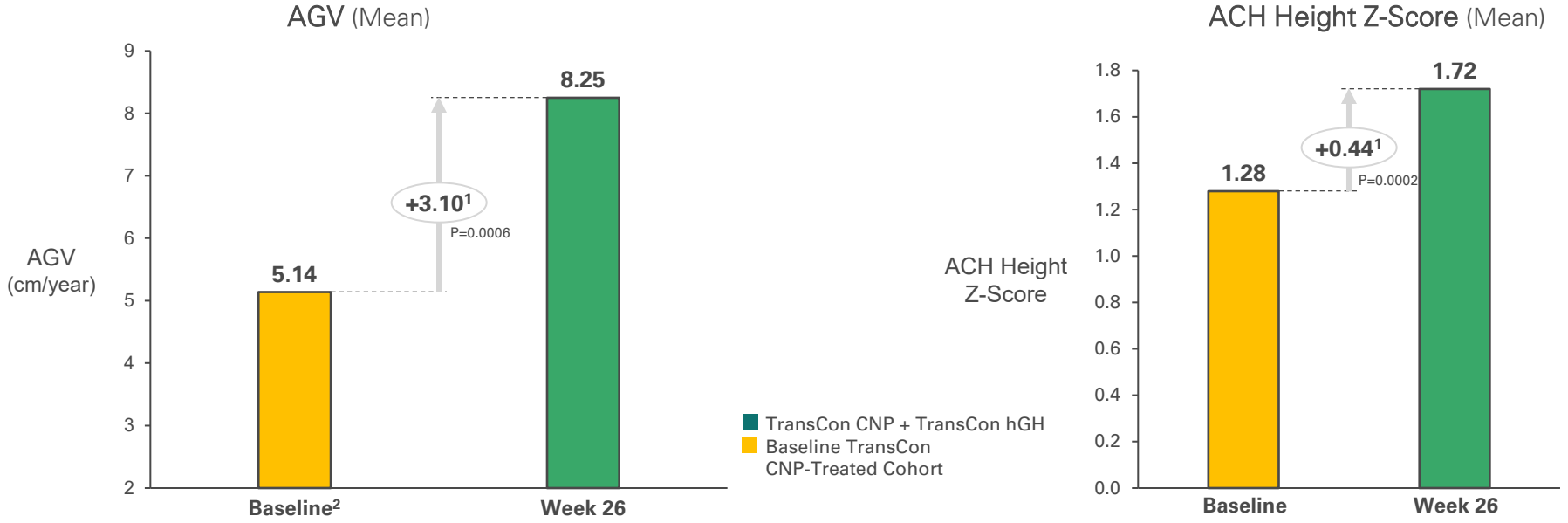
Combination Treatment Growth at Week 26 TransCon CNP Treatment-Naïve Cohort (N=12)



TransCon CNP + TransCon hGH treatment demonstrated significant growth improvements

[1]Gray arrow indicates change from baseline
Data on file, Ascendis Pharma 2025.

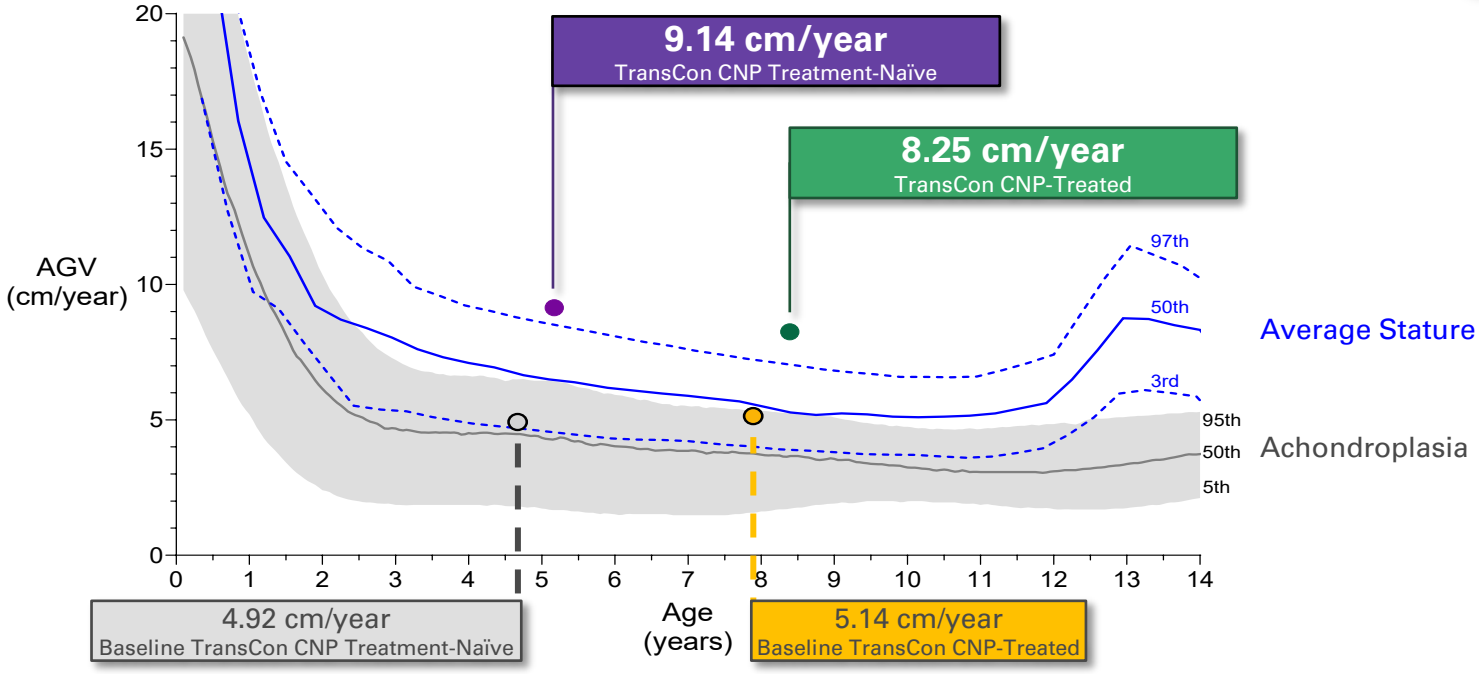
Combination Treatment Growth at Week 26 TransCon CNP-Treated Cohort (N=9)



Combination treatment demonstrated boosted growth in TransCon CNP-treated children

[1]Gray arrow indicates change from Baseline
[2] Baseline AGV calculated as annualized growth over the 52 weeks preceding the COACH Trial
Data on file, Ascendis Pharma 2025.

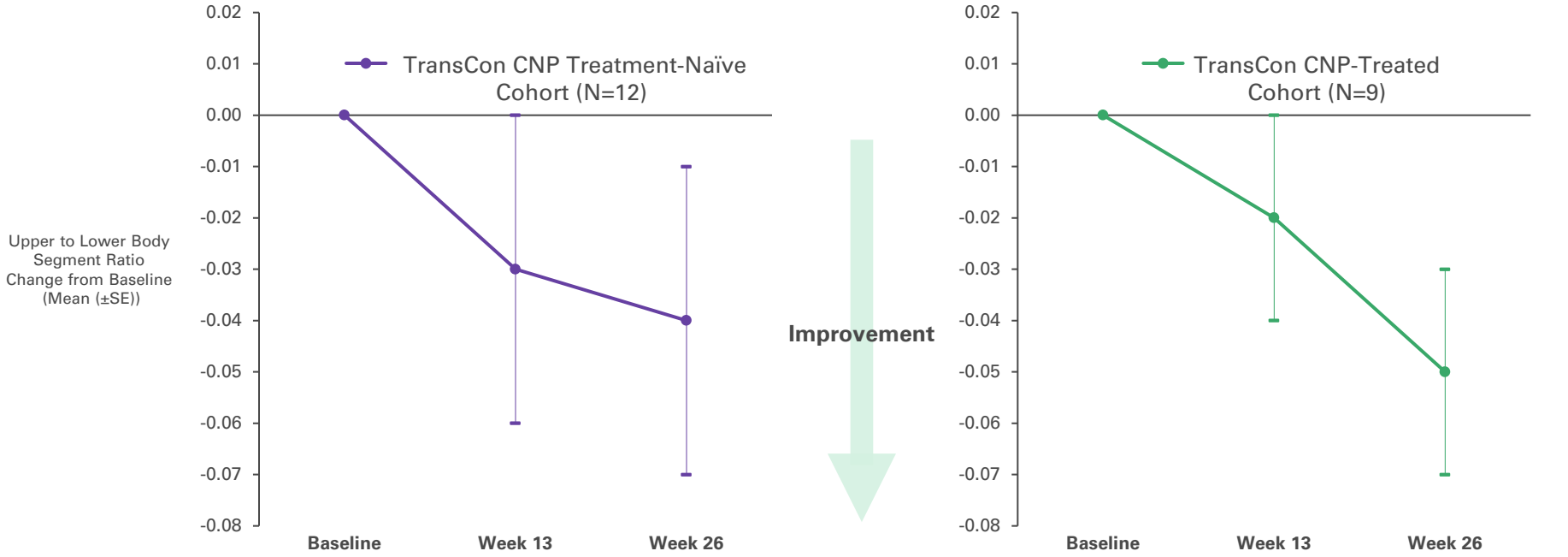
Combination Treatment Mean AGV at Week 26



TransCon CNP + TransCon hGH treatment exceeded AGV 97th percentile of average stature children

Adapted from: Hoover-Fong JE, et al. *Am J Clin Nutr.* 2008 Aug;88(2):364-71. Natural history AGV curves presented for male children; curves for average stature children from 0-3y reflect 10th, 50th, and 90th percentile.
Data on file, Ascendis Pharma 2025.

COACH Body Proportionality at Week 26



TransCon hGH + TransCon CNP treatment demonstrated accelerated improvement in body proportionality, aligning with the increase in linear growth

Data on file, Ascendis Pharma 2025.

Combination Treatment Program Next Steps

- Week 26 data demonstrated the potential to boost growth ~3x above that observed with CNP monotherapies over the same period, supporting the scientific rationale for treating with TransCon CNP and TransCon hGH combined
- Week 52 data expected in Q4 2025
- Plan to begin Phase 3 trial in Q4 2025
- Ongoing and planned new trials to support TransCon CNP + TransCon hGH treatment in additional indications such as hypochondroplasia

With once-weekly TransCon hGH and TransCon CNP, we believe Ascendis is well-positioned to be the leader in growth disorders and musculoskeletal health

Data on file, Ascendis Pharma 2025.

Thank you

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