EFFICACY AND SAFETY OF WEEKLY SOMATROGON VS DAILY SOMATROPIN IN CHILDREN WITH GROWTH HORMONE DEFICIENCY: A PHASE 3 STUDY

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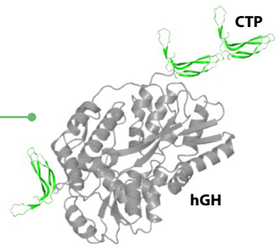
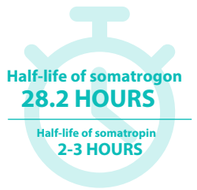
OVERVIEW OF SOMATROGON

Somatrogon is a molecular entity with a unique amino acid sequence that has been developed for the treatment of children with growth hormone deficiency (GHD)

Somatrogon is a long-acting version of human growth hormone (hGH) that contains 3 copies of carboxy-terminal peptide (CTP) from the beta chain of human chorionic gonadotropin

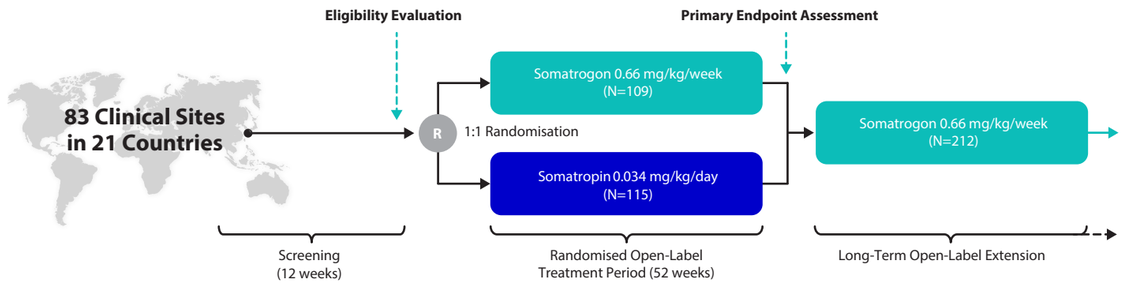


Fusion of sialylated and glycosylated CTP extends its half-life by decreasing clearance



PIVOTAL TRIAL CP-4-006

A 12-month, open-label, multicenter, randomised, active-controlled, parallel-group, phase 3 study to evaluate whether somatrogon administered once weekly (0.66 mg/kg/week) was non-inferior to somatropin (0.24 mg/kg/week) administered once daily in prepubertal children with GHD



PRIMARY ENDPOINT	• Annualised height velocity (HV) at month 12
SECONDARY ENDPOINTS	• Annualised HV at month 6 • Change in height standard deviation score (SDS) at months 6 and 12 • Change in bone maturation at month 12 • Insulin-like growth factor-1 (IGF-1) SDS serum levels

DEMOGRAPHICS	SOMATROGON (n=109)	SOMATROPIN (n=115)
AGE, MEAN (RANGE)	7.83 years (3.01-11.96)	7.61 years (3.05-11.85)
MALES	75.2%	68.7%
HEIGHT SDS, MEAN (SDS)	-2.94 (1.29)	-2.78 (1.27)

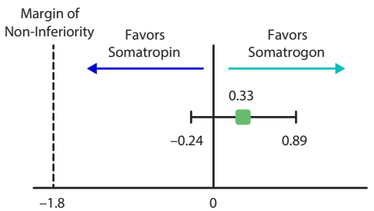
PRIMARY ENDPOINT: ANNUALISED HV (CM/YEAR) AT MONTH 12

The study met the primary objective. Once-weekly somatrogon was non-inferior to daily somatropin with respect to annualised HV after 12 months of treatment in subjects with paediatric GHD

Primary Endpoint: Annualised HV (cm/year)

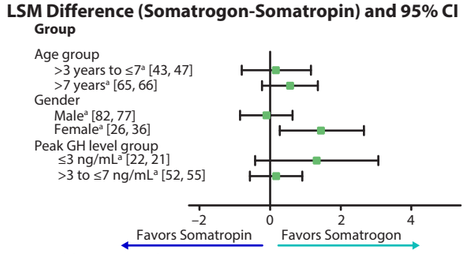
	Somatrogon (n=109)	Somatropin (n=115)	Treatment Difference
LS Mean Estimate	10.10	9.78	0.33 (95% CI: −0.24 to 0.89)

CI=confidence interval; LS=least squares.

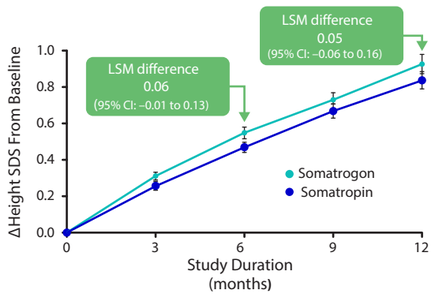


Similar HV responses were achieved in response to both treatments in prespecified subgroup analyses

LSM Difference (Somatrogon-Somatropin) and 95% CI



GH=growth hormone; LSM=least squares mean.
[a][n1, n2] represents the sample sizes for somatrogon and somatropin, respectively, within each subgroup.



SECONDARY ENDPOINTS

The secondary endpoint of change in height SDS from baseline was similar in somatrogon-treated and somatropin-treated subjects

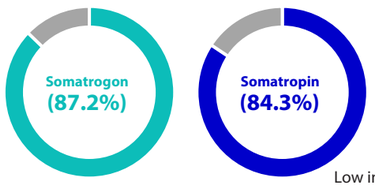
ADDITIONAL SECONDARY ENDPOINTS

- LSM annualised HV at 6 months: Higher in the somatrogon group (10.59 cm/y) vs the somatropin group (10.04 cm/y)
- Mean change from baseline in bone age relative to chronological age at 12 months: Comparable between groups
- Mean value for IGF-1 SDS approached 0 at 1 month post-baseline and was 0.65 SDS at 12 months post-baseline in the somatrogon group, remaining within the normal range

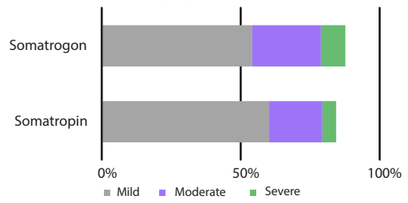
SAFETY AND TOLERABILITY

Both treatments were generally well tolerated, with comparable treatment-emergent adverse events (TEAEs)

TEAEs occurred at a similar rate in both treatment groups, with the majority related to injection site reactions



Most TEAEs were mild or moderate, including injection site pain



Low incidence of serious adverse events for both groups, with none related to treatment.

IMMUNOGENICITY

The presence of anti-drug antibodies (ADAs) did not have an effect on overall safety or efficacy during the main study

- There were no clinical or safety effects observed with the formation of antibodies.
- Post hoc analyses comparing clinical endpoint results to ADA status indicate that the presence of ADAs did not have an effect on overall safety or efficacy (eg, growth rate) during the main study

SUMMARY

The efficacy of somatrogon administered once-weekly was non-inferior to somatropin administered once-daily for the treatment of prepubertal children with GHD

Once weekly somatrogon resulted in a robust and sustained increase in HV compared with daily GH treatment, while maintaining IGF-1 and bone age advancement within the normal range

- Long-acting somatrogon and daily GH had similar safety and tolerability profiles

Compared with somatropin administered once-daily, the less-frequent injection schedule afforded by somatrogon administered once-weekly has the potential to improve poor adherence and quality of life, which are key unmet needs in this pediatric population

REFERENCES

1. Deal C, et al. J Clin Endocrinol Metab. 2022;107(7):e2717-e2728. doi: 10.1210/clinem/dgac220.
2.Somatrogon Israel LPD

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For further safety information please refer to the latest Ngenla (Somatrogon) prescribing information
To report adverse events: ISR.AEReporting@pfizer.com To report product complaints: israelProdComplaints@pfizer.com For medical information inquiries: MIQueriesIsrael@pfizer.com