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OR31-5:
A Phase 2, Six-Month Safety and Efficacy Study of TransCon hGH Compared to Daily hGH in Pre-Pubertal Children with Growth Hormone Deficiency (GHD)

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- ABSTRACT

Abstract:

Background: TransCon hGH is a long-acting pro-drug of recombinant human Growth Hormone (hGH) that releases fully active unmodified hGH into the blood compartment.
TransCon hGH was shown in healthy volunteers and in adults with GH Deficiency (AGHD) to: 1) be safe and well tolerated, 2) generate dose dependent serum levels and predictable levels of growth hormone, 3) be suitable for a once-weekly dosing regimen and 4) induce a dose-related IGF-I pharmacodynamic (PD) response within the normal range throughout the dosing period.
This study demonstrates the safety and efficacy of TransCon hGH in children with GHD over a treatment period of six months.
Objectives: The objective of this Phase 2 study in GHD is to investigate 1) safety and tolerability, 2) pharmacokinetics (PK) and pharmacodynamics and 3) efficacy of TransCon hGH in children with Growth Hormone Deficiency (GHD).
Design and methods: Pre-pubertal, treatment naïve GHD children received s.c. injections of one of three once-weekly TransCon hGH doses (0.14, 0.21 and 0.30 mg hGH/kg/week) or daily hGH (0.03 mg hGH/kg/day = 0.21 mg/kg/week) over a six-month treatment period, in a randomized, comparator-controlled Phase 2 study. The patients' GHD diagnosis was established in accordance with international consensus guidelines, based on auxology (height & height velocity), GH stimulation tests & IGF-I. Children Small for Gestational Age (SGA), SHOX gene defect and other genetic growth disorders were excluded.
Results: Safety and efficacy (annualized height velocity), as well as PK and PD data of 53 GHD patients treated over a six-month period with TransCon hGH or daily hGH will be presented. All TransCon hGH doses demonstrated an excellent safety (comparable to daily hGH) and local tolerability profile (only mild and sporadic reactions comparable to daily hGH / no nodule formation and lypodystrophy) and an excellent growth within the expected ranges - mean annualized height velocities ranging between 11.9 cm to 13.9 cm for the different dose levels of TransCon hGH compared to 11.6 cm mean annualized height velocity for daily hGH treatment.
Conclusions: To date, TransCon hGH has demonstrated efficacy and safety comparable to that observed with daily hGH. Injection site reactions have generally been mild and similar to what is expected with daily hGH injections, with no nodule formation or lipoatrophy noted. The low immunogenicity, comparable to daily hGH treatments was confirmed. Hence, this TransCon hGH Phase 2 study

conducted in a pediatric population with GHD confirms the very good safety and efficacy profile of TransCon hGH, an hGH pro-drug, and forms the basis for Phase 3 development.
Disclosure: P. Chatelain, MD: Investigator, Ascendis PharmaM. Beckert, MD: Consultant, Ascendis Pharma A/SNothing to Disclose: O. Malievsky, MD, PhD, K. Radziuk, MD, G. Senatorova, MD, PhD, J. Skorodok, MD, M. O. Abdou, MD, PhD, V. Peterkova, MD, PhD, E. Vlachopapadopoulou, MD, PhD.