A Phase IIb study to Evaluate the Safety, Tolerability, Pharmacokinetic and Pharmacodynamic Profile of ARX201 Following Repeated Dosing to Young Adult Patients with Childhood Onset Growth Hormone Deficiency

Safety Follow-up for Female Patients

Sponsor:	Ambrx, Inc.
Coordinating Investigator	Prof. Karoly RÁCZ, MD PhD
Sponsor's Medical Officer	Douglas W. AXELROD, MD PhD
Study/Protocol No.:	PRO-ARX201-701
Study Medication Name:	ARX201 (a modified human recombinant growth hormone conjugated to a 30,000 Dalton linear poly(ethylene) glycol)
Development Phase:	Phase IIb
Indication:	Childhood Onset Growth Hormone Deficiency
Date of First Enrollment:	30-June-2009
Date Last Patient Completed:	30-March-2010
Date of Report:	30-August-2010

The study was conducted according to the protocol and in compliance with Good Clinical Practice (GCP) and other applicable regulatory requirements.

2. CLINICAL STUDY SYNOPSIS

Name of Company: Ambrx, Inc. **Name of Finished Product:** ARX201 **Name of Active Ingredient(s):** pegylated human recombinant growth hormone	**Individual Study Table Referring to Part of the Dossier** **Volume:** **Page:**	**(For national authority use only)**

Title of Study: A Phase IIb study to Evaluate the Safety, Tolerability, Pharmacokinetic and Pharmacodynamic Profile of ARX201 Following Repeated Dosing to Young Adult Patients with Childhood Onset Growth Hormone Deficiency (GHD) - Safety Follow-up for Female Patients

Protocol Number: PRO-ARX201-701

Study Period:
Date of first enrollment: 30-June-2009
Date last patient completed: 30-March-2010

Phase of Development: Phase IIb

Investigator(s): Three Investigators in 3 countries.

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Publication(s): None.

Objectives: The primary objective of this 12-month Safety Follow-up was to evaluate the safety of ARX201 following repeated dosing in young adult females with childhood onset GHD.

Study Design: Multicenter, 12-month, observational study in female patients who completed treatment with 12 to 24 doses of ARX201 administered weekly. This report is a supplement to the report for the primary study which described the period of treatment with ARX201.

Number of Patients (planned and analyzed): 12 patients were enrolled in the Safety Follow-up; 10 patients completed the study and 2 patients discontinued.

Diagnosis and Main Criteria for Inclusion: Female patients who participated in PRO-ARX201-701 were eligible for the Safety Follow-up portion of the study. All female patients who participated in the main PRO-ARX210-701 study consented and were enrolled in the safety follow-up.

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Test Product, Dose and Mode of Administration, and Lot Number(s): Not applicable		
Reference Therapy, Dose and Mode of Administration, and Lot Number(s): Not applicable		
Duration of Treatment: Not applicable		
Criteria for Evaluation: The following safety criteria were evaluated during the safety follow-up period: Breast imaging with mammography, sonography, or magnetic resonance imaging (MRI), adverse events (AEs), parameters of glucose metabolism (fasting insulin level, fasting glucose level, haemoglobin A1C (HbA1c) levels), immunogenicity (Anti- Human growth hormone (hGH) antibodies), Insulin-like growth factor-I (IGF-I) levels, status of other hormonal axes: estradiol, thyroid hormones (free T4, T3 and thyroid stimulating hormone (TSH)), cortisol and prolactin levels, other safety laboratory parameters, including serum chemistry profile, hematology, physical examinations, vital signs, and fundoscopy.		
Pharmacokinetic Assessments: Not applicable		
Statistical Methods: Analyses are descriptive and based upon descriptive summary statistics.		
Safety Results: Breast imaging examinations revealed occasional clinically insignificant findings which remained stable throughout the study. No AEs were reported and laboratory evaluations, physical examinations, and fundoscopy findings were unremarkable.		
Efficacy Results: Not applicable		
Pharmacokinetics Results: Not applicable		
Conclusions: There was no indication that treatment with ARX201 for up to 6 months in female patients caused emergent or longer-term AEs. Findings from the Safety Follow-up period were consistent with the re-evaluation of the pre-clinical data, as well as the clinical data obtained from the previous first-in-man study (study PRO-ARX201-601).		
Date of Report:30-August-2010		