INTRODUCTION

- The easyPod™ auto-injector device is designed to make daily administration of recombinant human growth hormone (r-hGH) comfortable and easier to patients.
- EasyPod™ device delivers pre-set doses of r-hGH (Saizen®) and stores a digital record of adherence to therapy that can be shared with healthcare providers for evaluation.
- The easyPod™ auto-injector device is designed to make daily administration of recombinant human growth hormone (r-hGH) comfortable and easier to patients by delivering pre-set doses of r-hGH (Saizen®).
- Furthermore, easyPod™ is integrated into an e-Health ecosystem for management of growth disorders treated with Saizen (r-hGH) available to healthcare professionals through a secure web solution.

OBJECTIVES

- To assess adherence to r-hGH therapy delivered via the easyPod™ device in easyPod™-naïve patients according to the approved pediatric indications for Saizen® in Mexico: growth hormone deficiency (GHD) or born small for gestational age (SGA).
- To evaluate the association of therapy adherence with growth outcomes.

METHODS

Study Design

- ECOS (NCT01555528) is a multicenter (24 countries), 5-year, longitudinal, observational study, which aims to evaluate country-specific adherence to r-hGH therapy prescribed via the easyPod™ electronic manual auto-injector device.
- Herein we present the subanalysis for the Mexican population included in ECOS.

Endpoints

- The primary endpoint was the recorded adherence at yearly intervals.
- Secondary endpoints were height velocity, height velocity standard deviation scores (SDS), height SDS, as well as GHD-1 concentrations after each year of treatment.

Variables

- Demographic, anthropologic and diagnostic data were obtained from medical notes, with adherence data obtained directly from the patients' easyPod™ records.
- Adherence was determined as the percentage adherence over time (number of days with injections received divided by the number of days with injections planned).

Data Analysis

- Correlations between adherence and growth outcomes were calculated using Spearman’s product-moment correlation.
- A statistically significant correlation of 0.004 was observed with change in height (p<0.0003), change in height SDS (p=0.0023), height velocity (p=0.0338), and height velocity SDS (p=0.0267) (Table 3).

RESULTS

- The Complete Analysis Set included 148 Mexican patients (mean age: 9.96±3.41 years, 56.8% male, mean height at baseline 124.88±18.95 cm): 118 with GHD, 24 SGA, 5 with Turner Syndrome (TS) and 1 other (missing) (Table 1). A total of 105 (71.4%) patients were also GH-naïve.
- Overall median adherence was 90% over the first year of treatment and ~90% over 4 years (Figure 1).
- Adherence was not different by r-hGH indication (Figure 2).
- Both median and mean adherence were maintained above 80% over three years (Figure 2).
- At 1-year follow-up, mean change in height was 8.78±2.20 cm, whereas mean height velocity was 8.80±1.94 cm per year. In all, 84.7% patients had normal IGF-1 concentrations at 1-year follow-up (Table 2).

- Statistically significant correlations were observed with change in height (p=0.0003), change in height SDS (p=0.0023), height velocity (p=0.0338), and height velocity SDS (p=0.0267) (Table 3).

- Adherence rates with the easyPod™ device are for personal use only and may not be reproduced without written permission of the authors. GET POSTER PDF

CONCLUSIONS

- ECOS has produced robust, real-time adherence data in patients receiving Saizen® via easyPod™ and provided useful insights into growth response to Saizen® treatment.
- Adherence rates with the easyPod™ device are high and maintained over time in GHD and SGA easyPod™-naïve Mexican patients.
- The positive correlations between adherence and growth outcomes suggest an influence of adherence on treatment outcomes.

REFERENCES


DISCLOSURES

The authors declare no conflicts of interest.