**INTRODUCTION**

- Poor adherence to long-term treatment with growth hormone (GH) is known to affect final growth and other clinical outcomes.
- Real-world adherence to GH treatment has always been difficult to monitor and is usually assessed by proxy methods, such as patient testimony or prescription records.
- The easyPod™ injection device allows automatic recording and transmission of adherence data from patients receiving recombinant human growth hormone (r-hGH; Saizen) to treat growth disorders.
- Through the easyPod connect ecosystem, healthcare professionals can access transmitted data and gain insights into adherence patterns.
- An observational study using easyPod connect (ECOS) has shown that most patients maintained an adherence rate of >80% over 3 years of easyPod use.
- A previous analysis in a real-world setting, conducted exclusively on Latin American (LATAM) patients using easyPod connect, has shown that most patients maintain high adherence, with girls and younger patients being the most adherent.

**OBJECTIVES**

- This analysis aimed to evaluate real-world adherence to r-hGH therapy administered via easyPod at 1, 3, 6, 12 and 24 months, plus overall data at 48 months in LATAM children, and assess the effects of age, sex, and engagement with treatment on adherence.

**METHODS**

- This was an exploratory cross-sectional descriptive analysis study.
- Records from 4,530 children transmitting data to the easyPod connect in nine LATAM countries were analyzed (Figure 1).
- The period of recorded data varied according to the length of each individual's treatment.
- Only children with at least 10 injections registered on easyPod were analyzed, to exclude test/training injections.
- Adherence was assessed at Month 24 (1, 3, 6, 12, 24 months) and overall at Month 48.
- Adherence was calculated as mg of GH injected vs. mg prescribed (dosage and frequency as per easyPod settings defined by healthcare professional) and categorized as high (>85%), intermediate (<65–85%) or low (<55%).
- Adherence was categorized according to sex and nominal puberty status, with age cutoffs at 10 years for girls and 12 years for boys.
- Adherence was recorded for the cross section of children/caregivers transmitting data at each time point and no imputation was made for missing data or withdrawal.
- For each adherence cohort, the mean number of transmissions was used as a measure of engagement in disease management.

**RESULTS**

**Patient Demographic**

- Data were downloaded on 15th February 2019; overall, 4,459 patients transmitted data for >10 injections.

**Data Transmissions According to Adherence rates**

- Children in the high- and intermediate adherence categories had the highest mean number of data transmissions (51 [SD 9.8] and 43.9 [SD 9.4] respectively) compared with the low adherence category (25.5 [5.5], Table 1).

**DISCUSSION**

- Real-world evidence from the easyPod connect system suggested that high adherence was seen in children using easyPod.
- The LATAM data were consistent with the global real-world evidence.
- The adherence rate varied from child to child, and not all data were available for all patients.
- No conclusions can be drawn about the adherence trends over time of individual children due to the cross-sectional nature of the study.

**REFERENCES**


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