INTRODUCTION

The first-generation, sst, preferential somatostatin analogues octreotide LAR and lanreotide Autogel are the current standard of medical management in acromegaly. However, various studies have shown that many patients remain inadequately controlled despite receiving these somatostatin analogues. As such, there remains an unmet medical need for a new treatment option in patients who are inadequately controlled on currently available therapies.

Somatostatin analogues (SSAs) are a group of drugs that are used to control the secretion of various hormones, including growth hormone (GH) and insulin-like growth factor 1 (IGF-1), which are often elevated in patients with acromegaly. These drugs work by blocking the receptors for these hormones in the hypothalamus and pituitary gland, thereby reducing their production and release.

METHODS

Patients

- Male and female patients aged ≥18 years with inadequately controlled acromegaly
- Defined as mean growth hormone (GH) levels >2.5 μg/L and IGF-1 levels >1.25 x upper normal limit for age and sex
- All patients received octreotide LAR 30 mg or lanreotide Autogel 120 mg monotherapy for 6 months before screening.

Study Design and Endpoints

- Prospective, 24-week, multicentre, randomised, parallel-group study
- Patients randomized to: double-blind pasireotide LAR 40 mg/28 days or 60 mg/28 days, or continued treatment with open-label octreotide LAR or lanreotide Autogel (active control)
- The primary endpoint was biochemical control (mean GH <2.5 μg/L and mean IGF-1 <2.5 x upper normal limit) at 24 weeks.
- Key secondary endpoints: proportion of patients achieving normalized GH and IGF-1 levels at 24 weeks.

RESULTS

Patient Population

- Overall, 198 patients were randomized to pasireotide LAR 40 mg (n=68), pasireotide LAR 60 mg (n=66) and active control (n=64).
- Six randomized patients (n=2, and 2, respectively) did not receive treatment because of administrative issues (n=3), consent withdrawal (n=1) and protocol violation (n=1).
- One additional patient (pasireotide LAR 60 mg) was treated but did not have any post-baseline assessments.
- 59 (30.8%), 57 (29.7%) and 65 (38.6%) patients completed the 24-week study, respectively.
- Patient demographics, characteristics and disease history at baseline were generally similar across treatment groups (Table 1).

Safety and Tolerability of Pasireotide

- Overall, 58 (92.1%), 53 (85.5%) and 49 (74.2%) patients in the pasireotide LAR 40 mg, 60 mg and active control groups experienced at least one adverse event (AE).
- The most common AEs were shown in Table 2.

Safety and Tolerability of Pasireotide in Acromegaly

- Pasireotide LAR 40 mg was well tolerated; the safety profile was similar to that observed in the active control group, except for a higher frequency and degree of hyperglycaemia.
- Pasireotide LAR 60 mg was generally well tolerated, with an acceptable safety profile.

Efficacy

- PASIREE LAR study met its primary and key secondary endpoints, demonstrating that pasireotide LAR 40 mg and 60 mg can provide superior efficacy over continued treatment with octreotide LAR 30 mg or lanreotide Autogel 120 mg in patients with inadequately controlled acromegaly.
- Pasireotide LAR was well tolerated; the safety profile was generally similar to that observed in the active control group, except for a higher frequency and degree of hyperglycaemia.
- Pasireotide LAR could become the new standard of care for the management of acromegaly, with an additional, inadequately controlled by first-generation somatostatin analogues.