Acromegaly is a rare, slowly progressive, acquired disorder resulting from excessive growth hormone (GH) production.1,3 About half of acromegaly patients require treatment after surgery. If treatment goals are not met, multiple modalities or medications may be required. Guidelines regarding treatment sequencing are vague, and little is known about the frequency and sequencing of existing drug treatments.

**OBJECTIVE**

- To use recent claims data to characterize 1st, 2nd, and 3rd line drug treatments for acromegaly, including duration of treatment and patterns of switching.

**METHODS**

**Study Design and Data Source**

Retrospective cohort study using Truven Health Analytics MarketScan® and IMS Health Pharmetrics. Study Timetable and Population

**Timeframe:** 1/1/2002 to 12/31/2010

**Pharmacologically Treated Patients**

- 22 medical claims with acromegaly (ICD-9-CM code 253.0) in the study timeframe; AND
- ≥1 claim of pharmacologic treatment in the study timeframe; AND
- Continuously enrolled for at least 6 months prior to the first observed treatment date

**Key Definitions**

- Course of pharmacologic treatment: period from first to last treatment claim
- Combination treatment: ≥2 medications with overlap of ≥90 days

**RESULTS**

- 1,758 patients in study cohort; mean age 46.7 years; 50% female
- Between 19 and 145 patients per year were newly treated with a pharmacologic agent (total of 740 patients)
- Somatostatin analogues (SSA) were the most common class of 1st line therapies (59%)
- Octreotide LAR was most common drug (31.2%)
- No combinations used in 1st line therapy
- Pegvisomant and octreotide LAR had the longest duration of use among 1st line therapies
- Patients on 1st line long-acting SSA switched to combination therapy more often than pegvisomant
- Among 503 2nd line patients during 2008-2010, SSA (50%) and drug combinations (20%) were used most frequently
- SSA used in 88.9% of combination therapies
- Most common 2nd line combination was octreotide LAR + cabergoline (29.3%)
- Among 209 3rd line patients during 2008-2010, SSA (51%) and DA (18%) were used most frequently
- SSA used in 85.3% of combination therapies
- Most common 3rd line combination was again octreotide LAR + cabergoline (25.3%)

**LIMITATIONS**

- The study included primarily commercially insured patients, excluding others such as patients in clinical trials, veterans, and the uninsured.
- Claims databases lack biochemical parameters.
- No single patient group was followed consistently through all treatment lines.
- The study had small sample sizes for most individual treatment patterns.

**REFERENCES**

5. ICE-EDDC 2016-2016, June 21, 2016, Chicago, IL, USA.

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