Background

- Obesity is a major public health concern affecting 40% of adults and is associated with $147 billion in medical costs in the United States.
- Despite the availability of pharmacotherapy options to augment diet and exercise lifestyle interventions, evidence of low adoption of anti-obesity medications (AOM) exists.

Objective

- To characterize the utilization patterns and treatment duration of Anti-Obesity Medications (AOM) approved for use in adults included in the U.S. FDA’s Sentinel System.

Methods

Data Source:

- Sentinel Distributed Database (SDD)
- Consists of claims data from a distributed network of 18 Data Partners, (generally commercial insurers, but Medicare contributed fee for service enrollee data)

Study Design and Analysis:

- Descriptive Drug Utilization Analysis
- Time Period: 2008-2017
- Selected medications: 9 AOMs
- Long Term AOM: No limit in Duration of use according to the AOM label (lorcaserin, bupropion/naltrexone, liraglutide, phentermine/topiramate, orlistat)
- Short Term AOM: Limit in duration of use ≤12 weeks according to the AOM label (phentermine, benzphetamine, diethylpropion, phendimetrazine)

We conducted a descriptive drug utilization analysis in adults ≥18 years initiating AOMs in 17 Sentinel Data Partners from 2008-2017.
- We characterized new users (first dispensing in 183 days) of any AOM and individual AOMs.
- Baseline patient characteristics, including Body Mass Index (BMI) and cardiovascular history were described in the 183 days prior to first dispensing.
- Treatment duration was depicted with Kaplan Meier survivor curves; persistence was assessed primarily allowing for a 60 day gap between dispensings to account for inconsistent medication use.

Results

- We identified 267,836 AOM new users, predominately female (82%) and less than 65 years of age (92%) (Figure 2).
- Only 50% of AOM users had a diagnostic code for obesity and only 14% had one for BMI; among AOM users with a BMI diagnosis code, 87% had a BMI ≥30 (obese).
- Hypertension (30%) and hyperlipidemia (28%) were the most common comorbidities among AOM users. However, ischemic heart disease (2.6%) was not common.
- Phentermine (n=198,203) was the most common AOM, followed by bupropion/naltrexone (n=29,106).
- Across AOM, duration of use was generally short (median, 62 days); at 1 month, 59% of AOM users remained on treatment and persistence declined substantially thereafter (2 months:51%, 3 months:37%). After 6 months, 17% of AOM users were still on treatment (Figures 3 & 4).

Conclusion

- The most commonly used AOM was phentermine, followed by bupropion/naltrexone. Most AOM users were female and <65 years of age. Overall, in the majority of AOM users, treatment duration was short.

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Disclaimer

- The authors have no conflicts of interest to disclose.
- The opinions expressed in this poster are those of the authors and not necessarily of the U.S. FDA.

Footnotes:

1. Food and Drug Administration, Silver Spring, MD, USA, 2 Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA

Figure 1. Obesity Drugs study diagram

Figure 2. Number of New users by Year

Figure 3. Duration of First Treatment Episodes- in Days

Figure 4. Drug Persistence Survival Curve for Length of First Episode