Abstract

Use of Monoclonal Antibodies for Asthma in the United States, 2003-2019

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Results

**Characteristics of Patients with Asthma Treatment Visits in 2019**

<table>
<thead>
<tr>
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<th>Biologic</th>
<th>No Biologic</th>
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<tbody>
<tr>
<td>N</td>
<td>205,690</td>
<td>11,214,530</td>
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**Age category, n (%)**

- 6-19: 12,938 (0.5) vs 282,332 (99.5)
- 20-39: 70,847 (2.5) vs 2,761,864 (97.5)
- 40-59: 74,739 (2.1) vs 3,402,937 (97.9)
- 60-74: 26,388 (1.5) vs 1,676,563 (98.5)
- >75: 20,778 (3.6) vs 549,934 (96.4)

**Female, n (%)**

- White: 125,326 (1.7) vs 7,163,818 (98.3)
- Black: 26,462 (1.4) vs 1,897,232 (98.6)
- Asian: 17,059 (2.2) vs 769,642 (97.8)
- Hispanic: 33,393 (2.8) vs 1,163,198 (97.2)

**Insurance type, n (%)**

- Public: 123,203 (1.9) vs 6,477,295 (98.1)
- Private: 63,476 (2.1) vs 2,984,361 (97.9)
- Other: 19,011 (1.5) vs 1,275,640 (98.5)
- No insurance/unspecified: 0 vs 477,234 (100)

**Physician Specialty, n (%)**

- Allergy/Immunology: 94,688 (6.0) vs 1,488,574 (94.0)
- Pulmonology: 60,710 (3.3) vs 1,768,206 (96.7)
- Other specialties: 502,982 (0.6) vs 795,805 (99.4)

**Region, n (%)**

- East: 81,414 (3.3) vs 2,405,510 (96.7)
- Midwest: 28,162 (1.2) vs 2,263,376 (98.8)
- South: 59,506 (1.8) vs 3,277,952 (98.2)
- West: 36,608 (1.1) vs 3,267,792 (98.9)

DIFFERING TRENDS ACROSS SUBGROUPS

- Trends stable/decreasing in whites but increasing across other racial and ethnic groups.
- Use highest in East and South which have higher disease severity. However, decreasing in the West.

CONCLUSIONS

- About 1 in 100 asthma-related visits are associated with mAb use.
- Since 2016, total biologic use, which had plateaued between 2006 and 2014, has been steadily increasing, with omalizumab-related visits decreasing.
- Omalizumab remains the most commonly used biologic.
- Trends in biologic use appear to differ by race/ethnicity, and region, and not explained by racial or regional trends in asthma prevalence.
- Further studies are needed to explore these patterns of use.

REFERENCES