

Real-World Effectiveness of Omalizumab in Patients Treated for Chronic Spontaneous Urticaria

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Conclusion

Omalizumab use was associated with significantly greater reduction in days of OCS use compared with other CSU medications, indicating the real-world effectiveness of omalizumab in patients with inadequate control of CSU symptoms. Better adherence to treatment guidelines of omalizumab initiation^{3,4} would likely reduce OCS use and potential OCS-related side effects⁷ in patients with CSU.

Methods

- A retrospective analysis of insurance claims from the Merative™ MarketScan® commercial claims database (2017–2021) was conducted, which provided deidentified, longitudinal, and patient level information in the context of the United States health care system.
 - We identified patients with CSU (≥12 years of age) who were already treated with 1 class of CSU medication, and indexed these patients at the point where they initiated a new class of CSU medication (grouped into omalizumab and non-omalizumab users).
 - All patients were continuously enrolled during the 1-year pre-index and 1-year post-index period.
 - All patients had a claim for CSU medication other than their index drug and ≥1 acute (≤10 days' supply) OCS fill during the 1-year pre-index period.
- The 1-year post-index days of OCS supply were examined using a difference-in-difference comparison ([post-index OCS minus pre-index OCS in omalizumab users] minus [post-index OCS minus pre-index OCS in non-omalizumab users]).
- Linear regression models were conducted to control for pre-index differences in age, sex, region, Charlson Comorbidity Index, number of CSU medication classes used, days from CSU diagnosis to the index date, and days of OCS supply.

Introduction

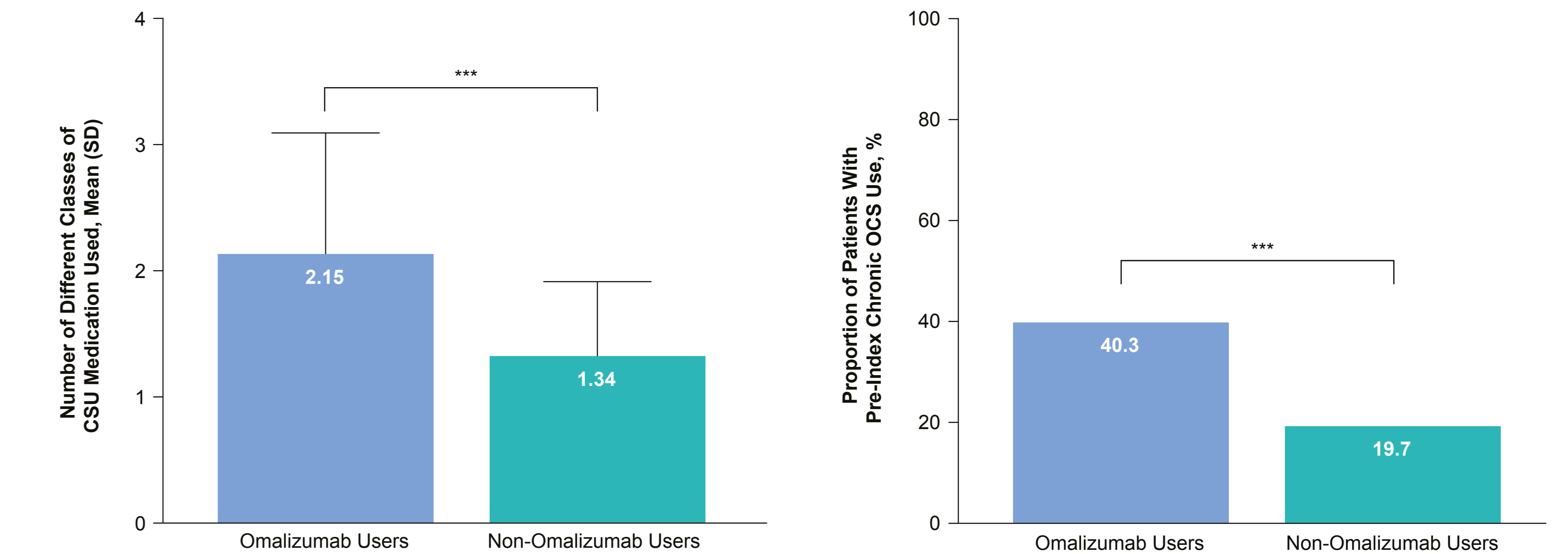
Omalizumab is approved for patients with chronic spontaneous urticaria (CSU)¹ who remain symptomatic despite H1 antihistamine treatment; however, patients may be undertreated,² and not all physicians follow recommended guidelines,^{3–5} which may lead to suboptimal management.⁶ Patients with uncontrolled CSU symptoms may use oral corticosteroids (OCS); however, chronic OCS use is not recommended,^{3,4} as it is associated with potential adverse effects.⁷ Our aim was to identify the real-world effectiveness of omalizumab in reducing OCS use in patients with CSU.

Patient characteristics were similar for both omalizumab and non-omalizumab users. Before index, more omalizumab users were treated by an allergist than non-omalizumab users

Characteristic	Omalizumab Users n=700	Non-Omalizumab Users n=1,116
Age, mean (SD)	43.2 (13.6)	43.1 (14.6)
Female, n (%)	535 (76.4)	837 (75.0)
Charlson Comorbidity Index, mean (SD)	0.59 (0.99)	0.61 (1.17)
Number of chronic conditions,* mean (SD)	4.27 (2.56)	3.84 (2.40)
Index CSU medication class, n (%)		
Omalizumab	700 (100.0)	0
First-generation H1 antihistamines	0	294 (26.3)
H2 antagonists	0	246 (22.0)
Leukotriene modifiers	0	334 (29.9)
Second-generation H1 antihistamines	0	140 (12.5)
Immunosuppressants/modulators	0	92 (8.2)
Cyclosporine	0	10 (0.9)
Pre-index consulting physician, n (%)		
Allergist	221 (31.6)	101 (9.1)
Dermatologist	42 (6.0)	77 (6.9)
Consulting physician at time of index, n (%)		
Allergist	309 (44.1)	401 (35.9)
Dermatologist	20 (2.9)	69 (6.2)

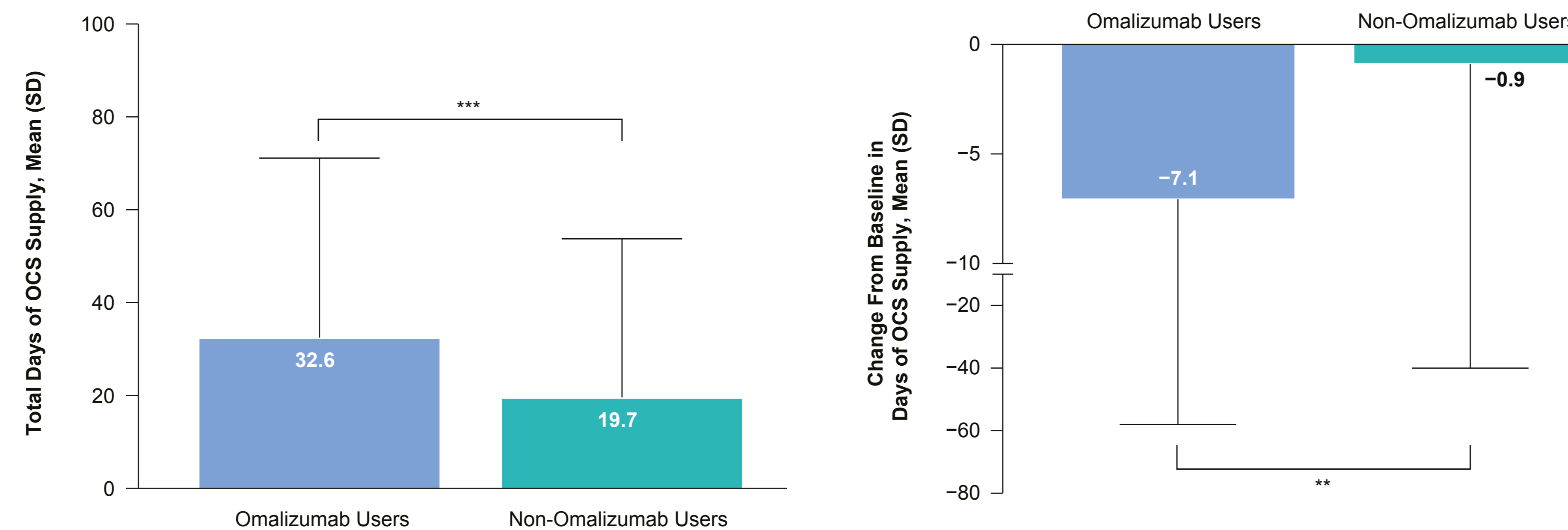
CSU, chronic spontaneous urticaria.
*Healthcare Cost and Utilization Project.

Before index, omalizumab users had tried more CSU medication classes and had more chronic OCS use than non-omalizumab users



CSU, chronic spontaneous urticaria; OCS, oral corticosteroid.
Chronic OCS use was defined as the presence of a drug claim(s) with consecutive days' supply of >10 days.
***P<0.001.

Before index, omalizumab users had more days of OCS than non-omalizumab users. At 1-year post-index, days of OCS use were significantly reduced from baseline in omalizumab users compared with non-omalizumab users



OCS, oral corticosteroid.
Unadjusted change from baseline.
**P=0.007.
***P<0.001.

OCS, oral corticosteroid.

At 1-year post-index, adjusting for baseline differences, omalizumab users had an estimated 5.2-day greater reduction in days of OCS use from baseline compared with non-omalizumab users

Omalizumab users had a greater reduction* in OCS use compared with non-omalizumab users

5.2 days

*Estimated greater reduction of 5.2 days (95% CI, 0.5–9.9; P=0.030) as determined using a linear regression model.

Key Findings

Before index, omalizumab users had tried more CSU medication classes, had more chronic OCS use, and used more days of OCS compared with non-omalizumab users. At 1-year post-index, omalizumab users had a significantly greater reduction in days of OCS used compared with non-omalizumab users.

Disclosures

VG, AS, MH: employees of Genentech, Inc.; stockholders in Roche. MSB, EC, MHT: employees of PHAR (Partnership for Health Analytic Research), a health services research company paid by Genentech, Inc. to conduct the research described in this poster. GM: current research grant support from GlaxoSmithKline, Novartis, Sanofi-Regeneron, and Teva; consulting fees from Chiesi, Genentech, Inc., Novartis, Sanofi-Regeneron, and Teva; past research grant support from Alk-Abelló, Genentech, Inc., and Teva.

Acknowledgments

This analysis was funded by Genentech, Inc., a member of the Roche Group. Medical writing assistance was provided by Nilisha Fernando, PhD, of Envision Pharma Group, and funded by Genentech, Inc., a member of the Roche Group.

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