P1034 HEALTHCARE UTILIZATION OF PATIENTS WITH HYPEREOSINOPHILIC SYNDROME IN EUROPE

Topic: 16. Myeloproliferative neoplasms - Clinical

Jeremiah Hwee¹, Namhee Kwon², Rafael Alfonso-Cristancho³, Lee Baylis⁴, Gema Requena⁵, Shawn Du⁶, Anamika Khanal⁶, Lynn Huynh⁶, Mei Sheng Duh⁶, Rupert W. Jakes⁵

¹ Value Evidence & Outcomes, GSK, Mississauga, ON, Canada; ² Respiratory Research & Development, GSK, Brentford, Middlesex, United Kingdom; ³ Value Evidence & Outcomes, GSK, Collegeville, PA, United States of America, United States; ⁴ Global Medical Affairs, GSK, Durham, NC, United States; ⁵ Epidemiology, GSK, London, United Kingdom; ⁶ Analysis Group, Inc., Boston, MA, United States

Background: Hypereosinophilic syndrome (HES) is a rare group of blood disorders characterized by prolonged eosinophilia that can lead to tissue and organ damage. HES was previously considered to be largely idiopathic, but myeloid and lymphocytic variants are also now recognized. The disease may manifest in multiple organ systems, most commonly the heart, nervous system, gastrointestinal tract, skin, and lungs, due to eosinophilic infiltration. Treatment aims to reduce eosinophil counts, and the current standard of care consists of high-dose glucocorticosteroids, despite the risks associated with high doses or long exposure, and antineoplastic agents for those with more severe disease or who do not respond to steroids. Healthcare resource utilization (HCRU) in patients with HES is not well characterized, and data from clinical trials may not be representative of the general disease population encountered in real-world settings.

Aims: To describe HES-related HCRU among a real-world cohort of patients with a confirmed diagnosis of HES in Europe.

Methods: This retrospective chart review study included patients ≥6 years old with a confirmed diagnosis of HES and ≥1 year of follow-up data from index (first physician encounter: Jan 2015–Dec 2019). Chart review was conducted by physicians in 5 European countries (France, Germany, Italy, Spain, and the United Kingdom [UK]). Data from a similar number of patients were reviewed and included across each country. HES-related hospitalizations and outpatient and emergency room (ER) visits were assessed and reported descriptively across all patients and separately by country.

Results: Of the 280 patients included, the majority were male (65.0%) and had idiopathic HES (55.4%); patients had a mean (standard deviation [SD]) age at HES diagnosis of 42.4 (16.2) years. The most common comorbidity was asthma (45.0%). The mean disease duration was 4.0 (4.5) years, and the mean length of follow-up was 2.8 (1.4) years. Overall, 85 (30.4%) patients had ≥1 HES-related hospitalization. For patients with a HES-related hospitalization, the mean (SD) length of stay (LoS) was 11.0 (9.4) days. HES-related ER visits were reported for 72 (25.7%) patients, and HES-related outpatient visits were reported for 243 (86.8%) patients. Patients had a mean of 0.4 (1.2) hospitalizations, 0.3 (0.8) ER visits, and 4.3 (4.9) outpatient visits (of which 1.0 [3.3] were unscheduled outpatient visits) per year (Table). HCRU varied between countries. The proportion of patients requiring hospitalization was highest in the UK (43.5%) and lowest in Spain (11.5%). Mean (SD) days of LoS during a HES-related hospitalization was highest in Spain (15.3 [4.2]) and lowest in the UK (9.9 [11.0]) and France (9.9 [7.3]). The proportion of patients with outpatient visits was highest in France (93.4%) and lowest in Italy (78.8%). The proportion of patients with ER visits was highest in the UK (37.1%) and lowest in Italy (13.5%).

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Summary/Conclusion: These results demonstrate that real-world patients with HES have substantial HCRU, including lengthy hospitalizations, ER visits, and outpatient visits, which is higher than that reported in previous clinical trials for control (placebo-treated) patients with eosinophilic diseases such as EGPA and severe eosinophilic asthma. These observations highlight the need for novel approaches to treatment to relieve the disease-related burden of HES for patients and to ameliorate the associated HCRU burden.

| HCRU | Overall | France | Germany | Italy | Spain | UK |
|------|---------|--------|---------|-------|-------|----|
|      | N=280   | n=61   | n=53    | n=52  | n=52  | n=62|
| HES-related visits |          |        |         |       |       |     |
| Hospitalizations, n (%) | 85 (30.4) | 23 (32.8) | 25 (28.3) | 17 (32.7) | 6 (11.5) | 27 (43.5) |
| Mean (SD) LoS, days | 13.0 (9.4) | 9.9 (7.3) | 12.3 (15.1) | 11.5 (5.9) | 15.3 (4.2) | 9.9 (11.0) |
| ER visits, n (%) | 72 (25.7) | 18 (29.9) | 11 (20.8) | 7 (13.5) | 13 (25.6) | 23 (37.4) |
| Outpatient visits, n (%) | 243 (86.8) | 57 (85.4) | 43 (81.1) | 41 (78.8) | 47 (90.4) | 55 (88.7) |
| HES-related visits per person per year, mean (SD) |          |        |         |       |       |     |
| Hospitalizations | 0.4 (1.2) | 0.4 (1.3) | 0.6 (1.9) | 0.3 (0.6) | 0.1 (0.2) | 0.5 (1.0) |
| ER visits | 0.3 (0.8) | 0.5 (1.2) | 0.2 (0.5) | 0.2 (0.6) | 0.2 (0.4) | 0.4 (0.7) |
| Outpatient visits | 4.8 (4.9) | 5.8 (5.2) | 5.6 (8.0) | 6.2 (3.0) | 5.3 (4.9) | 3.8 (3.5) |

ER, emergency room; HCRU, healthcare resource utilization; HES, hypereosinophilic syndrome; LoS, length of stay; SD, standard deviation.