EE405

Residual Burden in Adalimumab-Treated Patients with Hidradenitis Suppurativa

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Objective

To assess the residual disease burden in adalimumab-treated patients with hidradenitis suppurativa (HS).

Background

- From 2015 until 2023, adalimumab was the only approved biologic for patients with moderate to severe hidradenitis suppurativa (HS).[1,2]
- Some patients may not respond to biologic treatment, or lose treatment response over time, requiring additional care and/or treatments for their HS.[1]
- We therefore assessed changes in healthcare resource utilization (HCRU) in patients with HS after initiating adalimumab treatment.

Methods

- This observational cohort study used Merative MarketScan® Commercial, Medicare, and Multi-State Medicaid claims databases.
- Adult patients with HS were included if they were new, adalimumab users (treatment started between September 2015 and December 2018), and had continuous insurance enrollment ≥1 year prior to adalimumab initiation (baseline period).
- Patients were followed until adalimumab discontinuation (the day after the end of daily supply of the last pharmacy claim prior to a ≥90 days gap in therapy), or end of enrollment/data availability in the databases.
- During the baseline period and during adalimumab treatment, the following items were evaluated: the proportions of patients with HCRU events and the HCRU rate (claims/1,000 patient-years [kPY]).

Results

- Overall, 2,367 adult patients with HS started adalimumab treatment and were included in the analysis. Baseline characteristics are shown in **Table 1**.
- Of the included patients, 67% discontinued adalimumab before 1 year of treatment.
- During the baseline period, the proportion of patients who had at least one HCRU event was generally higher than during adalimumab treatment, though HCRU still remained (**Figure 1**). This included outpatient dermatology visits (before adalimumab: 62.7%, n=1,484; during adalimumab: 47.8%, n=1,131), surgical procedures (before adalimumab: 48.5%, n=1,148; during adalimumab: 35.1%, n=832), acute care (before adalimumab: 8.1%, n=192; during adalimumab: 4.4%, n=104), and inpatient visits (before adalimumab: 2.2%, n=52; during adalimumab: 1.4%, n=32).
- The following changes in HCRU rates during adalimumab treatment were observed (**Figure 2**):
  - Increases in HCRU rates were seen for outpatient dermatology visits: 404/kPY, antidepressant use: 165/kPY and neuropathic pain agents: 71/kPY.
  - Decreases in HCRU rates were seen for systemic antibiotics: –978/kPY, and both opioid and non-opioid analgesics: –258/kPY and –208/kPY.
- For some HCRU events, rates differed between insurance types (**Figure 3**).
  - ER/acute/urgent events decreased in Medicaid (–115.1/kPY)- versus Commercial/Medicare (37.8/kPY)-insured patients.
  - Neuropathic pain agent use increased in Medicaid (237/kPY)- versus Commercial/Medicare (1/kPY)-insured patients.
- Longer duration of adalimumab use resulted in larger HCRU rate changes, notably for systemic antibiotics, non-opioid analgesics, and inpatient visits:
  - With ≥1 year of treatment (n=784, 33.1%) outpatient claim rates decreased by –529/kPY and systemic antibiotic claim rates decreased by –1,667.1/kPY.
  - With ≥2 years of treatment (n=353, 14.9%) outpatient claim rates decreased by –851/kPY and systemic antibiotic claim rates decreased by –1,909/kPY.

Conclusions

Overall, some HS-related HCRU improvements could be identified during adalimumab treatment but, even with treatment, a substantial residual disease burden remained. Many patients discontinued treatment before 1 year, which highlights the need for other treatment alternatives with rapid response.

Graphical Summary

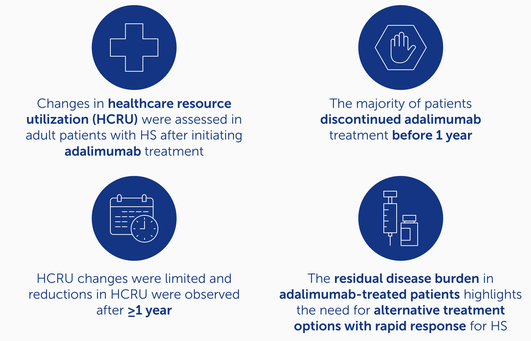
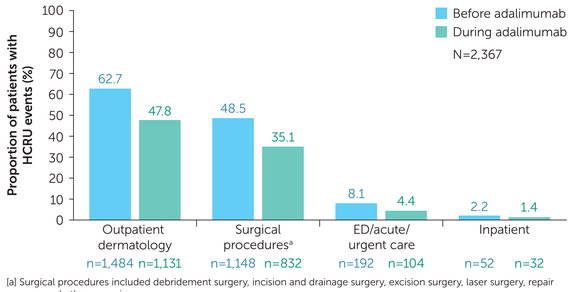


Table 1 Baseline characteristics

	Total N=2,367
Female, n (%)	1,811 (76.5)
Age, years, mean ± SD	36.7 ± 11.7
Insurance type, n (%)	
Commercial/Medicare	1,667 (70.4)
Medicaid	700 (29.6)
Adalimumab prescriber, n (%)	
N (% non-missing)	2,344 (99.0)
Acute inpatient/outpatient care[a]	269 (11.5)
Dermatology	779 (33.2)
Non-physician[b]	240 (10.2)
Obstetrics & Gynaecology	54 (2.3)
Primary care	200 (8.5)
Rheumatology	68 (2.9)
Surgeon	61 (2.6)
Other[c]	673 (28.4)
Overweight/Obese, n (%)	1,039 (43.9)
Psoriasis, n (%)	316 (13.4)
Psoriatic arthritis, n (%)	70 (3.0)
Rheumatoid arthritis, n (%)	173 (7.3)
Polycystic ovary syndrome, n (%)	161 (6.8)
Depression, n (%)	547 (23.1)
Anxiety, n (%)	568 (24.0)
Cardiovascular disease, n (%)	1,250 (52.8)

[a] Acute care was composed of: acute care hospital, urgent care facility, emergency medicine, critical care medicine, pediatric critical care medicine, pediatric emergency medicine, surgical critical care. [b] Non-physician was composed of: chiropractor/doctor of chiropractic medicine, dietitian, nursing services, psychiatric nurse, nurse practitioner, physician assistant, therapy (physical), therapists (alternative), psychologist, acupuncturist, home health organization/agency.
[c] Other was composed of: other provider, other specialists and undefined physician categories.

Figure 1 Proportion of patients with HCRU events



[a] Surgical procedures included debridement surgery, incision and drainage surgery, excision surgery, laser surgery, repair surgery, and other surgeries.

CI: confidence interval; **ER:** emergency room; **HCRU:** healthcare resource utilization; **HS:** hidradenitis suppurativa; **kPY:** 1,000 patient-years; **SD:** standard deviation.

Figure 2 Overall changes in HCRU

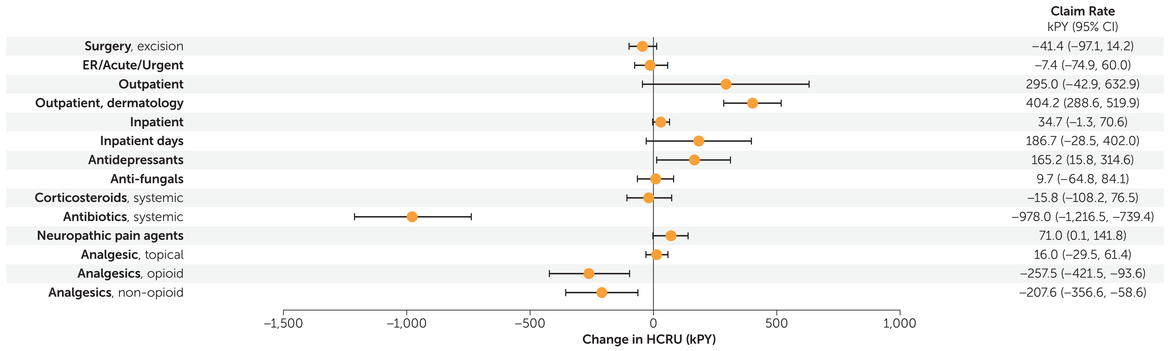
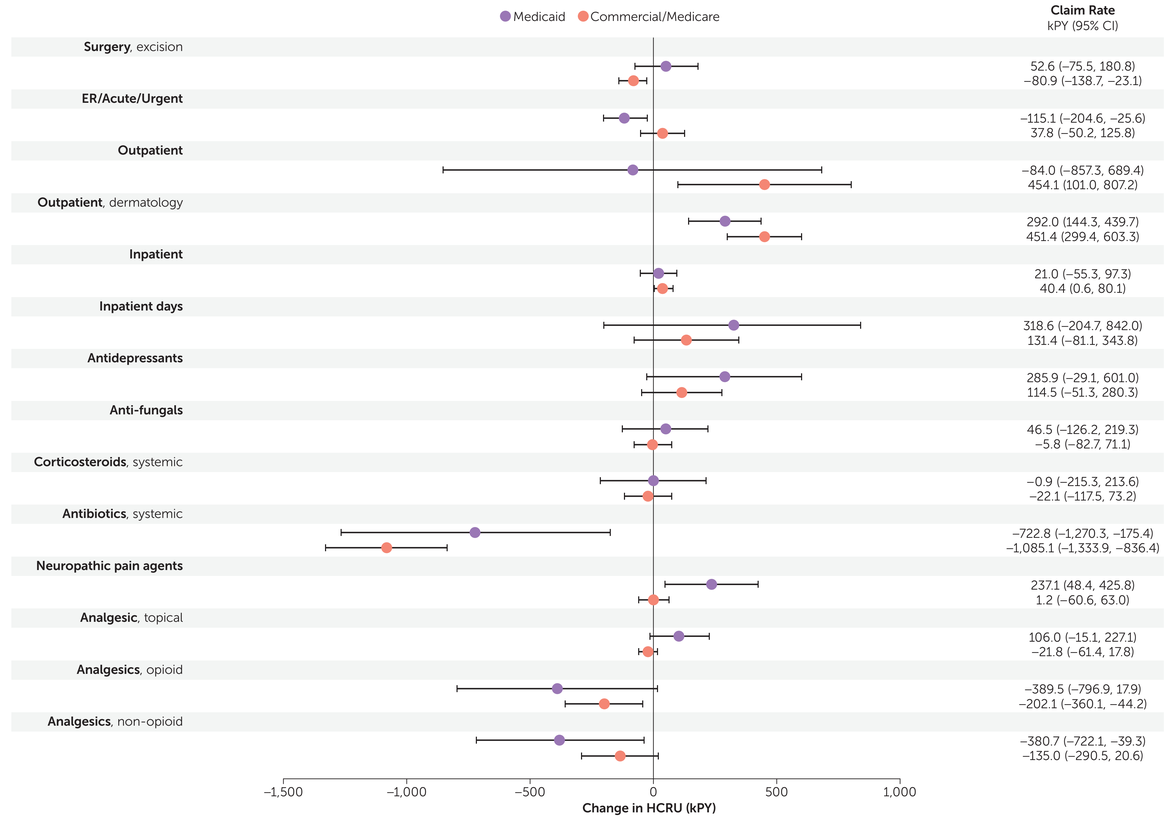


Figure 3 Overall changes in HCRU by insurance type



Institutions: [1]Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, MA, USA; [2]UCB Pharma, Brussels, Belgium; [3]UCB Pharma, Slough, UK; [4]UCB Pharma, Basel, Switzerland; [5]UCB Pharma, Smyrna, GA, USA; [6]Department of Dermatology, Stanford University School of Medicine, Stanford, CA, USA.

References: [1]Markota Čagalj A. Int J Mol Sci 2022;23:3753; [2]Novartis. Press release. Published online October 31, 2023. Accessed March, 2024 at: https://www.novartis.com/us-en/news/media-releases/fda-approves-novartis-cosentyx-first-new-biologic-treatment-option-hidradenitis-suppurativa-patients-nearly-decade. **Author Contributions:** Substantial contributions to study conception/design, or acquisition/analysis/interpretation of data: **ABK**, **TT**, **DF**, **AS**, **IP**, **TO**, **MAA**; Drafting of the publication, or reviewing it critically for important intellectual content: **ABK**, **TT**, **DF**, **AS**, **IP**, **TO**, **MAA**; Final approval of the publication: **ABK**, **TT**, **DF**, **AS**, **IP**, **TO**, **MAA**. **Author Disclosures: ABK:** Institution received grants from AbbVie, Admirx, AnaptysBio, Aristea, Bristol Myers Squibb, Eli Lilly, Incyte, Janssen, MoonLake Immunotherapeutics, Novartis, Pfizer, Prometheus, Sonoma Bio, and UCB Pharma; received consulting fees from AbbVie, Alumis, Bayer, Boehringer Ingelheim, Eli Lilly, Janssen, MoonLake Immunotherapeutics, Novartis, Pfizer, Provant, Sanofi, Sonoma Bio, Target RWE, UCB Pharma, Union, and Ventyx; serves on the board of directors of Almirall. **TT**, **AS**, **IP**, **TO:** Employees and shareholders of UCB Pharma. **DF:** Independent contractor for UCB Pharma. **MAA:** Consulting fees from AbbVie and Santa Ana Bio; advisory board for Novartis; research funding from UCB Pharma. **Acknowledgements:** This study was funded by UCB Pharma. The authors acknowledge Jaco Voorham, Data to Insights Research Solutions, Lisbon, Portugal, for statistical analysis support; Susanne Wiegratz, MSc, UCB Pharma, Monheim am Rhein, Germany, for publication coordination; Isabel Merrien, Costello Medical, London, UK, for medical writing and editorial assistance; and the Creative team at Costello Medical for graphic design assistance. All costs associated with development of this poster were funded by UCB Pharma.

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