

Real-World Treatment Patterns of Ankylosing Spondylitis

Lawrence Rasouliyan, Amanda G. Althoff, Vikas Kumar, Stella Chang, Stacey Long, Amanda Mummert
OMNY Health, Atlanta, GA, United States



BACKGROUND

- Ankylosing spondylitis (AS) is an inflammatory disease affecting the spine with multisystemic implications¹.
- Inflammation is primarily located at the base of the spine and pelvis and often spread to joints between the vertebrae².
- AS symptoms tend to worsen gradually with age.
- Disease management focuses on relieving symptoms (mainly pain and inflammation) and preventing longer-term complications².
- Common treatment strategies include analgesics/opioids, tumor necrosis factor (TNF) alpha inhibitors, and interleukin 17 (IL-17) inhibitors.
- Treatment patterns for AS in the real-world setting are not well characterized.

OBJECTIVE

- The objective of this research was to characterize real-world treatment patterns among AS patients in diverse healthcare delivery settings in the United States (US).

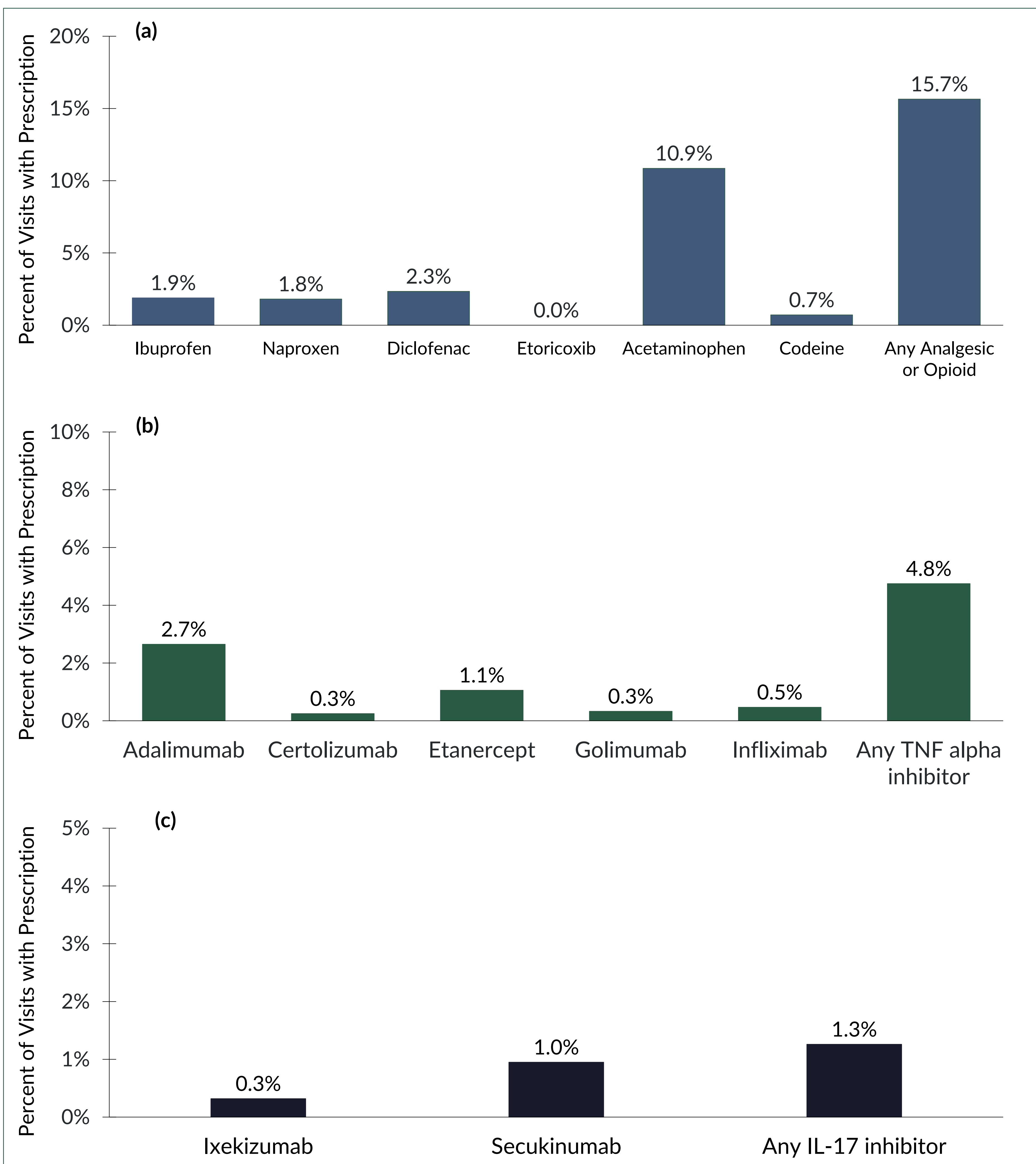
METHODS

- The OMNY Health real-world data platform was used to access electronic health record data from US-based integrated delivery networks and specialty networks from 2017 to June 2023.
- Patients were included if they ever had a diagnosis code for AS (International Classification of Diseases, 10th Revision: M45*).
- Demographic characteristics of the patient population were summarized.
- Percentages of patients with prescriptions for any of the following treatments were tabulated:
 - Analgesics/opioids
 - Ibuprofen
 - Naproxen
 - Diclofenac
 - Etoricoxib
 - Acetaminophen
 - Codeine
 - TNF alpha inhibitors
 - Adalimumab
 - Certolizumab
 - Etanercept
 - Golimumab
 - Infliximab
 - IL-17 inhibitors
 - Ixekizumab
 - Secukinumab

RESULTS

- A total of 6,171 patients and 7,919 AS-associated encounters were included.
- Distributions of demographic variables were as follows: gender (49% female), race (86% White, 7% Black or African American, 7% Other among known categories), and age (39% > 60 years, 59% 21-60 years, 2% < 21 years).
- Prescriptions of therapies at AS-associated encounters are summarized in Figure 1.

Figure 1: Therapy Prescriptions at AS-Associated Encounters (a) Analgesics and Opioids, (b) TNF Alpha Inhibitors, (c) IL-17 Inhibitors



AS = ankylosing spondylitis; IL-17 = interleukin 17; TNF = tumor necrosis factor.

- Analgesics/opioids were prescribed at 16% of AS-associated encounters, while TNF alpha inhibitors and IL-17 inhibitors were prescribed at 5% and 1% of AS-associated encounters, respectively.
- Acetaminophen (11%), adalimumab (3%), and secukinumab (1%) were the most commonly prescribed therapies of each class.

CONCLUSIONS

- Results provide insights into the therapeutic management of AS in the real-world setting.
- Future analyses characterizing healthcare resource utilization and associated costs would be helpful to understand the treatment landscape and economic burden of AS.

REFERENCES

1. Spondylitis Association of America. Overview of Ankylosing Spondylitis (<https://spondylitis.org/about-spondylitis/types-of-spondylitis/ankylosing-spondylitis/>).
2. Cleveland Clinic. Ankylosing Spondylitis (<https://my.clevelandclinic.org/health/diseases/16595-ankylosing-spondylitis-as>).

CONTACT INFORMATION

Lawrence Rasouliyan | Head, Biostatistics & Data Science
OMNY Health | Email: lawrence@omnyhealth.com Website: omnyhealth.com