

Utilization of JAK inhibitors Norway before, during and after the COVID-19 pandemic



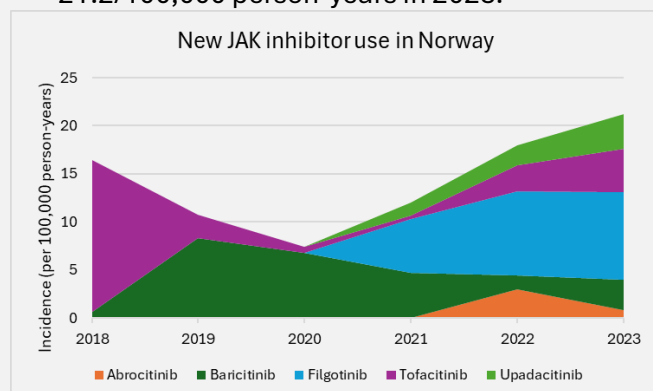
Treatment with Janus kinase (JAK) inhibitors gains popularity in the management of several autoimmune disorders, including atopic dermatitis, inflammatory bowel disease, and rheumatoid arthritis. This DARWIN EU® study estimated the incidence of new JAK inhibitor use over time and characterized new users in Norway.

Study overview

- Design: Population-level cohort study in Finland, Germany, Norway, The Netherlands, and Spain.
- Population: Individuals in Norway (2018-2023), with ≥ 1 year prior observable data (N = 5.83 mil).
- Exposure: Dispensation of a JAK inhibitor (abrocitinib, filgotinib, baricitinib, upadacitinib, or tofacitinib) to estimate incidence of use.
- Patient and treatment characterization for each JAK inhibitor, stratified by indication.

JAK inhibitor utilization in Norway

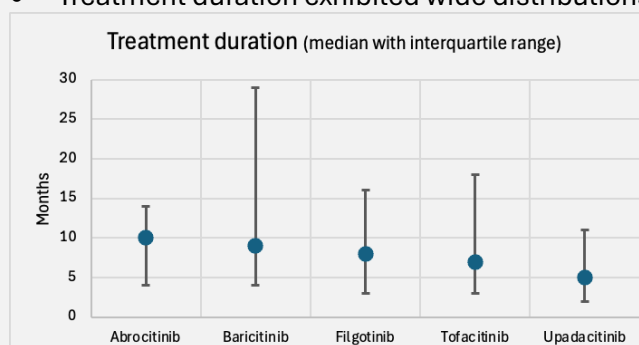
- Data started in 2018 with an incidence of JAK inhibitor initiation of 16.4/100,000 person-years, dropped to 7.4/100,000 in 2020 during the COVID-19 pandemic, to increase again to 21.2/100,000 person-years in 2023.



- Among the included JAK inhibitors, filgotinib had most initiators (1,560), followed by baricitinib (1,538), tofacitinib (1,472), upadacitinib (544), and abrocitinib (298).

Patient characteristics of new JAK inhibitor users in Norway

- The median age at initiation was youngest for abrocitinib (32 years); most started therapy before the age of 40. For all other JAK inhibitors, median age at initiation was ≥ 49 years.
- Most JAK inhibitors initiators had rheumatoid arthritis as their likely indication, except for abrocitinib, where 99.7% had atopic dermatitis.
- Treatment duration exhibited wide distributions.



Data & Methods notes

- Assumptions around the duration of JAK inhibitor use were unavoidable.
- The actual indication for prescription was not recorded.
- Dispensing records were only available from 2018 onwards, therefore the spike of incidence in 2018 may be attributable to misclassification of certain prevalent JAK inhibitor users as incident JAK inhibitor users.

How was this useful?

The start and rising trend of each JAK inhibitor matched with the year of their marketing authorization by EMA. Patient characteristics matched with the indication of different JAK inhibitors. Switching of JAK inhibitors was not uncommon, and treatment duration in this real-world setting was shorter than previously reported.

As there is scarcity of literature on the utilization of JAK inhibitors in Europe, this study provides a wider understanding of JAK inhibitor use, which was higher in Norway compared to the other countries. However, a drop in JAK inhibitor use was observed during the COVID-19 pandemic. This research provides a solid basis for future studies on the safety of JAK inhibitors.

Access to the full report

[DARWIN EU® - Characterising the use of JAK inhibitors in Europe: a Drug Utilisation Study](#)

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