

# REAL-WORLD EVIDENCE ON RHEUMATOID ARTHRITIS TREATMENT PERSISTENCE: JANUS KINASE INHIBITORS VERSUS BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS

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## Background and importance

The therapeutic armamentarium for **Rheumatoid Arthritis (RA)** has been remodeled over the last decades with the advent of **biologic Disease-Modifying Antirheumatic Drugs (bDMARDs)** and the emergence of **Janus Kinase inhibitors (JAKi)**. So far, real-world data comparing the persistence of these different treatment approaches are scarce.

## Aim and objectives

To compare **treatment persistence** between JAKi and bDMARDs in a real-world setting of RA patients.

## Materials and methods

A retrospective study (2017/01-2022/09), including all RA patients from a tertiary hospital under treatment with **JAKi**, **Tumor Necrosis Factor inhibitor (TNFi)**, **Interleukin (IL)6 inhibitor (IL6i)**, **Cluster of Differentiation (CD)80/86 inhibitor (CD80/86i)**, or **CD20 inhibitor (CD20i)**.

- Persistence was examined through **Kaplan-Meier survival analysis**.
- Median survival times were compared statistically using **Log-rank test** and **Cox model**.

## Results

We included 582 cases: 166 (28.5%) JAKi treatments, 180 (30.9%) TNFi treatments, 124 (21.3%) IL6i treatments, 64 (11.0%) CD80/86i treatments, and 48 (8.3%) CD20i treatments, corresponding to 293 RA patients (86% women, 63±14 years old).

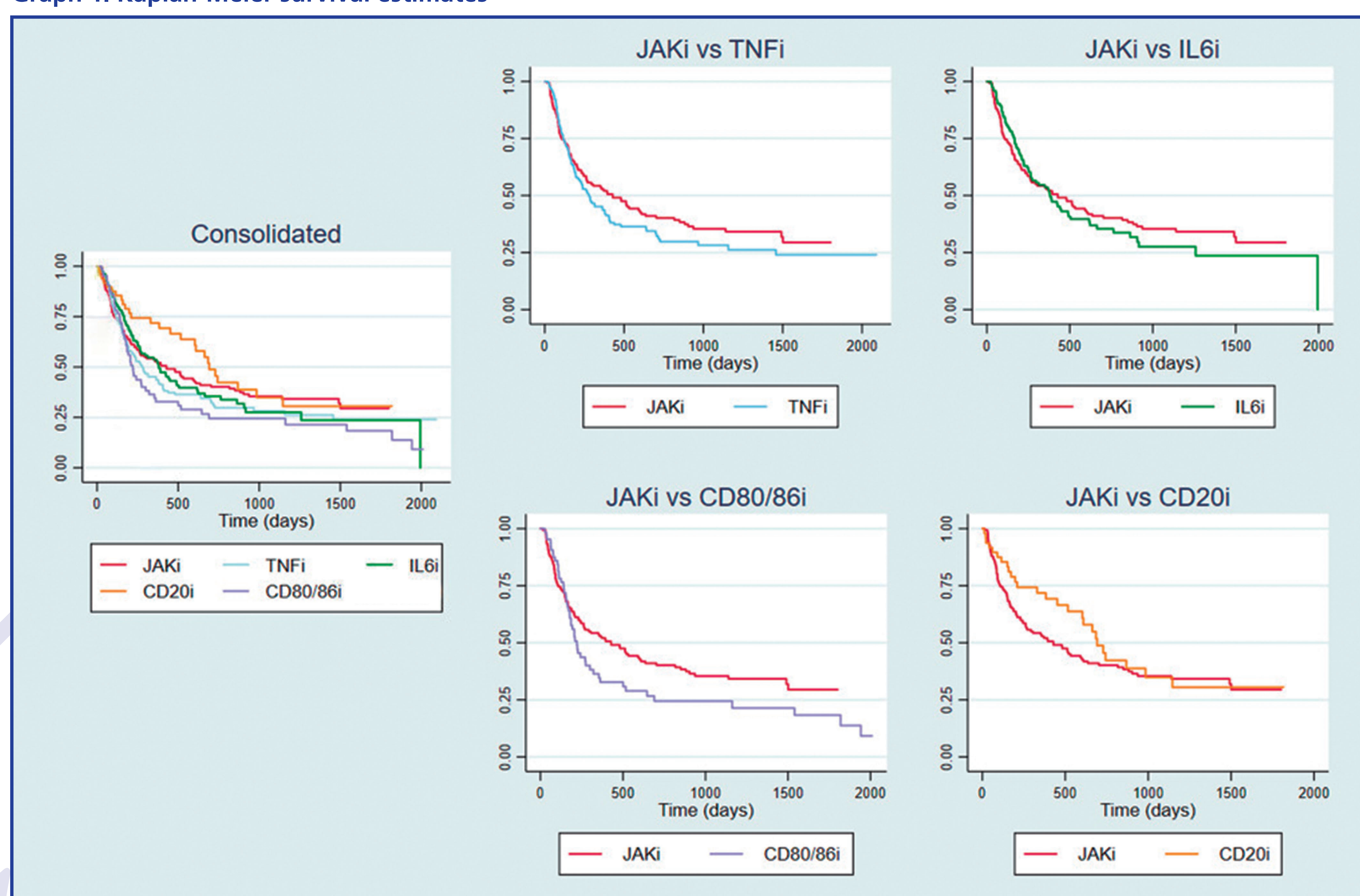
Median treatment persistences are presented in **Table 1**.

Kaplan-Meier curves represent the estimated survival functions (**Graph 1**).

Table 1. JAKi and bDMARDs treatment persistences

Drug (n = 582)	Median persistence, days [95CI%]	HR [95CI%]; p-value
<b>JAKi</b> (n = 166)	428 [262 - 609]	-
<b>TNFi</b> (n = 180)	281 [210 - 378]	1.19 [0.91 - 1.56]; p = 0.215
<b>IL6i</b> (n = 124)	381 [263 - 504]	1.06 [0.79 - 1.43]; p = 0.695
<b>CD80/86i</b> (n = 64)	221 [177 - 321]	1.40 [0.99 - 1.98]; p = 0.054
<b>CD20i</b> (n = 48)	692 [516 - 1,146]	0.77 [0.50 - 1.18]; p = 0.227

Graph 1. Kaplan-Meier survival estimates



## Conclusion and relevance

Based on the results from our RA real-world cohort, JAKi treatment persistence is in line with TNFi and other bDMARDs treatment persistences. Further research is needed to confirm our findings.

