

PERSISTENCE OF ABATACEPT TREATMENT IN RHEUMATOID ARTHRITIS PATIENTS

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Background and importance

ABATACEPT (ABA) is indicated as first-line treatment in patients diagnosed with moderate-severe active rheumatoid arthritis (RA). Persistence of ABA in patients diagnosed with RA and the prognostic factors that are associated with treatment discontinuation may help optimize its use.

Aim and objectives

To assess the persistence of abatacept and identify factors that contributes to its discontinuation in patients diagnosed with RA.

Material and methods

Retrospective observational cohorts study. RA patients treated with ABA between 2009 and 2019 (n=190). Socio-demographic, clinical and pharmacological characteristics of patients were collected. Clinical disease activity indicated by disease activity score **(DAS)28-ESR** as well as adverse drugs events (AEs) were evaluated. Kaplan-Meier survival analysis was used to obtain the time to discontinuation, and the log-rank test was used to examine the difference in therapy continuation rate. Cox proportional hazards model was used to identify factors associated with durability.

Variable	N	%
Women	143/190	75.26
RA duration (years)	190	14 (8-20)
Age ABA start (years)	190	58.50 (49.25-68.00)
Concomitants DMARDs	177/190	96.16
Previous BTs	190	-
Bionaive	42/190	22.11
1 TNFi	50/190	26.32
2 or more TNFi	98/190	51.57
Therapeutic failure	55/190	28.95
Adverse events	25/190	13.15
Infections	14/25	56.30

Table 1. Patients characteristics

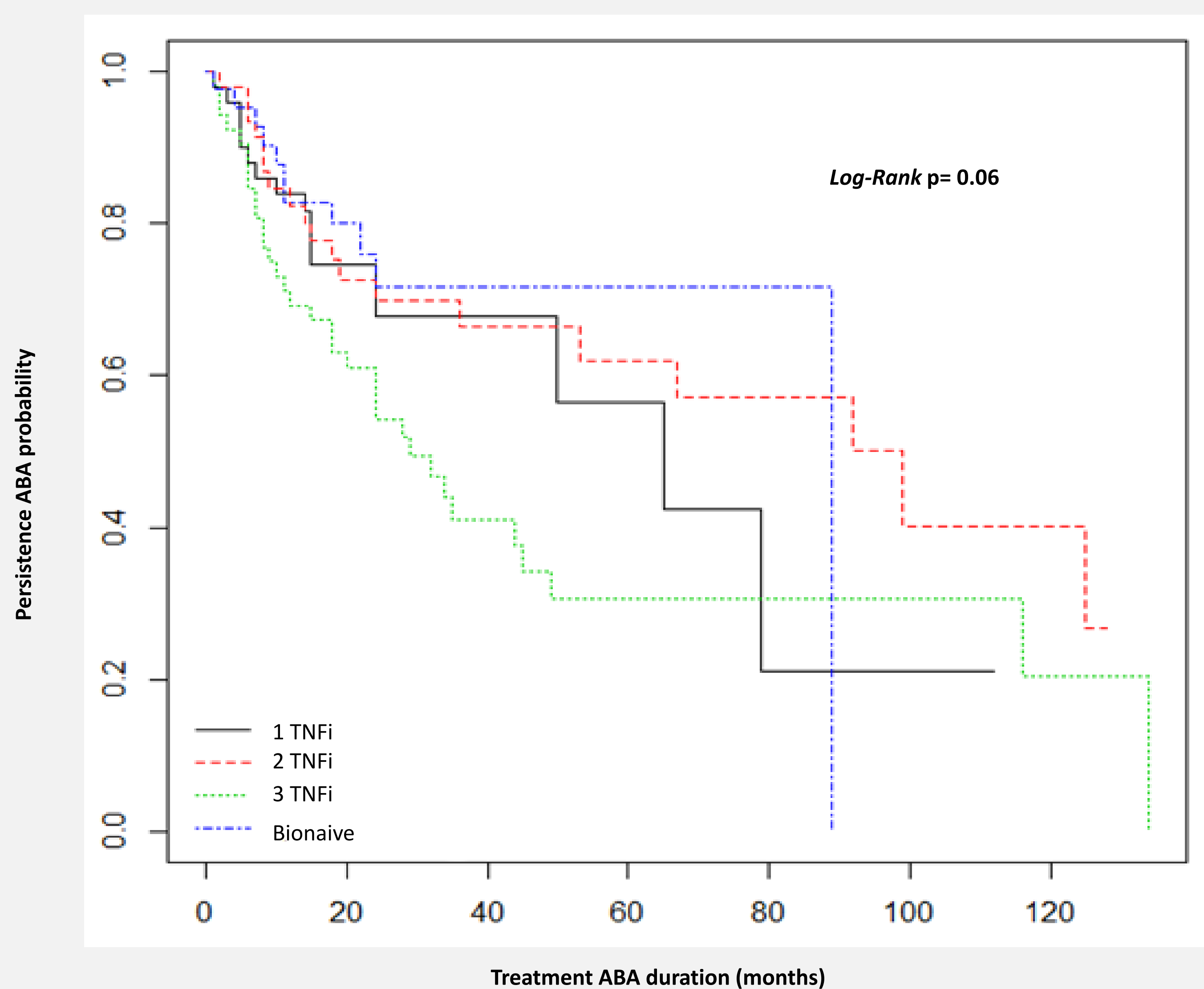


Figure 1. Kaplan-Meier retention curves in patients bionaive and patients failing 1 TNFi, 2 TNFi and 3 or more TNFi.

COX-MODEL. High risk of ABA treatment interruption

	B	P-value	IC _{95%}
RA duration	-0.046	0.010	0.92-0.98
Duration of previous TBs	0.007	0.017	1.01-1.02
Number of previous TBs	0.224	0.043	1.01-1.55

Log-Rank p=0.002

Table 2. Cox-model. Factors associated with high risk of ABA treatment interruption

Results

190 RA patients have been evaluated; 75.26% (143/190) were women, disease duration was 14 (8-20) years and age of ABA starts was 58.5 (49.25-68). Overall, 96.16% (177/190) had concomitant therapies with ABA (methotrexate, leflunomide, hidroxicloroquine). A total of 22.11% (42/190) were bionaive, 26.32% (50/190) began the treatment after failure of 1 tumor necrosis factor inhibitor (TNFi), and 51.57% (98/190) began treatment with ABA after failure of 2 or more TNFis. The causes of ABA withdrawal were therapeutic failure in 28.95% (55/190) and adverse events in 13.15% (25/190). Infections were the most frequent AEs (56.3%). The **median persistence of ABA** was **65** (IC_{95%}=45-116) **months**. The **Kaplan-Meier** analysis shower a trend of high persistence of abatacept in naive patients (89 months) compared with patients with one, or two or more previous biological therapies (TBs) (89 vs. 65 and 29 months, respectively) (log-rank p=0.06). According to **Cox-model**, duration of disease, duration of previous TBs and number of previous TBs were associated with a higher risk of treatment interruption (log-rank p=0.002).

Conclusion and relevance

The median duration of ABA persistence was 65 months. Factors associated with the duration of the disease as well as previous biological therapies influenced the persistence of ABA.