

# IS THERE A SAFETY DIFFERENCE? JANUS KINASE INHIBITORS IN REAL CLINICAL PRACTICE

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## BACKGROUND AND IMPORTANCE

Tofacitinib, baricitinib, upadacitinib and filgotinib are Janus kinase inhibitors (JAKs) indicated in rheumatoid arthritis (RA). The EMA notified that in **patients with RA who were ≥50 years with at least one cardiovascular risk factor had an increased risk of major adverse cardiovascular events (MACE), and malignancies with use of tofacitinib** relative to TNF-alpha inhibitor. Although it is being evaluated, it is still unknown if this risk is shared by other JAKs.

## AIM AND OBJECTIVES

To describe and **compare the safety** of tofacitinib, baricitinib, upadacitinib and filgotinib in patients with RA in a real-world-setting.

Secondary objective: to analyze if there is a relationship between MACE and malignancies with a patient profile with a higher risk of developing them as established in the alert.



## MATERIAL AND METHODS



Retrospective/prospective observational study of RA patients under treatment with tofacitinib, baricitinib, upadacitinib and filgotinib until September 2022

**Safety** was determined based on the adverse events (AEs) reported

### Variables:

Sex, age at start, time-of-treatment, reason for discontinuation, risk factor's MACE, risk factors for malignancies and AEs

### Statistical analysis:

A description of characteristics and events that occurred in the cohort was carried out. Associations were later explored

## RESULTS

**124 patients** (80.6% women); mean age 55.8 (SD 11.8) years

Treatments	Patients (N)	Median of treatment (days)
Tofacitinib	60	399 (171-884)
Upadacitinib	49	287 (130-477)
Baricitinib	21	308 (210-632)
Filgotinib	14	93 (60-171)

✓ 19 patients (15.3%) were treated with more than one JAK sequentially

✓ **110 patients** were identified with an increased risk of MACE or malignancies

<b>AEs in 39 (31.5%) treatments</b>	21 with tofacitinib
	9 with upadacitinib
	7 with baricitinib
	4 with filgotinib

<b>79 end of treatment</b>	46 for inefficacy
	22 for AE
	7 for both reasons
	4 for considered a risk patient

The most common AE was **herpes zoster**

**Only 2 patients** suffered a MACE in the total cohort with tofacitinib

**No association could be established between risk patient and the development of adverse events, neither minor or major**

## CONCLUSION AND RELEVANCE



Therefore, it is still unknown if the exchange strategy between them is adequate to reduce the risk. Limitation: a larger sample size and longer follow-up time are required to detect major AEs and their association with patients at risk.

