

# SAFETY ASSESSMENT OF JANUS KINASE INHIBITORS IN CLINICAL PRACTICE

de la Fuente Villaverde, Irene; García Jiménez, Virginia; Fernández Lastras, Sergio; Oyague López, Laína; Eiroa Osoro, Mateo; Roríguez-Tenreiro Rodríguez, Carlota; Muñoz Villasur, Marina; Diez Romero, Carolina; Fadón Herrera, Celia; Lozano Blázquez, Ana. Hospital Univeristario Central de Asturias

## **BACKGROUND AND IMPORTANCE**

- >Janus kinase inhibitors (JAKi) tofacitinib, baricitinib, upadacitinib and filgotinib are immunosuppressants indicated for the treatment of chronic inflammatory disorders.
- >Concern regarding their safety has recently arisen since new data have been published in the last years.

### **AIM AND OBJECTIVES**

- >To assess the safety of JAKi for the treatment of chronic inflammatory disorders in real clinical practice.
- To compare it with the clinical trials (CT) results.

### MATERIALS AND METHODS

- >Observational restrospective study including patients treated with JAKi from January 2019 to August 2023.
- > Data were obtained by review of electronic medical records and laboratory database.
- ➤ Variables studied were: patient demographics, prescribing units, adverse reactions (AR), treatment duration and motive of interruption.

### **RESULTS**

N= 271 (74,5% women) Median age= 55 years (18-92)

	BARICITINIB	TOFACITINIB	UPADACITINIB	FILGOTINIB
Total patients n	142	105	20	4
Toxicity n patients (%)	66 (46,5)	49 (46,6)	5 (25)	2 (50)
Total AR	101	65	5	4
Gastrointestinal disorders (GD)	9	13	0	2
Infections	18	7	0	0
Blood test parameters	44	22	3	1
Hypertriglyceridaemia	5	4		1
Hypercholesterolaemia	21	15		1
Others	18	3		1 0
Cardiovascular disorders (%)	9	2	1	0
Headache	5	6	0	0
Dyspnea	4	3	0	0
Skin disorders	1	1	1	0
Others	11	11	0	1

Treatment interruption due to toxicity in 43 patients (tofacitinib>baricitinib>upadacitinib>filgotinib) and due to neoplasm diagnosis in 5 patients (barcitinib>tofacitinib)

### **CONCLUSION AND RELEVANCE**

- For tofacitinib and baricitinib, the toxicity profile is similar to the one described in CT. All AR are described in the literature.
- Infections and hypercholesterolaemia are among the most frequent AR in our study and in CT.
- Although most of the AR were tolerable, there were several cases of severe AR led to treatment interruption.
- In contrast to recent CT results, no major adverse cardiovascular events were registered in our study.
- >A bigger sample is needed to make conclusions about upadacitinib and filgotinib safety.

