

ROLE OF HLA-DQA1*05 IN THE PERSISTENCE OF ADALIMUMAB IN THE MANAGEMENT OF INFLAMMATORY BOWEL DISEASE

M. LÓPEZ GILETE, J. CASAS ARRATE, A. DE BASAGOITI GORORDO, M. DUQUE RODRÍGUEZ,
I. ARIAS LÓPEZ, L. MAESTRO FERNÁNDEZ, B. GARCÍA PAJARES

Pharmacy Service, Cruces University Hospital, Barakaldo, Spain

BACKGROUND AND IMPORTANCE

Efficacy of anti-tumor necrosis factor (anti-TNF) drugs is significantly reduced due to the formation of anti-drug antibodies, which can lead to treatment failure. HLA-DQA1*05 haplotype has been linked as a possible biomarker of immunogenicity and loss of response to anti-TNF treatment.

AIM AND OBJECTIVES

To analyse persistence after 48 weeks of treatment with adalimumab (ADA) in biologic-naïve patients with Inflammatory Bowel Disease (IBD) starting ADA in 2022 who had HLA-DQA1*05 determined.

MATERIALS AND METHODS

- ✓ **Descriptive** and **retrospective** study
- ✓ **Biologic-naïve** patients diagnosed with IBD who started **ADA** in **2022**
- ✓ **Data sources:** electronic medical records

Variables collected:

- ❖ Demographic data: sex and age
- ❖ Type of IBD (Crohn's disease (CD) or ulcerative colitis (UC))
- ❖ Smoking status
- ❖ Previous immunosuppressant (IS) treatment
- ❖ According to the presence or absence of **HLA-DQA1*05** haplotype (table 1)

*Target therapeutic interval (ADA maintenance) = 5-12 mcg/mL

RESULTS


39 patients

- 56% female
- Median age (IQR) 51 (39-60)
- CD (74%), UC (26%)
- Smokers (26%), ex-smokers (31%)
- Previous IS treatment (30%)

Table 1:

	HLA-DQA1*05		Total (n=39)
	YES (n=17)	NO (n=22)	
	N (%)	N (%)	N (%)
Persistence after 48 weeks of ADA			
YES	10 (58.8)	17 (77.3)	27 (69.2)
NO	7 (41.2)	5 (22.7)	12 (30.8)
Median time (days) to failure (IQR)	75 (34-103)	49 (29-112)	66.5 (36.5-102)
Reason for withdrawal			
Primary failure	4 (23.5)	3 (13.6)	7 (17.9)
Secondary failure	2 (11.8)	1 (4.5)	3 (7.7)
Immunogenic	1 (5.9)		1 (2.6)
Pharmacodynamic	1 (5.9)	1 (4.5)	2 (5.1)
Other causes	1 (5.9)	1 (4.5)	2 (5.1)
Anti-drug antibodies	2 (11.8)	2 (9.1)	4 (10.3)
Intensification			
Interval	3 (17.6)	3 (13.6)	6 (15.4)
Dose + interval	5 (29.4)	7 (31.8)	12 (30.8)
ADA levels			
Pre-intensification*			
Supratherapeutic	2 (11.8)	3 (13.6)	5 (12.8)
Therapeutic	7 (41.2)	9 (40.9)	16 (41)
Subtherapeutic	4 (23.5)	3 (13.6)	7 (17.9)
Post-intensification			
Supratherapeutic	4 (23.5)	5 (22.7)	9 (23.1)
Therapeutic	3 (17.6)	4 (18.2)	7 (17.9)
Subtherapeutic	1 (5.9)	1 (4.5)	2 (5.1)

*last level available if not intensified

CONCLUSION AND RELEVANCE

- The **persistence** at 48 weeks was **69.2%** in the total study population after ADA initiation: **1.3 times lower** in patients with **HLA-DQA1*05**.
- Further studies are needed in order to support the determination of HLA-DQA1*05 prior to initiation of therapy.



4CPS-238

✉ mireya.lopezgilete@osakidetza.eus