THE KCNMB1(A>G) (rs703505) GENETIC VARIANT AND THE EFFICACY OF TOCILIZUMAB IN RHEUMATOID ARTHRITIS PATIENTS

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BACKGROUND AND OBJECTIVES

The aim of our study was to explore the potential role of KCNMB1 genetic polymorphisms as a predictor of tocilizumab efficacy in rheumatoid arthritis (RA) patients.

MATERIAL AND METHODS

The KCNMB1 (A>G) (rs703505) genetic variant was genotyped using predesigned TaqMan® genotyping assays technology and analyzed on a ViiA7® Real-time PCR system. Clinical response was evaluated at 24 weeks with the use of the 28-joint disease activity score criteria (DAS28). Clinical response was evaluated at 14 weeks with the use of the 28-joint disease activity score criteria (DAS28) and good response and remission were classified according to EULAR criteria. EULAR good response was defined as a change of DAS28>1.2 and DAS28 ≤3.2. EULAR remission was defined as achieving DAS28 at 14 weeks ≤2.6. The statistical analysis was performed using SPSS v.20.

RESULTS

	n=140 n (%) or mean (±sd)	
Women	110 (79%)	
Age	53,25 (±12,42)	
DAS (Baseline)	5.71(±1.13)	



	KCNMB1-GG	Non KCNMB1-GG	O.R (95% C.I.)	P-value
EULAR good response	8	76	0.37 (0.14-0.93)	0.026
NON EULAR good response	13	43		
EULAR Remission	4	58	0.29 (0.09-0.87)	0,01
NON EULAR Remission	17	62		

CONCLUSION

Our results confirm that KCNMB1 (A>G) rs703505 polymorphisms could be useful as a genetic marker of tocilizumab efficacy in RA patients. More studies are necessary to confirm these results.



