

Analysis of expression of inflammasome genes in Familial Mediterranean Fever

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Familial Mediterranean fever (FMF) is an autoinflammatory disease that usually occurs in people of Mediterranean origin including Armenians, accounting for 14-100 cases per 10,000 population [1]. This disease is caused by point mutations in the *MEFV* (MEditerranean FeVer) gene located on the short arm of the 16th chromosome, encoding the pyrin protein. Despite the extensive information available about mutations in the gene encoding the protein pyrin, the mechanism by which these mutations contribute to the activation of molecular processes leading to auto-inflammation is still not well understood [2-5]. The aim of the current project is to evaluate the levels of inflammasome genes in patients with FMF compared to healthy controls. Our results indicated disrupted levels of CASP1, NLRP3, GAPDH, P65 genes which are in correspondence to the existing data obtained in other studies. This enhances the knowledge on functional genetic variants and assists understanding of the molecular mechanisms underlying changes of inflammasome gene levels. In future, we will assess their potential relationship with the *MEFV* genetic variants obtained using nanopore sequencing approach.

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