

LETTER TO THE EDITOR

Tumor Necrosis Factor-308 G/A Polymorphism and Chronic Obstructive Pulmonary Disease Risk

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(Clin. Lab. 2020;66:xx-xx. DOI: 10.7754/Clin.Lab.2019.191142)

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KEY WORDS

tumor necrosis factor, polymorphism, COPD

TO THE EDITOR

We read the publication on “Association between Tumor Necrosis Factor (TNF)-308 G/A Polymorphism and Chronic Obstructive Pulmonary Disease (COPD) Risk in Chinese Population: Evidence from a Meta-Analysis” with a great interest. Shi and Zhao concluded that “TNF-308A/G polymorphism may contribute to individual susceptibility to COPD in Chinese population [1].” In fact, similar observations are reported in several studies on non-Chinese ethnic groups [2,3]. Focusing on the molecular pathogenesis, as a single variant consideration, TNF-308A/G polymorphism can result in molecular alteration. If the standard molecular calculation technique, as used in the previous studies [4,5], is applied, the A/G variant can result in molecular weight change due to the focused single point variant equal to + 16 g/mol (from 135.13 to 151.13 g/mol). This pathological process is the same as that seen in another medical disorder, ankylosing spondylitis [6]. The underlying molecular change can well explain the alteration in susceptibility to COPD due to TNF-308A/G polymorphism.

Declaration of Interest:

None.

References:

1. Shi C, Zhao H. Association between Tumor Necrosis Factor-308 G/A Polymorphism and Chronic Obstructive Pulmonary Disease Risk in Chinese Population: Evidence from a Meta-Analysis. *Clin Lab* 2019;65(10) (PMID: 31625355).
2. Melek K, Ulubay G, Sarınc Ulaşlı S, Verdi H, Ataç B, Öner Eyüboğlu F. [Associations between TGF- β 1 G/A and TNF- α 308 G/A gene polymorphisms with airway resistance in chronic obstructive pulmonary disease]. *Tuberk Toraks* 2013;61:1-11 (PMID: 23581259).
3. Özdoğan N, Tutar N, Demir R, Saatçi Ç, Kanbay A, Büyükoğlan H. Is TNF- α gene polymorphism related to pulmonary functions and prognosis as determined by FEV1, BMI, COPD exacerbation and hospitalization in patients with smoking-related COPD in a Turkish population? *Rev Port Pneumol* 2014;20:305-10 (PMID: 24818527).
4. Joob S, Guran M. Letter to editor: G12V and G12C mutations in the gene KRAS and association with prognosis in primary colorectal cancer. *Adv Lab Med Int* 2019;9:28-30.
<https://drive.google.com/file/d/1Xnm5puVegJUjZdMNeJfI-3uFJpGhtkQv/view>
5. Joob S, Guran M. PRDM1 rs1010273 polymorphism and survival of patients with hepatitis B virus-related hepatocellular carcinoma. *Adv Lab Med Int* 2019;9:31-2.
<https://drive.google.com/file/d/1rLYcWV29puX0MomzoLaXQU4i9CwhqYr2/view>
6. Joob B, Wiwanitkit V. TNF- α -308 polymorphism and therapeutic response of ankylosing spondylitis. *Med Clin (Barc)*. 2018;150:248 (PMID: 29055491).