

Bogor, December 12th 2019

Editor-in-Chief: Dr. Dewi Muliaty
The Indonesian Biomedical Journal

Dear Dr. Dewi Muliaty;

Please find enclosed our manuscript entitled “**Association of CCL7 Promoter Polymorphism with Responsiveness to Allergen in Cynomolgus Macaque Model of Asthma**” by Sela S. Mariya, Fitriya N. Dewi, Eric Hayes, Villiandra, Yasmina A. Paramastri, Diah Iskandriati, Uus Saepuloh, Joko Pamungkas, I Nengah Budiarsa and Dondin Sajuthi for publication as Research Article in The Indonesian Biomedical Journal.

C-C motif Ligand 7 (*CCL7*) has been reported to be associated with asthma severity in humans. *Cynomolgus macaques (Macaca fascicularis; Mf)* are often used as animal model of asthma but little is known about *Mf* genetic profile such as polymorphism. Our aim was to identify *CCL7* polymorphism in *Mf* as a potential surrogate marker for identification of allergen responsiveness in the *Mf* model of asthma. Real-time PCR was performed on archive of bronchoalveolar fluid samples previously collected from *Mf* that were exposed to allergen. Expression of *CCL7* mRNA was evaluated, and sequencing technique was used to identify polymorphism in this gene. The results showed that *CCL7* expression did not differ between *Mf*, despite a trend of lower expression in *Mf* that exhibited high response to allergen. By direct DNA sequencing of *CCL7*, 10 sequence variants were identified; three in promoter region (-456 -/A, -459 A/G, -460 G/A), two in exon 1 (9 A/G, 65 G/C), four in intron 1 (135 T/C, 254 T/C, 420 T/C, 453 A/G), and one in intron 2 (1205 T/A). There was an association between *Mf* reactivity to allergen with *CCL7* promoter polymorphism at (-456 -/A). These results suggest that *CCL7* may be a potential genetic marker to identify *Mf* sensitivity to allergen, which could be a useful tool to efficiently select for *Mf* model of asthma.

We hereby state that we have no conflict of interest. The manuscript contains novel and original data which have not been published or submitted for publication elsewhere. All authors have read and approved the manuscript.

Thank you for considering our manuscript.

Sincerely,



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