## SCIENTIFIC LETTER



## Factors Determining Course of IgE-Mediated Cow's Milk Allergy

Azwin Mengindra Putera<sup>1</sup> · Lailita Ramadhianty<sup>2</sup>

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To the Editor: This retrospective study affected age-onset for outgrown cow's milk allergy (CMA) in Indonesian children. Data was collected from 2018 to 2023 at a tertiary hospital in Indonesia (n=217). Inclusion criteria included participants aged 1 mo to 18 y, positive skin prick test or prick-to-prick test with milk extraction, and those undergoing an elimination diet. Exclusion criteria included congenital abnormalities, lactose intolerance, inflammatory bowel syndrome, and a history of gastrointestinal surgery. Diagnosis was based on the Indonesian Pediatric Association's CMA criteria [1].

Participants with outgrown CMA had a mean age of  $50.32 \pm 31.19$  mo, while those with ongoing CMA had a mean age of  $60.24 \pm 25.57$  mo (z=3.248; p=0.001). Most participants were outgrown (55.71%) and current were 44.29%; OR = 1.048; p=0.868. Most participants experienced respiratory problems as a response to CMA, which was 54.86% of outgrown participants (p=0.604). The age distribution of outgrown participants was: 10.83% by 1 y, 27.5% by 2 y, 57.5% by 3 y, 58.33% by 4 y and 75.83% by 5 y. The mean age of male and female outgrown participants was  $56.89 \pm 35.14$  mo and  $39.14 \pm 17.18$  mo, respectively (z=2.143; p=0.032).

The onset age of outgrown IgE-mediated CMA was longer in boys. The CMA ratio in girls and boys was 1:1.8. However, the recessive character of the X gene associated with allergic disorders, which more easily explains the dominance of food allergies in men, is one factor that causes boys (XY) to have more CMA [2]. According to an earlier study in Indonesia, most IgE-mediated CMA reactions are respiratory difficulties, which is impacted by more Indonesian children presenting with digestive problems to pediatric gastroenterology clinics as well as those with skin problems taking dermatological appointments [3]. Patients with IgEmediated CMA with a respiratory reaction have a later onset for outgrown than other responses, and the frequency is just 7.5% [4].

## Declarations

Conflict of Interest None.

## References

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<sup>2</sup> Medical Program, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

Azwin Mengindra Putera azwin-m-p@fk.unair.ac.id

<sup>&</sup>lt;sup>1</sup> Department of Child Health, Faculty of Medicine, Universitas Airlangga – Dr. Soetomo General Academic Hospital, Surabaya, Indonesia