



Lack of association between *TYK2* and *STAT3* genes and Crohn's disease in the Malaysian population

L.H. Lian¹, T.P. Lau¹, V.L. Lee¹, W.S. Lee², I. Hilmi³, K.L. Goh³ and K.H. Chua⁴

¹Department of Molecular Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

²Department of Paediatrics, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

³Division of Gastroenterology and Hepatology, Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

⁴Department of Biomedical Science, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

Corresponding author: K.H. Chua

E-mail: khchua@um.edu.my

Genet. Mol. Res. 12 (1): 167-174 (2013)

Received May 11, 2012

Accepted October 3, 2012

Published January 24, 2013

DOI <http://dx.doi.org/10.4238/2013.January.24.9>

ABSTRACT. This study aimed to investigate the potential association of *TYK2* and *STAT3* genes with the susceptibility to Crohn's disease (CD) among Malaysians. DNA samples were obtained from 80 CD patients and 100 healthy controls. Polymerase chain reaction-restriction fragment length polymorphism methods were employed for genotyping, followed by statistical analysis. In our current study, none of the single nucleotide polymorphisms of either *TYK2* or *STAT3* was statistically associated with the susceptibility to CD in our local population ($P > 0.05$). In contrast, there was a statistically significant association between the G/G homozygotes of the *STAT3* rs2293152 and the healthy control

group ($\chi^2 = 6.229$, $P < 0.05$). In conclusion, our study does not support the role of the *TYK2* and *STAT3* genes influencing CD susceptibility.

Key words: Crohn's disease; *TYK2*; *STAT3*; SNPs; Malaysia