

COMMENTARY

A commentary on molecular basis of transfusion dependent beta-thalassemia major patients in Sabah

This article has been corrected since Advance Online Publication, and a corrigendum is also printed in this issue.

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The paper described the genotype of beta thalassemia major patients in Sabah.¹ There are two interesting issues in this study, which require further studies as followed:

Filipino β^0 -deletion was the predominant mutation identified in the indigenous population of Sabah (86.9%). It would be interesting to characterize the beta globin gene haplotype of this mutation in all patients and compare it with the haplotype of Filipino β^0 -deletion patients from other countries (Philippine and Indonesia).^{2,3} From this study we will know the population migration and why this mutation is predominant in Sabah. If all patients in

Sabah have the same beta globin gene haplotype, the reason for the predominance of this mutation in Kota Kinabalu is most likely to be due to founder effects and possibly intermarriages between the various ethnic as proposed by Thong *et al.*^{4,5}

All patients in this study are beta thalassemia major patients; however, the clinical severity of beta thalassemia/HbE patients, especially Filipino β^0 -deletion/HbE, varies widely from mild who do not require blood transfusion to thalassemia major.³ Therefore, family studies in Filipino β^0 -deletion/HbE patients to detect asymptomatic patients with these mutations would be interesting.

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- 3 Setianingsih, I., Williamson, R., Daud, D., Harahap, A., Marzuki, S. & Forrest, S. Phenotypic variability of filipino β^0 -thalassemia/HbE patients in Indonesia. *Am. J. Hematol.* **62**, 7–12 (1999).
- 4 Thong, M. K. & Soo, T. The spectrum of beta-globin gene mutations in children with beta thalassaemia major from Kota Kinabalu, Sabah, Malaysia. *Singapore Med. J.* **46**, 340–343 (2005).
- 5 Thong, M. K., Rudzki, Z., Hall, J., Tan, J. A., Chan, L. L. & Yap, S. F. A single, large deletion accounts for all the beta-globin gene mutations in twenty families from Sabah (north Borneo), Malaysia. *Hum. Mutat.* **13**, 413 (1999).