

# [Commentary: profiling of ugt1a1 28 polymorphisms in indonesian neonates with hype...](https://assignbuster.com/commentary-profiling-of-ugt1a1-28-polymorphisms-in-indonesian-neonates-with-hyperbilirubinemia-using-multiplex-pcr-sequencing/)

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A Commentary on
[Profiling of UGT1A1 \* 6, UGT1A1 \* 60, UGT1A1 \* 93, and UGT1A1 \* 28 Polymorphisms in Indonesian Neonates With Hyperbilirubinemia Using Multiplex PCR Sequencing](https://doi.org/10.3389/fped.2019.00328)

*by Amandito, R., Rohsiswatmo, R., Carolina, E., Maulida, R., Kresnawati, W., and Malik, A. (2019). Front. Pediatr. 7: 328. doi:* [*10. 3389/fped. 2019. 00328*](https://doi.org/10.3389/fped.2019.00328)

Neonatal hyperbilirubinemia is a common benign phenomenon, related to a variety of physiological, pathological, and genetic conditions of neonates ( [1](#B1) ). Since this disorder can lead to neurodevelopmental impairment, finding the predictable factors could guide clinicians to provide better care ( [2](#B2) ). We read this article by Amandito et al. and congratulate the authors and also provide some suggestions.

In this well-designed cross-sectional study, the genetic sequencing was fully performed in different parts of the UGT1A1 gene, which is related to Gilbert syndrome ( [3](#B3) ). Finally, the researchers made an attempt to create a link between a neonate's genetic map with his/her bilirubin level. In this study, four polymorphisms in the UGT1A1 gene were investigated. By paying attention to the location of the single nucleotide polymorphisms, at least two genes UGT1A1 \* 60(−3279T> G) and UGT1A1 \* 6(−3156G> A) are situated in very close proximity ( [4](#B4) ).

An important concept in genetic polymorphism is linkage disequilibrium. It means that two genes are physically linked to each other, and alleles do not occur randomly with respect to each other ( [5](#B5) ).

In conclusion, due to the high likelihood of these two mutations moving together ( [6](#B6) ), the researchers have to calculate the linkage disequilibrium value before performing the statistical tests. If the *D* ′ value was high, in their analysis, two mutations were considered as one. For this reason, they have to decide to test this mutation together either or alone.

## Author Contributions

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

## Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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