

Author's reply

Sir,

Thank you for giving us an opportunity to reply to the letter.^[1] Our views are, firstly, we had followed-up a total of 147 patients with a mean of 3.83 years, which translates to 563.5 patient years. The average duration of symptoms to appear in zidovudine myopathy varies in different studies. The most prominent of them by Peters *et al.*

recorded an average of 270 days, or 0.74 years, and the average incidence of the problem ranges from 8 to 50%.^[2,3] Taking an average of 13% as the incidence of the problem and with a confidence interval of 5 and confidence level 95%, the sample size required will be 384 patients. Hence, our sample size was adequate. With a higher incidence of the problem (tending toward 50%), the required sample size will shrink further. Secondly, mitochondria contain DNA. In toxic mitochondrial disorders due to nucleoside reverse transcriptase inhibitors like zidovudine, there is also some evidence that clinical involvement of a given organ, like blood, skeletal muscle, myocardium and liver, parallels mitochondrial DNA depletion.^[4] This mitochondrial DNA damage has also been implicated for selective lactic acidosis and lipodystrophy for stavudine and zidovudine to a lesser degree in Australian whites compared to the US and European cohorts.^[4] Hence, we postulated a racial variance for zidovudine myopathy. Thirdly, our study includes cases with a mean follow-up of 3.83 years on antiretroviral therapy, which is almost two- to three-times the follow-up period of comparable studies on the subject. The living conditions, compliance with drugs, follow-up and survival was comparable with the western population; hence, the higher prevalence in the latter may not be linked to an increase in the survival associated with iatrogenic conditions.

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References

1. Wivanitkit V. Zidovudine-induced myopathy. *J Neurosci Rural Pract* 2011;2:206.
2. Peters BS, Winer J, Landon DN, Stotter A, Pinching AJ. Mitochondrial myopathy associated with chronic zidovudine therapy in AIDS. *Q J Med* 1993;86:5-15.
3. Cupler EJ, Danon MJ, Jay C, Hench K, Ropka M, Dalakas MC. Early features of zidovudine-associated myopathy: Histopathological findings and clinical correlations. *Acta Neuropathol* 1995; 90:1-6.
4. Brinkman K, Copeland W, editors. Mitochondrial toxicity and HIV disease meeting report. Washington. Available from: <http://www.hivforum.org>. [Last accessed on 2000 June 5-6].

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