“Kilometer hours” hypoxic dose: one size fits all

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TO THE EDITOR: The authors propose an interesting and reasonable model for the hypoxic dose (as kilometer hours) for the altitude training considering current relevant literatures (3). However, the totality of the response has been fitted with the percentage increase in hemoglobin mass production. In reality, the physiological responses of high performance athletes might be difficult to fit in the model of “one size fits all.” Because the model of hypoxic exposure varies with research groups (normobaric and hypobaric hypoxia), the responses might be different as well (4). Next, the current model of hypoxic exposure equivalent to altitude is still under debate (1). It would be interesting to incorporate other physiological responses in the metrics. It might still be difficult to account for individual variability, for example, individualized dose-response, baseline training level, and type of sports. The training level with hypoxic dose needs to be titrated and individualized. The overall performance, as indicated in the article, depends upon many different physiological responses and some of them are yet to be clear even at the resident altitude training level (5). Therefore, the development of a metric for hypoxic dose with the consideration of hemoglobin mass is a welcome step and it will be a foundation to incorporate other variables in the future. Finally, safety of the hypoxic training per se has not been well investigated and likely to be detrimental to some (2).

DISCLOSURES
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REFERENCES