Reply to the Letter by François Lalonde and Daniel Curnier

Alexander S. Kraus1, Evan Pasha1, Daniel R. Machin1, Mohammed Alkatan1, Robert A. Kloner2, and Hirofumi Tanaka1,*

1Department of Kinesiology and Health Education, The University of Texas at Austin, Austin, TX 78712, USA
2The Heart Institute, Good Samaritan Hospital, Los Angeles, CA 90017, USA

DEAR EDITOR,

We would like to thank Drs. Lalonde and Curnier for their interest as well as for their complimentary comments regarding our study [1]. In their letter to the editor, 3 primary points were raised, and we would like to address each of their comments. First, we do agree wholeheartedly that more research is needed in this area. What sports would most likely gain benefits from ischemic preconditioning (IPC)? How long does the effect of IPC last? What are the dose-response relationships between IPC and exercise performance? No information is currently available regarding physiological mechanisms underlying ergogenic benefits of IPC. There are far more questions than answers that we can provide in this area. Second, Drs. Lalonde and Curnier contend that distinction needs to be made between recreational athletes and professional/elite athletes. We concur. Most of the available studies have used recreational athletes as their subject populations except for one study that used national and international level swimmers [2]. It should, however, be noted that all the athletes competing at any level are always looking for any edge in sports competitions and will utilize ergogenic aids if they are shown to be effective in enhancing their performance. This is reflected in the fact that the biggest users of anabolic steroids are non-competitive body builders and elite athletes are rather minorities. Third, it is of great interest to see if the IPC procedure can be applied to older and/or patient populations. Functional capacity is of critical importance in determining one’s ability to perform the tasks of daily life. Could IPC work to enhance their functional capacity? This question has not been answered. More importantly, would repeated IPC applied on the regular basis over months or years exert cardiovascular or functional conditioning effects on depressed functions? In this context, daily exposure to remote IPC over 7 days improved brachial artery endothelium-dependent vasodilation [3].

CONFLICT OF INTEREST

The authors confirm that this article content has no conflict of interest.

ACKNOWLEDGEMENTS

Declared none.

REFERENCES


*Address correspondence to this author at the Department of Kinesiology and Health Education, The University of Texas at Austin, 2109 San Jacinto Blvd, D3700, Austin, TX 78712, USA; Tel: 512-232-4801; Fax: 512-471-0946; E-mail: htanaka@austin.utexas.edu

© Kraus et al.; Licensee Bentham Open.
This is an open access article licensed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/3.0/) which permits unrestricted, non-commercial use, distribution and reproduction in any medium, provided the work is properly cited.