Reviewer’s report

Title: A protocol to prospectively assess risk factors for medial tibial stress syndrome in distance runners

Version: 0 Date: 18 Apr 2018

Reviewer: Roger Adams

Reviewer’s report:

MTSS is a debilitating and difficult-to-treat condition, and the central logic of this proposal, regarding reduced lower leg structure and muscle function as a predictive factor, is logical and timely. With respect to the measures to be taken, given that ultrasound is to be used to obtain muscle cross-sectional area and identify atrophy, the same instrument could also be used to conduct grayscale analysis (Pillen, 2010, Skeletal muscle Ultrasound) for extent of infiltration of fat and fibrous tissue into muscles. This additional analysis could possibly replace the isometric strength testing, where the inclusion of 12 exhorted applications per runner, for a total of 1200 tests, raises the possibility of a muscle strain injury occurring during testing. The proposed logistic regression analysis is appropriate, and the protocol is detailed and well-written.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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I am able to assess the statistics

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