Reviewer's report

Title: Relationship between age and marathon race time in world single age records from 18 to 80 years

Version: 1 Date: 25 June 2014

Reviewer: Catherine Fieseler

Reviewer's report:

No major compulsory revisions
I am not an expert in statistics and must rely on other reviewers' comments on this component.

Minor Essential Revisions
In the background, masters classification is age 40 years and older (not 35).
There are marathons in the U.S. that allow runners younger than 18 years to participate.
In results - the fastest marathon was 2:03:02 in Boston. Because this is a point to point course, it is not accepted as a world record. Therefore the world record is not the fastest marathon and should be labelled the fastest age group record or the world record. This is noted in the discussion but should be clarified in the results.
In the discussion - you list sarcopenia as a cause of increasing marathon times. VO2 max decreases with age and is a factor in slower times with increasing age. You do acknowledge that you did not have available data on the runners when discussing limitations of your study.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.