

1 Supplement Figure legends

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3 Suppl. Figure 1 Bland-Altman diagram of the prediction accuracy of the multiple linear regression

4 Bland-Altman diagram of the prediction accuracy of the multiple linear regression to predict mGS in

5 females (A) and males (B) were presented.

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7 Suppl. Figure 2

8 In order to visualize the presented multivariable reference centiles for females more clearly,

9 averaged "projections" were generated for fixed ranges for height and BMI and compared with the

10 classic, only sex- and age-adjusted, reference centiles (details see Methods).

11 The range of the centiles for height and BMI was given in the title of each subfigure.

12 The X-axis represents age, and the Y-axis represents maximum grip strength.

13

14 Suppl. Figure 3

15 In order to visualize the presented multivariable reference centiles for males more clearly, averaged

16 "projections" were generated for fixed ranges for height and BMI and compared with the classic, only

17 sex- and age-adjusted, reference centiles (details see Methods).

18 The range of the centiles for height and BMI was given in the title of each subfigure.

19 The X-axis represents age, and the Y-axis represents maximum grip strength.

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21 Suppl. Figure 4

22 Reference centiles for the change of mGS z-scores for females were presented in A for mGS z-scores
23 which were sex- and age-adjusted and in B which were sex-, age-, height- and BMI-adjusted.

24 Reference centiles for the change of mGS z-scores for males were presented in C for mGS z-scores
25 which were sex- and age-adjusted and in D which were sex-, age-, height- and BMI-adjusted.

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27 Suppl. Figure 5

28 The solid line represents the false positive classification rate having a low mGS, using only sex- and
29 age-adjusted z-scores. The dashed line represents the false negative classification rate having a low
30 mGS, using only sex- and age-adjusted z-scores. The X-axis represents the sum of the age-adjusted z-
31 scores for height and BMI.

32 The false positive classification rate increased with decreasing z-scores for height and BMI.

33 The false negative classification rate increased with increasing z-scores for height and BMI.

34 For further details s. Methods and Discussion.

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36 Suppl. Figure 6

37 In each subfigure the 10th, 50th and the 90th centile were given.

38 In subfigure A and B our sex- and age- adjusted reference centiles for mGS were compared with

39 those of Dodds et al. In subfigure C and D our reference centiles were compared with those of

40 Ploegmakers et al. In subfigure E and F our reference centiles were compared with those of Kocher et

41 al.

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