



Correction to: Can artificial intelligence support or even replace physicians in measuring sagittal balance? A validation study on preoperative and postoperative full spine images of 170 patients

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Space missing between the words “andagreement” in the first line of conclusion section of Abstract. The complete correct conclusion is given below.

Conclusion A new, fully automated algorithm that determines SB parameters has excellent reliability and agreement

with human raters, particularly on preoperative full spine images. The presented solution will relieve physicians from time-consuming routine work of measuring SB parameters and allow the analysis of large databases efficiently.

In Table 1 and Table 2, the indexes 1, 2 and 3 are supposed to be superscripted but they have been published incorrectly in the original publication. The complete correct Tables 1 and 2 are given below.

The original article can be found online at <https://doi.org/10.1007/s00586-022-07309-5>.

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Table 1 Intra-rater reliability of the manual measurements; rater 1a vs rater 1b; $n = 170$

	Statistical method	PI ¹	PT ²	SS ³	L1/S1 Lordosis	T4/T12 Kyphosis	SSA ⁴
<i>Intra-rater reliability (rater 1a vs rater 1b)</i>							
Preop	ICC ⁵ (95% CI ⁶)	0.93 (0.87–0.96)	0.97 (0.96–0.98)	0.88 (0.81–0.92)	0.96 (0.93–0.97)	0.96 (0.94–0.97)	0.93 (0.89–0.95)
	Mean (95% CI)	1.8 (1.2–2.4)	0.2 (–0.1–0.5)	1.5 (0.9–2.1)	1.4 (0.7–2.0)	1.2 (0.6–1.7)	1.5 (0.9–2.1)
	STD ⁷	3.9	2.1	4.1	4.3	3.6	4.1
	RMSE ⁸	4.2	2.1	4.3	4.5	3.8	4.3
Postop	ICC (95% CI)	0.93 (0.87–0.96)	0.95 (0.94–0.97)	0.88 (0.82–0.91)	0.94 (0.92–0.96)	0.93 (0.90–0.95)	0.92 (0.89–0.95)
	Mean (95% CI)	1.8 (1.2–2.3)	0.4 (0.1–0.8)	1.3 (0.7–1.9)	1.1 (0.4–1.7)	1.4 (0.8–2.0)	1.3 (0.7–1.9)
	STD	3.7	2.3	4.1	4.5	4.1	4.0
	RMSE	4.1	2.3	4.3	4.6	4.3	4.2

¹PI, Pelvic incidence²PT, Pelvic tilt³SS, Sacral slope⁴SSA, Spino-sacral angle⁵ICC, Intraclass correlation coefficient⁶CI, Confidence interval⁷STD, Standard deviation⁸RMSE, Root mean square error

Table 2 Inter-rater reliability of the manual measurements; rater 1a vs rater 2; rater 1b vs rater 2; $n = 170$

	Statistical method	PI ¹	PT ²	SS ³	L1/S1 Lordosis	T4/T12 Kyphosis	SSA ⁴
<i>Inter-rater reliability (rater 1a vs rater 2)</i>							
Preop	ICC ⁵ (95% CI ⁶)	0.92 (0.89–0.94)	0.95 (0.93–0.96)	0.87 (0.82–0.90)	0.92 (0.90–0.94)	0.94 (0.88–0.97)	0.92 (0.89–0.94)
	Mean (95% CI)	0.7 (0.0–1.4)	0.4 (0.0–0.8)	0.3 (– 0.4–1.0)	0.0 (– 0.9–0.9)	– 2.1 (– 2.7 to – 1.5)	0.3 (– 0.3–1.0)
	STD ⁷	4.7	2.7	4.6	6.0	3.9	4.5
	RMSE ⁸	4.8	2.7	4.6	6.0	4.4	4.5
Postop	ICC (95% CI)	0.92 (0.88–0.94)	0.93 (0.90–0.95)	0.88 (0.84–0.91)	0.94 (0.92–0.95)	0.93 (0.87–0.96)	0.92 (0.89–0.94)
	Mean (95% CI)	1.2 (0.5–1.8)	0.8 (0.4–1.2)	0.3 (– 0.3–1.0)	0.3 (– 0.5–1.0)	– 1.9 (– 2.5 to – 1.3)	0.5 (– 0.2–1.2)
	STD	4.4	2.7	4.3	4.8	4.1	4.3
	RMSE	4.5	2.8	4.3	4.8	4.5	4.4
<i>Inter-rater reliability (rater 1b vs rater 2)</i>							
Preop	ICC (95% CI)	0.90 (0.87–0.93)	0.97 (0.96–0.98)	0.86 (0.81–0.90)	0.93 (0.91–0.95)	0.91 (0.71–0.96)	0.93 (0.90–0.95)
	Mean (95% CI)	– 1.1 (– 1.8 to – 0.3)	0.2 (– 0.1–0.5)	– 1.2 (– 1.9 to – 0.6)	– 1.4 (– 2.2 to – 0.6)	– 3.3 (– 4.0 to – 2.6)	– 1.2 (– 1.8 to – 0.5)
	STD	5.1	2.0	4.5	5.4	4.5	4.2
	RMSE	5.2	2.0	4.6	5.6	5.6	4.3
Postop	ICC (95% CI)	0.91 (0.88–0.93)	0.97 (0.95–0.98)	0.87 (0.83–0.91)	0.93 (0.91–0.95)	0.91 (0.62–0.96)	0.91 (0.88–0.94)
	Mean (95% CI)	– 0.6 (– 1.3–0.1)	0.4 (0.1–0.7)	– 1.0 (– 1.6 to – 0.3)	– 0.8 (– 1.5 to – 0.1)	– 3.3 (– 3.9 to – 2.8)	– 0.8 (– 1.5 to – 0.2)
	STD	4.5	1.9	4.2	4.8	3.8	4.2
	RMSE	4.6	2.0	4.3	4.8	5.1	4.3

¹PI, Pelvic incidence²PT, Pelvic tilt³SS, Sacral slope⁴SSA, Spino-sacral angle⁵ICC, Intraclass correlation coefficient⁶CI, Confidence interval⁷STD, Standard deviation⁸RMSE, Root mean square error

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