CORRECTION

Correction: Accuracy of Pulse Oximeters in Detecting Hypoxemia in Patients with Chronic Thromboembolic Pulmonary Hypertension

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There is an error in the first three sentences under the subheading “Cut-Off value of SpO₂” in the Results section. The correct sentences are: We hypothesized that the cut-off value of each pulse oximeter to detect hypoxemia (SaO₂ ≤ 90% or PaO₂ ≤ 60 mmHg) was different. We calculated the sensitivity, specificity, PPV, and NPV of each pulse oximeter to detect hypoxemia. As shown in [Table 5](#), the specificity ([patients with SaO₂ ≤ 90 and SpO₂ ≤ 90] / [patients with SaO₂ ≤ 90]) by Masimo Radical was 45.5% and the NPV ([patients with SaO₂ ≤ 90 and SpO₂ ≤ 90] / [patients with SpO₂ > 90]) by Nihonkohden 3100 was 65.0%.

OPEN ACCESS

Citation: Kohyama T, Moriyama K, Kanai R, Kotani M, Uzawa K, Satoh T, et al. (2015) Correction: Accuracy of Pulse Oximeters in Detecting Hypoxemia in Patients with Chronic Thromboembolic Pulmonary Hypertension. PLoS ONE 10(10): e0141944. doi:10.1371/journal.pone.0141944

Published: October 28, 2015

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Table 5. Optimal SpO₂ value and ability of 3 pulse oximeters to detect hypoxemia (SaO₂ ≤ 90%).

	Cut-off value of SpO ₂ (%)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)
Nihon-kohden OLV-3100	90	90.3	81.2	95.6	65.0	88.6
Nellcor N-BS	90	93.9	85.7	96.9	75.0	92.5
Masimo Radicalp	90	100	45.5	91.4	100	92.0
	Optimal SpO ₂ (%) [#]					
Nihon- kohden OLV-3100	89	97.2	81.2	95.9	86.7	94.3
Nellcor N-BS	90	93.9	85.7	96.9	75.0	92.5
Masimo Radical	92	93.8	81.8	96.8	69.2	92.0

The sensitivity, specificity, positive predictive values, and negative predictive values of each pulse oximeter to detect hypoxemia are shown with the calculated optimal SpO₂ value to detect hypoxemia.

PPV positive predictive values, NPV negative predictive values

Sensitivity = (patients with SaO₂ > 90 and SpO₂ > 90) / (patients with SaO₂ > 90)

Specificity = (patients with SaO₂ < = 90 and SpO₂ < = 90) / (patients with SaO₂ < = 90)

PPV = (patients with SaO₂ > 90 and SpO₂ > 90) / (patients with SpO₂ > 90)

NPV = (patients with SaO₂ < = 90 and SpO₂ < = 90) / (patients with SpO₂ < = 90)

[#]Optimal SpO₂ represents the best compromise between sensitivity and specificity to detect hypoxemia (SaO₂ ≤ 90%)

doi:10.1371/journal.pone.0141944.t001

There are also errors in the footnotes of Tables 5 and 6. Please view the corrected Tables 5 and 6 here.

Table 6. Optimal SpO₂ value and ability of 3 pulse oximeters to detect hypoxemia (PaO₂ ≤ 60 mmHg).

	Cut-off value of SpO ₂ (%)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)
Nihon Kohden OLV-3100	90	98.2	61.3	82.4	95.0	85.2
Nellcor N-BS	90	100	57.1	81.2	100	85.0
Masimo Radical	90	100	23.8	77.1	100	78.7
	Optimal SpO ₂ (%) [#]					
Nihon Kohden OLV-3100	92	86.0	96.8	98.0	78.9	89.8
Nellcor N-BS	93	82.7	100	100	75.7	88.8
Masimo Radical	95	97.8	95.2	97.8	95.2	97.0

The sensitivity, specificity, positive predictive values, and negative predictive values of each pulse oximeter to detect hypoxemia are shown with the calculated optimal SpO₂ value to detect hypoxemia.

PPV positive predictive values, NPV negative predictive values

Sensitivity = (patients with PaO₂ > 60 and SpO₂ > 90) / (patients with PaO₂ > 60)

Specificity = (patients with PaO₂ < = 60 and SpO₂ < = 90) / (patients with PaO₂ < = 60)

PPV = (patients with PaO₂ > 60 and SpO₂ > 90) / (patients with SpO₂ > 90)

NPV = (patients with PaO₂ < = 60 and SpO₂ < = 90) / (patients with SpO₂ < = 90)

[#]Optimal SpO₂ represents the best compromise between sensitivity and specificity to detect hypoxemia (PaO₂ ≤ 60 mmHg)

doi:10.1371/journal.pone.0141944.t002

Reference

1. Kohyama T, Moriyama K, Kanai R, Kotani M, Uzawa K, Satoh T, et al. (2015) Accuracy of Pulse Oximeters in Detecting Hypoxemia in Patients with Chronic Thromboembolic Pulmonary Hypertension. PLoS ONE 10(5): e0126979. doi: [10.1371/journal.pone.0126979](https://doi.org/10.1371/journal.pone.0126979) PMID: [25978517](https://pubmed.ncbi.nlm.nih.gov/25978517/)