RETRACTION NOTE

Retraction Note to: The impact of fluid therapy on microcirculation and tissue oxygenation in hypovolemic patients: a review

Editorial Office of Intensive Care Medicine

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Retraction note to: Intensive Care Med (2010)

36:1299–1308

<https://doi.org/10.1007/s00134-010-1912-7>

4-010-1912-7

The Editor-in-Chief has retracted this article [1] because a number of studies included in this review [2, 3, 4] (originally cited as references 24, 49, 51) have subsequently been retracted. This has rendered the content of the review unreliable.

Author Joachim Boldt has not responded to any correspondence from the publisher about this retraction. Author Can Ince agrees to the retraction.

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References

1. Boldt J, Ince C (2010) The impact of fluid therapy on microcirculation and tissue oxygenation in hypovolemic patients: a review. *Intensive Care Med* 36:1299–1308. <https://doi.org/10.1007/s00134-010-1912-7>
2. Boldt J, Suttner S, Brosch C, Lehmann A, Röhm K, Mengistu A (2009) The influence of a balanced volume replacement concept on inflammation, endothelial activation, and kidney integrity in elderly cardiac surgery patients. *Intensive Care Med* 35:462–470
3. Lang K, Boldt J, Suttner S, Haisch G (2001) Colloids versus crystalloids and tissue oxygen tension in patients undergoing major abdominal surgery. *Anesth Analg* 93:405–409
4. Boldt J, Heesen M, Müller M, Pabsdorf M, Hempelmann G (1996) The effects of albumin versus hydroxyethyl starch solution on cardiorespiratory and circulatory variables in critically ill patients. *Anesth Analg* 83:254–261

Published online: 13 May 2020

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<https://www.springer.com/journal/134/>

The original article can be found online at <https://doi.org/10.1007/s00134-010-1912-7>.