Appendix 4. Excluded studies

1. Pinto M, Barjas-Castro ML, Nascimento S, Falconi MA, Zulli R, Castro V: The new noninvasive occlusion spectroscopy hemoglobin measurement method: a reliable and easy anemia screening test for blood donors. Transfusion 2013; 53:766-9

Reason: Bias and SD are not provided.

2. Joseph B, Hadjizacharia P, Aziz H, Snyder K, Wynne J, Kulvatunyou N, Tang A, O'Keeffe T, Latifi R, Friese R, Rhee P: Continuous noninvasive hemoglobin monitor from pulse ox: ready for prime time? World J Surg 2013; 37:525-9

Reason: Bias and SD are not provided

3. Tekstra-Kay C, Schoeffel RE, Bolton D, Htun C, King GG: The Use of Non-Invasive Haemoglobin in the Measurement of Diffusion Capacity. Respirology 2012; 17:6-

Reason: Poster

4. Pyregov AV, Ovechkin A, Petrov SV: [Noninvasive total hemoglobin monitoring based on multiwave spectrophotometry in obstetrics and gynecology]. Anesteziol Reanimatol 2012:36-9

Reason: Unable to get full-text article

5. Miller RD, Ward TA, McCulloch CE, Cohen NH: Does a digital regional nerve block improve the accuracy of noninvasive hemoglobin monitoring? J Anesth 2012; 26:845-50

Reason: Bias and SD are not provided

6. Crowley C, Montenegro-Bethancourt G, Solomons NW, Schumann K: Validity and correspondence of non-invasively determined hemoglobin concentrations by two trans-cutaneous digital measuring devices. Asia Pac J Clin Nutr 2012; 21:191-200

Reason: Bias and SD are not provided

7. Alvarez RG, Motos AA, Duenas DS, Montero LG, Vecino JMC: The accuracy of continuous noninvasive measurement of hemoglobin via pulse co-oximetry in patients undergoing knee arthroplasty. British Journal of Anaesthesia 2012; 108:109-10

Reason: Abstract

8. Butwick AJ, Hilton G, Riley ET, Carvalho B: Non-invasive measurement of hemoglobin during cesarean hysterectomy: a case series. Int J Obstet Anesth 2011; 20:240-5

Reason: Case series

9. Crowley C, Montenegro-Bethancourt G, Arriaga C, Solomons NW, Schumann K: Correspondence of hemoglobin values obtained by a noninvasive, cutaneous-contact method with values obtained by conventional methods from whole blood samples in a Guatemalan field setting. Food and Nutrition Bulletin 2010; 31:503-12

Reason: Bias and SD are not provided

10. Sakudo A, Kato YH, Kuratsune H, Ikuta K: Non-invasive prediction of hematocrit levels by portable visible and near-infrared spectrophotometer. Clin Chim Acta 2009; 408:123-7

Reason: Bias and SD are not provided.

11. Bender JE, Shang AB, Moretti EW, Yu B, Richards LM, Ramanujam N: Noninvasive monitoring of tissue hemoglobin using UV-VIS diffuse reflectance spectroscopy: a pilot study. Opt Express 2009; 17:23396-409

Reason: Bias and SD are not provided

12. Yoon G, Kim SJ, Jeon KJ: Robust design of finger probe in non-invasive total haemoglobin monitor. Medical & Biological Engineering & Computing 2005; 43:121-5

Reason: Bias and SD are not provided. No measurement of Hb in Laboratory testing.

13. Petrova IY, Esenaliev RO, Petrov YY, Brecht HP, Svensen CH, Olsson J, Deyo DJ, Prough DS: Optoacoustic monitoring of blood hemoglobin concentration: a pilot clinical study. Opt Lett 2005; 30:1677-9

Reason: Bias and SD are not provided

14. Noiri E, Kobayashi N, Takamura Y, Iijima T, Takagi T, Doi K, Nakao A, Yamamoto T, Takeda S, Fujita T: Pulse total-hemoglobinometer provides accurate noninvasive monitoring. Crit Care Med 2005; 33:2831-5

Reason: Not a commercially available device

15. Kanashima H, Yamane T, Takubo T, Kamitani T, Hino M: Evaluation of noninvasive hemoglobin monitoring for hematological disorders. J Clin Lab Anal 2005; 19:1-5

Reason: Bias and SD are not provided