

The Ember non-invasive hemoglobin tracking system is based on existing technology that is trusted and used in hospitals around the world including here in the United States. The technology platform licensed by Cercacor Laboratories to Masimo Corporation for use in medical devices is referred to as Masimo rainbow SET (Signal Extraction Technology). This technology has been developed and utilized in both a spot-checking (one measurement at a time) and a continuous format.

Here is a list of what others have found when evaluating the performance of non-invasive hemoglobin (SpHb) spot-check measurements utilizing Masimo rainbow SET technology for medical use.

1. Raikhel, M. (2012) Accuracy of noninvasive and invasive point-of-care total blood hemoglobin measurement in an outpatient setting. *Postgrad Med.* , 124(4), 250-155.
<http://www.ncbi.nlm.nih.gov/pubmed/22913913>
2. Stoesz, M., Wood, L., Clark, W., Kwon, Y.M., Freiberg, A.A. (2014) Utility of noninvasive transcutaneous measurement of postoperative hemoglobin in total joint arthroplasty patients. *J. Arthroplasty*, 29(11), 2084-6.
<http://www.ncbi.nlm.nih.gov/pubmed/25087726>
3. DeBarros, M., Shawhan, R., Bingham, J., Sokol, K., Izenberg, S., Martin, M. (2015) Assessing serum hemoglobin levels without venipuncture: accuracy and reliability of Pronto-7 noninvasive spot-check device. *Am. J. Surg*, 209(5), 844-55.
<http://www.ncbi.nlm.nih.gov/pubmed/25869336>
4. Amano, K., Murakami, A. (2013) Use of Non-Invasive Total Hemoglobin Measurement as a Screening Tool for Anemia in Children. *Pediatr Int.*, 55(6), 803-5.
<http://www.ncbi.nlm.nih.gov/pubmed/24330295>

Here is a link to what others have found when evaluating the performance of non-invasive, continuous hemoglobin measurements utilizing Masimo rainbow SET technology for medical use.

5. Frasca, D., Dahyot-Fizelier, C., Catherine, K., Levrat, Q., Debaene, B., Minoz, O. (2011) Accuracy of a continuous noninvasive hemoglobin monitor in intensive care unit patients. *Critical Care Med.*, 39(10), 2277-82.
<http://www.ncbi.nlm.nih.gov/pubmed/21666449>

For additional resource: Search PubMed under the terms SpHb or Noninvasive Hemoglobin

<http://www.ncbi.nlm.nih.gov/pubmed/?term=SpHb>