PULSE CO-OXIMETER®

Total Hemoglobin

SpHb

Noninvasive > Continuous

Total Hemoglobin (SpHb®) is a breakthrough measurement that allows clinicians to noninvasively and continuously monitor hemoglobin—facilitating earlier and better clinical decisions, improved patient safety, and reduced cost of care.

SURGERY

- Blood transfusions increase morbidity, mortality, and cost of treatment.[1,2,3,4]
- Continuous and noninvasive SpHb is proven to help clinicians reduce blood transfusions during surgery.[5]

CRITICAL CARE AND OBSTETRICS

- Late detection of bleeding increases risks and cost of treatment.[6]
- Continuous and noninvasive SpHb allows you to track changes in hemoglobin that may help you detect bleeding earlier.[7]

EMERGENCY DEPARTMENT

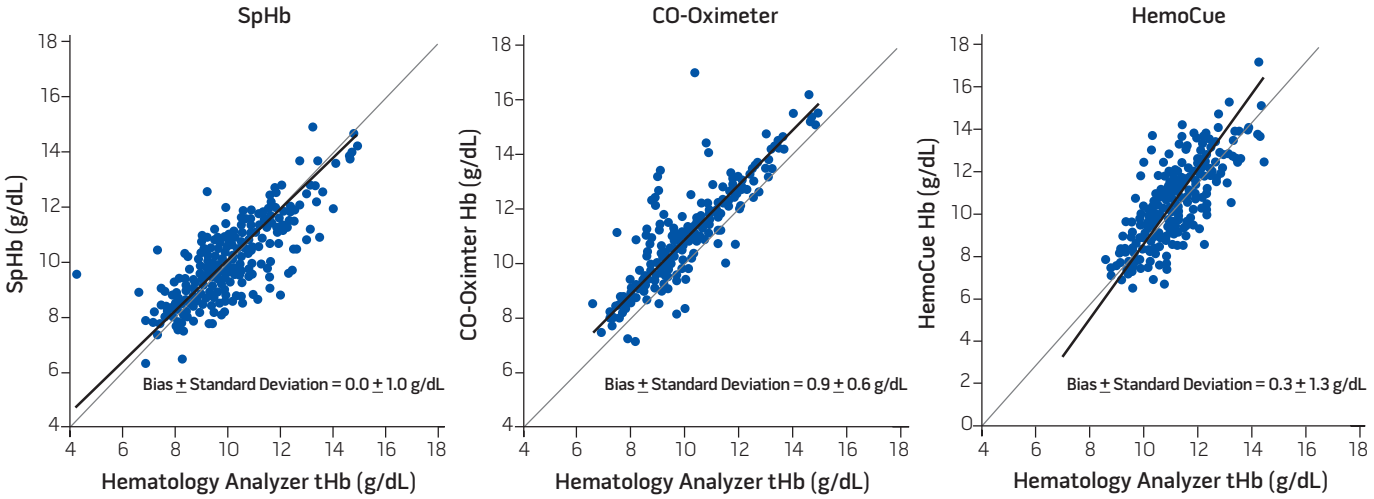
- Traditional invasive lab testing provides delayed results and requires a painful needle stick and time consuming blood draws.
- Noninvasive spot check hemoglobin may facilitate timely patient assessment and reduce the need to wait for lab results.

"Masimo SpHb is an impressive new tool that could potentially help us to more safely guide patients in surgery through to recovery. With it, not only can we spot hemoglobin changes as they occur, but we can see where they are heading. This ability to identify an upward or downward hemoglobin trend on a second-by-second basis as it occurs could be of tremendous value."

RONALD MILLER, MD
Chief of Anesthesia, Professor and Chairman of the Dept. of Anesthesia and Perioperative Care at the University of California, San Francisco, CA

Masimo SET® rainbow

CLINICAL ACCURACY



- In Masimo's FDA submission, SpHb was validated in a range of 8 to 17 g/dL with accuracy of 1.0 g/dL ± at one standard deviation.[8]
- An independent study in the surgical intensive care unit evaluated 471 hemoglobin measurements from 62 patients. SpHb, a satellite laboratory CO-Oximeter (Siemens RapidPoint 405), and a point-of-care device (HemoCue 301) were compared to reference hemoglobin from the central laboratory hematology analyzer (Sysmex XT2000i). The bias ± precision of each method was as follows:
  - SpHb 0.0 ± 1.0 g/dL
  - CO-Oximeter 0.9 ± 0.6 g/dL
  - Point-of-care device 0.3 ± 1.3 g/dL

  In the same study, changes in SpHb compared to changes in the reference hemoglobin showed the same correlation as the laboratory CO-Oximeter and better correlation than the point-of-care device.[9]

TECHNOLOGY PLATFORM

Masimo rainbow SET® is a noninvasive monitoring platform enabling the assessment of multiple blood constituents and physiologic parameters that previously required invasive or complicated procedures, in addition to providing Masimo SET® Measure-through Motion and Low Perfusion pulse oximetry.

- Acoustic Respiration Rate (RRa™)
- Carboxyhemoglobin (SpCO®)
- Methemoglobin (SpMet®)
- Oxygen Content (SpOC™)
- Pleth Variability Index (PVI®)
- Total Hemoglobin (SpHb®)
- Oxygen Saturation (SpO_2)
- Pulse Rate (PR)
- Perfusion Index (PI)

The upgradeable rainbow SET® platform lets you choose the rainbow® measurements that are right for you now and be confident that your investment in patient safety won't become obsolete tomorrow.

REFERENCES

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