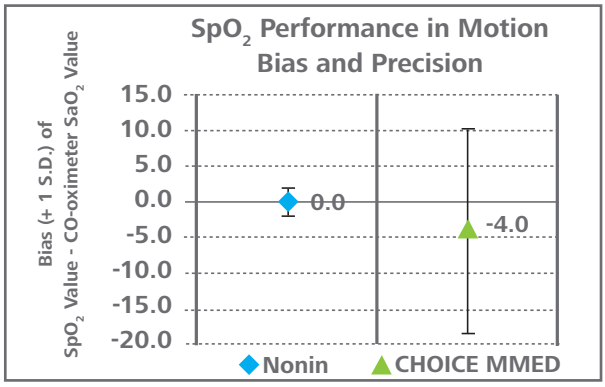
INNOVATIVE VITAL SIGN MONITORING

Tested in Motion: See the Nonin Difference

A study comparing performance of a Nonin Medical finger pulse oximeter with PureSAT® technology and a CHOICE MMED finger pulse oximeter was conducted at a leading hypoxia research laboratory in a challenging condition: motion. Performance was determined using an industry standard breathe-down protocol of induced hypoxia in thirteen subjects. SpO_2 values are compared to the gold standard which is CO-oximetry analysis of arterial blood samples. Motion was generated using a mechanical fixture with tapping and rubbing.

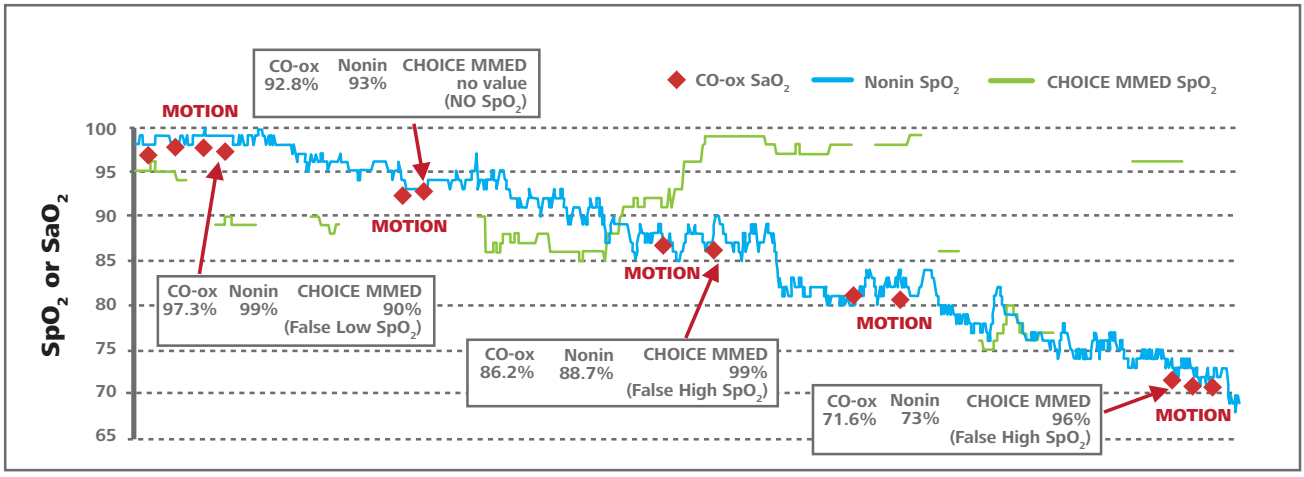
Nonin oximetry with PureSAT technology was found to have superior performance. Nonin precision was ±2.1; CHOICE MMED precision was ±14.4.

	Nonin 9590	CHOICE MMED C316SM
Bias	+0.03	-3.96
Precision (Standard Deviation)	±2.08	±14.38
Samples (n)	250	227
Accuracy % SpO_2 (A_{RMS})	2.1	14.9



Individual Subject SpO_2 and SaO_2 Over Time

The Nonin Onyx® Vantage 9590 finger pulse oximeter with PureSAT technology tracked the subjects' desaturation and had an outstanding correlation with the CO-oximeter. In addition, Nonin's finger oximeter was able to read through motion. The CHOICE MMED oximeter gave false high and false low SpO_2 readings as compared to the CO-oximeter reference values. The CHOICE MMED oximeter was unable to read through motion and provided no readings during motion as indicated by gaps in the green chart line.



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