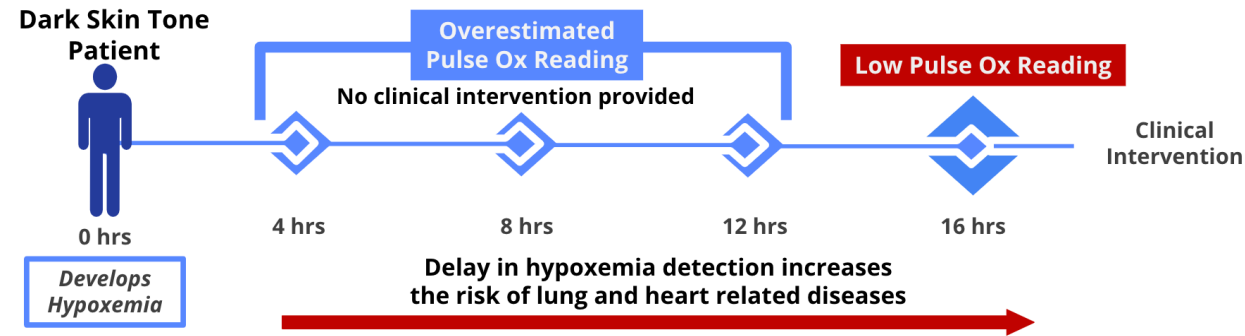




Earlier Detection of Hypoxemia in Dark Skin Tone Patients

PATIENT TIMELINE



Patients can be hypoxemic for up to 16 hours before the pulse oximeter detects hypoxemia, which delays care, worsens health outcomes, and requires more resources from these already strained hospitals.

CONTEXT

Pulse oximeters measure blood oxygen saturation (SpO2) levels, providing critical information on a patient's respiratory health.

Annually in the United States, at least 240,000 patients suffer complications from their respiratory diseases due to incorrect pulse oximeter blood oxygen saturation (SpO2) readings.

OPPORTUNITY & BENEFITS



\$3.6

Potentially saved in US with solution to bias



6.1%

Reduction in US hospital mortality
Tobin, M.J., Jubran, A. Pulse oximetry, racial bias and statistical bias. Ann. Intensive Care 12, 2 (2022). <https://doi.org/10.1186/s13613-021-00974-7>



2.6B

Dark skin toned people across the world can benefit

OUR PRODUCT: EQUINOX

- ✓ LOW COST
- ✓ REUSABILITY & RELIABILITY
- ✓ QUICK PROCESSING
- ✓ PERSONALIZED CALIBRATION

<\$25 USD

EquinOx's hardware and software innovations are inexpensive to implement.



EquinOx can be easily sanitized, and can operate in a wide variety of temperatures and humidities.

3X

GREATER LIKELIHOOD OF A DARK SKIN TONED PATIENT DEVELOPING UNDETECTED HYPOXEMIA (LOW BLOOD OXYGEN)

17%

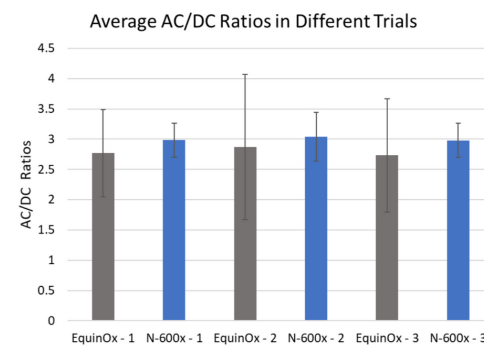
DARK SKIN TONE PATIENTS WITH INACCURATE BLOOD OXYGEN SATURATION READINGS



Sjoding, Michael W., et al. "Racial Bias in Pulse Oximetry Measurement." NEJM, vol. 383, no. 25, 2020, pp. 2477-2478.

This bias is hypothesized to originate in the higher concentration of melanin in pigmented skin, interfering with the light absorbance measurements used by pulse oximeters

TESTING RESULTS



The figure compares the average AC/DC ratio for a hospital-grade oximeter and EquinOx. It can be concluded that EquinOx can obtain accurate and precise PPG waveforms, as compared to a hospital-grade pulse oximeter.

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REFER TO THE QR CODE TO SEE A VIDEO DEMO OF EQUINOX:



EquinOx's ML Algorithm outputs measurement in less than 10 seconds.



EquinOx's sensor array accounts for differences in skin pigmentation.