








Pulse oximeter measurements vary across ethnic groups: an observational study in patients with COVID-19

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Be aware that pulse oximeters overestimate oxygen saturation measurements in patients with hypoxaemia, and that this error is larger in individuals from black and Asian ethnic groups

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To the Editor:

The pulse oximeter provides regular non-invasive measurements of blood oxygenation and is used in a wide range of clinical settings [1]. The light wave transmission that this technology uses is modified by skin pigmentation and thus may vary by skin colour. A recent study of paired measures of oxygen saturation from pulse oximetry and arterial blood gas reported differing outputs in patients with black skin compared to patients with white skin that has the potential to adversely impact on patient care [2].

