The use of partial-opioid antagonism combined with oxygen insufflation to support the physiology of chemically immobilized white rhinoceroses (*Ceratotherium simum*)

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Immobilisation is essential for rhino management
Potent Opioids (M99)

Partial reversal

Poor respiration

Oxygen

Positioning

Respiratory stimulants

White rhino particularly sensitive
Seven experimental interventions

Boma-kept rhinos
Blood gas machine

Arterial blood pressure

Oxygen

Capnograph
Oxygen

\[ \text{PaO}_2 \text{ (mmHg)} \]

Time after lateral recumbency (min)

PaCO\(_2\) (mmHg)

Time after lateral recumbency (min)

Carbon dioxide
Oxygen

Carbon dioxide
Combination of partial reversal + oxygen provides the best cardiorespiratory support for the immobilized white rhinoceros
Thanks to the whole team involved