

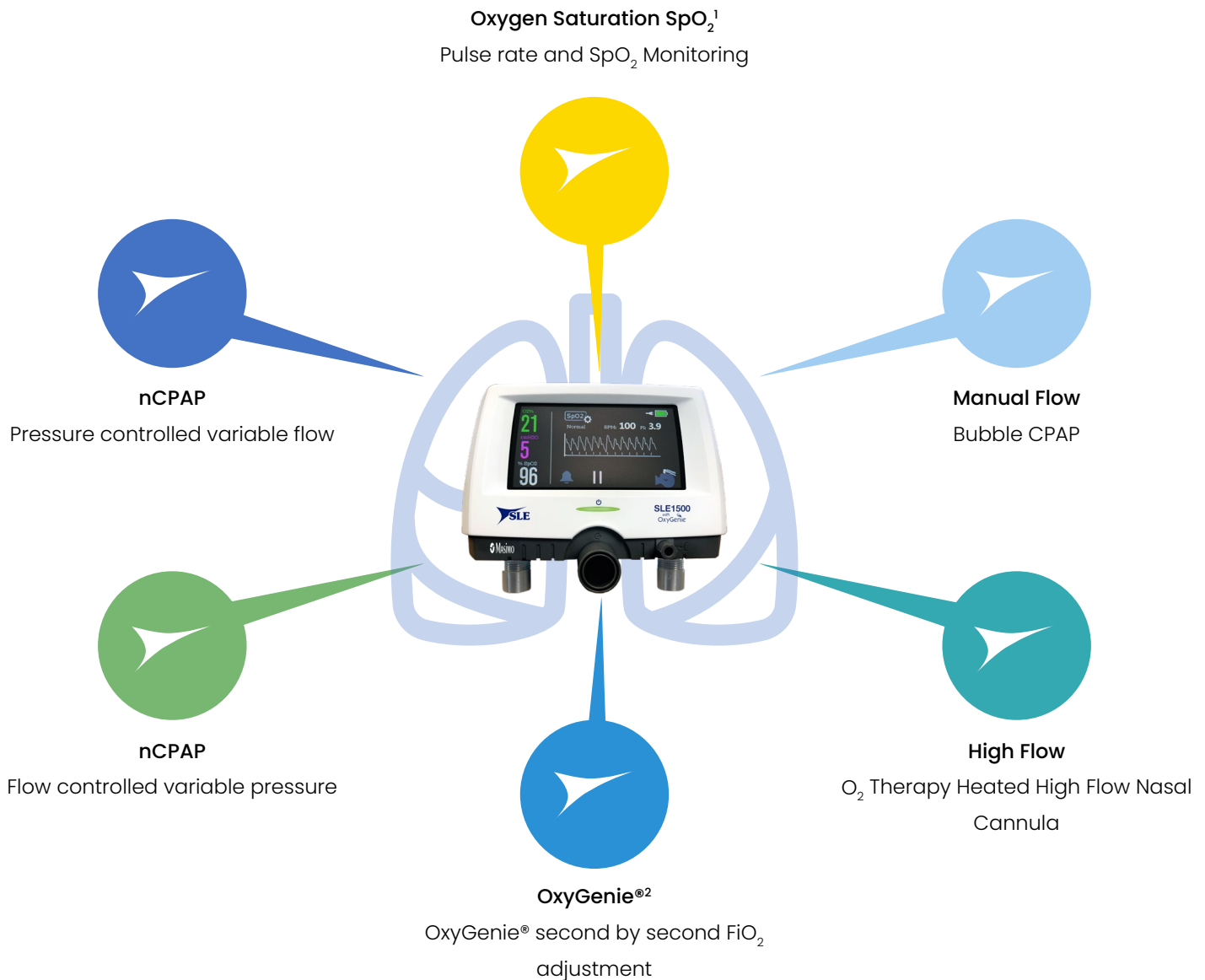


# SLE1500

Respiratory Therapy System with OxyGenie®

# Respiratory Support

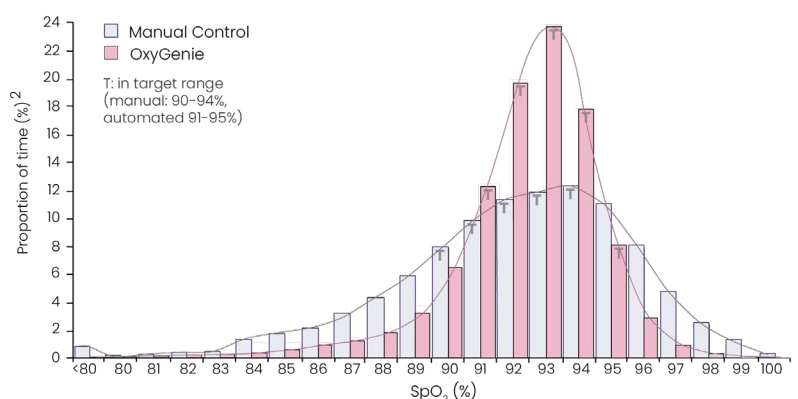
for neonatal and infant care



## OxyGenie<sup>®2</sup> and $SpO_2^1$

OxyGenie<sup>®</sup> is the Automatic  $FiO_2$  controller for the SLE1500. Designed with the University of Tasmania and the Royal Hobart Hospital, SLE wanted to create a solution that maximises the amount of time the patient's  $SpO_2$  is within target range, by analysing their  $FiO_2$  every second.

SLE1500 uses Masimo's proven RD SET<sup>®</sup> technology. The sensors plug directly into the unit providing instant monitoring of a plethysmogram and  $SpO_2$  values on screen, providing immediate clinical data.



# Non-Invasive Ventilation (NIV)

Decreases need for Mechanical Ventilation<sup>3</sup>

Reduce Work of breathing (WOB)<sup>3</sup>

Stabilises lung volume<sup>4</sup>

Maintains patency of upper airways<sup>3</sup>

Improves thoracoabdominal synchrony<sup>5</sup>

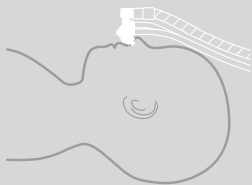
Reduce re-intubation rates in infants<sup>3</sup>

Lowers the rate of post extubation respiratory failure<sup>3</sup>

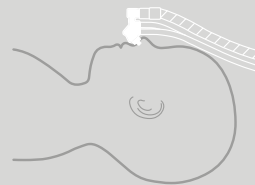
## Advantages of NIV

- Decreased cost as compared to invasive ventilation<sup>3</sup>
- Delivery of a precisely controlled oxygen concentration<sup>2</sup>
- Prevention of airway collapse<sup>3</sup>
- Transition from invasive mechanical ventilation<sup>3</sup>
- NIV is better tolerated by infants<sup>6</sup>

mBar/cmH<sub>2</sub>O

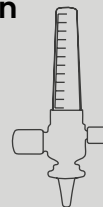


L/min



CPAP  
Pressure and Flow Set

L/min



Manual Mode  
Bubble CPAP

L/min



O<sub>2</sub> Therapy  
High Flow O<sub>2</sub>

## References

1. A full citation list of featured clinical studies from Masimo is available at: <http://www.masimo.com/evidence/featured-studies/feature/>
2. Plottier GK, Wheeler KI, Ali SKM, Sadeghi Fathabadi O, Jayakar R, Gale TJ, Dargaville PA. Clinical evaluation of a novel adaptive algorithm for automated control of oxygen therapy in preterm infants on non-invasive respiratory support. *Arch Dis Child Fetal Neonatal Ed* 2017; 102: F37-F43 <https://pubmed.ncbi.nlm.nih.gov/27573518/>
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MK-PHL-000008

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