



Key Points

↓
NHF reduced intubation rate
↓

↓
NHF reduces escalation of care
↓



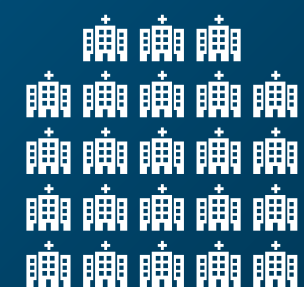
Publication

Frat et al. 2015. NEJM.
aka the FLORALI study

What was the aim of this study?

Administration of noninvasive ventilation (NIV) in patients with acute hypoxemic respiratory failure (AHRF) is debated.

The aim of this study was to determine, in patients admitted to the ICU with AHRF, whether Nasal High Flow (NHF) or NIV, as compared with standard oxygen (Std. O₂) therapy alone, could reduce the rate of intubation and improve outcomes.



23 ICUs in France and Belgium

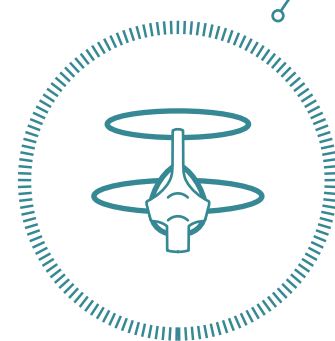


Method

n=310

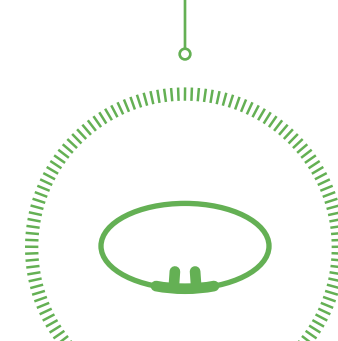
AHRF
(PaO₂:FiO₂ ≤ 300 mmHg)

Randomization



NIV
n=110

Minimum 8 hours* for 2 days TV 7-10 ml/kg, PEEP 2-10 cmH₂O*, O₂*



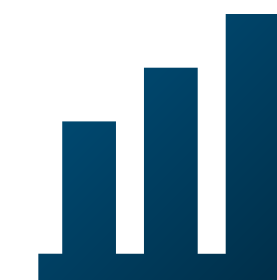
Std. O₂
n=94

> 10 L/min* non-rebreather mask



NHF
n=106

50 L/min, minimum 2 days starting at 100% O₂*



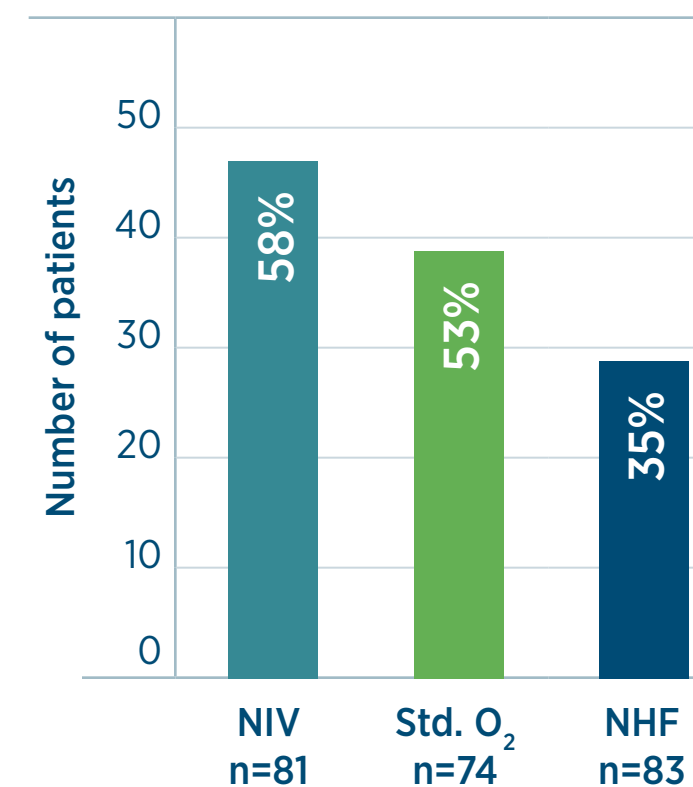
Results

Primary Outcome

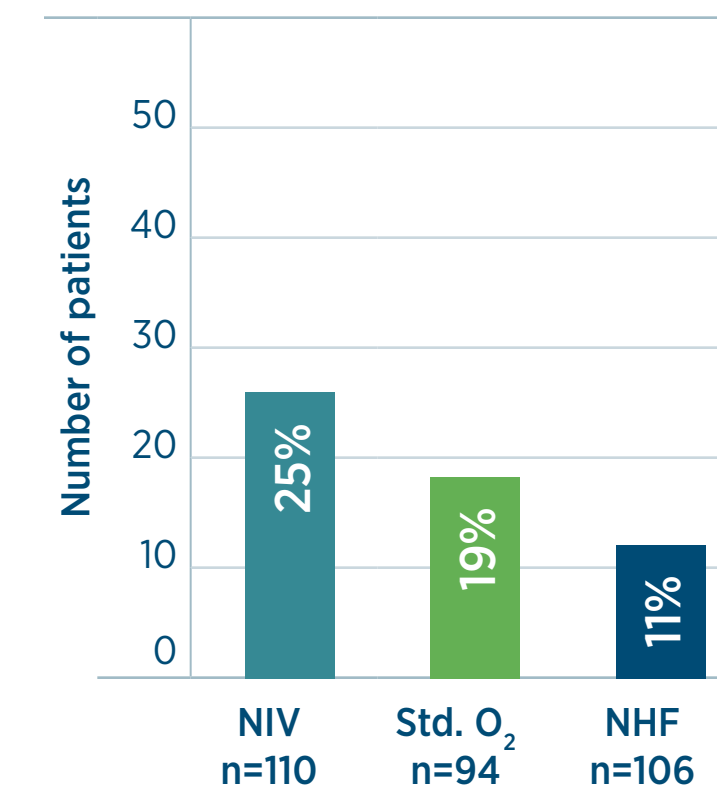
Difference in number of patients intubated at day 28 - not found to be statistically significant (p=0.18)

Secondary Outcomes

Reduced intubation rate† (%) (p=0.009)



Reduced ICU mortality (%) (p=0.047)



↑ Significant increase in ventilator-free days on NHF

↓ NHF significantly reduced intensity of respiratory discomfort and dyspnea

† Patients with PaO₂:FiO₂ ≤ 200 mmHg i.e. this represents a smaller/"sicker" subset of the study population.

Further reading

PubMed Abstract

Full paper

* Adjusted for SpO₂ ≥ 92%. TV = Tidal Volume, PEEP = Positive End-Expiratory Pressure