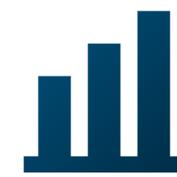


# Rochwerg et al. March 2019, Intensive Care Medicine

High flow nasal cannula compared with conventional oxygen therapy for acute hypoxemic respiratory failure: a systematic review and meta-analysis.



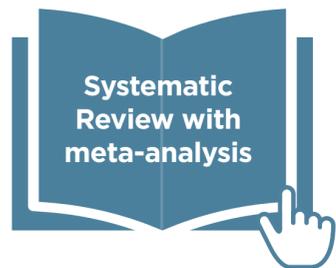
Meta-analysis results  
NHF vs COT



Publication:  
Systematic review & meta-analysis

## Objectives:

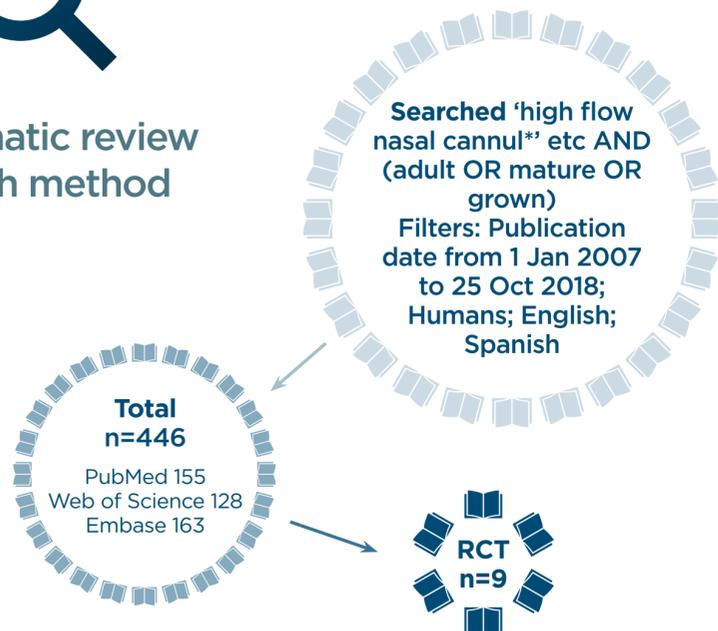
The aim of this review and meta-analysis was to summarize the safety and efficacy of nasal high flow (NHF) in patients with acute hypoxemic respiratory failure (AHRF).



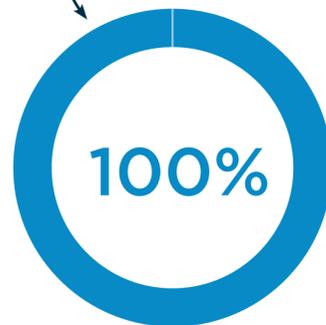
Devices & settings



Systematic review search method



Yes, it's a pie chart



100% of the analyzed studies used F&P Optiflow Systems

## Decreased risk of requiring intubation:

Relative risk [RR] 0.85, 95% confidence interval [CI] 0.74 - 0.99, low certainty

## Decreased escalation of oxygen therapy:

[RR] 0.71, [CI] 0.51 - 0.98, low certainty

## No difference in mortality:

[RR] 0.94, [CI] 0.67 - 1.31, moderate certainty

## No effect for:

ICU LoS, Hospital LoS, patient reported comfort and dyspnea.

Analyzed RCTs	Flow (L/min)											Subjects (n)	Inclusion Criteria	
	10	15	20	25	30	35	40	45	50	55	60			
Azoulay et al. 2018										●			778	Acute respiratory failure (immunocompromised)
Bell et al. 2015										●			100	Acute undifferentiated shortness of breath
Frat et al. 2015										●			313	Acute hypoxemic respiratory failure (pre-intubation)
Jones et al. 2016										●			322	Acute hypoxemic respiratory distress
Lemiale et al. 2015										●			102	Acute hypoxemic respiratory failure (immunocompromised)
Makdee et al. 2017										●			136	Cardiogenic pulmonary edema
Parke et al. 2011										●			60	Mild-to-moderate hypoxemic respiratory failure
Rittayamai et al. 2015										●			40	Acute dyspnea and hypoxemia
Schwabbauer et al. 2014										●			14	Hypoxic respiratory failure

Legend: INTENSIVE CARE DEPARTMENT (grey), EMERGENCY DEPARTMENT (blue), Flow Range (line), Starting Flow (blue dot), Mean Flow (black dot)

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Some flows were calculated from the reported mean and standard deviation or interquartile range, and/or the known flow limits of the system used. Where the mean alone is reported, no estimated maximum or minimum is calculated unless an initial flow (different to the mean) is reported in which case it is taken as one of the limits.