|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Study reference** | **Study characteristics** | **Patient characteristics 2** | **Intervention (I)** | **Comparison / control (C) 3** | **Follow-up** | **Outcome measures and effect size 4** | **Comments** |
| Ruangsomboon, 2021 | "Type of study:  Single-center open label randomised controlled trial  Setting and country:  Emergency department of Siriraj Hospital, a tertiary university hospital in Bangkok, Thailand  Funding and conflicts of interest:  Fisher & Paykel Healthcare provided the NHF devices. The company played no role in the trial design, data collection, data analysis, or manuscript preparation." | "Inclusion criteria:  Adult patients with a known diagnosis of asthma, admitted to the ED with symptoms of an acute asthma exacerbation (defined as having a progressive increase in shortness of breath, cough and wheezing, and chest tightness) and hypoxia (defined as an oxygen saturation of <95%)  Exclusion criteria:  Respiratory failure (respiratory rate >35 breaths/minute or oxygen saturation <90% or signs of increased work of breathing), a Glasgow Coma Scale score of <13, contraindications for using airway pressurizing therapy, COPD, history of smoking >5 pack-years, lung cancer.  n: 37 (I: 19, C: 18); age: I 64 C 63 (sd: I 17 C 22)  Sex (% male): I: 16%; C: 17%  Groups comparable at baseline: yes" | High-flow oxygen therapy using an Optiflow nasal canula at airflow of 35 L/min initially to achieve a O2 saturation of 95-99% or 90-92% if the initial saturation was <92%, in addition to conventional asthma exacerbation treatment. | Standard oxygen nasal canula or nonrebreather mask, in addition to conventional asthma exacerbation treatment. | "Duration of follow-up: Duration of follow-up: During hospital stay  Loss-to-follow-up (n, reason): I: 1, Patient was intubated;  C: 1, Patient was intubated  Incomplete outcome data (n, reason): I: 0, na;  C: 0, na" | Treatment failure: I: 5.6%; C 5.6%, p=0.97 (95% CI: na) (percentage for intervention group was reported incorrectly, should be 5.3%)  Difference: 0.29% (95% CI: -20 to 21) (calculated by TC, Kennisinstituut, Federatie Medisch Specialisten)  ED stay duration (hours): I: 4.4 (3.2-10.1); C: 6.8 (4.9-11.6), p=0.26 (95% CI: na)  Hospitalisation duration (hours): I: 9.6 (4.5-67.2); C: 12.0 (4.8-69.6), p=0.87 (95% CI: na) | Only p-values reported, furthermore a reasonably designed study in a small number of patients. |