

Category :**Sedation - analgesia**

A229 - Icu-free and ventilator-free days with isoflurane or propofol as a primary sedative – a post-hoc analysis of the sedaconda study

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Introduction:

The Sedaconda study was an RCT in invasively ventilated patients, comparing inhaled isoflurane (Iso) via the Sedaconda Anaesthetic Conserving Device (ACD) to iv propofol (iP) [1]. 150 patients received Iso and 151 iP, for up to 48±6h or extubation, whichever was first. Continued sedation, if needed, was at the physician's discretion. We compared ICU-free days (ICU-FD) and ventilator-free days (VFD) in patients receiving the initial drug and never converting to the other drug in the 30 days from randomisation.

Methods:

69 Iso patients not switching to iP and 109 iP patients not switching to Iso after the study period were analysed. Study groups had similar demographic and clinical baseline characteristics (Table 1).

Results:

The Iso group had significantly more ICU-FD than the iP group (15.9 vs 11.6, p=0.008). VFD in Iso and iP were 18.6 and 16.6 respectively (p=0.231). Additional analyses:

1. Comparing only patients that were further sedated after the study period (43 Iso patients vs 81 iP patients); the Iso group had more ICU-FD (14.7 vs. 9.6, p=0.017) than the iP group. VFD for Iso vs iP were 18.7 and 14.8 respectively (p=0.103).
2. Controlling for SAPS II at baseline; the Iso group had more ICU-FD than the iP group (15.6 vs 12.4 ICU-free days, p=0.043). VFD for Iso vs iP were 18.5 vs 17.8 respectively (p=0.672).
3. Controlling for SOFA score 48 hours after randomisation; ICU-FD were more with Iso than with iP: 17.9 vs 13.3, p=0.005. VFD for Iso vs iP were 20.4 and 17.6, respectively (p=0.086).

Conclusion:

Isoflurane, via Sedaconda ACD, as the primary sedative was associated with more ICU-free days than intravenous propofol. Ventilator-free days favoured isoflurane but differences did not reach statistical significance.

References:

1. Meiser A, Lancet Respir Med, 9(11):1231-1240, 2021

Table:

	Isoflurane (n=69)	Propofol (n=109)	p-value
Age, mean (SD) years	66 (11.8)	66 (13.15)	0.885

Female sex n (%)	17 (24.6)	38 (34.9)	0.150
BMI, Mean (SD) kg/m ²	27.5 (6.1)	27.7 (7.2)	0.958
Emergency admission n (%)	39 (56.5)	71 (65.1)	0.299
Infection at admission, n (%)	33 (47.8)	57 (52.3)	0.480
SAPS II score, mean (SD)	40.1 (17.3)	44.3 (18.3)	0.191
SOFA score Mean (SD) 48 hours after randomisation	7.5 (4.3)	8.1 (3.7)	0.378

Demographic and clinical baseline characteristics.