

How to set INTELLiVENT®-ASV® for a (COVID-19) ARDS patient

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Author: Matthias Himmelstoss, Reviewer: Kaouther Saihi, Süha Demirakca, Alexandra Gerlach, Kathrin Elsner, Annemarie Weideli

This article gives you step-by-step instructions on how to set the ventilator when using the ventilation mode INTELLiVENT-ASV on ARDS patients.

- Set patient height and select patient gender.
- Connect SpO2 and CO2 sensors and activate Oxygenation and Ventilation controllers.
- Activating the “ARDS” patient condition results in higher starting values for the Oxygenation and Ventilation controllers.
- Individualize alarm settings according to the patient condition.
- Start ventilation.
- Monitor blood gases (no later than 30 min after the start of ventilation) and adjust PetCO2- and SpO2-target shifts for INTELLiVENT-ASV to reach your target PaCO2 and SpO2. Perform another ABG as soon as INTELLiVENT-ASV brings the patient (yellow cross) into the target range.
- PEEP limitation: Be aware that higher PEEP settings are beneficial in moderate and severe ARDS patients. Assess recruitability and the PEEP setting using the P/V Tool. If you decide on higher PEEP, you can limit the INTELLiVENT-ASV Oxygenation controller to higher PEEP values. You can set the range for the PEEP controller limits by setting the minimum and maximum PEEP limits as shown below.
- It is also possible to set the PEEP controller to manual and select the optimal PEEP for your patient resulting from a recruitment maneuver and decremental PEEP trial focusing on oxygenation. (1) **Note:** High PEEP values can affect your patient’s hemodynamics.
- Select your low FiO2 limit as well as your PEEP limits for the controller.
- Ensure you avoid leakages at the endotracheal tube cuff, as the applied pressures (PEEP and inspiratory pressures) might require adjustments to the cuff pressure (use the IntelliCuff pressure controller if possible).

Read the evidence on INTELLiVENT-ASV:

[Download INTELLiVENT-ASV-bibliography](#)

References

1. Hodgson CL, Cooper DJ, Arabi Y, et al. PHARLAP Study Investigators and the ANZICS Clinical Trials Group. Maximal recruitment open lung ventilation in acute respiratory distress syndrome (PHARLAP): a phase II, multicenter, randomized. Controlled Trial. Am J Respir Crit Care Med. 2019. [https://doi.org/ 10.1164/rccm.201901-0109OC](https://doi.org/10.1164/rccm.201901-0109OC).

For additional information on COVID-19:

WHO guidelines: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

ESICM information: <https://www.esicm.org/resources/coronavirus-public-health-emergency/>

Current evidence about COVID-19:
<https://jamanetwork.com/journals/jama/pages/coronavirus-alert>

Centers for Disease Control and Prevention, CDC: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

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