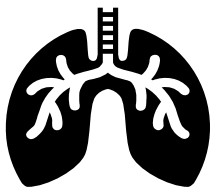


Fluid Optimization as part of a COVID-19 Treatment Strategy



54% of COVID-19 patients experience respiratory failure¹ (respiratory failure is the second most frequently observed complication)



ARDS was observed in **31%** of all patients (98% in non-survivors).¹

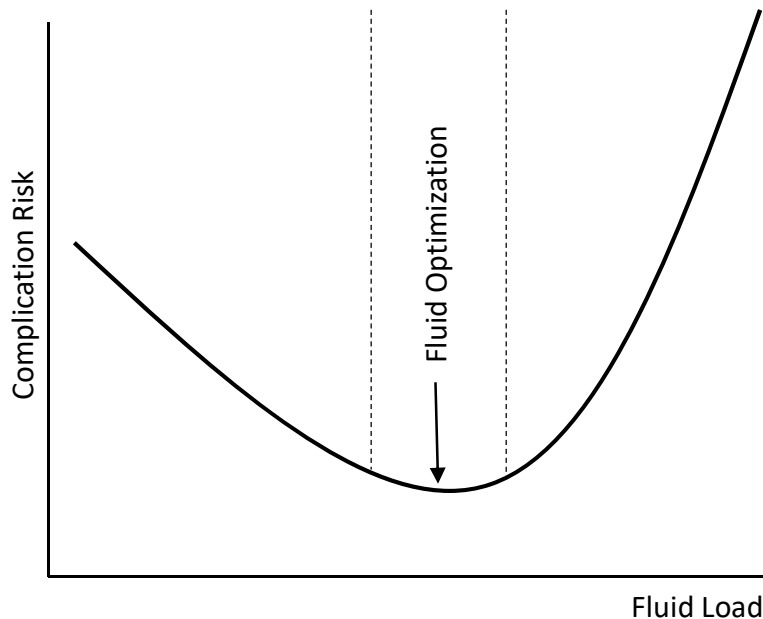
ARDS patients are at a high risk requiring prolonged mechanical ventilation.²



Under-/over-resuscitation can exacerbate existing gas-exchange abnormalities and extend the requirement for mechanical ventilation.

Too Little Fluid [Hypovolemia]

Tissue Hypoperfusion
Tissue Hypoxia
Organ Failure
Insufficient Perfusion



Too Much Fluid [Hypervolemia]

Tissue Edema
Organ Failure
Increased ICU/
Ventilator Days
Increased Mortality



A goal-directed fluid management strategy guided by SVI/CI has been shown to decrease time on mechanical ventilation.³ See attached information about the Argos Cardiac Output Monitor.



Continued focus on interventions to reduce duration of mechanical ventilation are both clinically and operationally significant during a time when ventilator demand is anticipated to exceed supply.

¹ Zhou F *et al.* Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *The Lancet.* March 11, 2020.

² Wunsch H, Linde-Zwirble WT, Angus DC, Hartman ME, Milbrandt EB, Kahn JM. The epidemiology of mechanical ventilation use in the United States. *Critical Care Medicine.* 2010; 38:1947-53.

³ Data on file.

The Argos Cardiac Output Monitor

Use the existing radial arterial line with *no additional disposables*

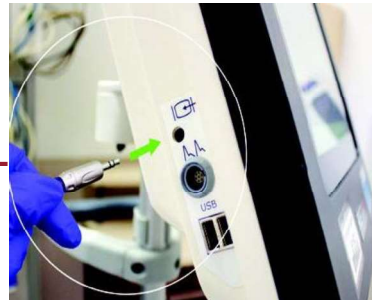


Single cable connection to the bedside monitor

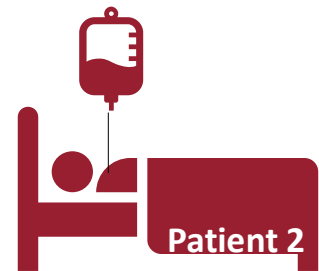
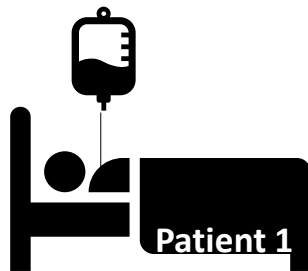
Consistently accurate^{1,2} hemodynamic profile in seconds

Compatible with different patient monitors

Argos Monitor input



Easy setup to *quickly* meet the monitoring needs of each COVID-19 patient



- 1 Saugel B *et al.* Cardiac output estimation using multi-beat analysis of the radial arterial blood pressure waveform: a method comparison study in patients having off-pump coronary artery bypass surgery using intermittent pulmonary artery thermodilution as the reference method. *Journal of Clinical Monitoring and Computing.* August 5, 2019.
- 2 Greiwe G *et al.* Cardiac output estimation using multi-beat analysis of the radial arterial blood pressure waveform versus intermittent pulmonary artery thermodilution: a method comparison in patients treated in the intensive care unit after off-pump coronary artery bypass surgery. *Journal of Clinical Monitoring and Computing.* August 5, 2019.