



Supplementary Figure 1. Effect on $S_{\bar{v}}O_2$ of different approaches to managing \dot{V}_{SWEEP} .

Results for when P_aCO_2 is held constant at 40 mm Hg by varying \dot{V}_{SWEEP} (continuous lines) compared to when \dot{V}_{SWEEP} is held constant at 5 l/min (data points as blue markers). As \dot{Q}_{EC} increases $S_{\bar{v}}O_2$ rises. The higher the $\frac{\dot{Q}_S}{\dot{Q}_T}$, the higher the \dot{Q}_{EC} required to achieve “acceptable” values of $S_{\bar{v}}O_2 > 60\%$. The blue dots of fixed $\dot{V}_{SWEEP} = 5$ l/min match the curves of variable \dot{V}_{SWEEP} (fixed P_aCO_2), demonstrating that the approach taken to managing \dot{V}_{SWEEP} has minimal effect on $S_{\bar{v}}O_2$.