



24th Postgraduate Refresher Course
Cardiovascular and Respiratory Physiology
Applied to Intensive Care Medicine

Brussels, December 4-6, 2018

Tuesday, December 4, 2018

08.30	Introduction J.L. Vincent (Brussels, Belgium) & M.R. Pinsky (Pittsburgh, United States)
08.35	Static lung and chest wall mechanics R. Naeije (Brussels, Belgium)
09.10	The interest of esophageal pressure measurements A. Pesenti (Milan, Italy)
09.40	Lung edema R. Naeije (Brussels, Belgium)
10.10	<i>Discussion</i>
10.20	<i>Coffee break</i>
10.45	Gas exchange: basic aspects R. Naeije (Brussels, Belgium)
11.15	Gas exchange: clinical applications A. Pesenti (Milan, Italy)
11.45	PaO₂/FiO₂ in clinical practice L. Brochard (Toronto, Canada)
12.10	Evaluation of lung and gas volume A. Pesenti (Milan, Italy)
12.40	<i>Discussion</i>
12.55	<i>Lunch</i>
13.40	Lung mechanics: the equation of motion at the bedside L. Brochard (Toronto, Canada)
14.20	Severe COPD : auto PEEP A. Pesenti (Milan, Italy)
14.55	<i>Discussion</i>
15.10	<i>Coffee break</i>
15.40	Ventilator-induced lung injury (VILI) M.R. Pinsky (Pittsburgh, United States)
16.10	Lung protective strategies: a practical approach L. Brochard (Toronto, Canada)
16.40	<i>Discussion</i>
17.00	Clinical cases Hypoxemia - J.L. Vincent (Brussels, Belgium) Lung mechanics - A. Pesenti (Milan, Italy) Respirator management - L. Brochard (Toronto, Canada) Severe COPD - M.R. Pinsky (Pittsburgh, United States)

08.30	Pressure vs. volume targeted mechanical ventilation L. Brochard (Toronto, Canada)
09.00	Physiological relevance of spontaneous breathing in the critically ill A. Pesenti (Milan, Italy)
09.30	Ventricular pump function: P/V loops M.R. Pinsky (Pittsburgh, United States)
10.00	<i>Discussion</i>
10.15	<i>Coffee break</i>
10.40	Acute pulmonary hypertension & right ventricular dysfunction R. Naeije (Brussels, Belgium)
11.10	The determinants of cardiac output J.L. Vincent (Brussels, Belgium)
11.45	Systemic blood pressure: ventriculo-arterial coupling M.R. Pinsky (Pittsburgh, United States)
12.20	<i>Discussion</i>
12.30	<i>Lunch</i>
13.20	Venous return and effective circulating blood volume M.R. Pinsky (Pittsburgh, United States)
14.00	Cardiovascular alterations in sepsis J.L. Vincent (Brussels, Belgium)
14.40	<i>Discussion</i>
14.55	<i>Coffee break</i>
15.20	Heart-lung interactions M.R. Pinsky (Pittsburgh, United States)
16.00	Fluid responsiveness vs fluid challenge J.L. Vincent (Brussels, Belgium)
16.40	<i>Discussion</i>
17.00	Clinical cases Right ventricular dysfunction - R. Naeije (Brussels, Belgium) Heart-lung interactions - M.R. Pinsky (Pittsburgh, United States) Volume responsiveness – J.L. Vincent (Brussels, Belgium)

08.30	Blood flow distribution M.R. Pinsky (Pittsburgh, United States)
09.15	Gas exchange and cardiovascular physiology in ECMO A. Pesenti (Milan, Italy)
09.50	Oxygen delivery and consumption: SvO₂ & ScvO₂ J.L. Vincent (Brussels, Belgium)
10.20	<i>Discussion</i>
10.35	<i>Coffee break</i>
11.00	Circulatory shock J.L. Vincent (Brussels, Belgium)
11.45	Microcirculatory studies in humans F. Taccone (Brussels, Belgium)
12.15	Assessment of tissue perfusion J. Creteur (Brussels, Belgium)
12.45	<i>Discussion</i>
13.00	Lunch
13.45	Types of vasoactive agents J.L. Vincent (Brussels, Belgium)
14.20	Cerebral hemodynamics F. Taccone (Brussels, Belgium)
14.50	Types of IV fluid J.L. Vincent (Brussels, Belgium)
15.15	<i>Discussion</i>
15.30	Remaining questions
16.00	End of the meeting