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Lung-protective ventilation in intensive care unit and operation room

Tidal volume size, level of positive end-expiratory pressure and driving pressure

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Submitted manuscripts

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Serpa Neto A, Bein T, Lubnow M, Quintel M, Ranieri VM, Ried M, Slutsky AS, Terragni PP, Weber-Carstens S, Gama de Abreu M, Pelosi P, Schultz MJ; for the PROVE Network Investigators.
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Subphenotypes in patients undergoing general anesthesia for ventilation during open abdominal surgery: An unbiased cluster analysis from the PROVHILO trial.

Pisani L, Roozeman JP, Simonis FD, Giangregorio A, van der Hoeven S, Schouten LR, Horn J, **Serpa Neto A**, Festic E, Dondorp AM, Grasso S, Bos LD, Schultz MJ.
Risk stratification Using SpO₂ to FiO₂ ratios and PEEP at Initial ARDS Diagnosis and after 24 Hours in Patients with Moderate or Severe ARDS.

PhD portfolio

PhD student: A. Serpa Neto
Supervisors: Prof. dr. M.J. Schultz and prof. dr. P. Pelosi
PhD period: September 2016 – September 2017

PhD Training	Year	ECTs
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Presentations

<i>Driving pressure during surgery and postoperative acute respiratory distress syndrome: An individual data meta-analysis of 3,659 patients.</i> Oral presentation at American Thoracic Society (ATS) International Conference	2014	0.3
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<i>Intraoperative ventilator settings and postoperative acute respiratory distress syndrome: An individual data meta-analysis of 3,659 patients.</i> Poster at American Thoracic Society (ATS) International Conference	2014	0.5
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<i>Use of lung-protective strategy of ventilation to prevent acute respiratory distress syndrome in critically ill patients under mechanical ventilation: An individual data meta-analysis of 2,184 patients.</i> Poster at American Thoracic Society (ATS) International Conference	2014	0.5
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<i>Peri-operative blood transfusion and higher tidal volumes are independently associated with the development of postoperative ARDS: An individual data meta-analysis of studies of protective ventilation for surgery.</i> Poster presentation at American Thoracic Society (ATS) International Conference	2014	0.3
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<i>Practice of ventilation in critically ill patients without ARDS at start of mechanical ventilation (PRoVENT) – An international observational study.</i> Oral presentation at Annual Congress of the European Society of Intensive Care Medicine	2016	0.3
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<i>Associations between ventilator settings during extracorporeal membrane oxygenation and outcome in patients with acute respiratory distress syndrome: A pooled individual patients data analysis.</i> Oral presentation at Annual Congress of the European Society of Intensive Care Medicine	2016	0.3
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International conferences

VII International Symposium on Intensive Care and Emergency for Latin America	2013	0.75
American Thoracic Society International Conference	2014	0.75
Annual Update in Anesthesia and Perioperative Care	2014	0.75
VIII International Symposium on Intensive Care and Emergency for Latin America	2015	0.75

The Update on Intraoperative Ventilation: Shining light on the latest developments	2015	0.75
Euroanesthesia	2016	0.75
Annual Congress of the European Society of Intensive Care Medicine	2016	1.0
IX International Symposium on Intensive Care and Emergency for Latin America	2017	0.75
Euroanesthesia	2017	0.75

Teaching

Student coaching and mentoring

Scientific Initiation, Medicine, Faculdade de Medicina do ABC (Felipe Ko Chen)	2016	1.0
Scientific Initiation, Medicine, Faculdade de Medicina do ABC (Philippe Franco do Amaral Tafner)	2016	1.0
Scientific Initiation, Medicine, Hospital Israelita Albert Einstein (Leticia Meneghini)	2016	1.0
Scientific Initiation, Medicine, Hospital Israelita Albert Einstein (Vittorio D'Angelo)	2017	1.0
Master's Degree, Health Science, Hospital Israelita Albert Einstein (Carolina Sant'Anna A Azevedo)	2016	1.0
Master's Degree, Health Science, Hospital Israelita Albert Einstein (Carin Ferreira Lopes)	2016	1.0
Master's Degree, Health Science, Hospital Israelita Albert Einstein (Rafael Ladeira Rosa Bocchile)	2016	1.0
Master's Degree, Health Science, Hospital Israelita Albert Einstein (Camila de Menezes Succi)	2016	1.0
Master's Degree, Health Science, Hospital Israelita Albert Einstein (David Pablo da Cunha Jolvino)	2017	1.0

Lecturing

<i>Set up ventilator parameters in Normal Lungs.</i> Lecture at VIII International Symposium on Intensive Care and Emergency for Latin America	2015	0.5
<i>The new player on the field – Driving pressure.</i> Lecture at The Update on Intraoperative Ventilation: Shining light on the latest developments	2015	0.5
<i>Postoperative pulmonary complications: lessons from observational studies on mechanical ventilation.</i> Lecture at Euroanaesthesia	2017	0.5

Other activities

Professor of Epidemiology in the Post-Graduation at Hospital Israelita Albert Einstein	2014 –	13.5
Professor of Biostatistics in the Post-Graduation at Hospital Israelita Albert Einstein	2014 –	13.5
Intensive Care Journal Club (weekly)	2015 –	13.5
Coordinator of the Discipline of Biostatistics in the Post-Graduation at Hospital Israelita Albert Einstein	2017 –	13.5

Parameters of esteem

Grants

Scientific Initiation Grant from the Programa Institucional de Bolsas de Iniciação Científica (PIBIC/CNPq)	2008
Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) Research Grant for “PROBESE trial”	2016
Fundação do Amparo a Pesquisa no Estado de São Paulo (FAPESP) Research Grant for the study “Necroptosis in Septic Patients”	2016
The Netherlands Organisation for Health Research and Development (ZonMw) Research Grant for “RELAX trial”	2016

Awards

Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo	2008
Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo	2009
Award Researcher of the Future, Sociedade Brasileira de Profissionais de Pesquisa Clínica, São Paulo	2009
Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo	2010
Professor Eric Roger Wroclawski Award, Sociedade Beneficente Israelita Albert Einstein, São Paulo	2010
Professor Eric Roger Wroclawski Award, Sociedade Beneficente Israelita Albert Einstein, São Paulo	2011
Resident Honored by the XXXVIII Class, Faculdade de Medicina do ABC, São Paulo	2011

Curriculum Vitae

Ary Serpa Neto was born on 08 July 1985 in São Paulo, Brazil, where he spent his whole life until now. Ary graduated from high-school at the Pueri Domus in São Paulo. In 2004 he commenced with her Medical studies at the Faculdade de Medicina do ABC, São Paulo, Brazil. During his studies he had a special interest in Critical Care and Oncology. After obtaining his doctors degree in 2009 he started residence in Internal Medicine at the same University, which finished in 2012. In 2014 he graduated an intensivist in Hospital Israelita Albert Einstein. Since then, he works as a physician in the Department of Critical Care at the Hospital Israelita Albert Einstein and as a researcher in the Research Institute at the same hospital. Meanwhile, dr. Serpa Neto had become acquainted with prof. dr. Marcus J. Schultz (Amsterdam, the Netherlands), who supervised the work presented in this thesis together with prof. dr. Paolo Pelosi (Genoa, Italy) and prof. dr. Marcelo Gama de Abreu (Dresden, Germany). Next to his clinical activities, dr. Serpa Neto is actively involved in several running research projects related to this PhD projects, and other projects under the umbrella of the 'PROtective VEntilation (PROVE) network (www.provenet.eu).

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