

Additional File 3: The publications included in the Methodological Quality of animal research study.

Authors: Meredith Bara BSc and Ari R Joffe MD, FRCPC.

References for the 77 animal research publications reviewed for methodological quality in three critical care journals during 6 months (Jan-June) of the year 2012.

Critical Care Medicine:

Hu H, Xenocostas A, Chin-Yee N, et al. Transfusion of fresh but not old stored blood reduces infarct size and improves cardiac function after acute myocardial infarction in anemic rats.
CCM 2012, 40, 740-746

Pantazopoulos IN, Xanthos TT, Vlachos I, et al. Use of the impedance threshold device improves survival rate and neurological outcome in a swine model of asphyxial cardiac arrest
CCM 2012, 40, 861-868

Pecchiari M, Ario M, Antonia K, et al. Plasma membrane disruptions with different models of injurious mechanical ventilation in normal rat lungs CCM 2012, 40, 869-875

Benavides U, Gonzalez-Murguiondo M, Harii N, et al. Phenylmethimazole inhibits production of proinflammatory mediators and is protective in an experimental model of endotoxic shock CCM 2012, 40, 886-894

Sheng C, Yu YH, Zhao KS, et al. Acute lung inflammatory response and injury after hemorrhagic shock are more severe in postpartum rabbits CCM 2012, 40, 1570-1577

Yoshida T, Uchiyama A, Matsuura N, et al. Spontaneous breathing during lung-protective ventilation in an experimental acute lung injury model: High transpulmonary pressure associated with strong spontaneous breathing effort may worsen lung injury.
CCM 2012, 40, 1578-1585

Yannopoulos D, Segal N, McKnite S, et al. Controlled pauses at the initiation of sodium nitroprusside enhanced cardiopulmonary resuscitation facilitate neurological and cardiac recovery after 15 minutes of untreated ventricular fibrillation CCM 2012, 40, 1562-1569

Li Bassi G, Saucedo L, Joan-Daniel M, et al. Effects of duty cycle and positive end expiratory pressure on mucus clearance during mechanical ventilation CCM 2012, 40, 895-902

Muders T, Leupschen H, Jorg Z, et al. Tidal recruitment assessed by electrical impedance tomography and computed tomography in a porcine model of lung injury CCM 2012, 40, 903-911

Leon K, Pichavant-Rafini K, Quemener E, et al. Oxygen blood transport during experimental sepsis: Effect of hypothermia CCM 2012, 40, 912-918

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Smuder AJ, Hudson MB, Nelson WB, et al. Nuclear factor kB signaling contributes to mechanical ventilation-induced diaphragm weakness CCM 2012, 40, 927-934

Timaru-Kast R, Wyschkon S, Luh C, et al. Delayed inhibition of angiotensin II receptor type I reduces secondary brain damage and improves functional recovery after experimental brain injury CCM 2012, 40, 935-944

Bitto A, Polito F, Irrera N, et al. Protective effects of melanocortins on short term changes in a rat model of traumatic brain injury CCM 2012, 40, 945-951

Esen F, Senturk E, Ozcan PE, et al. Intravenous immunoglobins prevent the breakdown of the blood brain barrier in experimentally induced sepsis CCM 2012, 40, 1214-1220

Empey PE, Miller TM, Philbrick AH, et al. Mild hypothermia decreases fentanyl and midazolam steady state clearance in a rat model of cardiac arrest CCM 2012, 40, 1221-1228

Bouchama A, Al-Mohanna F, Assad L, et al. Tissue factor/factor VIIa pathway mediates coagulation activation in induced-heat stroke in the baboon CCM 2012, 40, 1229-1236

Gill RS, Manouchehri N, Liu JQ, et al. Cyclosporine treatment improves cardiac function and systemic hemodynamics during resuscitation in a newborn piglet model of asphyxia: A dose-response study CCM 2012, 40, 1237-1244

Chien MS, Bien MY, Ku CC, et al. Systemic human orbital fat-derived stem/stromal cell transplantation ameliorates acute inflammation in lipopolysaccharide-induced acute lung injury CCM 2012, 40, 1245-1253

Hudson MB, Smuder AJ, Nelson WB, et al. Both high level pressure support ventilation and controlled mechanical ventilation induce diaphragm dysfunction and atrophy CCM 2012, 40, 1254-1260

Chan YL, Orie NN, Dyson A, et al. Inhibition of vascular adenosine triphosphate-sensitive potassium channels by sympathetic tone during sepsis CCM 2012, 40, 1261-1268

Boros M, Ghyczy M, Erces D, et al. The anti-inflammatory effects of methane. CCM 2012, 40, 1269-1278

Sun CK, Chang CL, Lin YC, et al. Systemic administration of autologous adipose-derived mesenchymal stem cells alleviates hepatic ischemia-reperfusion injury in rats CCM 2012, 40, 1279-1290

Zhan Y, Chen C, Suzuki H, et al. Hydrogen gas ameliorates oxidative stress in early brain injury after subarachnoid hemorrhage in rats CCM 2012, 40, 1291-1296

Fries M, Brucken A, Cizen A, et al. Combining xenon and mild therapeutic hypothermia preserves neurological function after prolonged cardiac arrest in pigs CCM 2012, 40, 1297-1303

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Metzger AK, Herman M, McKnite S, et al. Improved cerebral perfusion pressures and 24hr neurological survival in a porcine model of cardiac arrest with active compression-decompression CPR and aug of intrathoracic pressure CCM 2012, 40, 1851-1856

Nelson WB, Smuder AJ, Hudson M, et al. Cross talk between calpain and caspase-3 proteolytic systems in the diaphragm during prolonged mechanical ventilation CCM 2012, 40, 1857-1863

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Regli A, Chakera J, De Keulenaer BL, et al. Matching positive end expiratory pressure to intra-abdominal pressure prevents end-expiratory lung volume decline in a pig model of intra-abdominal hypertension CCM 2012, 40, 1879-1886

Kuper C, Fraek ML, Muller HH, et al. Sepsis-induced urinary concentration defect is related to nitric oxide dependent activation of TonEBP/NFAT5, which downregulates renal medullary solute transport proteins and aquaporin 2. CCM 2012, 40, 1887-1895

Smeding L, Leong-Poi H, Hu P, et al. Salutary effect of resveratrol on sepsis-induced myocardial depression. CCM 2012, 40, 1896-1907

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Filseth OM, How OJ, Kondratiev T, et al. Changes in cardiovascular effects of dopamine in response to graded hypothermia. *CCM* 2012, 40, 178-186

Pejo E, Feng Y, Chao W, et al. Differential effects of etomidate and its pyrrole analogue carboetomidate on the adrenocortical and cytokine responses to endotoxemia. *CCM* 2012, 40, 187-192

Heckel K, Winkelmann B, Struden MS, et al. Tetrastarch sustains pulmonary microvascular perfusion and gas exchange during systemic inflammation. *CCM* 2012, 40, 518-531

Hicks CW, Sweeney DA, Danner RL, et al. Efficacy of selective mineralocorticoid and glucocorticoid agonists in canine septic shock. *CCM* 2012, 40, 199-207

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Cabrera-Benitez NE, Parotto M, Post M, et al. Mechanical stress induces lung fibrosis by epithelia-mesenchymal transition. *CCM* 2012, 40, 510-517

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Yeh KH, Sheu JJ, Lin YC, et al. Benefit of combined extracorporeal shockwave and bone marrow-derived endothelial progenitor cells in protection against critical limb ischemia in rats. CCM 2012, 40, 169-177

Intensive Care Medicine:

Waisman D, Faingersh A, Levy C, et al. Early detection of deteriorating ventilation by monitoring bilateral chest wall dynamics in the rabbit. ICM 2012, 38, 120-127

Shah KG, Wu R, Jacob A, et al. Recombinant human milk fat globule-EGF factor 8 produces dose-dependent benefits in sepsis. ICM 2012, 38, 128-136

Zlotnik A, Leibowitz A, Gurevich B, et al. Effect of estrogens on blood glutamate levels in relation to neurological outcome after TBI in male rats. ICM 2012, 38, 137-144

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Nilsson MCA, Freden F, Larsson A, et al. Hypercapnic acidosis transiently weakens hypoxic pulmonary vasoconstriction without affecting endogenous pulmonary nitric oxide. ICM 2012, 38, 509-517

Zanella A, Cressoni M, Epp M, et al. Effects of tracheal orientation on the development of ventilator associated pneumonia: an experimental study. ICM 2012, 38, 677-685

Langer T, Carlesso E, Protti A, et al. In vivo conditioning of acid-base equilibrium by crystalloid solutions: an experimental study on pigs. ICM 2012, 38, 686-693

Zambelli V, Di Grigoli G, Scanziani M, et al. Time course of metabolic activity and cellular infiltration in a murine model of acid-induced lung injury. ICM 2012, 38, 694-701

van Hees HWH, Schellekens WJM, Acuna GLA, et al. Titin and diaphragm dysfunction in mechanically ventilated rats. ICM 2012, 38, 702-709

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Derive M, Bouazza Y, Alauzet C, et al. Myeloid-derived suppressor cells control microbial sepsis. ICM 2012, 38, 1040-1049

Lourenco AP, Vasques-Novoa F, Oliveira-Pinto J, et al. Haemodynamic and neuroendocrine effects of tezosentan in chronic experimental pulmonary hypertension. ICM 2012, 38, 1050-1060

American Journal of Respiratory and Critical Care Medicine:

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