

October 2017 Top Articles

AJRCM (ATS)

A Two-Biomarker Model Predicts Mortality in the Critically Ill with Sepsis.
Mikacenic C, Price BL, Harju-Baker S, O'Mahony DS, Robinson-Cohen C, Radella F, Hahn WO, Katz R, Christiani DC, Himmelfarb J, Liles WC, Wurfel MM.

Am J Respir Crit Care Med. 2017 Oct 15;196(8):1004-1011. doi:
10.1164/rccm.201611-2307OC.
PMID: 28418697

Effects of Omalizumab on Rhinovirus Infections, Illnesses, and Exacerbations of Asthma.

Esquivel A, Busse WW, Calatroni A, Togias AG, Grindle KG, Bochkov YA, Gruchalla RS, Kattan M, Kercksmar CM, Khurana Hershey G, Kim H, Lebeau P, Liu AH, Szeffler SJ, Teach SJ, West JB, Wildfire J, Pongracic JA, Gern JE.
Am J Respir Crit Care Med. 2017 Oct 15;196(8):985-992. doi:
10.1164/rccm.201701-0120OC.
PMID: 28608756

Joblessness and Lost Earnings after Acute Respiratory Distress Syndrome in a 1-Year National Multicenter Study.

Kamdar BB, Huang M, Dinglas VD, Colantuoni E, von Wachter TM, Hopkins RO, Needham DM; National Heart, Lung, and Blood Institute Acute Respiratory Distress Syndrome Network.
Am J Respir Crit Care Med. 2017 Oct 15;196(8):1012-1020. doi:
10.1164/rccm.201611-2327OC.
PMID: 2844816

Trauma, Acute Care Surgery

Development of the emergency preservation and resuscitation for cardiac arrest from trauma clinical trial.

Tisherman SA, Alam HB, Rhee PM, Scalea TM, Drabek T, Forsythe RM, Kochanek PM.

J Trauma Acute Care Surg. 2017 Nov;83(5):803-809. doi:
10.1097/TA.0000000000001585.
PMID: 28538639

How does marijuana affect outcomes after trauma in ICU patients? A propensity-matched analysis.

Singer M, Azim A, O'Keeffe T, Khan M, Jain A, Kulvatunyou N, Gries L, Jehan F, Tang A, Joseph B.

J Trauma Acute Care Surg. 2017 Nov;83(5):846-849. doi:
10.1097/TA.0000000000001672.
PMID: 28787375

Multi-institutional analysis of neutrophil-to-lymphocyte ratio (NLR) in patients with severe hemorrhage: A new mortality predictor value.

Duchesne JC, Tatum D, Jones G, Davis B, Robledo R, DeMoya M, O'Keeffe T, Ferrada P, Jacome T, Schroll R, Wlodarczyk J, Prakash P, Smith B, Inaba K, Khor D, Duke M, Khan M.

J Trauma Acute Care Surg. 2017 Nov;83(5):888-893. doi:
10.1097/TA.0000000000001683.
PMID: 28837540

CHEST

A Multicenter, Randomized Trial of Ramped Position vs Sniffing Position During Endotracheal Intubation of Critically Ill Adults.

Semler MW, Janz DR, Russell DW, Casey JD, Lentz RJ, Zouk AN, deBoisblanc BP, Santanilla JI, Khan YA, Joffe AM, Stigler WS, Rice TW; Check-UP

Investigators(*); Pragmatic Critical Care Research Group.

Chest. 2017 Oct;152(4):712-722. doi: 10.1016/j.chest.2017.03.061. Epub 2017 May 6.

PMID: 28487139

Feasibility, Safety, and Utility of Advanced Critical Care Transesophageal Echocardiography Performed by Pulmonary/Critical Care Fellows in a Medical ICU.

Garcia YA, Quintero L, Singh K, Lakticova V, Iakovou A, Koenig SJ, Narasimhan M, Mayo PH.

Chest. 2017 Oct;152(4):736-741. doi: 10.1016/j.chest.2017.06.029. Epub 2017 Jul 8.
PMID: 28694197

MUC5AC and a Glycosylated Variant of MUC5B Alter Mucin Composition in Children With Acute Asthma.

Welsh KG, Rousseau K, Fisher G, Bonser LR, Bradding P, Brightling CE, Thornton DJ, Gaillard EA.

Chest. 2017 Oct;152(4):771-779. doi: 10.1016/j.chest.2017.07.001. Epub 2017 Jul 14.

PMID: 28716644

NEJM

Age of Red Cells for Transfusion and Outcomes in Critically Ill Adults.

Cooper DJ, McQuilten ZK, Nichol A, Ady B, Aubron C, Bailey M, Bellomo R, Gantner D, Irving DO, Kaukonen KM, McArthur C, Murray L, Pettilä V, French C; TRANSFUSE Investigators and the Australian and New Zealand Intensive Care Society Clinical Trials Group.

N Engl J Med. 2017 Sep 27. doi: 10.1056/NEJMoa1707572. [Epub ahead of print]

PMID: 28952891

Oxygen Therapy in Suspected Acute Myocardial Infarction.

Hofmann R, James SK, Jernberg T, Lindahl B, Erlinge D, Witt N, Arefalk G, Frick M, Alfredsson J, Nilsson L, Ravn-Fischer A, Omerovic E, Kellerth T, Sparv D, Ekelund U, Linder R, Ekström M, Lauermann J, Haaga U, Pernow J, Östlund O, Herlitz J, Svensson L; DETO2X–SWEDEHEART Investigators.

N Engl J Med. 2017 Sep 28;377(13):1240-1249. doi: 10.1056/NEJMoa1706222. Epub 2017 Aug 28.

PMID: 28844200

Dual Antithrombotic Therapy with Dabigatran after PCI in Atrial Fibrillation.

Cannon CP, Bhatt DL, Oldgren J, Lip GYH, Ellis SG, Kimura T, Maeng M, Merkely B, Zeymer U, Gropper S, Nordaby M, Kleine E, Harper R, Manassie J, Januzzi JL, Ten Berg JM, Steg PG, Hohnloser SH; RE-DUAL PCI Steering Committee and Investigators.

N Engl J Med. 2017 Oct 19;377(16):1513-1524. doi: 10.1056/NEJMoa1708454.
Epub 2017 Aug 27.
PMID: 28844193

BMJ, LANCET resp

Classification of patients with sepsis according to blood genomic endotype: a prospective cohort study.

Scicluna BP, van Vught LA, Zwinderman AH, Wiewel MA, Davenport EE, Burnham KL, Nürnberg P, Schultz MJ, Horn J, Cremer OL, Bonten MJ, Hinds CJ, Wong HR, Knight JC, van der Poll T; MARS consortium.

Lancet Respir Med. 2017 Oct;5(10):816-826. doi: 10.1016/S2213-2600(17)30294-1. Epub 2017 Aug 29.

PMID: 28864056

Immediate interruption of sedation compared with usual sedation care in critically ill postoperative patients (SOS-Ventilation): a randomised, parallel-group clinical trial.

Chanques G, Conseil M, Roger C, Constantin JM, Prades A, Carr J, Muller L, Jung B, Belafia F, Cissé M, Delay JM, de Jong A, Lefrant JY, Futier E, Mercier G, Molinari N, Jaber S; SOS-Ventilation study investigators.

Lancet Respir Med. 2017 Oct;5(10):795-805. doi: 10.1016/S2213-2600(17)30304-1. Epub 2017 Sep 18.

PMID: 28935558

Comparative safety of direct oral anticoagulants and warfarin in venous thromboembolism: multicentre, population based, observational study.

Jun M, Lix LM, Durand M, Dahl M, Paterson JM, Dormuth CR, Ernst P, Yao S, Renoux C, Tamim H, Wu C, Mahmud SM, Hemmelgarn BR; Canadian Network for Observational Drug Effect Studies (CNODES) Investigators.

BMJ. 2017 Oct 17;359:j4323. doi: 10.1136/bmj.j4323.

PMID: 29042362

Circulation

Randomized Comparison of Ridaforolimus- and Zotarolimus-Eluting Coronary Stents in Patients With Coronary Artery Disease: Primary Results From the BIONICS Trial (BioNIR Ridaforolimus-Eluting Coronary Stent System in Coronary Stenosis).

Kandzari DE, Smits PC, Love MP, Ben-Yehuda O, Banai S, Robinson SD, Jonas M, Kornowski R, Bagur R, Iniguez A, Danenberg H, Feldman R, Jauhar R, Chandna H, Parikh M, Perlman GY, Balcells M, Markham P, Ozan MO, Genereux P, Edelman ER, Leon MB, Stone GW.

Circulation. 2017 Oct 3;136(14):1304-1314. doi:

10.1161/CIRCULATIONAHA.117.028885. Epub 2017 Aug 9.

PMID: 28794001

Outcomes Associated With Extraction Versus Capping and Abandoning Pacing and Defibrillator Leads.

Pokorney SD, Mi X, Lewis RK, Greiner M, Epstein LM, Carrillo RG, Zeitler EP, Al-Khatib SM, Hegland DD, Piccini JP.

Circulation. 2017 Oct 10;136(15):1387-1395. doi:

10.1161/CIRCULATIONAHA.117.027636. Epub 2017 Aug 22.

PMID: 28830879

Efficacy and Safety of a Pharmacologic Invasive Strategy With Half-Dose Alteplase Versus Primary Angioplasty in ST-Segment-Elevation Myocardial Infarction: EARLY-MYO Trial (Early Routine Catheterization After Alteplase Fibrinolysis Versus Primary PCI in Acute ST-Segment-Elevation Myocardial Infarction).

Pu J, Ding S, Ge H, Han Y, Guo J, Lin R, Su X, Zhang H, Chen L, He B; EARLY-MYO Investigators.

Circulation. 2017 Oct 17;136(16):1462-1473. doi:

10.1161/CIRCULATIONAHA.117.030582. Epub 2017 Aug 27.

PMID: 28844990

Critical Care

Predictors of diffuse alveolar damage in patients with acute respiratory distress syndrome: a retrospective analysis of clinical autopsies.

Thille AW, Peñuelas O, Lorente JA, Fernández-Segoviano P, Rodríguez JM, Aramburu JA, Panizo J, Esteban A, Frutos-Vivar F.

Crit Care. 2017 Oct 20;21(1):254. doi: 10.1186/s13054-017-1852-5.
PMID: 29052522

Translational evidence for two distinct patterns of neuroaxonal injury in sepsis: a longitudinal, prospective translational study.

Ehler J, Barrett LK, Taylor V, Groves M, Scaravilli F, Wittstock M, Kolbaske S, Grossmann A, Henschel J, Gloger M, Sharshar T, Chretien F, Gray F, Nöldge-Schomburg G, Singer M, Sauer M, Petzold A.

Crit Care. 2017 Oct 23;21(1):262. doi: 10.1186/s13054-017-1850-7.
PMID: 29058589

The impact of N-acetylcysteine and ascorbic acid in contrast-induced nephropathy in critical care patients: an open-label randomized controlled study.

Palli E, Makris D, Papanikolaou J, Garoufalis G, Tsilioni I, Zygoulis P, Zakynthinos E.

Crit Care. 2017 Oct 31;21(1):269. doi: 10.1186/s13054-017-1862-3.
PMID: 29089038

Critical Care Medicine

Efficacy and Safety of Combination Therapy of Shenfu Injection and Postresuscitation Bundle in Patients With Return of Spontaneous Circulation After In-Hospital Cardiac Arrest: A Randomized, Assessor-Blinded, Controlled Trial.

Zhang Q, Li C, Shao F, Zhao L, Wang M, Fang Y.

Crit Care Med. 2017 Oct;45(10):1587-1595. doi:
10.1097/CCM.0000000000002570.
PMID: 28661970

Patterns and Outcomes Associated With Timeliness of Initial Crystalloid Resuscitation in a Prospective Sepsis and Septic Shock Cohort.

Leisman DE, Goldman C, Doerfler ME, Masick KD, Dries S, Hamilton E, Narasimhan M, Zaidi G, D'Amore JA, D'Angelo JK.

Crit Care Med. 2017 Oct;45(10):1596-1606. doi:
10.1097/CCM.0000000000002574.
PMID: 28671898

Molecular Adsorbent Recirculating System Can Reduce Short-Term Mortality Among Patients With Acute-on-Chronic Liver Failure-A Retrospective Analysis.

Gerth HU, Pohlen M, Thölking G, Pavenstädt H, Brand M, Hüsing-Kabar A, Wilms C, Maschmeier M, Kabar I, Torner J, Pavesi M, Arroyo V, Banares R, Schmidt HHJ.

Crit Care Med. 2017 Oct;45(10):1616-1624. doi:

10.1097/CCM.0000000000002562.

PMID: 28640024

Resuscitation

Neurological outcomes of patients with history of obstructive sleep apnea after a cardiac arrest.

Alejos D, Festic E, Guru P, Moss JE.

Resuscitation. 2017 Oct;119:13-17. doi: 10.1016/j.resuscitation.2017.07.027.

Epub 2017 Jul 29.

PMID: 28764949

Prehospital sodium bicarbonate use could worsen long term survival with favorable neurological recovery among patients with out-of-hospital cardiac arrest.

Kawano T, Grunau B, Scheuermeyer FX, Gibo K, Dick W, Fordyce CB, Dorian P, Stenstrom R, Straight R, Christenson J.

Resuscitation. 2017 Oct;119:63-69. doi: 10.1016/j.resuscitation.2017.08.008.

Epub 2017 Aug 10.

PMID: 28802878

Ultrasound use during cardiopulmonary resuscitation is associated with delays in chest compressions.

Huis In 't Veld MA, Allison MG, Bostick DS, Fisher KR, Goloubeva OG, Witting MD, Winters ME.

Resuscitation. 2017 Oct;119:95-98. doi: 10.1016/j.resuscitation.2017.07.021.

Epub 2017 Jul 25.

PMID: 28754527

JAMA, ICM

Effect of an Early Resuscitation Protocol on In-hospital Mortality Among Adults With Sepsis and Hypotension: A Randomized Clinical Trial.

Andrews B, Semler MW, Muchemwa L, Kelly P, Lakhi S, Heimbürger DC, Mabula C, Bwalya M, Bernard GR.

JAMA. 2017 Oct 3;318(13):1233-1240. doi: 10.1001/jama.2017.10913.

PMID: 28973227

Effect of Lung Recruitment and Titrated Positive End-Expiratory Pressure (PEEP) vs Low PEEP on Mortality in Patients With Acute Respiratory Distress Syndrome: A Randomized Clinical Trial.

Writing Group for the Alveolar Recruitment for Acute Respiratory Distress Syndrome Trial (ART) Investigators, Cavalcanti AB, Suzumura ÉA, Laranjeira LN, Paisani DM, Damiani LP, Guimarães HP, Romano ER, Regenga MM, Taniguchi LNT, Teixeira C, Pinheiro de Oliveira R, Machado FR, Diaz-Quijano FA, Filho MSA, Maia IS, Caser EB, Filho WO, Borges MC, Martins PA, Matsui M, Ospina-Tascón GA, Giancursi TS, Giraldo-Ramirez ND, Vieira SRR, Assef MDGPL, Hasan MS, Szczeklik W, Rios F, Amato MBP, Berwanger O, Ribeiro de Carvalho CR.

JAMA. 2017 Oct 10;318(14):1335-1345. doi: 10.1001/jama.2017.14171.

PMID: 28973363

Effect of Individualized vs Standard Blood Pressure Management Strategies on Postoperative Organ Dysfunction Among High-Risk Patients Undergoing Major Surgery: A Randomized Clinical Trial.

Futier E, Lefrant JY, Guinot PG, Godet T, Lorne E, Cuvillon P, Bertran S, Leone M, Pastene B, Piriou V, Molliex S, Albanese J, Julia JM, Tavernier B, Imhoff E, Bazin JE, Constantin JM, Pereira B, Jaber S; INPRESS Study Group.

JAMA. 2017 Oct 10;318(14):1346-1357. doi: 10.1001/jama.2017.14172.

PMID: 28973220

Intensive Care

Trends in short-term and 1-year mortality in very elderly intensive care patients in the Netherlands: a retrospective study from 2008 to 2014.

Karakus A, Haas LEM, Brinkman S, de Lange DW, de Keizer NF.

Intensive Care Med. 2017 Oct;43(10):1476-1484. doi: 10.1007/s00134-017-4879-9. Epub 2017 Jul 13.
PMID: 28707185

A multi-center prospective cohort study of patient transfers from the intensive care unit to the hospital ward.

Stelfox HT, Leigh JP, Dodek PM, Turgeon AF, Forster AJ, Lamontagne F, Fowler RA, Soo A, Bagshaw SM.

Intensive Care Med. 2017 Oct;43(10):1485-1494. doi: 10.1007/s00134-017-4910-1. Epub 2017 Aug 29.
PMID: 28852789