

List of ADVOS Publications

Extracorporeal carbon dioxide Removal (ECCO₂R) with the Advanced Organ Support (ADVOS) system in critically ill COVID-19 patients

Artif Organs. 2021 Jul 26. doi: 10.1111/aor.14044.

J. Allescher, S. Rasch, J.R. Wiessner, A. Perez Ruiz de Garibay, C. Huberle, F. Hesse, D. Schulz, R.M. Schmid, W. Huber, T. Lahmer

Pharmacokinetics of meropenem during advanced organ support (ADVOS[®]) and continuous renal replacement therapy

Int J Artif Organs. 2021 Jun 18;3913988211021101. doi: 10.1177/03913988211021101.

C. König, S. Kluge, V. Fuhrmann, D. Jarczак

Successful elimination of bilirubin in critically ill patients with acute liver dysfunction using a cytokine adsorber and albumin dialysis: a pilot study

Sci Rep. 2021 May 13;11(1):10190. doi: 10.1038/s41598-021-89712-4.

C. Scharf, U. Liebchen, M. Paal, A. Becker-Pennrich, M. Irlbeck, M. Zoller, I. Schroeder

Applicability and safety of discontinuous ADVanced Organ Support (ADVOS) in the treatment of patients with acute-on-chronic liver failure (ACLF) outside of intensive care

PLoS One. 2021 Apr 1;16(4):e0249342. doi: 10.1371/journal.pone.0249342. eCollection 2021.

L. Kaps, C. J. Ahlbrand, R. Gadban, M. Nagel, C. Labenz, P. Klimpke, S. Holtz, S. Boedecker, M. Michel, W. M. Kremer, M. Hilscher, P. R. Galle, D. Kraus, J. M. Schattenberg, J. Weinmann-Menke

Registry on extracorporeal multiple organ support with the advanced organ support (ADVOS) system: 2-year interim analysis

Medicine (Baltimore). 2021 Feb 19;100(7):e24653.

V. Fuhrmann, A. Perez Ruiz de Garibay, A. Faltlhauser, B. Tyczynski, D. Jarczак, J. Lutz, J. Weinmann-Menke, A. Kribben, S. Kluge

Extracorporeal multiorgan support including CO₂-removal with the ADVanced Organ Support (ADVOS) system for COVID-19: A case report

The International Journal of Artificial Organs (2020). doi: 10.1177/0391398820961.

W. Huber, G. Lorenz, M. Heilmaier, K. Böttcher, P. Sahm, M. Middelhoff, B. Ritzer, D. Schulz, E. Bekka, F. Hesse, A. Poszler, F. Geisler, C. Spinner, R. M. Schmid, T. Lahmer

Advanced organ support (ADVOS) in the critically ill: first clinical experience in patients with multiple organ failure

Annals of Intensive Care volume 10, Article number: 96 (2020).

V. Fuhrmann, T. Weber, K. Roedl, J. Motaabbed, A. Tariparast, D. Jarczак, A. Perez, J. Kluwe, O. Boenisch, H. Herkner, J. Kellum, S. Kluge

Comparison of the albumin dialysis devices Molecular Adsorbent Recirculating System and ADVanced Organ Support in critically ill patients with liver failure - a retrospective analysis

Ther Apher Dial, 2020. Accepted Author Manuscript. doi:10.1111/1744-9987.13533

C. Falkensteiner, A. Kortgen, J. Leonhardt, M. Bauer, C. Sponholz

P254 A non-interventional, multicenter, non-randomized patient registry for multiple organ dialysis with the advos system: 2-year interim analysis in 118 patients

Crit Care, 2020 Mar 24; 24 (Suppl 1): 87

V. Fuhrmann, A. Perez, A. Faltlhauser, B. Tyczynski, D. Jarczак, J. Lutz, J. Weinmann-Menke, W. Huber, A. Kribben, S. Kluge

Options in extracorporeal support of multiple organ failure

Medizinische Klinik - Intensivmedizin und Notfallmedizin (2020)

W. Huber, A. Perez

A case report about ADVanced Organ Support (ADVOS) in hypoxic hepatitis

Journal für Anästhesie und Intensivbehandlung (2020-2)

T. König, S. Böhm, A. Perez, K. Bressemer, C. Spies, S. Weber-Carstens

Ein nicht-interventionelles, multizentrisches, nicht-randomisiertes Patientenregister zur Anwendungsbeobachtung bei Multiorgan-Dialyse mit ADVOS: 2-jährige Zwischenanalyse bei 118 Patienten

DIVI 2019 – Abstractbuch

V. Fuhrmann, A. Perez, A. Faltlhauser, B. Tyczynski, D. Jarczack, J. Lutz, J. Weinmann-Menke, W. Huber, A. Kribben, S. Kluge

Extrakorporale Leberunterstützung mit ADVanced Organ Support (ADVOS) in Patienten mit Akut-auf-chronischem Leberversagen (ACLV) und Hepatorenalem Syndrom - Erste Ergebnisse aus einer Single Center Studie

DIVI 2019 – Abstractbuch

L. Kaps, C.J. Ahlbrand, R. Gadban, W.M. Kremer, C. Labenz, M. Nagel, P. Ploch, J.U. Marquardt, P.R. Galle, J.M. Schattenberg J., Weinmann-Menke

ADVOS - Advanced Organ Support - Evaluierung eines neuartigen Extrakorporalverfahrens zum schnellen natriumbilanzneutralen Ausgleich metabolischer Azidosen

DIVI 2019 – Abstractbuch

A. Faltlhauser, D. Codl, F. Kullmann

Respiratory and metabolic acidosis correction with the ADVanced Organ Support system

Intensive Care Medicine Experimental volume 7, Article number: 56 (2019). doi: 10.1186/s40635-019-0269-7

Perez Ruiz de Garibay A, Kellum J. A , Honigschnabel J, Kreymann B

24h-treatment for high-volume ultrafiltration and/or CO₂-elimination with the ADVOS/HepaWash-device (HAEMADVOS IV)

Intensive Care Medicine Experimental 2019 7(Suppl 3):55

Huber W, Busch D, Mayr U, Herner A, Batres-Baires G, Rasch S, Schreiber S, Schmid R, Lahmer T

ADVOS removes CO₂ and corrects acidosis: Mechanism of action following a H⁺ and HCO₃⁻ gradient (physiological approach) or pCO₂ and SID variations (quantitative approach)

Intensive Care Medicine Experimental 2019 7(Suppl 3):55

Perez Ruiz de Garibay A, Kreymann B

Successful therapy of massive risperidone-induced rhabdomyolysis using different dialysis and adsorber devices: A case report

Artif Organs. 2019 May 28. doi: 10.1111/aor.13479

Jarczack D, Kluge S, Fuhrmann V

Feasibility of ultrafiltration in patients treated with the ADVOS/HepaWash-device under haemodynamic monitoring with transpulmonary thermodilution (TPTD) and pulse contour analysis (PCA): The HAEMADVOS-III-study

Crit Care. 2019 Mar 19;23(Suppl 2):72

Huber W, Leinfelder M, Lahmer T, Batres-Baires G, Rasch S, Schreiber S, Schmid R

Haemodynamic effects of disconnection from the „advanced organ support“ (ADVOS): the HAEMADVOS-II-study evaluating the „retransfusion volume challenge option“ (REVOLUTION)

Intensive Care Medicine Experimental20186 (Suppl 2) :40

Huber W, Leinfelder M, Lahmer T, Herner A, Mayr U, Batres-Baires G, Schreiber S, Häberlein M, Habenicht L, Schmid R

The impact of connection to the extracorporeal circuit on haemodynamics (transpulmonary thermodilution (TPTD) and pulse contour analysis (PCA)) in patients treated with the ADVOS/ HepaWash-device: the HAEMADVOS-I-study

Intensive Care Medicine Experimental20186 (Suppl 2) :40

Huber W, Leinfelder M, Lahmer T, Herner A, Mayr U, Batres-Baires G, Hartter I, Wiesner J, Schmid R

Erfahrungen mit Advanced organ support (ADVOS) bei Patienten mit Multiorganversagen

DIVI 2018 - Abstractbuch

Fuhrmann V, Weber T, Roedl K, Tariparast A, Jarckzack D, Kluwe J, Boenisch O, Kluge S

ADVOS ahmt die Nierenkompensation des Körpers für die Behandlung der respiratorischen Azidose nach: In-vitro-Demonstration

DIVI 2018 - Abstractbuch

Ruiz de Garibay A, Honigschnabel J, Kreymann B

Das ADVOS-System: Albumin-Dialyse-basierter Ansatz zur signifikanten und kontinuierlichen Entfernung von wasserlöslichen und proteingebundenen Toxinen auch bei geringen Blutflüssen

DIVI 2018 - Abstractbuch

Ruiz de Garibay A, Honigschnabel J, Kreymann B

The ADVOS Device: Albumin Dialysis Based Approach for Significant and Continuous Removal of Water Soluble and Protein Bound Toxins Even at Low Blood Flows

Blood Purif 2018;46:163–186

Perez Ruiz de Garibay A, Honigschnabel J, Kreymann B

ADVOS Reverses Metabolic Acidosis Without Elevating pCO₂: Proof of Concept In Vitro

Blood Purif 2018;46:163–186

Perez Ruiz de Garibay A, Ende-Schneider B, Kreymann B

ADVOS Corrects Respiratory Acidosis Mimicking the Body's Renal Compensation: In Vitro Demonstration

Blood Purif 2018; 46:163–186

Perez Ruiz de Garibay A, Ende-Schneider B, Kreymann B

ADVOS reduces liver and kidney disease markers and corrects acidosis: the Hamburg experience

Critical Care 2018 22(Suppl 1):82

Fuhrmann V, Jarczszak D, Boenisch O, Kluge S

Evaluation of an ADVanced Organ Support (ADVOS) system in a two-hit porcine model of liver failure plus endotoxemia

Intensive Care Med Exp. 2017; 5(1):31

Al-Chalabi A, Matevossian E, von Thaden A, Schreiber C, Radermacher P et al.

First clinical experience in 14 patients treated with ADVOS: a study on feasibility, safety and efficacy of a new type of albumin dialysis

BMC Gastroenterol. 2017; 17: 32

Huber W, Henschel B, Schmid R, Al-Chalabi A

Advanced Organ Support (ADVOS) based on albumin dialysis, a new method for CO₂ removal and pH stabilization

Critical Care 2017 21(Suppl 1):57

Perez Ruiz de Garibay A, Ende-Schneider B, Schreiber C, Kreymann B

Combined removal of 4.5 mol/day of protons and protein bound and water soluble substances in an ex vivo model for metabolic acidosis using an Advanced Organ Support (ADVOS) system based on albumin dialysis

Critical Care 2017 21(Suppl 1):58

Perez Ruiz de Garibay A, Ende-Schneider B, Schreiber C, Kreymann B

ADVOS kehrt die metabolische Azidose um, ohne pCO₂ zu erhöhen: Proof of Concept in vitro

DIVI 2016 - Abstractbuch

A. Ruiz de Garibay, B. Ende-Schneider, B. Kreymann

Das Advanced Organ Support (ADVOS) Verfahren in der Therapie des Multiorganversagens

DIVI 2016 - Abstractbuch

Sollinger D, Dörken M, Lutz J

Erste Erfahrungen mit einem neuen erweiterten Dialyseverfahren bei kritisch kranken Patienten mit Multiorganversagen

DIVI 2016 - Abstractbuch

Fuhrmann V, Drolz A, Horvatits T, Roedl K, Horvatits K, Benten D et al.

Erfolgreiche Therapie einer schwerwiegenden Rhabdomyolyse nach Einnahme von Risperidon durch den Einsatz verschiedener Dialyse- und Adsorptionsverfahren (ADVOS, CVVHD, CytoSorb)

DIVI 2016 - Abstractbuch

Jarczszak D, Wehmeyer MH, Roedl K, Tariparast P, Horvatits T, Drolz A et al.

Erste Erfahrungen mit dem ADVOS Verfahren (Advanced Organ Support) bei Patienten mit alkoholischer Steatohepatitis (ASH)

DIVI 2016 - Abstractbuch

Huber W, Henschel B, Lahmer T, Braun M, Mayr U, Schmid R, Al-Chalabi A

Anwendung eines neuartigen Hämodialyseverfahrens bei einem septischen Patienten mit hyperkapnischem Lungenversagen

DIVI 2016 - Abstractbuch

Tariparast P, Roedl K, Horvatits T, Drolz A, Rutter K, Jarczszak D, Siedler S et al.

First clinical experience with a new type of albumin dialysis: the Hepa Wash system

Critical Care. 2015; 19 (Suppl 1): P383 (16 March 2015)

Henschel B, Schmid R, Huber W

Leberunterstützungstherapien

Fachpflege Nephrologie und Dialyse. 2014; 5. Auflage: 471-479

Kreymann B, Riedelsdorf G, Schreiber C

Evaluation of the Hepa Wash treatment in pigs with acute liver failure

BMC Gastroenterology. 2013; 13:83 doi: 10.1186/1471-230X-13-83

Al-Chalabi A, Matevossian E, v Thaden AK, Luppä P, Neiss A, Schuster T et al.

Improvement of survival in a swine model of acute liver failure by a new liver support system (Hepa Wash)

Journal of Hepatology. 2010; 52: 319-S320

Al-Chalabi A, Matevossian E, Preissel AK, Yang Z, Schreiber C, Schimmel P et al.

Survival improvement in pigs with liver failure and superimposed sepsis by a new liver support system (Hepa Wash)

Critical Care. 2010; 14: 508

Al-Chalabi A, Matevossian E, Preissel AK, Yan H, Geiger A, Nairz E, Schimmel P et al.

A model of ischemic isolated acute liver failure in pigs: standardizing monitoring and treatment

European Surgical Research. 2010; 45: 86-97

Al-Chalabi A, Matevossian E, Preißel A, Perren A, Yang Z, Schuster T, Schreiber C et al.

Leberunterstützungstherapien 2010: Mehr Fragen als Antworten

Intensivmedizin und Notfallmedizin. 2010; 47: 576-581

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Al-Chalabi A, Kreymann B, Langgartner J, Brännler T

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Nephrology Dialysis Transplantation. 2009;24(7): 2244-51

Kozik-Jaromin J, Nier V, Heemann U, Kreymann B, Böhler J

Treatment of septic patients with an arginine-based endotoxin adsorber column improves hemodynamics and reduces oxidative stress: results of a feasibility study

Blood Purification. 2008; 26(4): 333-9

Umgelter A, Reindl W, Lutz J, Kreymann B, Ronco C, Huber W, Frank H et al.

Grundlagen der Nieren- und Leberdialyse

In: Wintermantel E, Ha S, Medizintechnik. Springer, Berlin/Heidelberg; 2007: 1191-125

Schreiber C, Al-Chalabi A, Tanase O, Kreymann B

Haemodialysis for the prevention of contrast-induced nephropathy: outcome of 31 patients with severely impaired renal function, comparison with patients at similar risk and review

Investigative Radiology. 2002; 37(9): 471-81

Huber W, Jeschke B, Kreymann B, Hennig M, Page M, Salmhofer H, Eckel F et al.

Albumin dialysis: effective removal of copper in a patient with fulminant Wilson disease and successful bridging to liver transplantation: a new possibility for the elimination of protein-bound toxins

Journal of Hepatology. 1999; 31(6): 1080-5

Kreymann B, Seige M, Schweigart U, Kopp KF, Classen M

Long-term treatment of patients with acute exacerbation of chronic liver failure by albumin dialysis

Transplantation Proceedings. 1999; 31(1-2): 1371-5

Seige M, Kreymann B, Jeschke B, Schweigart U, Kopp KF, Classen M

