**Recent publications 2022-2023**

Jan Bělohlávek, MD, PhD

1. **BĚLOHLÁVEK, Jan -** ŠMALCOVÁ, Jana - ROB, Daniel - FRANĚK, Ondřej - ŠMÍD, Ondřej - POKORNÁ, Milana - HORÁK, Jan - MRÁZEK, Vratislav - KOVÁRNÍK, Tomáš - ZEMÁNEK, David - KRÁL, Aleš - HAVRÁNEK, Štěpán - KAVÁLKOVÁ, Petra - KOMPELENTOVÁ, Lucie - TOMKOVÁ, Helena - MEJSTŘÍK, Alan - VALÁŠEK, Jaroslav - PEŘAN, David - PEKARA, Jaroslav - RULÍŠEK, Jan - BALÍK, Martin - HUPTYCH, Michal - JARKOVSKÝ, Jiří - MALÍK, Jan - VALERIÁNOVÁ, Anna - MLEJNSKÝ, František - KOLOUCH, Petr - HAVRÁNKOVÁ, Petra - ROMPORTL, Dan - KOMÁREK, Arnošt - LINHART, Aleš. Effect of Intra-arrest Transport, Extracorporeal Cardiopulmonary Resuscitation, and Immediate Invasive Assessment and Treatment on Functional Neurologic Outcome in Refractory Out-of-Hospital Cardiac Arrest: A Randomized Clinical Trial. *JAMA: The Journal of the American Medical Association*. 2022, 327(8), 737-747. ISSN 0098-7484. DOI 10.1001/jama.2022.1025.
2. ABRAMS, Darryl - MACLAREN, Graeme - LORUSSO, Roberto - PRICE, Susanna - YANNOPOULOS, Demetris - VERCAEMST, Leen - **BĚLOHLÁVEK, Jan** - TACCONE, Fabio S. - AISSAOUI, Nadia - SHEKAR, Kiran - GARAN, A. Reshad - URIEL, Nir - TONNA, Joseph E. - JUNG, Jae Seung - TAKEDA, Koji - CHEN, Yih-Sharng - SLUTSKY, Arthur S. - COMBES, Alain - BRODIE, Daniel. Extracorporeal cardiopulmonary resuscitation in adults: evidence and implications. *Intensive Care Medicine*. 2022, 48(1), 1-15. ISSN 0342-4642. DOI 10.1007/s00134-021-06514-y.
3. HAVRÁNEK, Štěpán - FINGROVÁ, Zdeňka - ROB, Daniel - ŠMALCOVÁ, Jana - KAVÁLKOVÁ, Petra - FRANEK, Ondrej - ŠMÍD, Ondřej - HUPTYCH, Michal - DUSÍK, Milan - LINHART, Aleš **- BĚLOHLÁVEK, Jan**. Initial rhythm and survival in refractory out-of-hospital cardiac arrest. Post-hoc analysis of the Prague OHCA randomized trial. *Resuscitation*. 2022, 181(December), 289-296. ISSN 0300-9572. DOI 10.1016/j.resuscitation.2022.10.006.
4. NAKASHIMA, Takahiro - OGATA, Soshiro - NOGUCHI, Teruo - NISHIMURA, Kunihiro - HSU, Cindy H. - SEFA, Nana - HAAS, Nathan L. **- BĚLOHLÁVEK, Jan** - PELLEGRINO, Vincent - TONNA, Joseph E. - HAFT, Jonathan - NEUMAR, Robert W.. Association of intentional cooling, achieved temperature and hypothermia duration with in-hospital mortality in patients treated with extracorporeal cardiopulmonary resuscitation: An analysis of the ELSO registry. *Resuscitation*. 2022, 177(August), 43-51. ISSN 0300-9572. DOI 10.1016/j.resuscitation.2022.06.022.
5. ROB, Daniel - ŠMALCOVÁ, Jana - ŠMÍD, Ondřej - KRÁL, Aleš - KOVÁRNÍK, Tomáš - ZEMÁNEK, David - KAVÁLKOVÁ, Petra - HUPTYCH, Michal - KOMÁREK, Arnošt - FRANEK, Ondrej - HAVRÁNEK, Štěpán - LINHART, Aleš - **BĚLOHLÁVEK, Jan**. Extracorporeal versus conventional cardiopulmonary resuscitation for refractory out-of-hospital cardiac arrest: a secondary analysis of the Prague OHCA trial. *Critical Care*. 2022, 26(1), 330. ISSN 1364-8535. DOI 10.1186/s13054-022-04199-3.
6. ROB, Daniel - KAVÁLKOVÁ, Petra - ŠMALCOVÁ, Jana - FRANEK, Ondrej - ŠMÍD, Ondřej - KOMÁREK, Arnošt - PISINGER, Michael - **BĚLOHLÁVEK, Jan**. Gender differences and survival after out of hospital cardiac arrest. *The American Journal of Emergency Medicine*. 2022, 55(May), 27-31. ISSN 0735-6757. DOI 10.1016/j.ajem.2022.02.032.
7. ROB, Daniel - KAVÁLKOVÁ, Petra - ŠMALCOVÁ, Jana - KRÁL, Aleš - KOVÁRNÍK, Tomáš - ZEMÁNEK, David - FRANEK, Ondrej - ŠMÍD, Ondřej - HAVRÁNEK, Štěpán - LINHART, Aleš - **BĚLOHLÁVEK, Jan**. Coronary angiography and percutaneous coronary intervention in cardiac arrest patients without return of spontaneous circulation. *Resuscitation*. 2022, 175(June), 133-141. ISSN 0300-9572. DOI 10.1016/j.resuscitation.2022.03.027.
8. BRESTOVANSKÝ, Peter - VOLNÝ, Lukáš - BROŽEK, Tomáš - BARTOŠOVÁ, Tereza - JURÍŠINOVÁ, Ivana - MEVALDOVÁ, Zuzana - MIŠOVIČ, Ondřej - NOVOTNÝ, Adam - HOREJSEK, Jan - OTÁHAL, Michal - FLAKSA, Marek - STACH, Zdeněk - RULÍŠEK, Jan - TRACHTA, Pavel - KOLMAN, Josef - ŠACHL, Robert - KUNSTÝŘ, Jan - KOPECKÝ, Petr - ROMANIV, Severyn - HUPTYCH, M. - ŠVARC, Michal - HODKOVÁ, Gabriela - FICHTL, Jaromír - MLEJNSKÝ, František - GRUS, Tomáš **- BĚLOHLÁVEK, Jan** - LIPŠ, Michal - BLÁHA, Jan. The impact of obesity on the outcome of severe SARS-CoV-2 ARDS in a high volume ECMO centre: ECMO and corticosteroids support the obesity paradox. *Journal of Critical Care*. 2022, 72(December), 154162. ISSN 0883-9441. DOI 10.1016/j.jcrc.2022.154162.
9. Marion Moseby-Knappe, Helena Levin, Kaj Blennow, Susann Ullén, Henrik Zetterberg, Gisela Lilja, Josef Dankiewicz, Janus Christian Jakobsen, Alice Lagebrant, Hans Friberg, Alistair Nichol, Kate Ainschough, Glenn M. Eastwood, Matt P. Wise, Matthew Thomas, Thomas Keeble, Alain Cariou, Christoph Leithner, Christian Rylander, Joachim Düring, **Jan Bělohlávek**, Anders Grejs, Ola Borgquist, Johan Undén, Maryline Simon, Vinzent Rolny, Alex Piehler, Tobias Cronberg, Niklas Nielsen. Biomarkers of brain injury after cardiac arrest; a statistical analysis plan from the TTM2 trial biobank investigators. *Resusc Plus*. 2022 Jun; 10: 100258. Published online 2022 Jun 2. doi: 10.1016/j.resplu.2022.100258
10. Rob D, Komárek A, Šmalcová J, **Bělohlávek J**. Effect of Intraarrest Transport, Extracorporeal Cardiopulmonary Resuscitation, and Invasive Treatment: A Post Hoc Bayesian Reanalysis of a Randomized Clinical Trial. *Chest.* 2023 Aug 2:S0012-3692(23)01068-1. doi: 10.1016/j.chest.2023.07.030. Epub ahead of print. PMID: 37536393.
11. Dusik M, Rob D, Smalcova J, Havranek S, Karasek J, Smid O, Brodska HL, Kavalkova P, Huptych M, Bakker J, **Belohlavek J.** Serum lactate in refractory out-of-hospital cardiac arrest: Post-hoc analysis of the Prague OHCA study. *Resuscitation*. 2023 Aug 11:109935. doi: 10.1016/j.resuscitation.2023.109935. Epub ahead of print. PMID: 37574002.
12. Pudil J, Rob D, Smalcova J, Smid O, Huptych M, Vesela M, Kovarnik T, **Belohlavek J**. Pulmonary embolism-related refractory out-of-hospital cardiac arrest and extracorporeal cardiopulmonary resuscitation: Prague OHCA study post hoc analysis. *Eur Heart J Acute Cardiovasc Care.* 2023 Aug 24;12(8):507-512. doi: 10.1093/ehjacc/zuad052. PMID: 37172033; PMCID: PMC10449371.
13. Grunau, Brian, Gurmeet Singh, **Jan Belohlavek**, Demetris Yannopoulos, Joseph E. Tonna, Alice Hutin, Dave Nagpal, Alexis Cournoyer, MD, and Sean van Diepen. “A Second Chance for Survival: Clinical Trial Evidence, Eligibility, and Barriers to Implementation of ECPR for Out-of-Hospital Cardiac Arrest.” *The Canadian journal of cardiology* vol. 39,4 (2023): 381-384. doi:10.1016/j.cjca.2022.12.006
14. **Belohlavek, Jan,** Demetris Yannopoulos, Jana Smalcova, Daniel Rob, Jason Bartos, Michal Huptych, Petra Kavalkova, Rajat Kalra, Brian Grunau, Fabio Silvio Taccone, and Tom P. Aufderheide. “Intraarrest transport, extracorporeal cardiopulmonary resuscitation, and early invasive management in refractory out-of-hospital cardiac arrest: an individual patient data pooled analysis of two randomised trials.” *Lancet* *EClinicalMedicine v*ol. 59 101988. 5 May. 2023, doi:10.1016/j.eclinm.2023.101988
15. Hrdlicka, Jan, Jana Smalcova, Bianka Bircakova, Lukas Lambert, **Jan Belohlavek**, Andrea Burgetova. “Both decreased and increased grey-to-white matter attenuation ratio in the putamen and caudate on early head computed tomography differentiate patients with favorable and unfavorable outcomes after prolonged cardiac arrest-secondary analysis of the Prague OHCA study.” *Quantitative imaging in medicine and surgery* vol. 13,9 (2023): 6205-6214. doi:10.21037/qims-23-430
16. Ubben, Johannes F H, Samuel Heuts, Thijs S. R. Delnoij, Martje M. Suverein, Anina F. van de Koolwijk, Iwan C. C. van der Horst, Jos G. Maessen, Jason Bartos, Petra Kavalkova, Daniel Rob, Demetris Yannopoulos, **Jan Bělohlávek**, Roberto Lorusso, and Marcel C. G. van de Poll. “Extracorporeal cardiopulmonary resuscitation for refractory OHCA: lessons from three randomized controlled trials-the trialists' view.” *European heart journal. Acute cardiovascular care* vol. 12,8 (2023): 540-547. doi:10.1093/ehjacc/zuad071
17. Ostadal, Petr, Richard Rokyta, Jiri Karasek, Andreas Kruger, Dagmar Vondrakova, Marek Janotka, Jan Naar, Jana Smalcova, Marketa Hubatova, Milan Hromadka, Stefan Volovar, Miroslava Seyfrydova, Jiri Jarkovsky, Michal Svoboda, Ales Linhart, **Jan Belohlavek**, for the ECMO-CS Investigators et al. “Extracorporeal Membrane Oxygenation in the Therapy of Cardiogenic Shock: Results of the ECMO-CS Randomized Clinical Trial.” *Circulation* vol. 147,6 (2023): 454-464. doi:10.1161/CIRCULATIONAHA.122.062949
18. Gisela Lilja, Susann Ullén, Josef Dankiewicz, Hans Friberg, Helena Levin, Erik Blennow Nordström, Katarina Heimburg, Janus Christian Jakobsen, Marita Ahlqvist, Frances Bass, **Jan Belohlavek**, Roy Bjørkholt Olsen, Alain Cariou, Glenn Eastwood, Hans Rune Fanebust, Anders M. Grejs, Lisa Grimmer, Naomi E. Hammond, Jan Hovdenes, Juraj Hrecko, Manuela Iten, Henriette Johansen, Thomas R. Keeble, Hans Kirkegaard, Jean-Baptiste Lascarrou, Christoph Leithner, Mildred Eden Lesona, Anja Levis, Marco Mion, Marion Moseby-Knappe, Leanlove Navarra, Per Nordberg, Paolo Pelosi, Rachael Quayle, Christian Rylander, Helena Sandberg, Manoj Saxena, Claudia Schrag, Michal Siranec, Cassina Tiziano, Philippe Vignon, Pedro David Wendel-Garcia, Matt P. Wise, Kim Wright, Niklas Nielsen, Tobias Cronberg. Effects of Hypothermia vs Normothermia on Societal Participation and Cognitive Function at 6 Months in Survivors After Out-of-Hospital Cardiac Arrest: A Predefined Analysis of the TTM2 Randomized Clinical Trial. *JAMA Neurol*. 2023 Aug 7 : e232536. doi: 10.1001/jamaneurol.2023.2536
19. Roberto Lorusso, Maria Elena De Piero, Silvia Mariani, Michele Di Mauro, Thierry Folliguet, Fabio Silvio Taccone, Luigi Camporota, Justyna Swol, Dominik Wiedemann, Mirko Belliato, Lars Mikael Broman, Alain Vuylsteke, Yigal Kassif, Anna Mara Scandroglio, Vito Fanelli, Philippe Gaudard, Stephane Ledot, Julian Barker, Udo Boeken, Sven Maier, Alexander Kersten, Bart Meyns, Matteo Pozzi, Finn M Pedersen, Peter Schellongowski, Kaan Kirali, Nicholas Barrett, Jordi Riera, Thomas Mueller, **Jan Belohlavek**, EuroECMO-COVID Study Group In-hospital and 6-month outcomes in patients with COVID-19 supported with extracorporeal membrane oxygenation (EuroECMO-COVID): a multicentre, prospective observational study. *Lancet Respir Med*. 2023 Feb; 11(2): 151–162. Published online 2022 Nov 16. doi: 10.1016/S2213-2600(22)00403-9 PMCID: PMC9671669
20. Gisela Lilja, Susann Ullén, Josef Dankiewicz, Hans Friberg, Helena Levin, Erik Blennow Nordström, Katarina Heimburg, Janus Christian Jakobsen, Marita Ahlqvist, Frances Bass, **Jan Belohlavek**, Roy Bjørkholt Olsen, Alain Cariou, Glenn Eastwood, Hans Rune Fanebust, Anders M. Grejs, Lisa Grimmer, Naomi E. Hammond, Jan Hovdenes, Juraj Hrecko, Manuela Iten, Henriette Johansen, Thomas R. Keeble, Hans Kirkegaard, Jean-Baptiste Lascarrou, Christoph Leithner, Mildred Eden Lesona, Anja Levis, Marco Mion, Marion Moseby-Knappe, Leanlove Navarra, Per Nordberg, Paolo Pelosi, Rachael Quayle, Christian Rylander, Helena Sandberg, Manoj Saxena, Claudia Schrag, Michal Siranec, Cassina Tiziano, Philippe Vignon, Pedro David Wendel-Garcia, Matt P. Wise, Kim Wright, Niklas Nielsen, Tobias Cronberg. Effects of Hypothermia vs Normothermia on Societal Participation and Cognitive Function at 6 Months in Survivors After Out-of-Hospital Cardiac Arrest: A Predefined Analysis of the TTM2 Randomized Clinical Trial. *JAMA Neurol*. 2023 Aug 7 : e232536. doi: 10.1001/jamaneurol.2023.2536 [Epub ahead of print]
21. Uwe Zeymer, Anne Freund, Matthias Hochadel, Petr Ostadal, **Jan Belohlavek**, Richard Rokyta, Steffen Massberg, Stefan Brunner, Enzo Lüsebrink, Marcus Flather, David Adlam, Kris Bogaerts, Amerjeet Banning, Manel Sabaté, Ibrahim Akin, Alexander Jobs, Steffen Schneider, Steffen Desch, Holger Thiele. Venoarterial extracorporeal membrane oxygenation in patients with infarct-related cardiogenic shock: an individual patient data meta-analysis of randomised trials. *Lancet. 2023* Published Online August 26, 2023 https://doi.org/10.1016/ S0140-6736(23)01607-0
22. Smalcová J, …….Extracorporeal Cardiopulmonary Resuscitation-Based Approach to Refractory Out-of-Hospital Cardiac Arrest: a Focus on Organ Donation, a Secondary Analysis of a Prague OHCA Randomized Study. Resuscitation 2023, in press
23. Tomas Vetrovsky, Michal Siranec, Tereza Frybova, Iulian Gant, Iveta Svobodova, Ales Linhart, Jiri Parenica, Marie Miklikova, Lenka Sujakova, David Pospisil, Radek Pelouch, Daniela Odrazkova, Petr Parizek, Jan Precek, Martin Hutyra, Milos Taborsky, Jiri Vesely, Martin Griva, Miroslav Semerad, Vaclav Bunc, Karolina Hrabcova, Adela Vojkuvkova, Michal Svoboda and **Jan Belohlavek** on behalf of the WATCHFUL Investigators. Lifestyle Walking Intervention in Patients With Heart Failure With Reduced Ejection Fraction: The WATCHFUL Trial. *Circulation. 2023* Originally published13 Nov 2023https://doi.org/10.1161/CIRCULATIONAHA.123.067395