

The Hemostatic Resuscitation and Trauma Induced Coagulopathy (HERETIC) meeting: challenging dogma

Matthew D Neal , Philip C Spinella

The Hemostatic Resuscitation and Trauma Induced Coagulopathy (HERETIC) meeting was hosted by the University of Pittsburgh's Trauma and Transfusion Medicine Research Center, Center for Military Medicine Research, and the McGowan Institute for Regenerative Medicine in Pittsburgh, Pennsylvania, in October 2022. This inaugural symposium was built on the success of the Trauma, Hemostasis, and Oxygenation Research (THOR) network,¹ which collaborated to introduce this meeting focused on advances in clinical, basic, and implementation science in transfusion medicine and trauma-induced coagulopathy (TIC). The acronym, HERETIC, was intentionally designed to encourage the theme of challenging dogma and popular opinion in the science of these important disciplines. The 2-day event leveraged civilian and military partnerships, including representation from the Department of Defense, Defense Health Agency, Biomedical Advanced Research and Development Authority, and the Defense Advanced Research Projects Agency, among others. In keeping with the vision of advancing multidisciplinary science towards the common goal of improved transfusion outcomes, zero preventable deaths from injury, and understanding best practices in resuscitation for hemorrhage, HERETIC included international experts in epidemiology, fundamental biology of TIC, advanced clinical trial design, implementation science, and bioengineering.

Trauma and Transfusion Medicine Research Center, Department of Surgery, University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Correspondence to Dr Matthew D Neal; nealm2@upmc.edu

The present issue of *Trauma Surgery and Acute Care Open* contains a number of papers submitted from the meeting, representative of the diversity of topics ranging from non-human primate trauma resuscitation² to plasma exchange as a rescue therapy for TIC³ to safety of whole blood resuscitation in multiple patient groups.^{3–6} Additional talks focused on best practices for disaster and emergency preparation, including scale for whole blood resuscitation in trauma as well as for potential combined radiation/nuclear threats.^{7,8} A synopsis of HERETIC as well as a link to presentations from the meeting is available online (HERETIC | Trauma & Transfusion Medicine Research Center | University of Pittsburgh). With the ongoing mission to advance the science of transfusion and trauma care, HERETIC will combine with the THOR Network to present the next symposium on the state of the art in trauma, transfusion, and hemorrhagic shock on October 6–9, 2024 in Miami, Florida, USA (2024 Remote Damage Control Resuscitation (RDCR) Symposium Overview | THOR).

Contributors MN and PS wrote and edited this manuscript and co-organized the HERETIC meeting.

Funding This study was funded by National Institute of General Medical Sciences (R35GM119526).

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.



OPEN ACCESS

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.



To cite Neal MD, Spinella PC. *Trauma Surg Acute Care Open* 2024;**9**:e001306. doi:10.1136/tsaco-2023-001306

Received 6 November 2023

Accepted 10 November 2023

Trauma Surg Acute Care Open 2024;**9**:e001306. doi:10.1136/tsaco-2023-001306

ORCID iD

Matthew D Neal <http://orcid.org/0000-0001-8931-6236>

REFERENCES

- 1 Woolley T, Stubbs JR, Sprague E, Suiter AM, Sarli CC, Stranden G, Spinella PC. The publication impact of the first 100 THOR network publications by Bibliometric and social network analyses. *Transfusion* 2022;**62**:S1–11.
- 2 Pusateri A, Morgan CG, Neidert LE. Safety of bioplasma FDP and hemopure in rhesus macaques after 30% hemorrhage. *Trauma Surg Acute Care Open* 2023;**9**:e001147.
- 3 Moore SA, Rollins-Raval MA, Gillette JM, *et al*. Therapeutic plasma exchange is feasible and tolerable in severely injured patients with trauma-induced coagulopathy. *Trauma Surg Acute Care Open* 2023.
- 4 Brown JB, Schreiber M, Moore EE, *et al*. Commentary on gaps in prehospital trauma care: education and bioengineering innovations to improve outcomes in hemorrhage and traumatic brain injury. *Trauma Surg Acute Care Open* 2023.
- 5 Khalil EA, Morgan KM, Gaines BA, *et al*. Use of whole blood in pediatric trauma: a narrative review. *Trauma Surg Acute Care Open* 2023.
- 6 Yazer MH, Emery SP, Triulzi DJ, *et al*. Another piece of the hemolytic disease of the fetus and newborn puzzle after RHD-positive transfusion in trauma resuscitation: the proportion of pregnant women who produce high titer anti-D. *Trauma Surg Acute Care Open* 2023.
- 7 Brignon EP, Cirone J, Harrell K. Walking blood bank: a plan to ensure self-sufficiency in an era of blood shortage. *Trauma Surg Acute Care Open* 2023.
- 8 Silverman TA, Shadiack AM, Hofmeyer KA, *et al*. Blood product use for radiological/nuclear trauma: product development and US regulatory considerations. *Trauma Surg Acute Care Open* 2023.