

TRAUMA UPDATE

NEW TECHNOLOGIES IN TRAUMA: PREHOSPITAL & INHOSPITAL CARE

December 9th, 2026

MILAN (Italy)

Aula Magna

ASST Grande Ospedale Metropolitano Niguarda

Preliminary program

INTRODUCTION

New technologies in trauma care are rapidly evolving to improve survival rates, enhance diagnostic speed, and optimize rehabilitation, with a focus on artificial intelligence (AI), point-of-care, and, in some contexts, virtual reality (VR) interventions.

The application of new technologies spans from pre-hospital to in-hospital care.

In the pre-hospital setting, new technologies involve machine learning models, implemented to analyse trauma data in real-time, predicting patient instability and optimizing triage. Tools like “Trauma AI” assist in predicting the need for surgery or other interventional procedures for bleeding control.

In-hospital AI might help in predicting mortality risk, coagulopathy and blood product utilization, the risk of subsequent VTE disease, summarizing large data, increasing our accuracy in injury recognition on imaging studies, and enhancing communication and workflow.

Technological devices, as Extra Corporeal Membrane Oxygenation (ECMO), is recognized as an acceptable therapy for patients with profound respiratory failure and systemic hypothermia secondary to trauma. When indicated, therapy should be initiated immediately as a component of the initial trauma evaluation.

New generation CT technology allows better visualization of traumatic injuries, providing more detailed information on organs and organ systems. These improvements in image quality may enable better clinical insights and improved diagnoses, while fixation systems, fascial traction devices, prosthetic materials improve the management of torso injuries.

We have brought together several well-known national and international experts in trauma surgery, intensive care, AI to highlight all the aspects pertaining the application of new technologies in trauma care, in order to improve the knowledge and the awareness about these topics.

SCIENTIFIC COMMITTEE

Oswaldo Chiara (Milan, Italy)

Stefania Cimbanassi (Milan, Italy)

FACULTY

Domenico Albano (Milan, Italy)

Luca Ansaloni (Pavia, Italy)

Alessio Caccioppola (Milan, Italy)

Oswaldo Chiara (Milan, Italy)

Stefania Cimbanassi (Milan, Italy)

Antonio Esposito (Milan, Italy)

Giuseppe Foti (Milan, Italy)

Simone Frassini (Pavia, Italy)

Shailvi Gupta (Baltimore, MD, USA)

Sharon M. Henry (Baltimore, MD, USA)

Gereon Lill (Cologne, Germany)

Gianluca Pariscenti (Milan, Italy)

Giovanna Pedrazzini (Milan, Italy)

Thomas M. Scalea (Baltimore, MD, USA)

Andrea Spota (Milan, Italy)

Cesare Stabilini (Genoa, Italy)

Mauro Zago (Lecco, Italy)

Marinella Zanierato (Turin, Italy)

SCIENTIFIC PROGRAM

08:15 **Registration**

08:45 **Welcome**

Osvaldo Chiara, Stefania Cimbanassi
Direzione ASST Grande Ospedale Metropolitano Niguarda

09:00 **Osvaldo Chiara Lecture**

The Evolution of Technology in Trauma Care
Thomas Scalea

09:30-11:10

SESSION 1 • NEW TECHNOLOGIES

Moderators: Gianluca Pariscenti, Mauro Zago

09:30 **Rib fixation: when and how?** | Shailvi Gupta [Remote]

09:50 **Photon Counting CT: the new era of CT imaging** | Antonio Esposito

10:10 **Vertical traction for fascial re-approximation** | Gereon Lill [Remote]

10:30 **New prosthetic materials for the abdominal wall reconstruction** | Cesare Stabilini

10:50 **Discussion**

11:10 **Break**

11:30-13:00

SESSION 2 • ARTIFICIAL INTELLIGENCE

Moderators: Luca Ansaloni, Giuseppe Foti

11:30 **Machine learning for hemodynamic instability prediction** | Simone Frassini

11:50 **Imaging interpretation by AI** | Domenico Albano

12:10 **AI application for trauma registries** | Andrea Spota

12:30 **Discussion**

13:00 **Break**

14:30-16:00

SESSION 3 • ECMO IN TRAUMA

Moderators: Sharon Henry, Giovanna Pedrazzini

14:30 **Venous-venous ECMO in trauma: why, when, how?** | Alessio Caccioppola

14:50 **Venous-arterial ECMO in trauma: why, when, how?** | Marinella Zanierato

15:10 **New technologies for ECMO monitoring** | Thomas Scalea

15:30 **Discussion**

16:00 **Closing Remarks**

Osvaldo Chiara, Stefania Cimbanassi

GENERAL INFORMATION

VENUE

Aula Magna (Pavillon nr. 1 - 1st floor)
ASST Grande Ospedale Metropolitano Niguarda
P.zza Ospedale Maggiore, 3 - 20162 Milan (Italy)

REGISTRATION

Online registration will soon be available at www.noemacongressi.it

CME CREDITS

An application for Italian CME credits will be submitted.

ORGANIZING SECRETARIAT AND CME PROVIDER

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Via degli Orefici, 4 - 40124 Bologna (Italy) - Tel. +39 051 230385
info@noemacongressi.it - www.noemacongressi.it