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

Osvaldo Chiara (Milan, Italy)

Stefania Cimbanassi (Milan, Italy)

SCIENTIFIC PROGRAM

08.15-08.45
Registration

08.45 **Welcome**

09.00-11.00
SESSION 1
NEW TECHNOLOGIES

09.00 **Rib fixation: when and how?**
09.20 **Photon Counting CT: the new era of CT imaging**
09.40 **Vertical traction for fascial re-approximation**
10.00 **New prosthetic materials for the abdominal wall reconstruction**
10.20 **Discussion**

11.00-11.20
Break

11.20-13.00
SESSION 2
ECMO IN TRAUMA

11.20 **Venous-venous ECMO in trauma: why, when, how?**
11.40 **Venous-arterial ECMO in trauma: why, when, how?**
12.00 **New technologies for ECMO monitoring**
12.20 **Discussion**

13.00-14.15
Break

14.15-16.00
SESSION 3
ARTIFICIAL INTELLIGENCE

14.15 **Machine learning for hemodynamic instability prediction**
14.35 **Imaging interpretation by AI**
14.55 **AI application for trauma registries**
15.15 **Discussion**
16.00 **Closing Remarks**

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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