

# Committee Report 2024 Artificial Intelligence Committee

Rome, 27<sup>th</sup> January 2025

# Report of the ESO Committees - Summary

## Artificial Intelligent Committee

- **Pietro Caliandro, Italy (Chair)**
- Carlos Molina, Spain
- Luigi Serio, Switzerland
- Olfa Kaaouana, France
- Rajiv Advani, Norway
- Robin Lemmens, Belgium
- Smriti Agarwal, UK
- Tatiana Kharitonova, Russia

# Report of the Artificial Intelligent Committee

## Meetings

- 22<sup>th</sup> January 2024 (virtual meeting): Discussion on AI committee strategy 2024-2026
- 15<sup>th</sup> May 2024 (in person meeting Basel-ESOC 2024): Discussion on organization of educational and scientific events
- 24<sup>th</sup> October (in person meeting Abu Dhabi 2024): Discussion on scientific collaborations

# Report of the Artificial Intelligent Committee

## Webinars

- **Artificial Intelligence and Stroke Management** (28 January, from 18:30-19:30 CET). Chairs: Dr. Xabier Urra (Spain) and Dr. Ellis van Etten (Netherlands). Joint webinar between the ESO Education Committee, the YSPR and the ESO AI Committee
  - Follow a stroke patients' journey from symptom onset to discharge. Dr. Giuseppe Reale (Italy)
  - Discover current AI applications, identify critical gaps, and explore future opportunities Dr. Carlos Molina (Spain)
- **AI applications in stroke** (April 29, 12 noon CET). Chairs: Robin Lemmens (Belgium) and Smriti Agarwal (UK)
  - Automated imaging to facilitate acute stroke treatments- current landscape and promises for the future. Professor Bruce Campbell (Australia)
  - EHR data- a valuable and evolving resource in the age of AI research Professor William Whiteley (UK)

# Report of the Artificial Intelligent Committee

## Contributions to ESOC 2025

- Session ID SS2 Amyloid and non-amyloid cerebral angiopathies: diagnostics and treatment (*Chair Smriti Agarwal* Wednesday, 21 May, 08:30 - 10:00 CEST)
- Session Hands-on Workshop 1C - Simulation Workshop on Telestroke management in the acute setting (*Olfa Kaaouana* Wednesday, 21 May, 17:00 - 18:30 CEST)
- Session ID SS15 Telestroke and e-support for optimizing acute patient care and transfer. Presentation: *Trustworthy AI solutions for boosting comprehensive data integration, analytics and decision-making in stroke* (*Carlos A. Molina*, Thursday, 22 May, 16:12 - 16:30 CEST)
- Session ID SS17 Therapy in chronic subdural hematomas – the new standard? Presentation: *What are your thoughts for the treatment of this chronic subdural haematoma? Views of the neurologist* (*Rajiv Advani* Thursday, 22 May, 17:36 - 17:54 CEST)
- Session ID SS8 Advanced technologies in stroke recovery: shaping the future of research and clinical practice. Presentation: *AI-Powered Digital Twin for Individual Outcome Prediction in Acute Ischemic Stroke: from Granular Data to Brain Networks* (*Caliandro Pietro*, Thursday, 22 May, 18:12 - 18:30 CEST)
- Session ID SS18 No reflow and penumbra revisited. Presentation: *Inside the penumbra: understanding pathophysiology, imaging technique, and the association with clinical outcome* (*Robin Lemmens* Friday, 23 May, 08:30 - 08:48 CEST)

# Report of the Artificial Intelligent Committee

## Ongoing Scientific projects

- Trustworthy prediction of stroke outcome on a federated learning infrastructure – TRUSTROKE
- Unleashing a Comprehensive, Holistic and Patient Centric Stroke Management for a Better, Rapid, Advanced and Personalised Stroke Diagnosis, Treatment and Outcome Prediction-UMBRELLA
- TIRESIA: Digital Twin, Immunity, and microRNA in the Evolution of Stroke In the Acute phase
- Stroke artificial Intelligence-Based avatar to predict Individual outcomes and tailor clinical Approach. The SIBILLA project