

# Bleeding news



## Coagulation management of critically bleeding patients with viscoelastic testing presented as a 3D Animated Blood Clot (The Visual Clot): Randomized Controlled High Fidelity Simulation Study

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This prospective randomized study, carried out by the University of Zurich, seeks to compare the management of critical bleeding in various scenarios using two tools. On the one hand, the usual ROTEM thromboelastography charts, known as TEMograms. On the other hand, a tool called Visual Clot, an animated 3D model representing in a schematic way the components of the clot.

The authors of the study analyze 59 simulated scenarios (including ectopic pregnancy, aortic arch reconstruction, uterine atony, and kidney transplant) with the participation of teams consisting of a senior anesthesiologist, a resident anesthesiologist, and an anesthesia nurse. It must be noted that the participants presented different levels of expertise regarding the use and interpretation of viscoelastic tests.

The goal of the study is to determine whether coagulation is corrected with the correct strategy, the time used for the correction, the confidence in the tool used for haemostatic decision-making, and the workload.

The use of Visual Clot provided a faster, more precise haemostatic correction than the use of TEMograms. The healthcare professionals who took part in the simulations took a survey that showed a high level of confidence in Visual Clot-based decision-making.

The authors suggest that viscoelastic test manufacturers could integrate this clot visualization method, which would seem more intuitive and easier to interpret than the display of results as TEMOgrams.

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