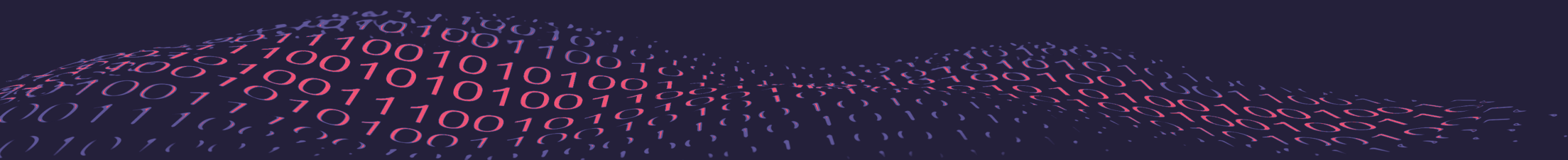


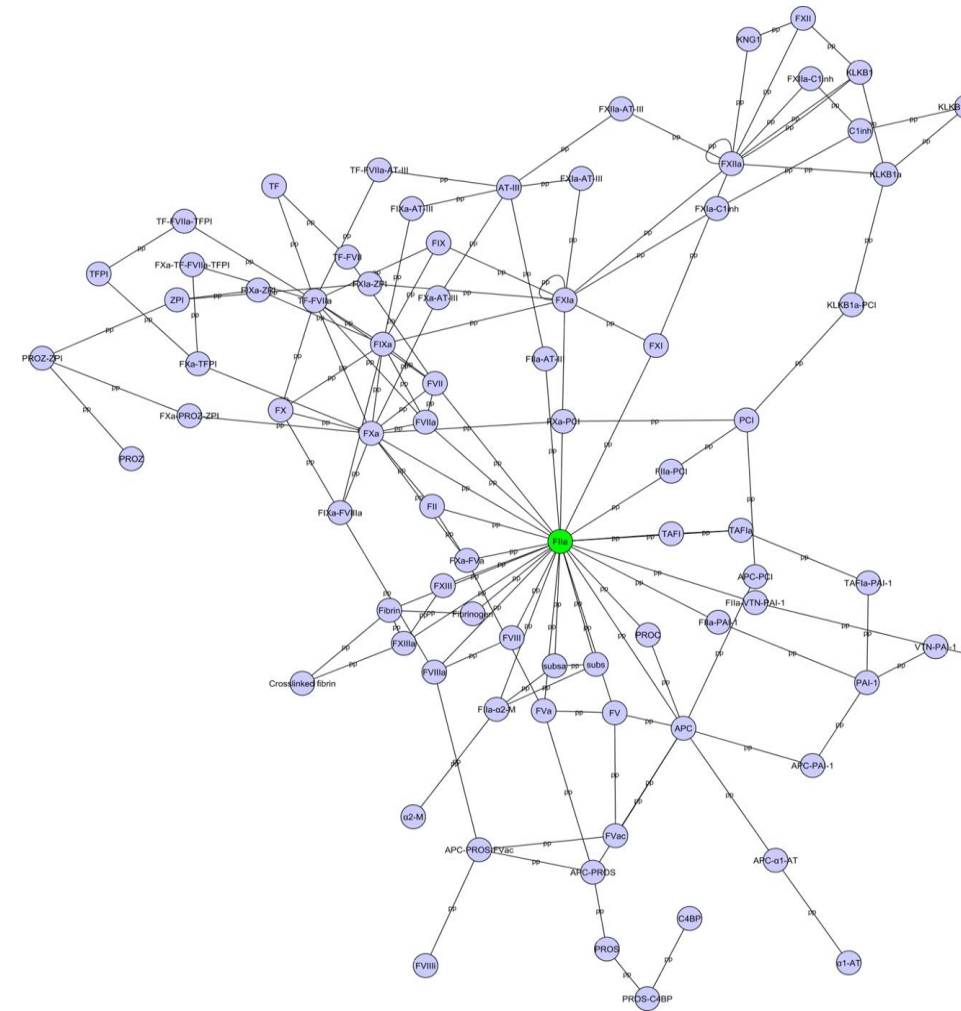
**HEMEO**

**KNOW THE FLOW**

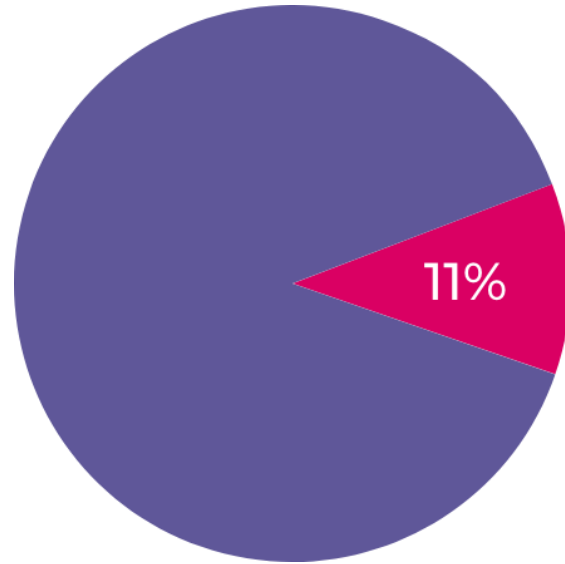


HEMEO's mission is to minimize thrombosis and bleeding incidents by providing physicians with personalized predictive and actionable decision support based on AI.

Our "Digital Twin" technology has been in industry development for almost 15 years.

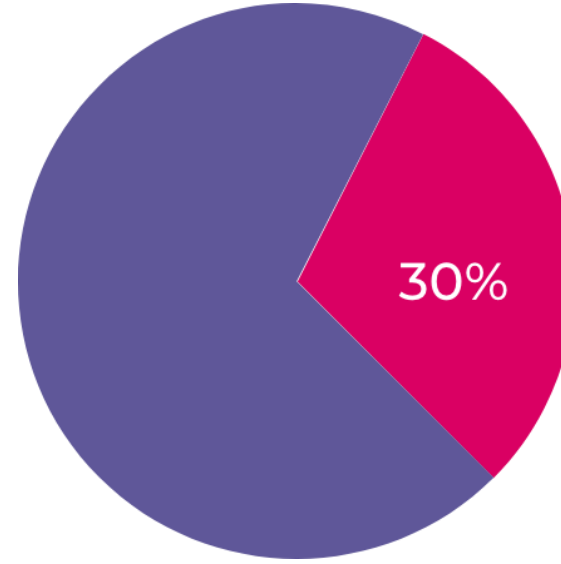


## Bleeding and thrombosis incidents in the OR and ICU affect everyday practice



33.7 million Surgeries (EU, UK & US)

11% (3.8 million)  
Bleeding incidents



5 million patients in the ICU (US Only)

30% (1.5 million)  
ICU Coagulopathies

## High costs associated with transfusion & length of stay (LoS)



Cost per transfusion

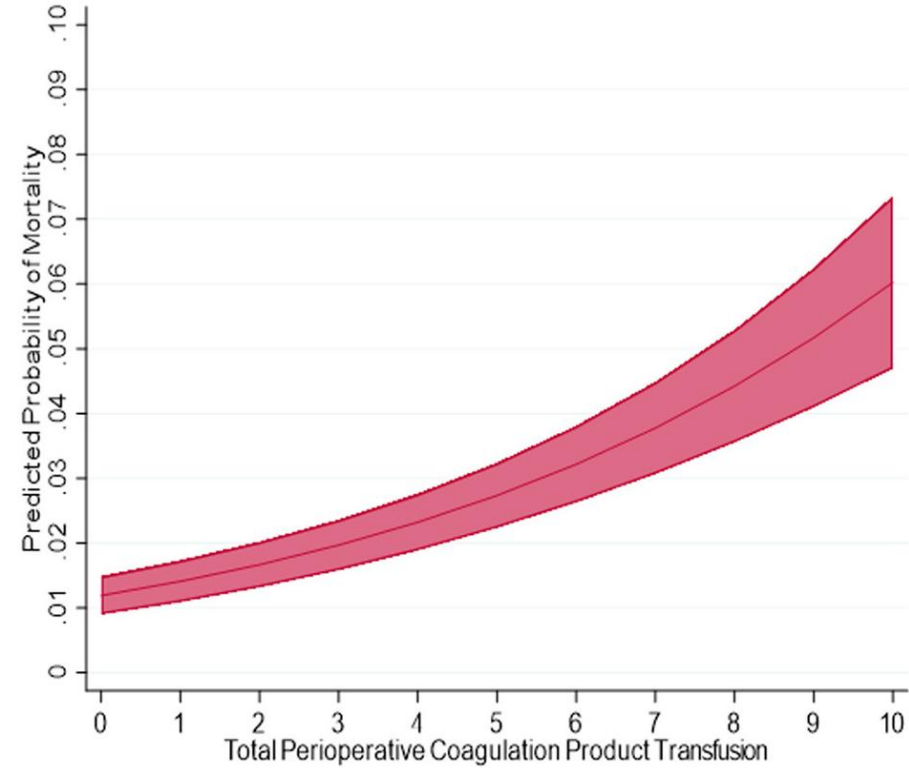
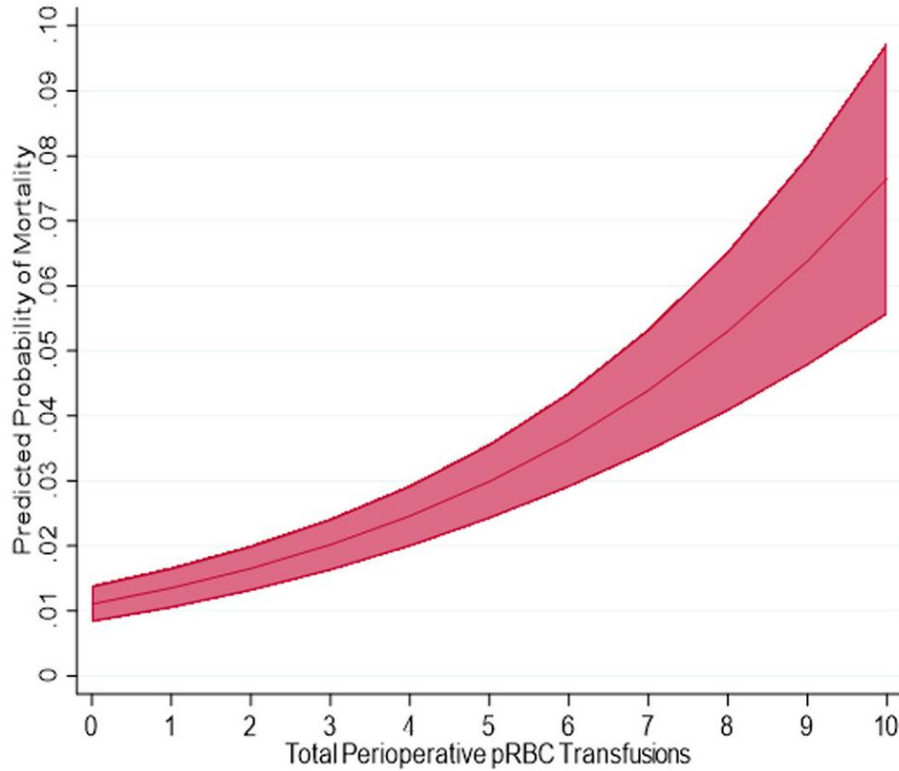
> €1,000 per patient



Extended LoS associated costs

€2,000 per patient

# Blood and blood product transfusions are associated with poor patient outcomes



# High acuity coagulation management is a major clinical challenge



*“Clinicians find it difficult to put all the data together from multiple sources simultaneously.”*

Professor Andrew Klein

Chair of Dept of Anaesthesia and Intensive Care  
Royal Papworth NHS Trust, Cambridge  
University, UK. Editor-in-Chief of Anaesthesia

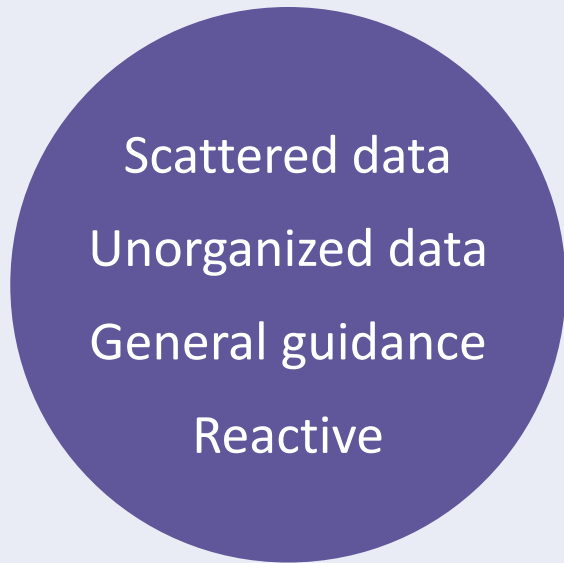


*“There are no current diagnostic tests [or algorithms] that can estimate these [thrombosis and bleeding] risks.”*

Professor Nicole Juffermans

Professor of Translational Intensive Care Medicine  
at the University of Amsterdam (AMC-UvA),  
Editor-in-Chief journal Intensive Care Medicine Experimental

## Current Patient Blood Management



Based on hospital guidelines



AI-based



# HEMEO Vantage is a fully developed Clinical Decision Support System

## Earlier treatment, improved patient outcomes and reduced costs

1.

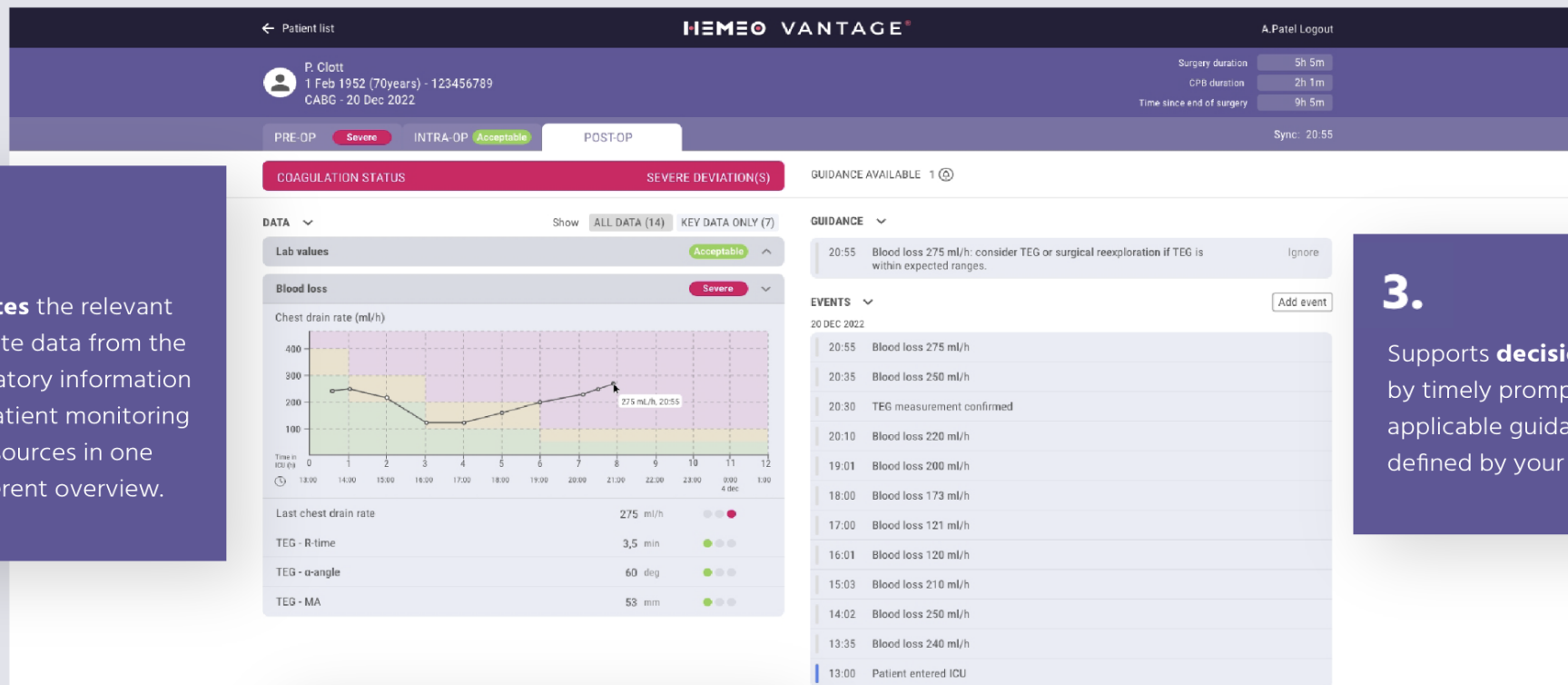
**Consolidates** the relevant but disparate data from the EMR, laboratory information systems, patient monitoring and other sources in one single coherent overview.

2.

Provides **focus** by highlighting values outside the desired ranges, based on your hospital's thresholds.

3.

Supports **decision making** by timely prompting patient applicable guidance, as defined by your team.





# What to do when it bleeds?

## Getting the Clinical Endpoints Right



HEMEO Vantage supports caregivers to adhere to local guidelines on the prevention and treatment of thrombosis and bleeding complications pre-, intra- and post cardiac surgery”

1. Clinical evaluation & definition of safety and performance endpoints
  - Review of literature, user interviews
    - Define the Standard of Care & State-of-the-Art of available solutions
    - Published: Aamer et al: Journal of Cardiothoracic and Vascular Anesthesia (2023)
  - Retrospective Observational Study (publication in preparation)
2. Clinical study
  1. Software verification (technical) & validation (usability)
  2. Pivotal study to demonstrate Safety & Performance (Q3-23/ Q1-24)
    - Primary endpoint: (improved) adherence to local guidelines
    - Secondary endpoints: blood (product) transfusions and bleeding
  3. Secondary endpoints used to design subsequent studies for extended marketing claims



# What to do when it bleeds?

## Clinical Evaluation Planning - Lessons learned (so far)

### 1. Partner with multiple hospitals

- It's a long complex journey and partners may drop off for various reasons. E.g.:
  - Contract: what's in it for the hospital...
  - Reluctance to share data (GDPR, cloud)
  - IT policies and time

### 2. Keep it as simple as possible

- Primary endpoint: retrospective study first
- Later studies for extended marketing claims: use secondary endpoints



# What to do when it bleeds?

## Clinical Evaluation Planning - Lessons learned (so far)

3. Be a super project manager
  - Many parties involved: clinical, IT, interoperability
4. Regulations are complex (and written with hardware in mind)
5. Publish, publish, publish
  - Peer reviewed (Randomised) Clinical Trials are the strongest clinical marketing tools
  - We recently published our clinical evaluation\* and will publish our retrospective study



\*Amer Ahmed M.D., Bruce Spiess M.D., Jeroen Kortsmijt Ph.D., Rene Van den Ham Ph.D., Gabor Erdoes M.D., Andrew Klein M.D., A narrative review of clinical decision support systems for perioperative bleeding management in cardiac surgery, Journal of Cardiothoracic and Vascular Anesthesia (2023), doi: <https://doi.org/10.1053/j.jvca.2023.05.008>

# Investment opportunity

## Current Capital Round

HEMEO is seeking a **EUR 2,5M Pre-Series-A investment** to reach the following major milestones until Q1 2025:

- ✓ CE-mark HEMEO Vantage
- ✓ Sales of HEMEO Vantage
- ✓ Development HEMEO Wiz
- ✓ Pivotal trial HEMEO Wiz in EU & USA

EUR 1M (40%) commitment received



## Round Details

New Investors

Lead Seed VC or strategic with future partner potential + HIF, ROM InWest, Angels

Timing

Closing ~ Q1/Q2.2023

Next Rounds

Series-B for development and regulatory approval of AI based HEMEO Wiz

## Exit Strategy

Choice of Exit

M&A to a large player in the MedTech or Digital Health space

Exit Horizon

Window of opportunity after:

- Demonstrating solid platform scalability (2025-2028)
- Roll-out of HEMEO Wiz (2027)

# Thank you

René van den Ham, CTO

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