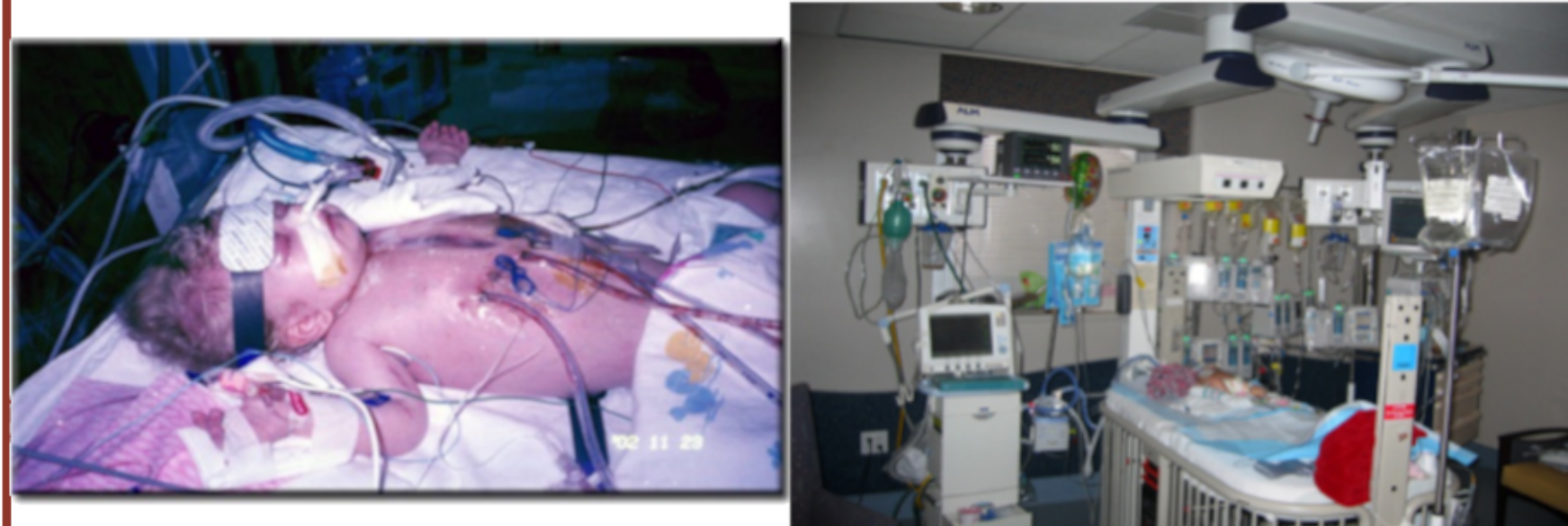


Pediatric Cardiac Surgery and Bleeding

Cardiac surgeries commonly require an alteration of the patient's coagulation abilities which can result in post-operative bleeding

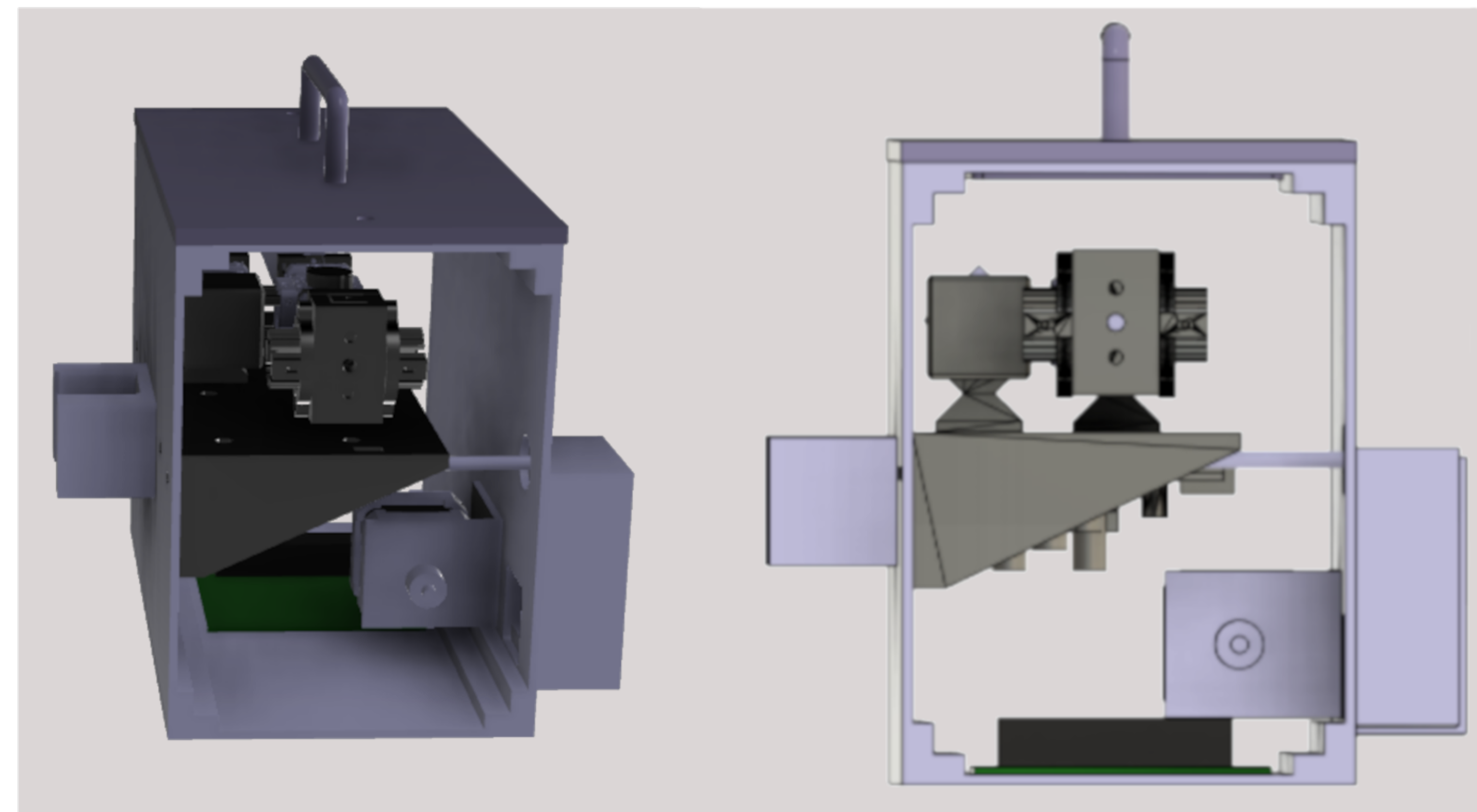
The most vulnerable group, in terms of blood loss and coagulation management, are babies and young children.



Successful monitoring of coagulation - better outcomes

Components

- Disposable microdialysis catheter
- Single use indicator solution
- Digital micro-pump / detector



Competition

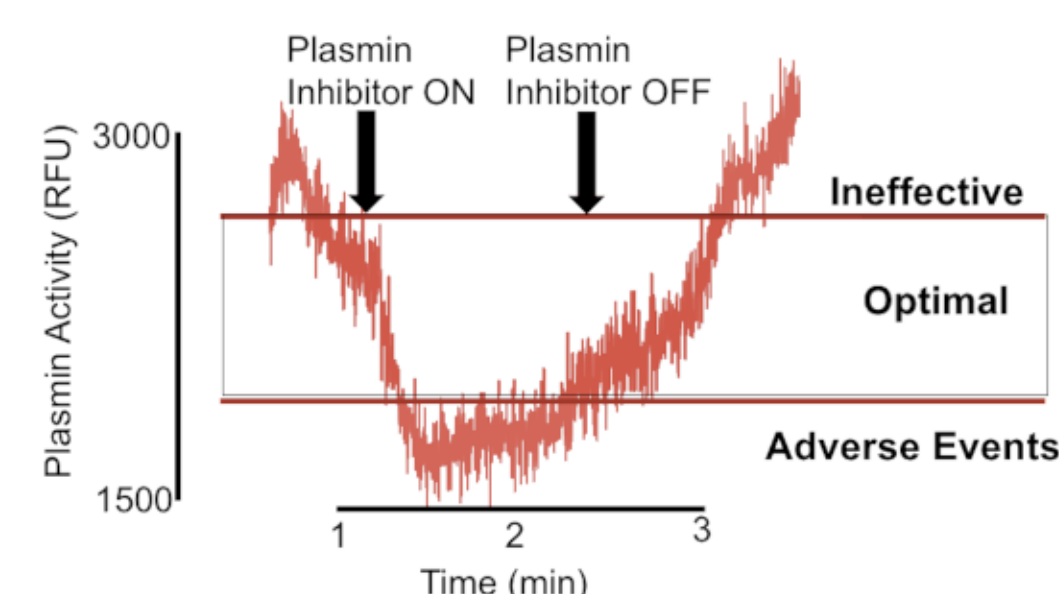
Competition technology:

- Static, one-off tests
- Indirect measurements
- Slow
- Hard to interpret
- Not specific
- Do not allow for the titration of drugs and blood products

This technology will address the unmet medical need and overcome past impediments associated with static measurements of blood coagulation profiles through the development of a novel, point of care, dynamic measurement system that will provide continuous information on key biological factors which regulate clot formation and degradation.

Solution

Continuous monitoring of a fundamental determinant of coagulation and clot degradation: **Plasmin**



How it Works

1. A unique method is used to capture, separate, and quantify a fluorescent spectrum in small quantities of blood.
2. Specially designed conjugated fluorescent moieties are cleaved by the target coagulation enzyme, which in turn causes a specific fluorescent signature.
3. Using microdialysis probes and microfluidics, the continuous measurements of these fluorescent signatures has been demonstrated.

