## HUMAN CENTERED TESTING

FOR TRAJAN SCIENTIFIC AND MEDICAL

## Swiss Testing for Down Under

The HemaPEN is a diagnostic device that was developed in Australia. It consists of four capillary tubes and a sealable storage unit, which guarantees the safe transport of the blood samples to the laboratory.

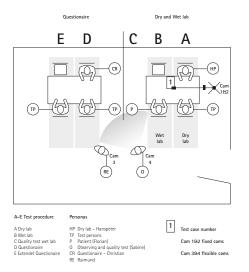


The challenge of "easy-to-use" was the starting point of the study. Erdmann Design was given the task to evaluate both the usability and the learning process in handling the HemaPEN and simplify it. Another important goal was to open up the homecare market with a device suitable for non-professionals. The results were tested with specialists from the medical field and prepared for the development team of Trajan. The documents created and the improved design helped the company to achieve rapid FDA and CE market approval.

## HUMAN CENTERED TESTING FOR TRAJAN SCIENTIFIC AND MEDICAL



A film with didactic animations to introduce the function, a QuickGuide with easy to understand instructions for action. The Product context, including user aspects and application, is explored and positioned with the firm in workshops.



Planning the test in mixed user-groups (age, education, experience) and the distribution of roles of the participants. The individual observation stations were placed according to process and equipped with cameras.



The Testing was done in hospital. Film recordings and an extensive set of questionnaires, which the participants were able to fill in after the test, were used for later evaluation. The Australian company Trajan Scientific and Medical develops technologies for scientific analysis systems for biological and food-related measurements.

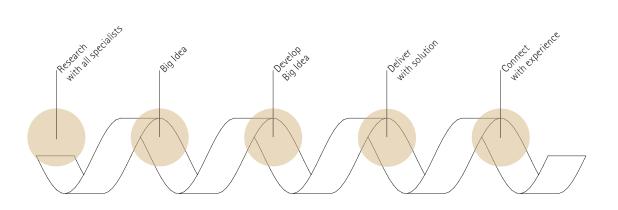
For the collection of small amounts of capillary blood samples (microsampling), Trajan has developed the HemaPEN, a simple and reliable tool for Medical Practice Assistants (MPA). The second phase of development aimed at bringing the same setting to the market for private individuals, patients and their carers. This testing process led to the creation of a very easy to use HemaPEN.

Erdmann Design was given the task of analyzing the existing product and proposing design optimizations. Simple didactic support was developed to make the HemaPEN set ready for use. A test in a hospital environment served to verify the design solutions and the findings.

Obtained usability documentation served in achieving the first clinical approvals (FDA and CE).

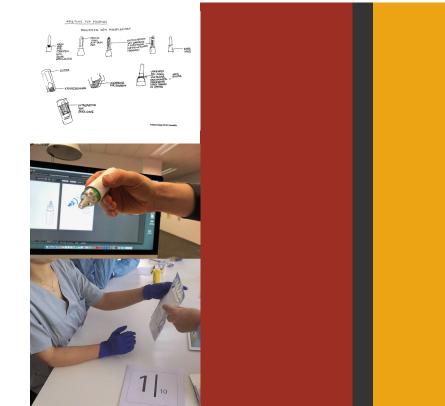


HemaPEN: IFU and Device



## Project since 2019

Sub projects: Product Design Product Development Industrialisation Usabilty testing FDA and CE approval Didactic concepts Cinematic Animation Print media



https://www.trajanscimed.com/ pages/hemapen

Erdmann Design AG Stahlrain 2 5200 Brugg Switzerland

T +41 55 242 00 50

www.erdmann.ch info@erdmann.ch