The HemoScreen’s performance and usability evaluation in the operating room in Uppsala, Sweden, shows accurate results and positive feedback from the operating room personnel. Portable and easy to use, the HemoScreen is placed in the operating room, providing platelet count in just 3 minutes. It demonstrates how immediate PLT results optimize blood transfusion management, potentially improving clinical outcome and saving limited blood component recourses, thus reducing costs and risks.

**THE NEED**

During surgery, blood platelets often decrease due to bleeding, posing a life-threatening risk if not treated promptly. Because blood components play a central role in normal coagulation, monitoring platelet counts is important, and transfusion of platelets is an effective treatment of coagulopathy for low platelet count. However, platelets are a limited resource, and platelet transfusions are associated with costs and risks. Current procedures of platelet analysis require appr. 30 minutes, increasing the risk of inappropriate or belated treatment of the problem.

**STUDY PLAN**

Uppsala University Hospital is Sweden’s oldest university hospital and one of the country’s largest hospitals. It serves as a training and research facility, as well as both county and specialist hospital. This study was conducted at the Department of Anesthesiology at Uppsala University Hospital under the supervision of Dr. Miklos Lipcsey.

In order to evaluate HemoScreen’s performance and usability in the operating room 145 measurements were analyzed on both the HemoScreen and the Sysmex XN. A comparison between the systems was conducted to evaluate performance, and usability was evaluated via operation of the device by site personnel with no technical background.

**RESULTS**

The correlation between the HemoScreen and Sysmex XN in 145 measurements analyzed is shown below: