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Internship HemCheck

About HemCheck
HemCheck is developing and commercializing a unique product concept, Helge (hemolysis level gauge equipment), for point-of-care detection of hemolysis. Hemolysis, rupturing of erythrocytes, is the most common cause of blood samples being unsuitable for testing. This leads to poorer-quality care, risks for patients and high costs for the healthcare sector. Helge detects hemolyzed blood immediately when the blood sample is taken, thereby contributing to improved care for patients worldwide. A large proportion of medical decisions are based on the results of laboratory testing of blood samples. Faulty test results, or results that must be rejected, can lead to diagnostic errors and faulty medical decisions with major consequences for patients, leading in the worst cases to considerable suffering or even death. The incidence of hemolysis in blood samples, which renders them unsuitable for analysis, is the most common cause for attending physicians not receiving blood test results. Currently, hemolysis is not discovered until the blood sample reaches the laboratory for analysis, which can delay correct diagnosis, causing suffering for the patient and increased costs for healthcare.

HemCheck Sweden AB is a public company listed at Nasdaq First North.

Project description
Although extensive scientific research has been done and published on hemolysis frequency in vacuum tubes, hemolysis in syringes aimed for blood gas analysis is relatively unexplored. Several of the analyses included in blood gas analysis, such as Potassium and Sodium, are affected by hemolysis. Today, these samples are not tested for hemolysis at all. The hemolysis point-of-care system consists of a disposable and a digital reader which enables *in vitro* diagnostic hemolysis test on whole blood in syringes intended for blood gas analysis. The purpose of this study is to:

- Investigate hemolysis prevalence on specimens analysed on the blood gas analyser in a clinical setting. Gold standard will be used as a method to measure free hemoglobin on centrifuged plasma.

- Evaluation of diagnostic sensitivity, specificity and positive/negative prediction values on the hemolysis point-of-care system compared to the reference method.

Method

Prospective cross sectional observational study.
Data will be processed with statistical methods, e.g. Chi2 test, and presented as sensitivity, specificity and prediction values.

The intern is responsible for the following main tasks

- Plan, perform and report the study which will be performed in a clinical setting, entailing hands on lab work.

- Write a scientific paper of the results

The intern is expected to have experience of data analysis and a clear understanding of the importance for extensive documentation of experimental data. Moreover, experience of writing scientific papers and performing lab work in a clinical setting.

Candidate Profile

Your personal competencies include you being a person who takes individual responsibility and take great pride and ownership in your project and have a positive attitude towards work and colleagues. You have excellent communication skills in English, both written and spoken. You are comfortable having a lot of freedom to navigate. We are seeking for a person who is positive, problem-solver, self-motivated and focused. The intern should have a PhD in biomedicine, molecular biology, physiology or equivalent scientific education. Previous experience of working in clinical settings as Intensive care units or clin. chem laboratory is beneficial. This post is valid until further notice.

Contact Information

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