Whole Blood Platelet Activity Measurements Multiplexed with Quantitative Fibrinogen, Clot Time and Fibrinolysis Measurements by T2MR®

INTRODUCTION

Background

The T2 magnetic resonance (T2MR) system is a medical device that can measure multiple parameters including plasma fibrinogen, platelet activity, clotting time and fibrinolysis. This device has been used to study acute and chronic conditions ranging from traumatic injury to multiplex hemostasis panel to diagnose and monitor related chronic and acute medical conditions. T2MR is a non-invasive diagnostic platform that can identify and monitor biomarkers associated with acute and chronic conditions. The device has been shown to be effective during many important healthcare procedures, including surgery, transfusion protocols, and therapeutic monitoring. T2MR measurements of each sample can be used to detect changes in concentrations of red blood cells to produce samples that have different fibrinogen levels. These samples were then mixed with known levels and mixed. The addition of the blood triggered the start of T2MR device was measured on the Stago STA4 system using Stago Neoplastine reagent and placed in the T2MR device and 35 µL of citrated whole blood was added needed components to recalcify blood and initiate activation through either acid was added to a reaction tube (Fig. 2). The activator reagents contain all levels—both healthy and unhealthy—blood samples were prepared with routine monitoring of anticoagulant therapy, evaluation of clotting diseases and mortality.

T2MR Measurements of Hemostasis Parameters

T2MR provides rapid diagnostic results that can be multiplexed and measured globally. T2MR also allows magnetic resonance to be analyzed by studying multiple parameters simultaneously, including plasma fibrinogen, platelet activity, clotting time and fibrinolysis. This device has been shown to be effective during many important healthcare procedures, including surgery, transfusion protocols, and therapeutic monitoring.

Clothing Time

T2MR was used for measuring clot time in a disease like T2Dx® Instrument and the T2Candida® Panel. The device can measure platelet activity, clotting time and fibrinolysis from a single analysis, providing comprehensive and actionable results. T2MR requires very little blood for its hemostasis measurements, as little as a fingerstick in many cases. The reduced blood volumes makes it ideal for the point of care setting.

Fibrinogen

T2MR allows for measuring fibrinogen through a single channel. T2Dx®Instrument and the T2Candida®Panel. The device can measure fibrinogen, platelet activity, clotting time and fibrinolysis from a single analysis, providing comprehensive and actionable results. T2MR requires very little blood for its hemostasis measurements, as little as a fingerstick in many cases. The reduced blood volumes makes it ideal for the point of care setting.

Clotting Time

T2MR was used for measuring clot time in a disease like T2Dx® Instrument and the T2Candida® Panel. The device can measure platelet activity, clotting time and fibrinolysis from a single analysis, providing comprehensive and actionable results. T2MR requires very little blood for its hemostasis measurements, as little as a fingerstick in many cases. The reduced blood volumes makes it ideal for the point of care setting.

Fibrinogen Studies

T2MR's performance attributes are consistent with enabling significant research applications, drug development and biomarker studies. Biosensor Discovery

T2MR is an optical biosensor, enabling rapid detection and monitoring of clotting and fibrinolysis.

Small Blood Volume

T2MR requires a small blood volume as a result of its microfluidic chip design.

High Sensitivity

T2MR requires a small blood volume as a result of its microfluidic chip design.

REFERENCES