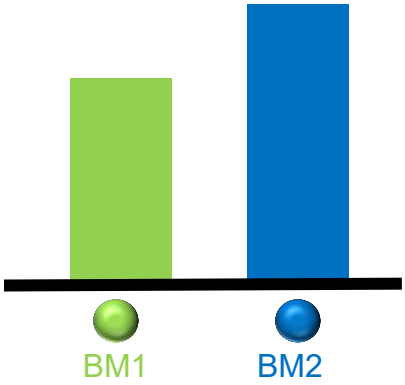
Laboratory Score for Predicting Cardio-toxicity



Laboratory score uses validated blood tests to accurately predict cardio-toxicity in patients undergoing cancer therapy.

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Provisional patent filed

Stage of Research

Proof of principle data available

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Abstract

Minimizing the risk of cardio-toxicity is an essential consideration in tailoring medical treatments involving anti-cancer therapy. Current methods of cardio-toxicity management and detection are based on physical examination, assessment using echocardiography, and endomyocardial biopsy. Unfortunately, these methods either have low diagnostic sensitivity, low predictive power in detecting subclinical myocardial injury, or are impractical due to invasiveness. These methods only identify cardiac damage after the onset of cardiac dysfunction. Thus, a novel algorithm to detect risk of cardio-toxicity is advantageous, using a combination of easily detectible cardiac biomarkers in the blood.

Applications

- Identify patients who are at risk for cardio-toxicity and a reduction in left ventricular ejection fraction (LVEF)
- Guide treatment in patients exposed to therapies with potential cardio-toxicity

Advantages

- Identify patients that will experience cardio-toxicity when other cardiac biomarkers cannot
- Cost-effective diagnostics tool for early identification of patients susceptible to cardio-toxicity from all medical treatments
- Increased sensitivity and non-invasive approach