

For Immediate Release

Contact:  
Jack Coats  
479-571-2592  
[jcoats@cardiowiseinc.com](mailto:jcoats@cardiowiseinc.com)

**CardioWise™ Completes Small Business Innovation and Research Grant from the National Science Foundation**

***Stage set for final product development of analysis software that produces four-dimensional quantitative views of the heart***

Fayetteville, Ark. — January 10, 2014 — CardioWise, Inc. has completed National Science Foundation (NSF) Phase I and IB Small Business Innovation and Research (SBIR) grants that continued the development and commercialization of a non-invasive analysis method for detection of heart disease. The final report submitted to the NSF in December detailed the research and development milestones that were achieved during the 2013 award period including:

- Development and testing of cloud-based software as a service (SaaS) solution that supports upload of magnetic resonance images (MRI) to CardioWise for analysis, and download of CardioWise analysis to any browser-based device in compliance with the Health Insurance Portability and Accountability Act (HIPAA) and Certified Electronic Health Record Technology (CEHRT). This allows the analysis to be sent to any mobile device so that providers, doctors and patients can see and understand the diagnosis and actively participate in decisions about treatment.
- Automation and testing of software components of the MRI analysis currently being done by hand reducing total analysis time from 6 hours to less than 30 minutes, allowing the entire image acquisition and analysis to be completed in a single office visit.
- Clinical validation testing of the CardioWise analysis software on separate MRI scans acquired on the same patient on the same MRI, as well as scans acquired on the same patient but on different MRI systems. This validation is important for regulatory submission and clearance and also to insure patient safety.

The CardioWise analysis software is uniquely capable of analyzing the three-dimensional motion of the heart that is acquired from cardiac MRI images and then comparing the analysis at 15,300 points to the motion of a normal heart model. The analysis detects portions of the heart that are moving abnormally and demonstrates to what degree the heart muscle has been affected. Since MRI uses no ionizing radiation or contrast, it is completely non-invasive and poses no risk to the patient. This diagnostic analysis method may aid doctors to determine what intervention, such as surgery, stent insertion, or drug is most appropriate for the patient who presents with cardiovascular disease symptoms.

CardioWise analysis software is a platform technology that can analyze heart contractile motion from other imaging modalities just as well as images acquired from MRI systems. In cardiac ultrasound (echocardiogram) and computerized tomographic (CT) images wall motion, recognizable patterns and easily identifiable cardiac anatomy may be tracked to produce input to CardioWise for analysis. The company's long-term strategy is to address all of these available markets with its platform analysis product.

The NSF Phase I and IB SBIR awards are intended to incentivize and support small and early stage businesses to undertake research and development with high technical risk and high commercial reward. To qualify for the award, there must be significant societal impact and significant market opportunity from the technology developed.

**CardioWise™ is commercializing patent-pending, non-invasive Cardiac Magnetic Resonance Imaging (cMRI) analysis software that produces a quantified 4D image model of the human heart, called Multiparametric Strain (MPS™) heart analysis.** CardioWise heart analysis software combined with cardiac MRI is a single diagnostic test that is able to provide quantitative analysis of the myocardium, arteries and valves with an unprecedented level of detail. It has the opportunity to become the new gold standard of care for heart health analysis. CardioWise™ is a [VIC Technology Venture Development™](#) portfolio company.

