

FOR IMMEDIATE RELEASE

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## **rCBV Threshold Distinguishes Radiation Effect From GBM**

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**Elm Grove, WI** – Imaging Biometrics®, LLC (IB), a biotechnology company specializing in the development of software solutions for advanced visualization and analytics, is pleased to announce the results of a study presented at this year’s International Society of Magnetic Resonance in Medicine (ISMRM) meeting (Toronto, Canada). The goal of the study, “Comparison of diffusion and perfusion parameters in distinguishing radiation effect from GBM,” presented by Prah et al. from the Medical College of Wisconsin, was to determine the threshold value of relative cerebral blood volume (rCBV) that would distinguish tissue comprised of glioblastoma (GBM), an aggressive brain tumor, from tissue altered by treatment. The threshold identified is in agreement with the value reported in a 2012 study by Barrow Neurological Institute in Phoenix, AZ. The perfusion data in both studies were processed using IB Neuro, IB’s dynamic susceptibility contrast (DSC) perfusion product. The results showed that rCBV can be used to clearly distinguish between GBM and radiation effect, whereas diffusion parameters, specifically apparent diffusion coefficient (ADC), does not. Because both types of tissue can appear bright on MRI with contrast agent, the ability of rCBV to make this distinction has the potential to significantly influence patient management.

“It is very difficult to discern radiation effect from GBM using conventional MRI,” said Timothy Dondlinger, IB’s COO. “It is critically important for clinicians who make treatment management decisions to know, with certainty, which areas are tumor and which are treatment effect. This is a growing issue due to the onslaught of new agents and cancer fighting therapies. We are encouraged that the IB Neuro-generated rCBV parameters identified the same cutoff value in both studies. This further affirms the accuracy and reproducibility of IB Neuro’s perfusion parameters as proven imaging biomarkers, and gets us closer to standardizing on one MR perfusion approach.” Dondlinger added.

The study also reconfirmed both the normalized (nRCBV) and standardized (sRCBV) thresholds. The advantage of the standardization technology, available exclusively in IB products, is that it enables consistent rCBV analysis across time and MRI platforms. Unlike normalized maps, standardized maps are automatically generated and require no manual user intervention, i.e., no need to draw reference regions of interest. Standardized maps have also been shown to be more consistent across subjects and

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more repeatable among scans. “From a clinical workflow perspective, the ability to deliver more accurate and consistent results as efficiently as possible is beneficial for both clinicians and patients,” said Dondlinger.

IB products are available as plug-ins into the aycan OsiriX PRO workstation. Together, IB and aycan Medical Systems are making advanced imaging available to clinicians in an automated and affordable manner.

**About Imaging Biometrics™ LLC**

*Imaging Biometrics develops and provides visualization and analytical solutions enabling clinicians to better diagnose and treat diseases with greater confidence. Through close collaboration with top researchers and clinicians, sophisticated advancements are translated into platform-independent software plug-ins which can extend the base functionality of workstations, imaging systems, PACS, and medical viewers. By design, IB’s advanced visualization software seamlessly integrates into routine workflows. For more information about Imaging Biometrics, LLC, visit [www.imagingbiometrics.com](http://www.imagingbiometrics.com).*