

MARCH 2024 | EDITION #7



*Dr. Max Krucoff at the
Medical College of Wisconsin*

Updates and Accolades

Dr. Max Krucoff, MD, FAANS, FACS, Assistant Professor of Neurosurgery at The Medical College of Wisconsin, describes a case study where he used IB's quantitative Fractional Tumor Burden (FTB) maps to guide tumor biopsy. He is working towards the routine incorporation of FTB into his practice.

Clinical Presentation:

A 53-year-old patient presented with a left temporal Glioblastoma (GBM). A primary resection was performed in May of 2022. The tumor recurred and the patient underwent a 2nd resection in July 2023. The patient was doing well until he presented with multi-focal recurrence. A bilateral biopsy was planned using Brainlab's Surgical Navigation System. Imaging Biometrics (IB) FTB maps, which are derived from IB's quantitative DSC perfusion platform IB Neuro, were imported into the Brainlab system. Originally, the biopsy target was in a yellow-blue region of the FTB map (an area less representative of tumor). Dr. Krucoff changed his approach from his initial target using the information provided by IB's FTB maps and sampled tissue from the red region (consistent with tumor). The pathology report confirmed his adjusted target was indeed GBM. "Misdiagnosing a recurrent brain tumor has significant consequences," explains Dr. Krucoff.

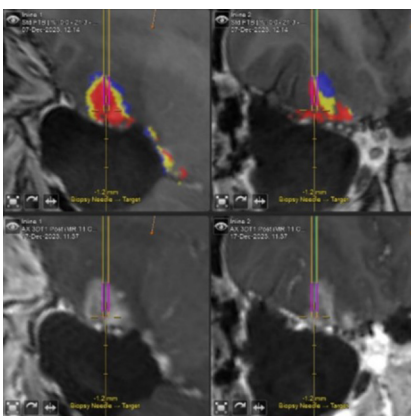
Conclusion:

Aggressive high-grade tumors, such as GBM, are heterogeneous and invasive. Using FTB maps during a surgical biopsy can help guide surgeons to the most aggressive areas of the enhancing region. This helps avoid tissue "undersampling" and ensures the patient is accurately diagnosed and placed on an optimal treatment plan.

Fractional Tumor Burden Maps

The distinction of brain tumor progression from treatment effect on post-contrast magnetic resonance imaging (MRI) is an ongoing challenge in the management of brain tumor patients. Fractional tumor burden maps have demonstrated the ability to spatially distinguish high-grade brain tumor from treatment effect with important implications for surgical management and pathological diagnosis.

IB Neuro's proven advanced imaging software can be seamlessly integrated with many surgical navigation platforms.



Surgical navigation biopsy target

Updates and Accolades Continued

- Read the recently published guide on DSC-MRI perfusion imaging by the Schmainda lab at The Medical College of Wisconsin. Along with creating the standard for how to acquire and post-process DSC perfusion data, this guide identifies common pitfalls and how to avoid them. We're grateful to have an amazing DSC powerhouse whose expertise supports our work at IB!

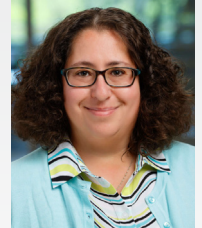
[Learn more](#)



Tim, pictured on the left, gives a presentation at RSNA

- We present a compelling case study describing the significance of standardized rCBV values. Titled "Magnetic Resonance Imaging-Derived Relative Cerebral Blood Volume Characteristics in a Case of Pathologically Confirmed Neurocysticercosis: Illustrative Case" in the Journal of Neurosurgery Case Lessons, our report establishes the first standardized rCBV values in a pathologically confirmed case of NCC in the United States. [Read article here](#)
- Imaging Biometrics' Tim Dondlinger discusses IB Delta T1 (patent-pending) & IB Neuro (MR DSC perfusion) applications at RSNA. [View video](#)
- Stop drawing reference ROIs! IB's proprietary standardized rCBV (sRCBV) in IB Neuro shows the best reproducibility/consistency compared to normalized rCBV. Normalizing rCBV values requires manual placement of reference ROIs on contralateral white matter. This manual intervention introduces inherent variability and requires knowledge as to where to accurately locate the reference ROI. IB Neuro is fully automated and, as studies have shown, more consistent. Why does this matter? Standardized rCBV enables direct longitudinal comparison between time points and gives clinicians insight into how well a patient is responding to treatment.

Dr. Mona Al-Gizawiy, Ph.D., from the Schmainda lab at the Medical College of Wisconsin, has authored an extensive publication delineating pre-clinical study results that served as a motivating factor for the initiation of the phase 1 clinical trial. The publication specifically highlights the robust in vivo efficacy of oral gallium maltolate in the treatment of resistant glioblastoma.



[Read article](#)



We express our profound gratitude for the unwavering support and collaborative efforts extended by AI Musella and the Musella Foundation for a generous \$100,000 grant to assist assist with the gallium maltolate Expanded Access Program. [View The Musella Foundation Newsletter](#)

GALLIUM MALTOLATE CLINICAL TRIAL UPDATES



PRESS
RELEASE

Imaging Biometrics is launching an intermediate population cohort Expanded Access Program (EAP) for oral gallium maltolate (GaM), subject to regulatory approval.

The EAP will be for brain tumor patients throughout the US unable to participate in the Phase 1 clinical trial at the Medical College of Wisconsin.

Under an EAP (also referred to as "compassionate use"), the Food and Drug Administration (FDA) works with companies to allow access to investigational products outside of a clinical trial.

Patients with limited or no viable treatment alternatives can gain access to promising treatments, ahead of regulatory approval, to fulfill an unmet clinical need.

Oral GaM has exhibited an excellent safety profile and promising anti-tumor efficacy - no Phase 1 trial patients have reported dose-limiting toxicities.

On the contrary, patients have shared experiences of enhanced quality of life, allowing many patients to engage in normal, pre-diagnosis, activities.

Oral GaM can be taken at home, further enhancing the patients' comfort.

IB NIMBLE

We thank Dr. Joseph Bovi, of ThedaCare Regional Cancer Center, for this outstanding webinar discussing the use and clinical benefits of IB Nimble.

IB Nimble provides access to a set of professionally recognized diagnostic algorithms for diseases. It also allows asynchronous communication between clinical experts facilitating patient care. The handheld mobile app provides real-time, evidence-based treatment plans reducing length of hospital stay, costs, and care delays. The smart technology enhances treatment center capabilities and physicians' expertise making healthcare more efficient. [Watch the video here](#)

UPCOMING CONFERENCES



American Society of Neuroradiology Annual Meeting (ASNR)

May 18-22, 2024,
Las Vegas, NV, Booth #215

[website](#)



American Society of Functional Neuroradiology

Aug. 23-26, 2024,
Snowmass, CO

[website](#)



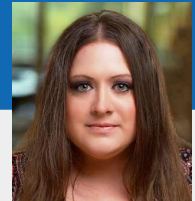
5th Annual Glioblastoma Drug Development Summit

March 26-28, 2024
Boston, MA

[website](#)

DEVELOPMENT UPDATE We take great pride in our excellent client retention track record. Having unique products and quantitative solutions help, but we also work hard at providing professional and responsive customer service and technical support. Each client interaction affords us an opportunity to learn from our clients. The feedback received ultimately ends up on our development roadmap. Prime examples are leveraging our exclusive quantitative technologies with the addition of a longitudinal reporting package that is being developed. Also, fully automated processing remains our goal – whether FTB maps or other advancing mapping. Stay tuned for further development updates!

IB USER'S GROUP WEBINAR



TITLE:

Considerations for reliable and accurate DSC-MRI acquisition and perfusion post-processing.

PRESENTER:

Melissa Prah
Engineer II, Medical College of Wisconsin

OBJECTIVE:

To provide guidance for improving DSC-MRI acquisition quality and perfusion post-processing technique for more reliable and accurate clinical interpretation.

DATE AND TIME:

April 16, 2024 11:00 AM CDT

[REGISTER HERE](#)

Strain for the Brain

Imaging Biometrics is proud to participate in Strain for the Brain, an annual event dedicated to honoring individuals diagnosed with brain tumors. This gathering celebrates the support of family and friends while raising funds that directly contribute to advancing research, medical treatments, and support programs for those affected by this life-changing condition. Your participation in Strain for the Brain not only supports the fight against brain tumors but also reflects your commitment to making a positive impact on the lives of individuals and families impacted by this disease.

[CLICK HERE SIGN UP](#)

SPOTLIGHT
CHARITABLE
ORGANIZATION

EVENT DETAILS

Strain for the Brain

DATE: June 2nd, 2024

WHERE: Harley Davidson Museum,
Downtown Milwaukee



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