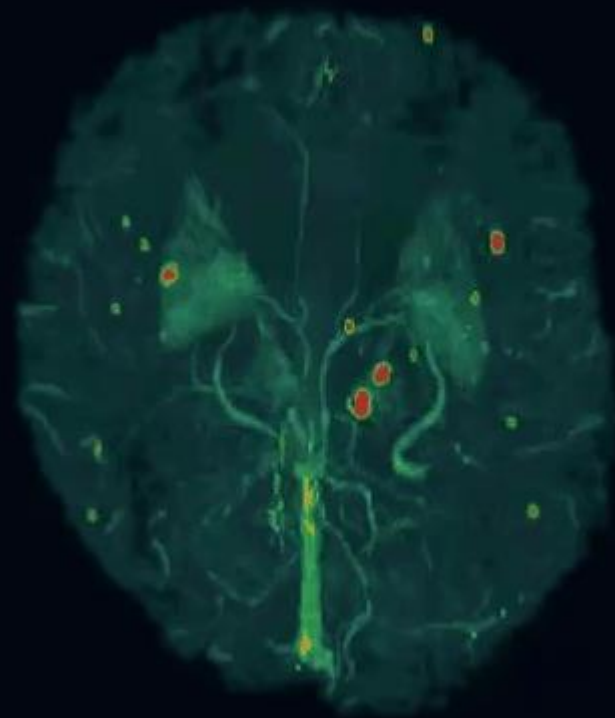




**STAGE Imaging**  
**COVID-19 Use Cases:**  
Rapid, quantitative imaging for  
enhanced brain MRI

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**Introducing STAGE™:**  
Quantitative.  
Multi-Contrast.  
Standardized.  
**40% Faster Brain Imaging.**



### **Faster Imaging. Enhanced Detection.**

40% reduction in brain imaging time with improved detection of key biomarkers.



### **Experienced Team & Partners**

Advanced technology from an experienced, winning team and global partners



### **Rapid Insights from Automation**

Powering AI detection of unseen biomarkers for faster, more accurate diagnoses.



### **Driving Clinical Value**

Meeting rapidly growing market for increased quality and revenue

# INTRODUCING STAGE™:

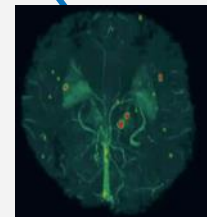
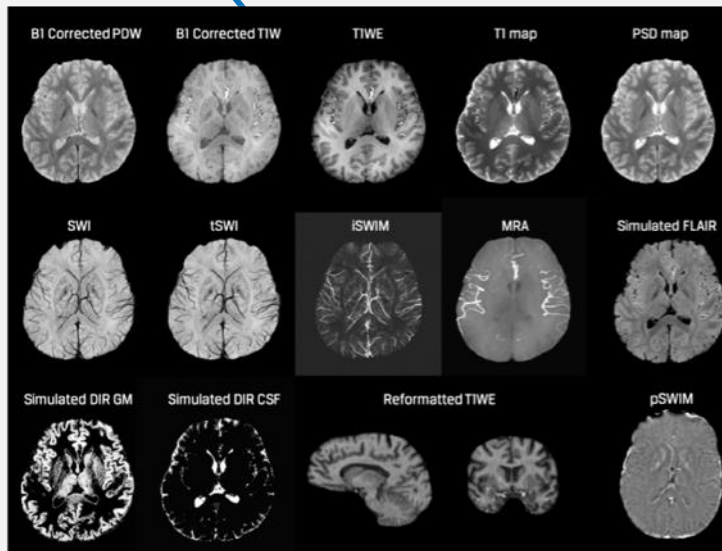
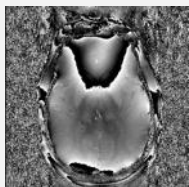
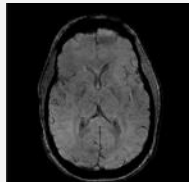
## A New Frontier in Rapid, Quantitative Brain MRI

Rapid, 5 Min. Acquisition

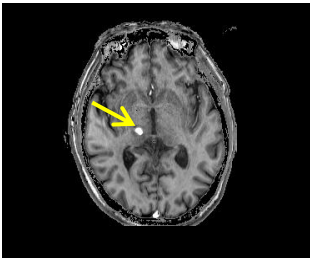
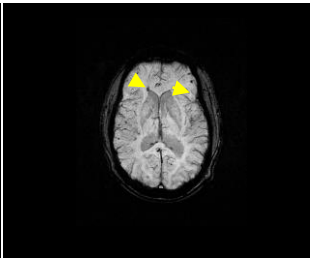
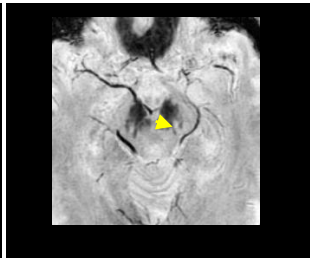
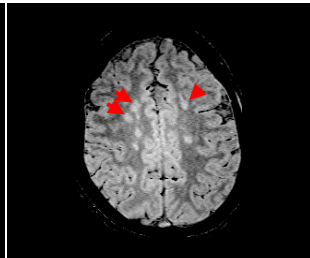
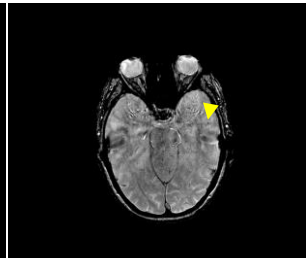
Seamless, Integrated Processing

Enhanced, Multi-Contrast, Quantitative Outputs

Automatic Detection and Reporting



# ENHANCED DETECTION = BETTER OUTCOMES

DISEASE	Stroke	Traumatic Brain Injury	Parkinson's	Multiple Sclerosis	Dementia
BIOMARKER	Microbleeds, O2 Saturation	Microbleeds, Vessel Shearing	SN Swallow Tail	FLAIR/SWI Mismatch	Microbleeds
					



Detect all of these critical biomarkers with one protocol



Diagnosis and treatment relies on clear detection



Inaccurate / missed biomarkers mean adverse outcomes



Drug development relies on reliable biomarkers

# TANGIBLE CLINICAL VALUE

*40% Faster Neuro Throughput Means...*

ABILITY TO SEE

**10-15**

MORE PATIENTS  
EACH WEEK

=

**\$500,000+**

ADDITIONAL REIMBURSEMENT  
EVERY YEAR



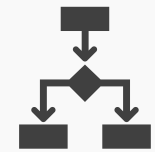
40% Faster  
Scan Times



Rich, Standardized  
Data



Lower Costs,  
Increased Revenue



Improved Workflow



Improved  
Patient Experience



Improved Outcomes

# COVID-19: NEW CHALLENGES FOR RADIOLOGISTS

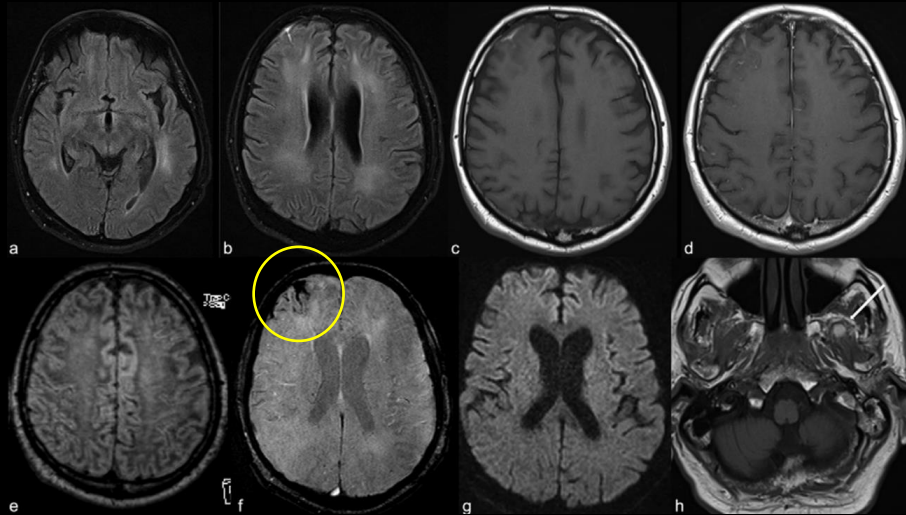
- 1/3 of COVID patients experience neurological symptoms
  - *Particularly neurovascular symptoms like stroke and hemorrhage*
- Disinfection and safety protocols add time to already overburdened workflow
  - *Need for faster imaging to maintain patient throughput*
- Need for accurate, quantitative imaging to monitor patients over time
  - *Location, severity of damage important for assessing cognitive outcomes and treatment*
- Lack of data standardization across sites
  - *Conventional imaging impedes study of disease across sites*

# BENEFITS OF STAGE™ FOR ADDRESSING COVID-19

- Improved patient monitoring and treatment through standardized, quantitative, comprehensive imaging protocol.
  - Complete picture of brain characteristics including neurovascular lesions.
  - Improved visualization and quantification of neurovascular damage.
  - Reduced patient rescan due to negative or inconclusive findings from less comprehensive protocols.
- Increased clinical capacity through reduced acquisition time.
  - Less patient time in the magnet will help counterbalance the time burden of increased environment sanitization protocols between patients.
  - By efficiently acquiring the data points needed for quantification, STAGE reduces patient time in magnet and increases the information depth of MR images.
- Enhanced workflow through automated post-processing
  - Automated post-processing means that improved contrast, quantitative maps, and composite images are available on the PACS shortly after each MR study is completed and uploaded.

# COVID-19 & NEUROIMAGING:

*Growing Evidence Supporting the need for Comprehensive, Standardized Neuroradiology Monitoring*

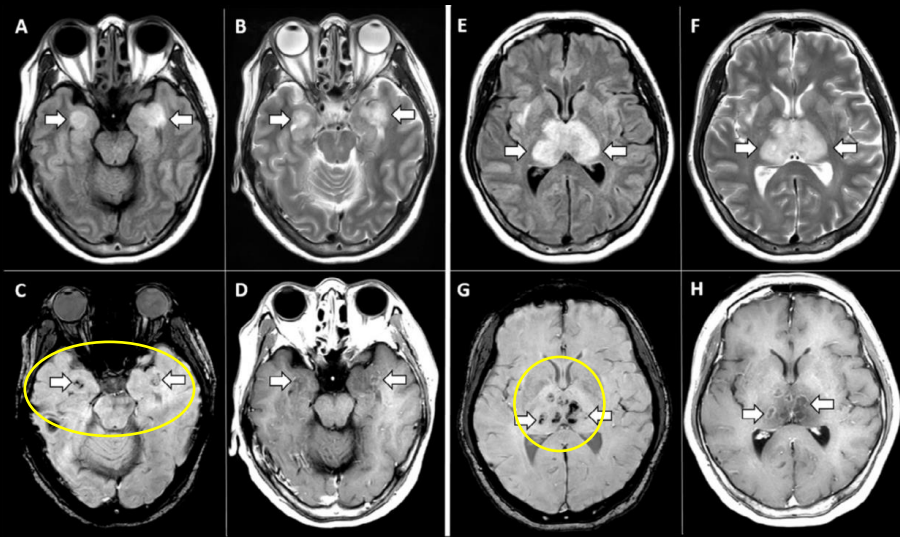


Kandemirli et al. 2020, Radiology,

- Around 1/3 of COVID-19 patients show neurological symptoms
  - Headache
  - Altered Mental State
  - Acute Cerebrovascular Disease
  - Epilepsy
- STAGE has the ability to robustly detect vascular damage and hemorrhagic lesions in the brain using SWI, QSM, and MRA.



# COVID-19 AND RARELY SEEN ACUTE HEMORRHAGIC NECROTIZING ENCEPHALOPATHY

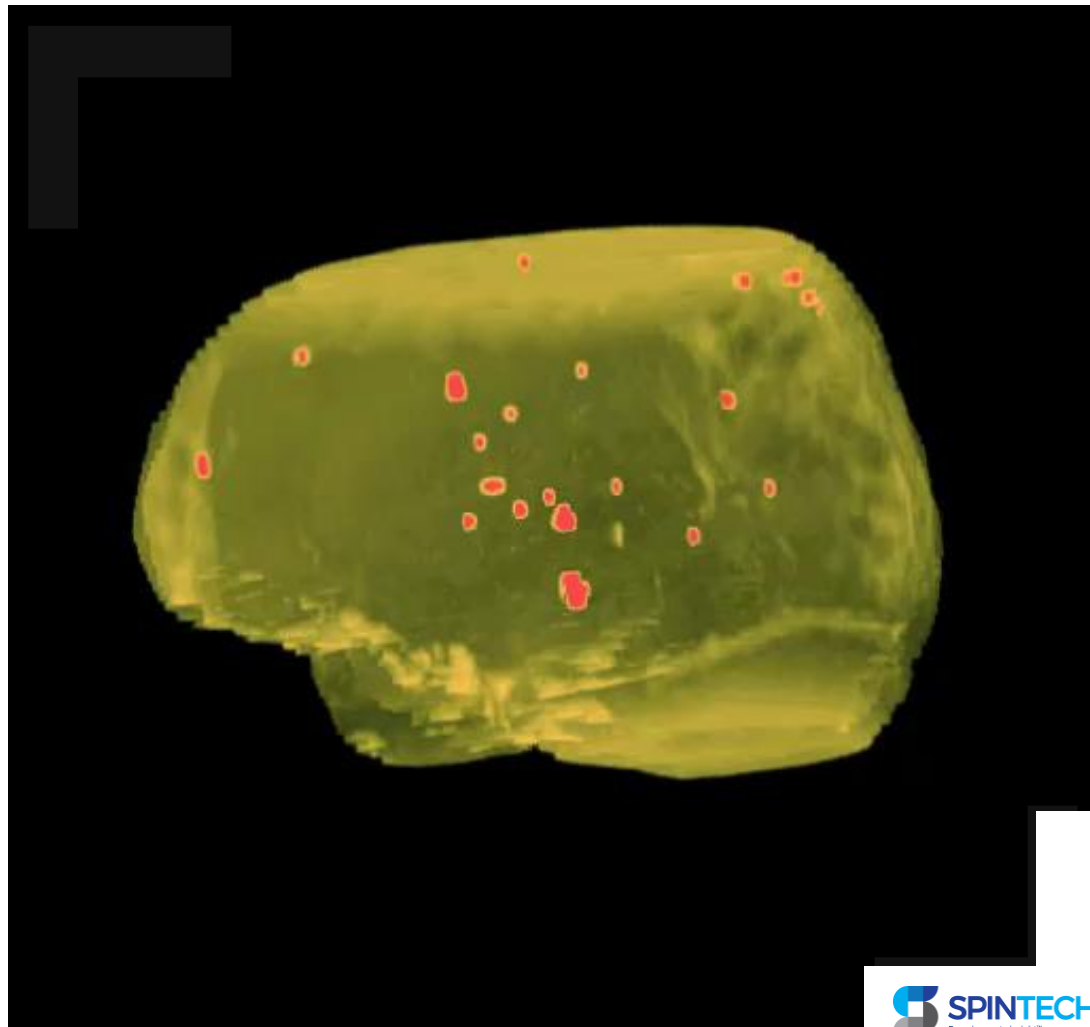
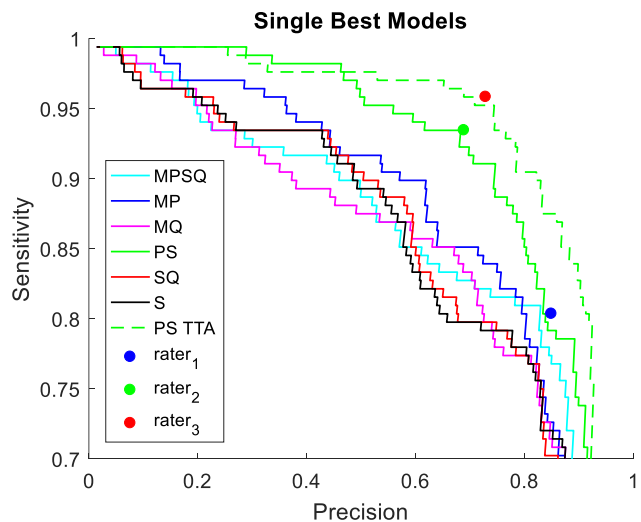


Poyiadji et al. 2020, Radiology,

- Subgroup of patients with severe COVID-19 might have a cytokine storm syndrome.
- Viral infection has the potential to cause damage to the brain tissue including inflammation, blood brain barrier breakdown, and hemorrhage.
- STAGE is designed to capture quantitative elements of these types of lesions in the brain.

# AI IS MAKING A DIFFERENCE

**STAGE** enables automatic detection of hard to detect cerebral microbleeds that may otherwise be missed





Contact us to learn more:

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[www.spintechimaging.com](http://www.spintechimaging.com)