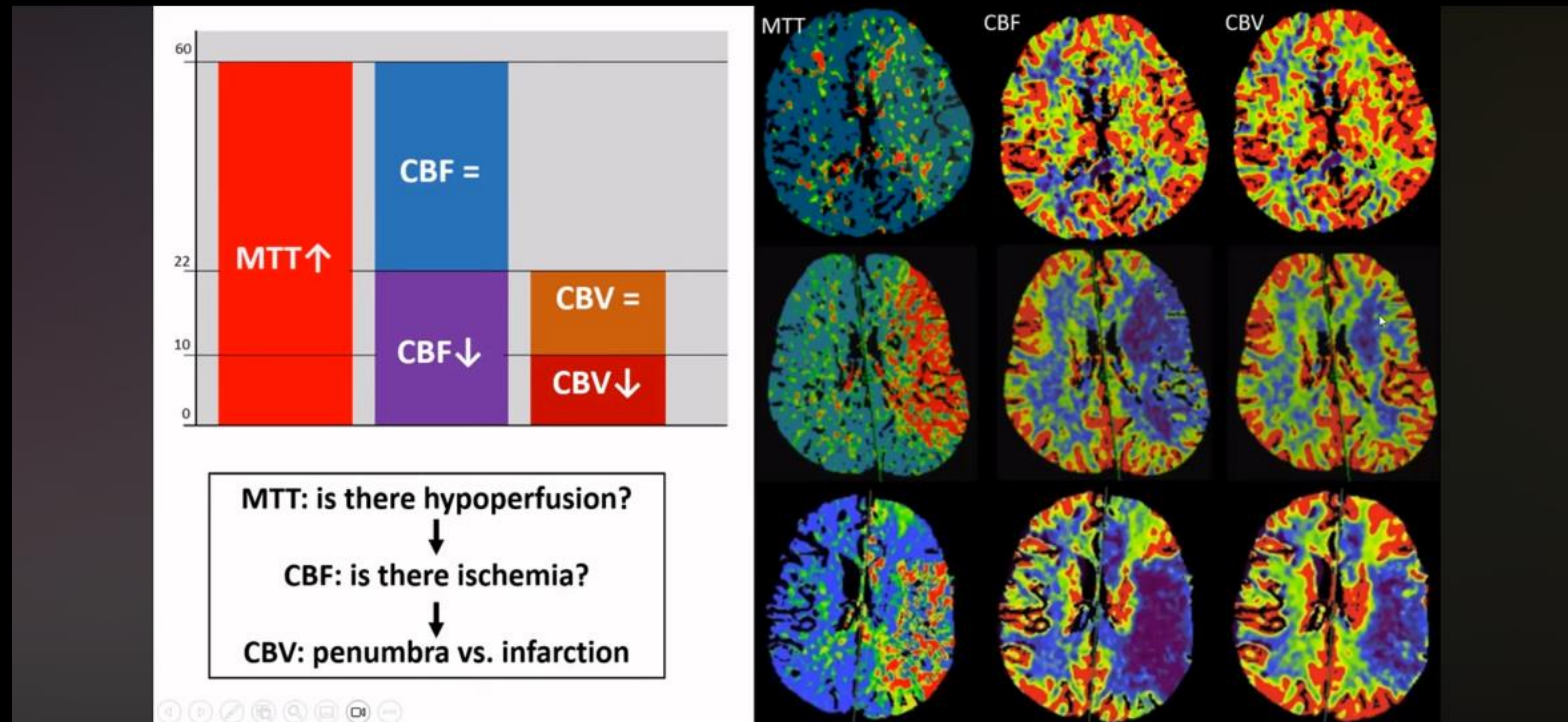


CRMC CTP primer

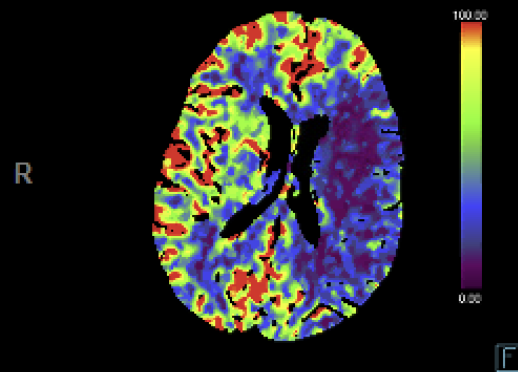


- Compared to Viz.ai, CTP at CRMC is more qualitative



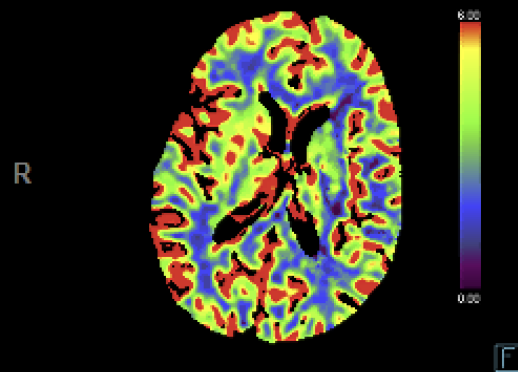
MTT: Mean transit time, CBF: Cerebral blood flow, CBV: Cerebral blood volume

13

Automatically calculated results.
Do not use without checking quality control images.

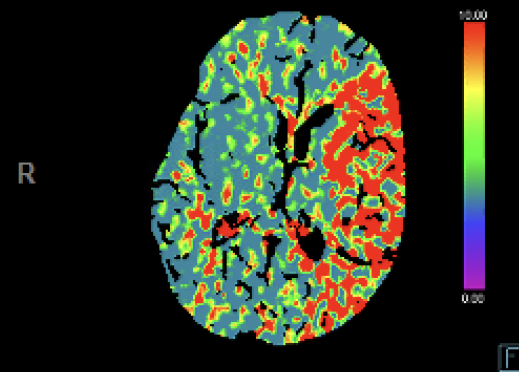
CT BRAIN PERFUSION
Stroke Perfusion RGB [3] CBF N/A 2025
Series #904 - Cerebral Blood Flow 20 Images

12

Automatically calculated results.
Do not use without checking quality control images.

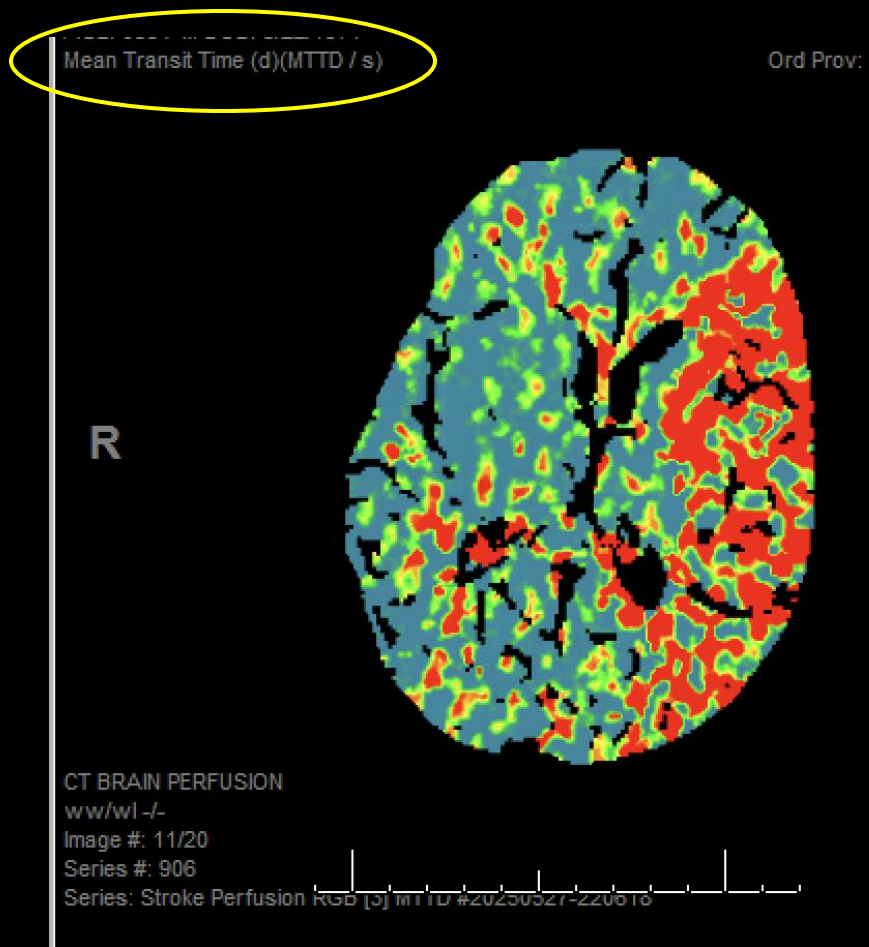
CT BRAIN PERFUSION
Stroke Perfusion RGB [3] CBV N/A 2025
Series #905 - Cerebral Blood Volume 20 Images

11

Automatically calculated results.
Do not use without checking quality control images.

CT BRAIN PERFUSION
Stroke Perfusion RGB [3] MTT N/A 2025
Series #906 - Mean Transit Time 20 Images

On the PACS thumbnails, the series (like CBV, CBF, MTT, etc) are labeled at the bottom

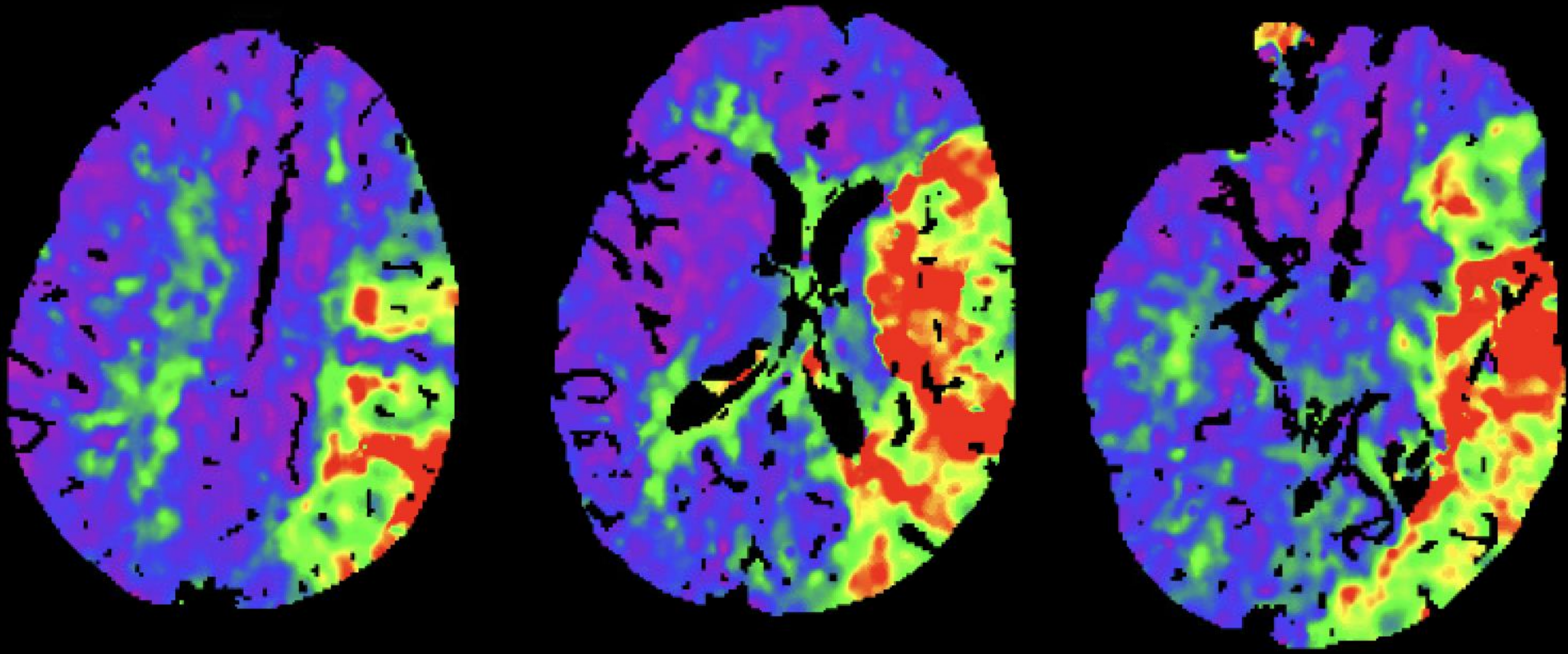


When you click on the series, the label will be at the top left screen

Case 1

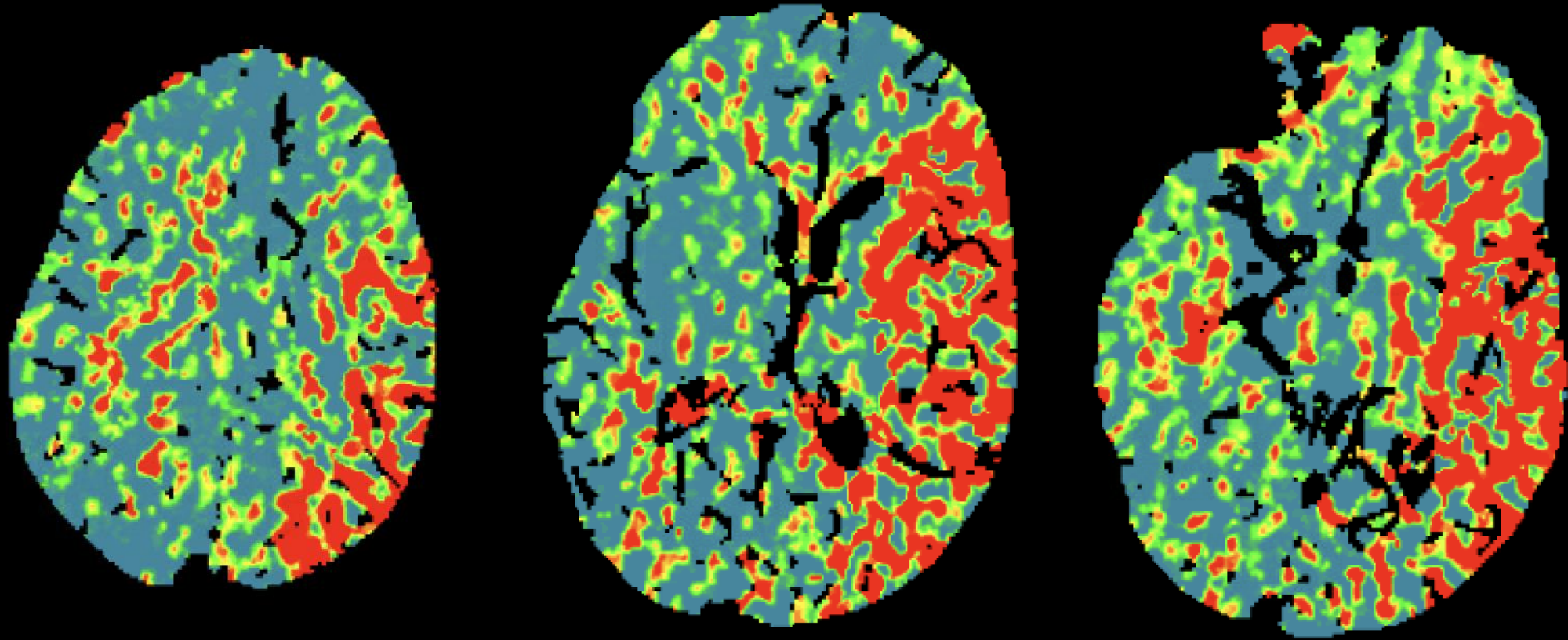
- Patient with Left ICA occlusion
 - One approach:
 1. Tmax/ MTT for hypoperfusion
 2. CBF for ischemia
 3. CBV for infarct core

Look at Tmax for hypoperfusion



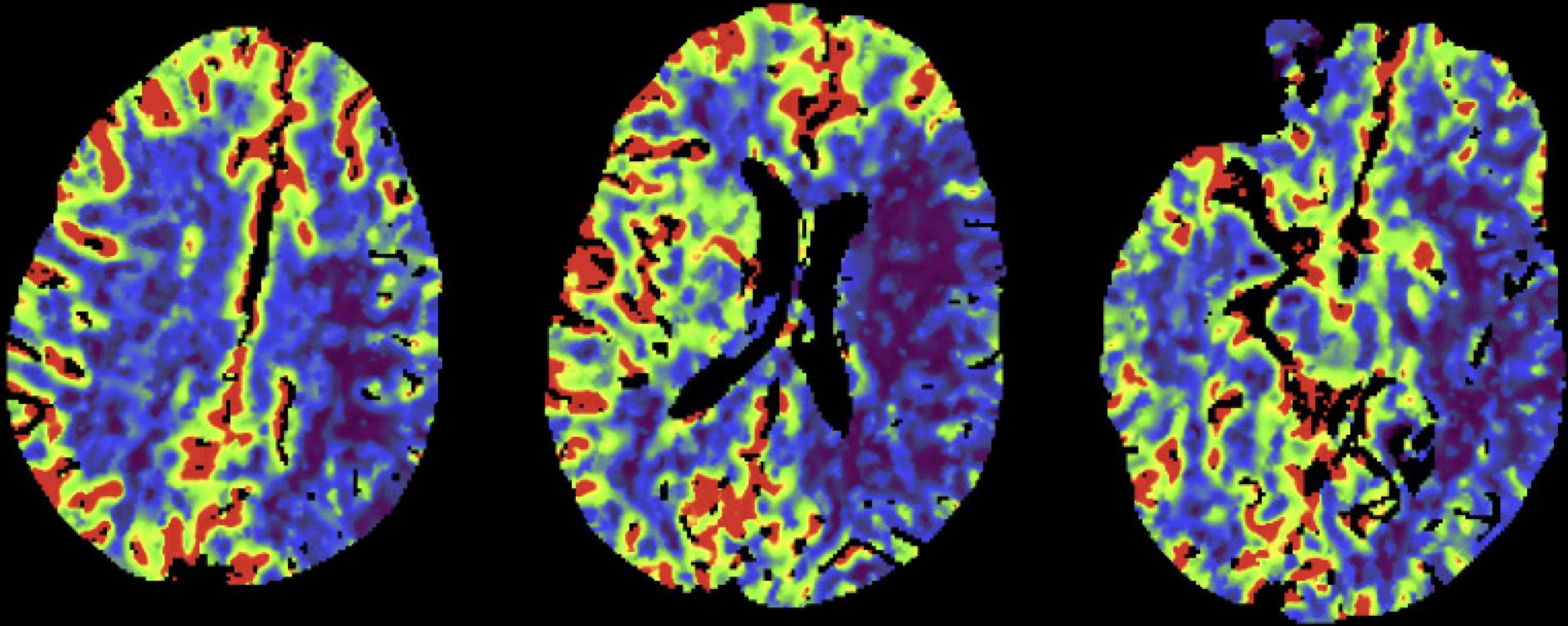
Patient has hypoperfusion in the left MCA territory

Look at MTT for hypoperfusion



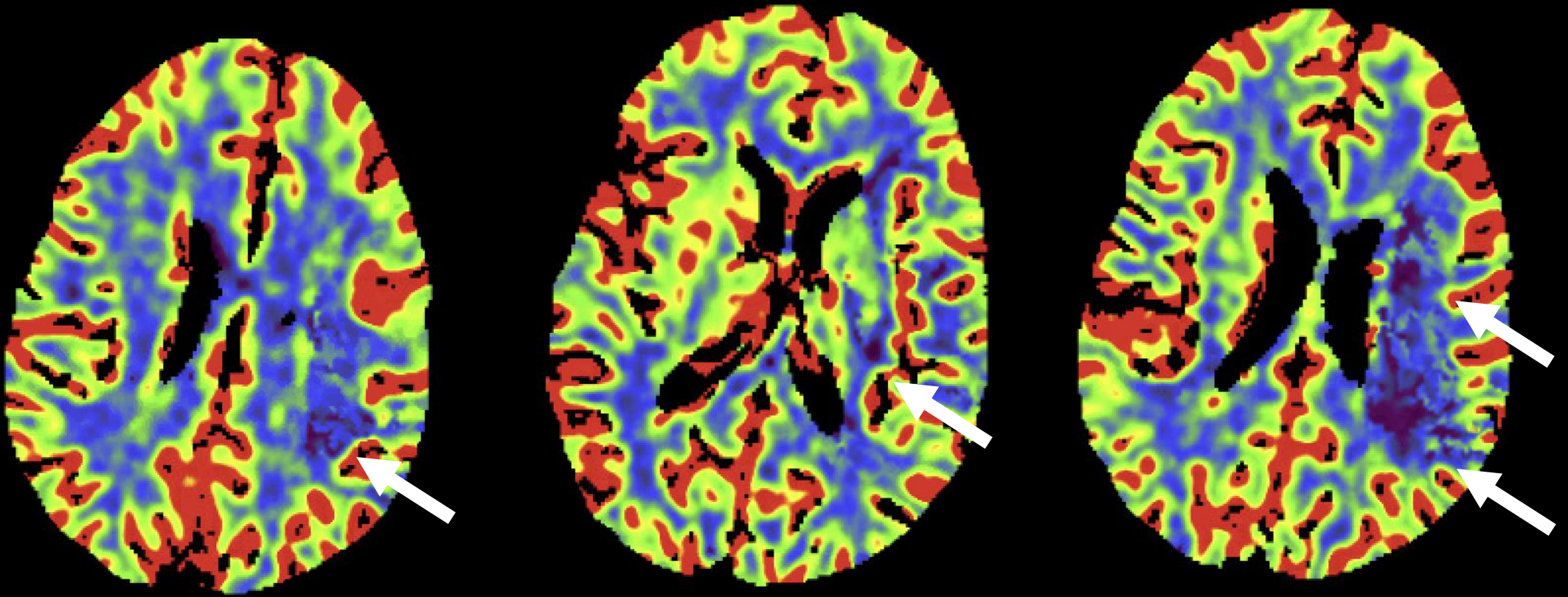
Patient has hypoperfusion in the left MCA territory

Look at CBF for ischemia



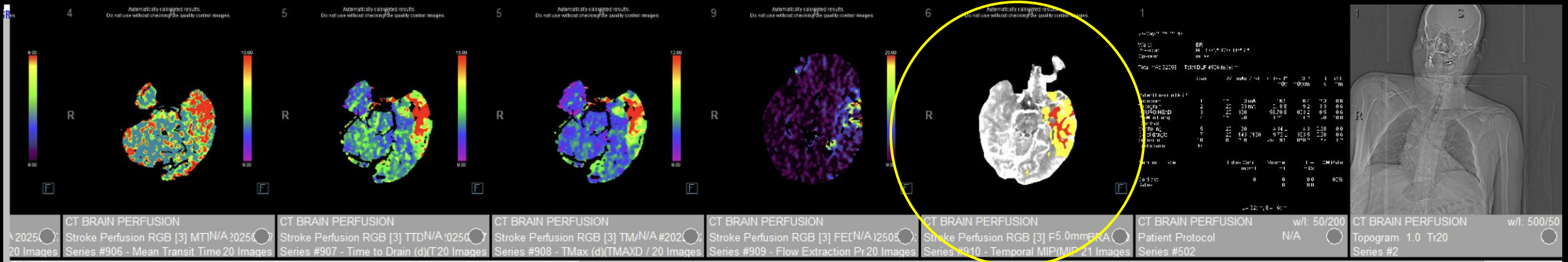
Patient has ischemia in the left MCA territory

Look at CBV for ischemic core/infarct

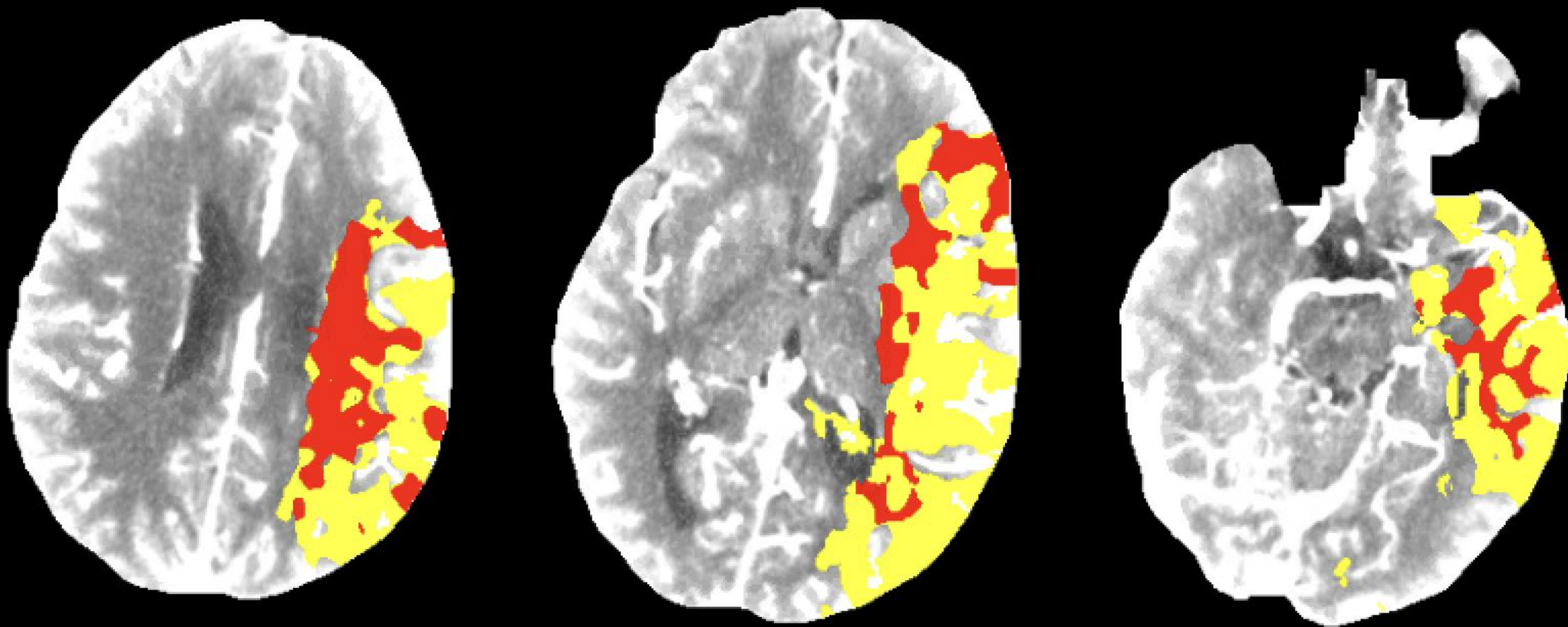


There are infarcts in the left MCA territory (though smaller than the hypoperfusion)

- One of the last series is a summary page that shows hypoperfusion and infarct as well as some quantitative data (but beware this can have lots of artifact as well)
- It is labeled "Temporal MIP", but that's not really helpful since other series at beginning of the study are labeled the same- you can recognize it by the red and yellow colors

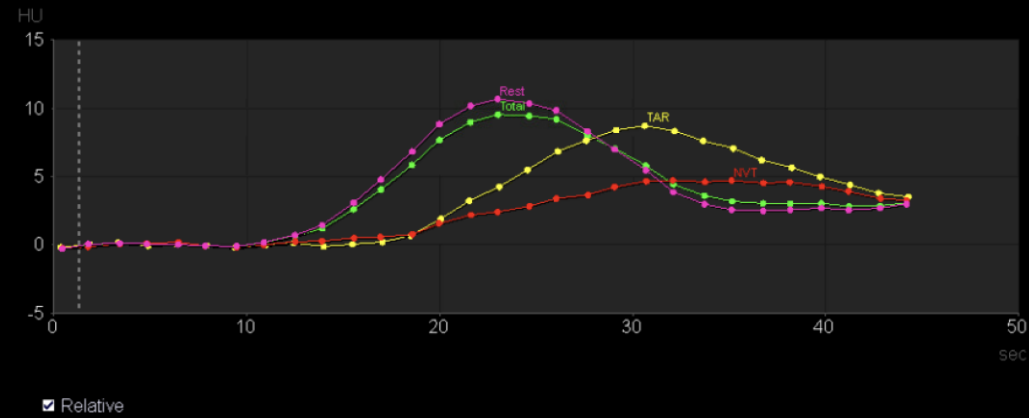


Yellow: hypoperfusion, Red: infarct (red=dead)



TAR/NVT

Automatically calculated results.
Do not use without checking the quality control images.



TAR/NVT

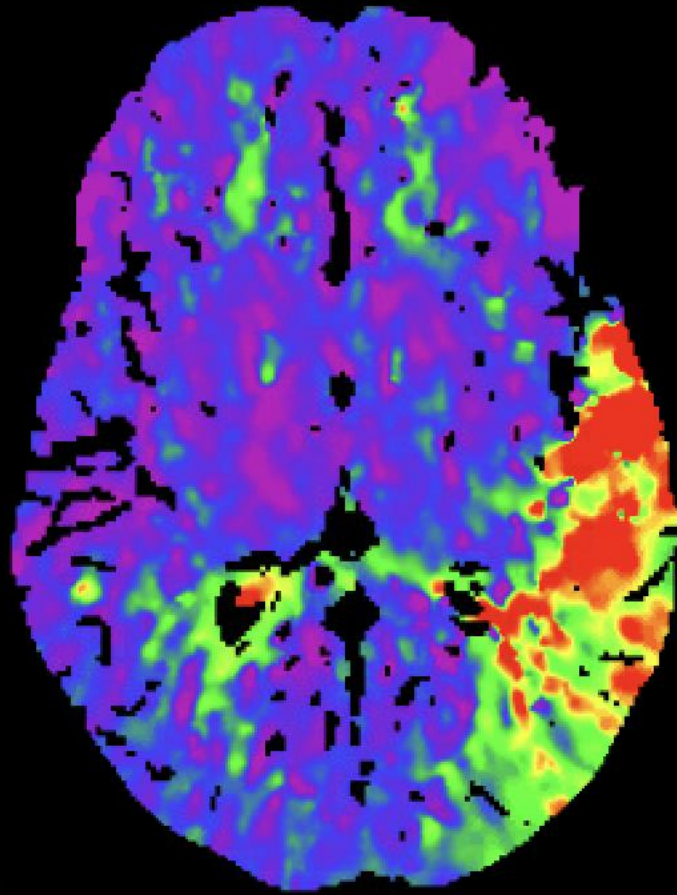
Region	Legend	Show TAC	Summary		
Total	—	<input checked="" type="checkbox"/>	Hypoperfusion	=	178.6cm ³
			Infarct	=	50.11cm ³
TAR	—	<input checked="" type="checkbox"/>	Penumbra/Mismatch	=	128.49cm ³
NVT	—	<input checked="" type="checkbox"/>	Mismatch Ratio	=	3.56
Rest	—	<input checked="" type="checkbox"/>	PRR	=	71.94 %
Calculated for left hemisphere.					

When you scroll through the summary series, there will be a list of data, including hypoperfusion, infarct, and penumbra. I have seen some include this in the report. Most of the time, I have seen impressions be qualitative. For example, for this case: Large hypoperfusion in the left MCA with smaller foci of infarct core.

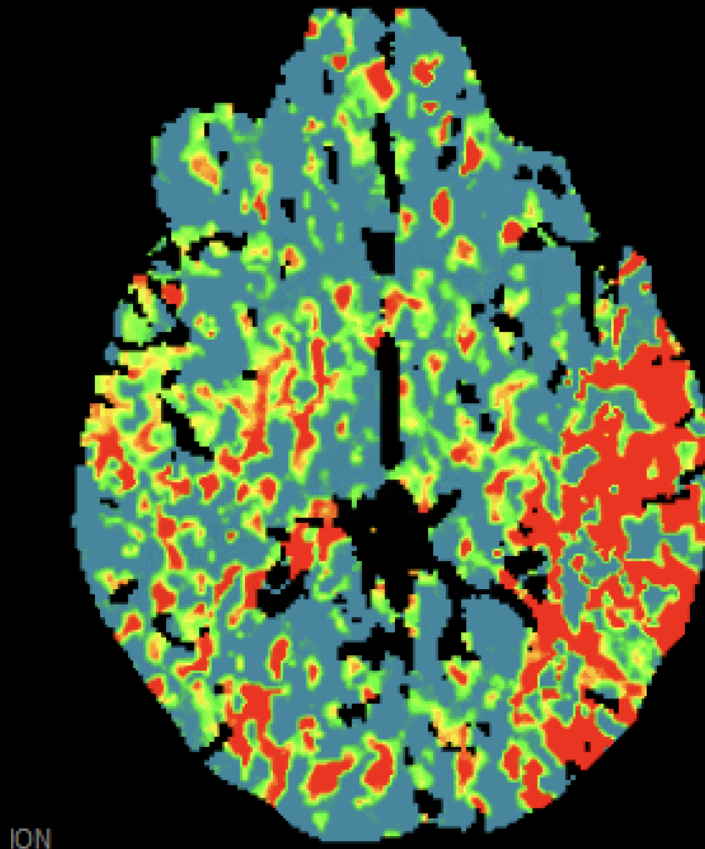
Case 2

- Left M2 clot

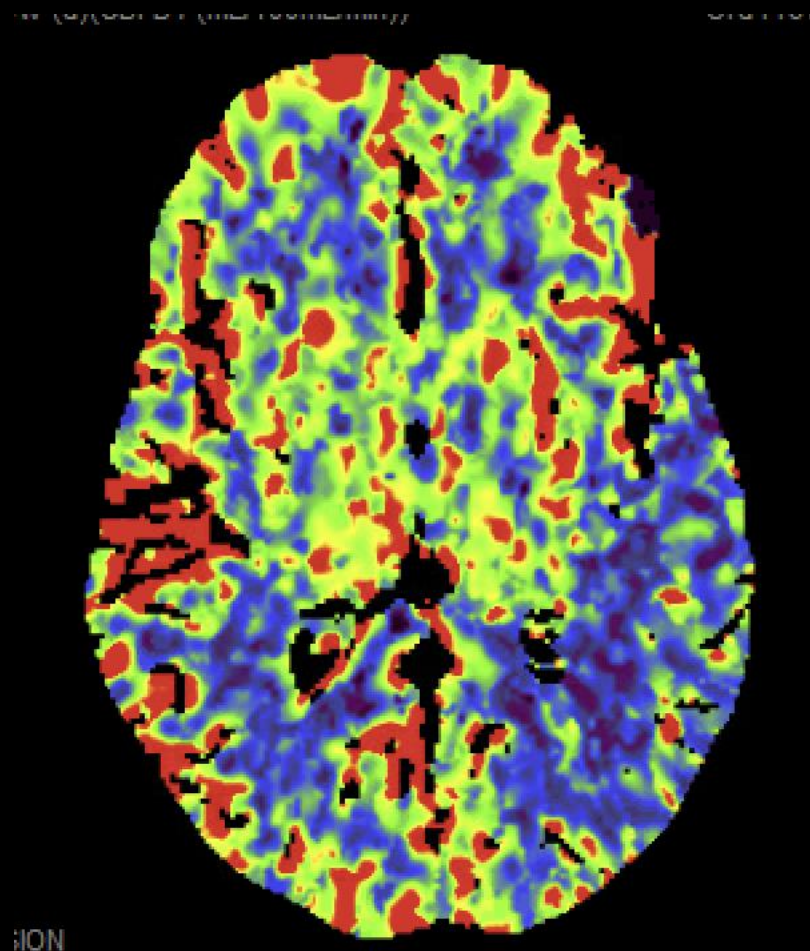
Tmax: hypoperfusion left MCA territory



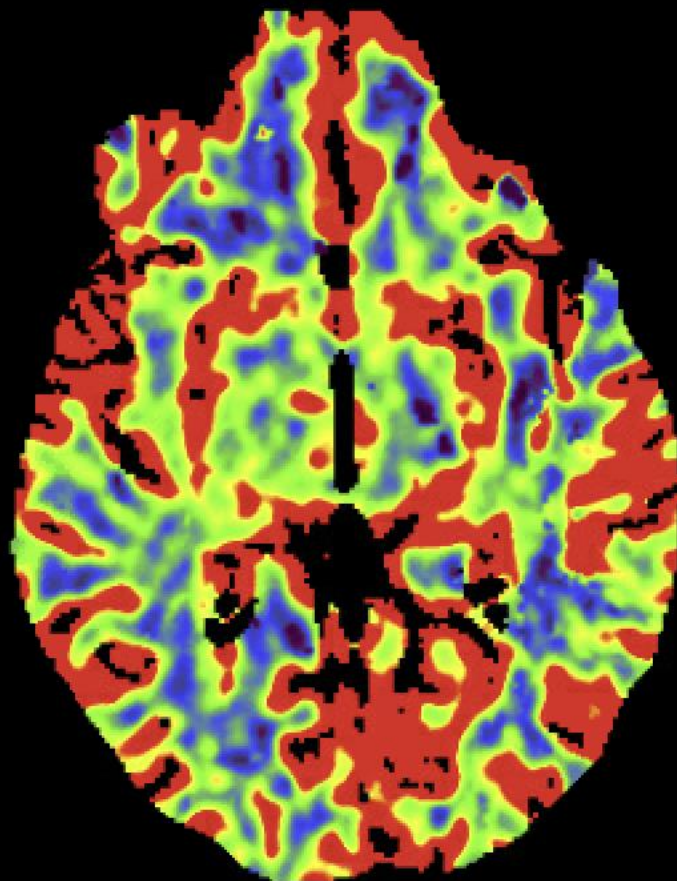
MTT: hypoperfusion left MCA territory



CBF: Ischemia in left MCA territory

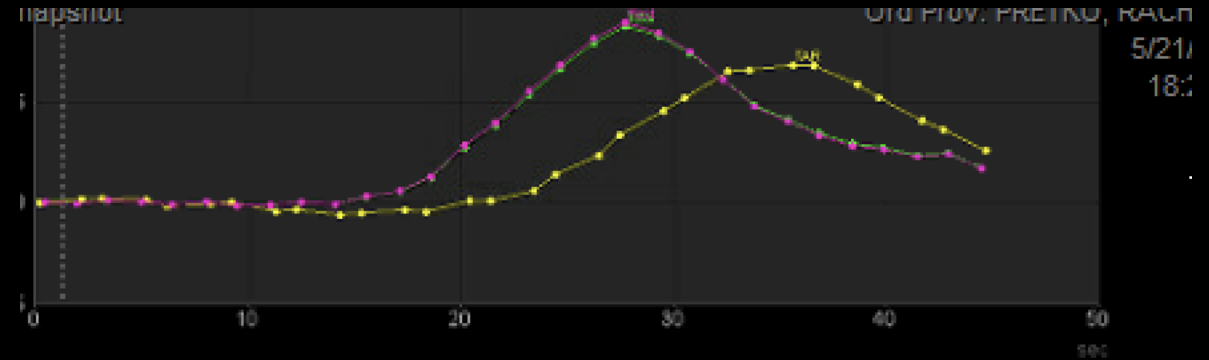
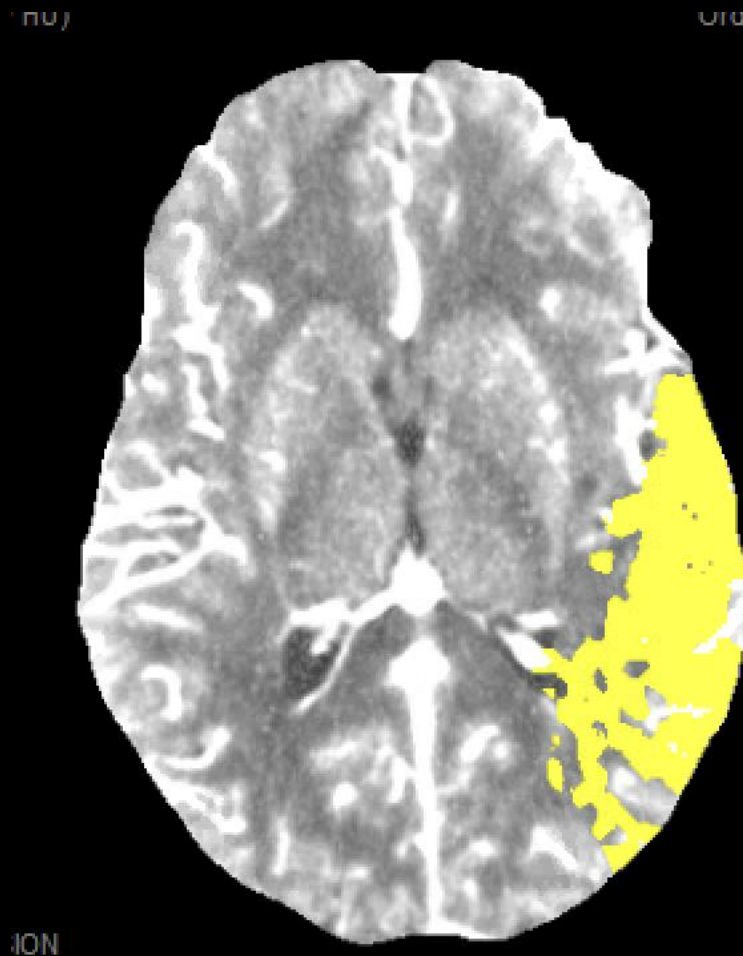


CBV: No significant ischemic core (looks symmetric)



ON

Summary page shows hypoperfusion left MCA territory, no ischemic core



☒ Relative

TAR/NVT

Region	Legend	Show TAC	Summary		
Total		<input checked="" type="checkbox"/>	Hypoperfusion	=	34.22cm ³
			Infarct	=	0.0cm ³
TAR		<input checked="" type="checkbox"/>	Penumbra/Mismatch	=	34.22cm ³
NVT		<input type="checkbox"/>	Mismatch Ratio	=	Infinity
MAIN PERFUSION		<input checked="" type="checkbox"/>	PRR	=	100 %
			Calculated for left hemisphere.		