## Patient Information

1. \*Study ID number:
2. \*Date and time of study (M M/D D/Y Y Y Y):

(HH:MM, 24 hr clock):

1. NIH Stroke Scale (NIHSS) at time of study (0-42):[[1]](#footnote-1)
2. Scan purpose (Select all that apply):

Diagnostic

Post-treatment

Monitoring

## Technical Information

1. Imaging modality (Select all that apply):

DSA (Answer 1A)

MRA (Answer 1B)

CTA (Answer 1C)

1. Digital Subtraction Angiography (DSA)
   1. Site of access:

Brachial  Femoral

Radial  Other

* 1. Selective injections (Select all that apply in table below and side) :

Technical Information Table

| Injection Site | Side |
| --- | --- |
| Arch | N/A – Not present |
| Common Carotid | Right  Left  Bilateral  N/A – Not present |
| Internal Corotid | Right  Left  Bilateral  N/A – Not present |
| Vertebral | Right  Left  Bilateral  N/A – Not present |
| Subclavian | Right  Left  Bilateral  N/A – Not present |

1. Magnetic Resonance Angiography (MRA): (Select all that apply)

Head (Time of Flight - TOF)

Neck (TOF)

Contrast enhanced Head and Neck

Magnetic Resonance Venography (MRV) with contrast

Magnetic Resonance Venography (MRV) without contrast

1. Computer Tomography Angiography (Select all that apply):

Head

Neck

Computer Tomography Venography (CTV)

1. Read type (Select all that apply):

Local read

Local report

Central read

1. Reader blinded to clinical data:

Yes

No

1. Study technically satisfactory:

Yes

No

## Findings

1. Arterial findings:
   1. CCA origin
      1. Findings, Cause, Symptomology:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. CCA to bifurcation
   1. Findings, Cause, Symptomology:

: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. ICA at origin
   1. Findings, Cause, Symptomology:

: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C1 cervical
   1. Findings, Cause, Symptomology:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C2 petrous
   1. Findings, Cause, Symptomology:

: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C3 lacerum
   1. Findings, Cause, Symptomology:

: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C4 cavernous
   1. Findings, Cause, Symptomology:

Findings, Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C5 clinoidal
   1. Findings, Cause, Symptomology:

Findings, Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C6 – ophthalmic to PCOM
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. C6 – PCOM to terminus
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

* + 1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. A1
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

* + 1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. A2
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M1 proximal to striate
   1. Findings, Cause, Symptomology:

Table : Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M1 distal to striate
   1. Findings, Cause, Symptomology:

Table : Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M2 single
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M2 multiple
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M3 single
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M3 multiple
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. M4 single
   1. Findings, Cause, Symptomology:

Table : Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

1. 3 - Full perfusion with filling of all distal branchesM4 multiple
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. Vertebral origin
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

1. 3 - Full perfusion with filling of all distal branchesVertebral - cervical
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. Vertebral – intracranial proximal to PICA
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

1. 3 - Full perfusion with filling of all distal branchesVertebral – distal to PICA
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. Basilar – distal to AICA
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

1. 3 - Full perfusion with filling of all distal branchesBasilar - mid
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. Basilar – proximal to AICA
   1. Findings, Cause, Symptomology:

: Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. PCOM
   * 1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. P1
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

* 1. P2
     1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. P3
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. SCA
   1. Findings, Cause, Symptomology:

:Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. AICA
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. PICA
   1. Findings, Cause, Symptomology:

Findings Cause and Symptomology Table

| Side | Right | Left |
| --- | --- | --- |
| Findings | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized | Normal  Occlusion  Aneurysm  Stenosis  AVM  Not visualized |
| Cause | Atherosclerotic  Embolic  Other  Unknown | Atherosclerotic  Embolic  Other  Unknown |
| Symptomology | Symptomatic  Asymptomatic  Indeterminate | Symptomatic  Asymptomatic  Indeterminate |

1. TIMI Scale – Individual Vessel Score

0 - No perfusion

1 - Perfusion past the initial occlusion, but no distal branch filling

2 - Perfusion with incomplete or slow distal branch filling

3 - Full perfusion with filling of all distal branches

1. Thrombolysis in Myocardial Infarction (TIMI) Perfusion Scale – Global Score (Scores listed and defined directly below):

Global Score Table

| Score | Description (Score vessel-specific TIMI in each treatable vessel) |
| --- | --- |
| 0 | No perfusion |
| 1 | Perfusion past the initial occlusion, but no distal branch filling, in at least one treatable vessel |
| 2 | For MCA, all M1 and M2 segments at least TIMI 2; for ICA terminus, ICA, M1, and both M2 branches at least TIMI 2; for posterior circulation, both VA and BA at least TIMI 2 |
| 3 | For MCA, all M1 and M2 segments at least TIMI 3; for ICA terminus, ICA, M1, and both M2 branches at least TIMI 3; for posterior circulation, both VA and BA at least TIMI 3 |

1. Qureshi Angiographic Occlusions Scale (Scores listed and defined directly below):

Occlusions Scale Table

| Score | Description |
| --- | --- |
| 0 | No Occlusion |
| 1 – MCA | MCA occlusion M3 segment |
| 1 – ACA | ACA occlusion A2 or distal segments |
| 1 – BA/VA | One BA/VA branch occlusion |
| 2 – MCA | MCA occlusion M2 segment |
| 2 – ACA | ACA occlusion A1 and A2 segments |
| 2 – BA/VA | Two or more BA/VA branch occlusions |
| 3A | MCA occlusion M1 segment with lentriculostriate arteries spared and/or leptomeningeal collaterals visualized |
| 3B | MCA occlusion M1 segment with no sparing of lentriculostriate arteries nor leptomeningeal collaterals visualized |
| 4A – ICA | ICA occlusion with collaterals filling MCA |
| 4A – BA | BA occlusion with partial anterograde filling |
| 4B – ICA | ICA occlusion with collaterals filling ACA |
| 4B – BA | BA occlusion with partial retrograde filling |
| 5 – ICA | ICA occlusion with no collaterals |
| 5 – BA | BA occlusion with no filling either directly or via collaterals |

1. Thrombolysis in Cerebral Infarction (TICI) Perfusion Scale-Grade (Scores listed and defined directly below):

Perfusion Scale Cause and Symptomology Table

| Score | Description |
| --- | --- |
| Grade 0 | No Perfusion. No antegrade flow beyond the point of occlusion. |
| Grade 1 | Penetration With Minimal Perfusion. The contrast material passes beyond the area of obstruction but fails to opacify the entire cerebral bed distal to the obstruction for the duration of the angiographic run. |
| Grade 2 | Partial Perfusion. The contrast material passes beyond the obstruction and opacifies the arterial bed distal to the obstruction. However, the rate of entry of contrast into the vessel distal to the obstruction and/or its rate of clearance from the distal bed are perceptibly slower than its entry into and/or clearance from comparable areas not perfused by the previously occluded vessel, eg, the opposite cerebral artery or the arterial bed proximal to the obstruction. |
| Grade 2a | Only partial filling (<2/3) of the entire vascular territory is visualized. |
| Grade 2b | Complete filling of all of the expected vascular territory is visualized, but the filling is slower than normal. |
| Grade 3 | Complete Perfusion. Antegrade flow into the bed distal to the obstruction occurs as promptly as into the obstruction and clearance of contrast material from the involved bed is as rapid as from an uninvolved other bed of the same vessel or the opposite cerebral artery. |

1. Arterial Occlusive Lesion (AOL) Recanalization Scale (Scores listed and defined directly below):

Recanalization Scale Table

| Score | Description |
| --- | --- |
| 0 | No recanalization of the primary occlusive lesion |
| 1 | Incomplete or partial recanalization of the primary occlusive lesion with no distal flow |
| 2 | Incomplete or partial recanalization of the primary occlusive lesion with any distal flow |
| 3 | Complete recanalization of the primary occlusion with any distal flow |

1. Venous findings:
   1. Superior Sagittal Sinus findings:

: Findings Table

| Overall Assessment | Normal  Small Caliber  Impaired Flow |
| --- | --- |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low |

1. Inferior Sagittal Sinus findings:

Findings Table

| Overall Assessment | Normal  Small Caliber  Impaired Flow |
| --- | --- |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low |

1. Straight Sinus findings:

Findings Table

| Overall Assessment | Normal  Small Caliber  Impaired Flow |
| --- | --- |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low |

1. Transverse Sinus findings:

Table : Findings

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Sigmoid Sinus findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Jugular Bulb findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Cavernous Sinus findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Internal Cerebral Vein findings:

: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Vein of Galen findings:

Findings Table

| Overall Assessment | Normal  Small Caliber  Impaired Flow |
| --- | --- |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low |

* 1. Frontal Cortical Vein findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Parietal Cortical Vein findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Temporal Cortical Vein findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Occipital Cortical Vein findings:

Findings Table

| Side | Right | Left |
| --- | --- | --- |
| Overall Assessment | Normal  Small Caliber  Impaired Flow | Normal  Small Caliber  Impaired Flow |
| Presumed Pathogenesis | Congenital Hypoplasia  Thrombosis  Stenosis | Congenital Hypoplasia  Thrombosis  Stenosis |
| Level of Confidence | High  Moderate  Low | High  Moderate  Low |

1. Collateral status:

Collateral status Table

| Location | Side |
| --- | --- |
| ECA/OA - ICA | Left  Right  Bilateral  N/A – No status |
| ECA/Other - ICA | Left  Right  Bilateral  N/A – No status |
| AComA - A1 - MCA | Left  Right  Bilateral  N/A – No status |
| AComA – A2 – MCA pial | Left  Right  Bilateral  N/A – No status |
| PComA – ICA | Left  Right  Bilateral  N/A – No status |
| PCA – ACA pial | Left  Right  Bilateral  N/A – No status |
| PCA – MCA pial | Left  Right  Bilateral  N/A – No status |
| ICA to MCA/ACA Moyamoya | Left  Right  Bilateral  N/A – No status |
| Other: | Left  Right  Bilateral  N/A – No status |

1. Collateral grade (Grades listed and defined directly below):

Collateral Grade Table

| Score | Description |
| --- | --- |
| Grade 0 | No collaterals visible to the ischemic site |
| Grade 1 | Slow collaterals to the periphery of the ischemic site with persistence of some of the defect |
| Grade 2 | Rapid collaterals to the periphery of ischemic site with persistence of some of the defect and to only a portion of the ischemic territory |
| Grade 3 | Collaterals with slow but complete angiographic blood flow of the ischemic bed by the late venous phase |
| Grade 4 | Complete and rapid collateral blood flow to the vascular bed in the entire ischemic territory by retrograde perfusion |

## General Instructions

This CRF contains data that would be collected when an imaging study is performed using angiography to examine the blood vessels of the body. There are separate sections to record arterial findings and venous findings.

Important note: A subset of the data elements included on this CRF Module is considered Core (i.e., strongly recommended for stroke clinical studies to collect if imaging studies are performed). The remaining data elements (i.e., non Core) are supplemental and should only be collected if the research team considers them appropriate for their study.

## Specific Instructions

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module. There is actually a single Data Dictionary for all of the imaging CDEs as the six different CRF Modules for stroke imaging share many elements.

The CRF includes all instructions available for the data elements at this time. More detailed instructions will be added in Version 2.0 of this CRF Module.

\* Recommended as a Core Stroke CDE if protocol includes imaging

1. NIHSS is also included on other Stroke CDE CRF Modules. This item should be pre-populated if initially collected elsewhere so as to avoid redundant data points. [↑](#footnote-ref-1)