## 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. Probe:
	1. Type:
	2. Frequency (Hz):
2. Patient type:
	1. **[ ]**  Asymptomatic
	2. **[ ]**  Acute Stroke

If Acute Stroke, indicate study type:

[ ]  Initial

[ ]  Follow-up 1

[ ]  Follow-up 2

* 1. **[ ]**  Chronic Stroke
1. Interpretation site:
	1. **[ ]** Onsite
	2. **[ ]** Offsite

If Offsite, indicate type:

[ ]  Video

[ ]  Print

[ ]  Digital

1. Contrast Agent:

[ ]  Yes

[ ]  No (Skip to 5)

* 1. Agent:
	2. Type:

[ ]  Bolus

[ ]  Infusion

[ ]  Other, specify:

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. B-mode:
	1. CCA

1 Findings Table

| Side | Right | Left |
| --- | --- | --- |
| \*Finding | **[ ]** Normal (Skip to B)**[ ]** Plaque | **[ ]** Normal (Skip to B)**[ ]** Plaque |
| \*Echo pattern | **[ ]** Homogeneous**[ ]** Heterogeneous | **[ ]** Homogeneous**[ ]** Heterogeneous |
| \*Surface | **[ ]** Smooth**[ ]** Irregular | **[ ]** Smooth**[ ]** Irregular |
| \*Severity of plaque | **[ ]** Mild**[ ]**  Moderate**[ ]**  Severe | **[ ]** Mild**[ ]**  Moderate**[ ]**  Severe |
| Texture of plaque | :Data to be entered by site | : Data to be entered by site |
| Composition of plaque | : Data to be entered by site | : Data to be entered by site |
| Motion of plaque | : Data to be entered by site | : Data to be entered by site |

* 1. ICA

2 Findings Table

| Side | Right | Left |
| --- | --- | --- |
| \*Finding | **[ ]** Normal (Skip to C)**[ ]** Plaque | **[ ]** Normal (Skip to B)**[ ]** Plaque |
| \*Echo pattern | **[ ]** Homogeneous**[ ]** Heterogeneous | **[ ]** Homogeneous**[ ]** Heterogeneous |
| \*Surface | **[ ]** Smooth**[ ]** Irregular | **[ ]** Smooth**[ ]** Irregular |
| Texture of plaque | Data to be entered by site | Data to be entered by site |
| Composition of plaque | Data to be entered by site | Data to be entered by site |
| Motion of plaque | Data to be entered by site | Data to be entered by site |
| Residual lumen | Data to be entered by site | Data to be entered by site |
| Thickness of plaque | Data to be entered by site | Data to be entered by site |

* 1. ECA

3: Findings Table

| Side | Right | Left |
| --- | --- | --- |
| \*Finding | **[ ]** Normal (Skip to 2)**[ ]** Plaque | **[ ]** Normal (Skip to B)**[ ]** Plaque |
| \*Echo pattern | **[ ]** Homogeneous**[ ]** Heterogeneous | **[ ]** Homogeneous**[ ]** Heterogeneous |
| \*Surface | **[ ]** Smooth**[ ]** Irregular | **[ ]** Smooth**[ ]** Irregular |
| Texture of plaque | Data to be entered by site | Data to be entered by site |
| Composition of plaque | Data to be entered by site | Data to be entered by site |
| Motion of plaque | Data to be entered by site | Data to be entered by site |
| Residual lumen | Data to be entered by site | Data to be entered by site |
| Thickness of plaque | Data to be entered by site | Data to be entered by site |

1. Color flow:
	1. CCA

4 Color flow Table

| Side | Right | Left |
| --- | --- | --- |
| \*Angle | (degrees): | (degrees): |
| \*Peak velocity | (cm/sec): | (cm/sec): |
| \*End diastolic velocity | (cm/sec): | (cm/sec): |
| \*No signal? | [ ]  Yes[ ]  No | [ ]  Yes[ ]  No |
| \*% Stenosis criterion | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: |
| \*% Stenosis | (%): | (%): |
| Volume flow rate {CDE# C13920} | (ml/m): | (ml/m): |
| Other findings | [ ]  Turbulence[ ]  Spectral broadening | [ ]  Turbulence[ ]  Spectral broadening |

* 1. ICA

5 Color flow Table

| Side | Right | Left |
| --- | --- | --- |
| \*Angle | (degrees): | (degrees): |
| \*Peak velocity | (cm/sec): | (cm/sec): |
| \*End diastolic velocity | (cm/sec): | (cm/sec): |
| \*No signal? | [ ]  Yes[ ]  No | [ ]  Yes[ ]  No |
| \*% Stenosis criterion | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: |
| \*% Stenosis | (%): | (%): |
| CCA externalization | [ ]  Yes[ ]  No | [ ]  Yes[ ]  No |
| Power Doppler | [ ]  Flow[ ]  No flow | [ ]  Flow[ ]  No flow |
| Other findings | [ ]  Turbulence[ ]  Spectral broadening | [ ]  Turbulence[ ]  Spectral broadening |

* 1. ECA

6 Color flow Table

| Side | Right | Left |
| --- | --- | --- |
| \*Angle | (degrees): | (degrees): |
| \*Peak velocity | (cm/sec): | (cm/sec): |
| \*End diastolic velocity | (cm/sec): | (cm/sec): |
| \*No signal? | [ ]  Yes[ ]  No | [ ]  Yes[ ]  No |
| \*% Stenosis criterion | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: | [ ]  PSV[ ]  PSV/EDV[ ]  Other, specify: |
| \*% Stenosis | (%): | (%): |
| Other findings | [ ]  Turbulence[ ]  Spectral broadening | [ ]  Turbulence[ ]  Spectral broadening |

* 1. Vertebral – origin:

[ ] Normal

[ ] Stenosis

[ ] Occluded

* 1. Vertebral – interosseous:

[ ] Normal

[ ] Stenosis

[ ] Occluded

1. Intima Media Thickness (IMT):
	1. B-mode:

[ ]  Yes

[ ]  No

* 1. B-mode guided M mode:

[ ]  Yes

[ ]  No

* 1. Electronic caliper:

[ ]  Yes

[ ]  No

* 1. Edge detection algorithm:

**[ ]** Yes, type:

**[ ]** No (Skip to 5)

* 1. Timing:

[ ]  ECG Gating

[ ]  End Diastolic

[ ] Peak Systolic

* 1. Findings:
		1. Mean and Max IMT:

7 Mean and Max IMT Table

| Artery and side | Mean IMT Near-wall | Mean IMT Far-wall | Max IMTNear-wall | Max IMTFar-wall |
| --- | --- | --- | --- | --- |
| CCA – right | (mm): | (mm): | (mm): | (mm): |
| CCA – left | (mm): | (mm): | (mm): | (mm): |
| Bulb – right | (mm): | (mm): | (mm): | (mm): |
| Bulb – left | (mm): | (mm): | (mm): | (mm): |
| ICA – right | (mm): | (mm): | (mm): | (mm): |
| ICA – left | (mm): | (mm): | (mm): | (mm): |

* + 1. Diameters:

8 Diameters Table

| Artery and side | Mean IMT Near-wall | Mean IMT Far-wall | Max IMTNear-wall | Max IMTFar-wall |
| --- | --- | --- | --- | --- |
| CCA – right | (mm): | (mm): | (mm): | (mm): |
| CCA – left | (mm): | (mm): | (mm): | (mm): |

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

## General Instructions

This CRF contains data that would be collected when an imaging study is performed using carotid ultrasound to examine the two large arteries in the neck. There are separate sections to record findings from B-mode and color flow imaging.

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 3.0 of this CRF Module.

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)