

## ND Acute Stroke Treatment Guideline

<b>0-15 minutes</b>	<p>Patient Name: _____</p> <p>Date of Birth: _____</p> <p>ED Arrival: Date _____ Time _____</p> <p>Last Known Well: Date _____ Time _____</p> <p><input type="checkbox"/> Activate Stroke Response Team</p> <p><input type="checkbox"/> Prepare for Stat CT</p> <p><input type="checkbox"/> Consider activating transport</p>	<p>Assess the following:</p> <p><input type="checkbox"/> BP _____ mm/hg</p> <p><input type="checkbox"/> Pulse _____ bpm</p> <p><input type="checkbox"/> O2 Saturation _____ %</p> <p><input type="checkbox"/> Bedside Glucose _____ mg/dL (Do not repeat if completed by EMS. Treat if &lt;60)</p> <p><input type="checkbox"/> VS q 15 min with neuro checks</p> <p><input type="checkbox"/> Continuous cardiac monitoring</p> <p><input type="checkbox"/> NIHSS on arrival _____</p>	<p><input type="checkbox"/> O2 to keep SATS &gt;94% (do not administer O2 if patient non-hypoxic)</p> <p><input type="checkbox"/> Keep NPO (including meds and ice chips)</p> <p><input type="checkbox"/> Establish 1-2 large bore IVs</p> <p><input type="checkbox"/> Normal Saline 0.9% TKO</p> <p><b>*Do not delay CT scan for any of the preceding</b></p>
<b>15-45 minutes</b>	<p><input type="checkbox"/> CT Scan head w/o contrast (Door to CT scan goal &lt;25 minutes)</p> <p><input type="checkbox"/> Request stat read of CT scan</p> <p><input type="checkbox"/> Stroke Panel: CBC, Platelets, PT-INR, PTT, BMP, Troponin</p> <p><input type="checkbox"/> Serum pregnancy test for females of childbearing age</p> <p><input type="checkbox"/> 12L ECG if time allows</p> <p><input type="checkbox"/> Weight _____ kg</p>	<p>CT Scan Results: (Door to CT scan results goal &lt;45 minutes)</p> <p><input type="checkbox"/> No acute findings</p> <p><input type="checkbox"/> New Ischemic Stroke</p> <p><input type="checkbox"/> Hemorrhage</p> <p><input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> Consult with accepting neurologist once CT scan results obtained. Send images if able.</p> <p><input type="checkbox"/> Arrange transport plans if not already done</p>	<p><input type="checkbox"/> If CT is negative for hemorrhage or other acute findings, complete Thrombolytic Alteplase (tPA) Therapy Guidelines checklist to determine IV Alteplase eligibility</p> <p><input type="checkbox"/> If patient is ruled ineligible for IV Alteplase due to BP &gt;185/110, refer to BP Management section below.</p>
<b>45-60 minutes</b>	<p><b>IV Alteplase Eligible Ischemic Stroke Patient</b></p> <p><input type="checkbox"/> IV Alteplase 0.9 mg/kg (max dose 90 mg) Total IV Alteplase. Total Dose _____ mg</p> <p><input type="checkbox"/> 10% total IV Alteplase dose as bolus over one minute. Bolus Dose _____ mg Time of bolus _____</p> <p><input type="checkbox"/> Remainder of IV Alteplase over 60 minutes Rate of infusion _____ ml/hr</p> <p><input type="checkbox"/> Follow IV Alteplase with 50 ml Normal Saline 0.9% at same rate as IV Alteplase infusion</p> <p><input type="checkbox"/> VS and neuro checks q 15 min during infusion, then q 15 min x 2 hr, q 30 min x 6 hr, then hourly until 24 hours after treatment</p> <p><input type="checkbox"/> If BP &gt; 180/105, refer to BP Management section below</p> <p><input type="checkbox"/> Repeat head CT if neuro status declines</p> <p><input type="checkbox"/> If symptom onset &lt;24 hours, screen for large vessel occlusion (see right)</p> <p><input type="checkbox"/> No anticoagulant/antiplatelet for 24 hours</p> <p><input type="checkbox"/> NIHSS post infusion _____</p>	<p><b>Non-IV Alteplase Eligible Ischemic Stroke Patient</b></p> <p><input type="checkbox"/> ASA 300 mg PR</p> <p><input type="checkbox"/> If BP &gt;220/120, consult with accepting neurologist regarding possible BP management</p> <p><input type="checkbox"/> If symptom onset &lt;24 hours, screen for one or more of the following criteria indicating a possible large vessel occlusion (LVO):</p> <p><input type="checkbox"/> NIHSS &gt;6 Score _____</p> <p><input type="checkbox"/> FAST ED &gt;4 Score _____</p> <p><input type="checkbox"/> Signs of cortical stroke: confusion, aphasia, neglect, visual field changes, head or gaze deviation</p> <p><input type="checkbox"/> If symptom onset is &gt;24 hours consult neurologist regarding possible treatment options</p>	<p><b>Hemorrhagic Stroke Patient</b></p> <p><input type="checkbox"/> If SBP between 150-220 administer medications as listed in BP management section below to achieve BP &lt;140/90.</p> <p><input type="checkbox"/> If SBP &gt;220 mmHg, consult neurologist regarding BP management.</p> <p><input type="checkbox"/> If patient is on oral anticoagulant, follow local ED protocol regarding use of reversal agents</p> <p><input type="checkbox"/> Elevate HOB 30 degrees</p> <p><input type="checkbox"/> Discuss possible anti-seizure and ICP lowering measures with consulting neurologist</p>
<b>BP Management</b>	<p><b>If ischemic stroke patient is ruled ineligible for IV Alteplase due to BP &gt;185/110, lower to acceptable range (SBP 140-180) with agents below. For hemorrhagic stroke, lower SBP to &lt;140 with agents below.</b></p> <p><input type="checkbox"/> Labetalol 10-20 mg IV over 1-2 minutes, may repeat x 1 <b>OR</b></p> <p><input type="checkbox"/> Nicardipine infusion: 5 mg/hr, titrate up by 2.5 mg/hr at 5-15 min intervals, max dose 15 mg/hr <b>OR</b></p> <p><input type="checkbox"/> Consider other agents (hydralazine, enalapril, clevidipine) when appropriate. AVOID NITRATES.</p>	<p><b>If BP &gt; 180/105 during and within 24 hours after treatment with Alteplase, administer the following:</b></p> <p><input type="checkbox"/> Labetalol 10 mg IV followed by continuous IV infusion 2-8 mg/min <b>OR</b></p> <p><input type="checkbox"/> Nicardipine 5 mg/hr IV, titrate up to desired effect by 2.5 mg/hr q 5-15 min, max 15 mg/hr</p>	
<b>Disposition</b>	<p><input type="checkbox"/> Transfer patient to Primary Stroke Center or thrombectomy certified center: Primary Plus Stroke Center, Thrombectomy Capable Stroke Center or Comprehensive Stroke Center as soon as EMS team is available</p> <p><input type="checkbox"/> If patient meets hemorrhagic or LVO criteria, consult neurologist regarding most appropriate transfer destination.</p>	<p>Report the following to accepting hospital staff:</p> <p><input type="checkbox"/> H&amp;P, Last Known Well, Medications, Lab results</p> <p><input type="checkbox"/> NIHSS at Discharge _____</p> <p>Contact name: _____</p> <p>Cell #: _____</p>	