Guidelines for Management of Hypertension In Acute Ischemic Stroke

- If the patient is otherwise considered eligible for treatment with IV t-PA, & SBP >180 mm Hg or DBP >105 mm Hg:
 - Start treatment to decrease BP with one of the following before starting t-PA:
 - o **labetalol** 10 20 mg IV over 1-2 minutes; may repeat once **OR**
 - o **nicardipine** infusion at 5 mg/h,
 - titrate up to 2.5 mg/h at 5 to 15 minute intervals
 - maximum dose 15 mg/h;
 - when desired blood pressure is attained, reduce to 3 mg/h.
 - If SBP remains >180 mm Hg or DBP remains > 105 mm Hg Do not administer IV t-PA

➤ Management of Blood Pressure During and After Treatment With IV t-PA

- o Monitor BP:
 - every 15 minutes during t-PA infusion and for 2 hours after infusion
 - then every 30 minutes for 6 hours
 - then every hour for 16 hours
- o Treat elevated BP as follows:
 - If SBP is between 180 230 mm Hg or DBP is between 105 120 mm Hg, give:
 - **Labetalol** 10 mg IV over 1-2 minutes; may repeat every 10 -20 minutes up to maximum dose of 300 mg

OR

- **Labetalol** 10 mg IV over 1 2 minutes x 1; followed by labetalol infusion (1 mg/1 mL) at 2 to 8 mg/min
- If SBP > 230 mm Hg or DBP > 121 140 mm Hg, give
 - **Labetalol** 10 mg IV over 1-2 minutes; may repeat every 10 20 minutes up to maximum dose of 300 mg

OR

• **Labetalol** 10 mg IV over 1 - 2 minutes x 1; followed by labetalol infusion (1 mg/1 mL) at 2 to 8 mg/min

OR

- **Nicardipine** infusion at 5 mg/h
 - o titrate up to desired effect by increasing 2.5 mg/h every 5 minutes to
 - o maximum dose of 15 mg/h

OR

- If blood pressure is not controlled, consider sodium nitroprusside
- Maintain SBP <180 mm Hg and DBP <105 mm Hg

Adams HP Jr, del Zoppo G, Alberts MJ, et al, Guidelines for the early management of adults with ischemic stroke: a guideline from the American Heart Association/American Stroke Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research interdisciplinary Working Groups: The American Academy of Neurology affirms the value of this guideline as an educational tool for neurologists [published errata appears in Stroke 2007;38(6):e38 and Stroke 2007;38(9):e96]. Stroke 2007;38(6):1655-1711.