Top Ten Things to Know
An Update on Radial Artery Access and Best Practices for Transradial Coronary Angiography and Intervention in Acute Coronary Syndrome

1. There is increasing evidence from both observational and randomized clinical trials that using a transradial artery access (TRA) approach versus a transfemoral artery access (TFA) approach in percutaneous coronary artery intervention (PCI) has many advantages.

2. The purpose of this scientific statement is to examine the advantages of TRA compared to TFA in the setting in PCI and particularly in acute coronary syndrome (ACS).

3. This statement reviews bleeding and vascular access complications and mortality related to the two access approaches.

4. Specific issues about TRA in ACS are also reviewed, including reperfusion time and procedural success, access site crossover, contrast volume, and radiation exposure.

5. The use of TRA in this patient population compared to TFA shows that TRA is associated with improved quality of life, reduced healthcare resources use and reduced healthcare costs.

6. Several comfort measures as best practices are reviewed, including the administration of local anesthesia, mild to moderate sedation, and a warm environment to reduce patient anxiety, discomfort and radial artery spasm.

7. Radial artery occlusion (RAO) is a common complication of radial access. Maintenance of patent hemostasis (MOPH) using procedural anticoagulation in combination with other best practices is critical to preventing RAO.

8. Nursing best practices are discussed in this statement. Goals include patient comfort measures, monitoring of distal pulses and skin temperature and color.

9. Operator proficiency, TRA technique including patient selection, preprocedural assessment of the patient, and access techniques are other considerations discussed in this scientific statement.

10. A “radial-first” approach is considered a best practice in all patients, but a graduated level of center and operator experience is recommended before TRA is pursued in patients with ACS.