1. SCAD is an important cause of Acute Coronary Syndrome in otherwise healthy young and middle-aged persons, particularly women without traditional cardiovascular risk factors. It is frequently underdiagnosed or misdiagnosed and can potentially result in substantial morbidity and mortality.

2. Patients with SCAD are an already high-risk group for psychological morbidity. Among all patients with prior MI, younger women are at high risk for post-MI chest pain syndromes compared with men and older women. They experience short- and long-term outcomes, angina, psychosocial risk factors including depression, anxiety, and posttraumatic stress disorder, increased prevalence of stress or depression at the time of MI, more caregiving responsibilities, lower health-related quality of life, and reduced physical and mental functioning after discharge. Current guidelines recommend formal screening for depression and anxiety after MI, but younger and female patients often do not receive these services.

3. Given the concerns for possible recurrent SCAD on re-exposure to the physical, hormonal, and potentially emotionally stressful conditions present during pregnancy and the postpartum period and the current lack of secondary prevention strategies, many clinicians recommend against subsequent pregnancy in women after SCAD, although there are few data to support this potentially life-changing recommendation. Included in the consideration are risks associated with medication use, functional status, and concomitant myocardial or valvular dysfunction.

4. Many female patients with SCAD are faced with decisions about management of menopause and postmenopausal hormone therapy (HT). Compared with oral and transdermal hormonal contraceptives, postmenopausal HT formulations have substantially lower levels of estrogen and progesterone and have a lower risk of thrombosis, but concerns include the uncertain effects of HT on SCAD incidence and recurrence and the absence of safety data available to guide initiation or continuation of HT specific to SCAD. As such, it is necessary to individualize recommendations using relevant consensus statements, guidelines.

5. Once systemic arteriopathy is diagnosed or an extra-coronary dissection or aneurysm is identified that requires longitudinal follow-up, subsequent use of alternative imaging methods that do not expose the patient to ionizing radiation. Particular efforts should be made to limit both patient and offspring radiation and contrast-agent exposure in pregnant or lactating patients with SCAD, in whom non-emergency imaging should be deferred.

6. The yield from routine genetic testing in patients with SCAD, especially among those without a suggestive personal or family history or physical examination of an inherited systemic arteriopathy or connective tissue disorder, has been shown to be low, and, in the absence of a suggestive history or physical examination, routine genetic testing after SCAD is not currently advised. Similarly, in patients with fibromuscular dysplasia screening for variants in known arteriopathy-causing genes also seems to be of low yield. However, given SCAD’s known association with several inherited arteriopathies, referral to a specialist in medical genetics for further evaluation should be considered to aid in decision making regarding formal genetic assessment.
7. The ultimate goal of acute and chronic medical therapy of SCAD is to alleviate symptoms, improve short- and long-term outcomes, and prevent recurrent SCAD. Unfortunately, there is a substantial gap in evidence to guide clinicians in this regard because of the relatively recent recognition of SCAD as an important clinical entity and the absence of identified cellular and molecular targets or randomized controlled trials to support an evidence-based approach. This scientific statement attempts to outline anticoagulation therapy, β-blockers, angiotensin-converting enzyme inhibitors and angiotensin receptor blockers, statins, antianginal therapy for patients with SCAD.

8. This scientific statement has classified research priorities into the areas of epidemiology, etiology, diagnosis, and treatment, each with key questions intended to spur collaborative research and advances in treatment for this disease. SCAD is an important cause of MI, particularly in young women.

9. The well-recognized sex bias in pursuing cardiac investigations in young women presenting with chest pain together with known challenges in diagnosing SCAD even when investigations are undertaken may serve to underestimate recurrence risk. Future larger-scale prospective and epidemiologic studies will help further our understanding of the demographic, treatment, and anatomical factors associated with recurrence and allow for more accurate prediction and ultimate prevention of recurrent SCAD.

10. Despite increased recognition of the condition by the medical community and patients, large gaps in knowledge must be addressed to provide the best outcomes. It should be acknowledged that only recently have there been even limited prospective studies and most available data are retrospective and observational. Future larger-scale prospective and epidemiologic studies will help further our understanding of the demographic, treatment, and anatomical factors associated with recurrence and allow for more accurate prediction and ultimate prevention of recurrent SCAD.