1. Cardiovascular disease (CVD) and breast cancer are significant causes of morbidity and mortality in the US with CVD afflicting ~47.8 million women and breast cancer afflicting ~3.32 million women.

2. Although cardiology and oncology are often considered separate medical fields, they are closely connected in many ways. Much of the intersection between CVD and breast cancer in women pertains to similarities in predisposition of risk factors such as age, tobacco use, diet, obesity, and sedentary lifestyle. Aggressive management of these cardiovascular risk factors can substantially reduce the lifetime risk of developing cancer. In older women diagnosed with breast cancer, CVD is the leading cause of mortality.

3. This scientific statement provides a comprehensive overview of the prevalence of CVD and breast cancer, shared risk factors, cardiotoxic effects of therapy, as well as the prevention and treatment of CVD in breast cancer patients.

4. Cancer outcomes can be influenced by cardiovascular health: antecedent cardiovascular health can affect cancer treatment selection. Cancer care can result in cardiovascular toxicities that could impact ongoing cancer treatment. In addition, cancer survivors can develop latent cardiovascular effects, secondary to cancer treatment, which can include chemotherapy, radiotherapy, and targeted therapy (e.g. treatment with trastuzumab).

5. Cancer chemotherapy could result in early or delayed cardiotoxicity that can vary from LV dysfunction to heart failure, hypertension, arrhythmias, myocardial ischemia, valvular disease, thromboembolic disease, pulmonary hypertension, and pericarditis. Several chemotherapeutic agents can also prolong QT intervals. The most commonly reported and monitored side effect of cancer treatment is LV systolic dysfunction.

6. In older women diagnosed with breast cancer, CVD is the leading cause of mortality. In this population, the identification and management of cardiovascular risk factors are more important because CVD, if not recognized early, can pose a greater risk than the cancer itself.

7. It is reasonable to consider long-term cardiac imaging surveillance and monitoring those with preexisting and ongoing CVD and those at risk for late cardiotoxicity. This should be a clinical decision (considering the history and physical examination), with the risks and benefits of further testing to be weighted by the clinician.

8. This scientific statement reviews CVD medications (angiotensin converting enzyme inhibitors or angiotensin receptor blockers, beta blockers, aspirin, statins) that could be used from a preventive standpoint for CVD or breast cancer. Oncologic strategies to mitigate the impact of cancer treatments on cardiovascular health could include use of dexrazoxane, doxorubicin via infusion and newer radiation therapies.

9. With the evolving intersection of the cardiovascular and oncologic fields, comprehensive care is an essential element in the management of cancer patients to maximize gains in cancer treatment, while minimizing the potential deleterious impact on cardiovascular health.

10. Breast cancer treatment options can be impacted by CVD risk factors and precedent CVD. Therefore, during breast cancer treatment, surveillance, prevention, and secondary management of cardiotoxicity are crucial. Post-treatment long-term monitoring is useful for identifying late cardiotoxicity.

Mehta LS, Watson KE, Barac A, Beckie TM, Bittner V, Cruz-Flores S, et al; on behalf of the American Heart Association Cardiovascular Disease in Women and Special Populations Committee of the Council on Clinical Cardiology; Council on Cardiovascular and Stroke Nursing; and Council on Quality of Care and Outcomes Research. Cardiovascular disease and breast cancer: where these entities intersect: a scientific statement from the American Heart Association [published online ahead of print February 1, 2018]. Circulation. DOI: 10.1161/CIR.0000000000000556.