The UW Medicine Regional Heart Center Cardio-Oncology Clinic provides care to patients in all stages of cancer treatment who have or are at increased risk for heart disease. The clinic incorporates a multidisciplinary team of doctors and advanced providers to minimize cardiotoxicity during cancer treatment and reduce cardiovascular risk in cancer survivors.

**Why is this important?**

Based on current estimates, 13.7 million patients in the United States have a history of cancer (either in remission or undergoing treatment), and approximately 1.7 million new cases are diagnosed annually. Owing to significant progress in diagnostic and treatment capabilities over the past few decades, a sizable proportion of these individuals have a good chance of long-term survival. Cancer can be viewed as a chronic manageable disease similar to diabetes or hypertension. It requires not only early detection, periodic surveillance, and appropriate therapy, but optimal management of comorbid conditions.

**What is cardio-oncology?**

Cardio-Oncology has emerged as a unique interface between the fields of oncology and cardiology. Cardiovascular events are increasingly being recognized as major sources of morbidity and mortality in cancer survivors, either from direct cardiotoxicity of chemotherapeutic agents or the presence of underlying concomitant cardiovascular conditions. Cancer can impact the cardiovascular system in numerous ways ranging from direct invasion of cardiac structures from primary or metastatic tumors of the heart, to increased physiological stress for patients with established cardiac disease, to acute or delayed cardiotoxicity of chemotherapy or radiation.
What patients should be referred to our clinic?

- Patients with a significant cardiovascular history who need to undergo cancer treatment
- Patients who present with heart failure following traditional treatments associated with cardiac dysfunction including anthracyclines, radiation, and newer agents such as kinase inhibitors (herceptin, imatinib, etc.)
- Patients who had cancer treatment in the past and develop new-onset cardiac problems
- Patients with a history of radiation therapy and who need surgical or interventional treatments

What imaging studies are available?

A full range of imaging techniques and diagnostic studies are available. Our expertise in cardiac imaging enables us to ensure that patients obtain appropriate testing personalized to their cardiac risk assessment. The available tests include:

- Echocardiography including 3D for measurement of LVEF and strain
- Cardiac MRI with gadolinium and T1 mapping
- Cardiac CT angiography with coronary calcium score
- Carotid IMT and vascular studies
- Cardiac MUGA for determination of RV and LV function
- Cardiac SPECT for evaluation of ischemia
- Cardiac PET for inflammation, ischemia, and estimation of coronary flow reserve

What treatment strategies are offered?

- Early detection of cardiotoxicity from chemotherapy
- Cardiac risk evaluation prior to chemotherapy and stem cell transplantation
- Appropriate and optimal guideline-directed therapy for all patients
- Consideration for ongoing clinical trials on a case-by-case basis if desired
- Longitudinal follow-up as cardiac side effects can occur up to years after treatment
- Advanced imaging and treatment for patients with valvular heart disease, coronary artery disease, and pericardial disease from exposure to radiation
- Consideration for advanced heart failure therapies for patients who progress to end-stage heart failure

What should the patient and referring provider expect from the Cardio-Oncology clinic?

The Cardio-Oncology clinic aims to provide state-of-the-art diagnostic capabilities and testing, interpretation of results, and formalized recommendations for optimal treatment, surveillance and follow-up for the full spectrum of cardiac disease in cancer patients.

Where is the clinic located?

The clinic is located at the Regional Heart Center on the main (3rd) floor of the University of Washington Medical Center. The address is 1959 N.E. Pacific Street, Seattle, WA 98195.

Who are the providers?

Richard Cheng, MD
Daniel Fishbein, MD
Carolina Masri, MD
James Kirkpatrick, MD (cardiac imaging)