

**Table 1**

Cancer agents associated with cardiotoxicity.

CANCER THERAPY	DRUG	CARDIOTOXICITY	MECHANISM OF CARDIOTOXICITY	SCREENING
Anthracycline	Doxorubicin	LVD, HF	Impaired protein synthesis, formation of reactive oxygen species, inhibition of DNA repair	2D-Echo, Strain <sup>+</sup> , Biomarkers (troponin, BNP)
	Daunorubicin			
	Idarubicin			
Monoclonal antibodies	Trastuzumab	LVD, HF HTN, LVD, HF	Inhibition or ErbB2 pathway inhibits VEGF	2d-Echo, Strain <sup>+</sup> , Biomarkers (troponin, BNP)
	Bevacizumab			
Antimetabolites	5-Fluorouracil	Arrhythmia, Ischemia	Coronary vasospasm	EKG
Microtubule-targeting agents	Paclitaxel	Arrhythmia, LVD, HF	Impaired microtubule function, impaired cell division	EKG, 2D-Echo
	Docetaxel			
Proteosome inhibitors	Bortezomib	LVD, HF	Interference with cell cycle degradation proteins	2D-Echo
Alkylating agents	Cyclophosphamide	Pericarditis, LVD, HF	ROS production	2D-Echo
Small Tyrosine kinase Inhibitors	Sunitinib	HTN, QT prolongation,	Impaired cell signal transduction, cell cycle regulation, metabolism and transcription	2D-Echo, EKG
	Imatinib	LVD, HF		
	Sorafenib	LVD, HF		
	Lapatinib	Ischemia, HTN QT prolongation, LVD, HF		
Radiation		Accelerated atherosclerosis, pericarditis, HF, valvular dysfunction	Microvascular injury, macrovascular injury, valve endothelial injury and dysfunction	2D-Echo, EKG, long-term surveillance

**Note:**

\*Obtain when available.

**Abbreviations:** BNP, brain natriuretic peptide; HTN, hypertension; LVD, left ventricular dysfunction; VEGF, vascular endothelial growth factor; HF, heart failure; ROS, reactive oxygen species.