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**Table 1**

Cancer agents associated with cardiotoxicity.

CANCER THERAPY	DRUG	CARDIOTOXICITY	MECHANISM OF CARDIOTOXICITY	SCREENING
Anthracycline	Doxorubicin Daunorubicin Idarubicin	LVD, HF	Impaired protein synthesis, formation of reactive oxygen species, inhibition of DNA repair	2D-Echo, Strain <sup>*</sup> , Biomarkers (troponin, BNP)
Monoclonal antibodies	Trastuzumab Bevacizumab	LVD, HF HTN, LVD, HF	Inhibition or ErbB2 pathway inhibits VEGF	2d-Echo, Strain <sup>*</sup> , Biomarkers (troponin, BNP)
Antimetabolites	5-Fluorouracil	Arrhythmia, Ischemia	Coronary vasospasm	EKG
Microtubule-targeting agents	Paclitaxel Docetaxel	Arrhythmia, LVD, HF	Impaired microtubule function, impaired cell division	EKG, 2D-Echo
Proteasome 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 Imatinib Sorafenib Lapatinib	HTN, QT prolongation, LVD, HF LVD, HF LVD, HF Ischemia, HTN QT prolongation, LVD, HF	Impaired cell signal transduction, cell cycle regulation, metabolism and transcription	2D-Echo, EKG
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.