

Supplementary Table 1: Class I recommendations for cardiovascular screening during treatment and the first 12 months after treatment with different cancer therapies

Cancer treatment	Recommendations during treatment and the first 12 months after treatment
Anthracycline chemotherapy e.g., doxorubicin, epirubicin, idrubicin	<ul style="list-style-type: none"> • Baseline TTE in all patients (IB) • TTE within 12 months after completing treatment (IB) • In high and very high-risk patients, TTE every two cycles and within 3 months of finishing treatment (IC) • Baseline NP and cTn in high and very high-risk patients before chemotherapy (IB) • In high and very high-risk patients, cTn and NP before every cycle and 3 and 12 months after treatment completion (IB)
HER2-targeted therapies e.g., trastuzumab, pertuzumab, neratinib	<ul style="list-style-type: none"> • Baseline TTE in all patients (IB) • Where HER2-targeted treatment is used in the adjuvant and neo-adjuvant setting, TTE is recommended every 3 months during treatment and once with 12 months of completing treatment (IB) • With metastatic disease, TTE is recommended every 3 months in the first year and if the patient remains without CV toxicity the frequency can reduce to every 6 months (IC) • Pre-treatment baseline NP and cTn measurements are recommended in high and very high-risk patients (IC)
Fluoropyrimidines e.g., 5-Fluorouracil, capecitabine	<ul style="list-style-type: none"> • A pre-treatment baseline evaluation should be conducted including BP measurement, ECG, lipids, HbA1c and SCORE2 or SCORE2-OP (IC) • Baseline TTE in patients with symptomatic CV disease (IC)

<p>VEGFi's - intravenous MAb's e.g., bevacizumab and oral TKI's e.g., sorafenib</p>	<ul style="list-style-type: none"> • BP should be measured at every clinical visit for patients given VEGFi, bevacizumab, or ramucirumab (IC) • Daily home monitoring of BP during the first cycle of VEGFi or after any dose increase, and every 2-3 weeks afterwards (IC) • Patients with moderate to high risk of QTc prolongation treated with VEGFi should have monthly QTc monitoring for 3 months then QTc monitoring every 3-6 months (IC) • Baseline TTE in patients treated with VEGFi or bevacizumab at high and very high risk of cardiotoxicity (IC)
<p>Multi-targeted kinase inhibitors targeting BCR-ABL TKI's - recommendations for 2nd generation e.g., nilotinib and 3rd generation e.g., ponatinib TKI's</p>	<ul style="list-style-type: none"> • Baseline CV risk assessment (IC) • With nilotinib or ponatinib treatment, CV risk assessment every 3 months during first year then every 6-12 months (IC) • Baseline TTE in patients due to receive dasatinib (IC)
<p>Bruton tyrosine kinase inhibitors e.g., ibrutinib</p>	<ul style="list-style-type: none"> • BP measurement at every clinical visit (IB) • Baseline TTE in high-risk patients before treatment (IC) • TTE in all patients who develop AF on treatment (IC) • Opportunistic AF screening at every clinical visit by pulse-taking or ECG rhythm strip while on treatment (IC)
<p>Multiple myeloma treatment including alkylating agents e.g., cyclophosphamide, immunomodulatory drugs e.g.,</p>	<ul style="list-style-type: none"> • BP measurement at every clinical visit for patients treated with PI (IC) • NP measurement before treatment with PI in high and very high-risk patients (IC) • NP and cTn measurement at baseline and every 3-6 months in patients with amyloid light chain cardiac amyloidosis (IB)

<p>lenalidomide, PI's e.g., bortezomib and MAb's e.g., daratumumab</p>	<ul style="list-style-type: none"> • Baseline TTE for multiple myeloma patients prior to PI (IC) • Therapeutic dose LWMH in multiple myeloma patients with prior VTE (IB) • Prophylactic LMWH in multiple myeloma patients with VTE risk factors for at least the first 6 months of therapy (IA)
<p>RAF inhibitors e.g., dabrafenib and MEK inhibitors e.g., binimetinib</p>	<ul style="list-style-type: none"> • BP monitoring each clinic visit, weekly outpatient monitoring for first 3 months and monthly thereafter (IC) • For cobimetinib/vemurafenib, ECG monitoring at 2 and 4 weeks after initiation and every 3 months onwards (IC) • Baseline TTE in high and very high-risk patients due to receive combined RAF and MEK inhibitors (IC)
<p>Immune checkpoint inhibitors with MAb's targeting CTLA-4 e.g., ipilimumab, PD-1 e.g., nivolumab, and PD-L1 e.g., atezolizumab</p>	<ul style="list-style-type: none"> • Baseline ECG, NP and cTn before treatment (IB) • Baseline TTE in high-risk patients before treatment (IB) • CV assessment every 6-12 months in high risk patients needing treatment >12 months (IC)
<p>Androgen deprivation therapies for prostate cancer including GnRH agonists e.g., goserelin, GnRH antagonists e.g., degarelix, 1st generation anti-androgens e.g., bicalutamide, 2nd generation anti-androgens e.g., enzalutamide, androgen metabolism inhibitors e.g., abiraterone</p>	<ul style="list-style-type: none"> • In patients without pre-existing CV disease, baseline risk assessment with SCORE2 or SCORE2-OP (IB) • Baseline and serial ECGs in those at risk of QTc prolongation during therapy (IB) • Annual CV risk assessment during therapy (IB)

<p>Endocrine therapies for breast cancer including SERM's e.g., tamoxifen and aromatase inhibitors e.g., letrozole</p>	<ul style="list-style-type: none"> • In patients without pre-existing CV disease, baseline risk assessment and estimation of 10-year risk of fatal and non-fatal events with SCORE2 or SCORE2-OP (IC) • Annual CV risk assessment during therapy for those with a high 10-year risk of fatal and non-fatal events (according to SCORE2 or SCORE2-OP score; IC)
<p>CDK 4/6 inhibitors e.g., palbociclib, ribociclib, abemaciclib</p>	<ul style="list-style-type: none"> • For patients on ribociclib, QTc monitoring at baseline, and day 14 and 28 of treatment (IA) • For patients on ribociclib, QTc monitoring with any dose increase (IB)
<p>ALK inhibitors e.g., crizotinib and epidermal growth factor receptor inhibitors e.g., osimertinib</p>	<ul style="list-style-type: none"> • Baseline CV risk assessment in all patients (IC) • Baseline TTE prior to treatment with osimertinib (IB)
<p>CAR-T and TIL therapies</p>	<ul style="list-style-type: none"> • Baseline ECG, NP, and cTn in all patients prior to treatment (IC) • Baseline TTE in patients with pre-existing CV disease prior to treatment (IC) • NP and cTn measurement alongside TTE in patients with CRS of American Society for Transplantation and Cellular Therapy grade ≥ 2 (IC)
<p>Radiotherapy to a volume including the heart</p>	<ul style="list-style-type: none"> • Baseline CV assessment and estimation of 10-year risk of fatal and non-fatal events with SCORE2 or SCORE2-OP (IB)
<p>HSCT (this incorporates a multi-factorial treatment with conditioning, which can include radiation, chemotherapy and immunosuppression in the case of allogeneic transplants)</p>	<ul style="list-style-type: none"> • Baseline and serial CV risk assessment (3 and 12 months, then every 12 months) with BP measurement, ECG, lipids and HbA1c (IC) • Echocardiography prior to HSCT in all patients (IC)

The level of evidence varies: level A, data from randomised controlled trials (RCTs) or meta-analysis; level B, data from a single RCT or large non-randomised studies; level C, expert consensus, small studies, retrospective studies or registry data. Abbreviations: TTE, trans-thoracic echocardiography; NP, natriuretic peptide; cTn, cardiac troponin; HER2, human epidermal receptor 2; CV, cardiovascular; BP, blood pressure; ECG, electro-cardiogram; HbA1c, glycated haemoglobin; SCORE2, Systematic Coronary Risk Estimation 2; SCORE2-OP, Systematic Coronary Risk Estimation 2-Older Persons; VEGFi, vascular endothelial growth factor inhibitor; MAb, monoclonal antibody; TKI, tyrosine kinase inhibitor; QTc, corrected QT interval; BCR-ABL, breakpoint cluster region-Abelson oncogene locus; AF, atrial fibrillation ; PI, proteasome inhibitor; LMWH, low molecular weight heparin; VTE, venous thromboembolism; RAF, rapidly accelerated fibrosarcoma; MEK, mitogen-activated extracellular signal-regulated kinase; CTLA-4, cytotoxic T-lymphocyte associated protein 4; PD-1, programmed cell death protein-1; PD-L1, programmed cell death ligand-1; GnRH, gonadotropin-releasing hormone; SERM, selective oestrogen receptor modulator; CDK 4/6, cyclin dependent kinase 4/6; ALK, anaplastic lymphoma kinase; CAR-T, chimeric antigen receptor T-cell; TIL, tumour-infiltrating lymphocyte; CRS, cytokine release syndrome; HSCT, haematopoietic stem cell transplantation. This table was adapted from recommendation tables 7 to 22 from ²¹ with permission from Oxford University Press.