

## Guidelines for Anthracycline Monitoring Thresholds

Anthracylines\* are associated with dose-related cardiotoxicty which can progress to reduced left ventricular ejection fraction (LVEF) or heart failure. Cumulative doses should take into account all previous anthracyclines received during a patient's lifetime.

When the **monitoring threshold** is reached, a cardiac assessment and/or consultation with an oncologist should be considered before continuing treatment (see Table below). If available, follow the monitoring threshold quoted in the affected treatment protocol being used. The protocol or drug monograph may also suggest a lifetime **maximum cumulative dose** for each drug. However, these are variable and depend on patient specific characteristics and risk factors with some patients tolerating much higher doses than others.

Further information regarding the risk, prevention and treatment of cardiotoxicity from the medications listed below can be found in their individual Drug Monographs [Cancer Drug Manual – <u>Drug Index</u>]. Also see the Pharmacy FAQ - <u>Anthracycline and Bleomycin</u> <u>Cumulative Doses</u> for information on BC Cancer cumulative dose documentation practices, and Pharmacy FAQ – <u>Dexrazoxane</u> for information about a cardioprotectant that is sometimes added to regimens after reaching a cumulative doxorubicin dose of 300 mg/m<sup>2</sup>.

Agent	Suggested Monitoring
	Threshold
DAUNOrubicin	450 mg/m <sup>2</sup>
DOXOrubicin	300 mg/m <sup>2</sup>
Epirubicin	600 mg/m <sup>2</sup>
IDArubicin	150 mg/m <sup>2</sup>
Mitoxantrone	140 mg/m <sup>2</sup>

## Suggested cardiac monitoring thresholds (in adult patients):

\* This information applies to anthracyclines, anthracenediones and mitoxantrone.