

# CITC Organ Toxicities Panel: Cardiac Toxicity

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# Impact of Drug-Associated Cardiac Toxicity

- Serious, life-threatening events
- Potential exposure of subjects/patients to unnecessary risk
- Withdrawal from market of several noncardiac drugs because of cardiac risk

<b>Clinical Presentation</b>	<b>Associated Drug</b>
<b>Ventricular arrhythmia (Torsade de Pointes)</b>	<b>Terfenadine</b>
<b>Valvular heart disease</b>	<b>Dexfenfluramine</b>
<b>Myocardial infarction</b>	<b>Rofecoxib</b>
<b>Pulmonary hypertension</b>	<b>Dexfenfluramine, amphetamine</b>
<b>Cardiomyopathy</b>	<b>Anthracyclines, trastuzumab</b>

# Signal detection/risk management

- Helpful to understand mechanism
- Best if detected early in development
- Strategies include:
  - nonclinical screening, risk biomarkers (detection)
  - dose and/or population selection, use of other medications to reduce risk (management)
- Emergence of “cardio-oncology” field