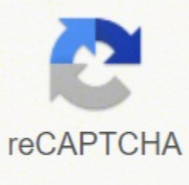




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Open

Current Guidelines in Cardio-Oncology

2016 ESC Position Paper on cancer treatments and cardiovascular toxicity developed under the auspices of the ESC Committee for Practice Guidelines  
The Task Force for cancer treatments and cardiovascular toxicity of the European Society of Cardiology (ESC)

Expert Consensus for Multimodality Imaging Evaluation of Adult Patients during and after Cancer Therapy: A Report from the American Society of Echocardiography and the European Association of Cardiovascular Imaging

# What is the optimal strategy?

## ACC/AHA Heart Failure guidelines (2013)

### Stage A: Recommendations (Class I, LOE C)

Conditions that may lead to or contribute to HF, such as ... cardiotoxic agents, should be controlled or avoided.

- "...it may be reasonable to evaluate those who are receiving (or who have received) cardiotoxic chemotherapy agents for LV dysfunction."
- "The use of advanced echocardiographic techniques or biomarkers to identify increased HF risk in those receiving may be useful ..."

Yancy, et al. *Circulation* 2013

## ESMO guidelines (2012)

- Patients receiving anthracyclines and/or trastuzumab in the adjuvant setting should perform serial monitoring of cardiac function at **baseline, 3, 6, and 9 months during treatment, and then at 12 and 18 months after the initiation of treatment.**
- Monitoring should be repeated during or following treatment as clinically indicated.

Curigliano, et al. *Ann Oncol* 2012

	Cohort	QTc Stratification by Group (msec)			p
		< 450	≥ 450 to 499	≥ 500	
<b>Overall</b>					
Baseline	n=71	73% (n=52)	23% (n=16)	4% (n=3)	p=0.75
On-Treatment	n=49	67% (n=33)	27% (n=13)	6% (n=3)	
<b>Pre- and On-Treatment Group</b>					
Baseline	n=35	80% (n=28)	20% (n=7)	0% (n=0)	p=0.34
On-Treatment	n=35	71% (n=25)	20% (n=7)	9% (n=3)	
<b>On-Treatment Group Only</b>					
First ECG	n=30	80% (n=24)	20% (n=6)	0% (n=0)	p=0.09
Longest QTc	n=30	56% (n=17)	33% (n=10)	10% (n=3)	

### WHO/ISH risk chart

<10%    10%–20%    >20%

### Total

### UKPDS engine

	<10%	10%–20%	>20%	Total
<b>&lt;10%</b>				
Count	1,221	39	14	1,274
Expected count	1,128.1	96.3	49.6	1,274.0
<b>10%–20%</b>				
Count	565	74	38	677
Expected count	599.5	51.2	26.4	677.0
<b>&gt;20%</b>				
Count	124	50	32	206
Expected count	182.4	15.6	8.0	206.0
<b>Total</b>				
Count	1,910	163	84	2,157
Expected count	1,910.0	163.0	84.0	2,157.0
	<b>Value</b>	<b>SE</b>	<b>Approx T<sup>b</sup></b>	<b>Approx sig</b>
Measure of agreement	0.144	0.014	11.236	0.000

# Primary Cardioprotection

Assessment & Optimization of risk +/- extent of CV Disease

Age

Co-morbid conditions (CAD, HTN, HLP)

Modifiable lifestyle risk factors (deconditioning, obesity)

### Primordial Prevention

Treat all high cardiac risk patients

#### Advantages

Minimize screening

#### Disadvantages

Treatment despite:

-Normal function

-Low (~5%) overall incidence of overt HF

### Primary Prevention

Screen for subclinical dysfunction (Imaging, blood biomarkers)

#### Advantages

Minimize unnecessary treatment

#### Disadvantages

Intensive / frequent screening

Optimal screening method uncertain

Potential delayed diagnosis / treatment

#### Advantages

Early intervention → Limit development of cardiotoxicity

#### Disadvantages

Duration of treatment uncertain

Áreas para seguir investigando Regímenes cardioprotectores Áptimos, incluyendo medicaciones específicas y selecci3n de pacientes, para prevenir la IC en pacientes sometidos a terapia oncol3gica. Diagnosis of asymptomatic LV dysfunction has been variably described: Classifications of asymptomatic LV dysfunction in trastuzumab clinical trials have included a drop in LVEF by more than 10 percentage points to less than 55%16 or to below the lower limit of normal, as well as any drop of 15 percentage points.17 Cancer Treatment Related Cardiac Dysfunction was defined in the 2014 imaging expert consensus statement as a drop of LVEF of 10% or more to a level

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