

# Cardiovascular risk factors and events in a district general Haematology population undergoing cytotoxic chemotherapy

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## Introduction:

There is increasing attention to the cardiovascular impact of cytotoxic chemotherapy. The European Society of Cardiology has defined the baseline risk factors for cardiotoxicity<sup>1</sup> alongside their position paper on Cardio-oncology. Within our district general haematology population the burden of these risk factors is unknown.

## Methods:

Retrospective analysis of 100 consecutive patients commenced on chemotherapy in the last year at Epsom & St Helier NHS Trust, London, UK. We reviewed the notes for pre-existing cardiovascular risk factors and disease. We followed them to assess for cardiovascular events.

## Results:

### Demographics:

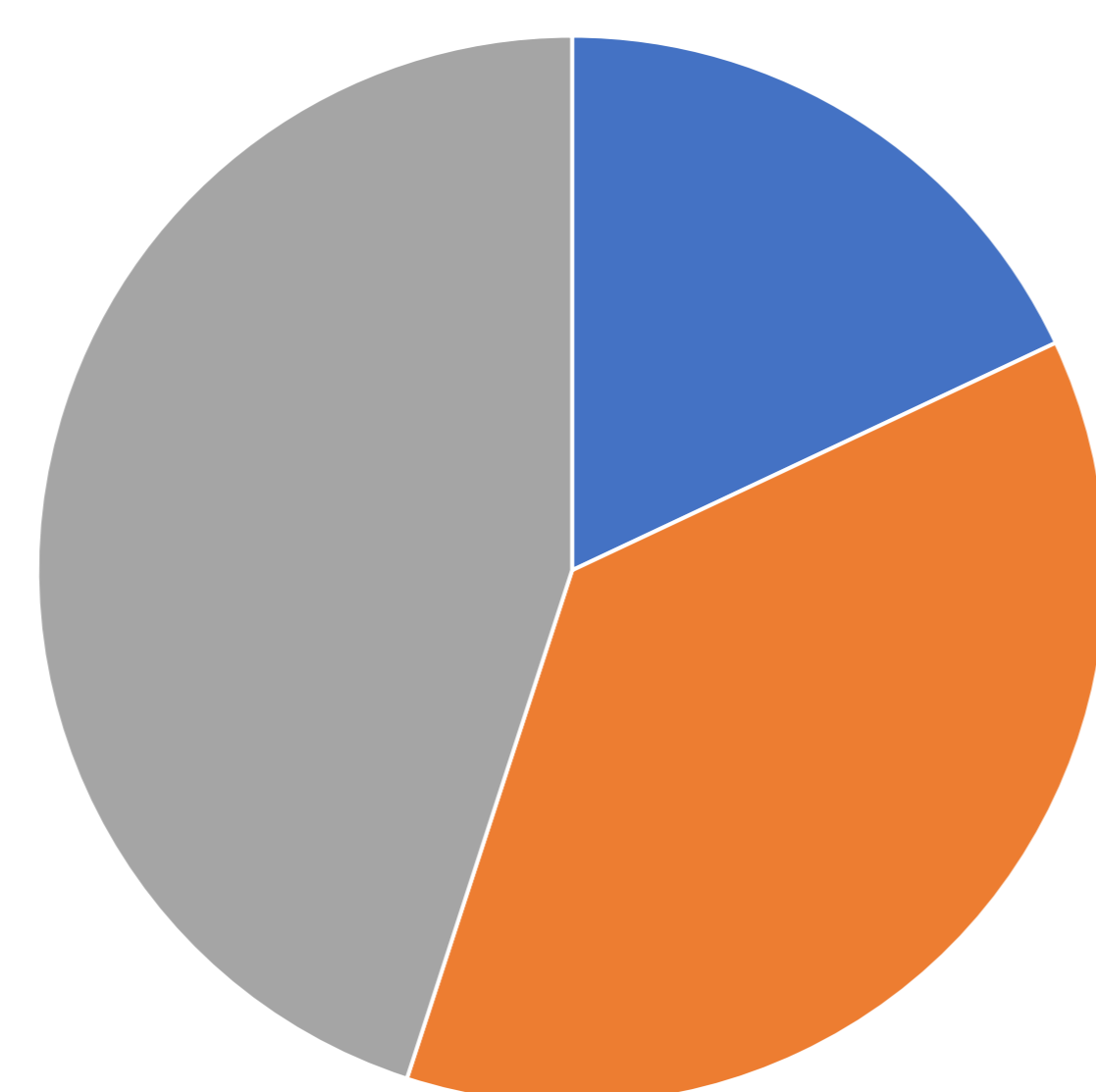
Median age (IQR):	73 (61-81)
Male sex:	60%
Caucasian ethnicity:	85%
Median follow up (days):	219 (31-339)

**Total cases: 100**

Myeloma: 45%

Leukaemia: 18%

Lymphoma: 37%



### Pre-existing cardiac disease:

Heart failure:	7%
Coronary artery disease:	16%
Atrial fibrillation:	12%
Ventricular tachycardia:	1%

## Conclusions:

There is a moderate burden of cardiac disease and risk factors in our population. Cardiovascular events are uncommon, but occur predictably in those with pre-existing disease and risk factors. Additional care should be taken in those patients when prescribing chemotherapy.

### Pre-existing Cardiovascular Risk Factors:

Hypertension: 50%

Hypercholesterolaemia: 45%

Diabetes: 28%

Active or ex-smoker: 43%

Excess alcohol intake: 8%

### Cardiovascular events during treatment:

New atrial fibrillation:	2%
Acute coronary syndrome:	1%
Acute heart failure:	3%
Non-specific chest pain:	2%
Total mortality:	15%
Cardiovascular mortality:	1%
Cardiovascular hospital admission:	4%

### Risk factor burden and cardiovascular events:

Patients that had cardiovascular events had significantly ( $P=0.01$ ) higher burden of pre-existing risk factors and cardiac disease.

#### Cardiovascular event:

Mean risk factors = 3.9

#### No Cardiovascular event:

Mean risk factors = 2.1

**P = 0.01**

1 -Cardiology ES of. ESC Summary Card for General Practice - Cardio-Oncology - Cancer Treatments and Cardiovascular Toxicity.; 2016. www.escardio.org/guidelines. Accessed August 3, 2019.