

# HEART TRANSPLANTATION IN CANCER SURVIVORS: TIME TO MIND THE DETAILS

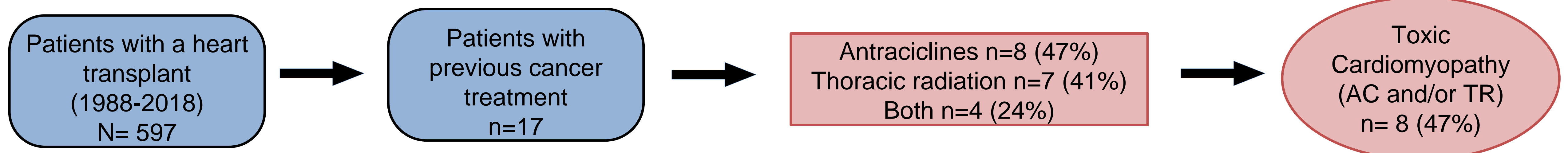
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## Introduction

Advances in oncology have increased survival, so the number of candidates for heart transplantation (HT) has raised in this population. The work-out for HT in these patients should be very conscious to ensure outcomes.

## Methods

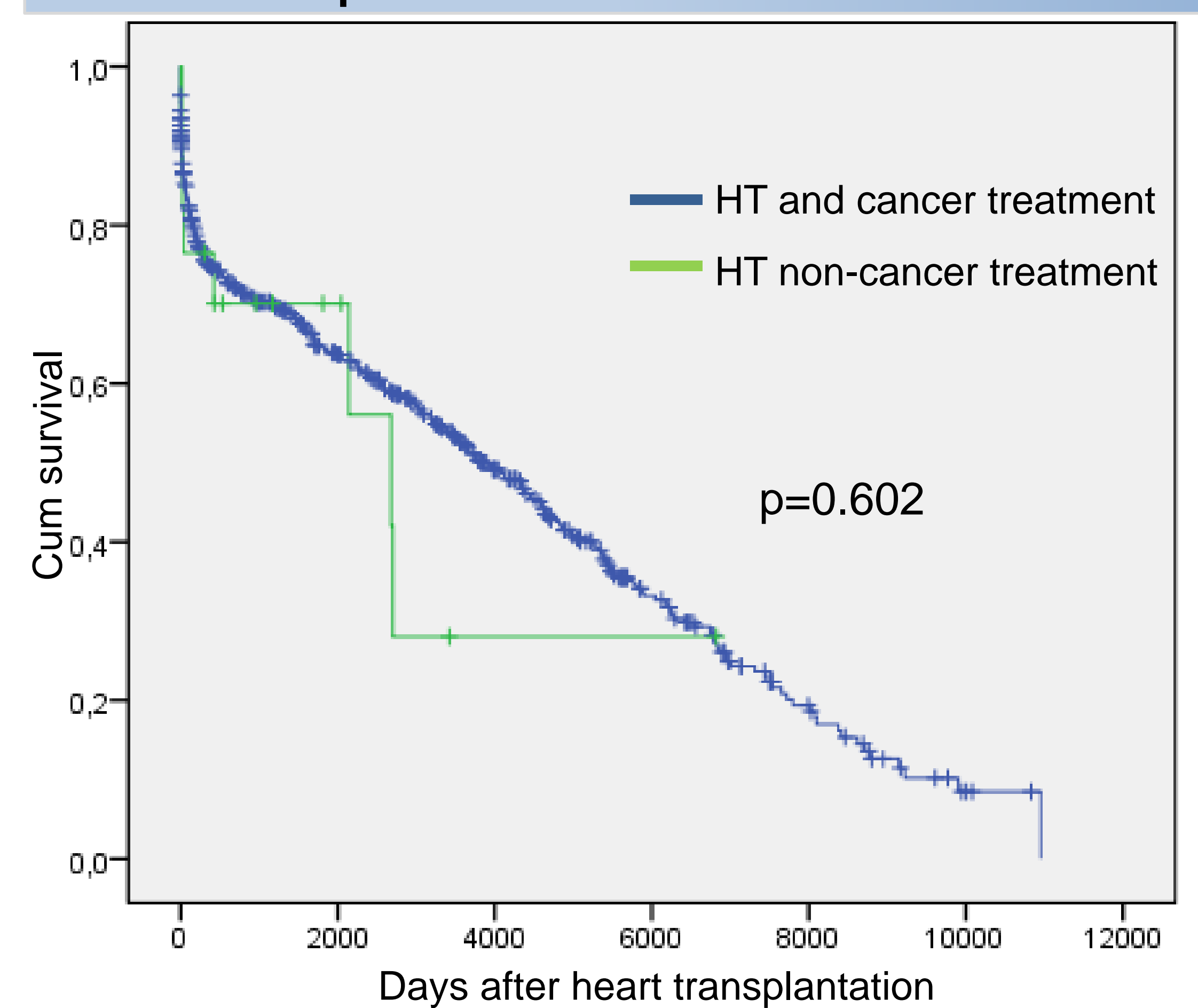


## Results

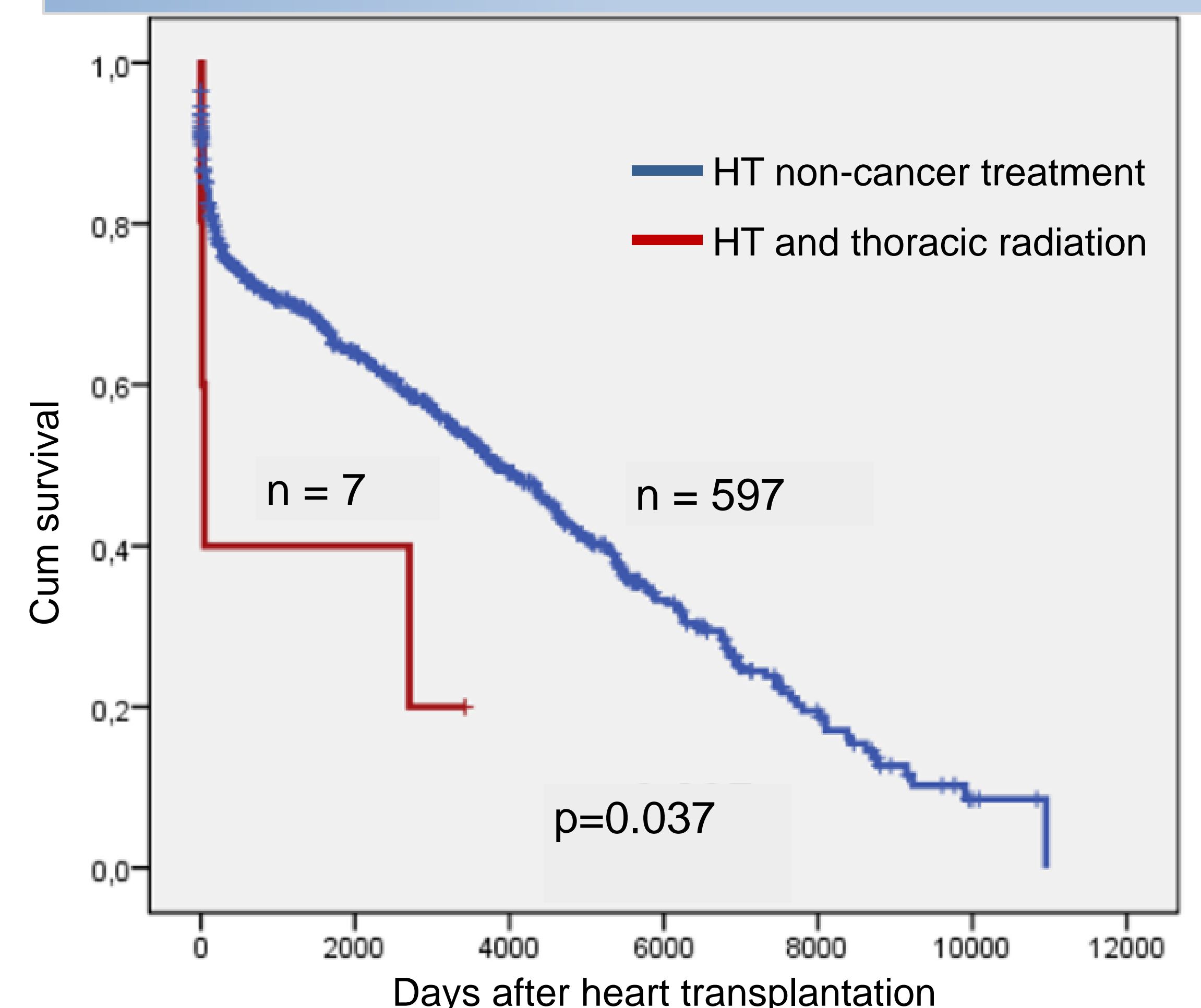
Basal characteristics	HT previous cancer N = 17	HT non-previous cancer N = 597	p
Age (years)	58 (27-69)	53 (15-73)	0,021
Female Gender (n,%)	7 (41)	124 (21)	0,07
Hypertension (n,%)	8 (47)	184 (32)	N.S
DM (n,%)	5 (29)	71 (12)	0,053
Hypercholesterolemia (n,%)	210 (37)	11 (64)	0,023
Periferic Artery Disease (n,%)	1 (6)	24 (4)	N.S
LVEF (%)	22 (10-35)	23 (5-70)	N.S
Receptor serology CMV+ (n,%)	13 (77)	476 (87)	N.S
Emergency status (n,%)	7 (41)	179 (31)	N.S
Ischaemia time (min)	260 (135-540)	197 (0-395)	0,001
Cardiopulmonary bypass (min)	193 (100-480)	137 (0-519)	0,0001
Mechanical ventilation (Hours)	149 (9-1080)	106 (1-1920)	N.S
Primary Graft Faillure (n,%)	6 (35)	174 (30)	N.S

Cancer survivors with HT characteristics		N = 17
Oncologic disease	<b>Haematologic (n, %)</b>	7 (41)
	•Hodgkin lymphoma	4 (28)
	•Non Hodgkin lymphoma	1 (6)
	•Promyelocytic leukemia	1 (6)
•Acute lymphocytic leukemia	1 (6)	
Breast (n, %)	5 (29)	
Colorectal (n, %)	2 (12)	
Prostate (n, %)	3 (18)	
Cardiomyopathy	<b>Toxic cardiomyopathy cancer treatment related (n, %)</b>	8 (47)
	•Antracyclines (n, %)	3 (18)
	•Thoracic radiation (n, %)	1 (6)
	•Antracyclines + Thoracic radiation (n, %)	4 (24)
Ischaemic (n, %)	6 (35)	
Valvular (n, %)	2 (12)	
Ischaemic and valvular (n, %)	1 (6)	
Cancer Treatment	Antracyclines alone (n, %)	4 (24)
	Thoracic radiation alone (n, %)	3 (18)
	Antracyclines + thoracic radiation (n, %)	4 (24)

Survival HT previous cancer treatment vs HT non-previous cancer treatment



Survival HT non-previous cancer treatment vs HT with thoracic radiation



## Conclusions

1. In our cohort, cancer survivors undergo heart transplantation mainly after haematologic or breast tumors.
2. Half of these cancer survivors received a heart transplantation because of a toxic cardiomyopathy.
3. Survival of patients with HT and previous cancer treatment is similar to those without history of cancer ( $p = 0.602$ ).
4. Survival in these patients may be specially affected by thoracic radiation.
5. Larger studies are needed to identify high-risk candidates for heart transplantation among cancer survivors.