



XXXII CONGRESSO NAZIONALE AIRO
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AIRO2022

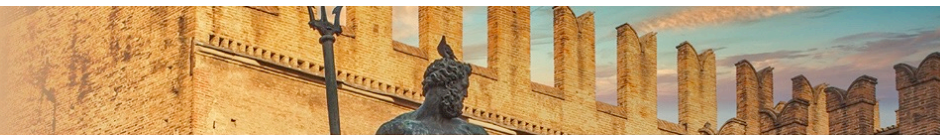
Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE
PALAZZO DEI CONGRESSI

ANALISI DEGLI EVENTI CARDIACI CLINICI E SUBCLINICI NEI PAZIENTI PEDIATRICI AFFETTI DA LINFOMA DI HODGKIN TRATTATI CON RADIOTERAPIA SUL MEDIASTINO: VALUTAZIONE DELLE DOSI CARDIACHE

Dott.ssa Ilenia Iamundo De Cumis

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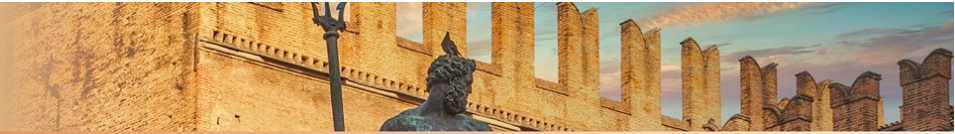


DICHIARAZIONE

Relatore: IAMUNDO DE CUMIS ILENIA

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Consulenza ad aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Partecipazione ad Advisory Board (**NIENTE DA DICHIARARE**)
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)



INTRODUCTION

Cardiac outcomes in a cohort of adult survivors of childhood and adolescent cancer: retrospective analysis of the Childhood Cancer Survivor Study cohort

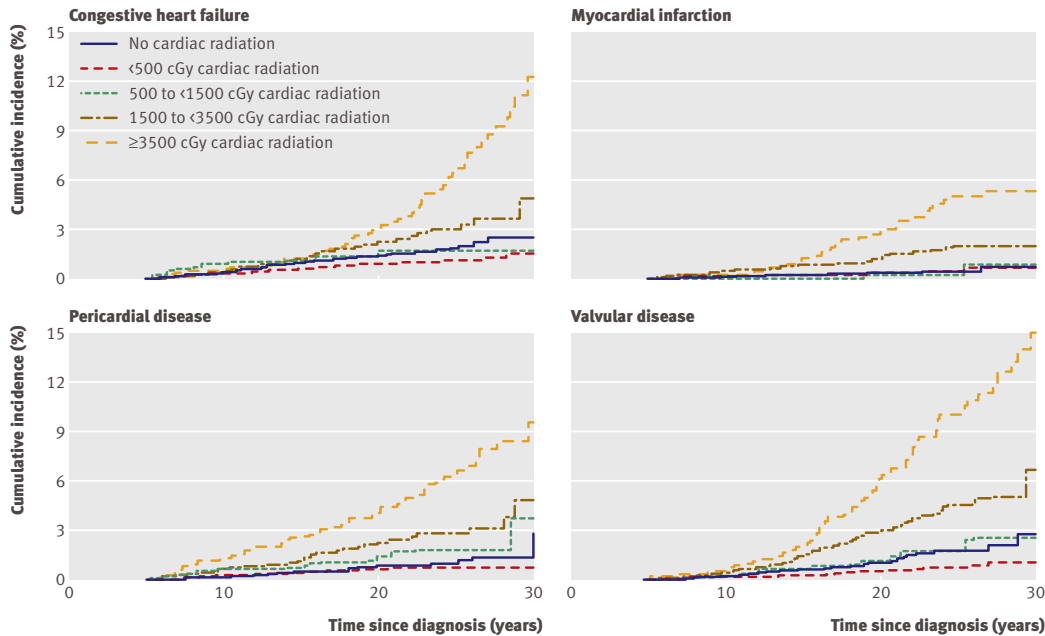


Fig 4 | Cumulative incidence of cardiac disorders among childhood cancer survivors by average cardiac radiation dose

AIMS

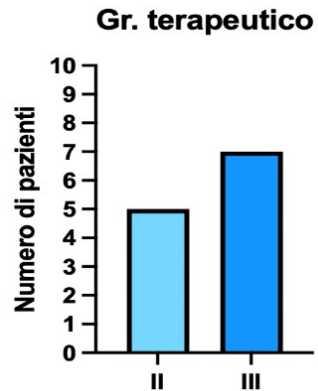
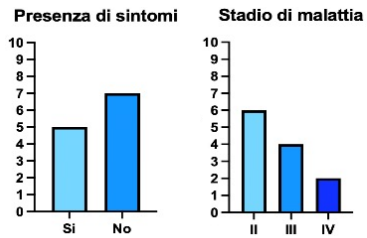
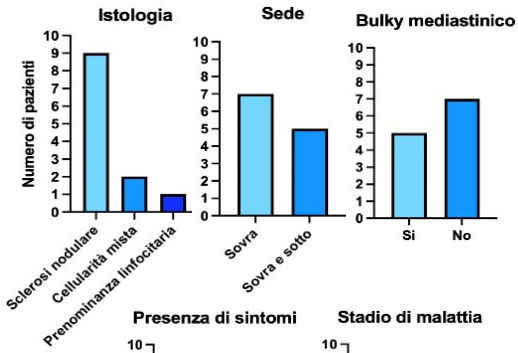
Analyze cardiac events (CE) and the relationship between these and doses received by heart and cardiac substructures (CS) in pediatric Hodgkin Lymphoma patients (pts) treated with mediastinal RT

MATERIAL AND METHODS

Twelve consecutive pts treated from 2009 to 2017 according to AIEOP LH-2004 protocol

Demographics HL patients (No 12)	No. patients (12)
Age (years)	14 (8-18)
Median (range)	14 (8-18)
Gender	
Female	7 (58%)
Male	5 (41%)
Familiarity for CVD	
IMA	1 (8%)
Hypertension	4 (33%)
Diagnostic exams	
CT TB scan	12 (100%)
PET scan	12 (100%)
Electrocardiogram	12 (100%)
Echocardiogram	12 (100%)

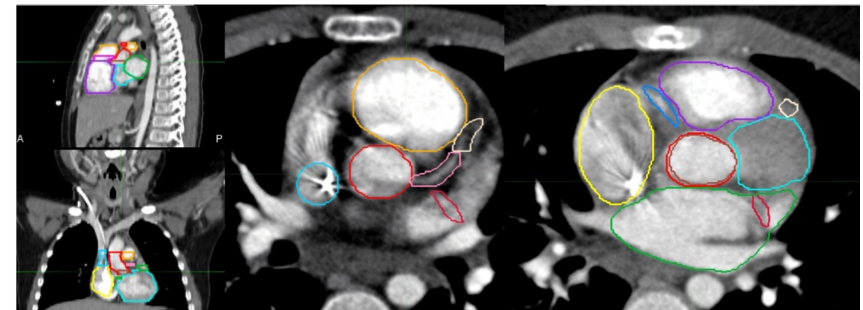
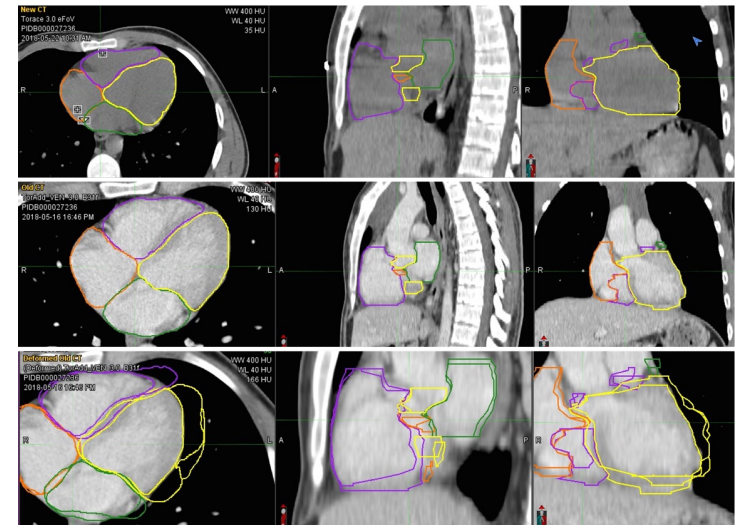
RESULTS

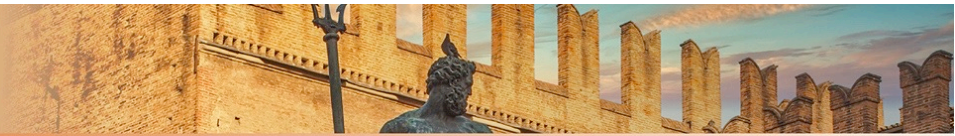


14.4 Gy in RC
 25.20 Gy in RP

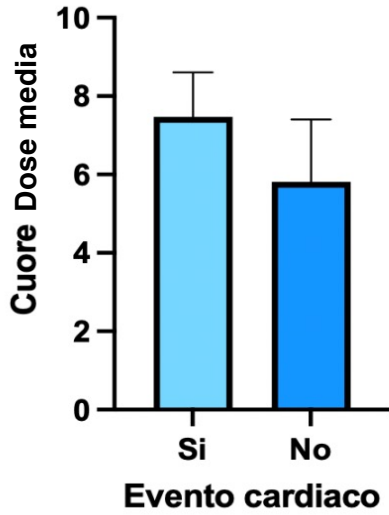
14.4 Gy in RC
 25.20 Gy in RP
 residuo >50cc boost
 fino a 35Gy

Deformable
 image
 registration
 between cCT
 and Simulation
 CT





RESULTS

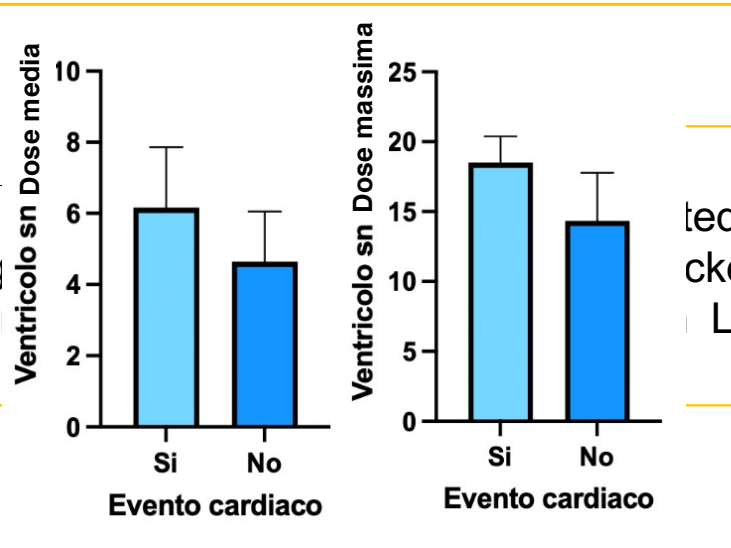


0% 97%, V95% 90%

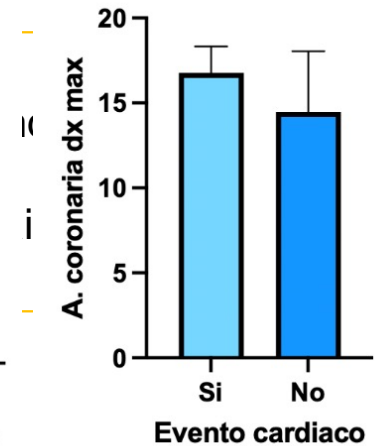
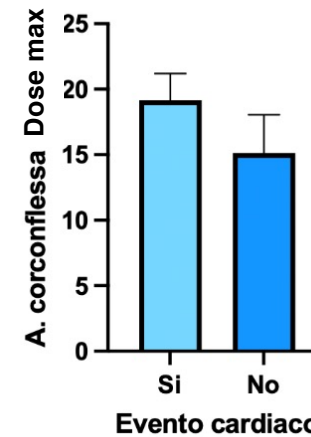
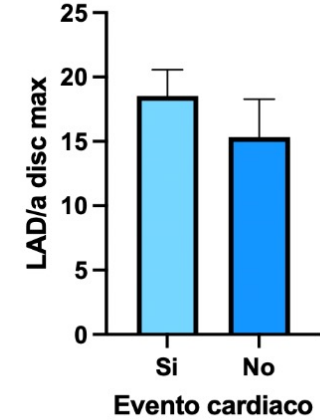
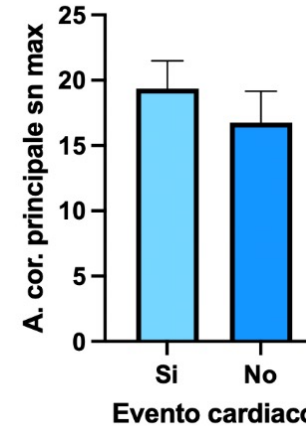
6.2 vs 14.3 Gy
 9.2yrs
 dose 5,45Gy

18.5 vs 14.3 Gy

three pts reduction
 which required drug
 two patients prese
 therapy)



ted myoca
 ckers)
 LV globa





CONCLUSIONS

- ❖ The onset of cardiovascular effects significantly impacts the morbidity and mortality of patients treated in childhood for Hodgkin's lymphoma
- ❖ The identification of cardiac dosimetric parameters could help predict cardiovascular risk
- ❖ Introducing cardiac substructures in the optimization of the radiotherapy treatment plan

*Grazie per
l'attenzione*