

CORSO WEBINAR
10 giugno 2022

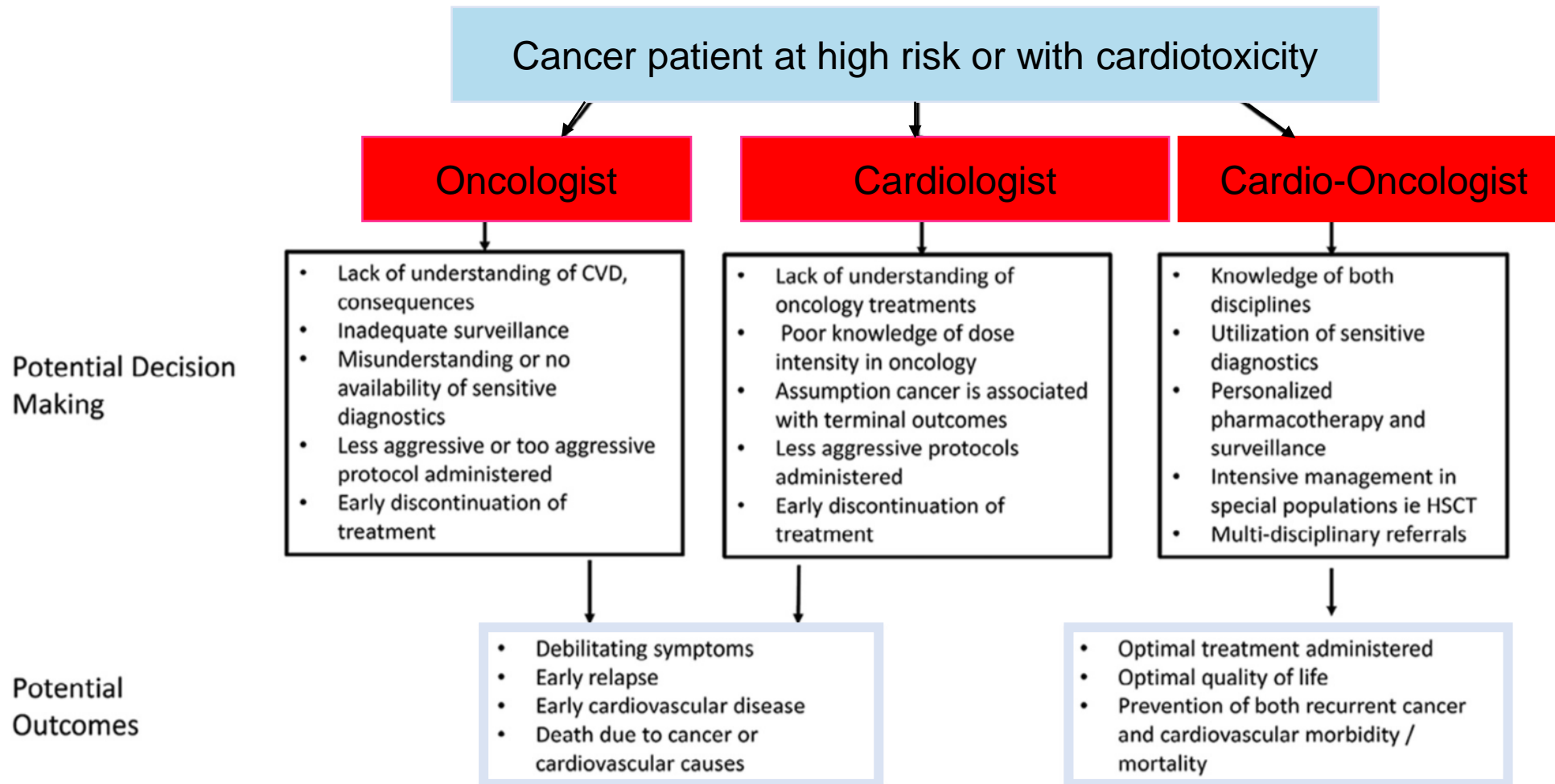


**I PERCORSI APPROPRIATI
ASSISTENZIALI E TERAPEUTICI
IN CARDIONCOLOGIA**

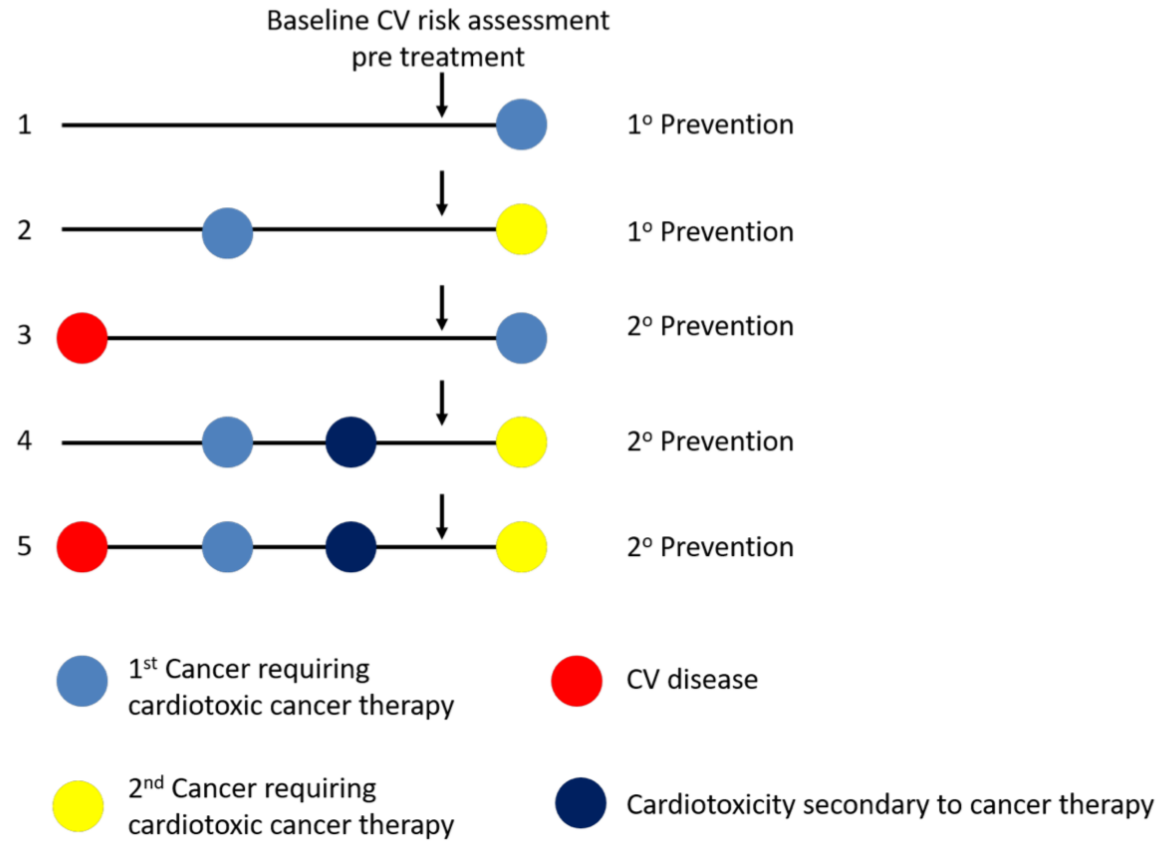
Approccio al paziente
ad alto rischio cardiovascolare

Irma Bisceglia
A.O.S. Camillo-Forlanini
Area Cardioncologia ANMCO

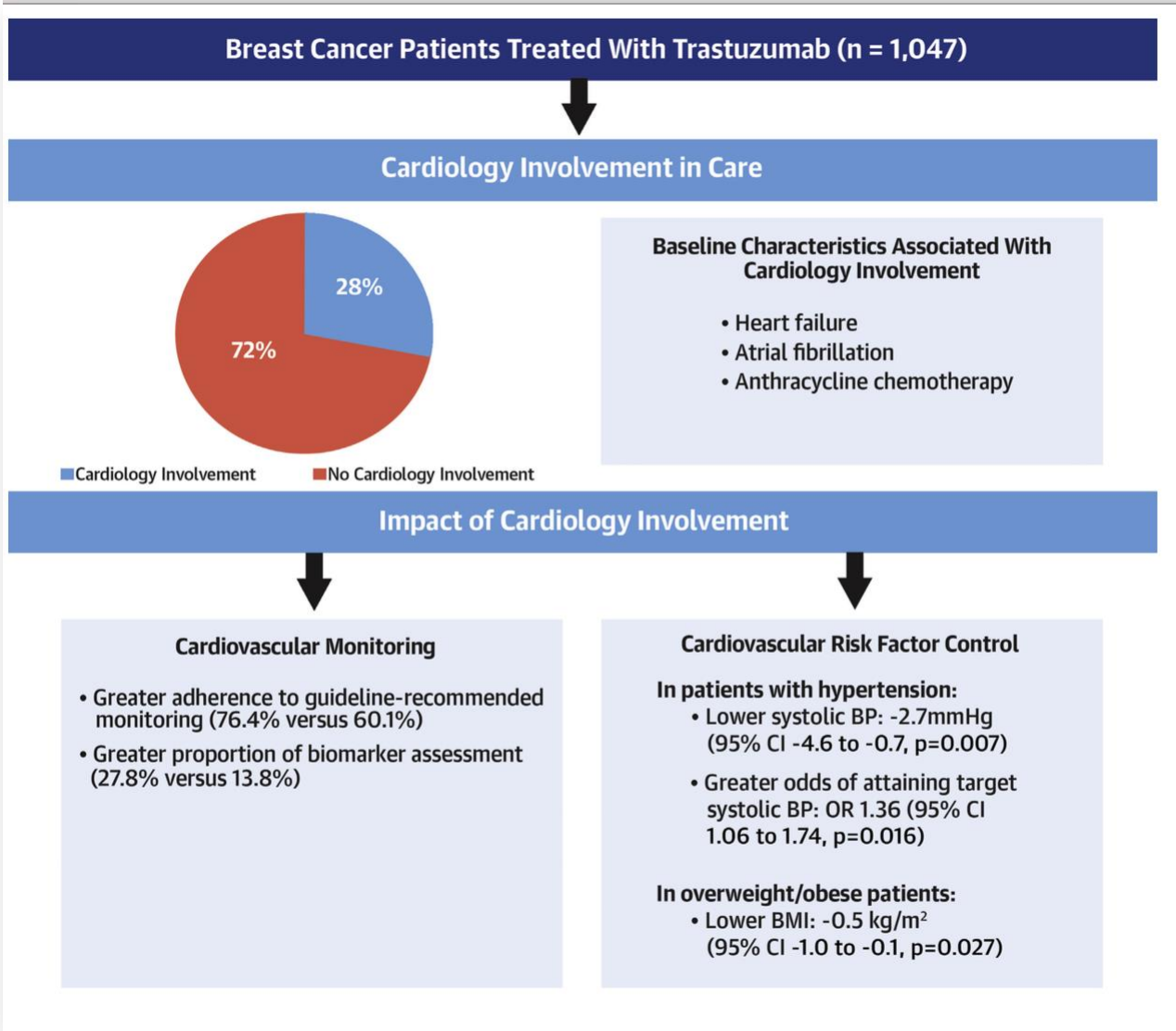
THE ROLE OF CARDIO-ONCOLOGY IN THE INTERPROFESSIONAL CARE OF ADULT PATIENTS RECEIVING CANCER THERAPY



WHY A CARDIO-ONCOLOGY PARTNERSHIP ?



Cardiology Involvement in Patients With Breast Cancer Treated With Trastuzumab

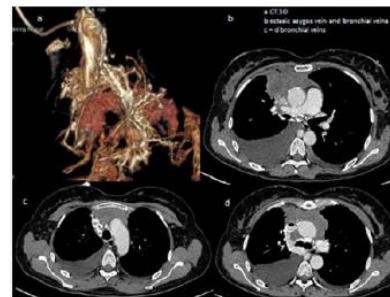
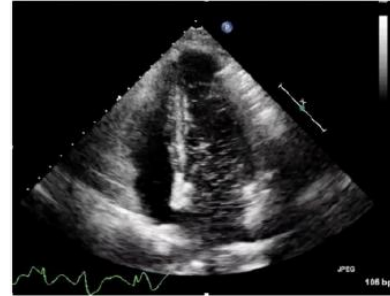


CARDIO-ONCOLOGY PARTNERSHIP SUCCESS

C50 CARDIO-ONCO-HAEMATOLOGY IN CLINICAL PRACTICE. A "CHANGELING" CASE: MORE THAN PARADOXICAL BUBBLES

I. Bisceglia, R. Mistrulli, D. Cartoni, V. Buffa, R. Battistini, A. Proia, L. Rigacci, S. Petrolati
 OSPEDALE SAN CAMILLO, ROMA; OSPEDALE SANT'ANDREA ROMA; HEMATOLOGY, AZIENDA OSPEDALIERA SAN CAMILLO-FORLANINI, ROMA

39-year-old female, without cardiovascular risk factors. At the end of pregnancy she complained of progressive dyspnoea and so she was admitted to the emergency room. Blood tests showed elevated D-dimer and LDH values. A chest CT scan was performed showing a mediastinal mass of about 15 cm encompassing the ascending aorta, the left brachiocephalic trunk and the superior vena cava, both of which appeared thrombosed. Therapy with low molecular weight heparin was started. The patient underwent a mediastinal biopsy, which documented a primary mediastinal non-Hodgkin's lymphoma. The baseline cardiologic evaluation showed a preserved ejection fraction (60%) at echocardiogram (ECHO). The first cycle of chemotherapy with R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine) was started. After an episode of hypoesthesia of the left upper limb, that regressed spontaneously within a few hours, she performed MRI that showed multiple areolas compatible with ischemic disease. Following these results the patient was submitted to an ECHO with saline solution injected through the right brachial vein that documented evidence of early opacification of the left atrium and subsequent opacification of the right sections (after 3 cardiac cycles) (Fig. 1-2). This finding suggested a right-to-left shunting, via the bronchial lower district to the left atrium (pulmonary veins). This suspicion was confirmed by CT angiography, which showed occlusion of the superior vena cava with passage of contrast into azygos and early opacification of peribronchial venous circles (Fig. 3). A patency of foramen ovale was ruled out by injection of saline solution through the femoral vein. After the second cycle of chemotherapy, ECHO showed diffuse hypokinesia and reduced EF to 50%. It was then decided to proceed with the third cycle according to the intensified R-DAEPOCH scheme, except for doxorubicin, because of the cardiotoxicity developed by the patient. A cardioprotective therapy was also started with bisoprolol and ramipril with rapid titration. At subsequent radiological controls, a progressive reduction of the mediastinal mass was found and after just one month, the echocardiogram showed a complete recovery of the EF. Contrast injection confirmed presence of a veno-venous shunt. Cardio-oncology is an intriguing and complex discipline that requires the development of local multidisciplinary teams for challenging situations that patients with cancer may ask us to address.



P140 EFFICACY AND SAFETY OF CHEMOTHERAPY CONTAINING NON-PEGYLATED LIPOSOMAL DOXORUBICIN IN PATIENTS AT HIGH CARDIOVASCULAR RISK: A SINGLE-CENTER EXPERIENCE

I. Bisceglia, M. Camilli, R. Mistrulli, D. Cartoni, S. Matera, M. Canale, R. Battistini, L. Rigacci, S. Petrolati
 OSPEDALE SAN CAMILLO, ROMA; FONDAZIONE POLICLINICO UNIV. A. GEMELLI, ROMA; OSPEDALE SANT'ANDREA DI ROMA, ROMA; OSPEDALE S. MARIA GORETTI, LATINA; NUOVO OSPEDALE VERSILIA, LIDO DI CAMAIORE; HEMATOLOGY, AZIENDA OSPEDALIERA SAN CAMILLO-FORLANINI, ROMA

Anthracyclines represent the most effective chemotherapeutic agent in the treatment of non-Hodgkin's lymphoma (NHL), although their use is limited due to the risk of cardiac toxicity. This occurs mainly in elderly patients, those with a history of cardiovascular (CV) disease and/or multiple concomitant risk factors. Liposomal doxorubicin has been shown to reduce this toxicity. The aim of this retrospective study is to investigate the use of non-pegylated liposomal doxorubicin in high-risk patients in terms of haematological response rate and CV events. In a single centre,

15 patients undergoing R-COMP regimen (Rituximab, Prednisone, Cyclophosphamide, Vincristine, Myocet liposomal doxorubicin) were consecutively collected from January 2020 to December 2021. The mean age of patients was 73.9 years and 60% were male. The baseline mean left ventricular ejection fraction (LVEF) was 55.9%; four patients had a baseline FE of < 50%, two of them had a severe reduction in LVEF. Among all patients, 86.7% had systemic hypertension, 40% diabetes mellitus, 46.7% dyslipidaemia and 20% a family history of CV disease. Moreover, 46.7% of patients had at least two concomitant risk factors and 20% at least three. 20% had a history of ischemic heart disease, 13.3% had previous exposure to anthracyclines and 20% with mediastinal radiotherapy; 26.7% had moderate to severe aortic valvulopathy. According to the joint Cardio-Oncology evaluation, 100% of patients had been considered unsuitable for conventional doxorubicin.. More than 85% of the cases were already on cardioactive therapy at baseline evaluation and 66.7% required titration or modification during chemotherapy. With R-COMP, the whole population was able to finish treatment achieved complete haematological remission. The mean LVEF at the end of treatment was 55.8% (p=0.814).

Conclusions: Our results support the efficacy and safety of R-COMP in a population at high risk for cardiac events, otherwise excluded from anthracycline-containing therapy. Liposomal formulatio reduces doxorubicin cardiomyocyte accumulation and thus toxicity, providing the best possible treatment for the majority of the onco-haematological population.

European Heart Journal
Supplements

The Heart of the Matter

Abstracts from the 53rd Congress of
the Italian Association of Hospital
Cardiologists (ANMCO) Rimini, 19-21
May 2022 and ANMCO Position Papers
and Communication Papers

Editor-in-Chief
Roberto Gheorghiade
Co-Editors
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David Serrano
President of the ANMCO
ANMCO President on behalf of the
ANMCO Executive Board



ANMCO
2022

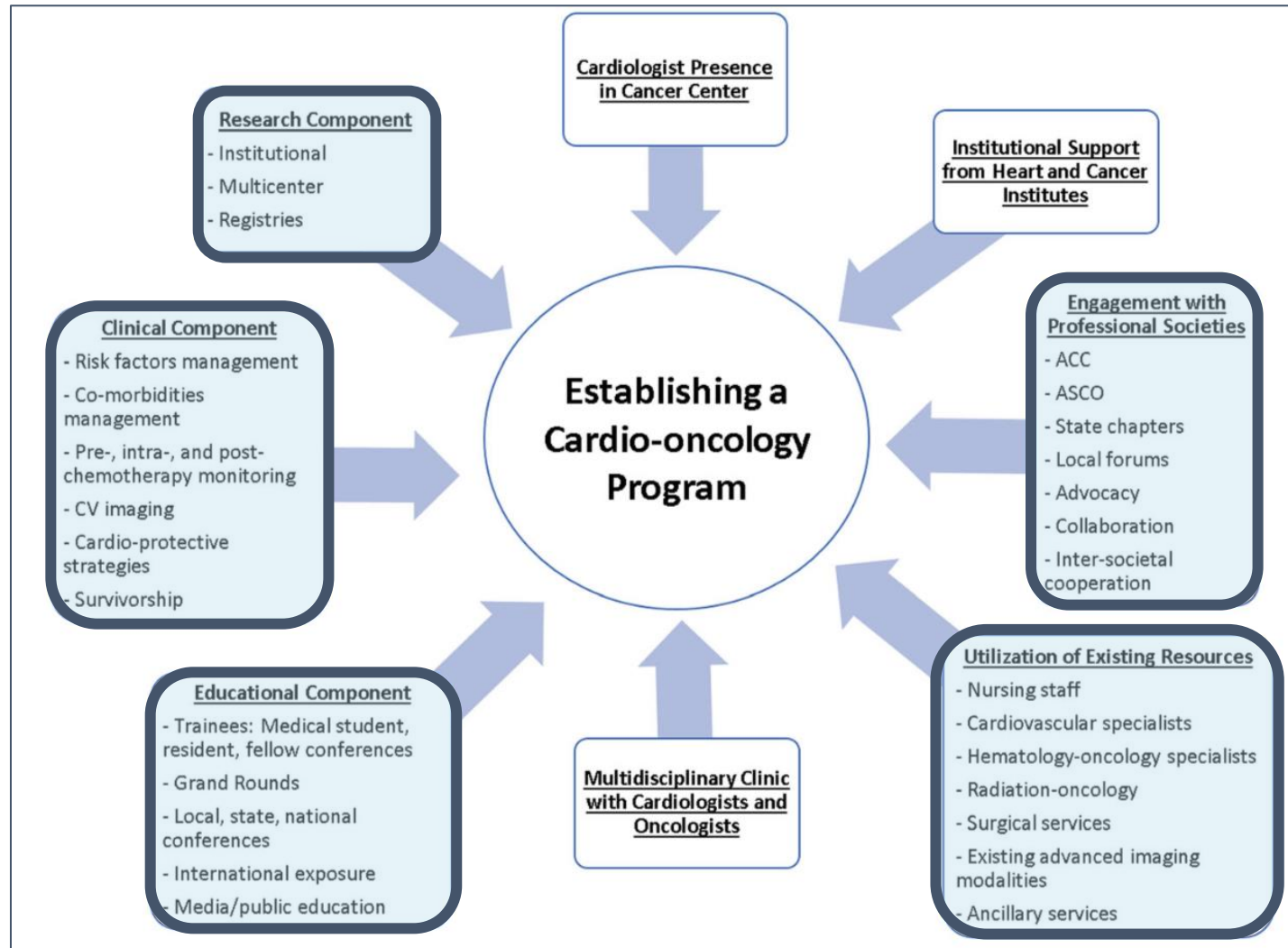
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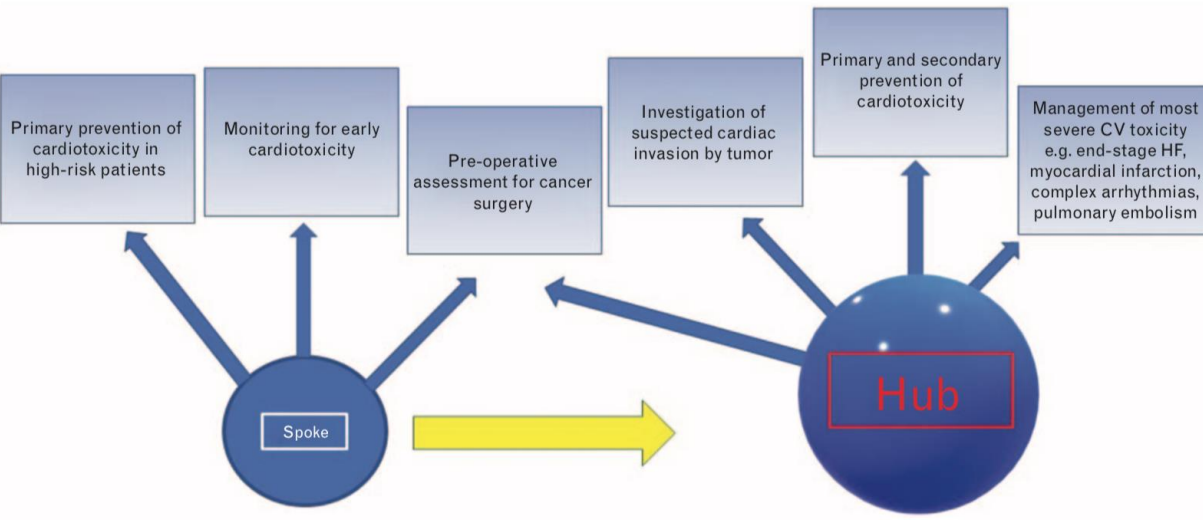
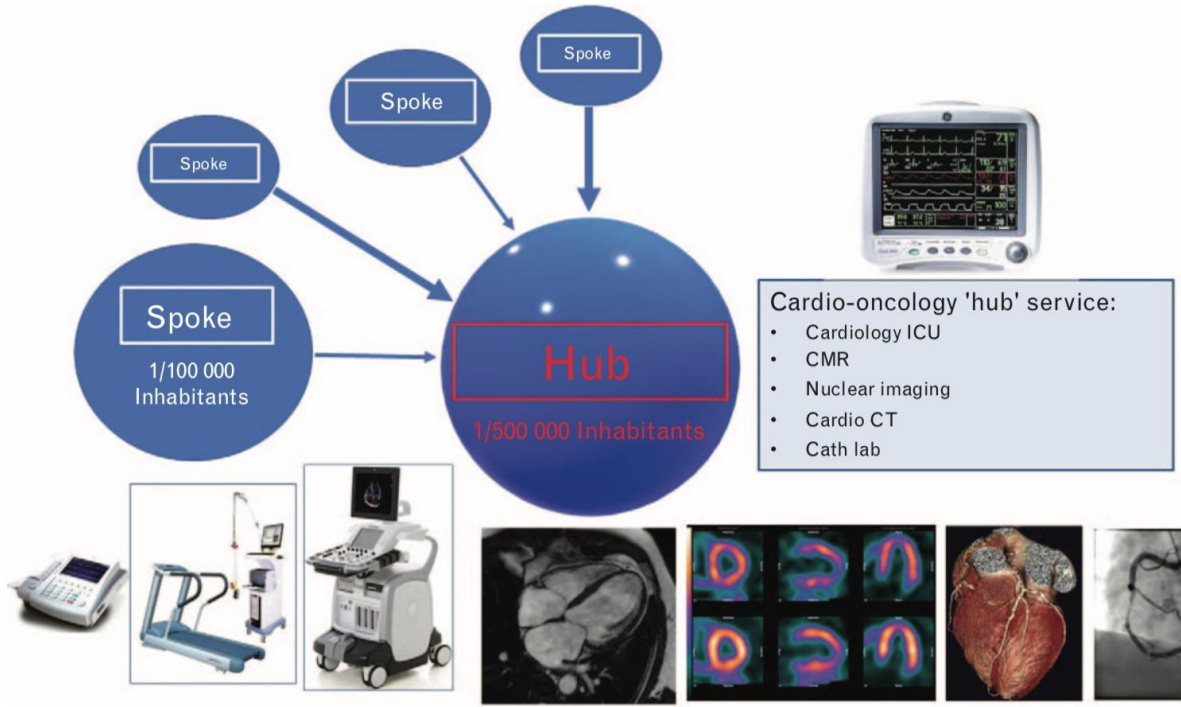
ANMCO POWER

ESC
European Society
of Cardiology

Practical and cost-effective model to build and sustain a cardio-oncology program



Rationale and proposal for cardio-oncology services in Italy



Hub centers should be placed in oncologic centers of tertiary hospitals, able to perform a large number of screening tests before, during and after anticancer therapy but also all the oncologic patients referred from the spoke centers

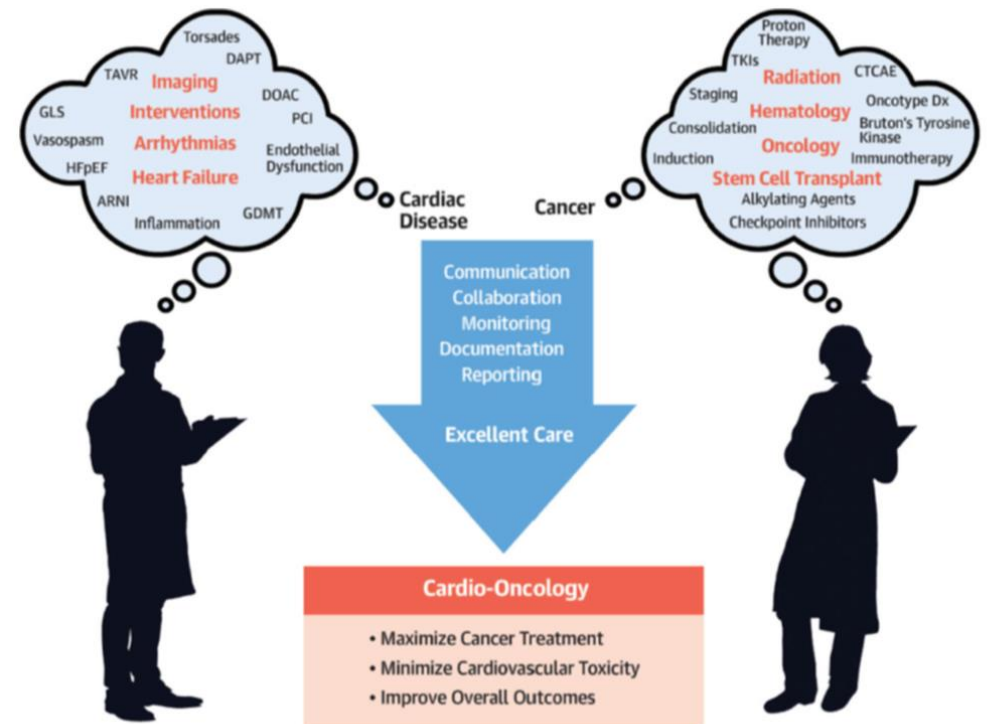
Cardio-oncology organization patterns in Italy: one size does not fit all

Maria Laura Canale^a, Chiara Lestuzzi^b, Irma Bisceglia^c, Paola Vallerio^d
and Iris Parrini^e, on behalf of Associazione Nazionale Medici Cardiologi Ospedalieri (ANMCO) Cardio-Oncology Task Force

Size	Strengths	Weaknesses
XL	<ul style="list-style-type: none"> High-volume cancer center Routine cardio-oncology evaluation Formalized path with exclusively committed cardiologists Ability to handle innovative drugs Experience with unusual toxicities 	<ul style="list-style-type: none"> Trouble in managing emergency Lack of dedicated ward Lower patient compliance because of distance (patients usually moving from distant places) Troubles in follow-up
L	<ul style="list-style-type: none"> Cardiology and oncology/hematology wards Specialists (usually) sharing the same building Formalized path with committed cardiologists Reference center for neighborhoods Ability to handle emergency 	<ul style="list-style-type: none"> Short time for consultations Not exclusively dedicated cardiologists Lower patient compliance because of distance (patients usually moving from distant places) Troubles in follow-up
M	<ul style="list-style-type: none"> Cardiology and oncology/hematology units co-presence Specialists sharing the same building Formalized path with committed cardiologists (although not exclusive) Face-to-face daily consultations Ability to handle emergency 	<ul style="list-style-type: none"> Trouble in managing experimental or innovative drug toxicity Trouble in physician update Lower number of treated patients than L or XL hospitals
S	<ul style="list-style-type: none"> Cardiology and oncology/hematology services co-presence Close relationship with general practitioners Direct patient access to services (open access model) High-patient compliance 	<ul style="list-style-type: none"> Not able to manage emergency Trouble in managing experimental or innovative drug toxicity Trouble in physician update Low number of treated patient Distance from larger centers (in some cases)

Clinical practice principles essential to develop a *vibrant* C-O program

- Establish a strong clinical connection with oncologists and hematologists
- Build relationships with primary care and internal medicine providers who are likely to treat cancer survivors
- Identify key administrators and clinicians in each area and ensure that they realize the purpose and benefits of C-O services
- Emphasize to all that optimal CV care has a major positive clinical impact
- Ascertain the best methods for communication among providers
- Participate in multidisciplinary meetings
- Evaluate a patient's eligibility to enroll in C-O clinical trials

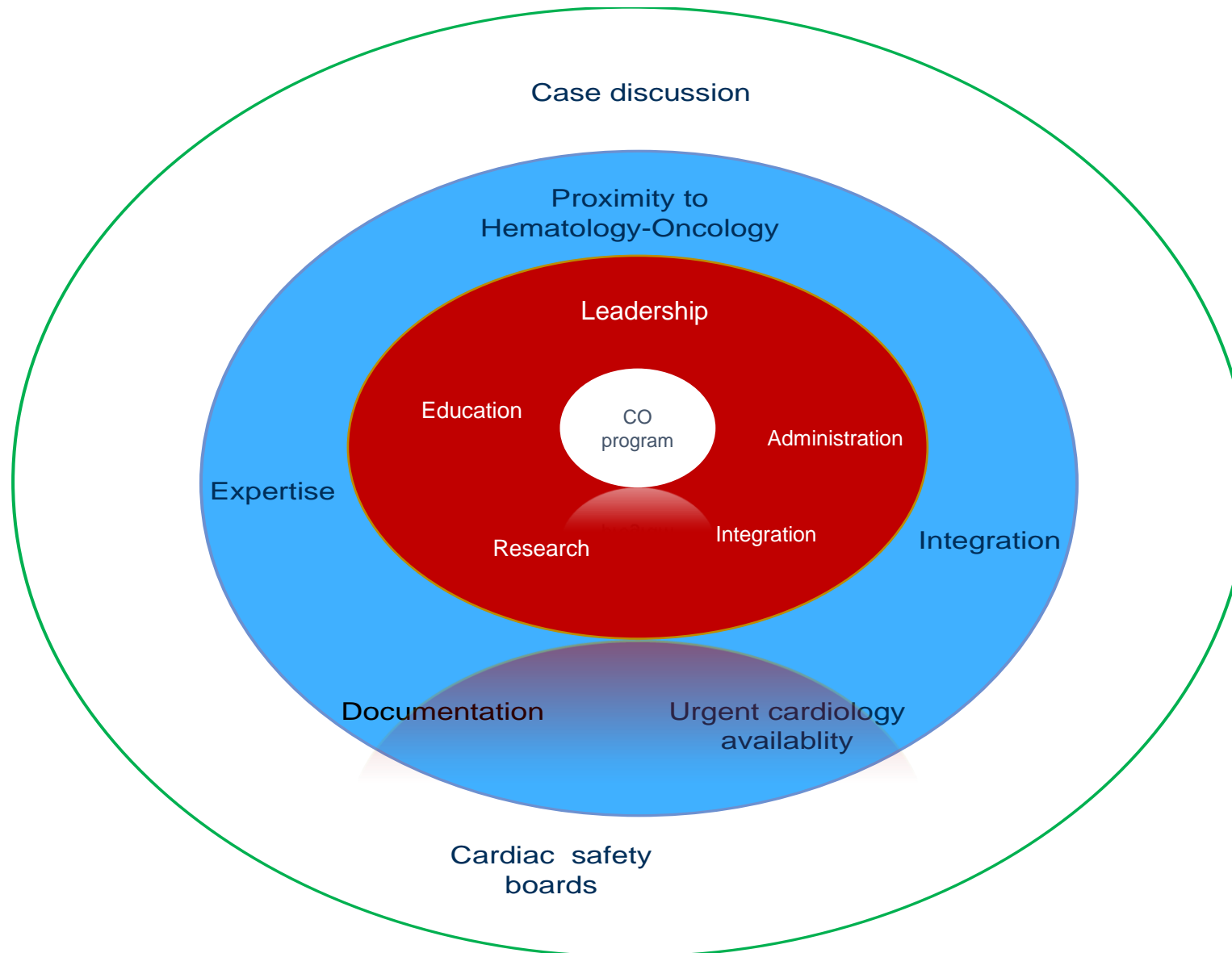


KEY POINTS

Which Patients Should Be Referred to CO

High baseline CV risk profile prior to potential cardiotoxic therapy or stem cell transplantation	Planned treatment with cancer therapies known to have higher likelihood of subsequent CV events	Patients who are to assist in monitoring and treatment of CV complications Cancer survivors (lifelong)
<ul style="list-style-type: none"> ▪ Established cardiovascular disease ▪ Uncontrolled diabetes ▪ Hypertension ▪ Hyperlipidemia ▪ Preexisting chronic inflammatory condition ▪ Tobacco use ▪ Prior anthracycline use ▪ Prior chest radiation ▪ Any prior CV toxicity related to cancer therapy 	<ul style="list-style-type: none"> ▪ Anthracyclines, especially with regimens intending to use more than 250 mg/m² lifetime dosing ▪ Radiation with exposure to heart/vascular structures ▪ Anti HER2 therapy in patient with CV risk factors ▪ Tyrosine kinase inhibitors targeting VEGFR, BCR-ABL, EGFR, PDGFR ▪ Proteasome inhibitors, especially in combination with other therapy ▪ Immune checkpoint inhibitors, ▪ CAR-T ▪ Ibrutinib ▪ Androgen deprivation therapy (ADT) 	<ul style="list-style-type: none"> ▪ Prior history of CV complications from cardiotoxic/vascular toxic therapy ▪ High-dose anthracyclines (eg, doxorubicin ≥ 250 mg/m²) ▪ RT to heart, neck, vascular structures (≥ 30 Gy) ▪ Lower-dose anthracycline + lower doses of RT to heart, neck, or vascular structures ▪ Lower-dose anthracycline + trastuzumab ▪ Young or old age at diagnosis/treatment ▪ Prior history of ADT ▪ Prior history of immunotherapy with a checkpoint inhibitor or CAR-T ▪ Any suspected pericardial disease

MAJOR COMPONENTS NECESSARY AND SUGGESTED TOOLS FOR DELIVERING EXCELLENT CARE IN CO

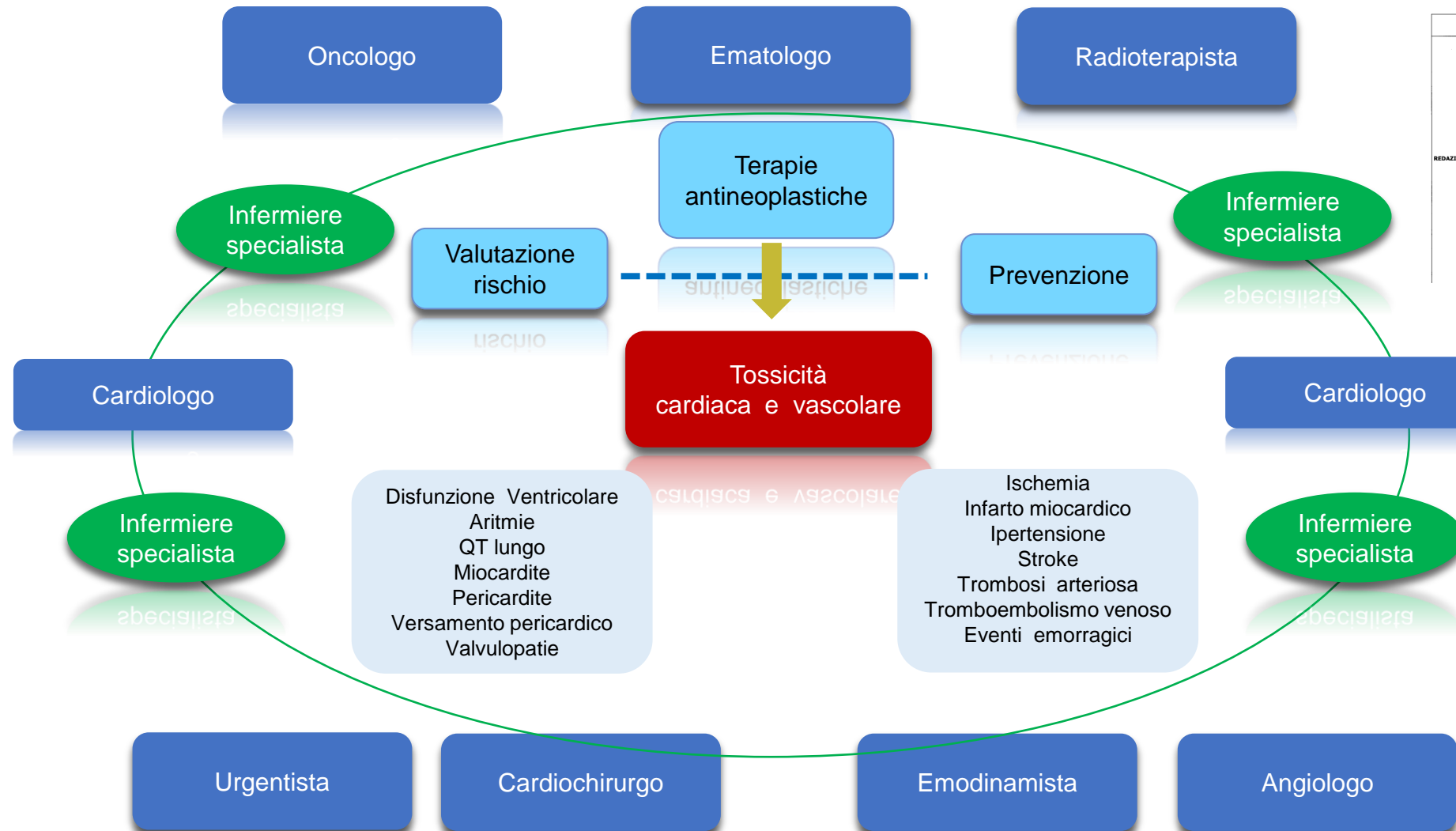


Establishing the value of a C-O program

SAFE	<ul style="list-style-type: none"> ▪ Incidence of cancer treatment-related cardiotoxicity in patients seen by C-O service (outcome metric)
EFFECTIVE	<ul style="list-style-type: none"> ▪ Incidence of cancer treatment-related cardiotoxicity in patients seen by C-O service (outcome metric) ▪ Number of cardiotoxicity related cancer treatment interruptions in patients seen by C-O service (outcome metric) ▪ Control of CV risk factors including blood pressure, cholesterol, and blood glucose levels (outcome metric) ▪ Implementation of appropriate guideline-directed therapies at evidence-based doses (lipid-lowering agents, antihypertensive agents, antiplatelet agents, heart failure medications)
PATIENT-CENTERED	<ul style="list-style-type: none"> ▪ Patient-reported outcome metrics (outcome metric) ▪ Physical activity (self-reported using validated instrument or via implantable cardiac device/wearable device) (outcome metric)
TIMELY	<ul style="list-style-type: none"> ▪ Time from request to completion of a C-O consult in the inpatient and outpatient settings (process metric) ▪ Number of trained Cardio-Oncologists per health system (structure metric)
EFFICIENT	<ul style="list-style-type: none"> ▪ Appropriateness of C-O service consults as determined by risk stratification protocols (process metric) ▪ C-O service capacity utilization (process metric)
EQUITABLE	<ul style="list-style-type: none"> ▪ Stratification of quality metrics mentioned above by gender, race, ethnicity, geographic location, and socioeconomic status to ensure there is no variation based on those personal characteristics

Regardless of size and make up

PDTA AZIENDA OSPEDALIERA S. CAMILLO-FORLANINI



REGIONE LAZIO

AZIENDA OSPEDALIERA SAN CAMILLO FORLANINI

PDTA PERCORSO DIAGNOSTICO TERAPEUTICO ASSISTENZIALE CARDIOVASCOLARE DEL PAZIENTE ONCOLOGICO PRIMA DURANTE E DOPO LE TERAPIE ANTITUMORALI

Rev. 00 del 05/02/2020

Cod. Doc.: 901/PD/A/20/02

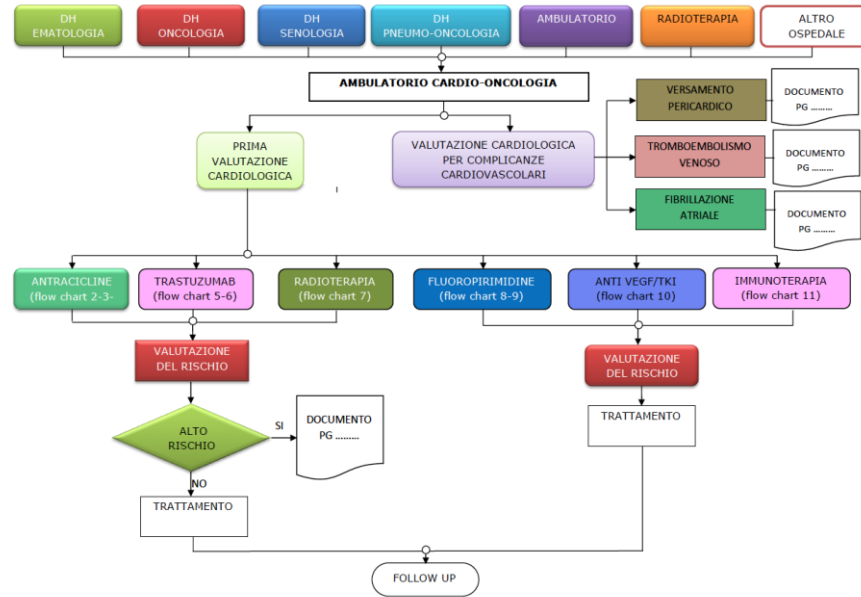
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Gruppo di lavoro Aziendale	Disciplina	Ruolo	Data	Firma
Staff di coordinamento	Qualità, Certificazione e Sicurezza delle Cure e Risk Management	Medico CPS Infermiere	2/1/2020	[Firma]
Antonio Silvestri				
Marco Mastrucci				
Coordinatore:				
Imma Biscaglia	Cardiologia	Medico	28/1/2020	[Firma]
Componenti:				
Amadei Alessandra	Oncologia	CPS Infermiere	28/1/2020	[Firma]
Battistini Roberta	Ematologia	Medico	02/01/2020	[Firma]
Calabrò Fabio	Oncologia	Medico	02/01/2020	[Firma]
Cartoni Domenico	Cardiologia	Medico	28/1/2020	[Firma]
Casamatta Luciana	Cardiologia	CPS Infermiere	28/1/2020	[Firma]
Chiodini Cinzia	Radioterapia	Medico	28/1/2020	[Firma]
D'Alessio Antonietta	Oncologia	Medico	05/03/2020	[Firma]
Di Martino Gabriella	Angiologia	Medico	03/03/2020	[Firma]
Feccia Mariano	Cardiochirurgia	Medico	03/03/2020	[Firma]
Garzia Maria Grazia	Ematologia	Medico	18/1/2020	[Firma]
Lauricella Gabriella	Breast Unit	CPS Infermiere	28/1/2020	[Firma]
Magnani Rita	Cardiologia	CPS Infermiere	25/1/2020	[Firma]
Paspalaro Augusta	Cardiologia	Medico	25/1/2020	[Firma]
Ricciardi Serena	Pneumologia	Medico	28/1/2020	[Firma]
Romagnolo Paolo	Medicina d' Urgenza	Medico	28/1/2020	[Firma]
Rossi Valentina	Breast Unit	CPS Infermiere	01/01/2020	[Firma]
Salvatori Stefania	Ematologia	CPS Infermiere	28/1/2020	[Firma]

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 Ambulatorio di Cardio-Oncologia
 Piano terra Padiglione Puddu
 065870 - 4489 - 3724-4482 (FAX)

UNITA OPERATIVA			
Ambulatorio / DH Oncologia	Ambulatorio /DH Breast Unit	Ambulatorio / DH Ematologia	Ambulatorio / DH Pneumo Oncologia
Radioterapia		Altro ospedale	
NOME E COGNOME		DATA DI NASCITA	TEL
MOTIVO DELLA RICHIESTA			
Pre-chemioterapia	Controllo programmato	Controllo per complicanze	Controllo per tossicità Pre trapianto Follow up
FARMACI			
Antraciclina	Trastuzumab	Fluoropirimidine	Anti VEGF
Carfilzomib/Bortezomib	Immunoterapia	Altro	Inibitori delle tirosinchinasi
Data inizio antraciclina		Data fine antraciclina	
SEDE NEOPLASIA			
.....			
ESAMI RICHIESTI			
ECG + VISITA CARDIOLOGICA	ECOCARDIOGRAMMA (*)	ECG per calcolo QT	
DATA E ORA APPUNTAMENTI			
ECG + visita cardiologica			
ECO			
Holter			
Test da sforzo			
(*) solo per pz sottoposti a trattamento con antraciclina e/o trastuzumab			
I PAZIENTI CARDIOPATICI DEVONO ESSERE INVIATI CON RACCOMANDAZIONE DI PORTARE DOCUMENTAZIONE CARDIOLOGICA			



Attività	Medico cardiologia	Medico oncologia	Infermiere cardiologia	Infermiere oncologia	Medico cardiologia interventista
Completazione modulistica per ambulatorio di cardiologia	I	R	I	C	
Invio modulistica per ambulatorio di cardiologia	I	I	C	R	
Comunicazione data appuntamenti	I	I	R	C	
Valutazione pazienti a rischio	R	C	I	I	I
Valutazione collegiale pazienti ad alto rischio	R *	R *	I	I	R *
Valutazione tempistica appuntamenti di ritorno	R	C	I	I	
Valutazione tempistica appuntamenti di richieste urgenti	C	I	R	I	
Esame clinico	R	I	C	I	
Prescrizione terapia cardiologica	R	C	I	I	
Esecuzione test da sforzo	R	I	C	I	I
Lettura test da sforzo	R	I	C	I	I
Esecuzione ECG	C	I	R		
Lettura ECG	R	I	I	I	
Coronarografia	C	I	I	I	R
Ecocardiografia	R	I	C	I	
Esecuzione Holter	C	I	R	I	
Lettura Holter	R	I	C	I	

INDICATORE	VALORE STANDARD	RESPONSABILE
Documentazione correttamente distribuita	100%	Responsabili UU.OO
Disponibilità della documentazione nei luoghi ove la documentazione stessa deve essere applicata.	100%	Coordinatore UU.OO
Tempi di esecuzione della prima visita cardiologica < 1 settimana	80% delle richieste	Cardiologo
Tempi di esecuzione di ecocardiogramma basale <1 settimana	80% delle richieste	Cardiologo
Esecuzione combinata di visita cardiologica ed ecocardiogramma	80% delle richieste	Cardiologo
Esecuzione di visita cardiologica per sospetta tossicità e/o complicanze entro 24 -48 ore	80% delle richieste	Cardiologo
Esecuzione di ecocardiogramma a fine CT con antraciclina ad alte dosi, a 6 mesi, 1 anno	90% dei pazienti	Cardiologo

RETE ITALIANA DEGLI AMBULATORI DI CARDIONCOLOGIA



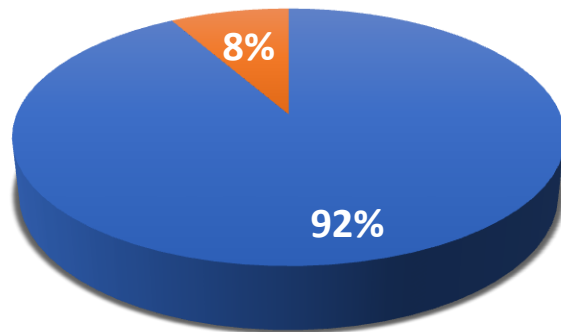
Questionario informativo
somministrato durante la raccolta
dati indirizzata a 612 Unità Operative di Cardiologia

Al questionario informativo in merito
all'attività degli Ambulatori di Cardioncologia hanno risposto
145 centri

Intendi aderire alla Rete Italiana degli Ambulatori di Cardioncologia?

→ Sì = 133

→ No = 12



■ Sì ■ No

ANMCO
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Via La Marmorata, 36 - 50121 Firenze
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Tel. +39 055 51011 - Fax +39 055 5101350

RETE ITALIANA DEGLI AMBULATORI DI CARDIONCOLOGIA
DA RISPEDIRE ALLA SEGRETERIA ANMCO ENTRO IL 30.1.2022
PER E-MAIL segreteria@anmco.it OPPURE VIA FAX +39 055/5101350

SCHEDA RACCOLTA DATI
SI PREGA DI CORREGGERE I DATI ERRATI E COMPILARE I MANCANTI IN OGNI PARTE IN STAMPATELLO

DATI UNITÀ OPERATIVA DI CARDIOLOGIA

«ospedale» _____
«unitaop» _____
«indirizzo» _____
«cap» «Citta» «prov» _____
Telefono: «telstru» Fax: «faxstru» _____
e-mail: «emailstru» _____
Direttore «dir» _____

NOMINATIVO DI RIFERIMENTO (per contatti tra ANMCO e la Cardiologia)

NOME e COGNOME _____
Telefono/Cellulare _____
e-mail _____

QUESTIONARIO INFORMATIVO

CENTRO	SI	NO
Intendi aderire alla Rete Italiana degli Ambulatori di Cardioncologia?	SI	NO
Esiste un ambulatorio di Cardioncologia nel Tuo Centro?	SI	NO
Ci sono Cardiologi appositamente dedicati all'ambulatorio di Cardioncologia nel Tuo Centro?	SI	NO
Quanti pazienti oncologici hanno bisogno di una valutazione cardiologica in media in un mese?	<20	da 20 a 50 >50
Esiste un percorso condiviso regolamentato a livello locale/aziendale?	SI	NO

Questionario informativo per gli ambulatori di Cardioncologia



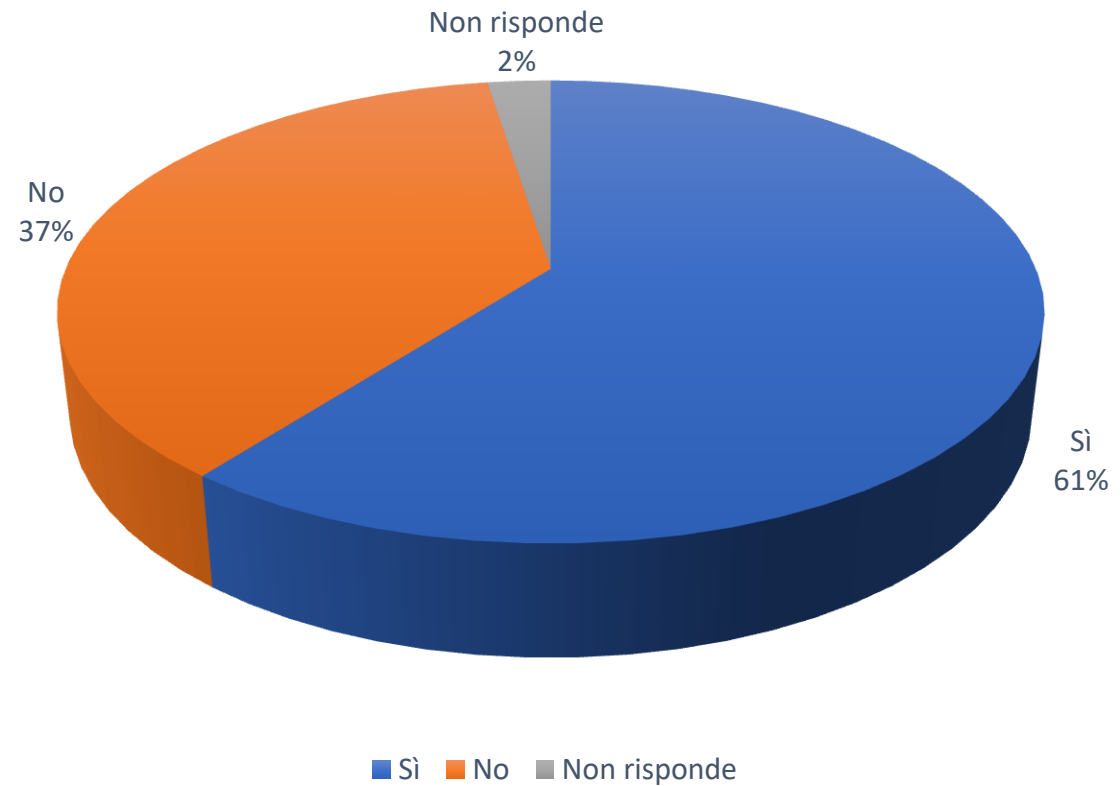
Esiste un percorso condiviso regolamentato a livello locale/aziendale?

Risultato in base agli 81 centri che hanno un ambulatorio di Cardioncologia:

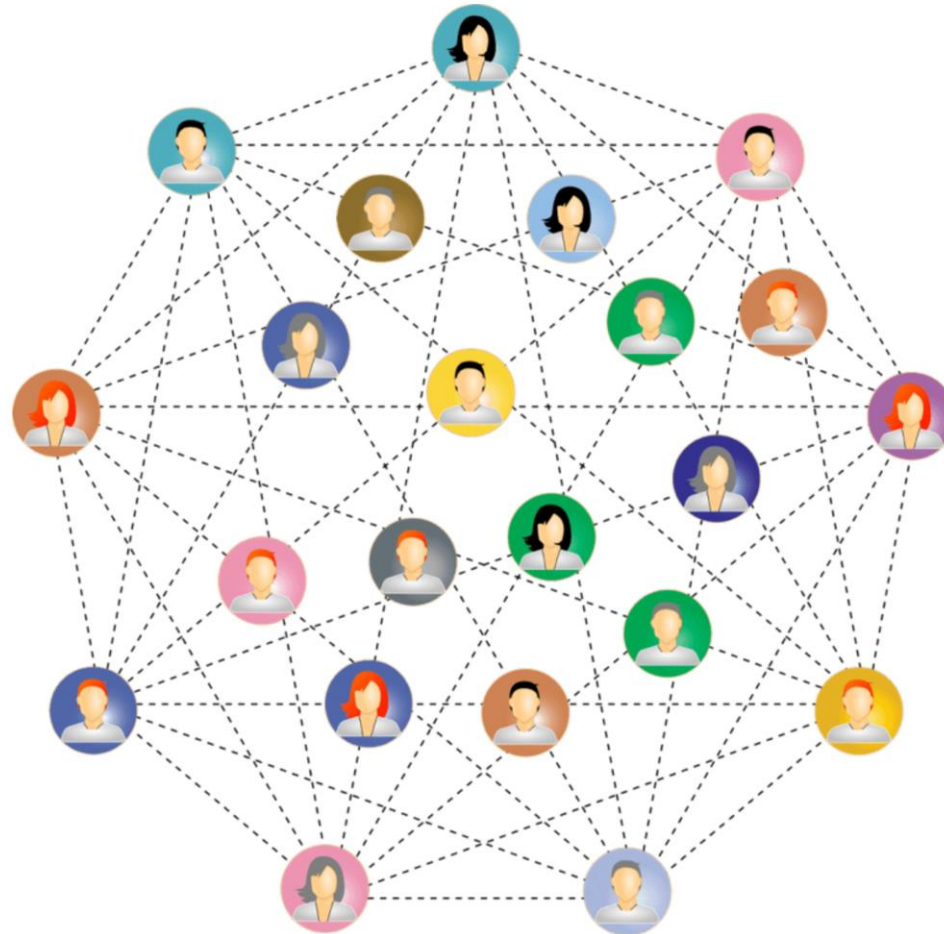
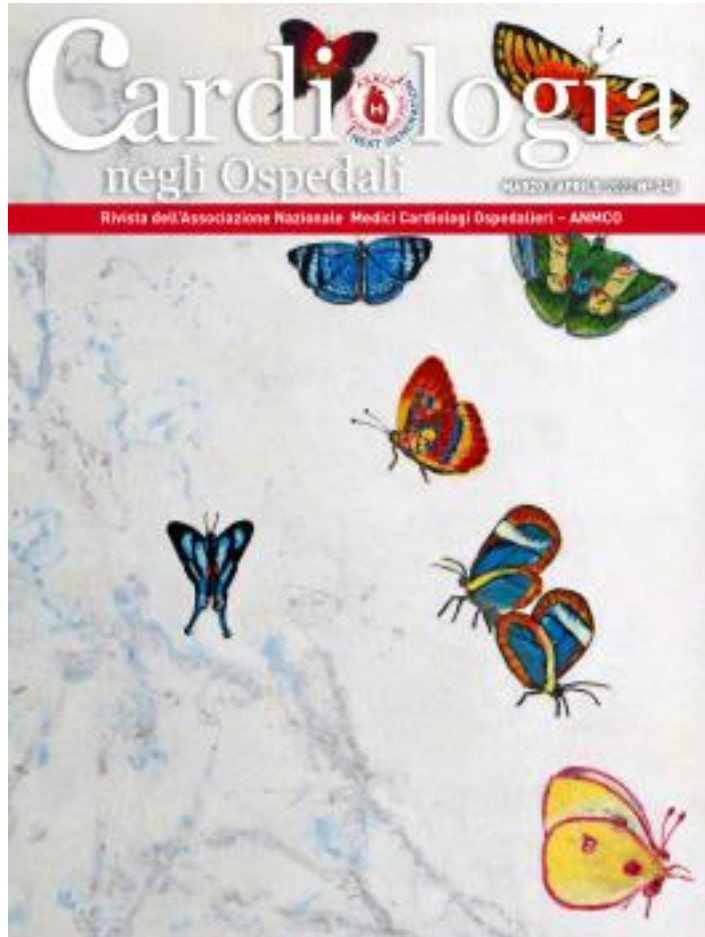
→ Sì 49

→ No 30

→ Non risponde 2



La CardiOncologia va in RETE



*La creatività è
mettere in
connessione le
cose
Steve Jobs*