



CARDIO CARE

An Interdisciplinary Approach for the Management of the Elderly Multimorbid Patient with Breast Cancer Therapy Induced Cardiac Toxicity



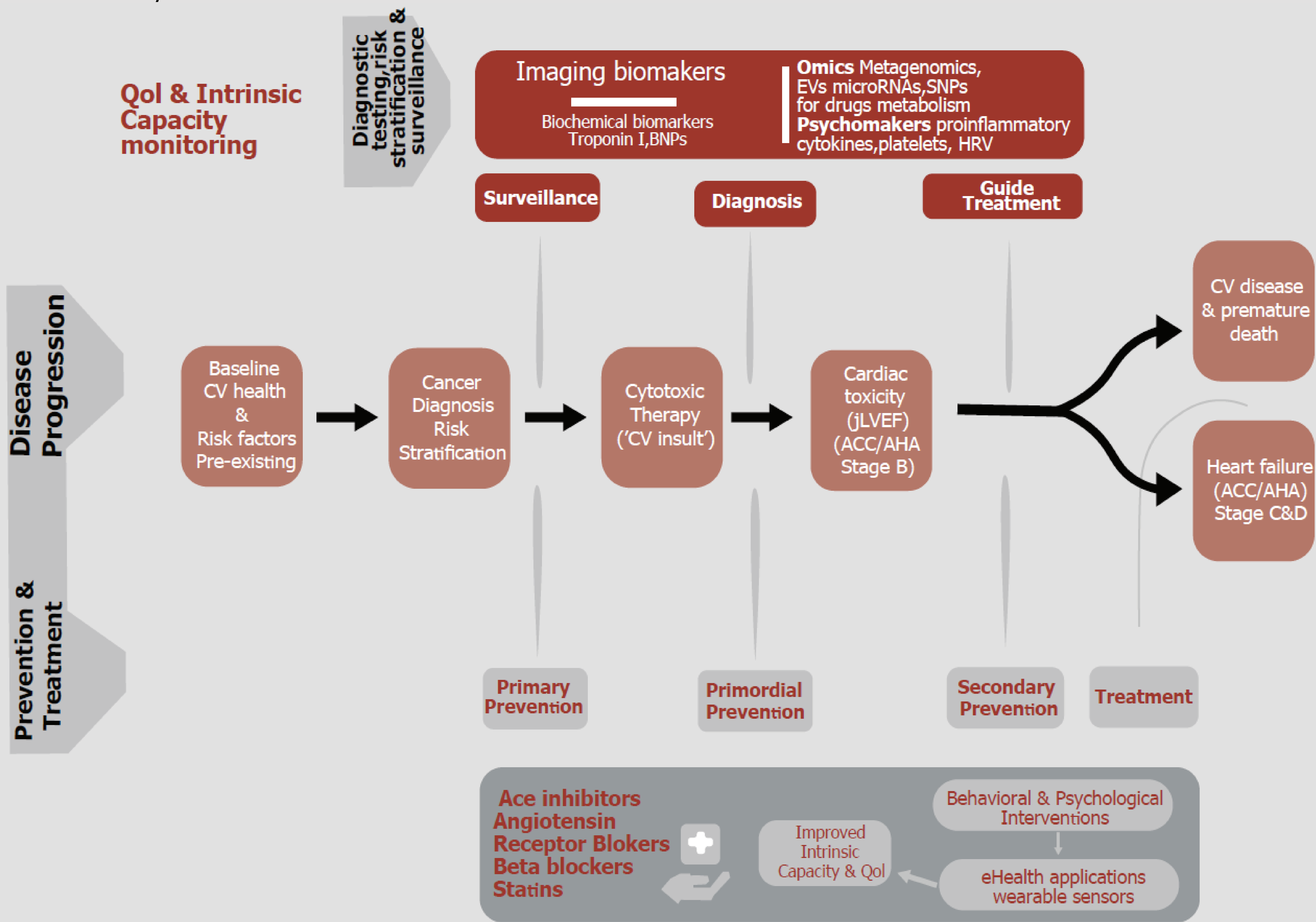
A multimodal approach for the management of co-morbid cardiotoxicity in the elderly breast cancer patients

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CARDIO CARE Vision

CARDIO CARE project [1] develops a novel and cost-effective risk stratification and healthcare model providing evidence-based best practices and care pathways to improve the management of multimorbid breast cancer patients at risk for cardiac toxicity.



Background

- Evidence-based best practices for risk stratification of elderly breast cancer patients are lacking.
- Data for breast cancer population are scarce since elderly patients are underrepresented in clinical oncology trials.
- Lower doses of chemotherapy are prescribed due to concerns for cardiotoxicity.
- Frailty and high prevalence of multimorbidity is revealed to breast cancer patients [2].
- Undertreatment and suboptimal outcomes with a negative impact on the breast cancer patients' Quality of Life (QoL) [3] are a main limitation.

Material and methods

In CARDIO CARE a multicenter clinical study, is performed to collect data (clinical, imaging, omics, biomarkers, psychomarkers, intrinsic capacity and QoL) through the CARDIO CARE mobile application to be explored by machine learning approaches.

Towards this direction, CARDIO CARE exploits:

- Data from 1560 retrospective patients.
- Digital biomarkers from sensor devices monitoring:
 - Physical activity & Heart functionality.
- Patient specific data integrated with retrospective data from 750 patients from a clinical study in:
 - Greece
 - Cyprus
 - Italy
 - Slovenia
 - Sweden

CARDIO CARE Innovation

CARDIO CARE approaches the challenge of the seamless integration and interoperability of a variety of software components by creating a scalable big data management and analysis platform to:

- Collect data from:
 - Mobile health application, Biomarkers.
 - Multidimensional health data & sensors signals.
 - Intrinsic capacity and QoL.
- Assist clinicians to identify best practices.
- Analyze new validated sets of quality Key Performance Indicators (KPIs).
- Target a better management of the elderly multimorbid breast cancer patients.
- Identify patient care gaps and improve their participation.
- Enhance the compliance to support patient-centred care.
- Improve QoL by automatically tracking and managing a patient's progress.
- Achieve a better management to prevent the Cardiotoxicity.

Contact Information

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Social Media

<https://www.facebook.com/CardiOCare.eu>

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<https://www.linkedin.com/companycardiocare-eu/>

<https://cardiocare-project.eu/>



References

[1] Cardiocare project, <https://cordis.europa.eu/project/id/945175>, [2] Baris et al. Management of Cardiovascular Disease in Women With Breast Cancer, Circulation. 2019;139:1110–1120, [3] Reddy P et al. Cardio-oncology in the older adult. J Geriatr Oncol. 2017;8(4):308-314