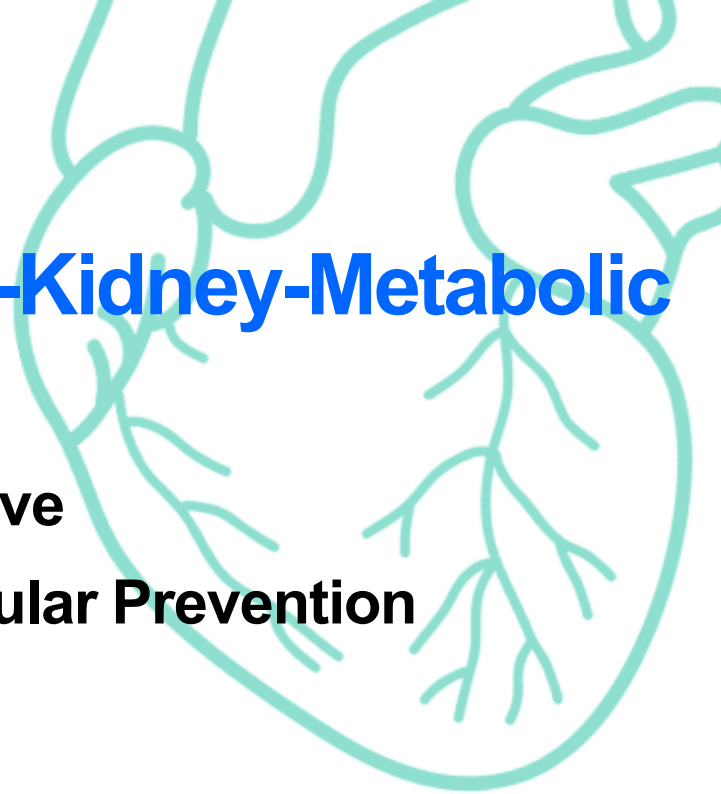


Characterizing Cardiovascular-Kidney-Metabolic Burden in HFpEF

A Multiorgan Imaging Approach to Improve Risk Stratification and Guide Cardiovascular Prevention

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Background

Cardiovascular-Kidney-Metabolic syndrome describes interrelated progression of **T2DM, CKD & CVD**

In a UK population study, up to **80%** of participants on CKM stage 2 or higher

High rates of obesity, hypertension & T2DM in the **CoLaus** population

HFpEF, a systemic disorder with strong association to CKM, **80%** with at least one additional **CKM comorbidity**

Project

500 HFpEF, 50 HFrEF & 50 healthy participant in HeartMagic (SNF funded project at UNIL) - for HFpEF phenotyping

Clinical presentation on baseline, cardiac MRI, renal MRI, TTE biological data (-omics) & 1 year follow-up

Primary analysis: stratification according to **CKM overlap burden**

Secondary analysis: **HFpEF and reference groups** stratification according to CKM staging framework

Objectives

Primary

Characterization of **clinical, biological, and multiorgan imaging phenotypes** in patients with HFpEF, stratified by cumulative CKM burden

Secondary

Assessing association of **1 year clinical outcome** and CKM burden

Comparing **cardiac and renal imaging markers** across CKM strata with reference groups

Identifying clinical and imaging phenotypes to improve risk stratification and inform **CV-Prevention strategies**