GROUP'S NAME: (sugere-se que o nome fique a 2 linhas, no máximo 3 linhas – 57 caracteres, sem espaços)

PRECAM – Precancerous Conditions and Early Cancer Management

PROJECTS WITH INTERNAL FUNDING

GEMS – Genetic Markers towards Early gastric cancer individualized Management and Surveillance (PI-269-CI-IPOP 91-2026); 15 000€ (2025-2029); Mário Dinis-Ribeiro

Description (2000 caracteres, sem espaços)

The GEMS project aims to identify and validate genetic and epigenetic biomarkers associated with the development of metachronous gastric lesions following curative endoscopic resection of early gastric neoplasms. The study will integrate genomic analyses via Whole Exome Sequencing (WES) and assessment of hypermethylation in genes previously associated with the risk of metachronous lesions, namely MIR124-3 and NKX6-1. Different anatomical regions of the stomach will be analyzed using FFPE samples. The aim is to characterize early molecular alterations associated with the risk of metachronicity, develop predictive models integrating molecular and clinical data, and explore the future applicability of these biomarkers in personalized surveillance strategies and liquid biopsy. We expect to contribute to improved risk stratification of patients, optimization of endoscopic surveillance programs, and the development of personalized medicine approaches in gastric oncology.

VOICE – *Perspectives on Liquid Biopsies for Gastric and Colorectal Cancer Screening and Surveillance: Voices of the Community, Patients and Physicians* (PI-271-CI-IPOP 88-2025) 10 000€ (2026) Patrícia Alves

Description (2000 caracteres, sem espaços)

This study aims to explore the perspectives of the community, patients with gastric and colorectal cancer, and healthcare professionals regarding the use of liquid biopsies in the screening, diagnosis, and surveillance of these cancers. The study's findings may contribute to the development of more inclusive and culturally sensitive screening and community education programs, promoting not only adherence to screening and surveillance strategies but also a critical and informed understanding of the different available options, which may help reduce health inequalities.

SNIFF – *Saliva-based Non-Invasive volatile organic compounds for gastric cancer detection* (PI-261 FA- CI-IPOP-45-2025) 20 000€ (2026-2028) Catarina Lopes

Description (2000 caracteres, sem espaços)

The SNIFF project aims to develop a noninvasive strategy based on the detection of volatile organic compounds (VOCs) in body fluids—particularly saliva—as a screening tool for gastric lesions. The goal is to establish a risk model to refer individuals at higher risk to individualized strategies for screening and monitoring gastric cancer in its early stages.

MATCH – Molecular biomarkers for the chemoprevention of metachronous gastric lesions (PI-270-CI-IPOP 92-2026) 20 000€ (2025-2028); Mário Dinis-Ribeiro

Description (2000 caracteres, sem espaços)

In Portugal, gastric cancer is the fifth most commonly diagnosed cancer and the third leading cause of cancer-related death. In its earlier stages, gastric cancer is often treated with endoscopic submucosal dissection (ESD), which preserves the stomach. However, there is a risk of new lesions—called metachronous lesions—developing in 10–20% of cases. The MATCH study aims to identify groups of individuals, based on biomarkers, who have a favorable risk-benefit profile regarding aspirin use. It also aims to identify other potential molecular targets for personalized chemoprevention and endoscopic surveillance strategies in the context of early gastric cancer treatment.