Título del Proyecto	Combining diagnostic and interventional approaches for patient-centric, futureproof cardiology care (COMBINE-CT)
Nº de expediente asignado	101132862
Abstract	For a patient with coronary artery disease (CAD), the care pathway still involves enormous variability and complexities. Inefficiencies and challenges in the treatment pathway are associated with poorer patient outcomes including recurrent cardiac events, incomplete revascularization in complex patients, and increased risk of mortality in patients with both acute and chronic CAD. Due to the low sensitivity or specificity of the standard diagnostic tests, 60% of CAD patients unnecessarily undergo an ICA, as they are found to have non-significant coronary stenoses and do not require revascularization.  Coronary Computed Tomography Angiography (CCTA) uses X-ray technology and computer processing to create a detailed 3D image of the coronary arteries, revealing the degree of lumen obstruction. It provides non-invasive access to the coronary anatomy, also for asymptomatic patients who would normally not undergo invasive coronary angiography (ICA). Current guidelines adopted in the US, EU, and the UK recommend CCTA as a first-line test for evaluation of CAD, positioning it as a "gatekeeper" to the Cath lab.  COMBINE will close the gaps in the existing workflow for the treatment of CAD patients: we propose an end-to-end workflow that will unlock the full potential of CCTA to improve hospital efficiency and patient outcomes. Alpowered CCTA algorithms will enable definitive ischemia diagnosis, accurate patient stratification and efficient planning of the interventions, as well as patient specific follow-up. While our focus on CAD is justified by the large patient population, the CCTA-enabled diagnostic accuracy and seamless workflow, backed by the clinical evidence generated in five multicentre clinical trials, will be directly transferable to other clinical domains using CT.

Entidad Financiadora	Unión Europea
Convocatoria:	HORIZON EUROPE (HORIZON-JU-IHI-2022-03-single-stage)
Importe de la ayuda	10.014.568,75 €
Fechas de ejecución del proyecto	Starting date: 01/11/2023; End date: 31/10/2027
	Co-funded by the European Union  Combine-CT  innovative health initiative
Enlaces:	https://combine-ct.com/