



Heart ‘omics’ in AGEing (HOMAGE): design, research objectives and characteristics of the common database

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Supplementary Table 1 Contributing HOMAGE investigators

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Glasgow, UK	Naveed Sattar, Paul Welsh, Ian Ford (PROSPER), Wouter Jukema (Eindhoven, The Netherlands; PROSPER), Brendan Buckley (Cork, Ireland; PROSPER)

Supplementary Table 2 Work description and work package leaders within the HOMAGE consortium

Work package title	Principal investigator	Institute
General coordination	Faiez Zannad	Inserm, France
Coordination of clinical studies and centres	Stéphanie Grojean	Fondation Transplantation EDDH, France
Cohorts studies for diagnosis and risk prediction	Faiez Zannad	Inserm, France
Prediction of therapeutic response	John Cleland	University of Hull, UK
Biobanking and bio-informatics	Stephane Heymans	Maastricht University, Netherlands
Bio-assay	Jim Curry	Radox Testing Service, UK
Data management and statistical analysis	Jan A. Staessen / Stuart Pocock	University of Leuven, Belgium / London School of Hygiene, UK
Industrial application, regulatory consultation and market research	Yigal Pinto / Joost Leenders	ACS Biomarker, Netherlands
Dissemination and changing clinical practices	Faiez Zannad / Patricia Joseph-Mathieu	Inserm, France / Inserm Transfert, France
Management and coordination	Patricia Joseph-Mathieu	Inserm-Transfert SA, France

Supplementary Table 3 List of candidate proteomics-based biomarkers

Domain	Candidate marker	Processes	Biofluid (volume needed)
miRNA-omics	miR-208, -499, -423-5p, -221, -132, -21, -126, -18 &- 19 and -22 & -24	F, I, M, A	Serum/plasma (0.5 mL)
Transcriptomics	Neutrophil gelatinase-associated lipocalin (NGAL)	I, M	Serum/plasma (0.1 mL)
	Anaplastic lymphoma receptor tyrosine kinase (ALK)	M	PBMC (5 mL for all)
	Nerve growth factor beta (NGFb)	M	
	F-box and WD repeat domain containing 7 (FBXW7)	M	
	Ferrochelatase (FECH)	M	
	CX3C chemokine receptor 1 (CX3CR1)	I, M	PBMC (1 mL for all)
	Chemokine (C-C motif) receptor 2 (CCR2)	I, M	
	CD28	F, I, M, A	PBMC (2 mL for all)
	CD69	F, I, M, A	
	Lymphocyte-specific protein tyrosine kinase (LCK)	F, I, M, A	
	Heme oxygenase 1 (HMOX1)	F, I, M, A	
	TNF receptor superfamily member 1A (TNFRSF1A)	F, I, M, A	
	B-cell CLL lymphoma 2 (BCL2)	F, I, M, A	
	Caspase 8	F, I, M, A	
	Chemokine (C-C motif) ligand 5 (CCL5)	F, I, M, A	
	DNA damage-inducible transcript 3 (DDIT3)	F, I, M, A	
	Early growth response 3 (EGR3)	F, I, M, A	
	IL10RB	F, I, M, A	
	IL1R2	F, I, M, A	
	Serpin peptidase inhibitor B2 (SERPINB2)	F, I, M, A	
	TIMP1	F, I, M, A	
	Thrombospondin 2	F	Serum/plasma (0.2 mL)
	Glycoprotein-Nmb	F	
	COL4A1	F, M	Serum/plasma (0.2 mL)
	Pentraxin	F, M	
Proteomics	Senescence associated secreted proteins including IL-8, GRO-a, GM-CSF, hsIL6 and MCP1	I, A	Serum/plasma (0.5 mL)
	Phosphorylated troponin T	M	Serum/plasma (0.1 mL)
	Quiescin-sulfhydryl oxidase 1 (QSOX-1)	M	Serum/plasma (0.2 mL)
	CD146	M	
	Soluble TWEAK (sTWEAK)	I, M	Serum/plasma (0.1 mL)
	Cathelicidin-related antimicrobial protein (CRAMP),	F, A	Serum/plasma (0.5 mL)
	Stathmin	F, A	
	Elongation factor 1 alpha (EF-1)	F, A	
	Chitinase 3-like protein 3	F, A	
	243 urinary peptides	F, I, M	Urine (1.5 mL)
Metabolomics	α -Ketoglutarate	M	Serum (0.25 mL)
	Pseudouridine	M	
	γ -Glutamyl leucine and valine	F, I, M	
	Asymmetric and symmetric dimethylarginin	F, I, M	
	5-Hydroxy-tryptamine (Serotonin)	M	
	Amino acids and derivatives	F, I, M, A	Serum/plasma (20 μ L)
	Biogenic amines	F, I, M, A	
	Acylcarnitines	M, A	
	Sphingolipids	F, I, M	
	Glycerolphospholipids	F, I, M	

The processes, in which proposed biomarkers are involved in, include ageing (A), inflammation (I), fibrosis (F) myocyte damage (M) or combinations. PBMC: peripheral blood mononuclear cell.