

CGA/16/42 – Defining the molecular signature of endothelial progenitor cells

The recent discovery of an endothelial progenitor cell (EPC) in adult human blood that can repair damaged blood vessels generated great excitement due to its potential to restore tissue function in patients with cardiovascular disease. However, it is not possible to isolate EPC for further investigation due to a lack of markers to distinguish EPC from other cell types. We aim to 'decode' the genetic information of EPC to identify new markers that permit validation of the regenerative potential of EPC, and reveal changes in EPC gene expression and function in cardiovascular disease.