Single-Cell RNA Sequencing (scRNA-seq) analysis of Congestive Heart Failure (CHF)

Presented by - Sanjai



Dataset used for the analysis

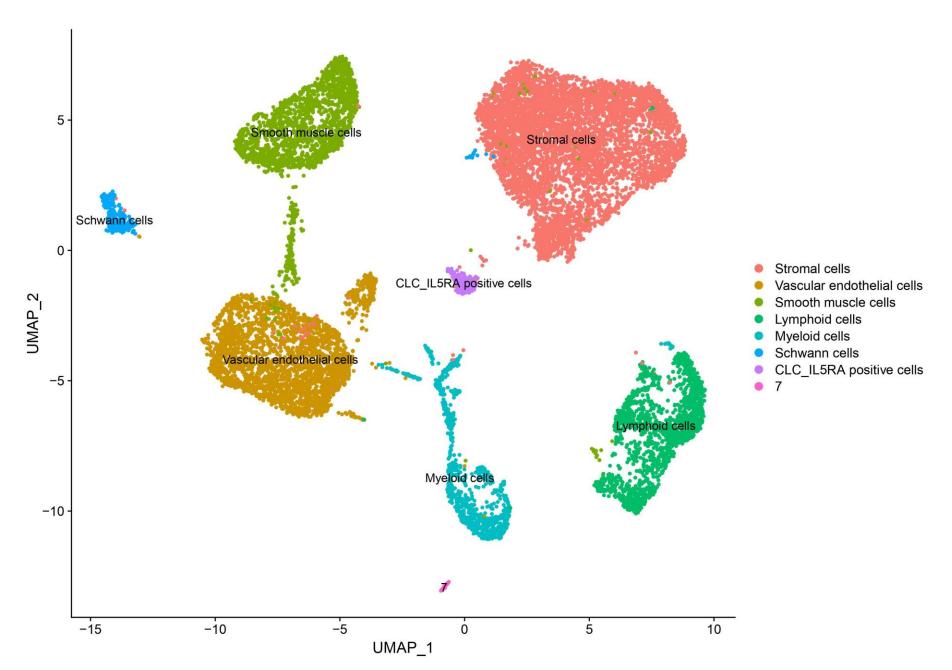
This analysis was done using, two types of human left ventricular samples:

- 1. one control sample (non-failing, non-transplantable heart) and
- 2. one heart failure sample (with a history of hypertension).

Aim

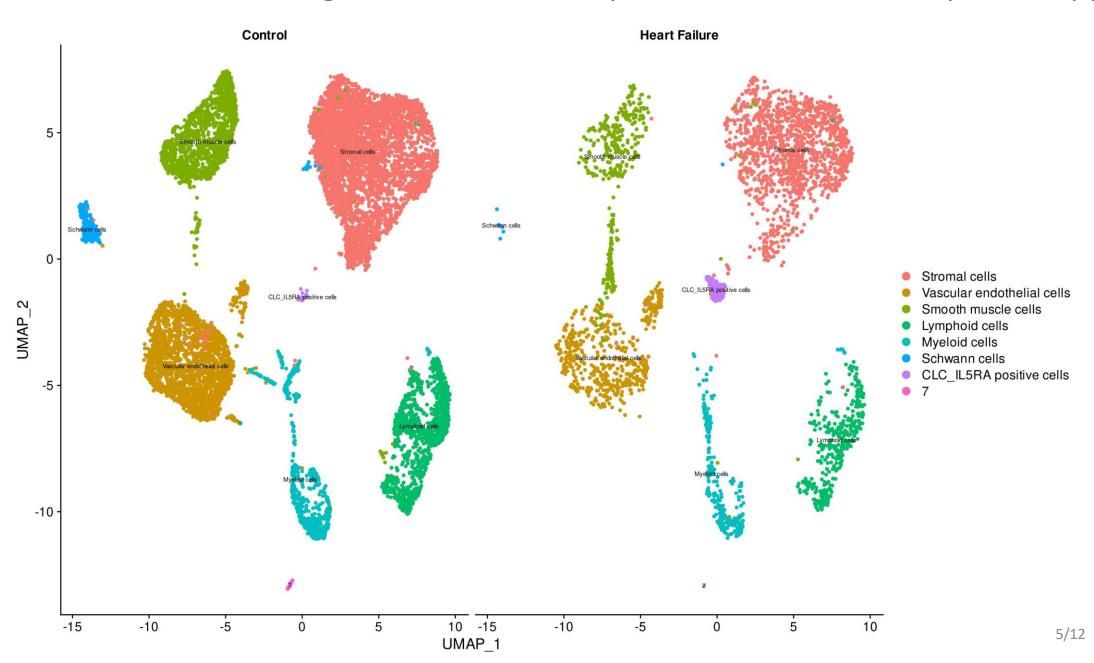
- 1. Explore the cellular landscape in Congestive Heart Failure
- 2. Identify the various cell markers and cell type
- Identify the differentially expressed genes across the cell types

UMAPs of Heart single cell transcriptomes colored by cell type



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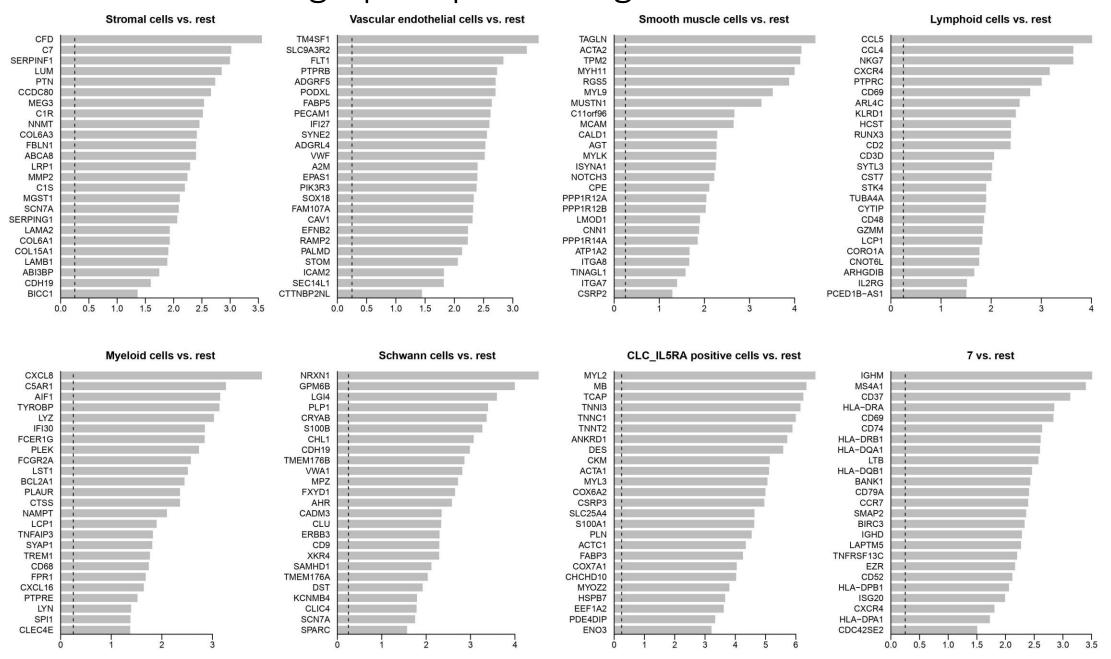
UMAPs of heart single cell transcriptomes colored by cell type



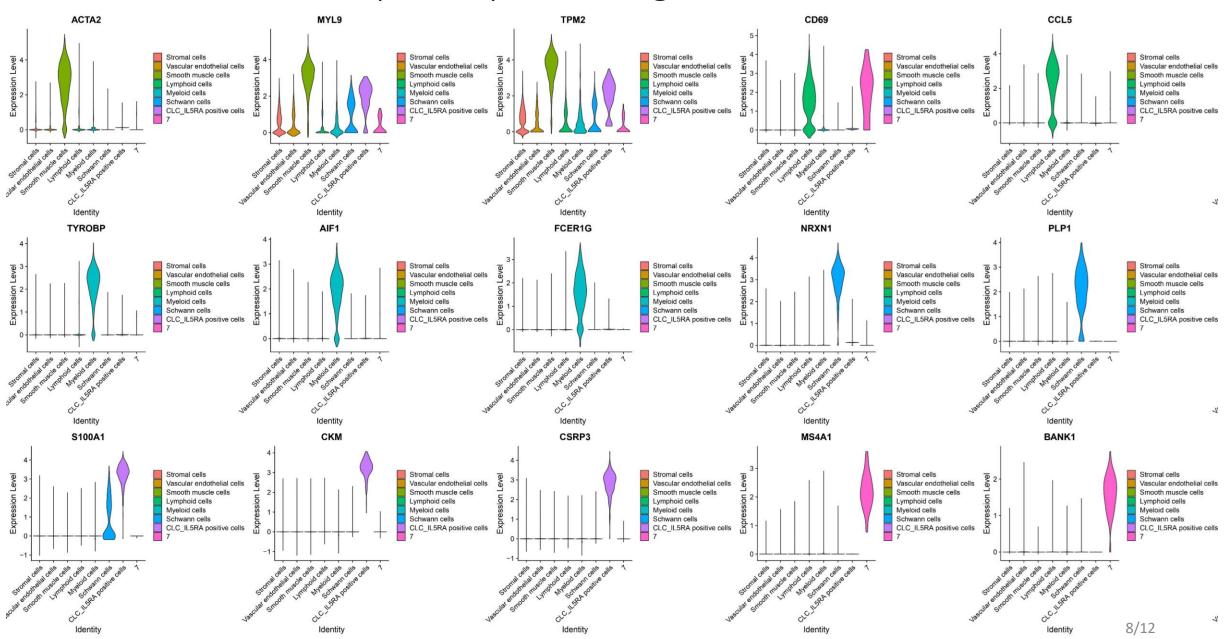
Heat map representing top five cell markers of all cell types



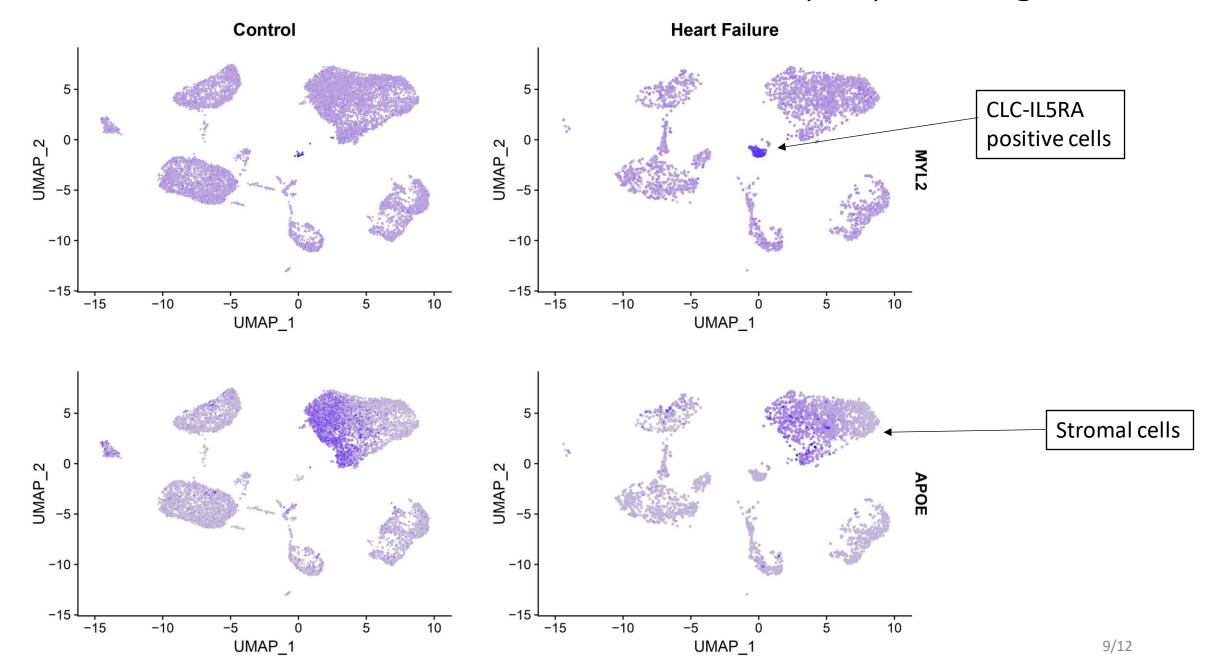
Bar graph representing the cell markers



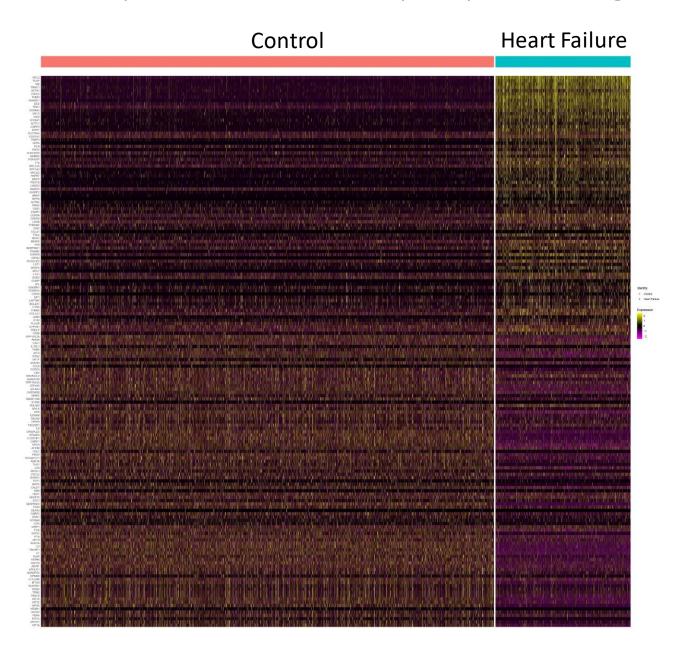
Violin plot representing the cell markers



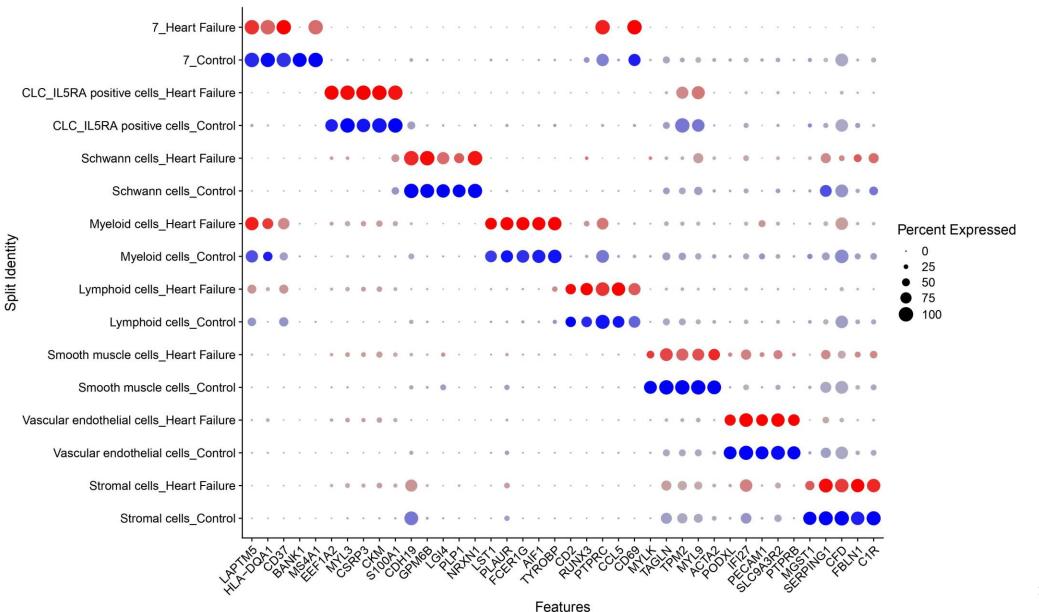
UMAPs of cells color coded with Differentially expressed genes



Heat map of Differentially expressed genes



Dot plot differentially expressed genes



THANK YOU

