Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Clinical meta data of all samples processed

File name: Supplementary Data 2

Description: robust NMF gene modules derived from snRNA-seq and Visium data

File name: Supplementary Data 3

Description: cores genes of each robust NMF clusters (core genes: genes present in at least 2 robust NMF programs within each cluster)