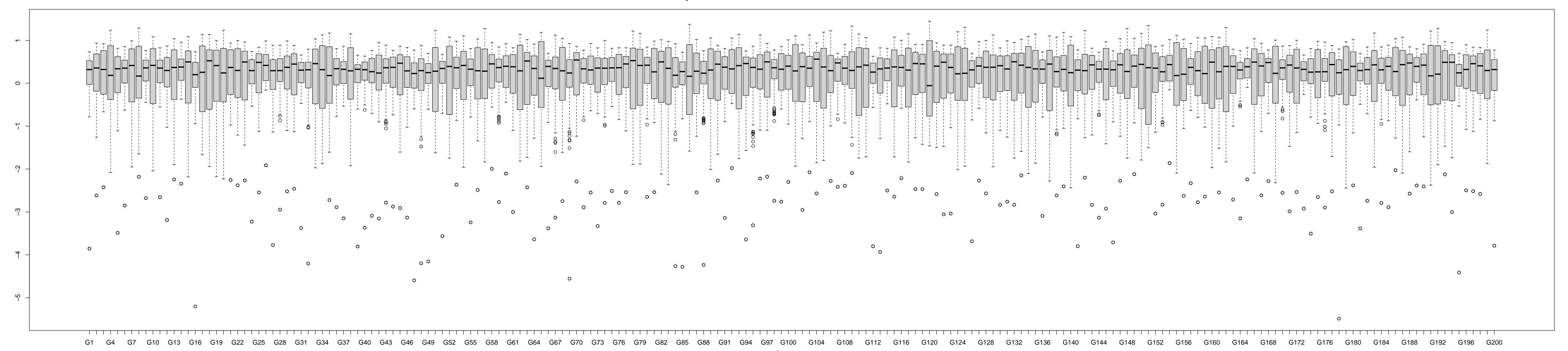
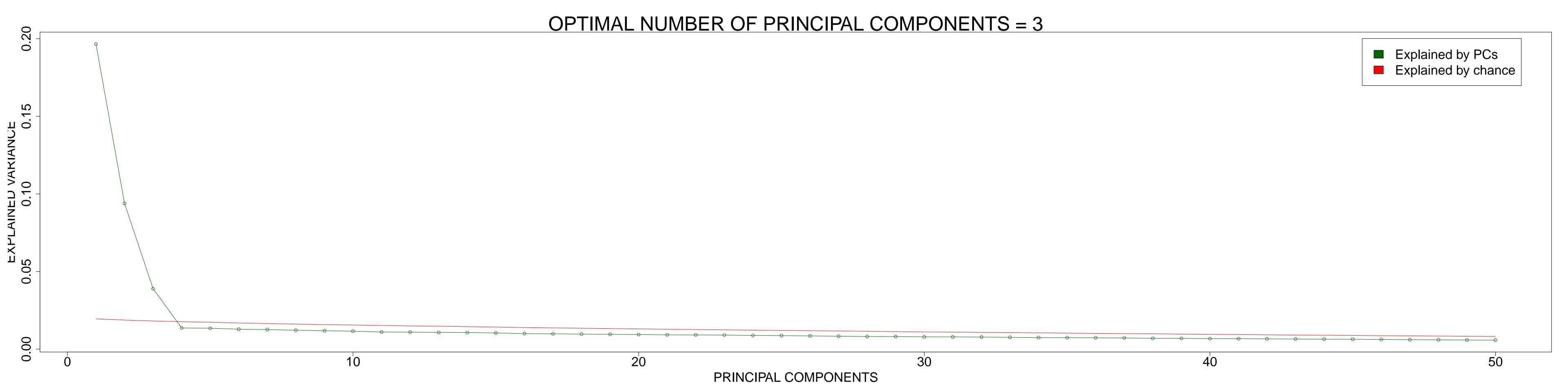
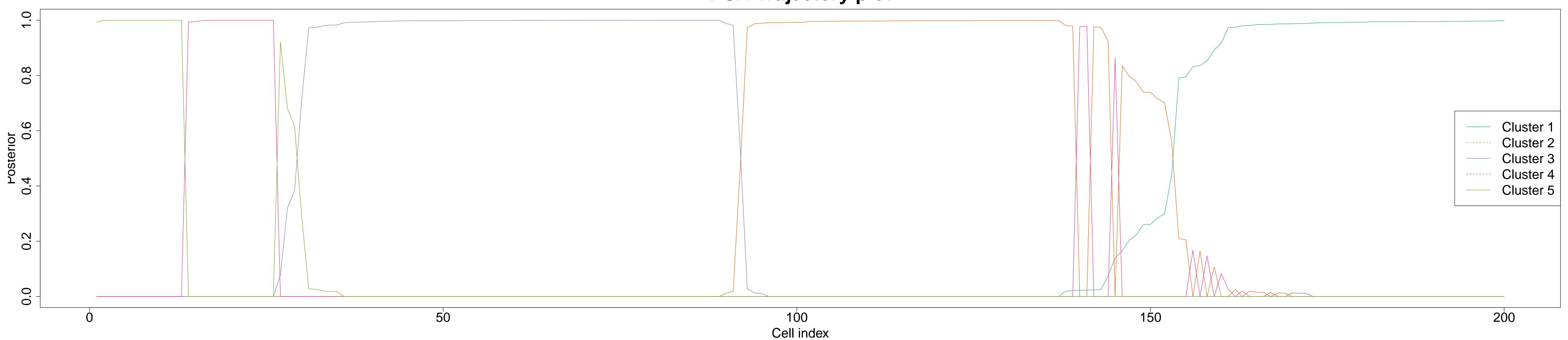
Barplot of Centered and Scaled Dataset 3

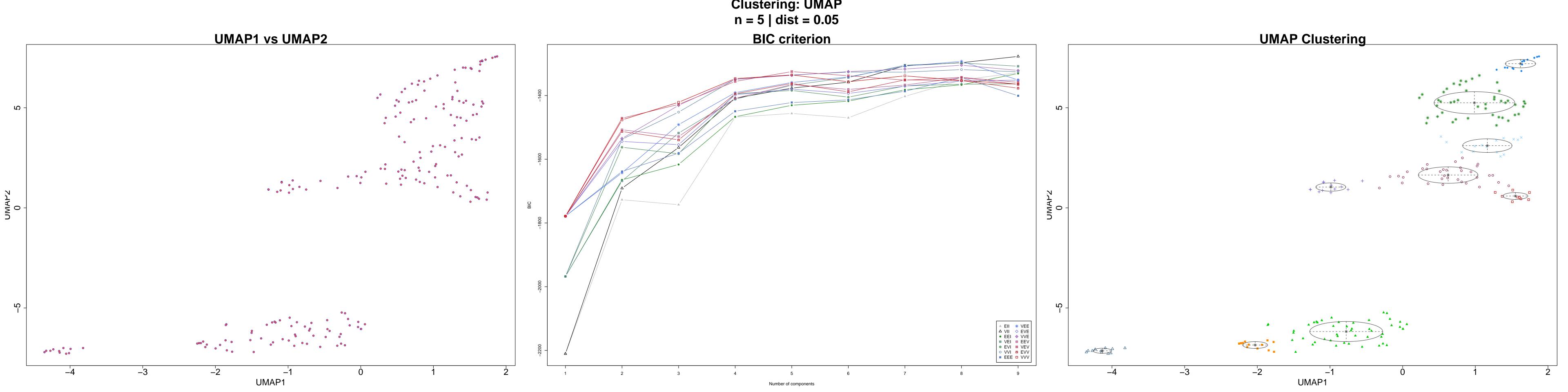


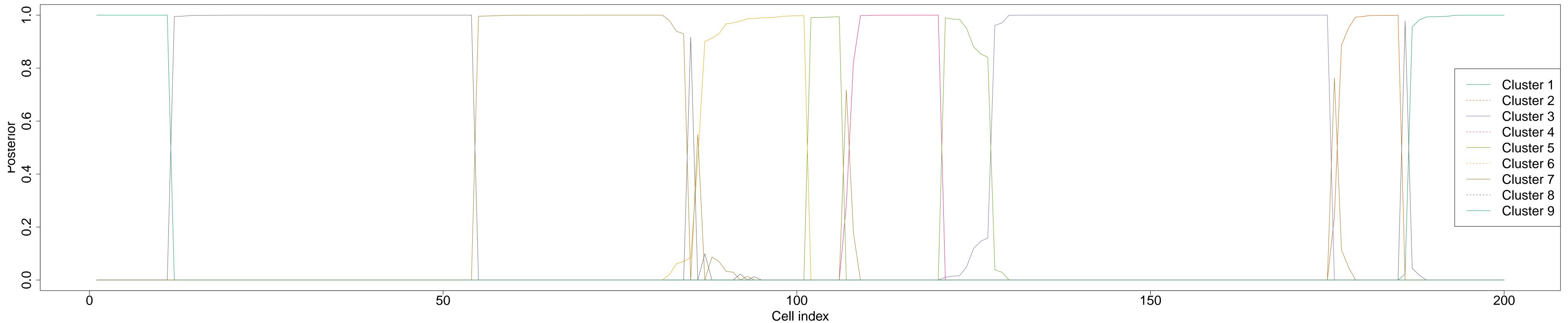


PCA PC1 vs PC2 **BIC** criterion PCA Clustering

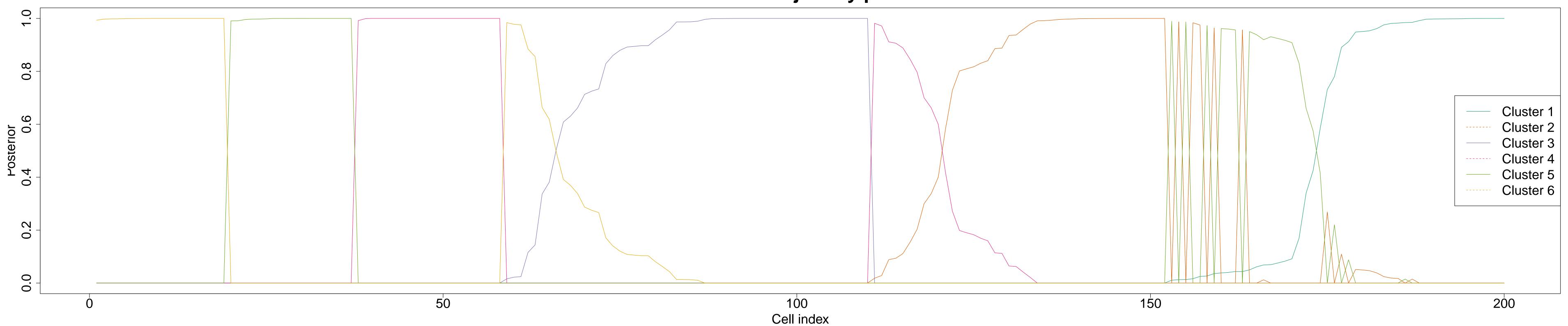
PCA Trajectory plot



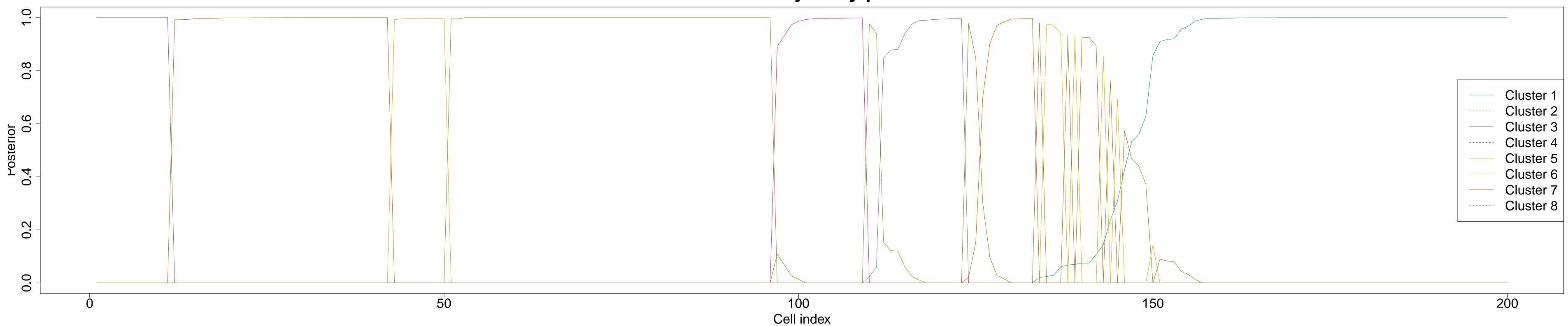




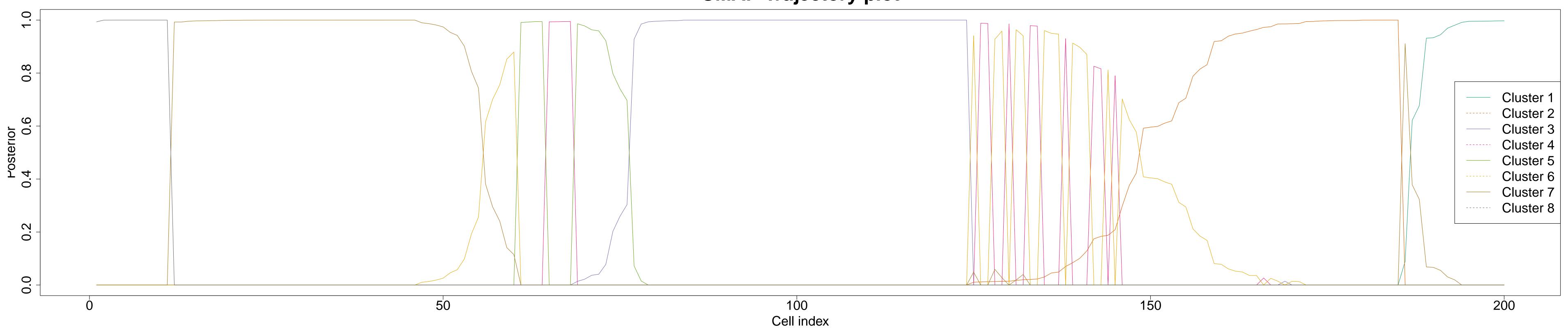
Clustering: UMAP n = 5 | dist = 0.1**BIC** criterion UMAP1 vs UMAP2 **UMAP Clustering** • • • • • • UMAP1 UMAP1



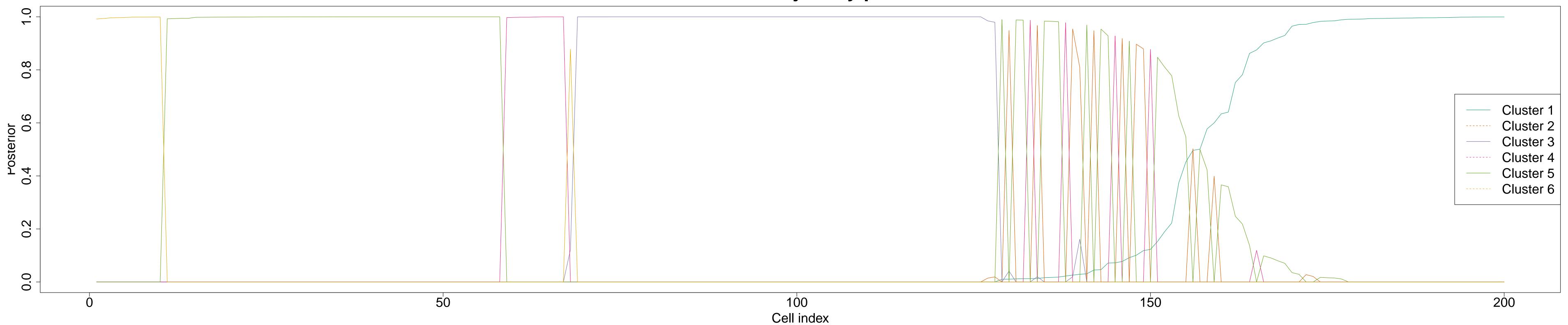
Clustering: UMAP n = 5 | dist = 0.2 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering** UMAP1

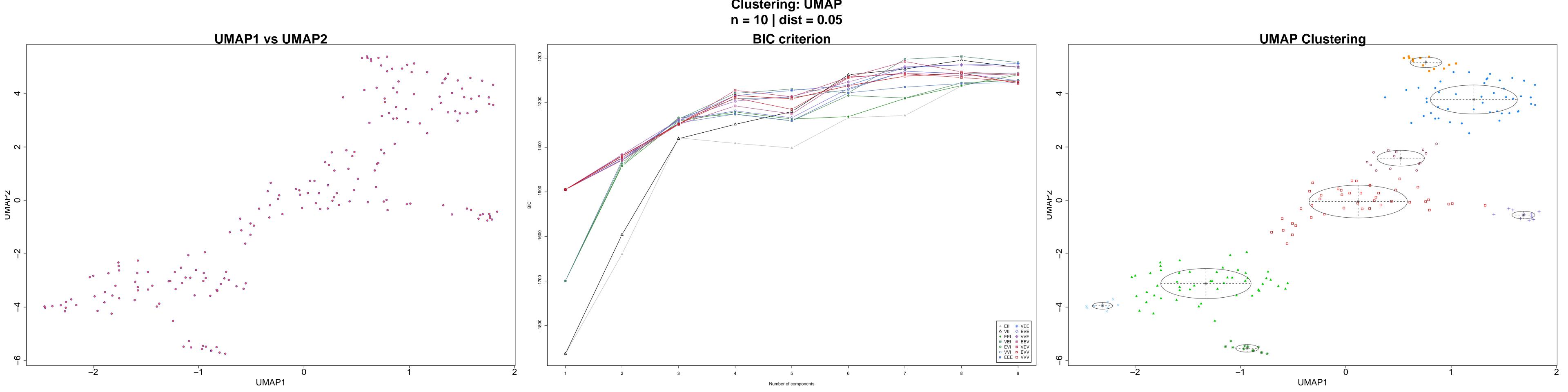


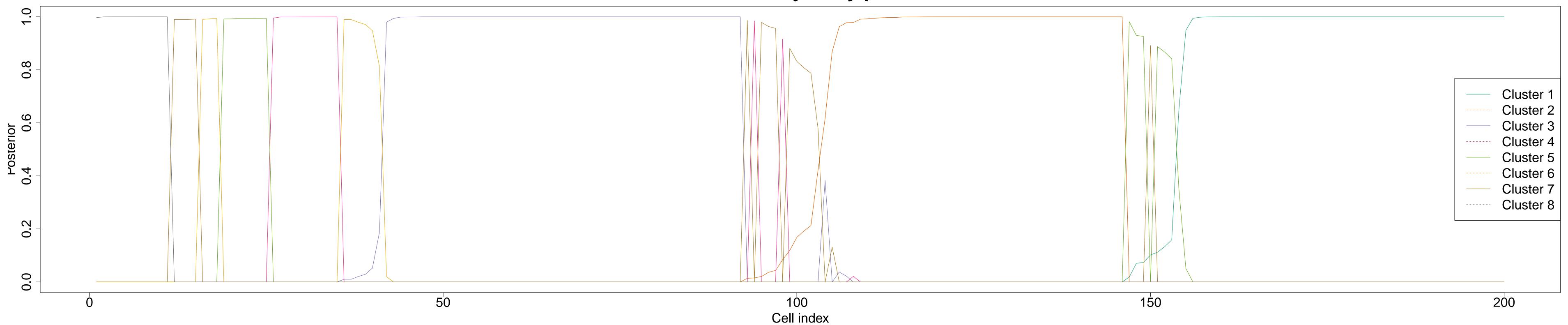
Clustering: UMAP n = 5 | dist = 0.3 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

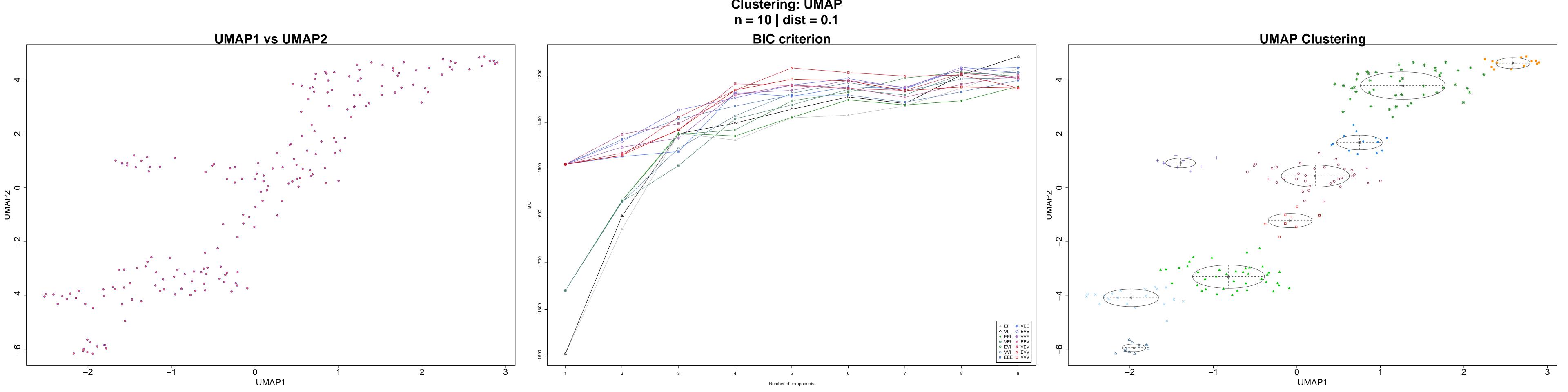


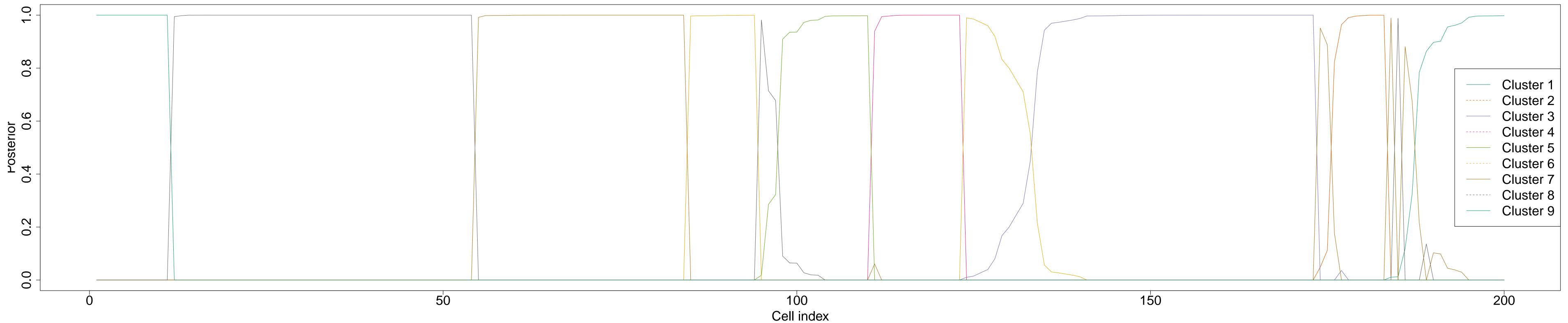
Clustering: UMAP n = 5 | dist = 0.4 **BIC** criterion UMAP1 vs UMAP2 **UMAP Clustering** UMAP1 UMAP1

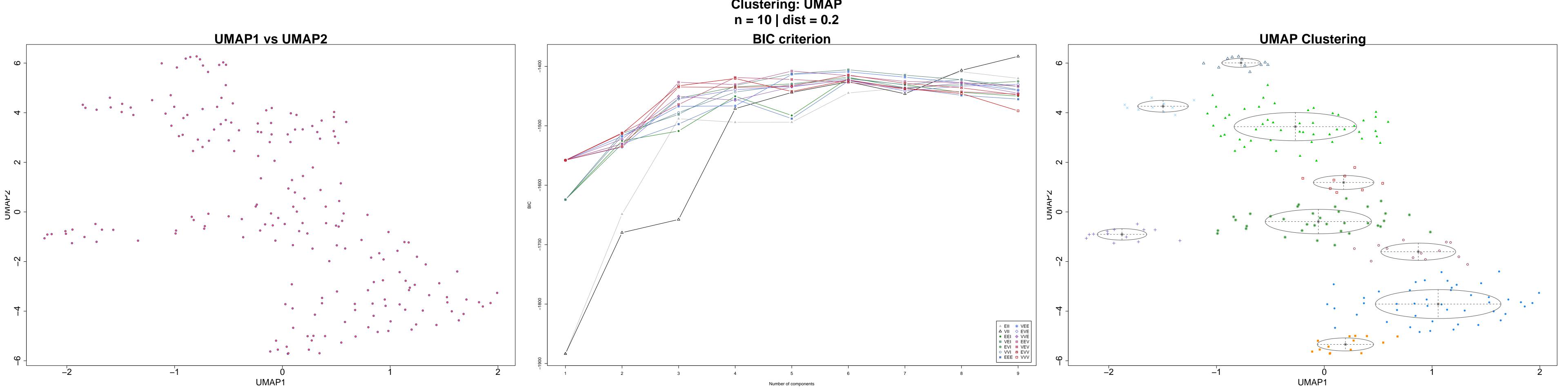


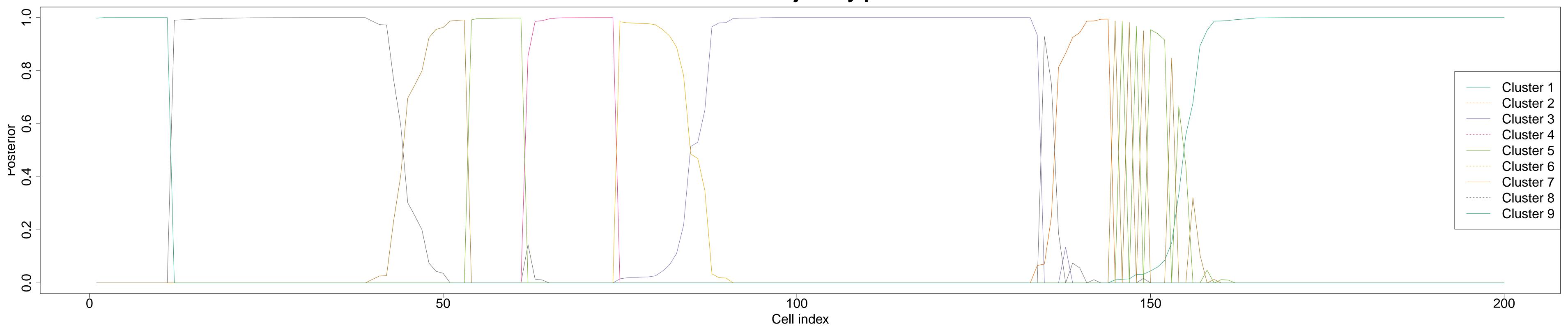


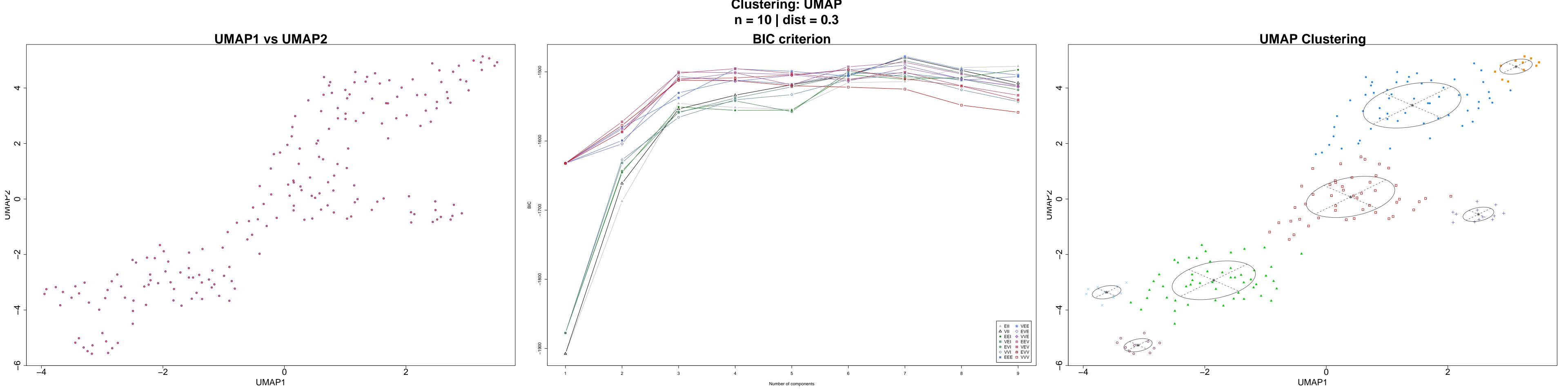


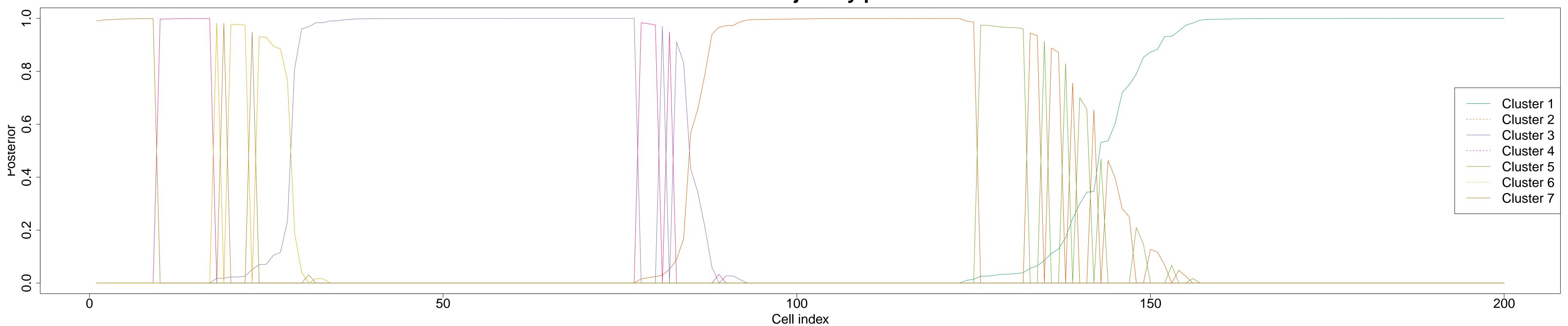




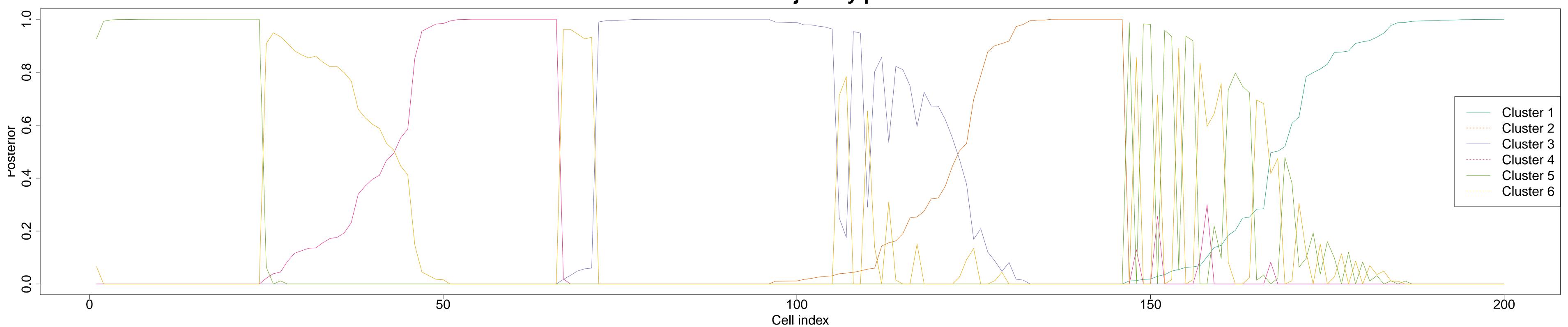






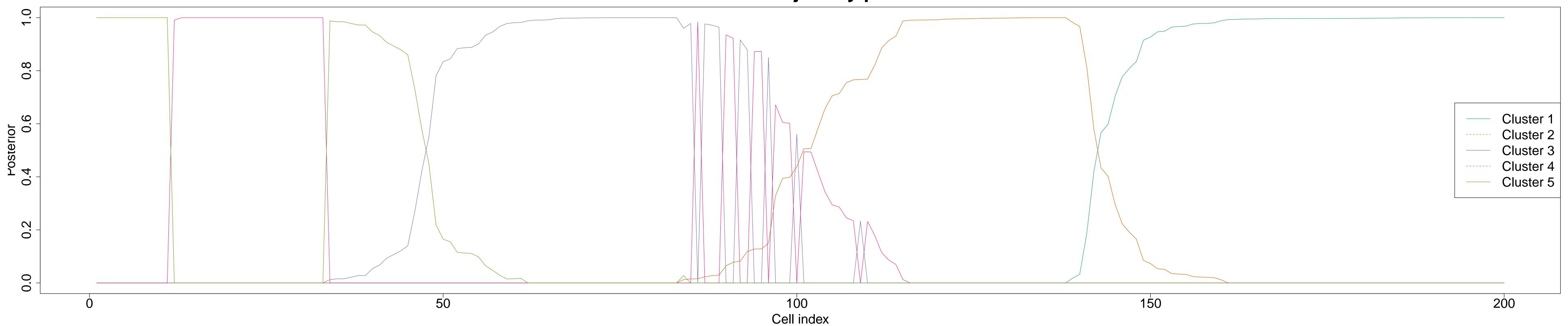


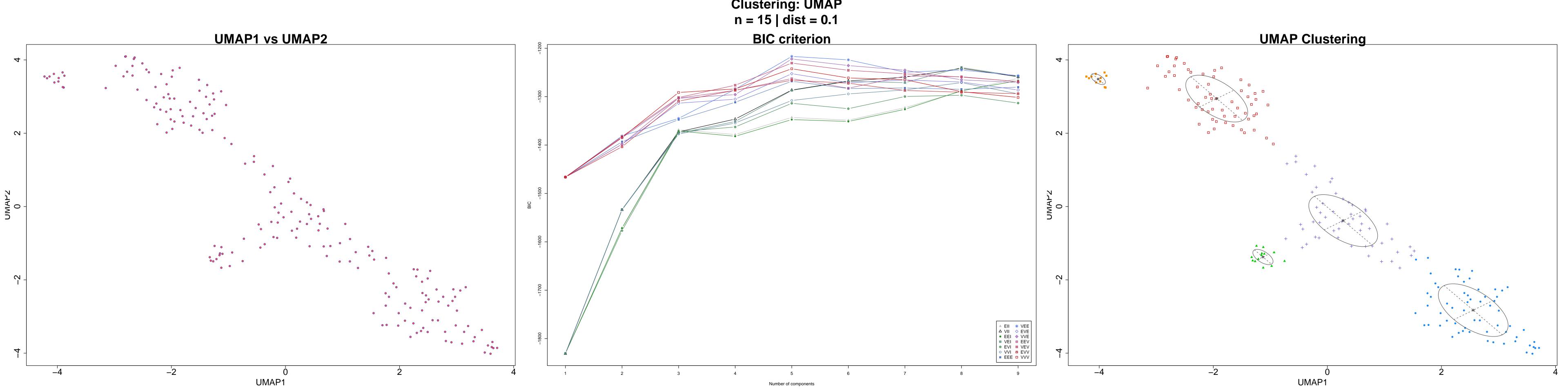
Clustering: UMAP n = 10 | dist = 0.4 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

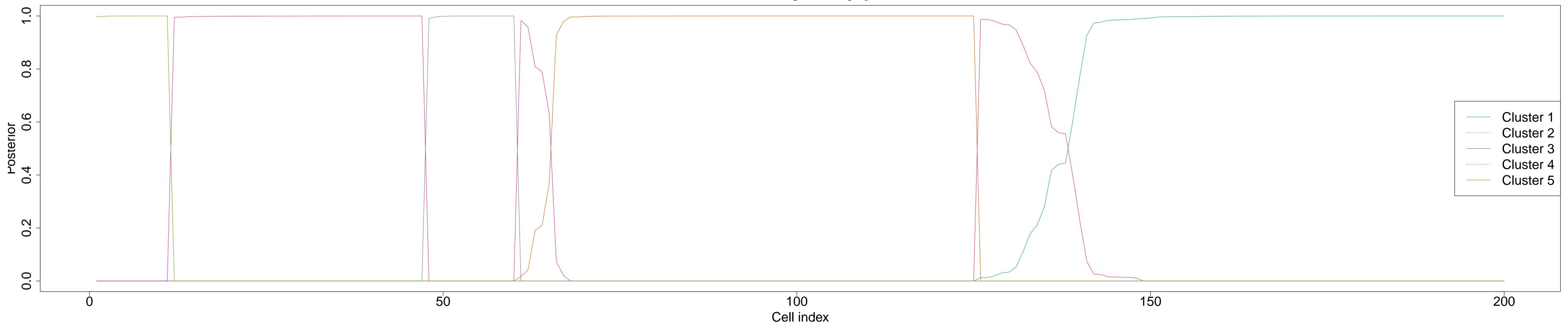


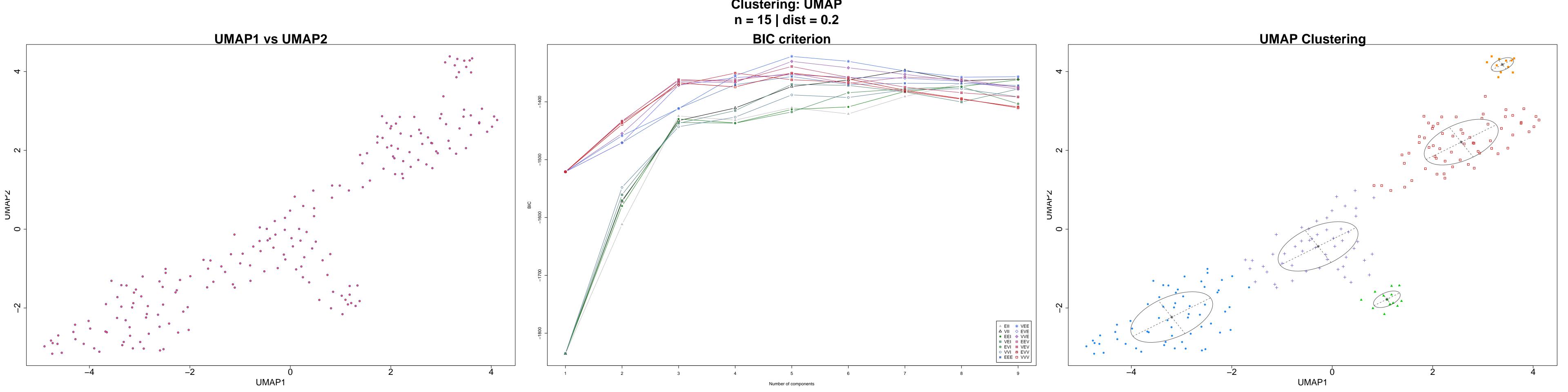
Clustering: UMAP n = 15 | dist = 0.05 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering** ▲ EII * VEE
△ VII ◇ EVE
● EEI ◆ VVE
※ VEI # EEV
● EVI ※ VEV
○ VVI ※ EVV
■ EEE □ VVV

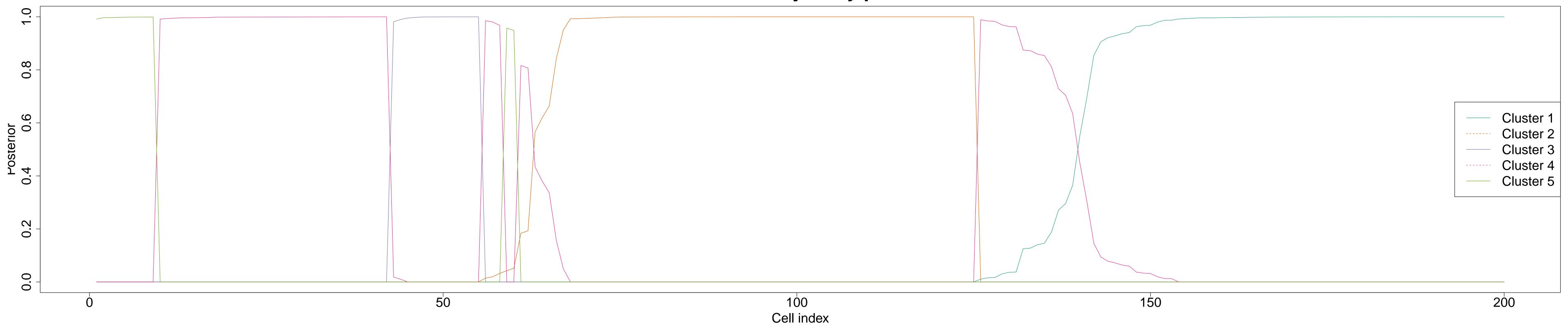




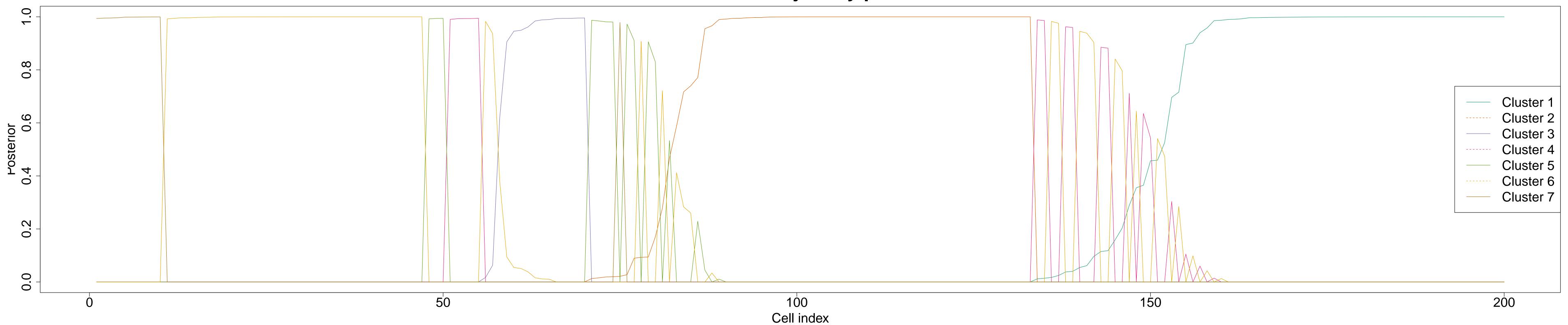


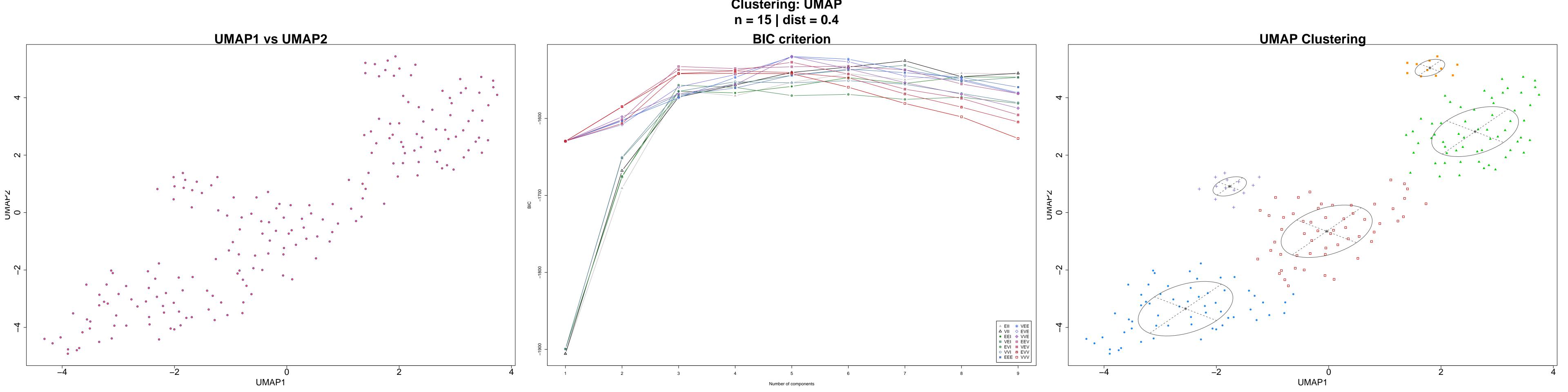


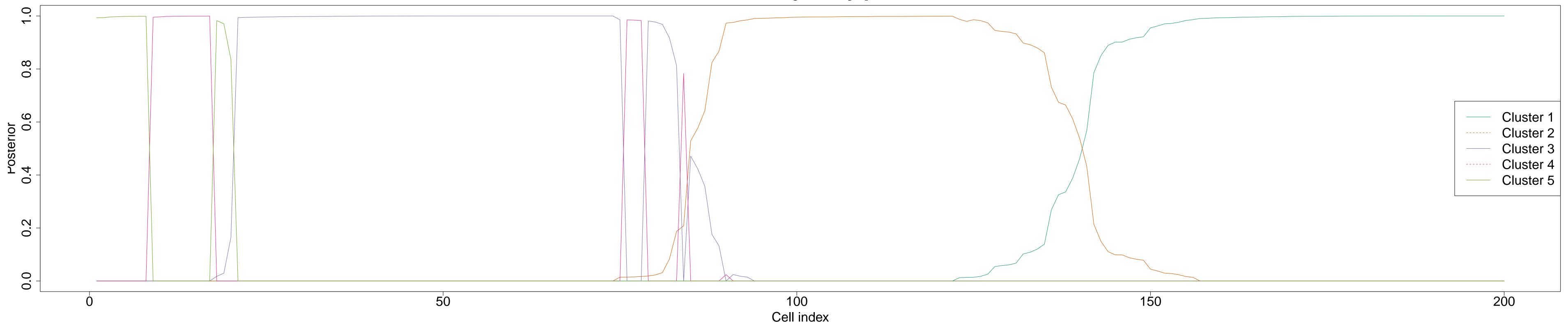


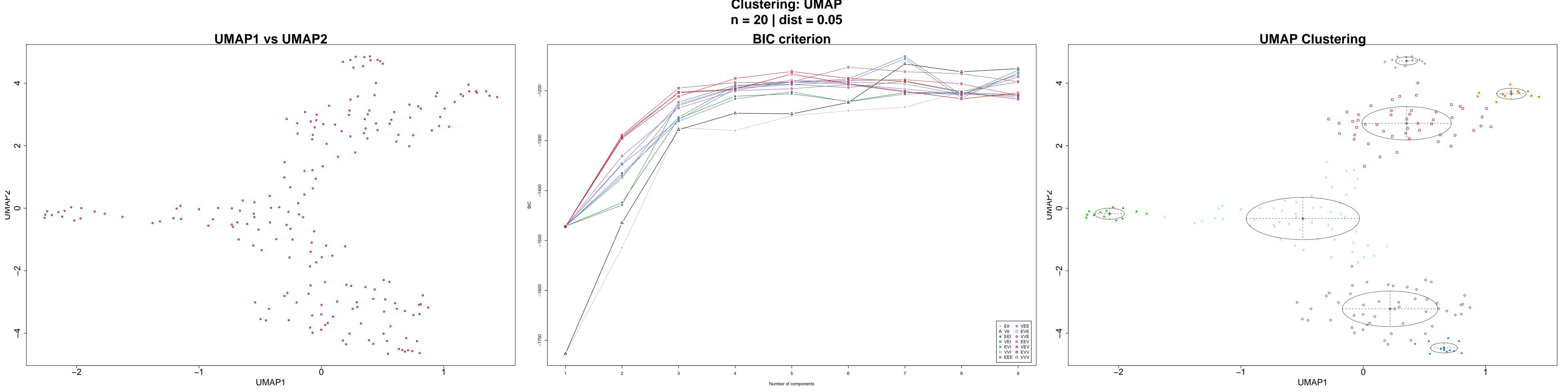


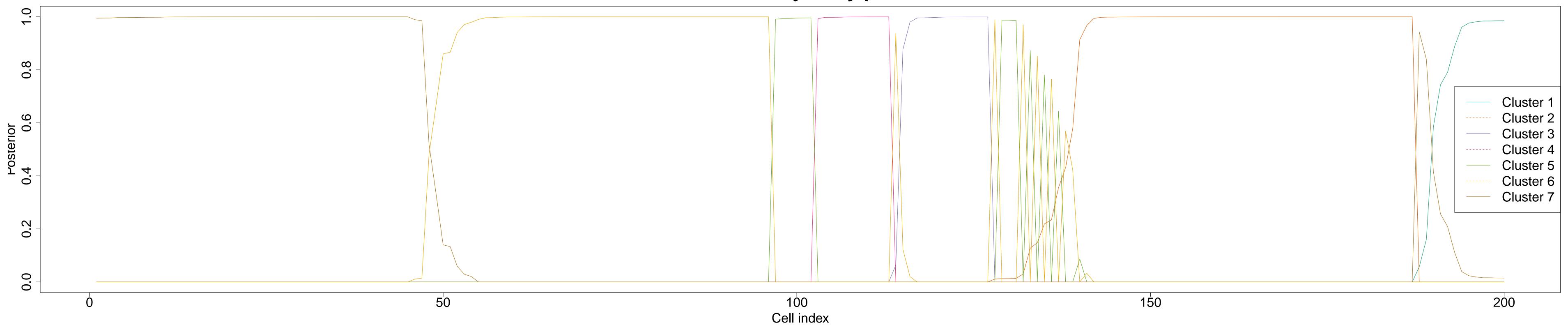
Clustering: UMAP n = 15 | dist = 0.3 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

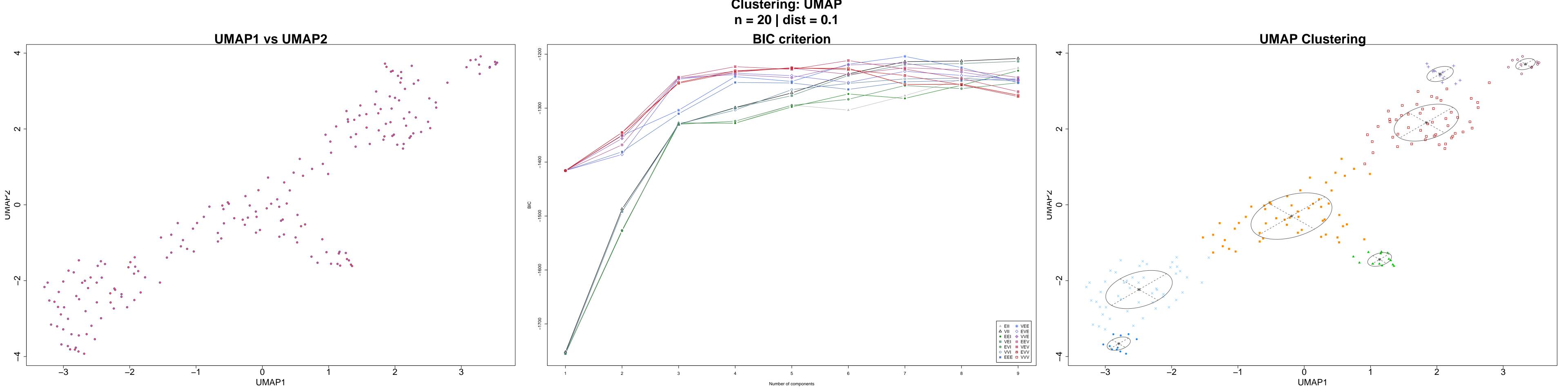


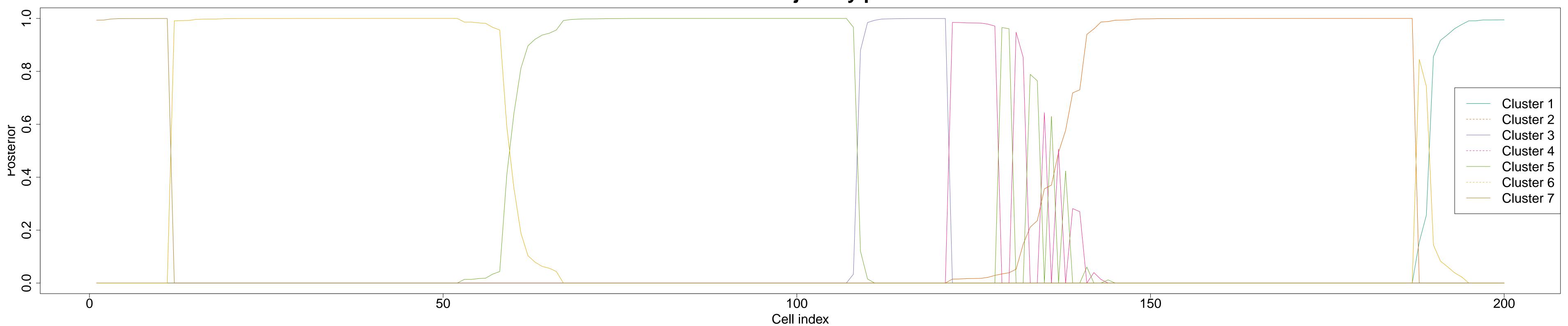


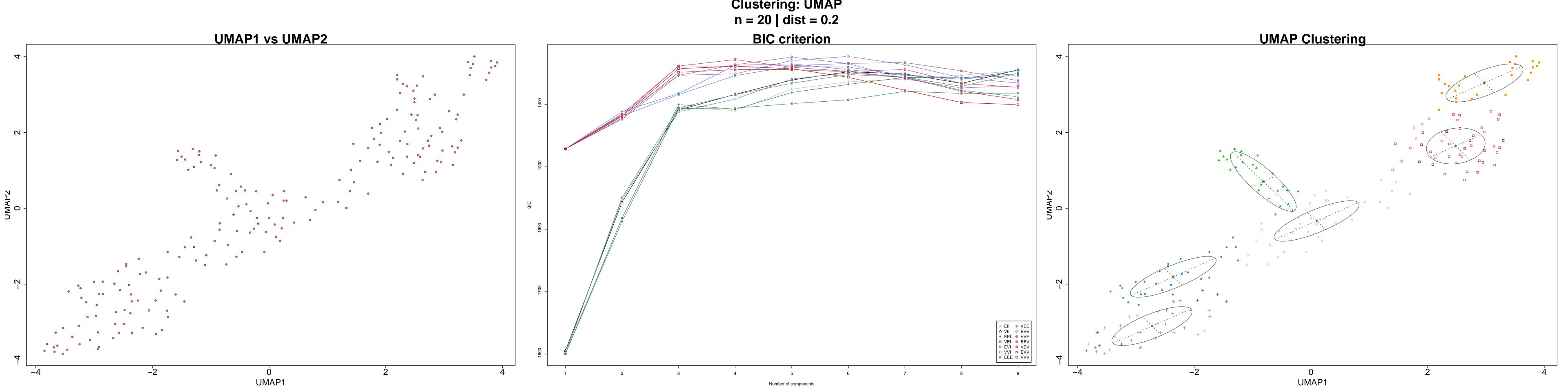


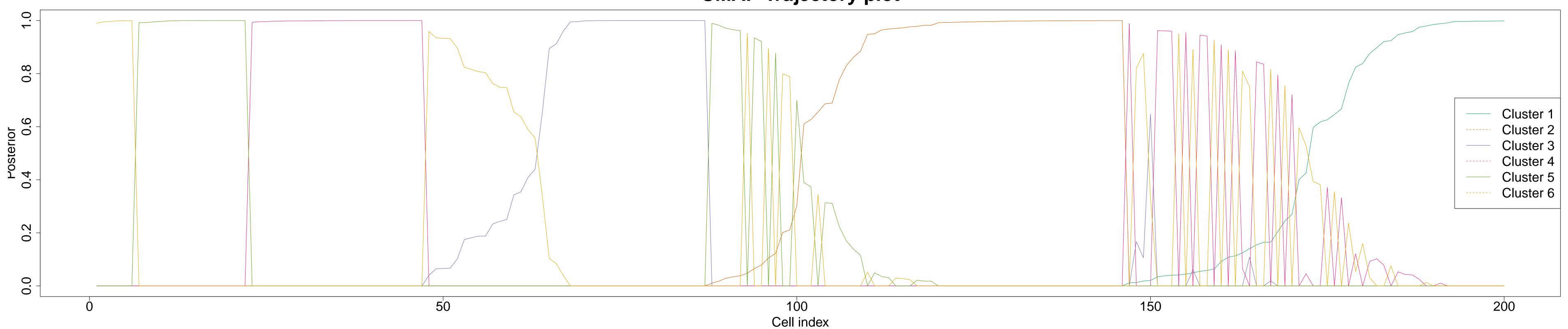




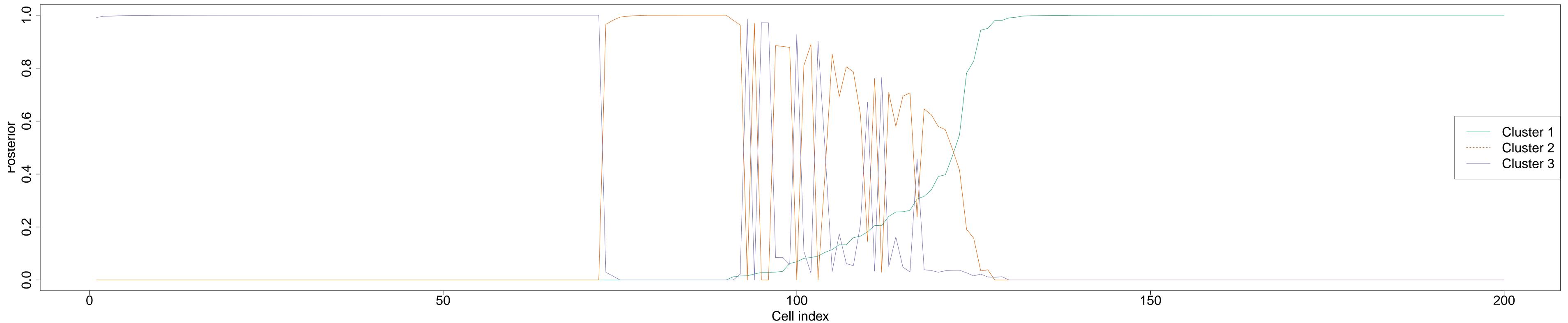


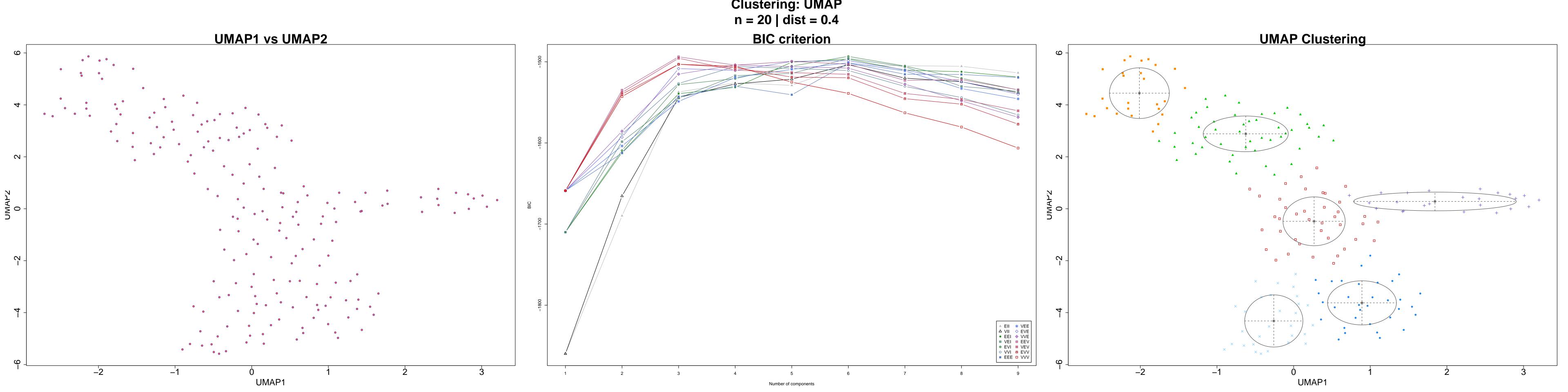


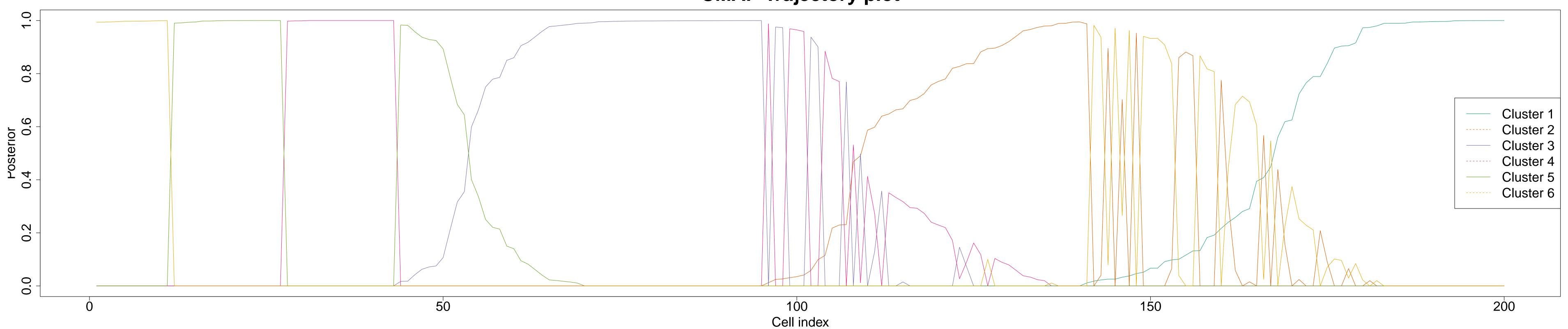




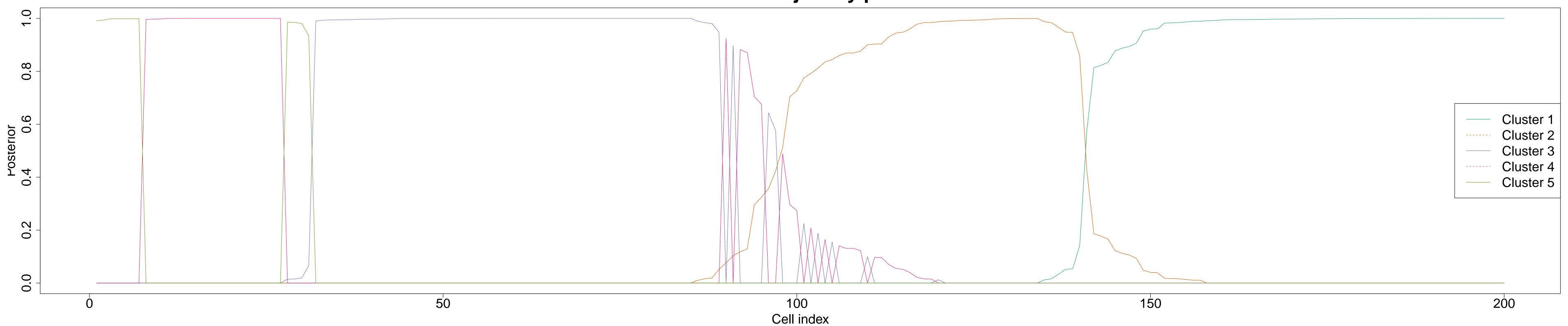
Clustering: UMAP n = 20 | dist = 0.3 UMAP1 vs UMAP2 **UMAP Clustering BIC** criterion



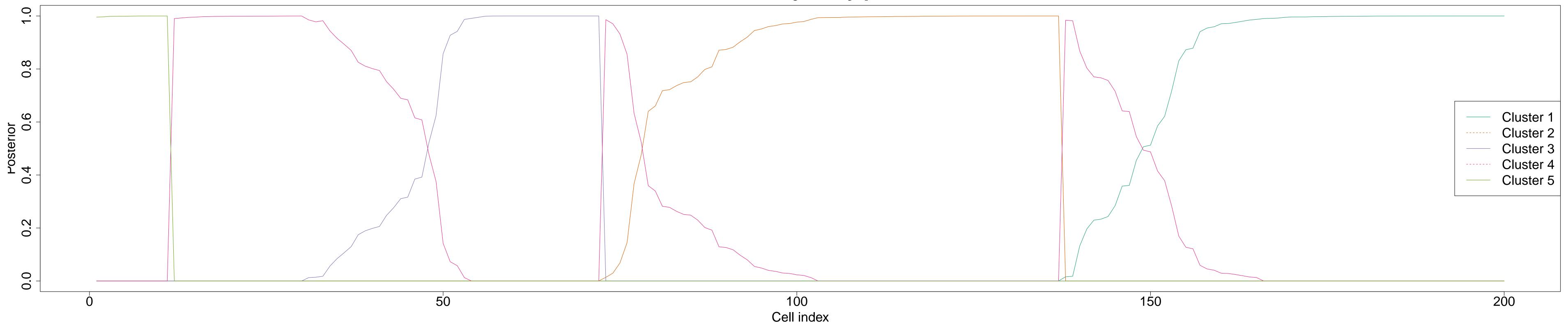


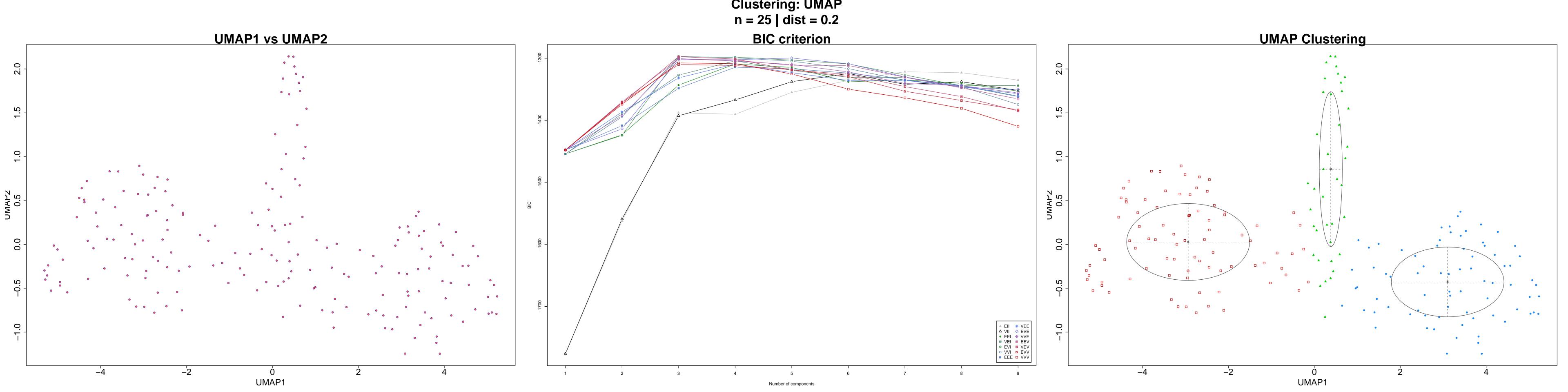


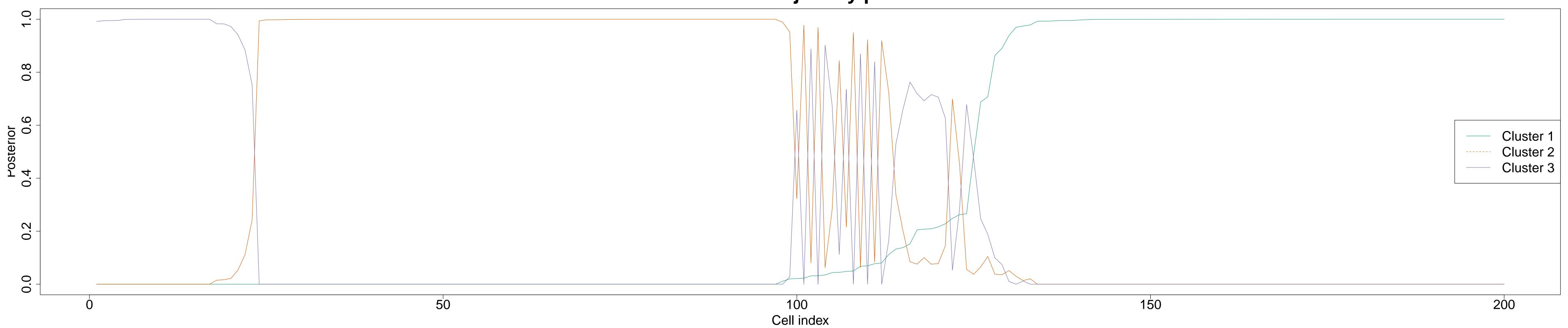
Clustering: UMAP n = 25 | dist = 0.05UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering** *--* 1.5

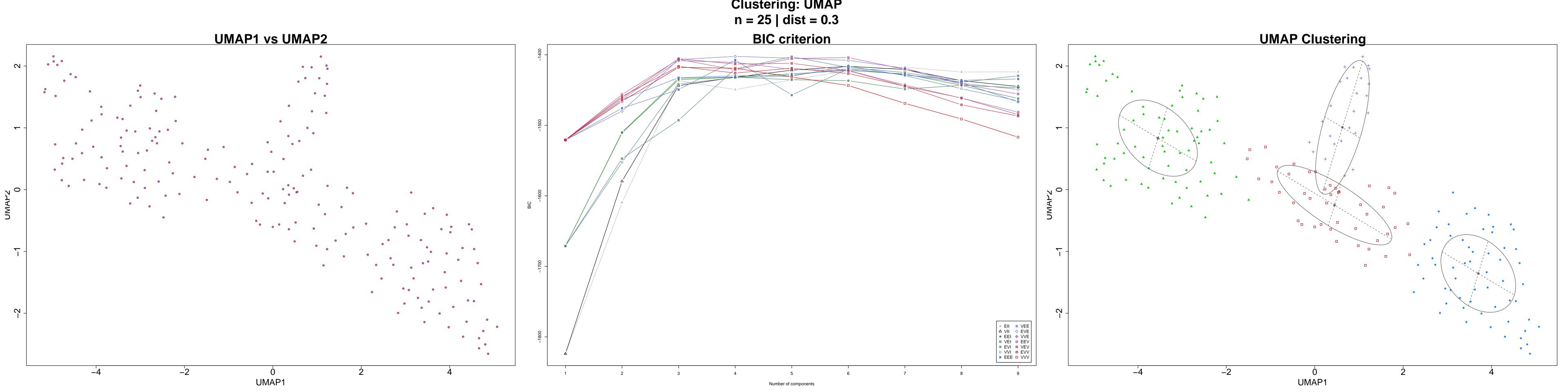


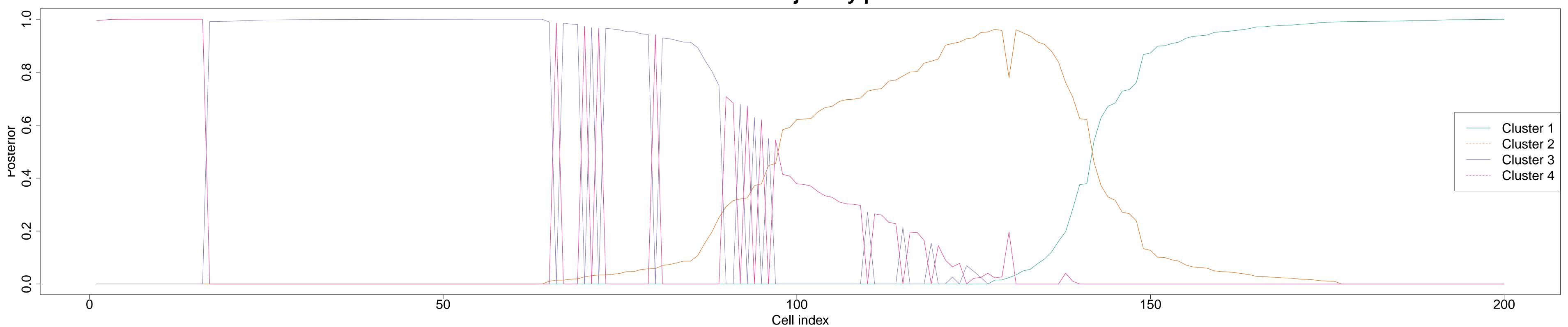
Clustering: UMAP n = 25 | dist = 0.1 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

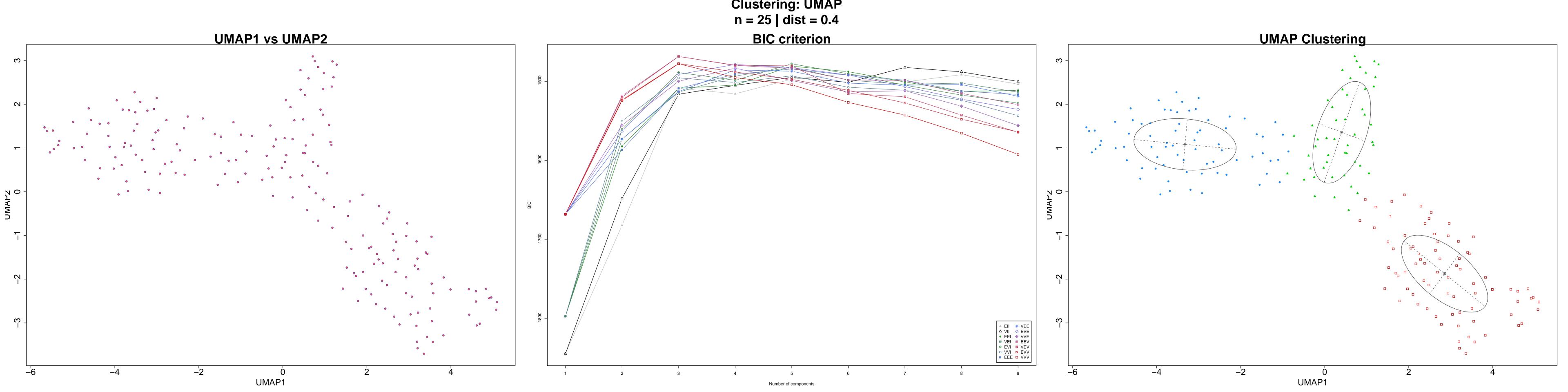


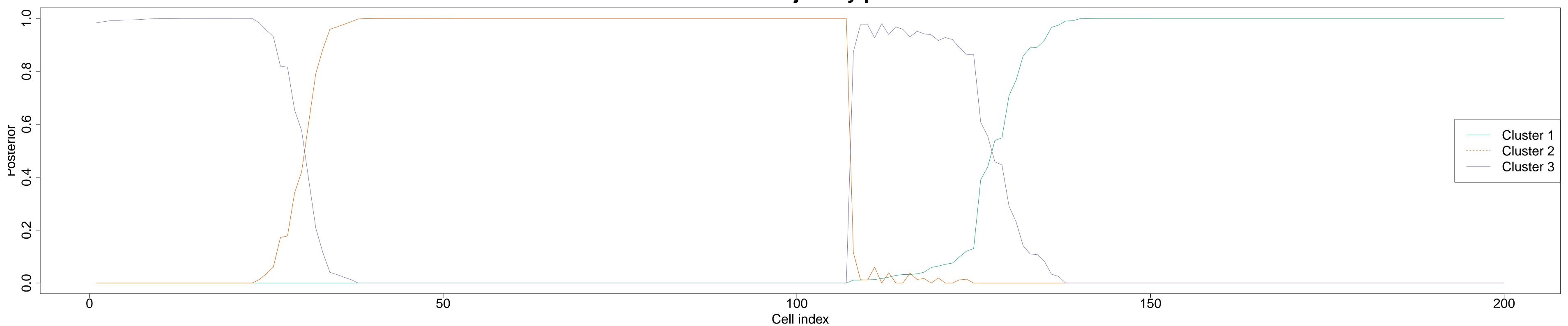


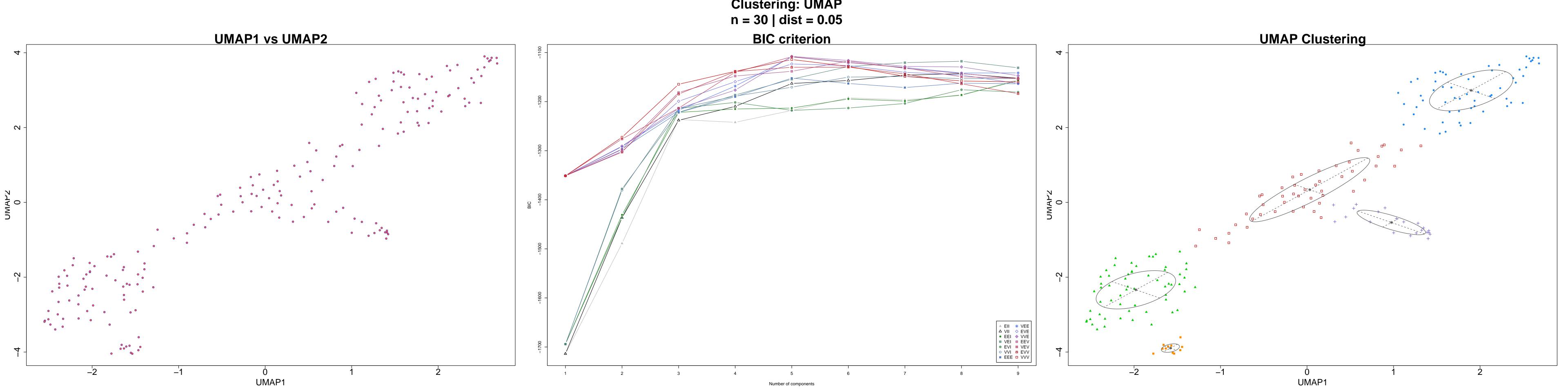


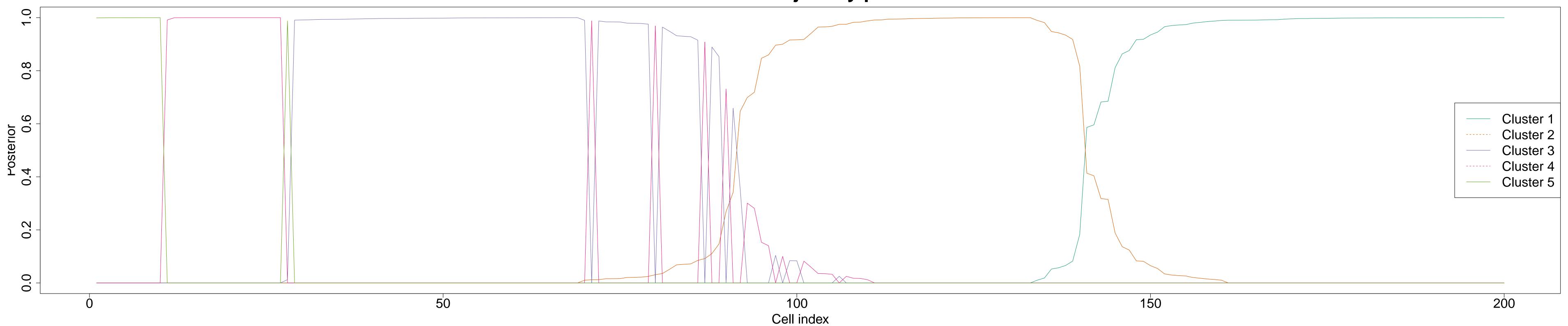




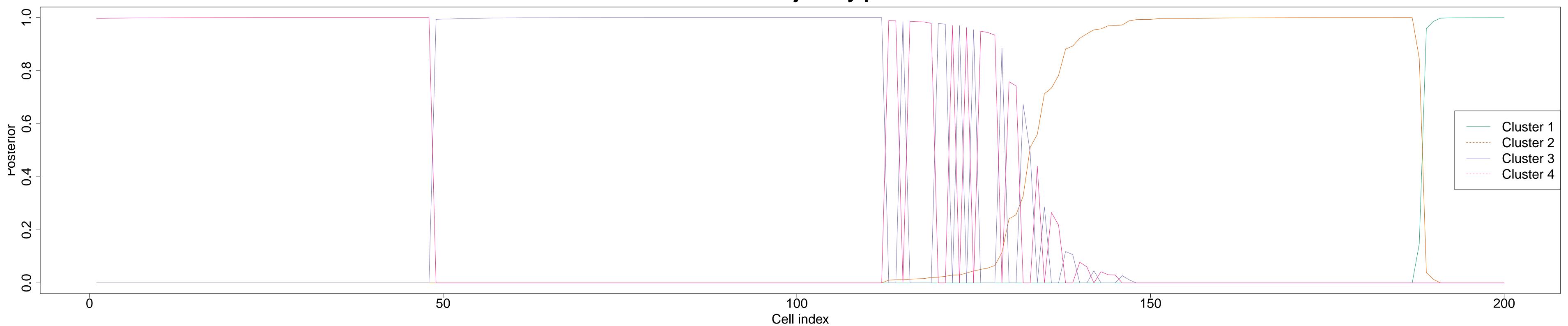


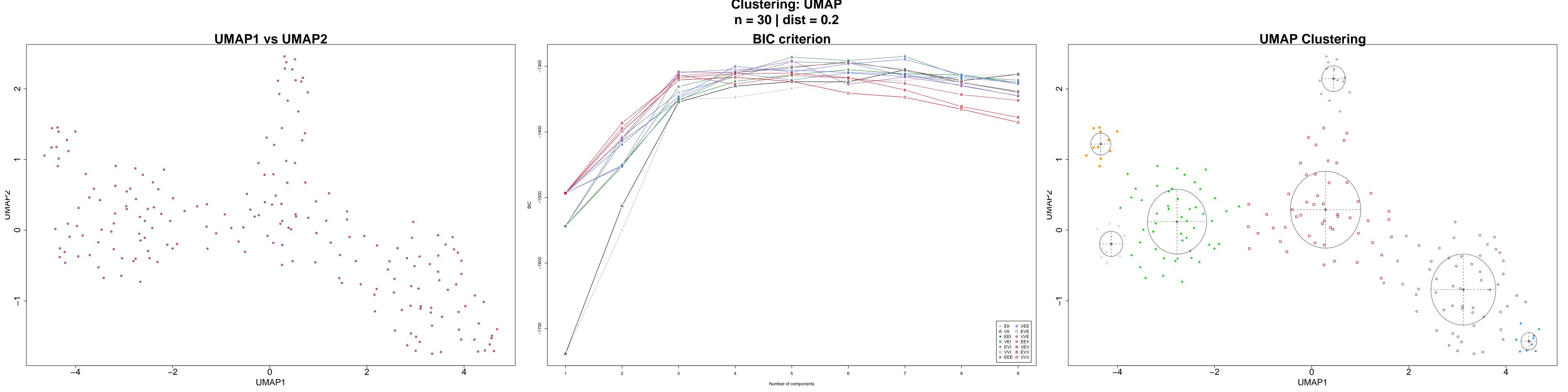


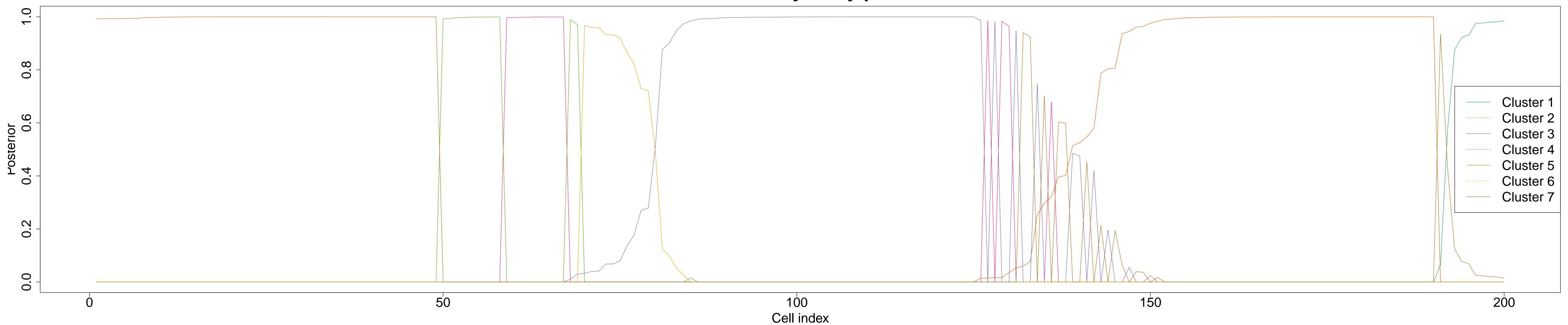


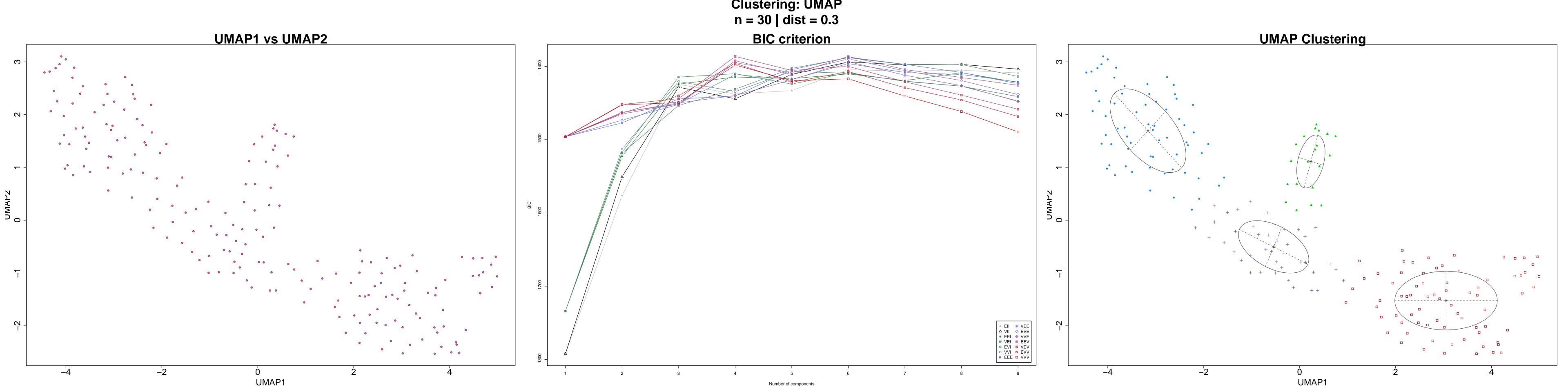


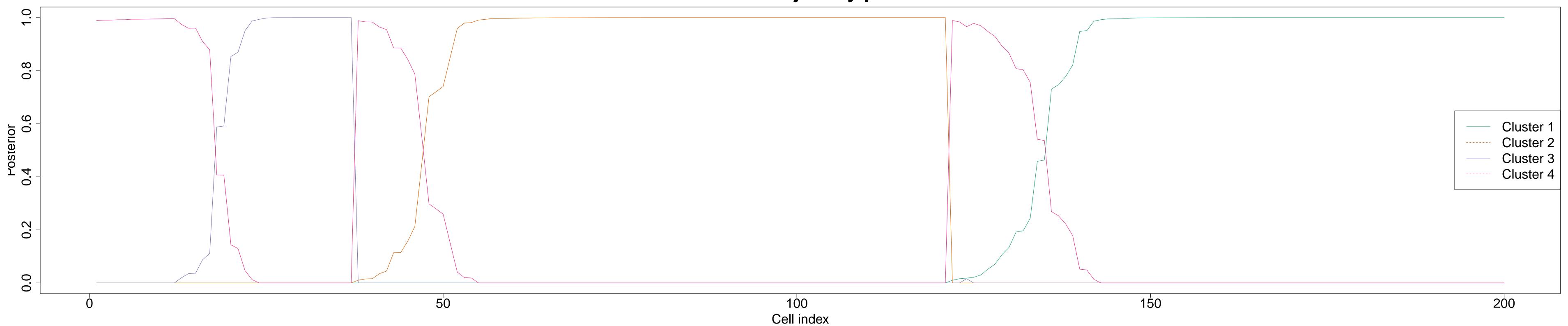
Clustering: UMAP n = 30 | dist = 0.1 UMAP1 vs UMAP2 **UMAP Clustering BIC** criterion



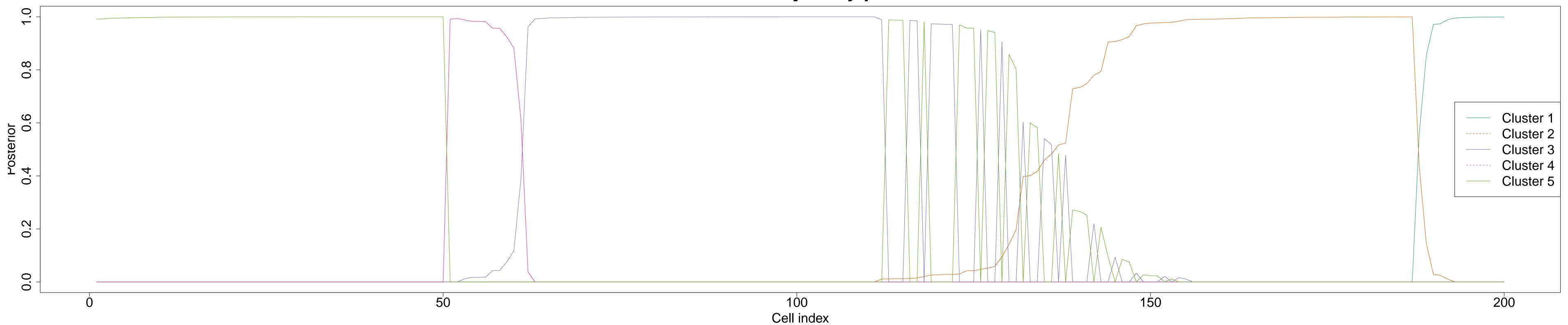


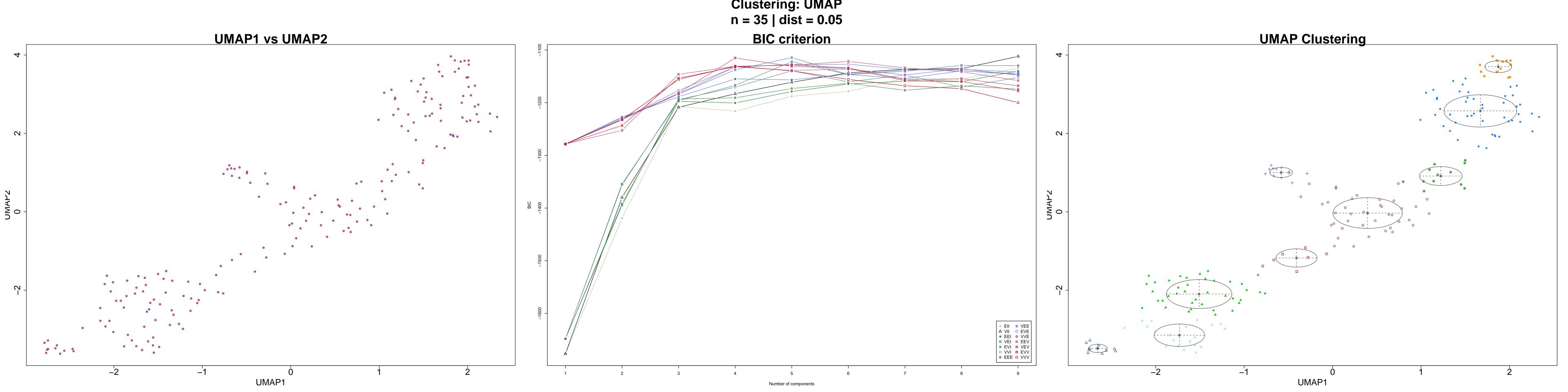


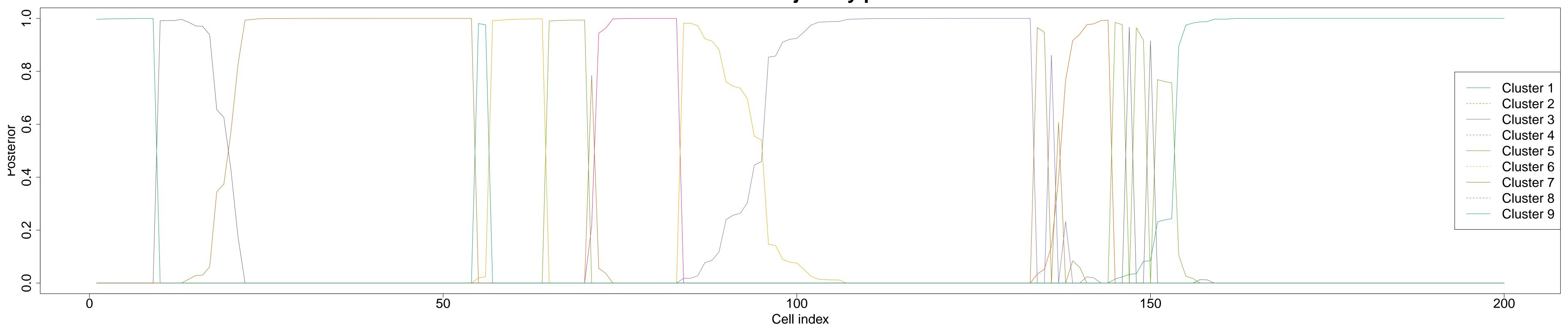


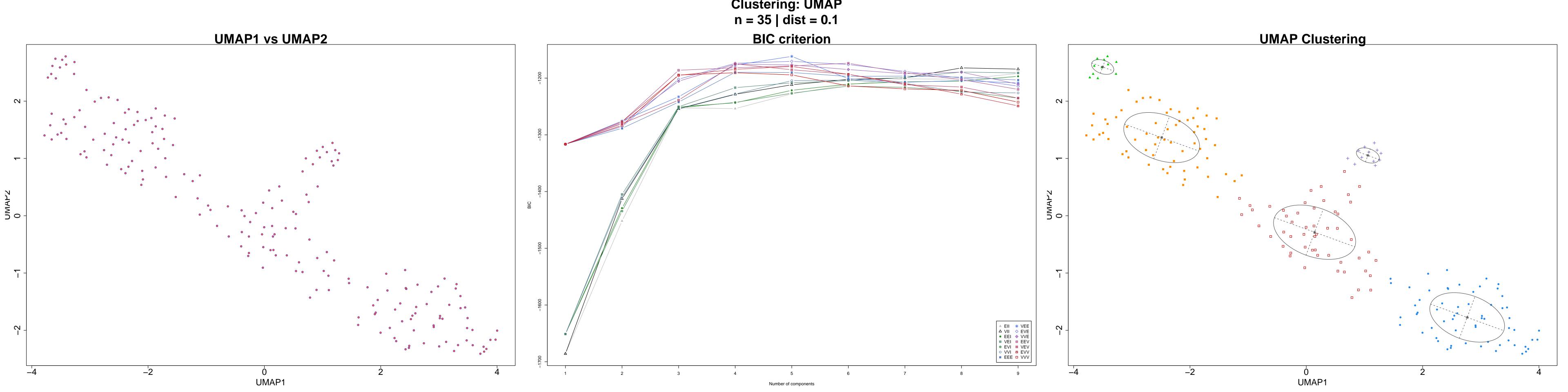


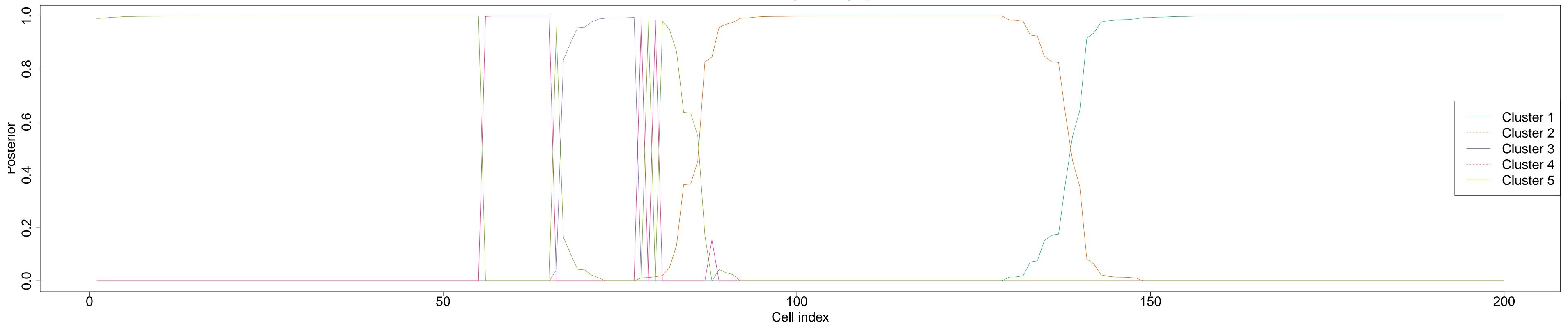
Clustering: UMAP n = 30 | dist = 0.4 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

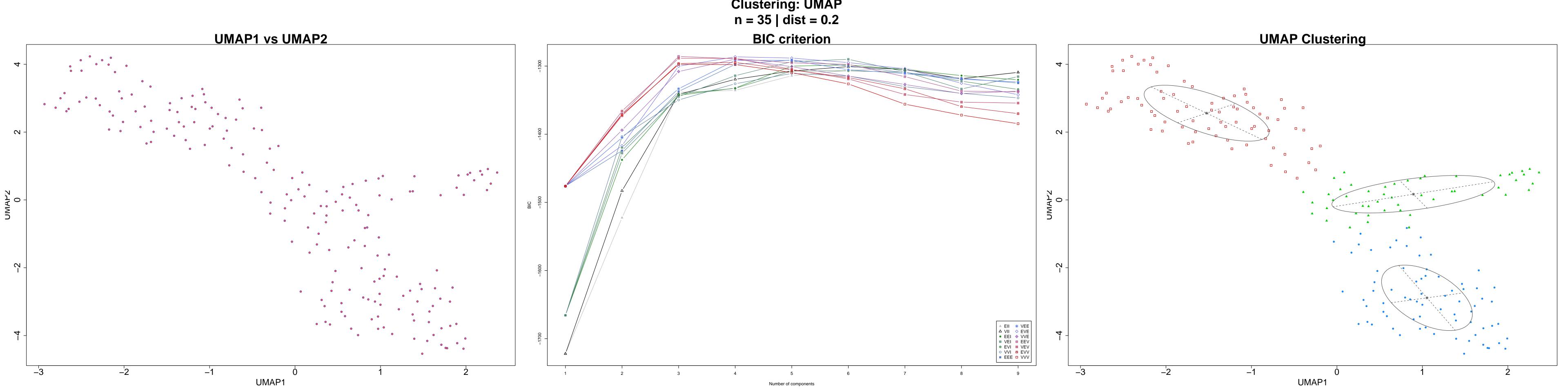


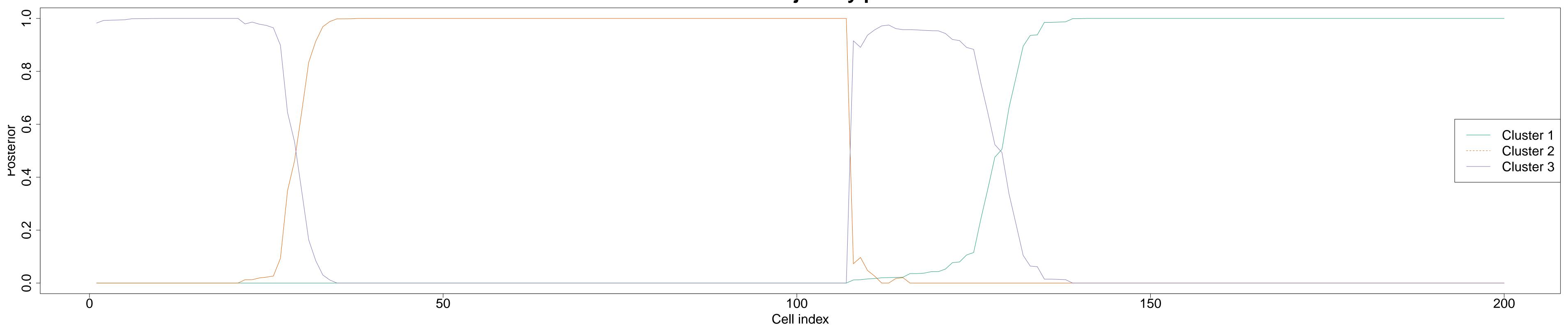


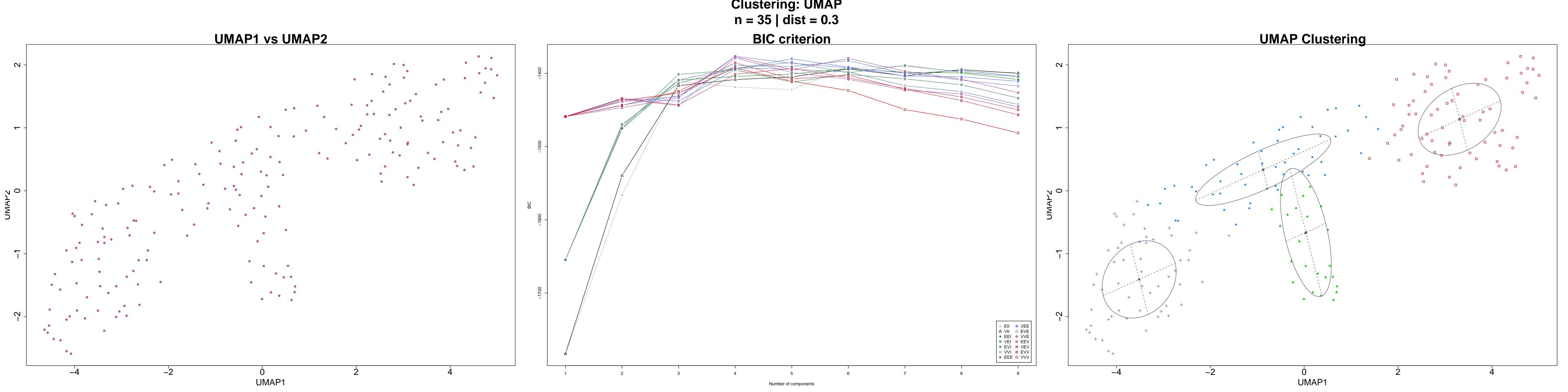


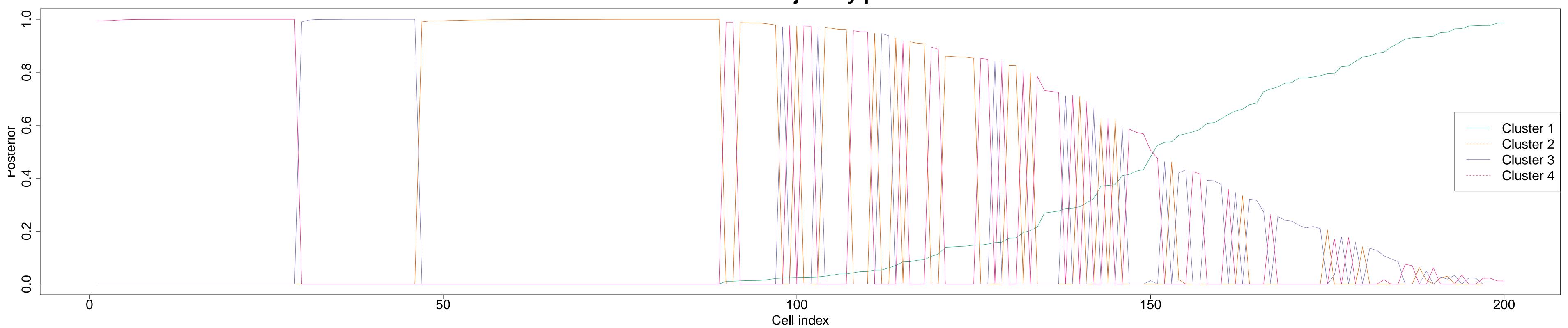




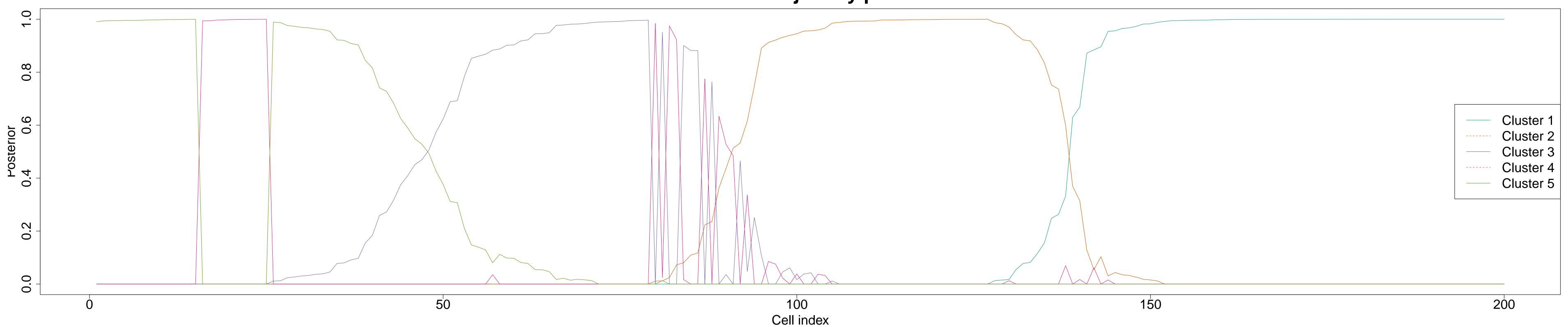




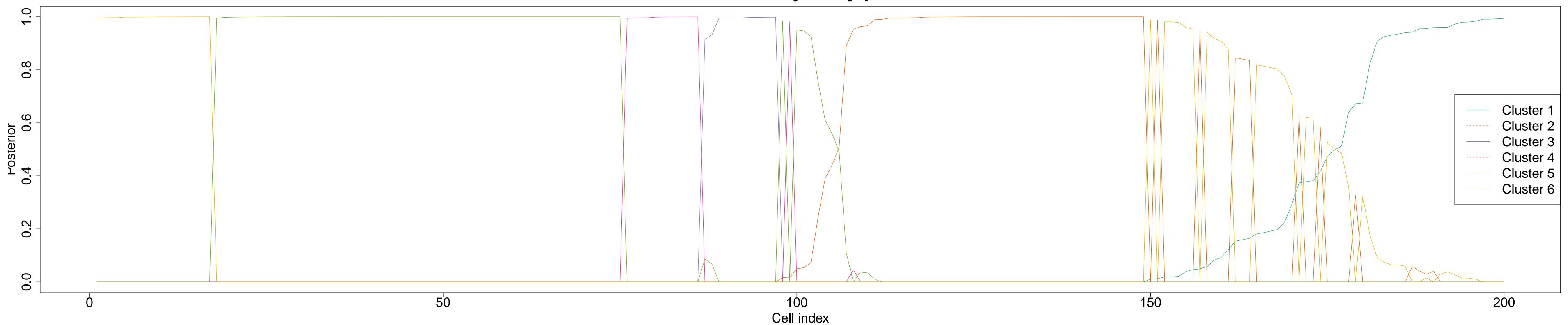


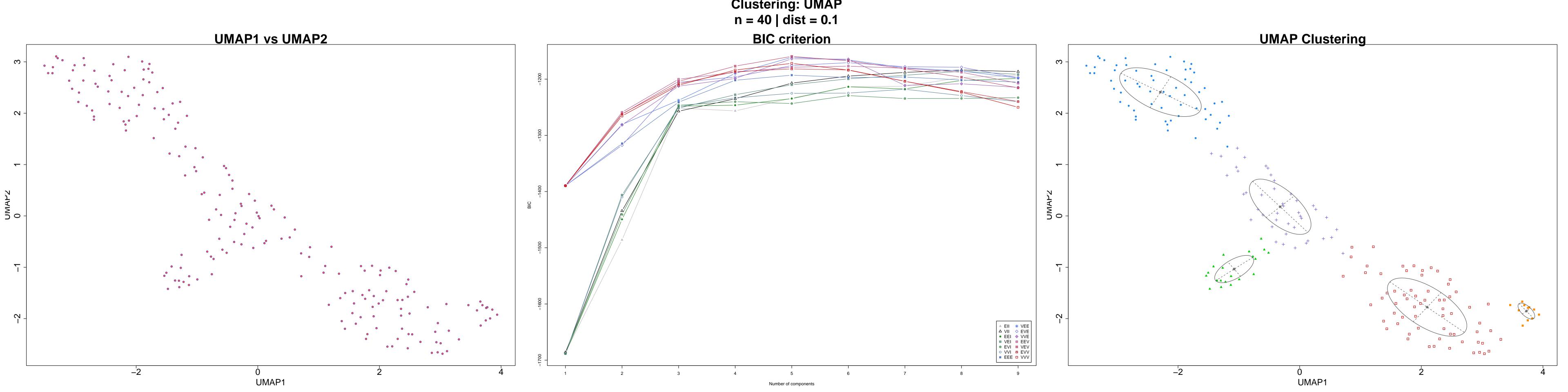


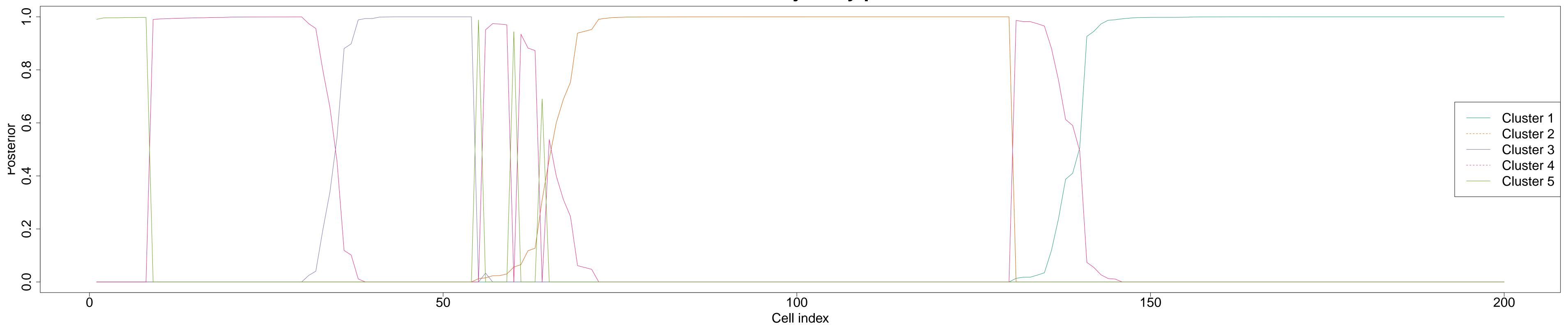
Clustering: UMAP n = 35 | dist = 0.4 **BIC** criterion UMAP1 vs UMAP2 **UMAP Clustering**

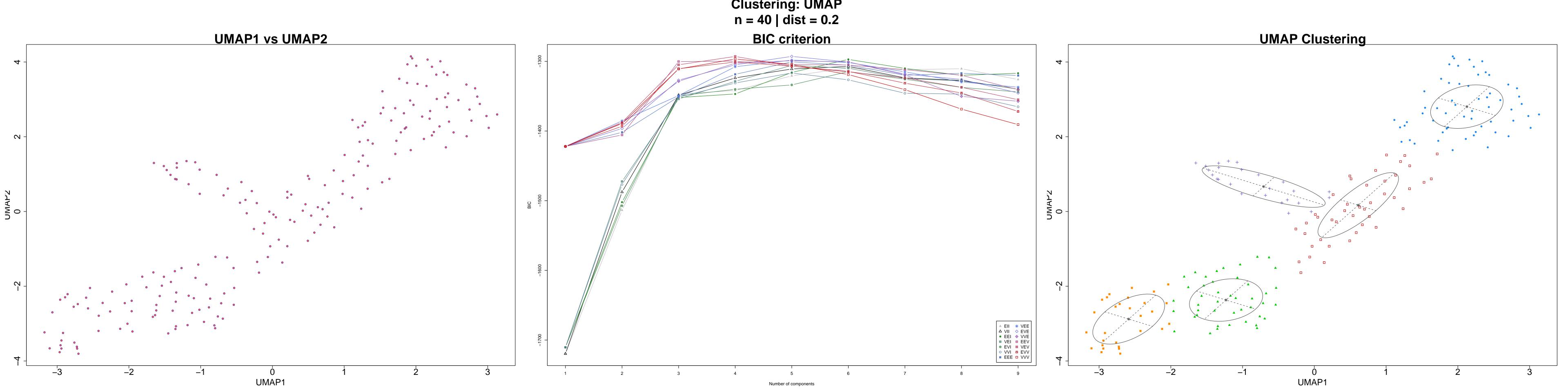


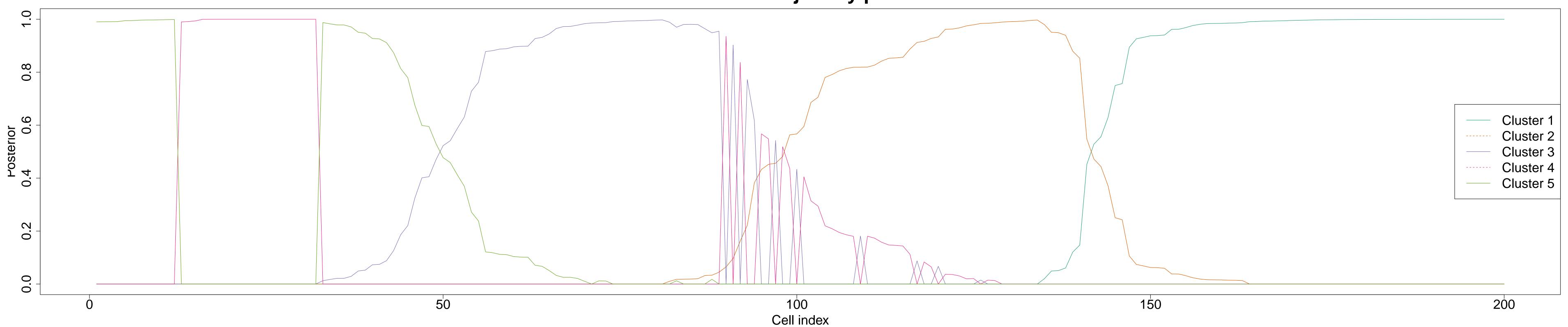
Clustering: UMAP n = 40 | dist = 0.05 **BIC** criterion UMAP1 vs UMAP2 **UMAP Clustering** ▲ EII * VEE
Δ VII ◇ EVE
• EEI • VVE
※ VEI # EEV
• EVI ※ VEV
○ VVI № EVV
■ EEE □ VVV ***



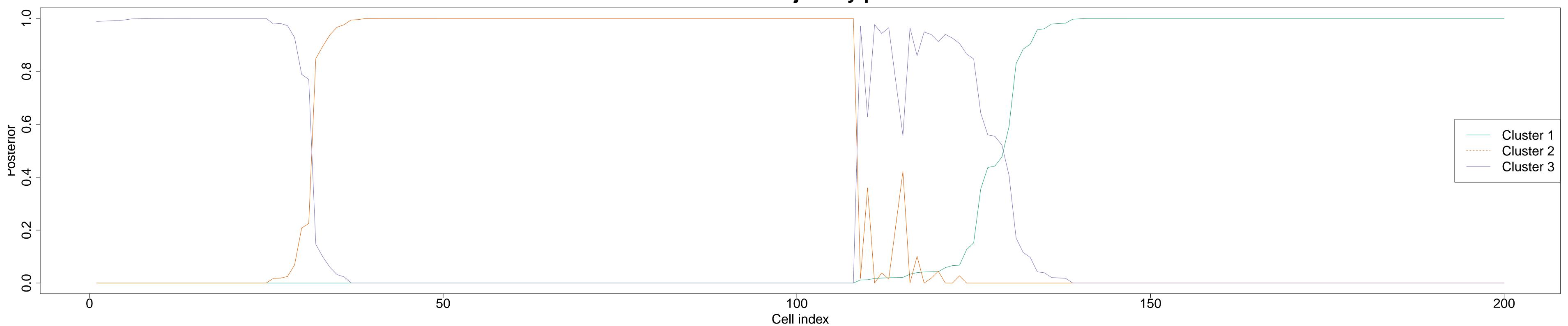


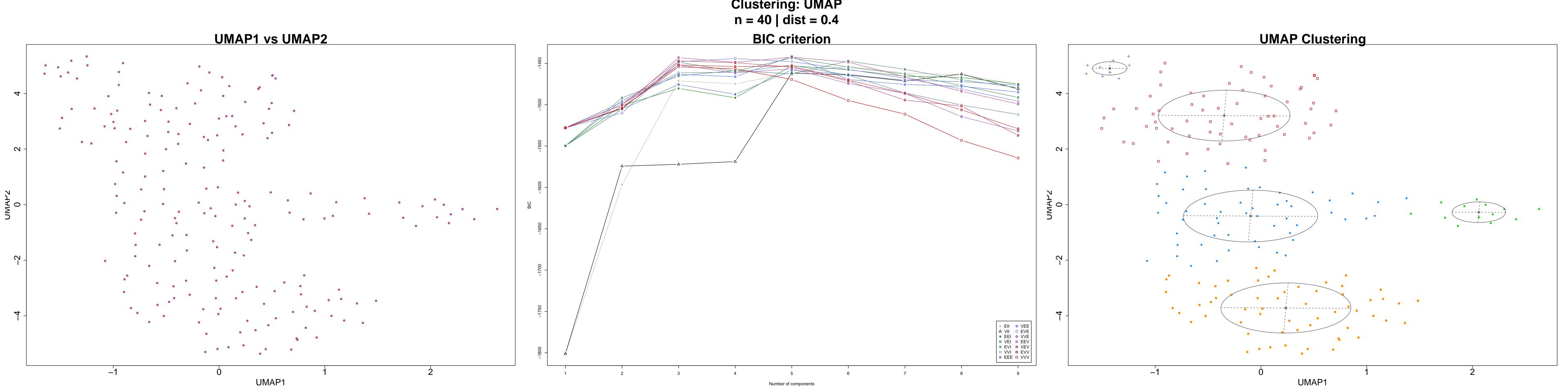


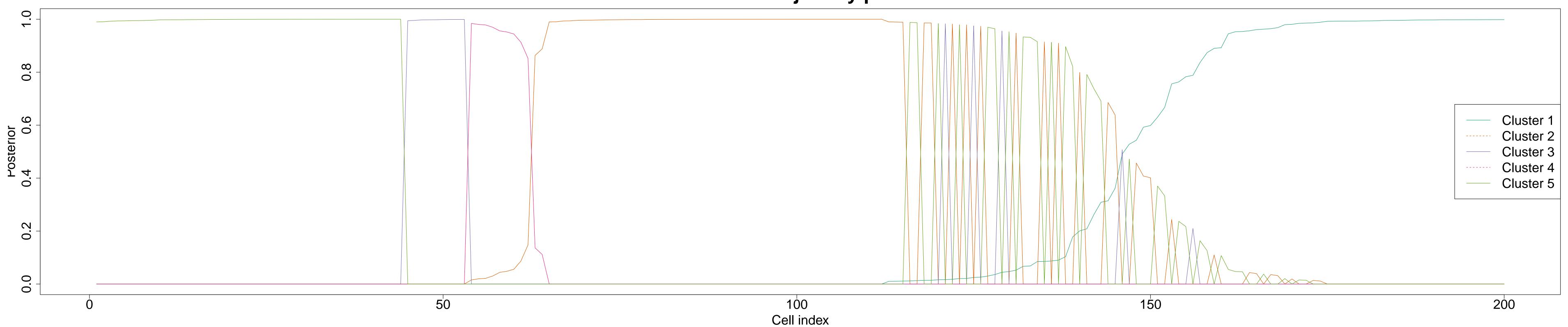


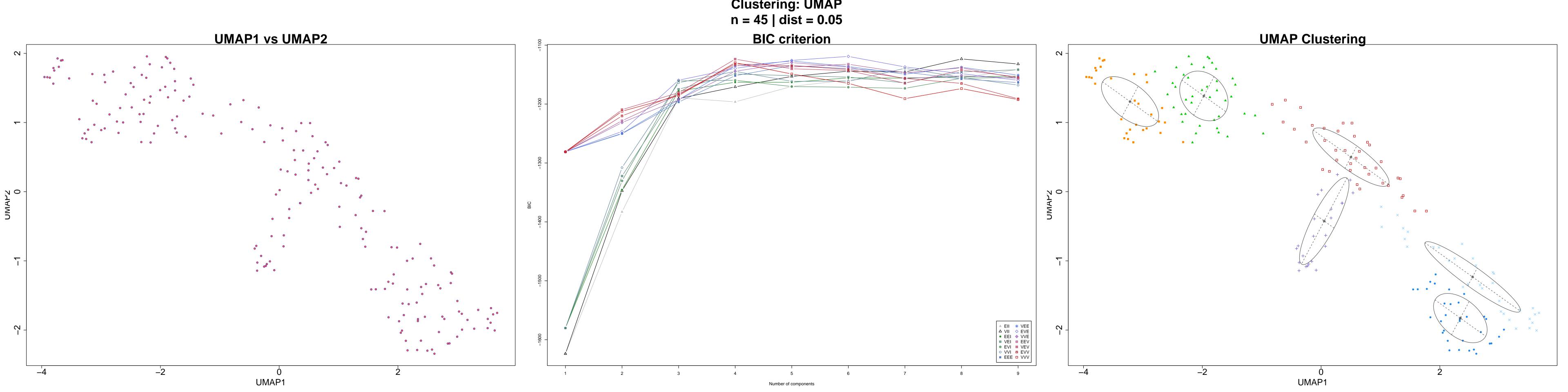


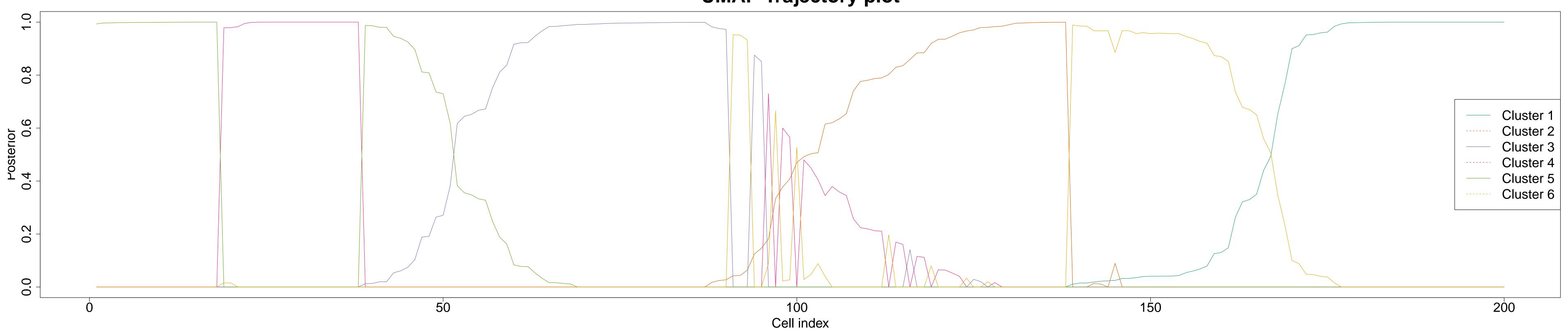
Clustering: UMAP n = 40 | dist = 0.3 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering** UMAP1 UMAP1

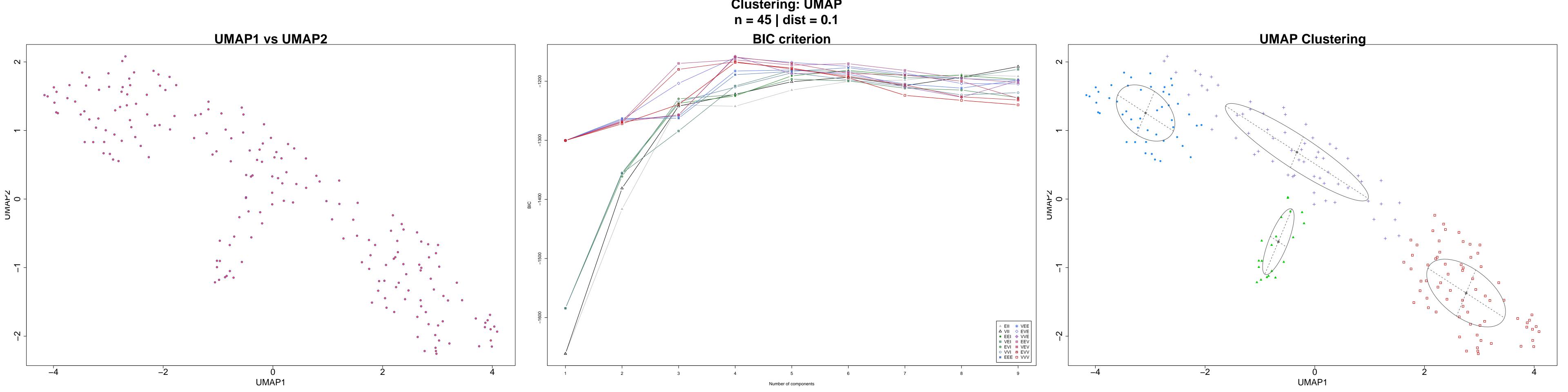


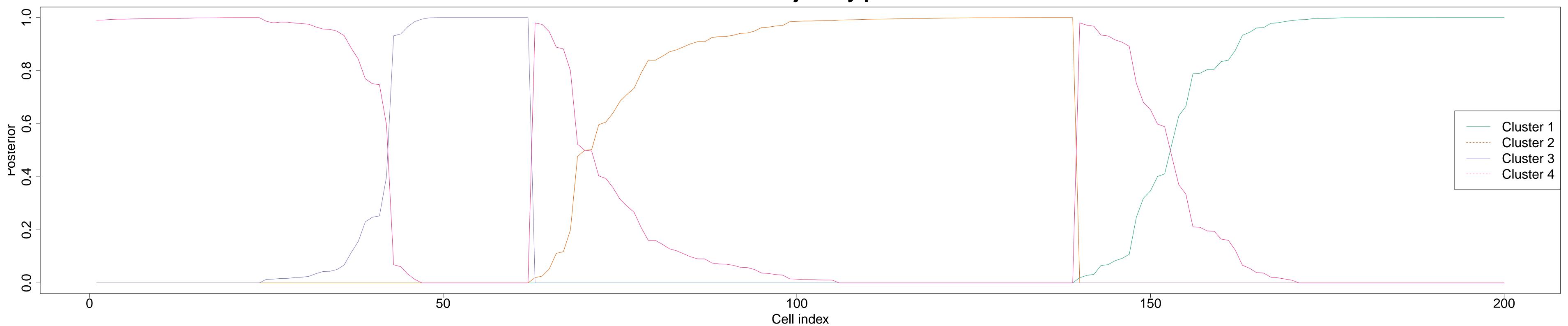


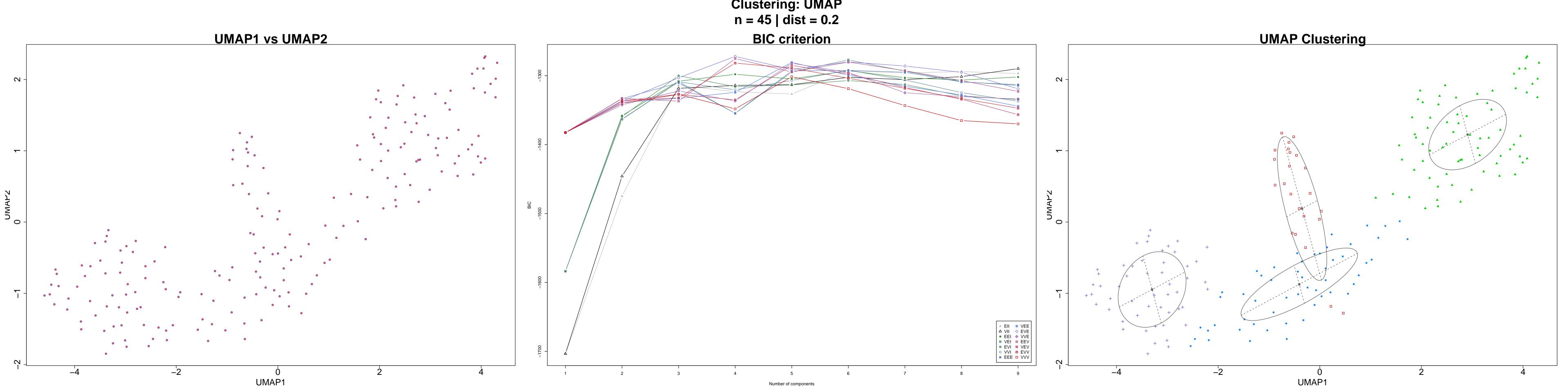


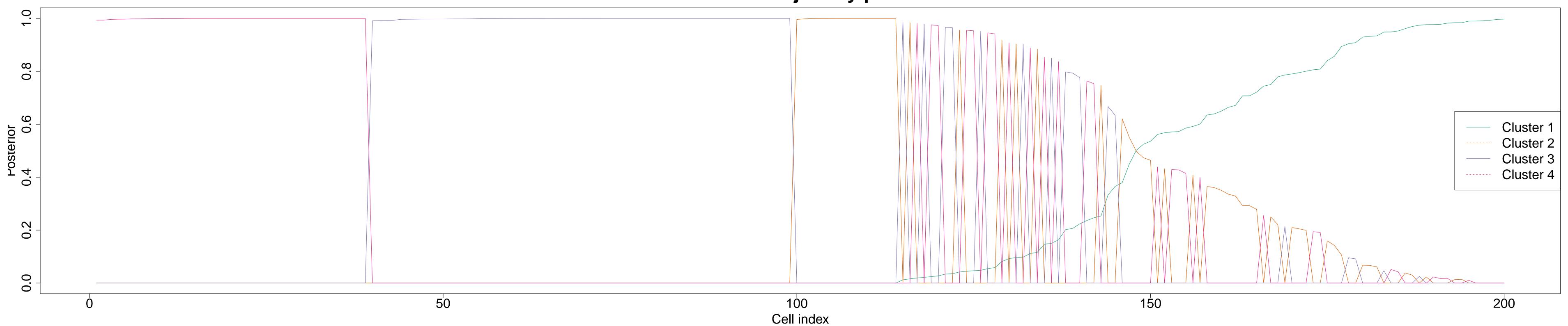




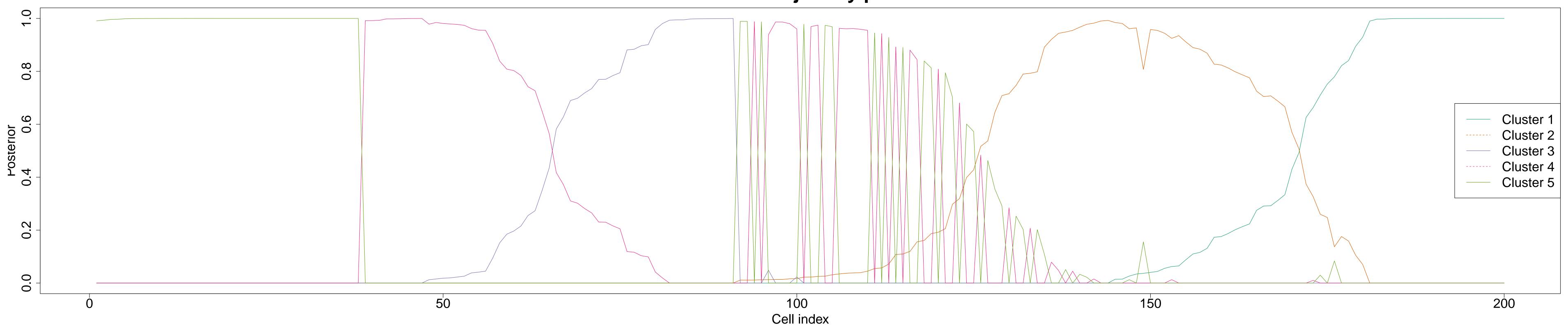




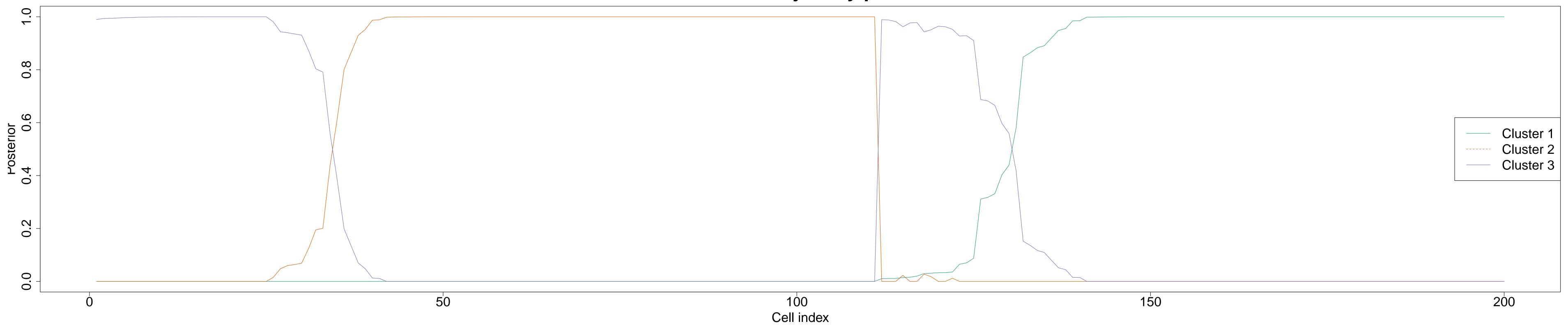


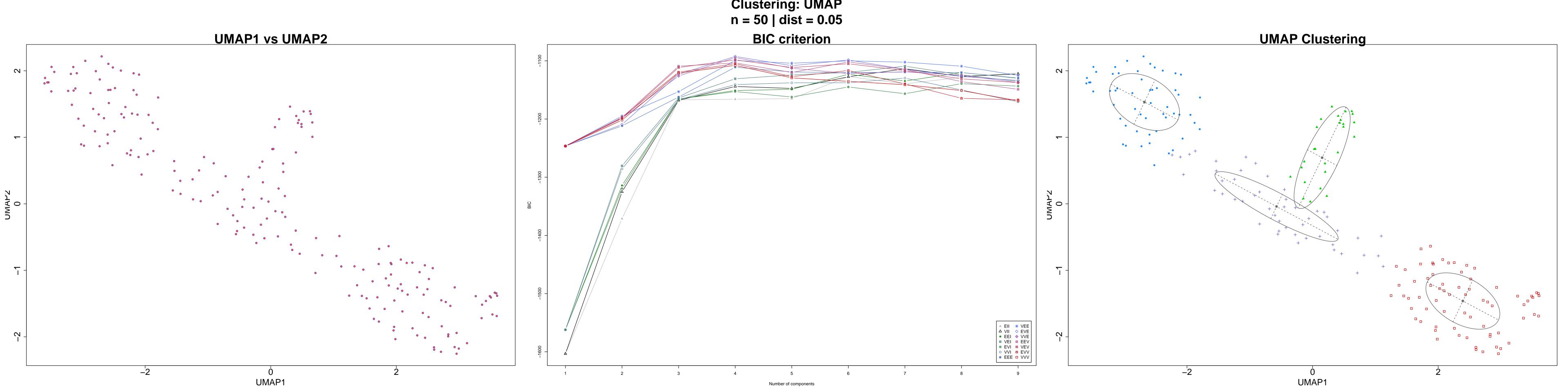


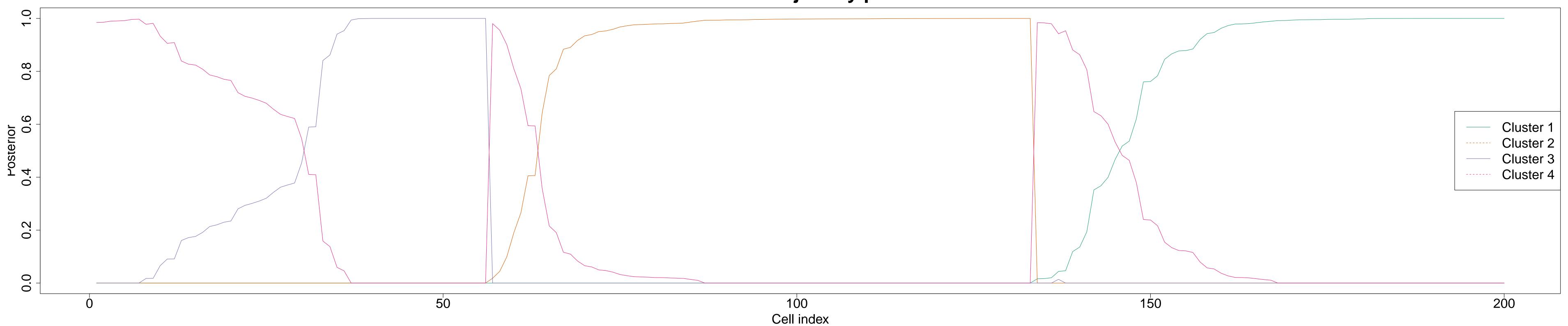
Clustering: UMAP n = 45 | dist = 0.3 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**



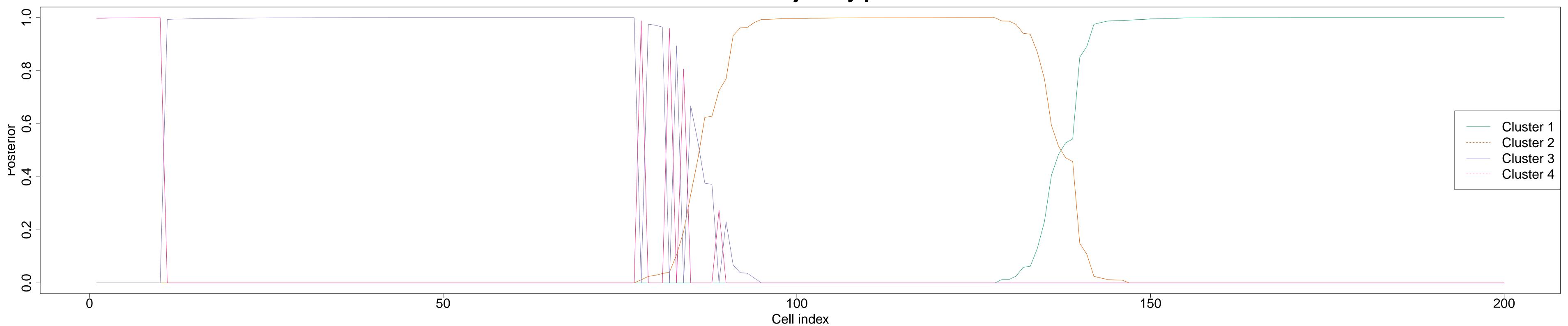
Clustering: UMAP n = 45 | dist = 0.4 UMAP1 vs UMAP2 **UMAP Clustering BIC** criterion



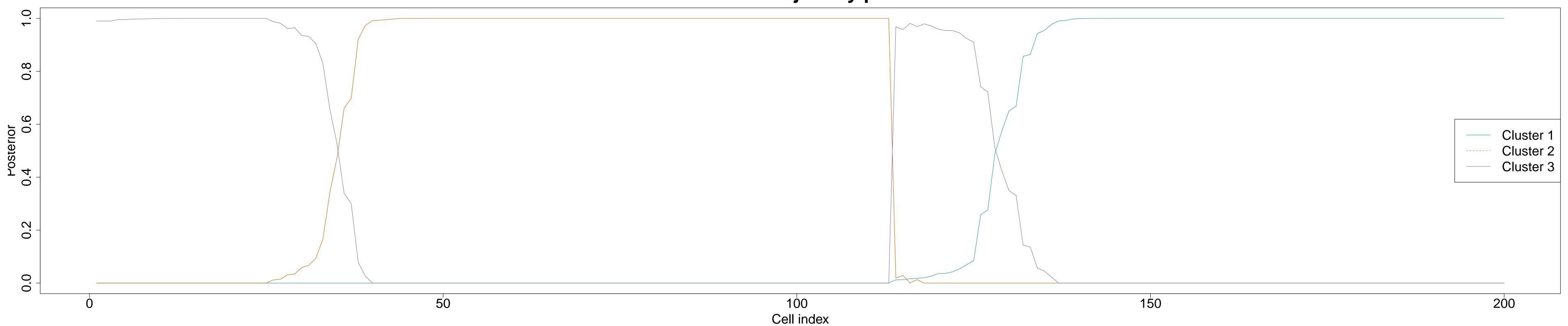


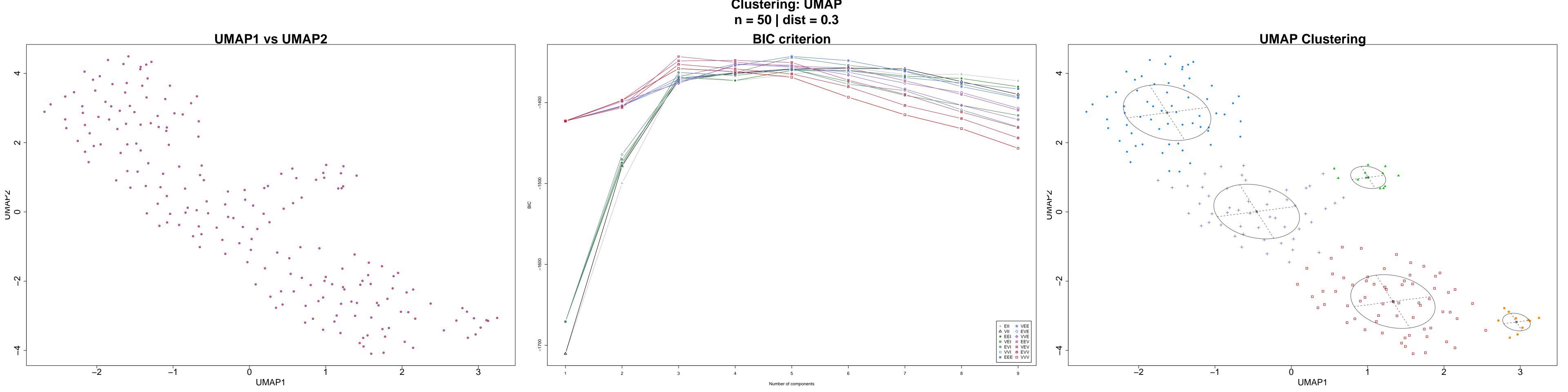


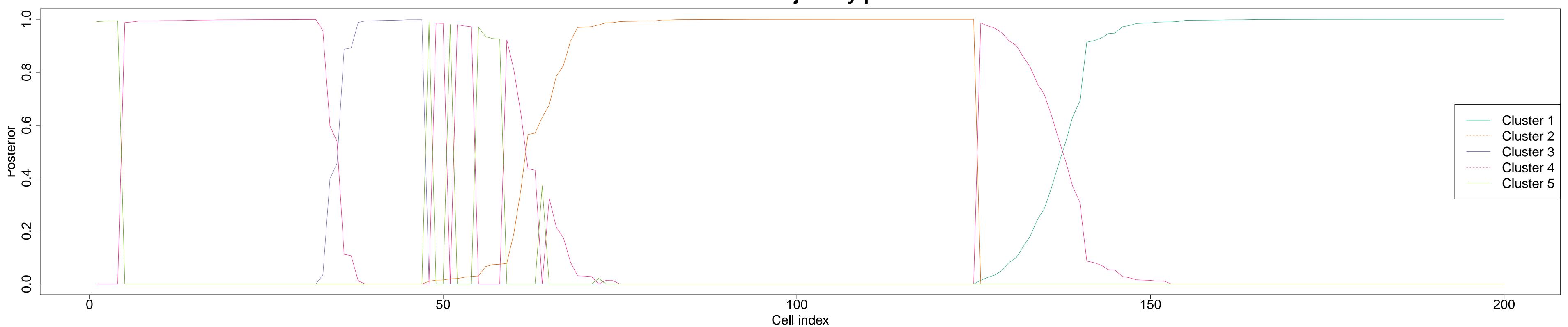
Clustering: UMAP n = 50 | dist = 0.1 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering** 1.0

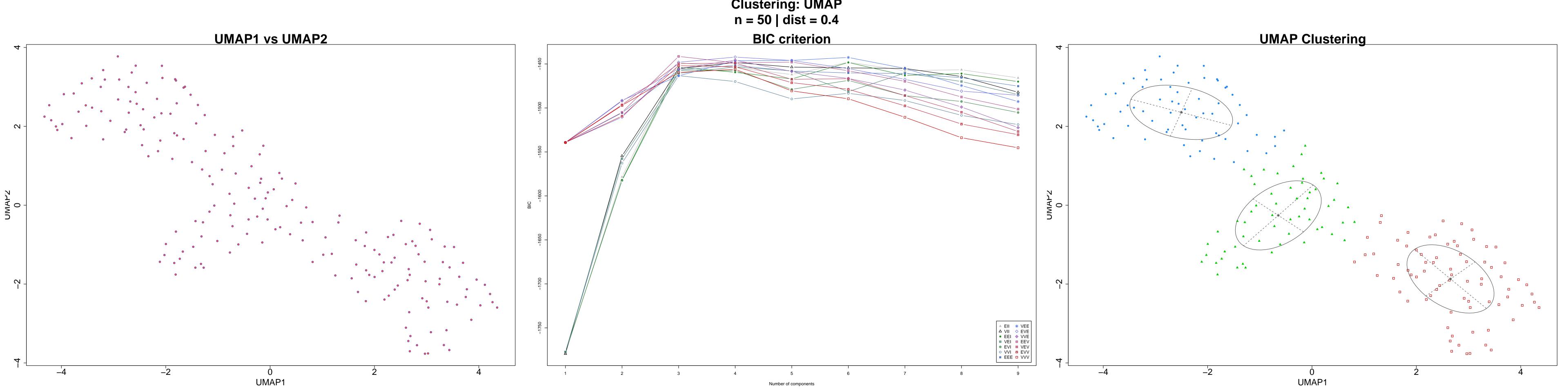


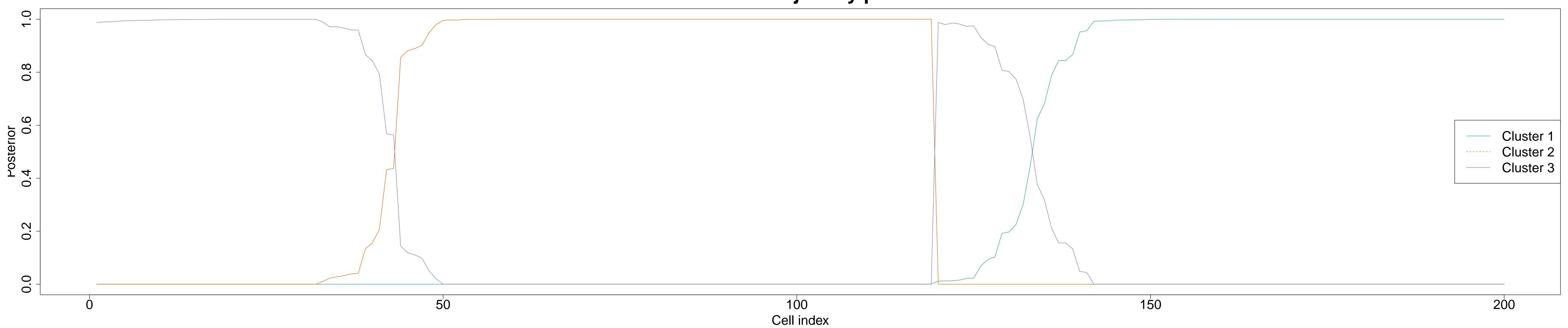
Clustering: UMAP n = 50 | dist = 0.2 UMAP1 vs UMAP2 **BIC** criterion **UMAP Clustering**

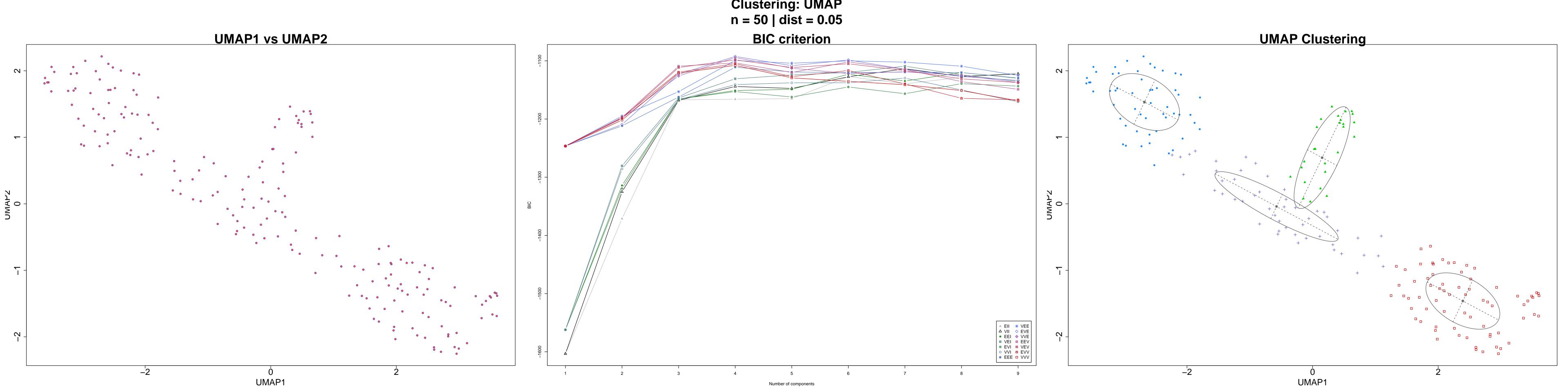


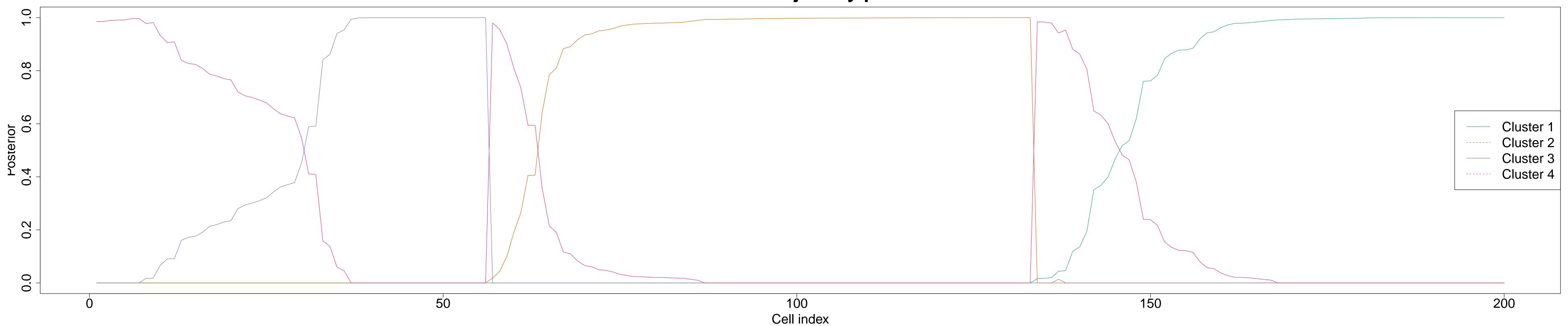






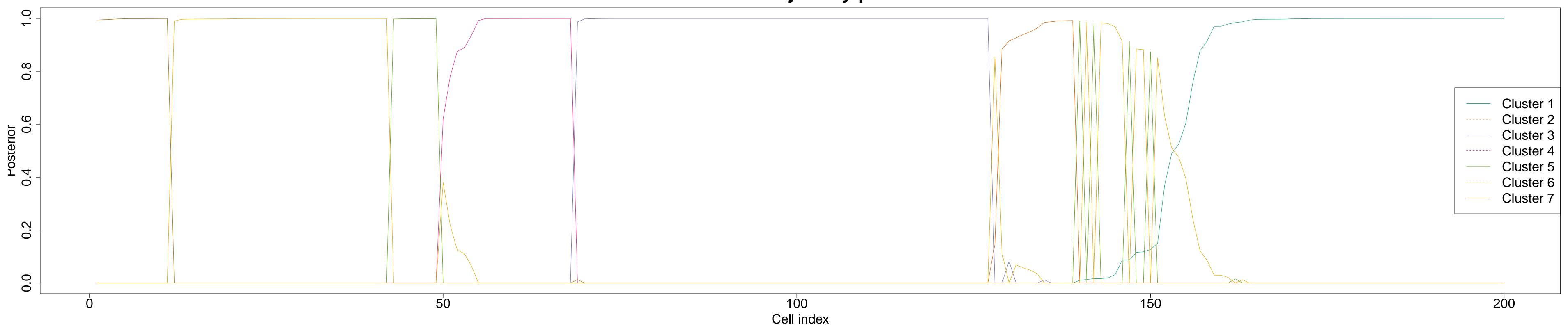




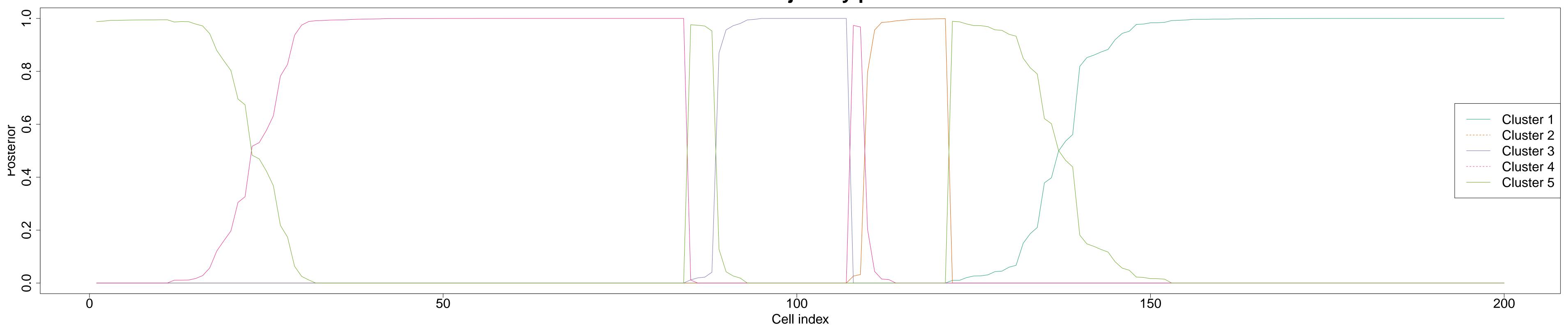


clustering: tSNE perp = 5 | iter = 5000 **BIC** criterion tSNE1 vs tSNE2 tSNE Clustering

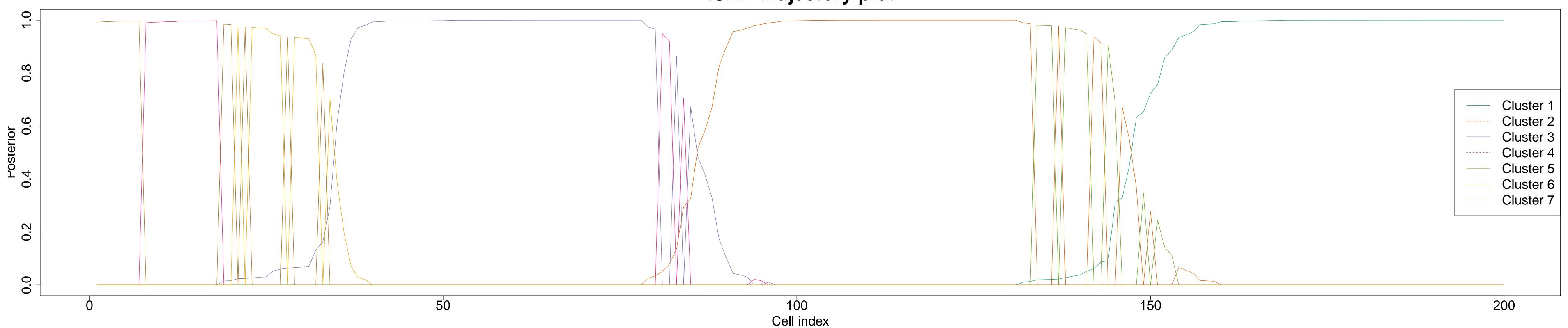
tSNE Trajectory plot



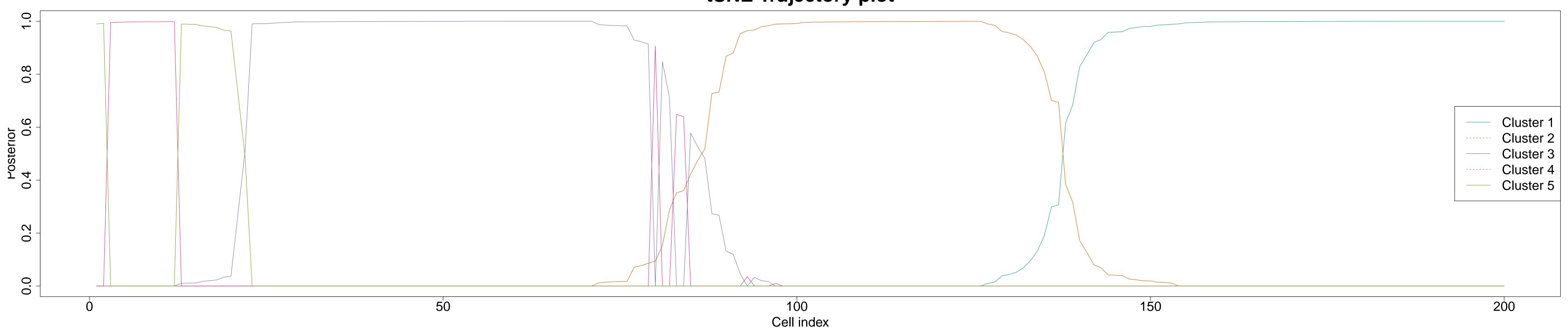
clustering: tSNE perp = 14 | iter = 5000 tSNE1 vs tSNE2 **BIC** criterion tSNE Clustering



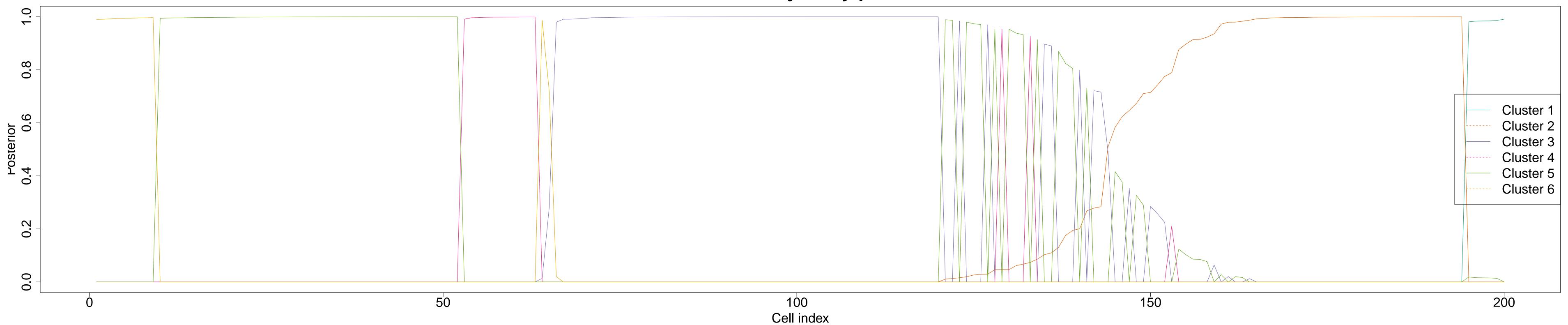
clustering: tSNE perp = 23 | iter = 5000 tSNE1 vs tSNE2 **BIC** criterion tSNE Clustering



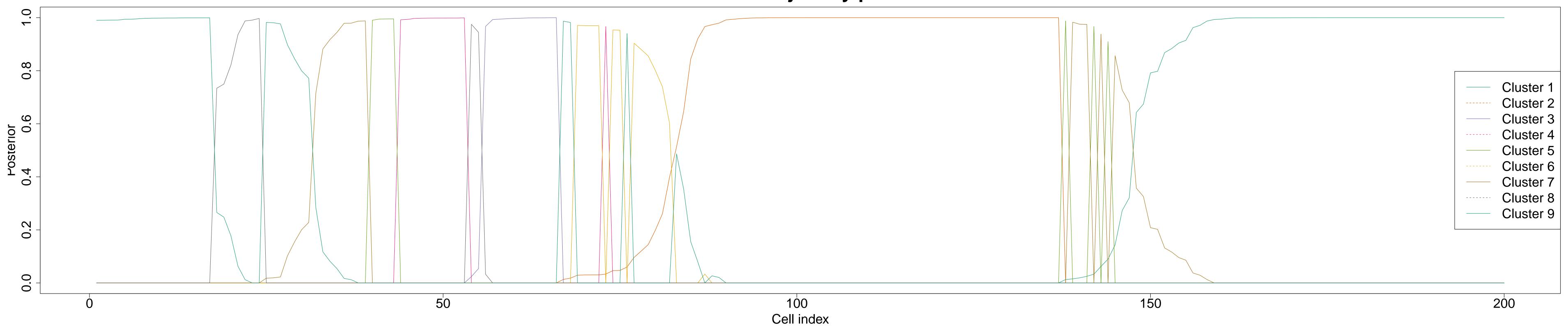
clustering: tSNE perp = 32 | iter = 5000 tSNE1 vs tSNE2 **BIC** criterion tSNE Clustering



clustering: tSNE perp = 41 | iter = 5000 tSNE1 vs tSNE2 tSNE Clustering **BIC** criterion



clustering: tSNE perp = 50 | iter = 5000 tSNE1 vs tSNE2 **BIC** criterion tSNE Clustering • • • • • • --tSNE1 tSNE1



clustering: tSNE perp = 50 | iter = 5000 tSNE1 vs tSNE2 **BIC** criterion tSNE Clustering

