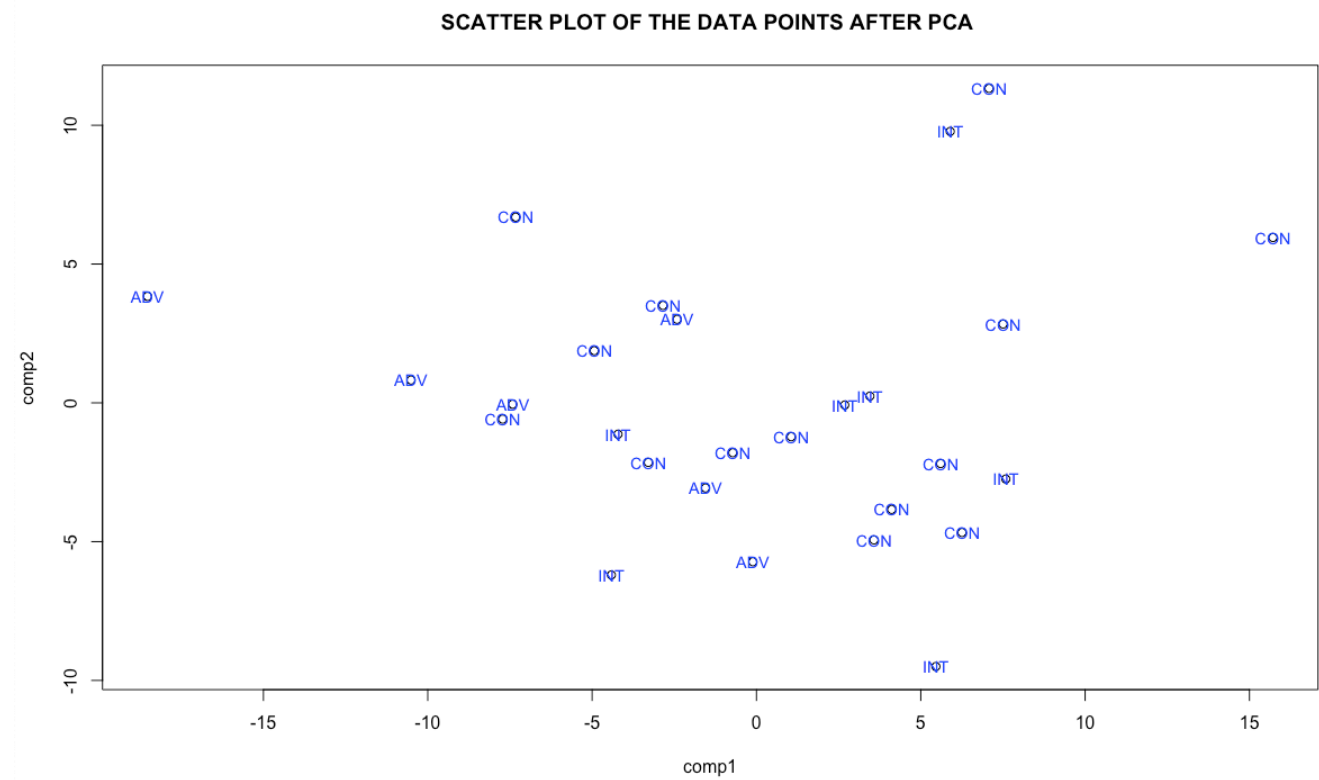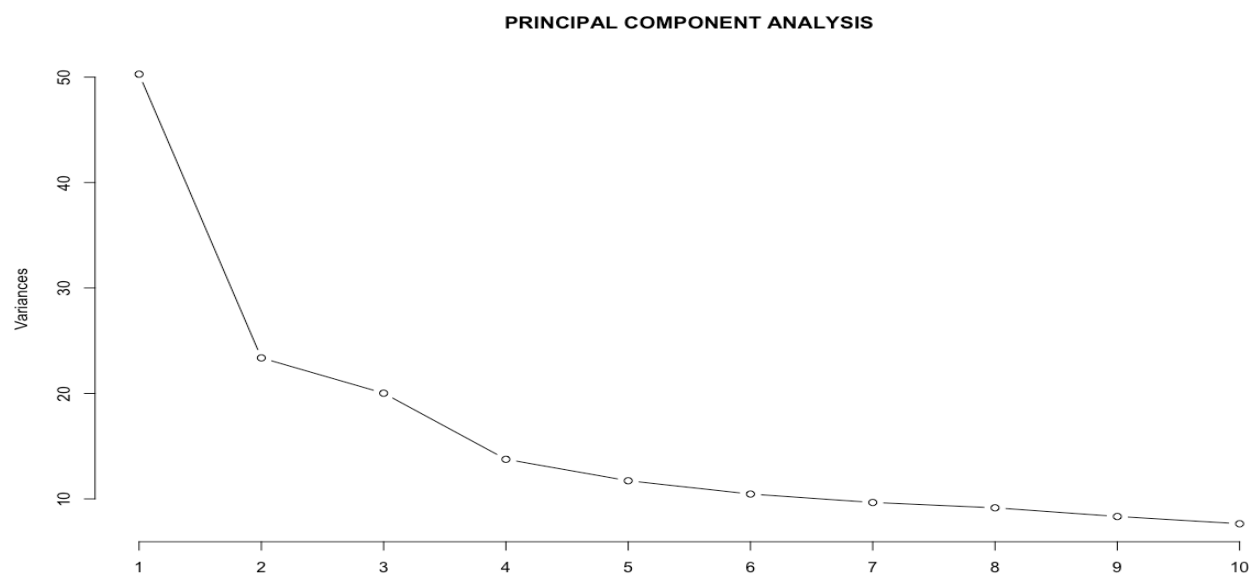# MACULAR DEGENERATION – PILOT STUDY

PRINCIPAL COMPONENT ANALYSIS

SCATTER PLOT OF THE DATA POINTS AFTER PCA

DENDROGRAM WITH COMPLETE LINKAGE
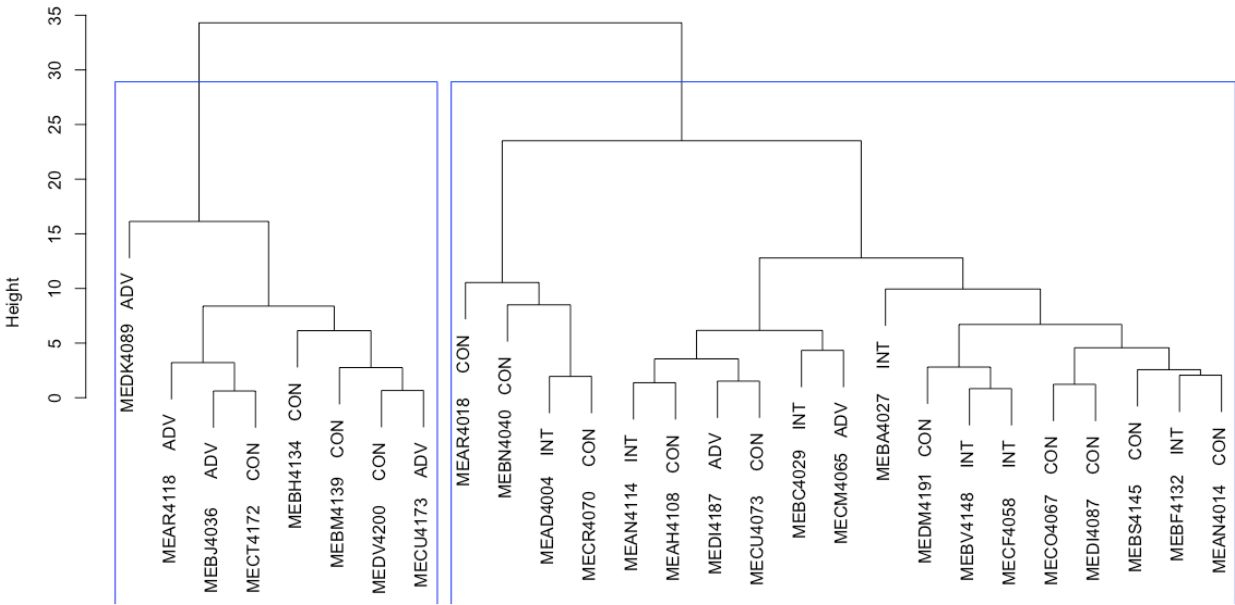
SILHOUETTE PLOT FOR K=2 FOR COMPLETE LINKAGE

n = 27

2 clusters C_j

j : n_j | $ave_{i \in C_j}$ s_i

1 : 19 | 0.28

2 : 8 | 0.47

Silhouette width s_i

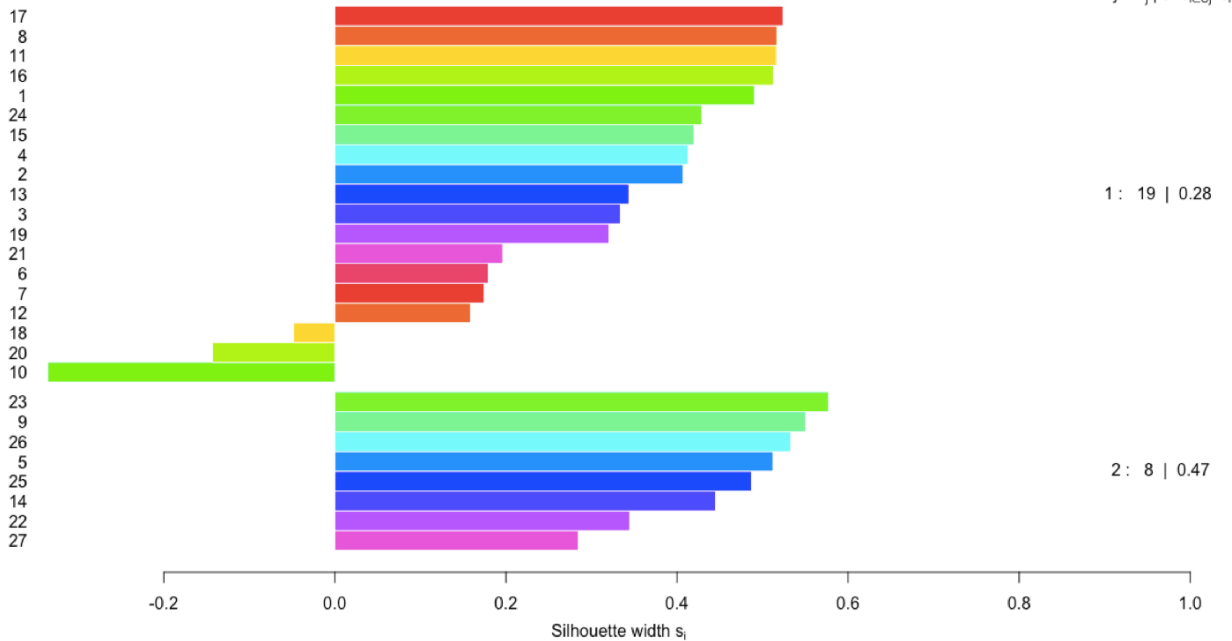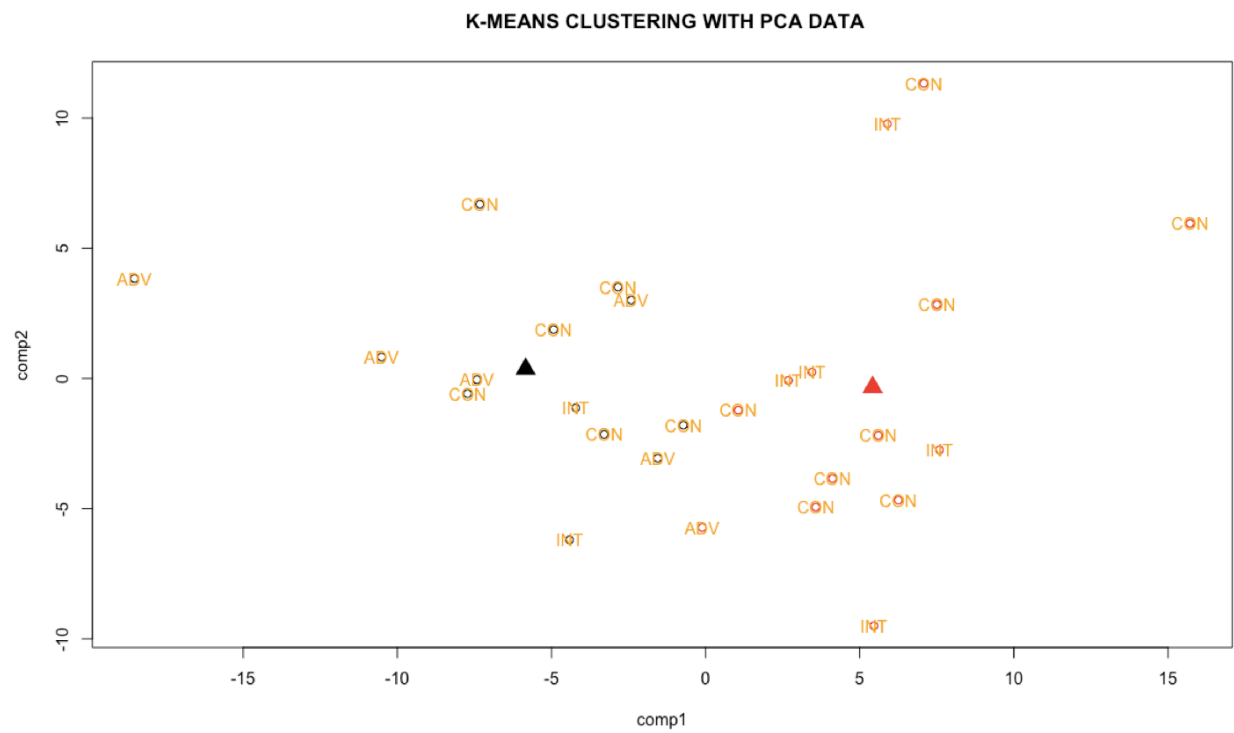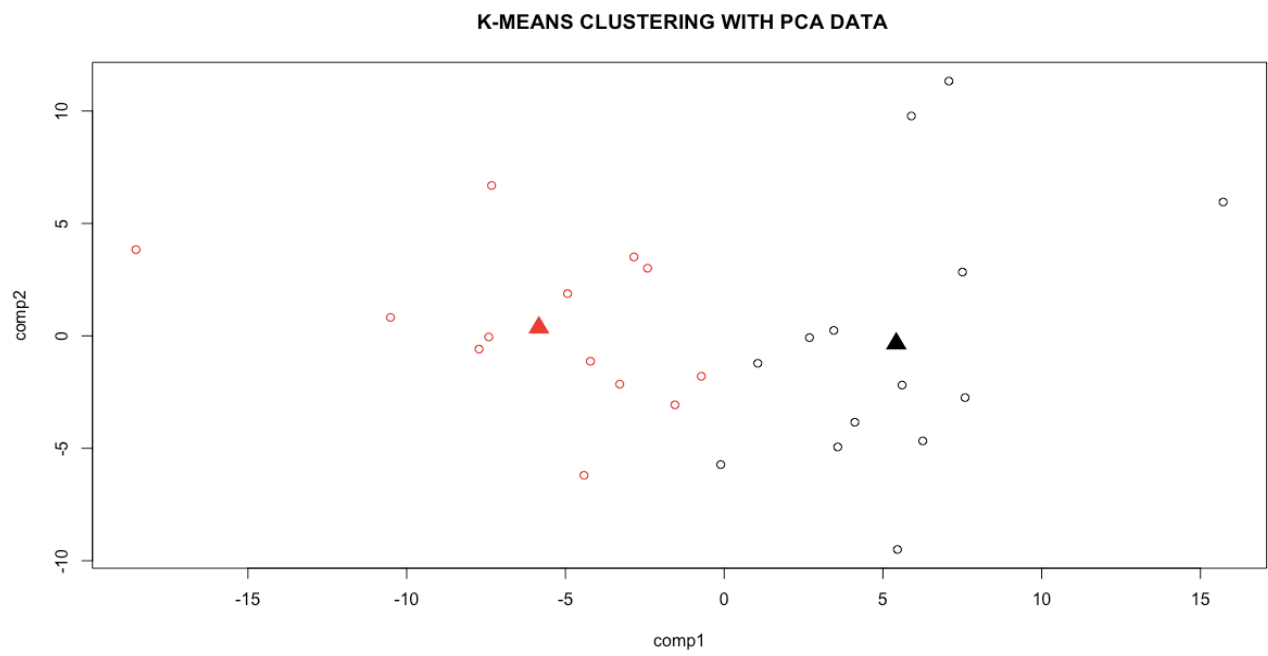Average silhouette width : 0.34

K-MEANS CLUSTERING WITH PCA DATA

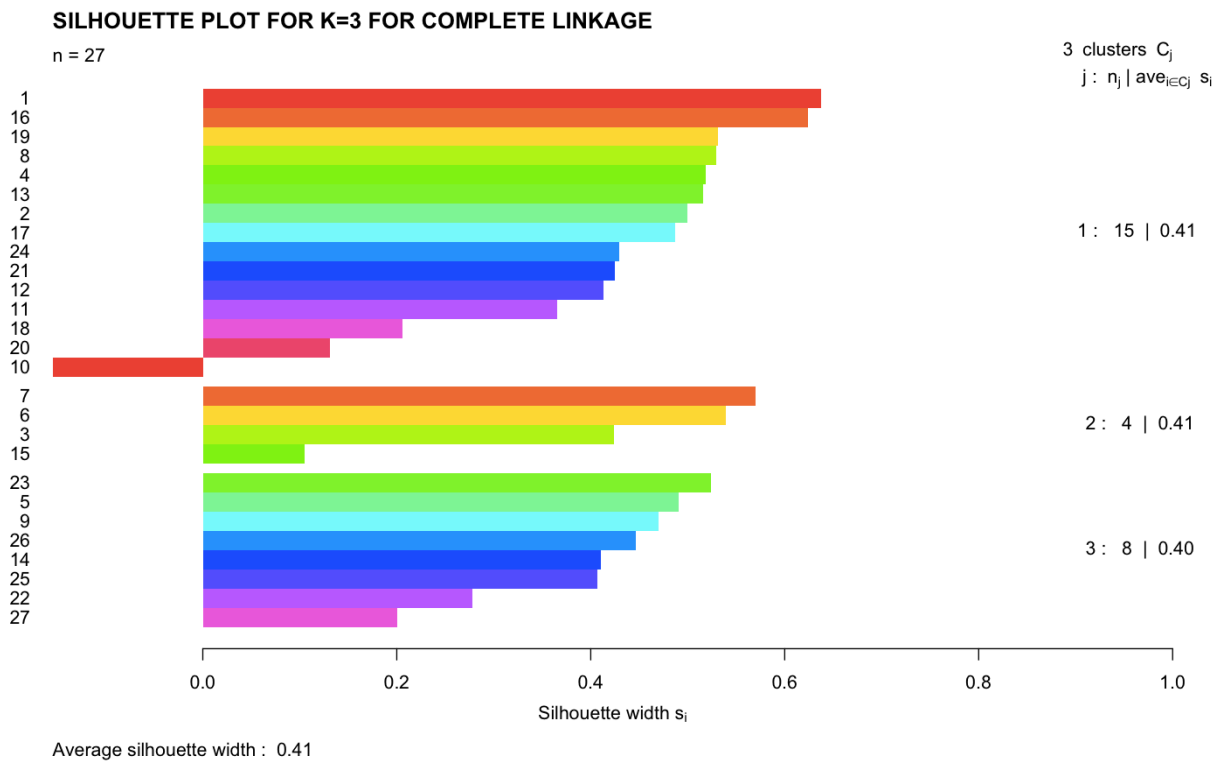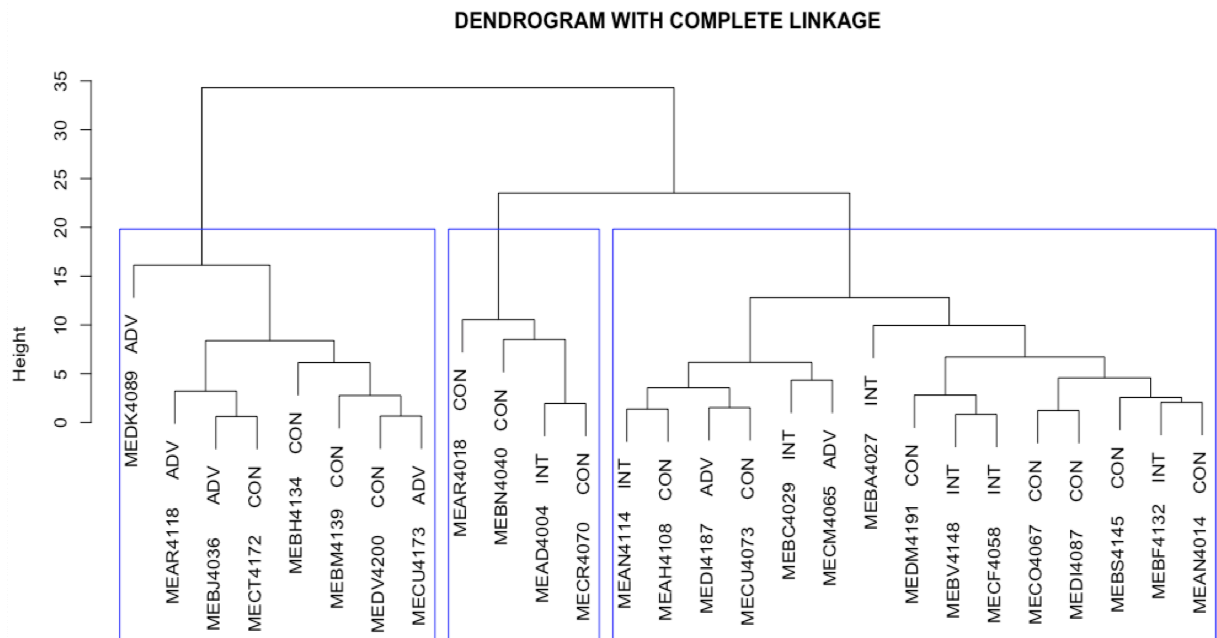
K-MEANS CLUSTERING WITH PCA DATA

DENDROGRAM WITH COMPLETE LINKAGE

SILHOUETTE PLOT FOR K=3 FOR COMPLETE LINKAGE

n = 27

3 clusters C_j
$j : n_j \mid ave_{i \in C_j} \; s_i$

1 : 15 | 0.41

2 : 4 | 0.41

3 : 8 | 0.40

Silhouette width s_i

Average silhouette width : 0.41

K-MEANS CLUSTERING WITH PCA DATA

K-MEANS CLUSTERING WITH PCA DATA

R-TSNE

R-TSNE PLOT

Green – Control
Blue – Intermediate
Red- Advanced

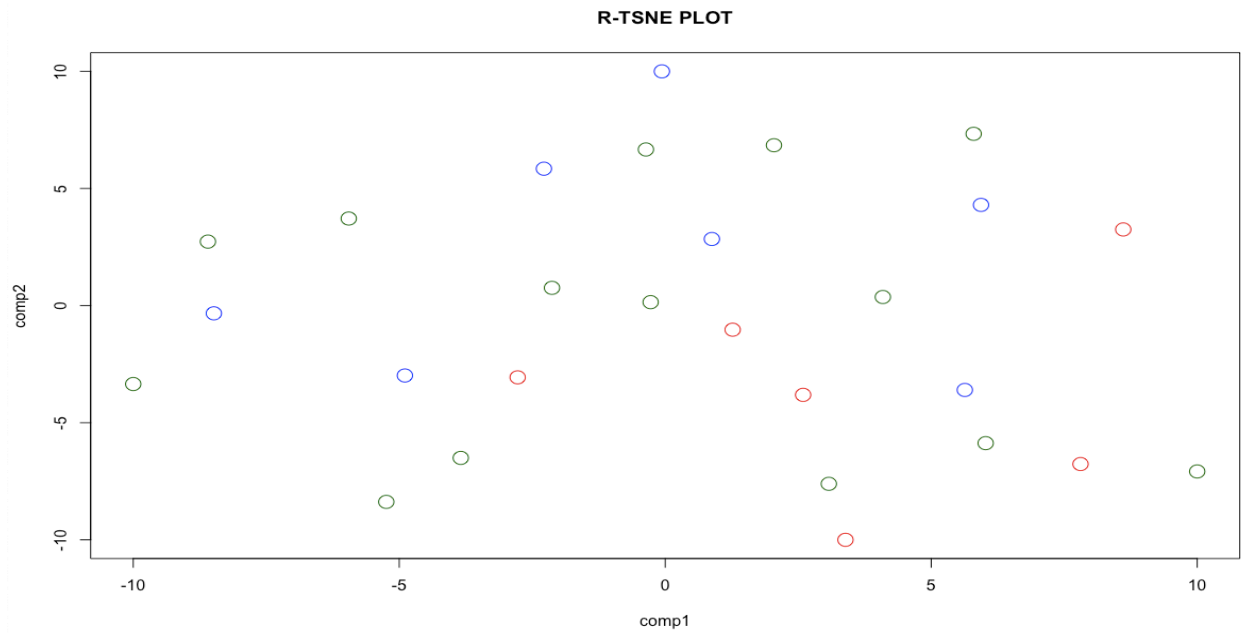DENDROGRAM WITH COMPLETE LINKAGE

SILHOUETTE PLOT FOR K=3 FOR COMPLETE LINKAGE

n = 27

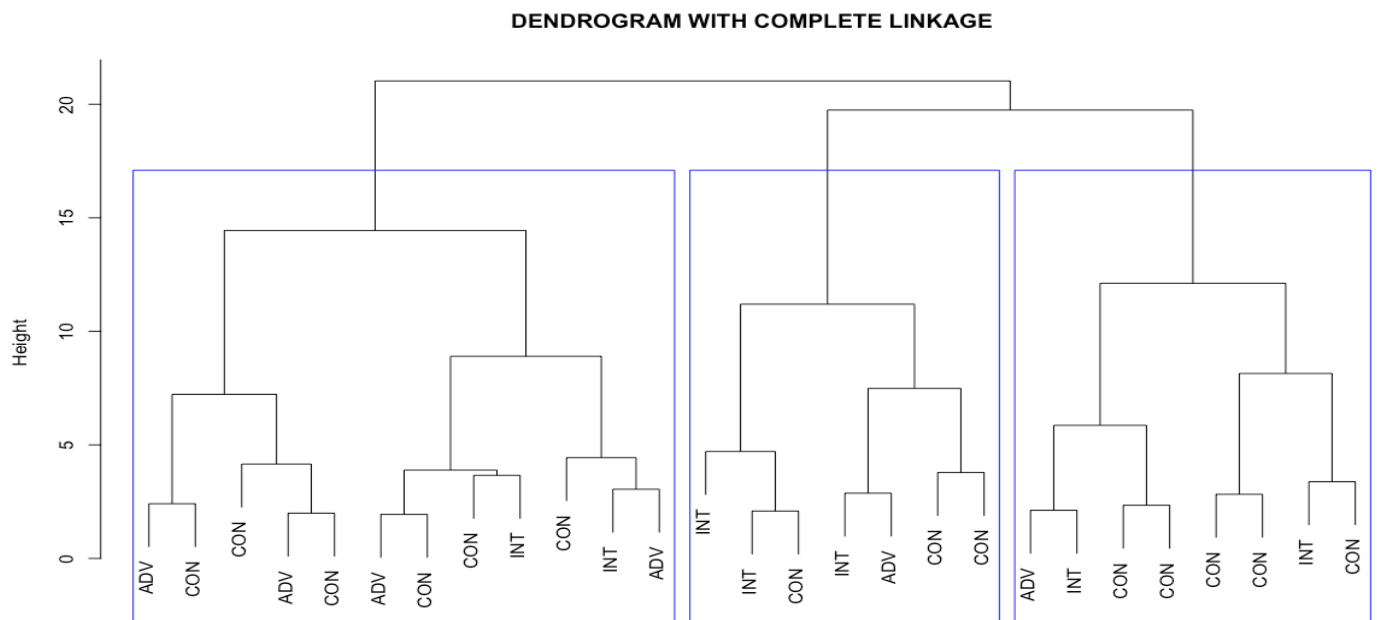3 clusters C_j

$j : n_j \mid ave_{i \in C_j} \; s_i$

1 : 12 | 0.28

2 : 7 | 0.45

3 : 8 | 0.39

Silhouette width s_i

Average silhouette width : 0.35