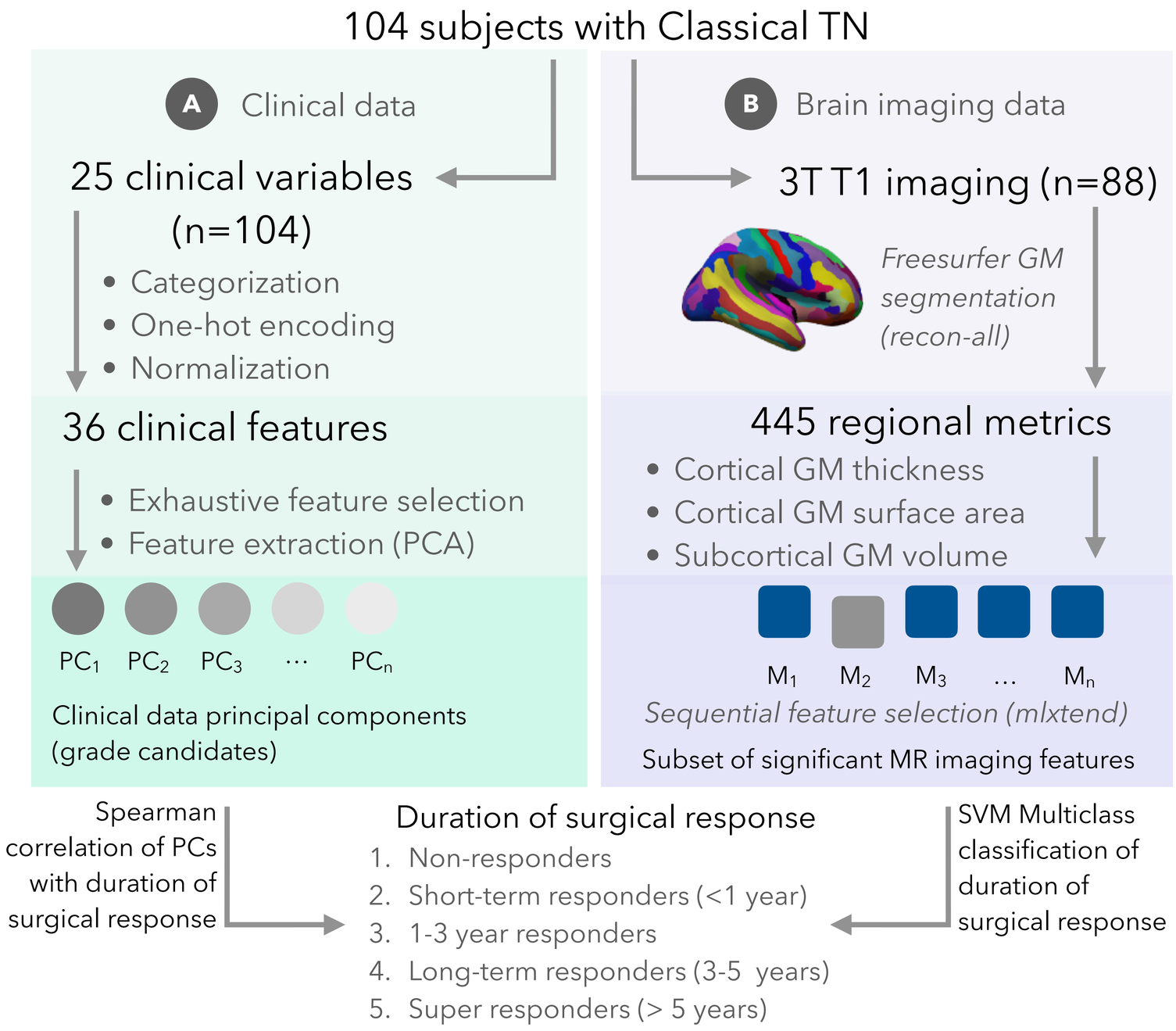

Fig. 1: Processing pipeline. A - clinical data branch - clinical data undergoes transformation to categorical features, one-hot encoding and normalization. Principal component analysis (PCA) and exhaustive feature selection have been done. A set of features having the strongest correlation with surgical response duration was determined. B - Imaging branch - T1 data was processed in Freesurfer and regional gray matter metrics were extracted. Sequential feature selection and SVM Classification model were used to predict the duration of surgical response.

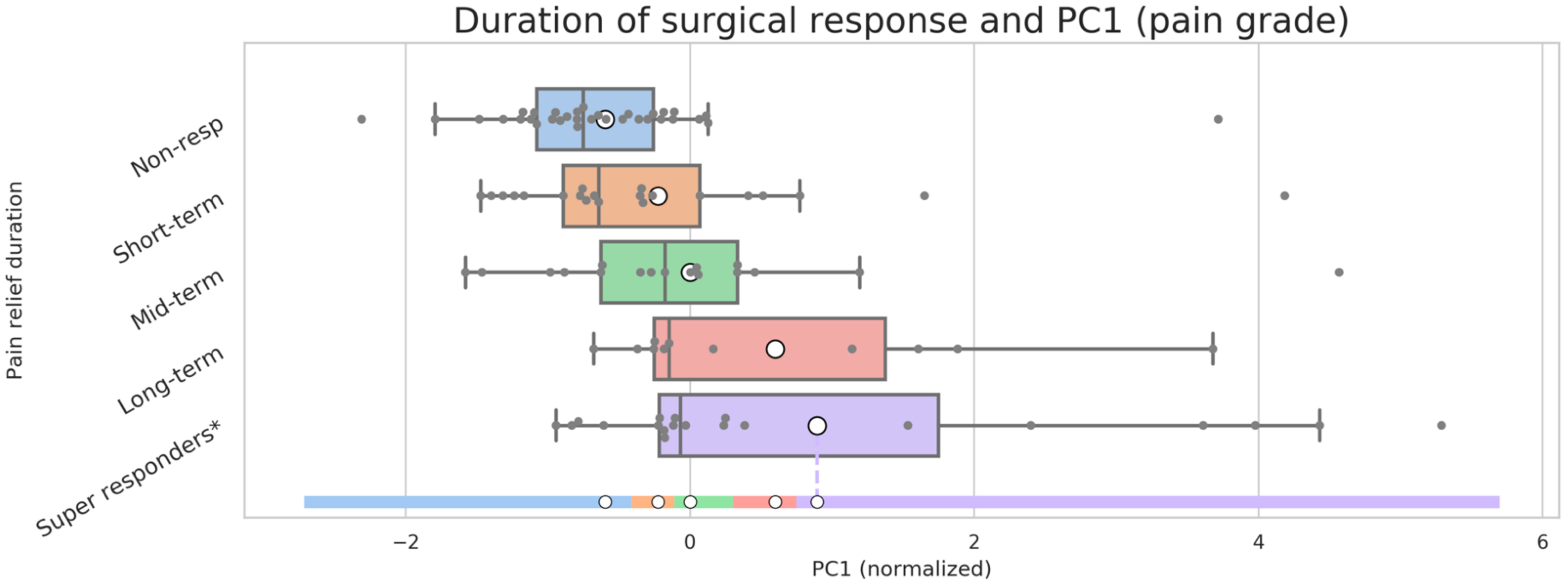

Fig.2: A combination of 18 normalized clinical features in a principal component (PC1) is significantly correlated with the duration of TN surgical response classes (Spearman R = 0.48, p-corrected <0.0001. Long-term and super responders groups distributions are matching, which might suggest that these groups represent one class.

Comment - 3-5 and 5+ years responders are highly similar clinically. This suggests that they rather represent one class. Subsequent supervised ML combined them together

Questions - should we merge 3-5 and >5 years relief groups for this plot as well? They seem quite similar and fewer groups should slightly improve the correlation accuracy and ML performance