**Analysis of the steroid therapy impact on the selected features.**

We considered the features selected for the multivariate analysis and draw a boxplot for each of them showing the feature range values divided among “*control subjects*” (N=18), DMD patients with “*ongoing therapy*” (N=10) and DMD patients who received steroid in the past (see main manuscript) and patients who never received (“past therapy/naive patients”, N=8).

Furthermore, we computed a t-test analysis comparing the “ongoing therapy” and the “past therapy/naive patients” groups, reporting significant nominal p-values.

This analysis shows that in our sample there are no differences that can be explained by the steroid therapy. Five features (“Fornix\_TR”, “L\_Cingulum\_cingulate\_gyrus\_FA”, “R\_External\_capsule\_FA”, “L\_Anterior\_corona\_radiata\_FA”, “L\_Ig\_ROI\_thickness”) showed a nominal significant p-value (i.e., p<0.05 uncorrected) at the t-test, but none of them will survive any multiple comparisons correction we tested (either false discovery rate correction or Bonferroni correction).

In the following pages we report all the boxplots ordered according to the feature forward model weight (i.e. Table 3 in the main manuscript).

