

-----Model inputs-----

Mode:Train

Model:multiTaskLinearModel

Params:default

No. of imaging features provided: 36

No. of gene features provided:976

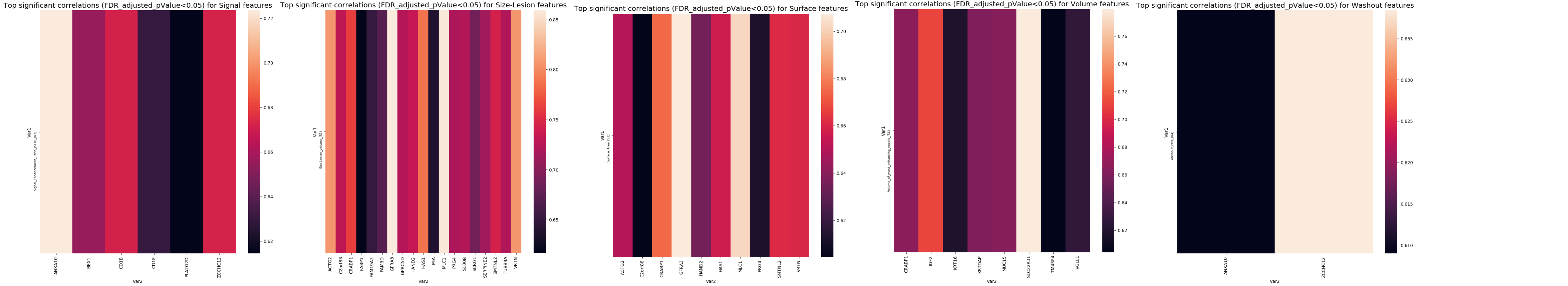
SampleID check results: 'The SampleIDs match for imaging and gene features'

No. of samples: 89

performing Stand\_scaler normalization for imaging features

performing Stand\_scaler for gene features

-----Multivariate Correlations (pearson based)-----



-----Features with highly significant correlations-----

Below is the list of imaging features

['Signal\_Enhancement\_Ratio\_SER\_(K7)', 'Size-Lesion\_volume\_(S1)', 'Surface\_Area\_(S3)', 'Volume\_of\_most\_enhancing\_voxels\_(S4)', 'Washout\_rate\_(K4)']

Below is the list of gene features

['ACTG2','ANXA10','BEX1','CDorf88','CD1B','CD1E','CRABP1','FABP1','FAM19A3','FAM3D','GFRA3','GPCRCD','HAND2','HAS1','IGF2','KRT16','KRTDAP','MIA','MLC1','MUC15','PLA2G2D','PRG4','S100B','SCRGI','SERPINE2','SLC22A31','SMTNL2','TM4SF4','TUBB4A','VGLL1','VRTN','ZCCHC12']

Number of imaging features

5

Number of gene features

32

-----Number of Samples for Training and Testing-----

No. of samples for training:71

No. of samples for test:18

-----Model Summary-----

Model Type : multiTaskLinearModel

Cross Validation Metrics:

Parameters: cv=3 scoringavg\_mean\_squared\_error

Cross validation score:1.36013762262

Model Parameters:

normalize:False

warm\_start:False

selection:cyclic

fit\_intercept:True

li\_ratio:0.5

max\_iter:1000

random\_state:None

tol:0.0001

copy\_X:True

alpha:1.0

-----Model evaluation for Train data-----

Min Square Error for the Model

MSE of train\_eval set:0.627617341365

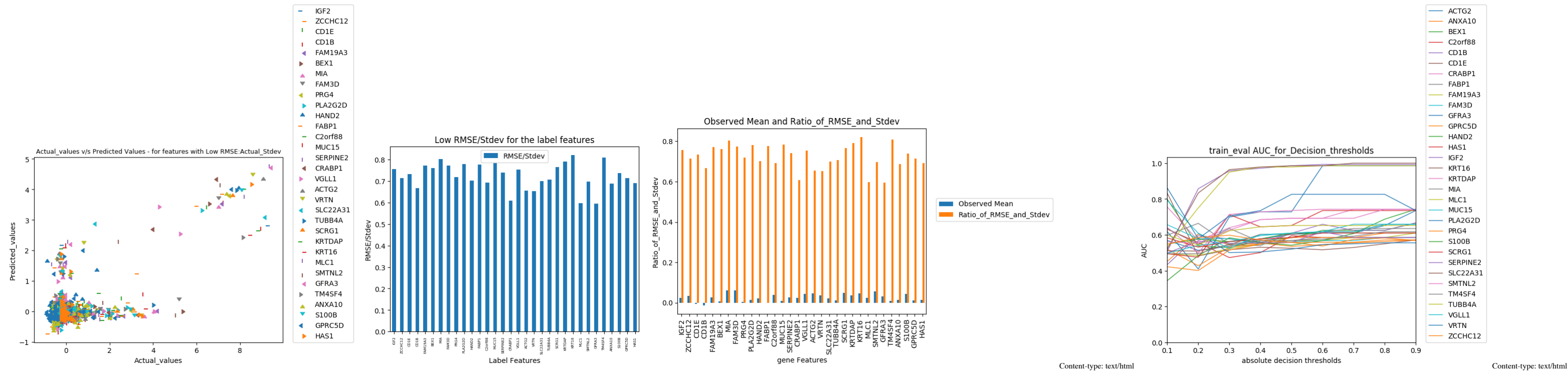
No. of features showing LOW 'RMSE/Stdev' (<=1.0): 32

All such features with their Low 'RMSE/Stdev' values could be found in output file: train\_eval\_multiTaskLinearModel\_Labels\_with\_Low\_Ratio.csv

No. of features showing HIGH 'RMSE/Stdev' (>1.0): 0

All such features with their High 'RMSE/Stdev' values could be found in output file: train\_eval\_multiTaskLinearModel\_Labels\_with\_High\_Ratio.csv

Model evaluation for Train data for label features showing Low 'RMSE/Stdev' (<=1.0)



Min Square Error for the Model

MSE of test\_eval set:0.328242618299

No. of features showing LOW 'RMSE/Stdev' (<=1.0): 2

All such features with their Low 'RMSE/Stdev' values could be found in output file: test\_eval\_multiTaskLinearModel\_Labels\_with\_Low\_Ratio.csv

No. of features showing HIGH 'RMSE/Stdev' (>1.0): 30

All such features with their High 'RMSE/Stdev' values could be found in output file: test\_eval\_multiTaskLinearModel\_Labels\_with\_High\_Ratio.csv

Model evaluation for Test data for label features showing Low 'RMSE/Stdev' (<=1.0)

