

Supplementary Table 21 – Variable Importance for predicting BCLM α SMA+ using primary tumor clusters. Larger values imply higher variable importance. Clusters used in the optimal model are marked with “X.”

Cluster in Primary	Included In Optimal Model	Variable Importance
E-cad+	X	0.804
HIF1 α +	X	0.786
CD68+	X	0.768
PD-L1+	X	0.750
CD8a+PD1+	X	0.696
MMP9+	X	0.679
α SMA+	X	0.679
CD31+	X	0.643
CD8a+PD1-	X	0.607
CD14+	X	0.589
CD206+	X	0.589
CD4+PD1+	X	0.589
pERK+	X	0.589
Collagen+	X	0.589
CD68+CD163+CD206+	X	0.571
Ki-67+		0.536
CD68+MMP9+		0.518
CD163+		0.518
CD56+		0.518
CD163+MMP9+		0.518