

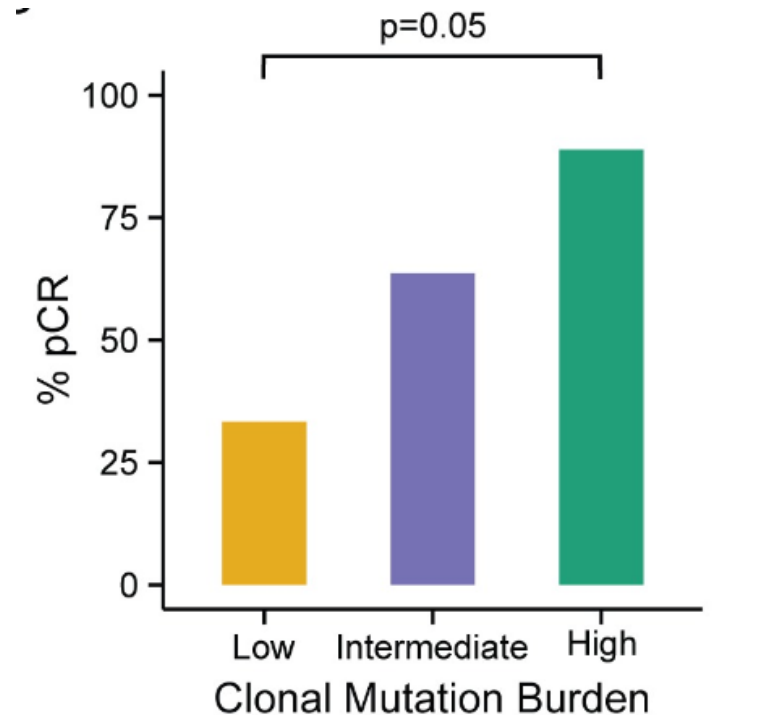
Clonal Mutation Burden Analysis for PCAWG Somatic SNVs

Xiaotong Li

Predictors of Chemosensitivity in Triple Negative Breast Cancer: An Integrated Genomic Analysis

Tingting Jiang, Weiwei Shi, Vikram B. Wali, Lórin S. Pongor, Charles Li, Rosanna Lau, Balázs Gyórfy, Richard P. Lifton, William F. Symmans, Lajos Pusztai, Christos Hatzis

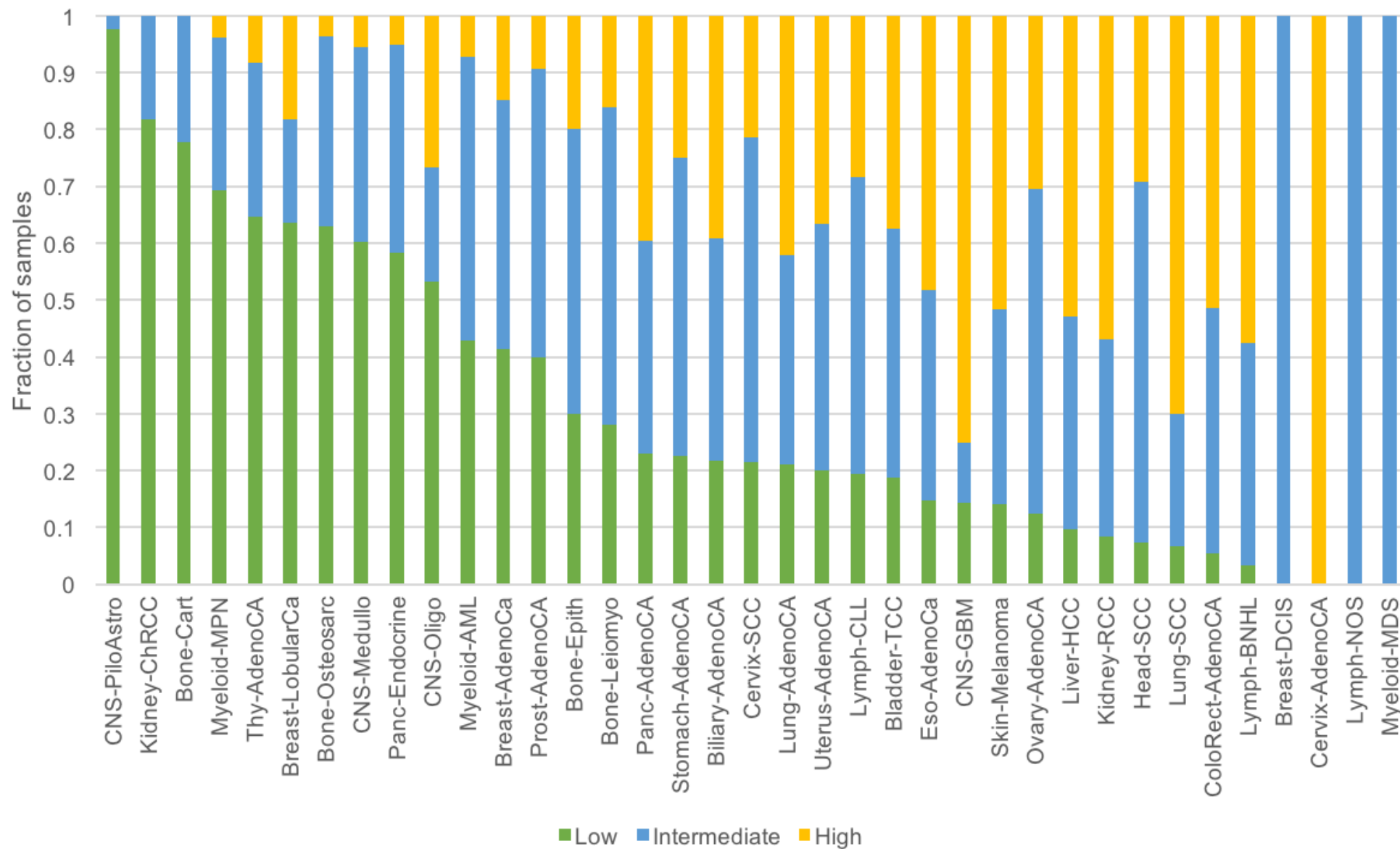
Published: December 13, 2016 • <http://dx.doi.org/10.1371/journal.pmed.1002193>



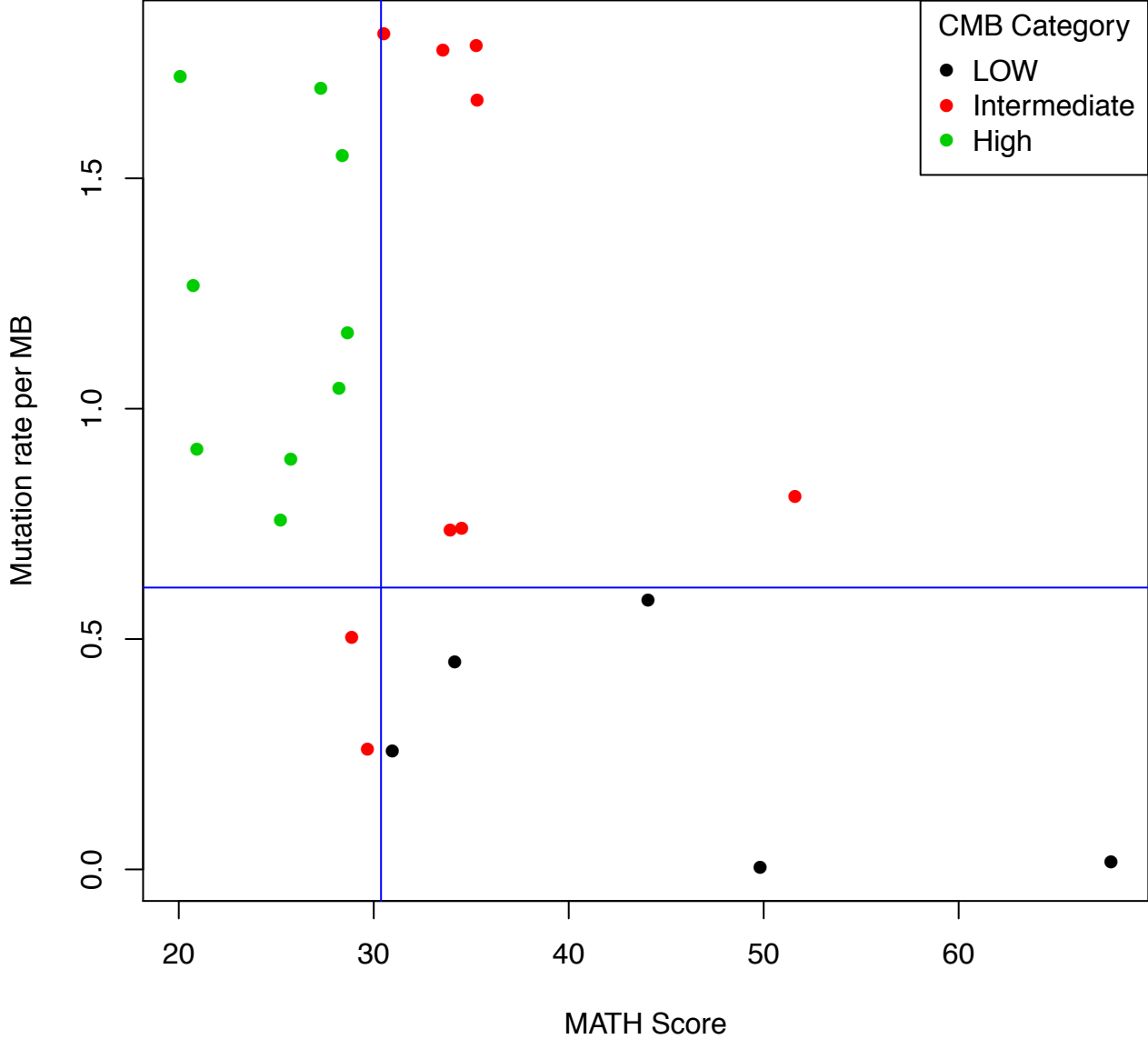
pCR, pathologic complete response

- **Mutational Burden and Clonality as Predictors of Chemosensitivity in Triple Negative Breast Cancer**
 - Methods
 - Combine **mutation rate** (MR) and **mutant allele tumor heterogeneity** (MATH) into a composite score, as **Clonal Mutation Burden** (CMB)
 - Captures both the clonality of a tumor and the number of somatic mutations per clone.
 - MR and MATH scores were **median-dichotomized** in the cohort, and CMB categories were defined as **low** (low MR, high MATH), **high** (high MR, low MATH), or **intermediate** (all others).
 - Tumors with high CMB appear to be extremely chemosensitive.

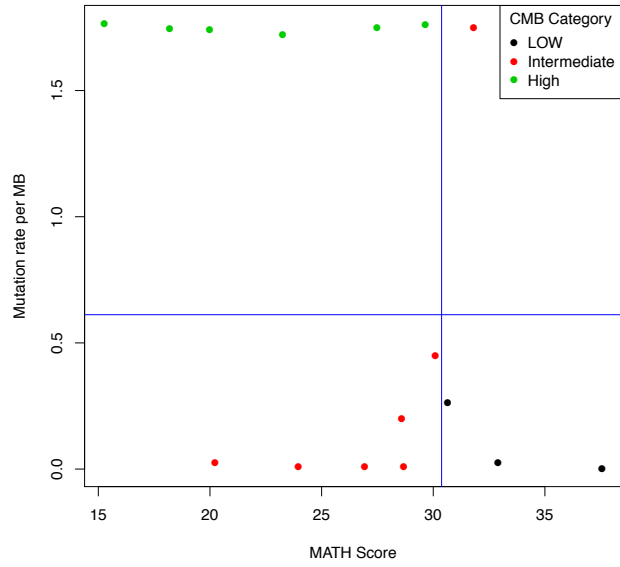
Distribution of cancer samples in each CMB category



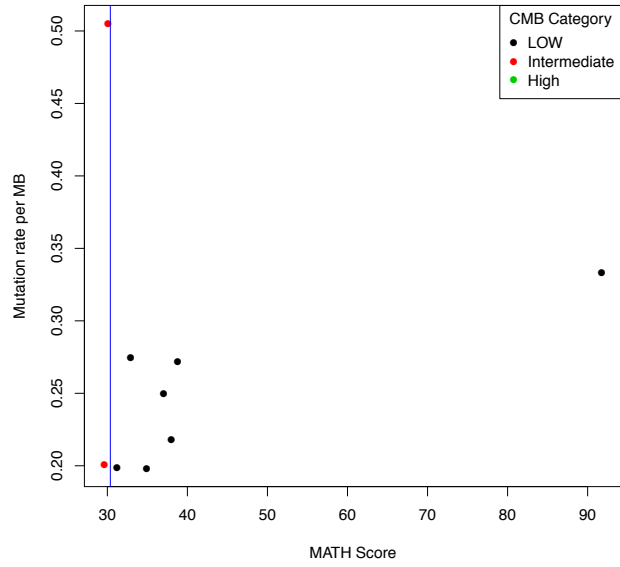
Distributions of MR and MATH scores in Biliary-AdenoCA



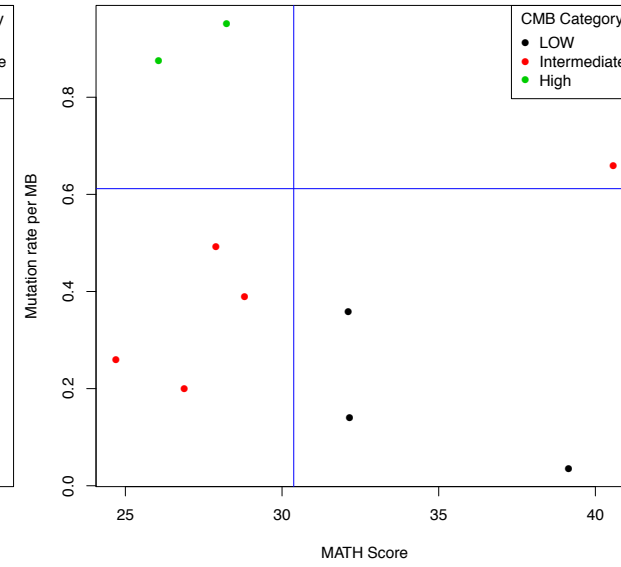
Distributions of MR and MATH scores in Bladder-TCC



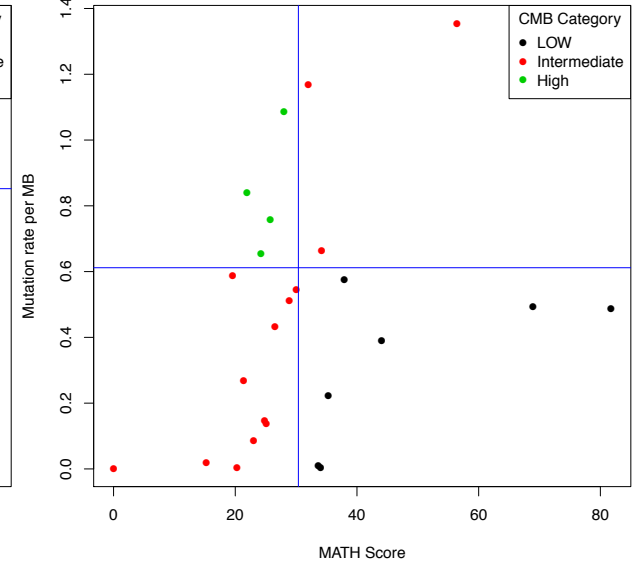
Distributions of MR and MATH scores in Bone-Cart



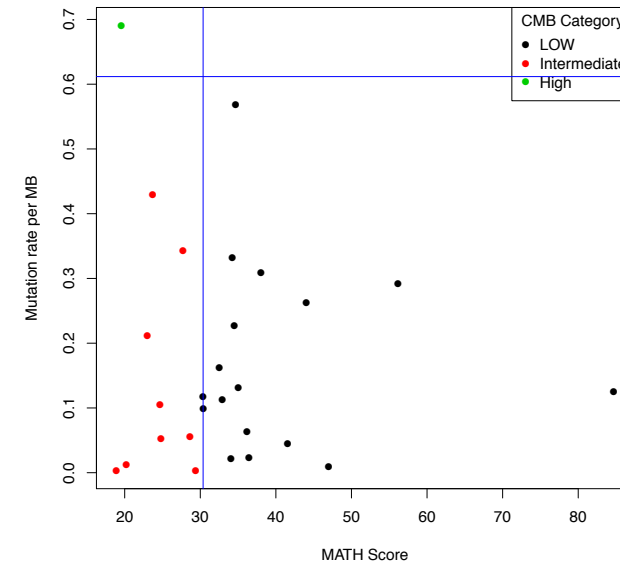
Distributions of MR and MATH scores in Bone-Epith



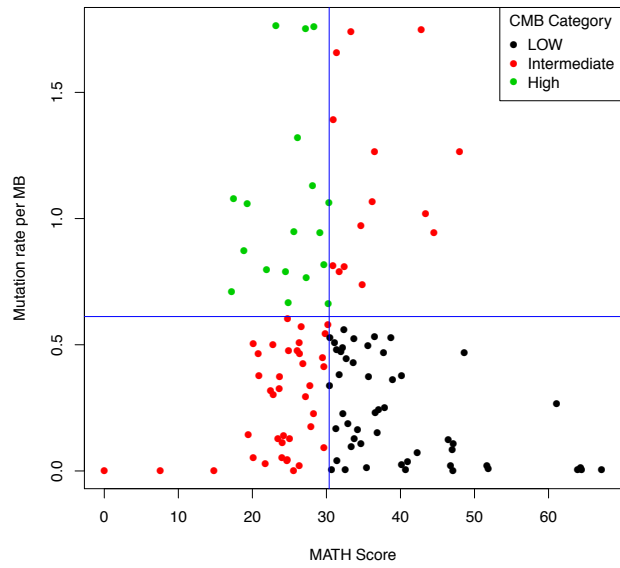
Distributions of MR and MATH scores in Bone-Leiomyo



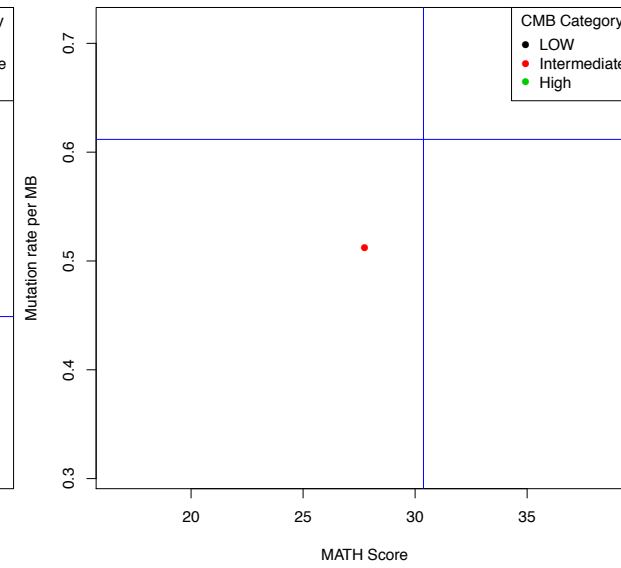
Distributions of MR and MATH scores in Bone-Osteosarc



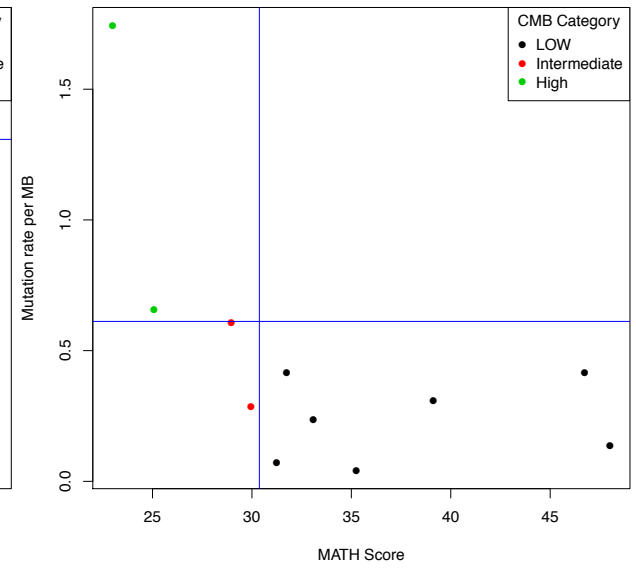
Distributions of MR and MATH scores in Breast-AdenoCa



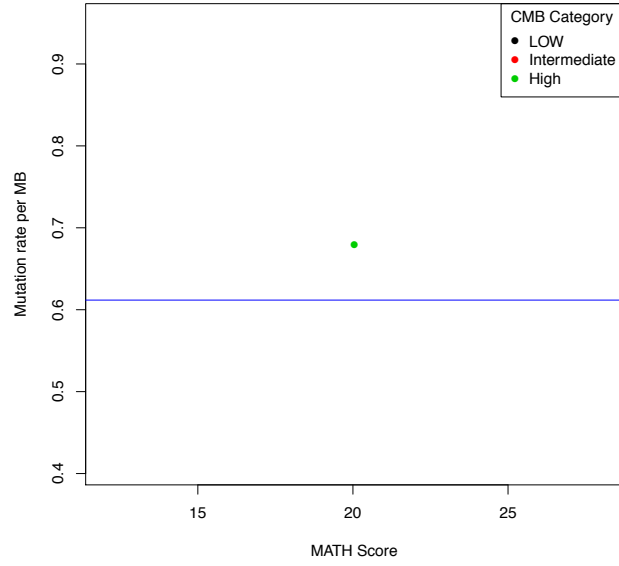
Distributions of MR and MATH scores in Breast-DCIS



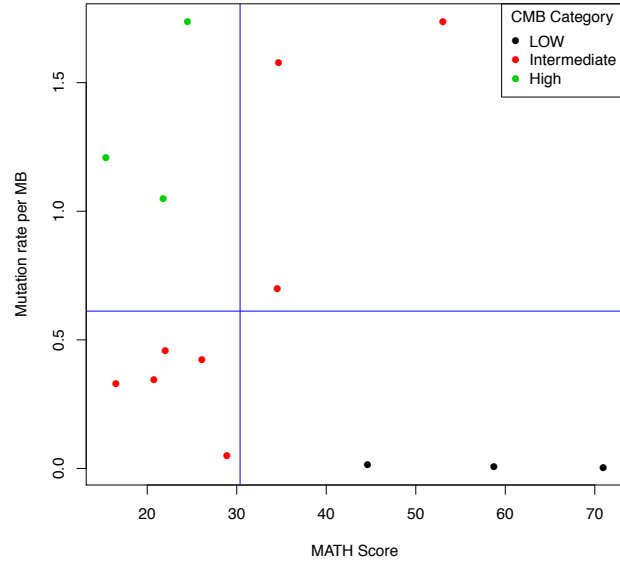
Distributions of MR and MATH scores in Breast-LobularCa



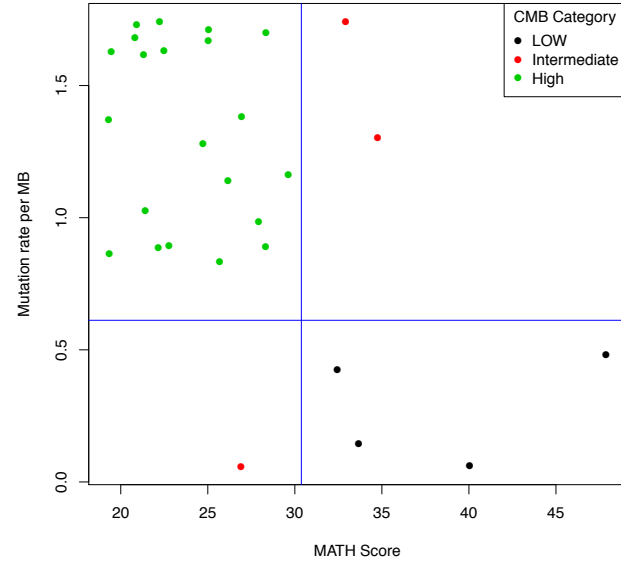
Distributions of MR and MATH scores in Cervix-AdenoCA



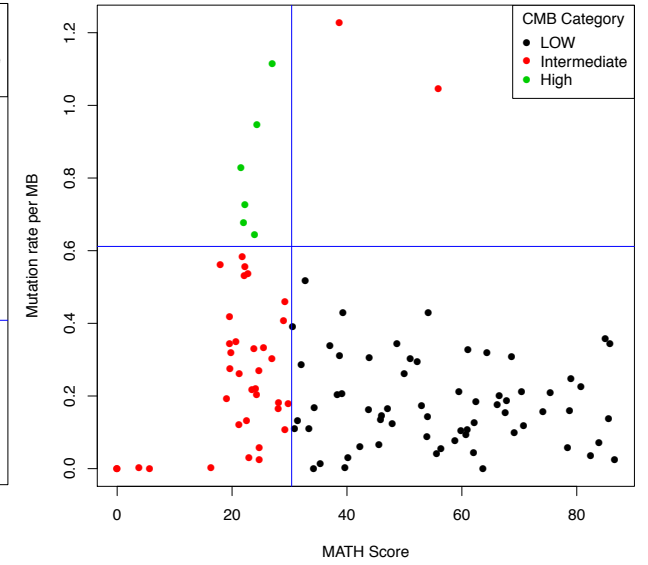
Distributions of MR and MATH scores in Cervix-SCC



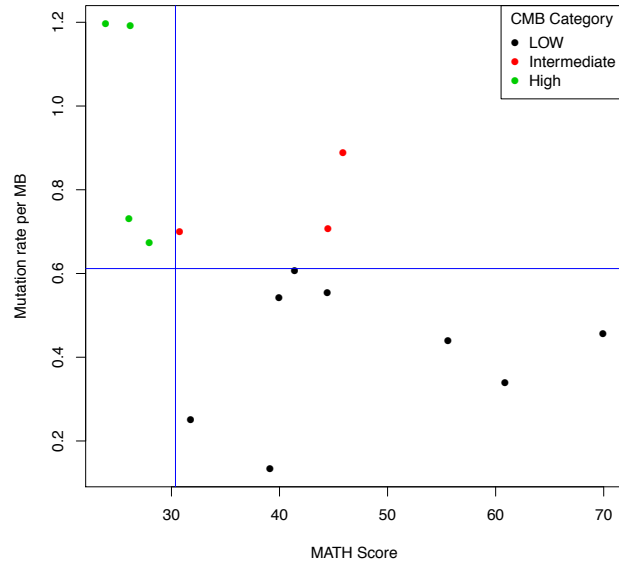
Distributions of MR and MATH scores in CNS-GBM



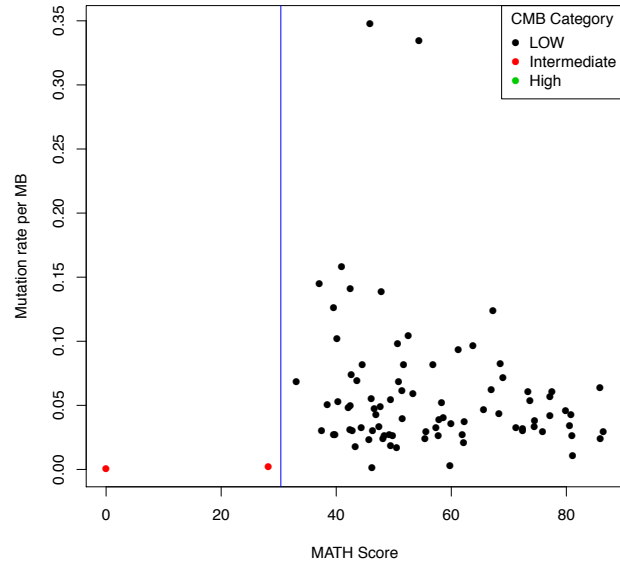
Distributions of MR and MATH scores in CNS-Medullo



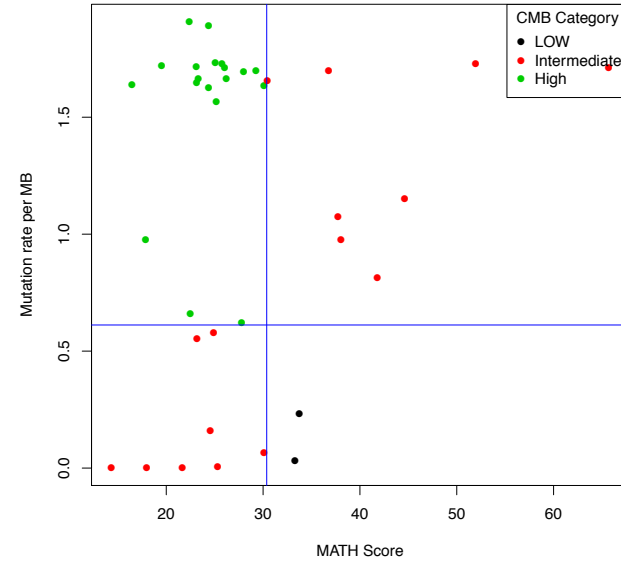
Distributions of MR and MATH scores in CNS-Oligo



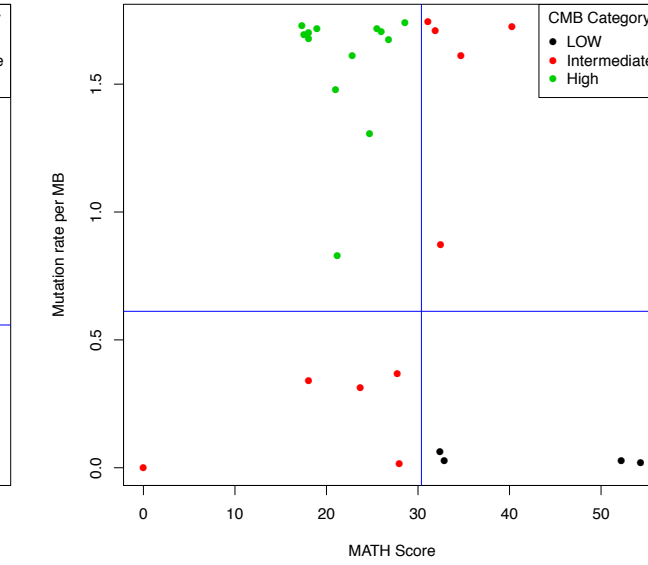
Distributions of MR and MATH scores in CNS-PiloAstro



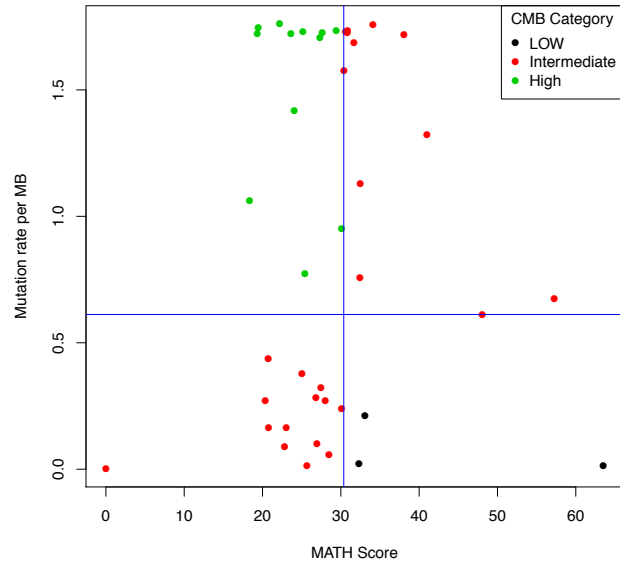
Distributions of MR and MATH scores in ColoRect-AdenoCA



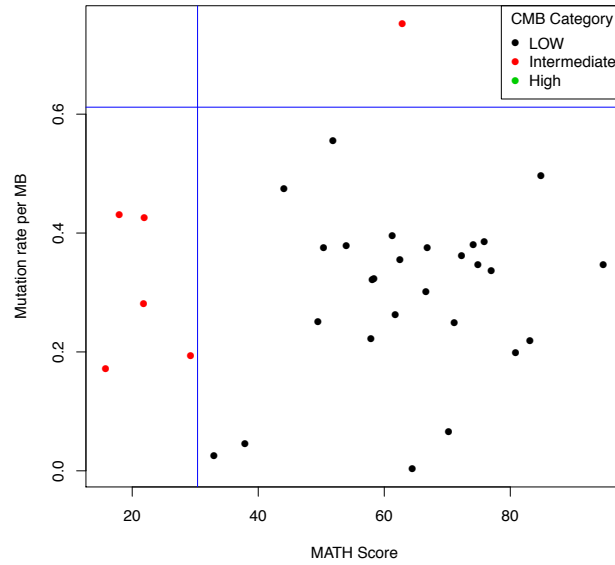
Distributions of MR and MATH scores in Eso-AdenoCa



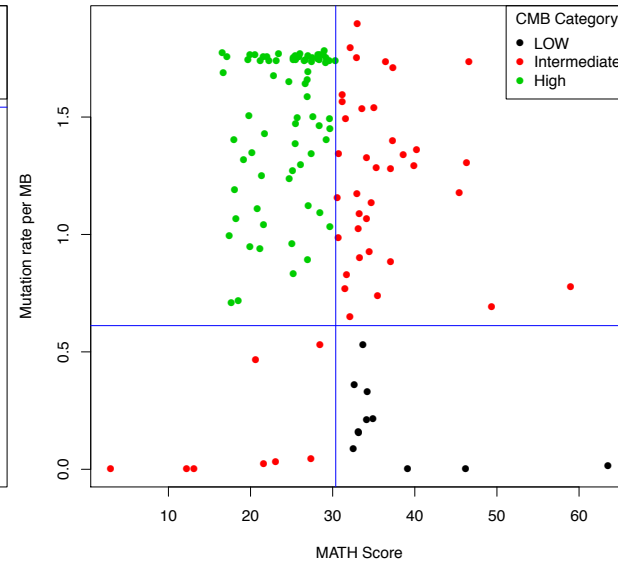
Distributions of MR and MATH scores in Head-SCC



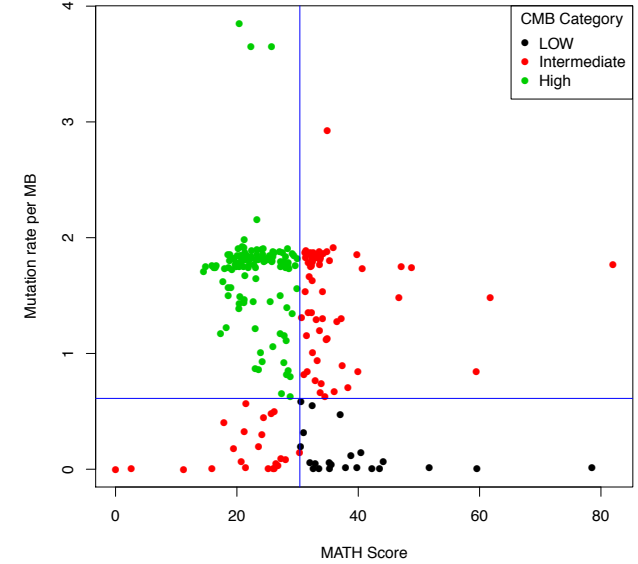
Distributions of MR and MATH scores in Kidney-ChRCC



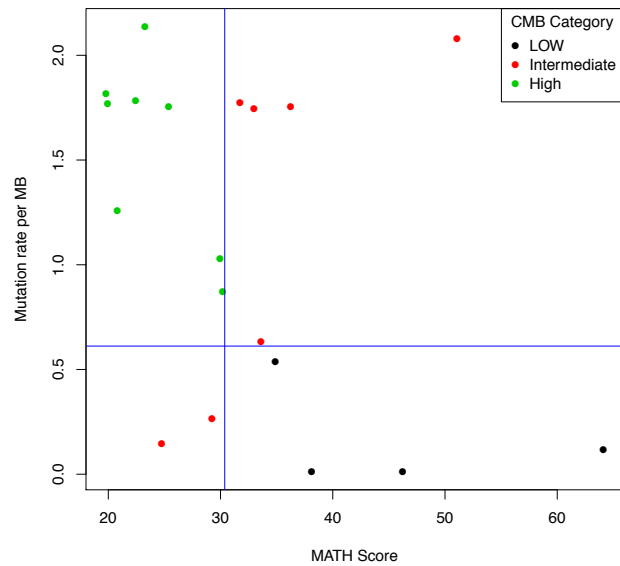
Distributions of MR and MATH scores in Kidney-RCC



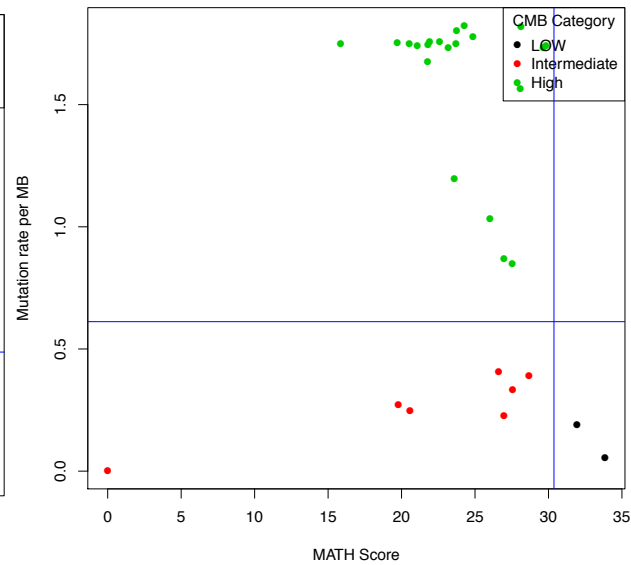
Distributions of MR and MATH scores in Liver-HCC



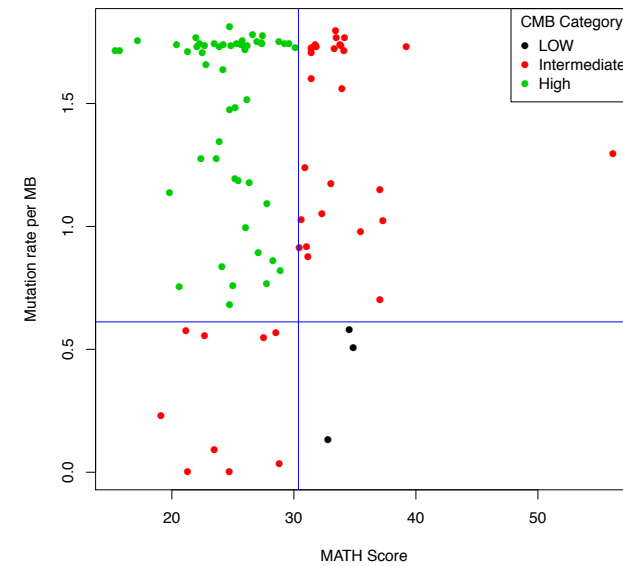
Distributions of MR and MATH scores in Lung-AdenoCA



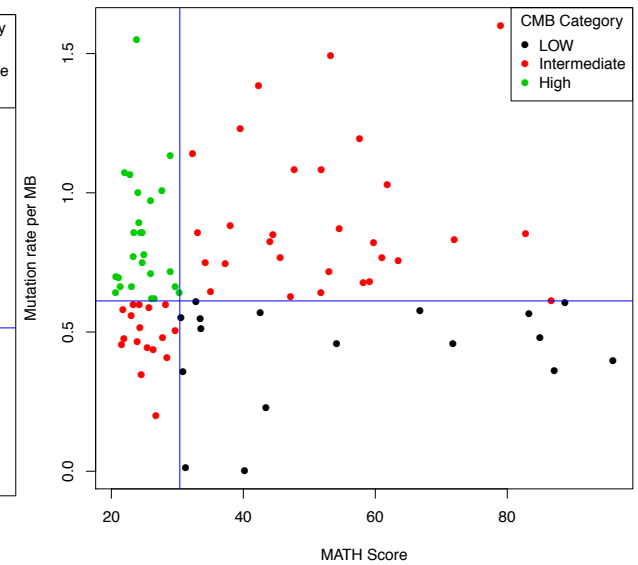
Distributions of MR and MATH scores in Lung-SCC



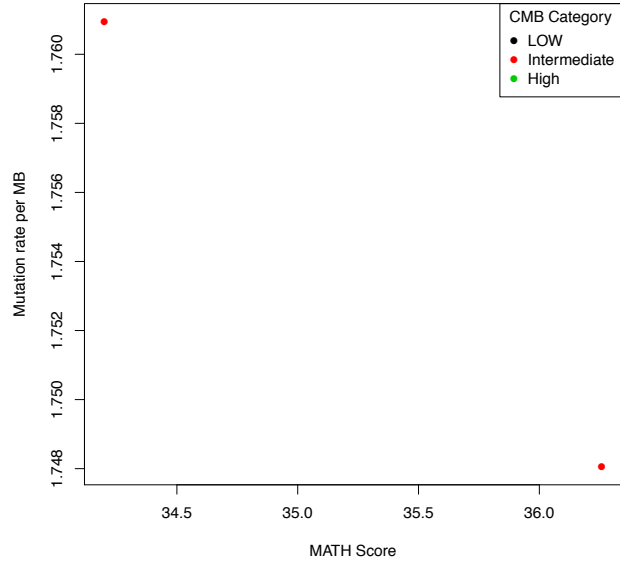
Distributions of MR and MATH scores in Lymph-BNHL



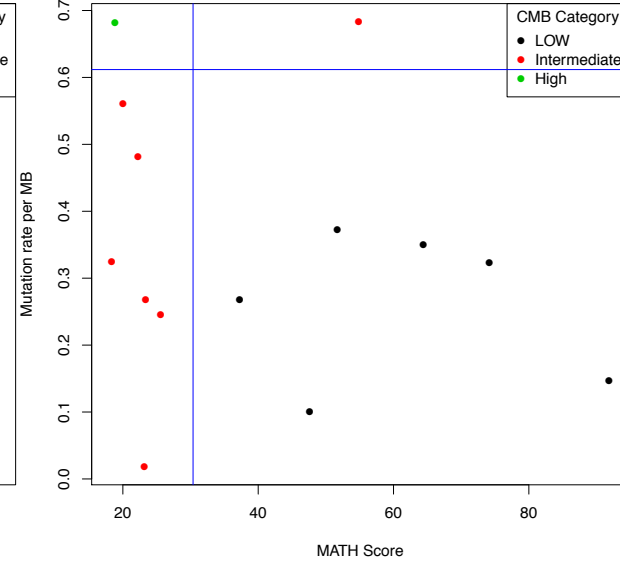
Distributions of MR and MATH scores in Lymph-CLL



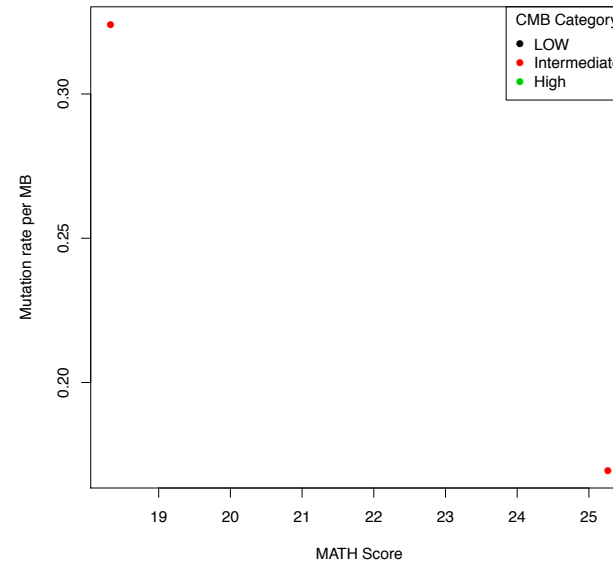
Distributions of MR and MATH scores in Lymph-NOS



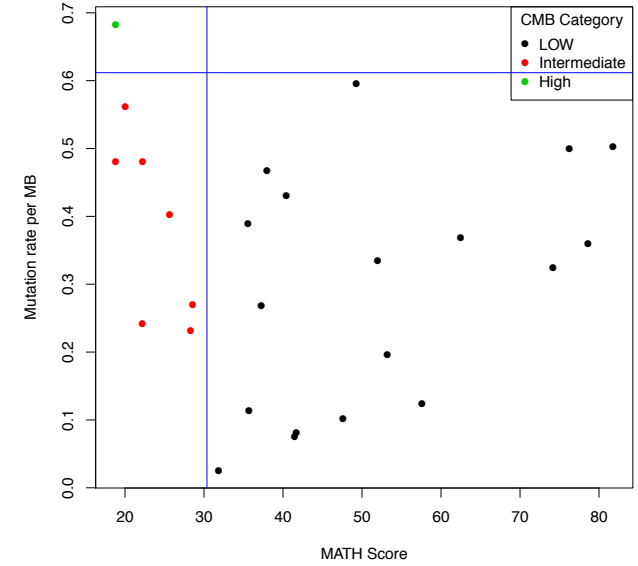
Distributions of MR and MATH scores in Myeloid-AML



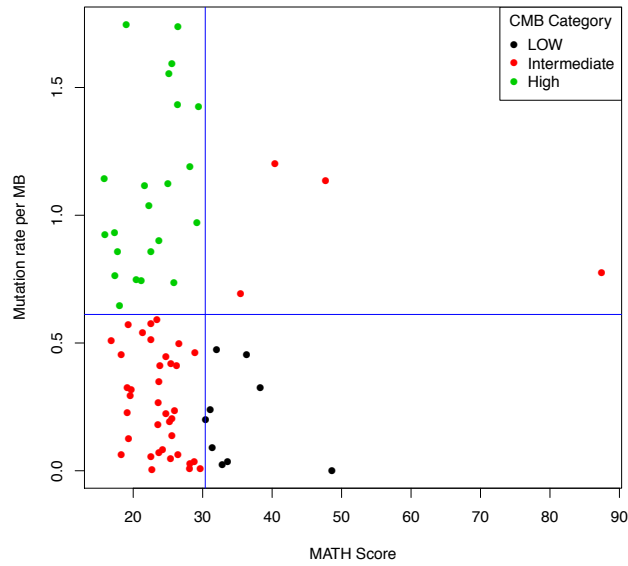
Distributions of MR and MATH scores in Myeloid-MDS



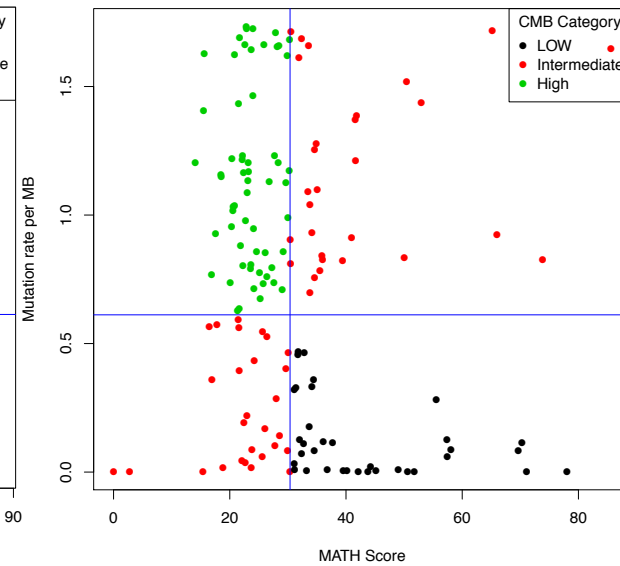
Distributions of MR and MATH scores in Myeloid-MPN



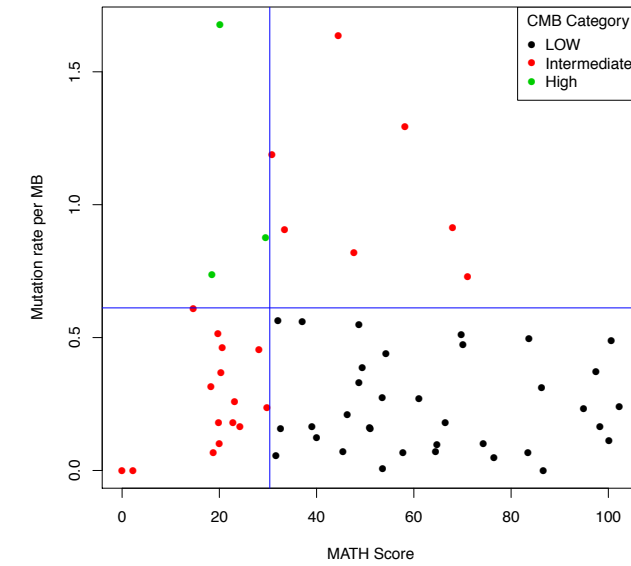
Distributions of MR and MATH scores in Ovary-AdenoCA



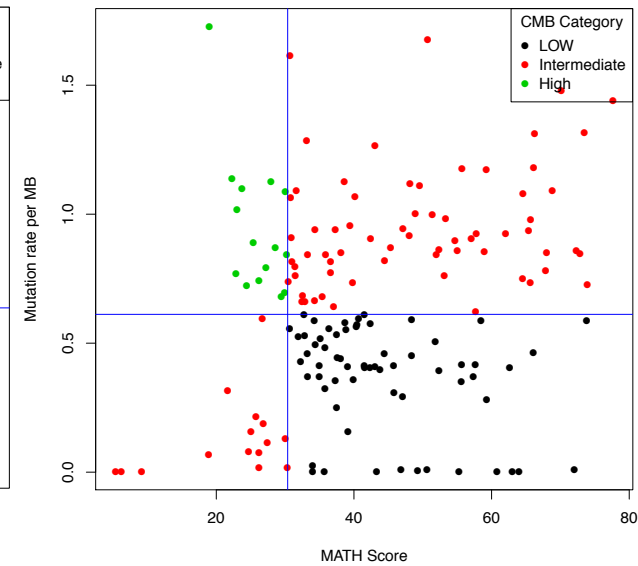
Distributions of MR and MATH scores in Panc-AdenoCA



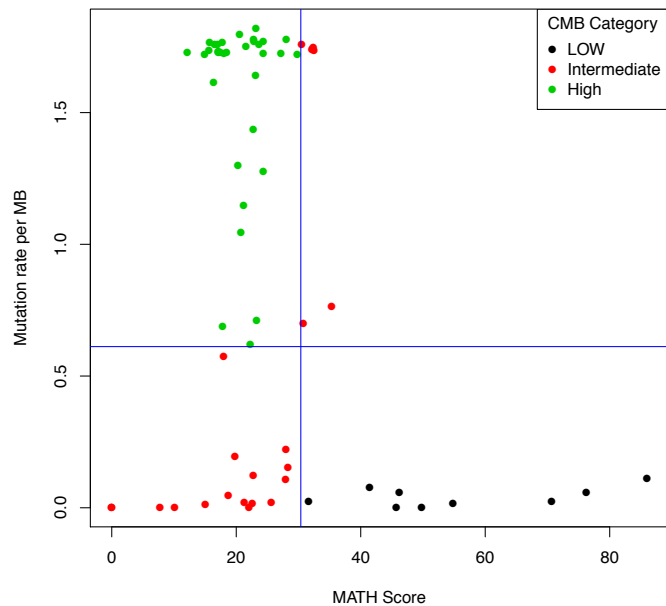
Distributions of MR and MATH scores in Panc-Endocrine



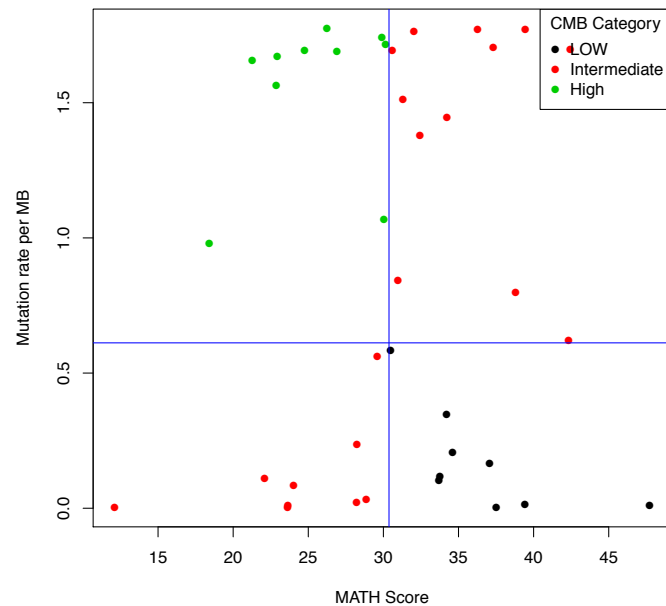
Distributions of MR and MATH scores in Prost-AdenoCA



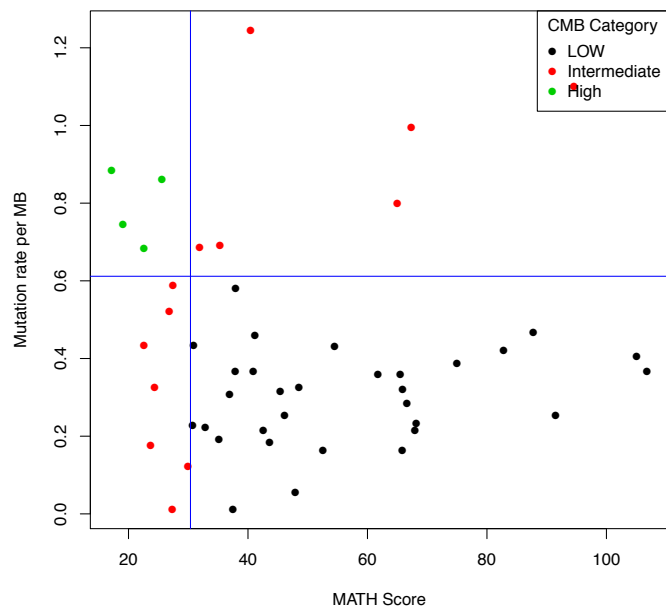
Distributions of MR and MATH scores in Skin-Melanoma



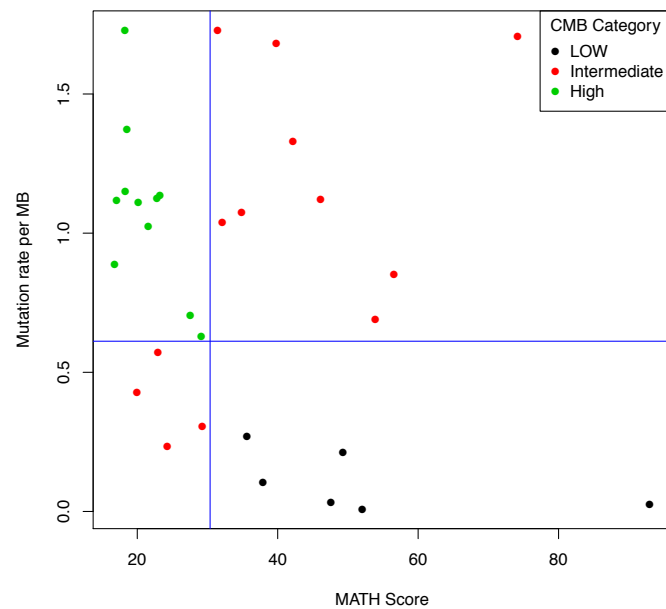
Distributions of MR and MATH scores in Stomach-AdenoCA



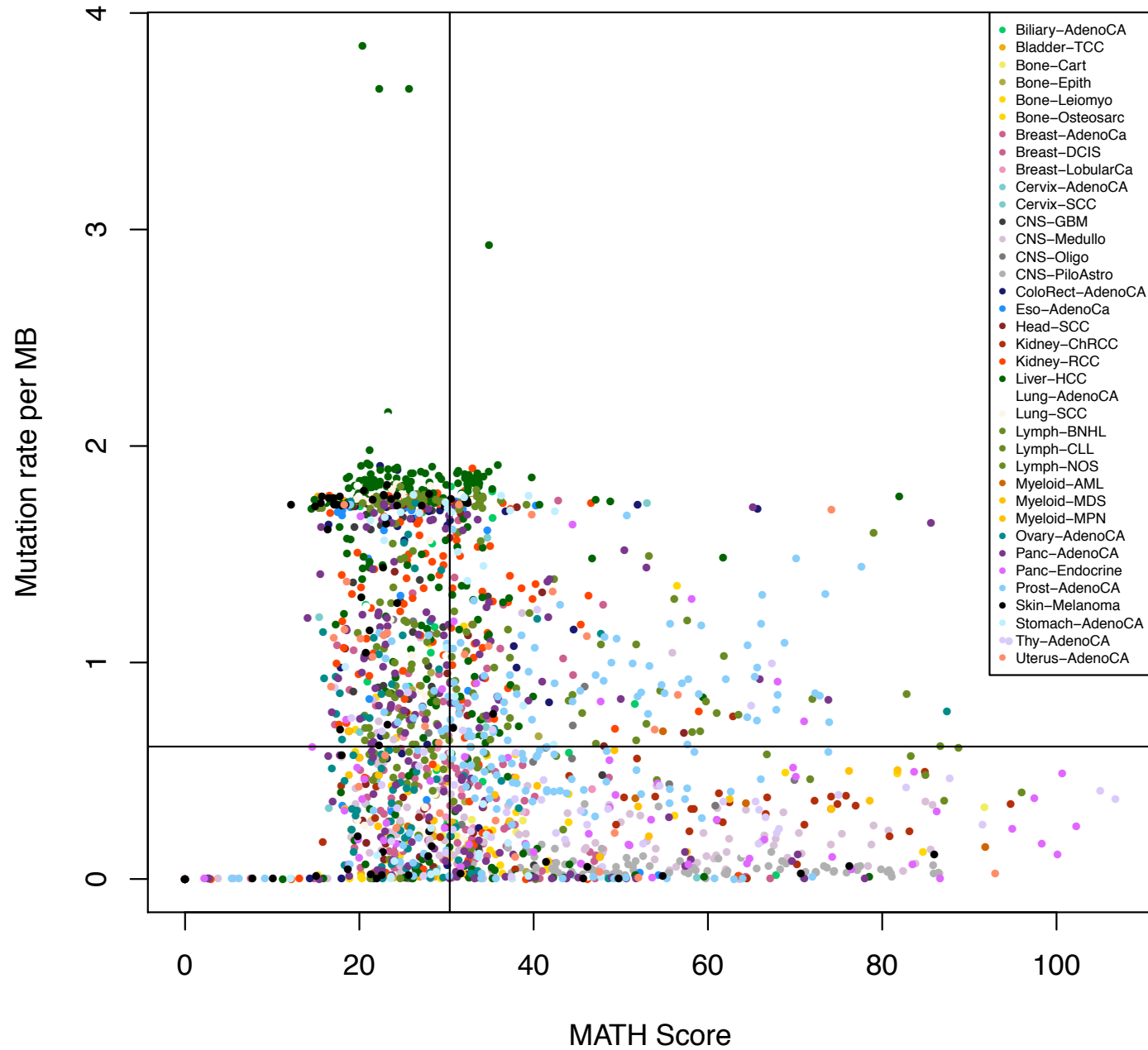
Distributions of MR and MATH scores in Thy-AdenoCA



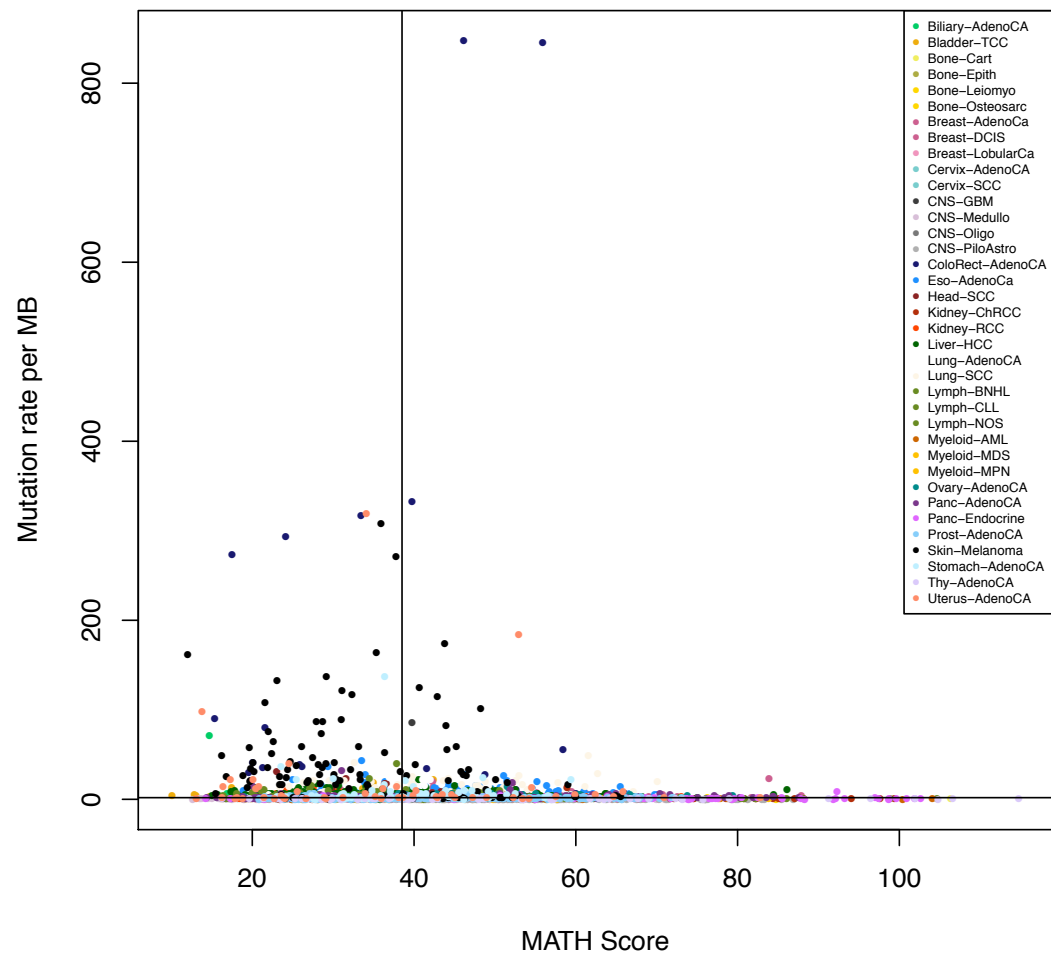
Distributions of MR and MATH scores in Uterus-AdenoCA



Distributions of MR and MATH scores in all samples



Distributions of MR and MATH scores in all samples



Distributions of MR and MATH scores in selected samples (MR per MB < 7)

