

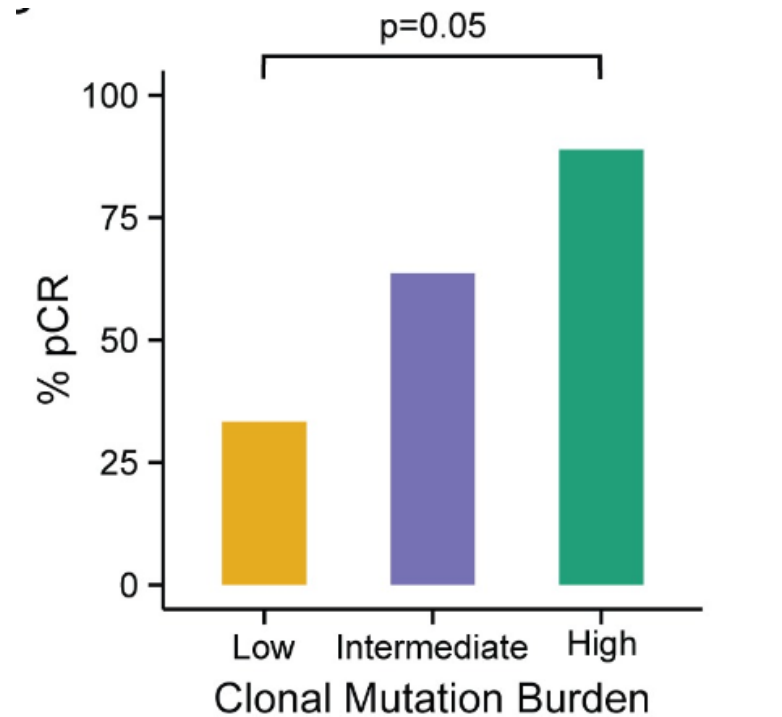
Clonal Mutation Burden Analysis for PCAWG Somatic SNVs

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

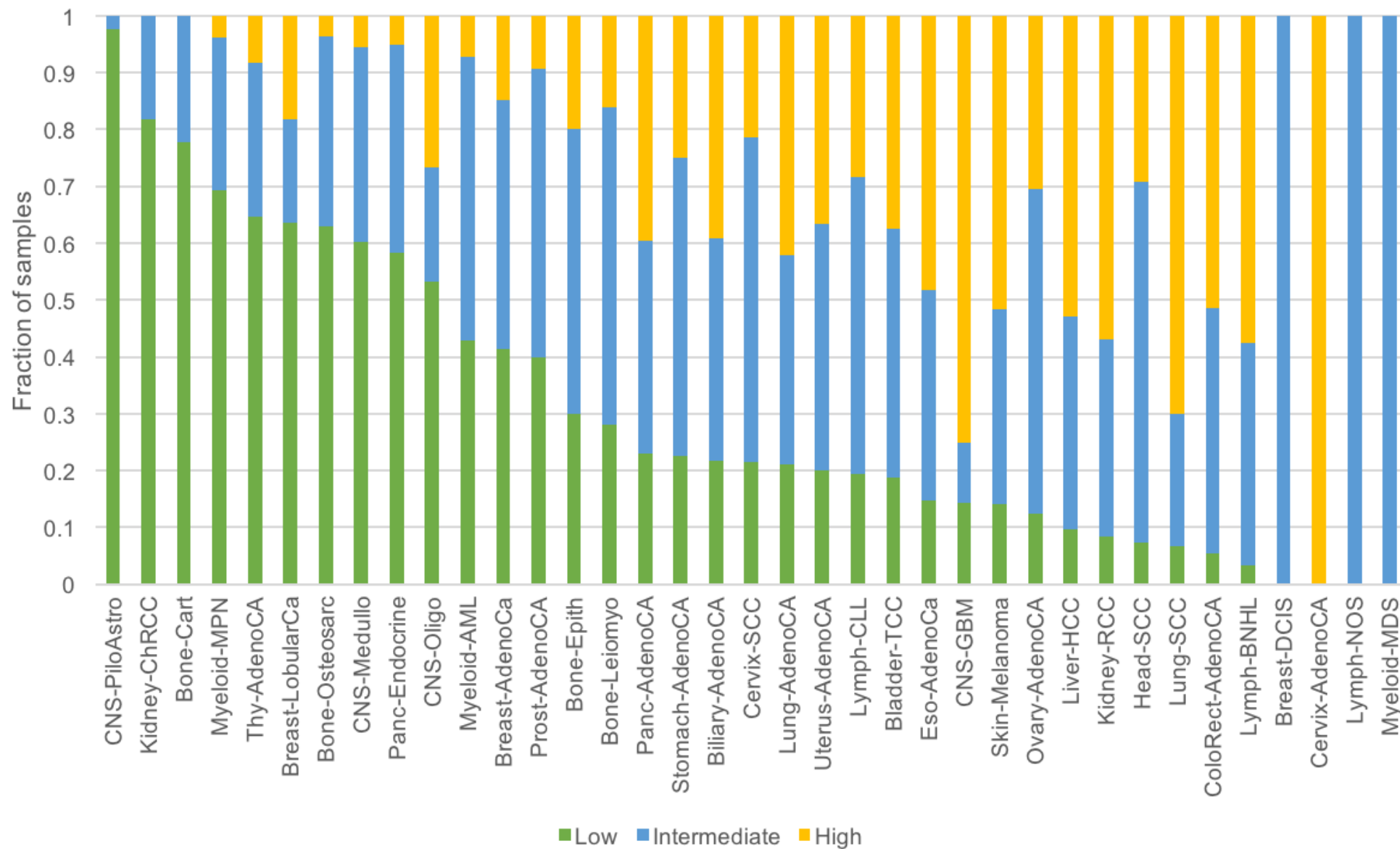
Published: December 13, 2016 • <http://dx.doi.org/10.1371/journal.pmed.1002193>



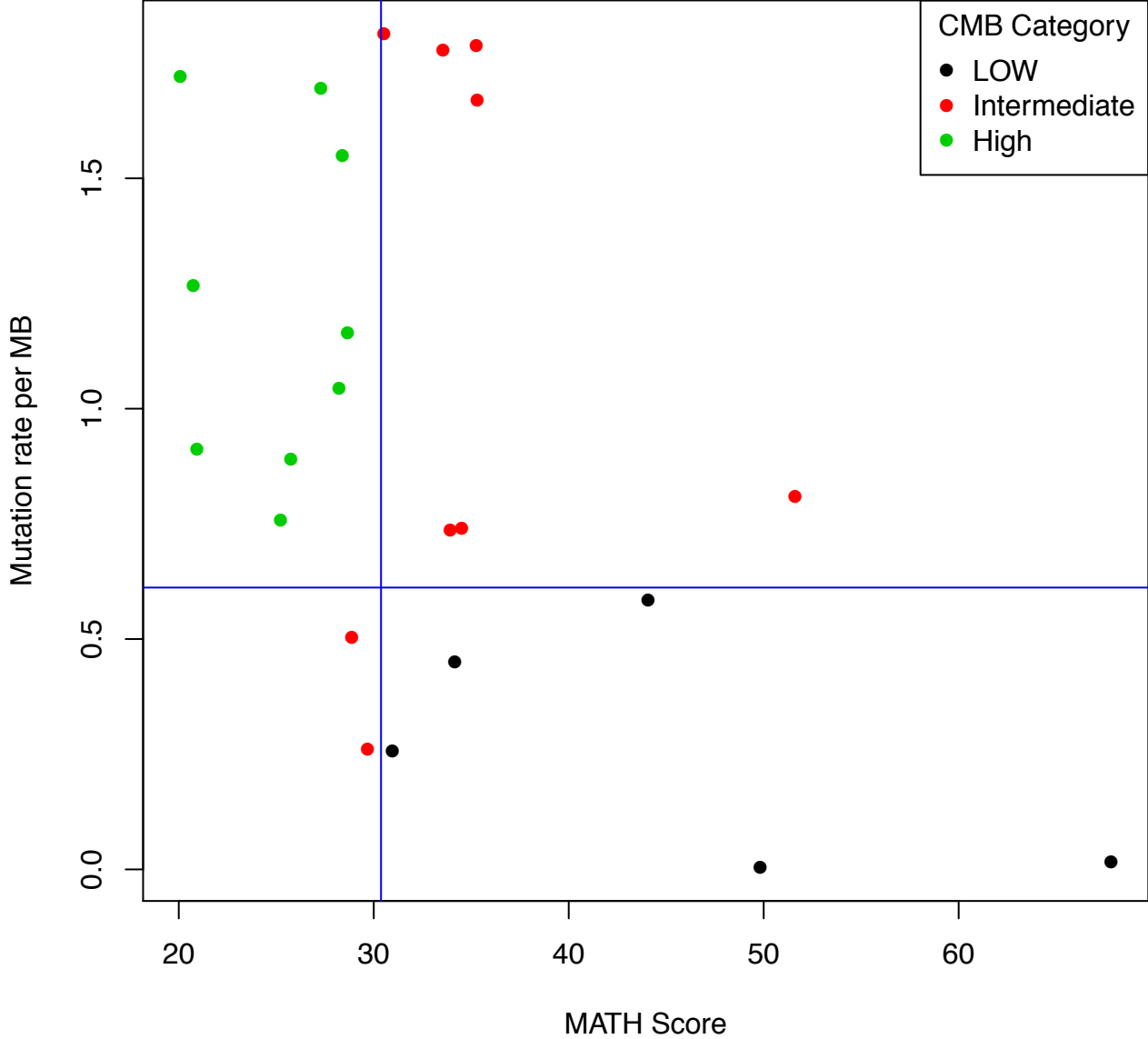
pCR, pathologic complete response

- **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.

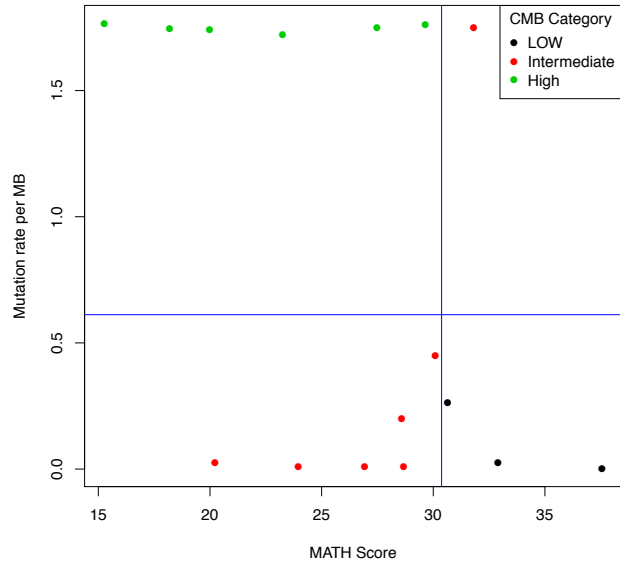
Distribution of cancer samples in each CMB category



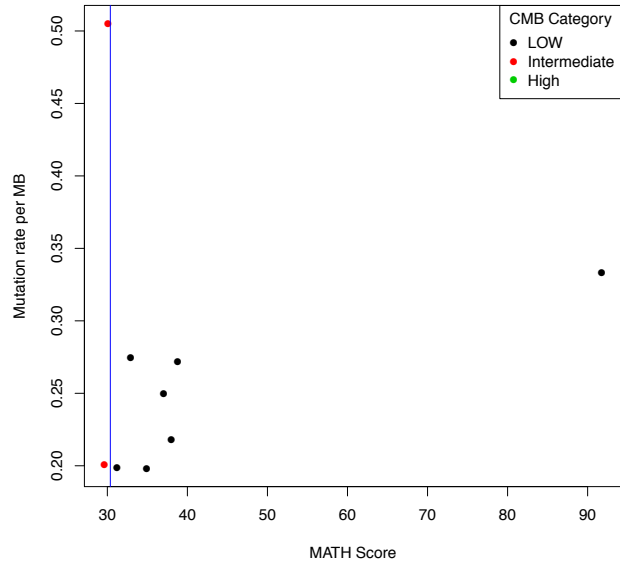
Distributions of MR and MATH scores in Biliary-AdenoCA



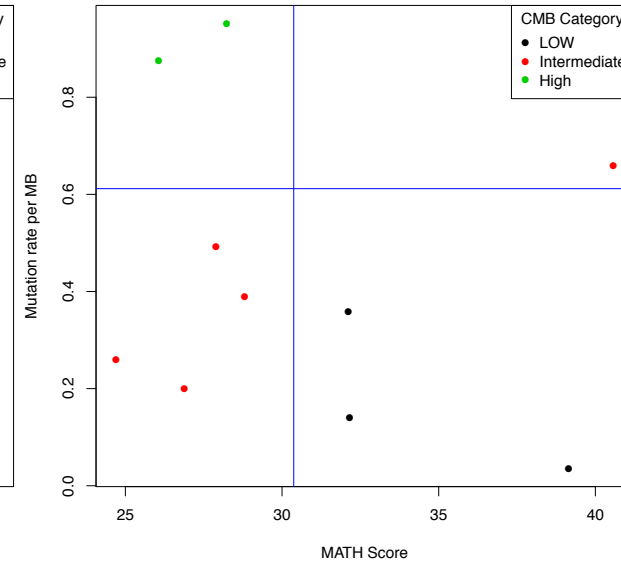
Distributions of MR and MATH scores in Bladder-TCC



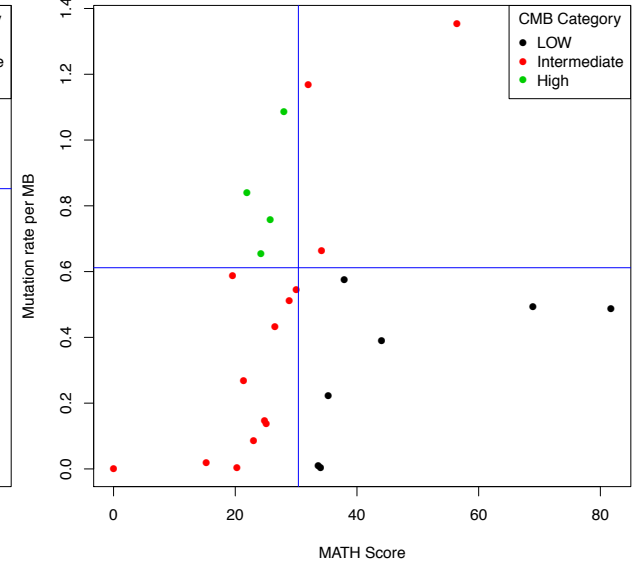
Distributions of MR and MATH scores in Bone-Cart



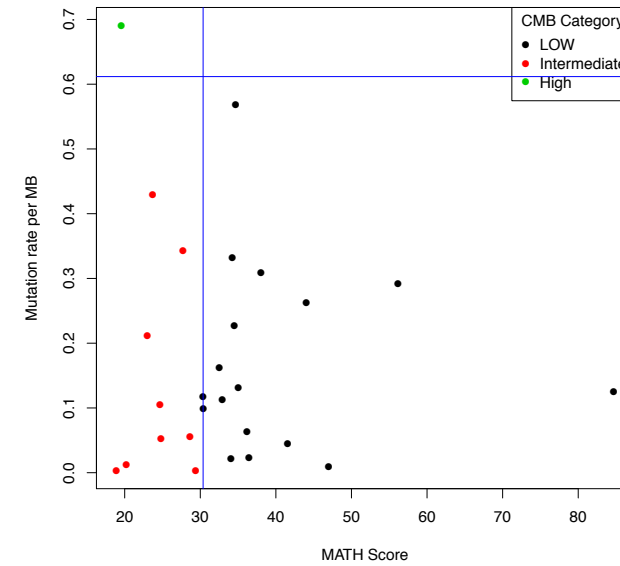
Distributions of MR and MATH scores in Bone-Epith



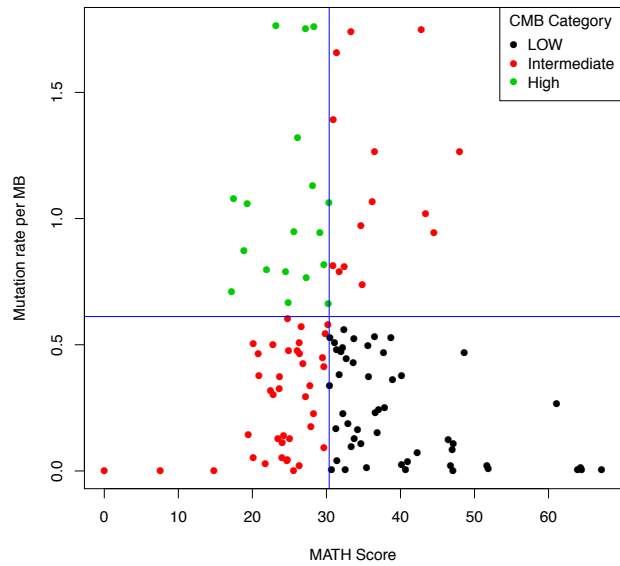
Distributions of MR and MATH scores in Bone-Leiomyo



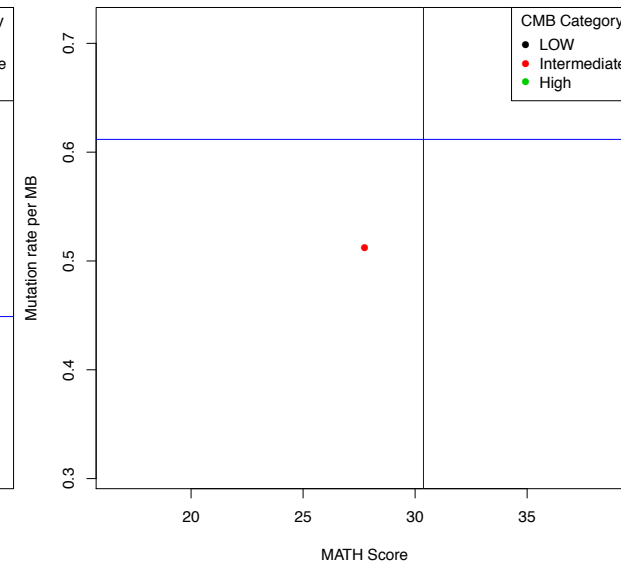
Distributions of MR and MATH scores in Bone-Osteosarc



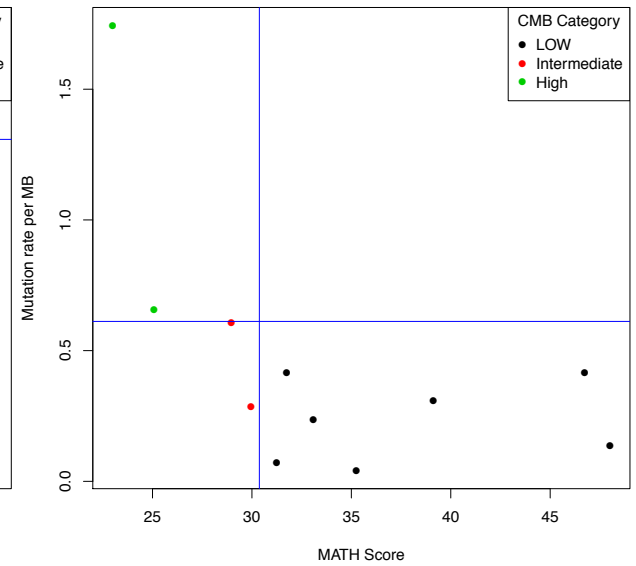
Distributions of MR and MATH scores in Breast-AdenoCa



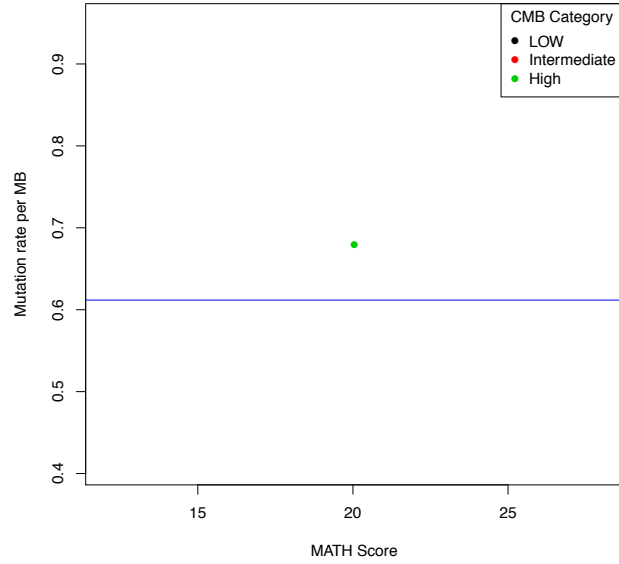
Distributions of MR and MATH scores in Breast-DCIS



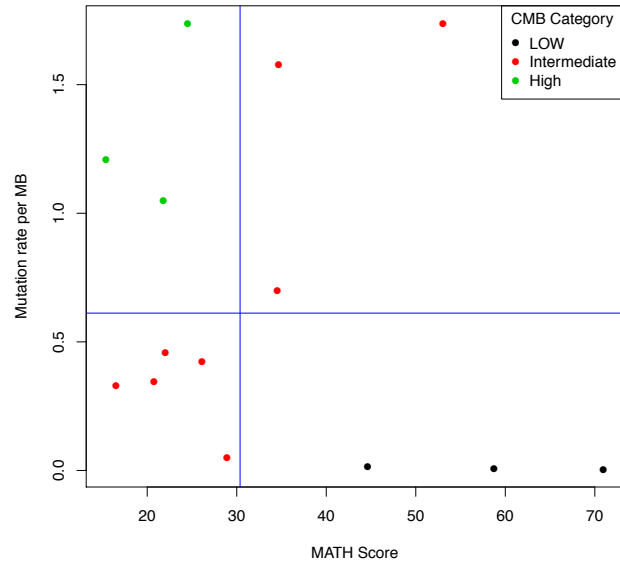
Distributions of MR and MATH scores in Breast-LobularCa



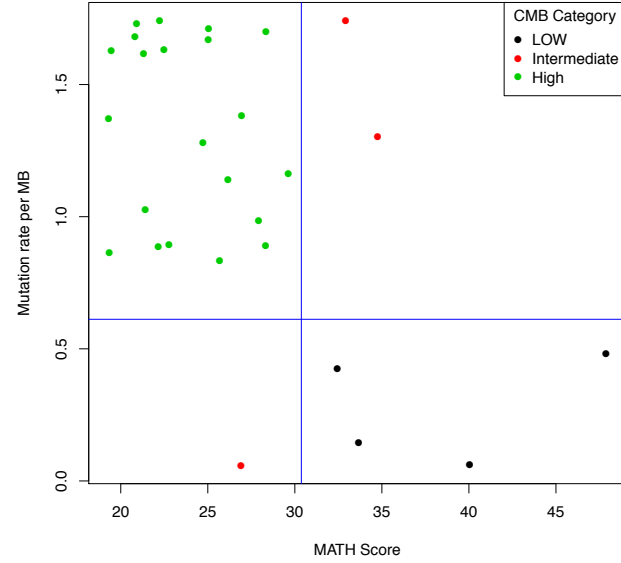
Distributions of MR and MATH scores in Cervix-AdenoCA



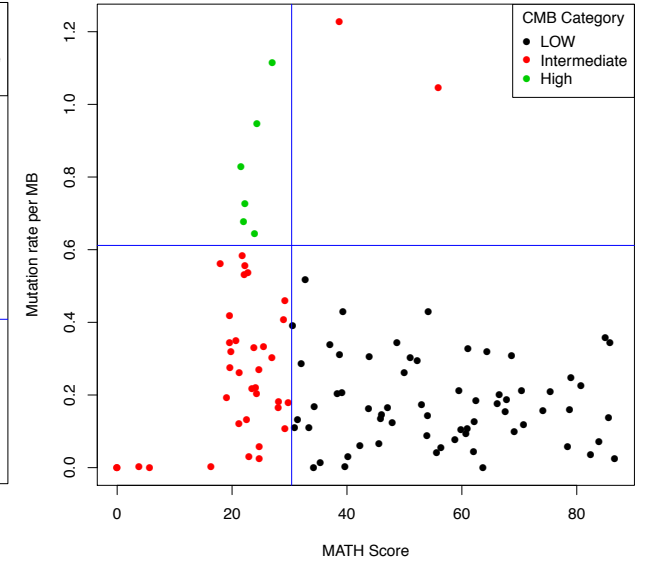
Distributions of MR and MATH scores in Cervix-SCC



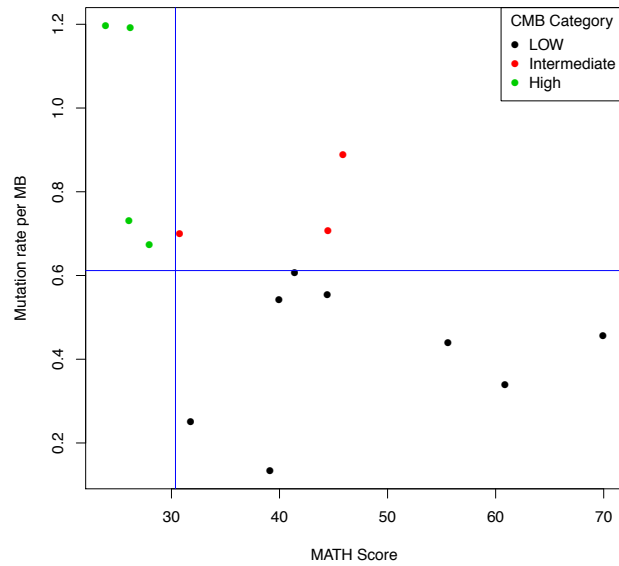
Distributions of MR and MATH scores in CNS-GBM



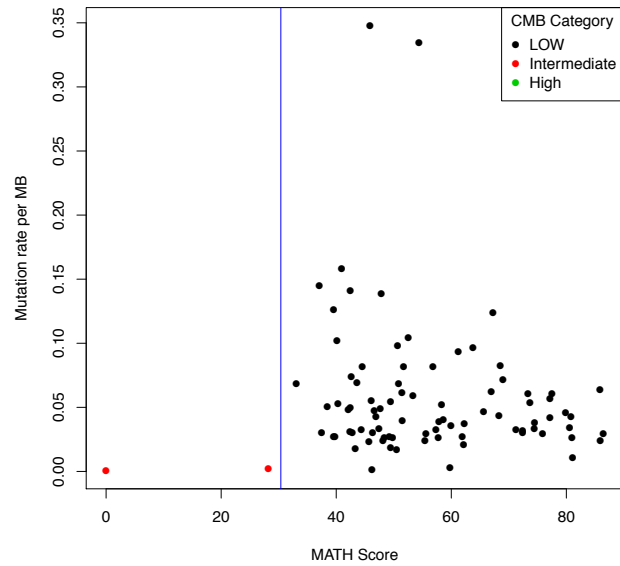
Distributions of MR and MATH scores in CNS-Medullo



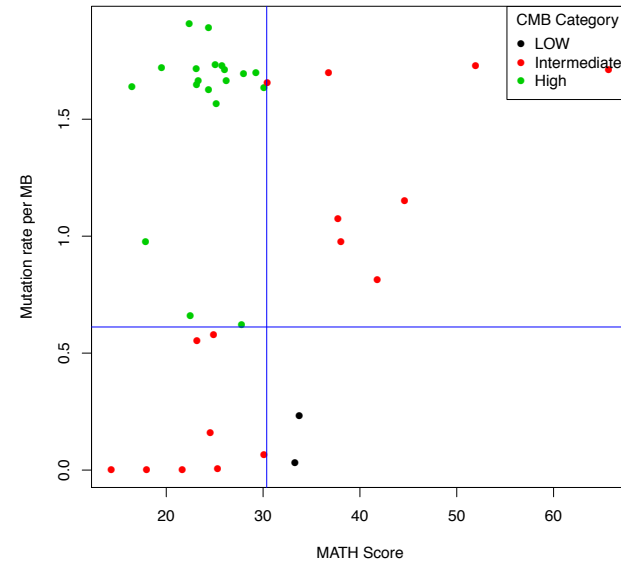
Distributions of MR and MATH scores in CNS-Oligo



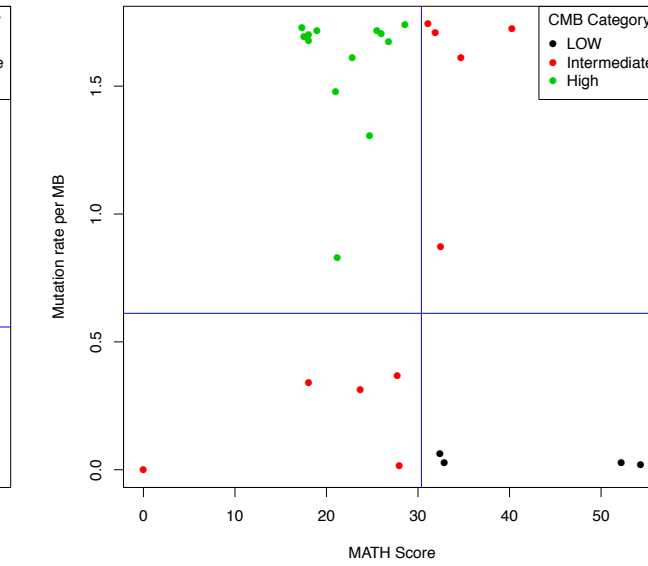
Distributions of MR and MATH scores in CNS-PiloAstro



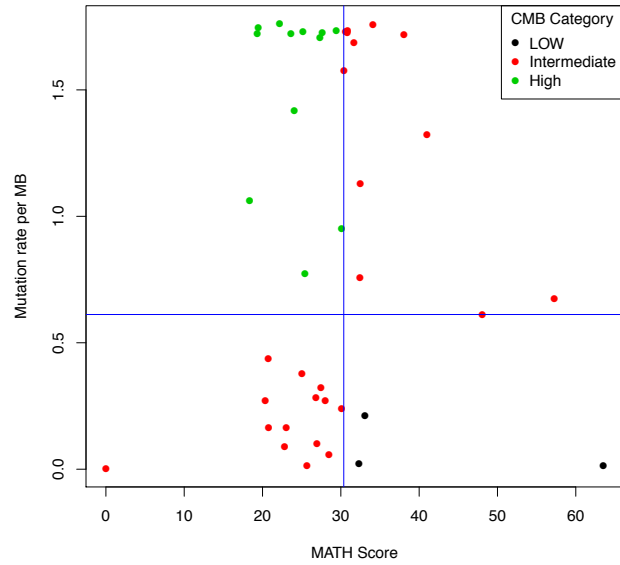
Distributions of MR and MATH scores in ColoRect-AdenoCA



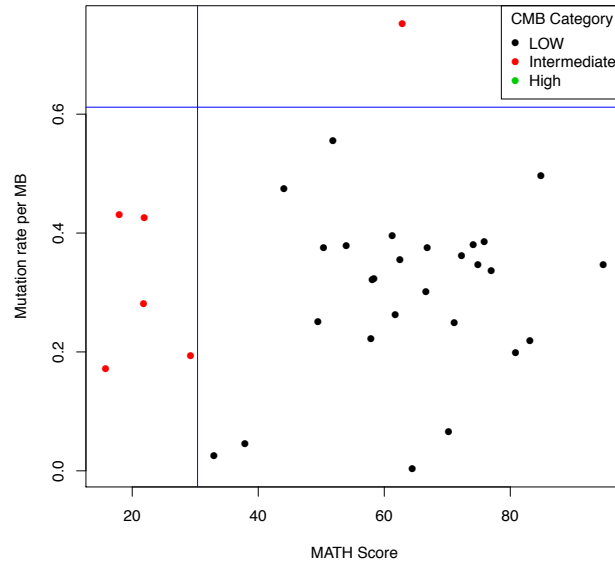
Distributions of MR and MATH scores in Eso-AdenoCa



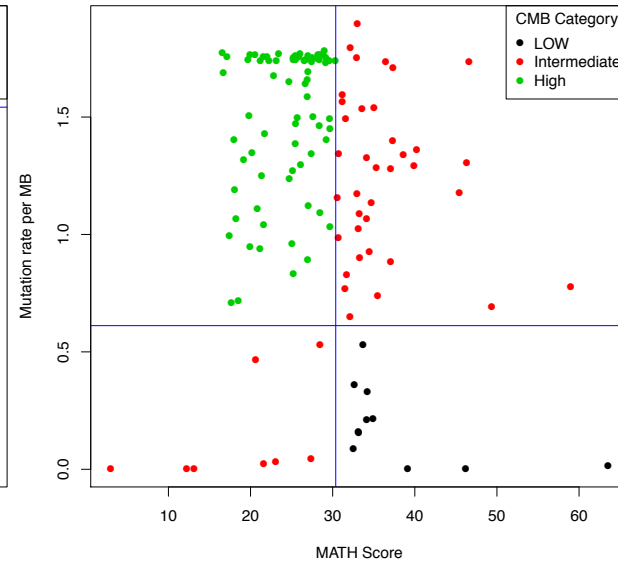
Distributions of MR and MATH scores in Head-SCC



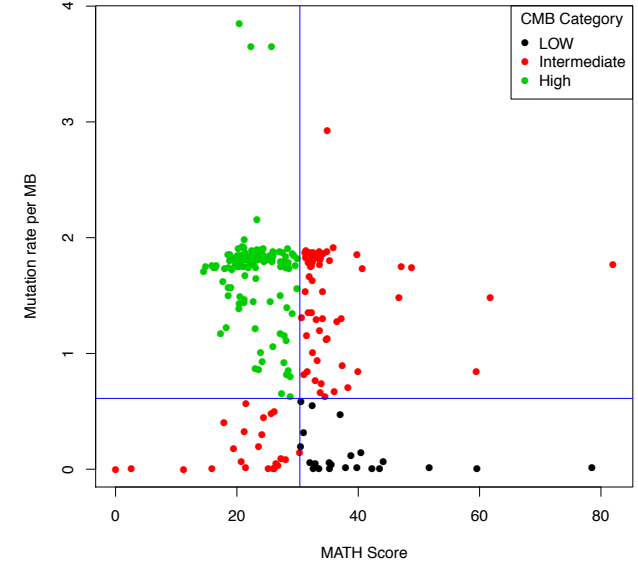
Distributions of MR and MATH scores in Kidney-ChRCC



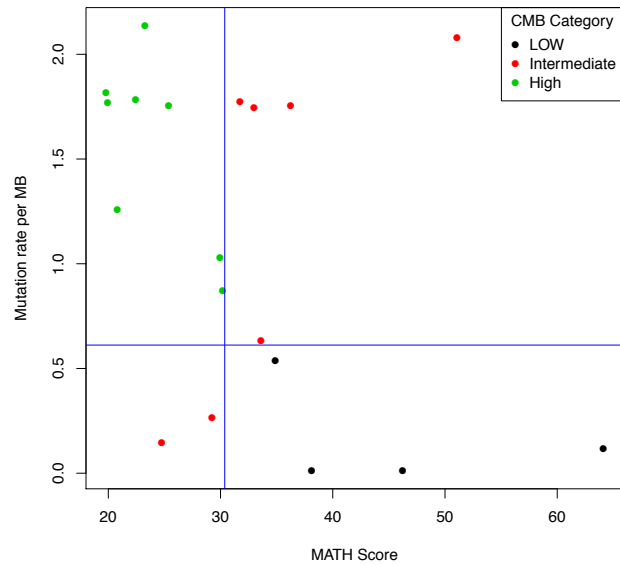
Distributions of MR and MATH scores in Kidney-RCC



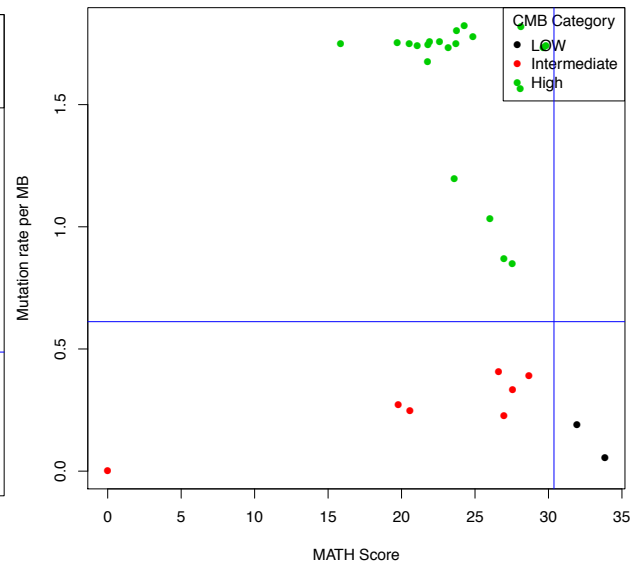
Distributions of MR and MATH scores in Liver-HCC



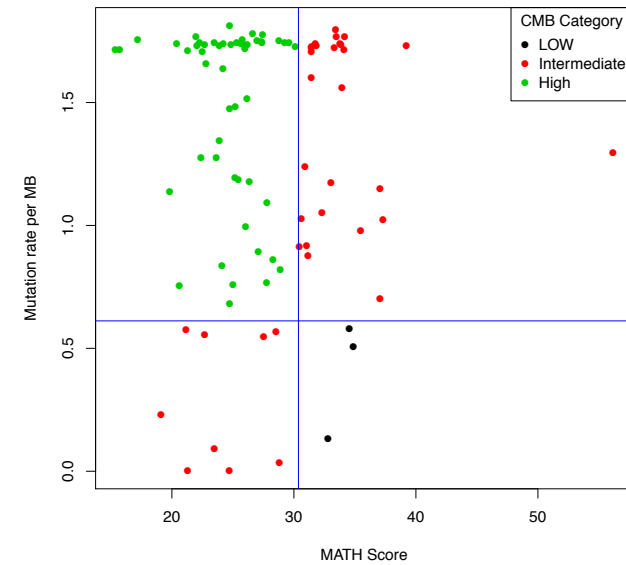
Distributions of MR and MATH scores in Lung-AdenoCA



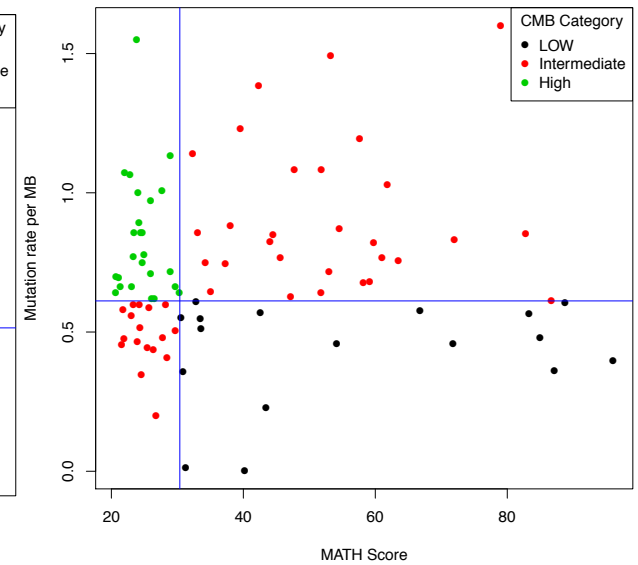
Distributions of MR and MATH scores in Lung-SCC



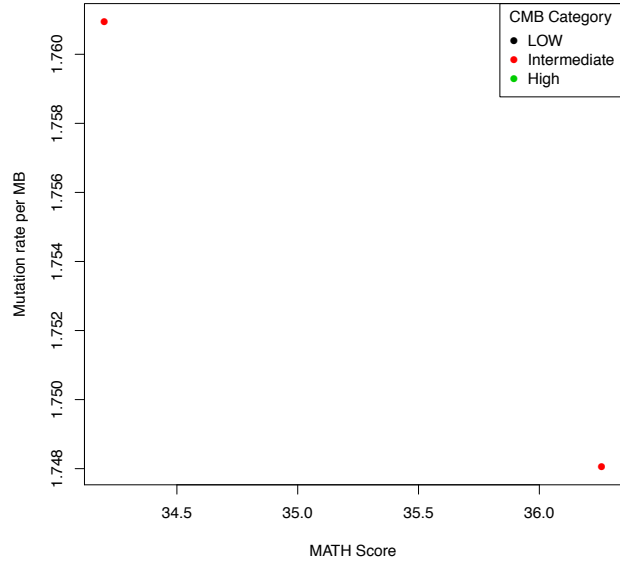
Distributions of MR and MATH scores in Lymph-BNHL



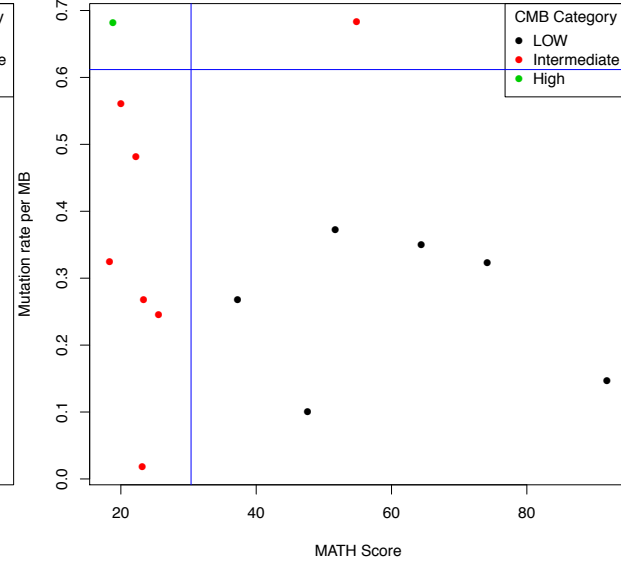
Distributions of MR and MATH scores in Lymph-CLL



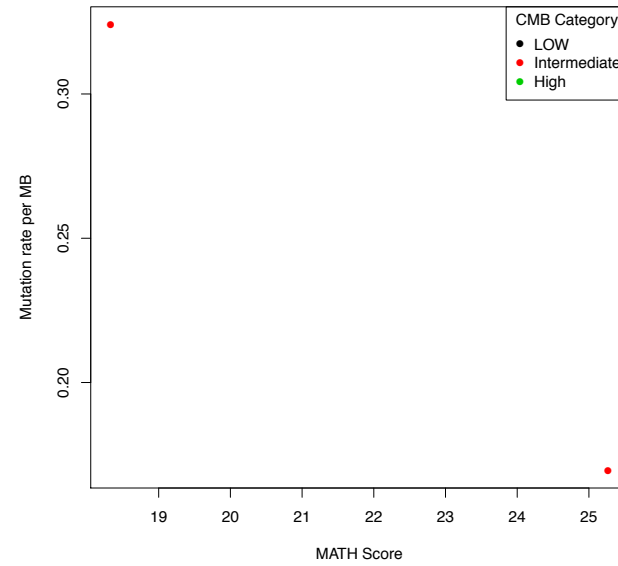
Distributions of MR and MATH scores in Lymph-NOS



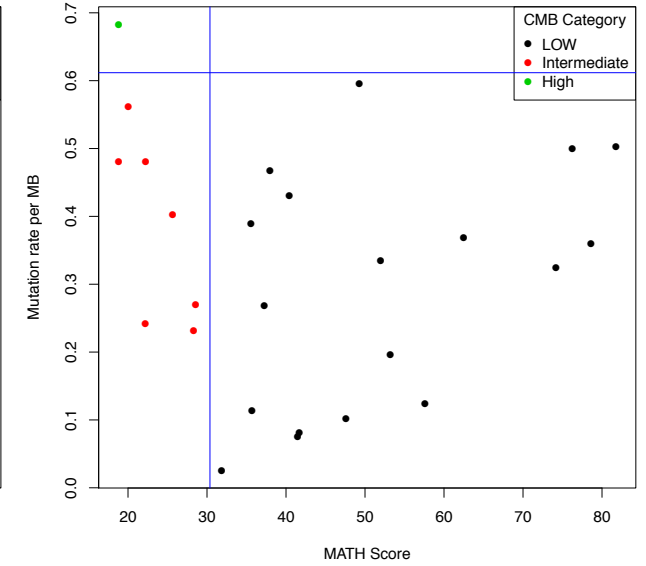
Distributions of MR and MATH scores in Myeloid-AML



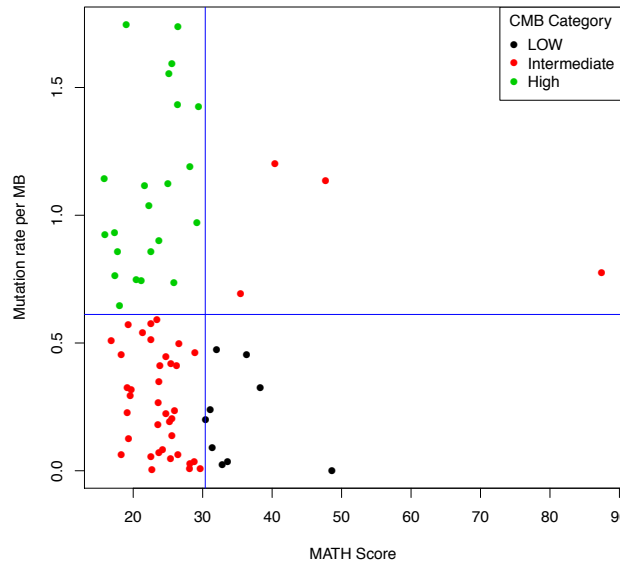
Distributions of MR and MATH scores in Myeloid-MDS



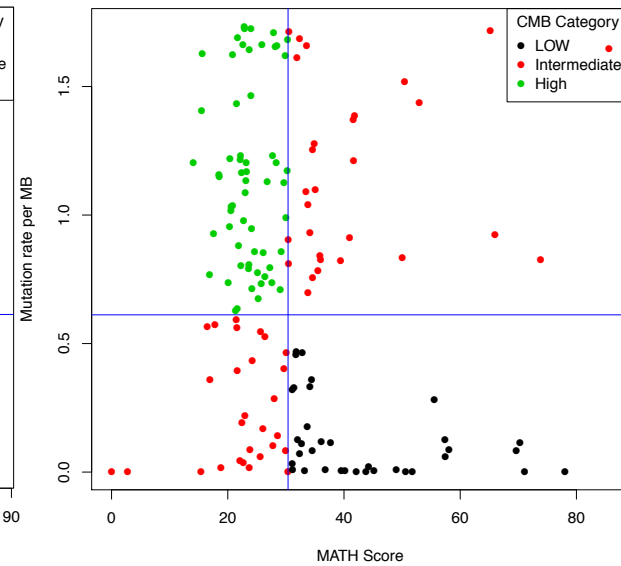
Distributions of MR and MATH scores in Myeloid-MPN



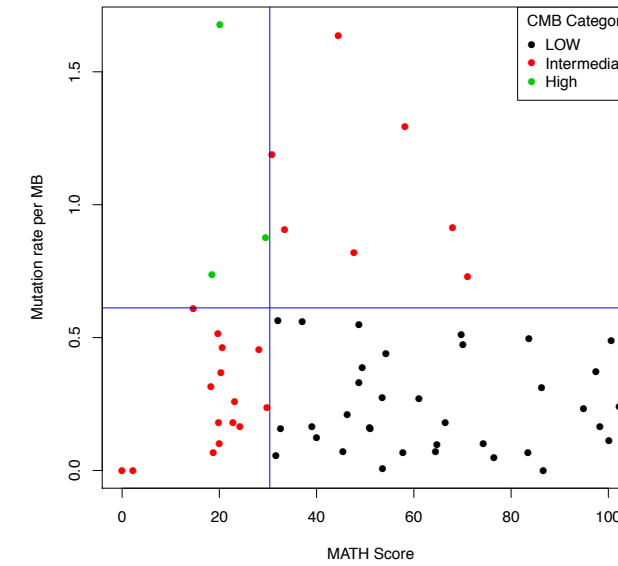
Distributions of MR and MATH scores in Ovary-AdenoCA



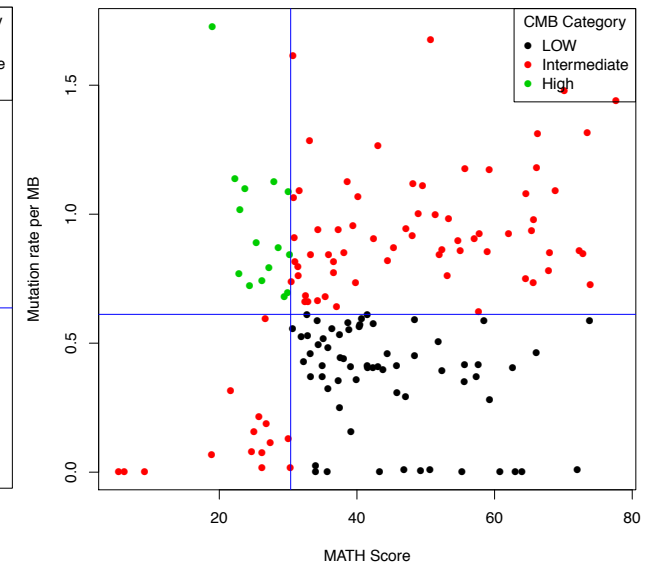
Distributions of MR and MATH scores in Panc-AdenoCA



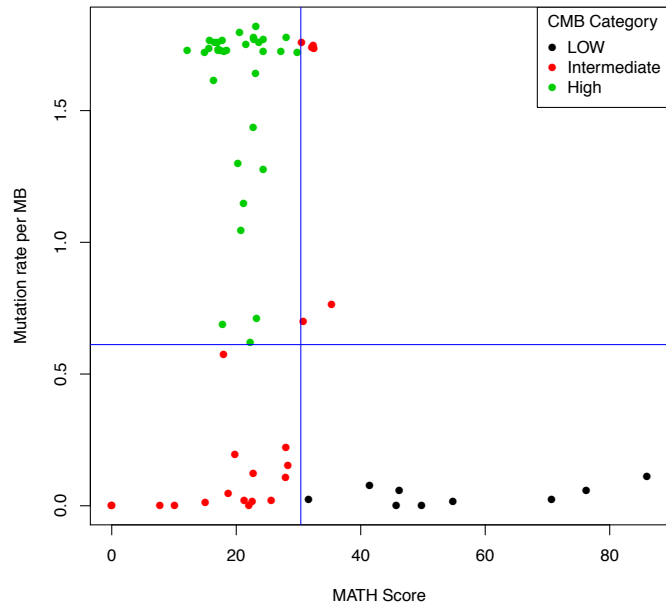
Distributions of MR and MATH scores in Panc-Endocrine



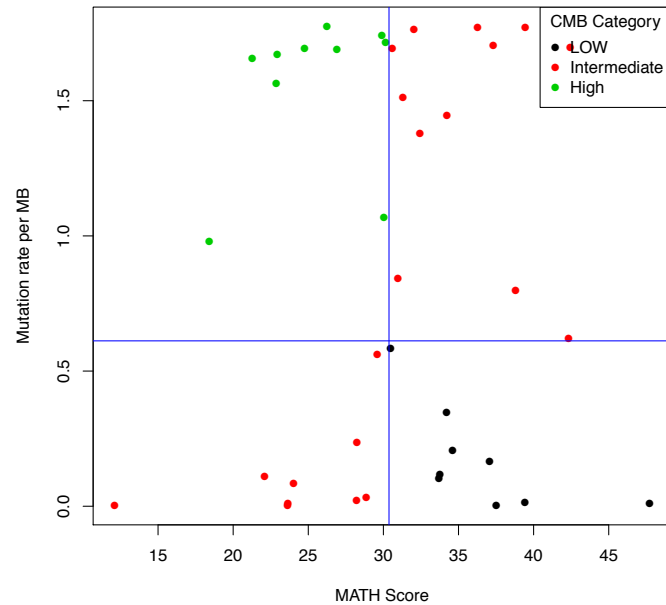
Distributions of MR and MATH scores in Prost-AdenoCA



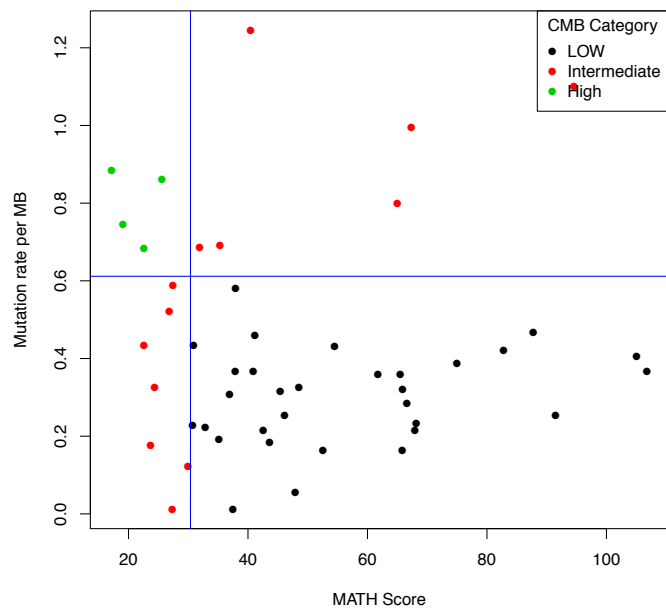
Distributions of MR and MATH scores in Skin-Melanoma



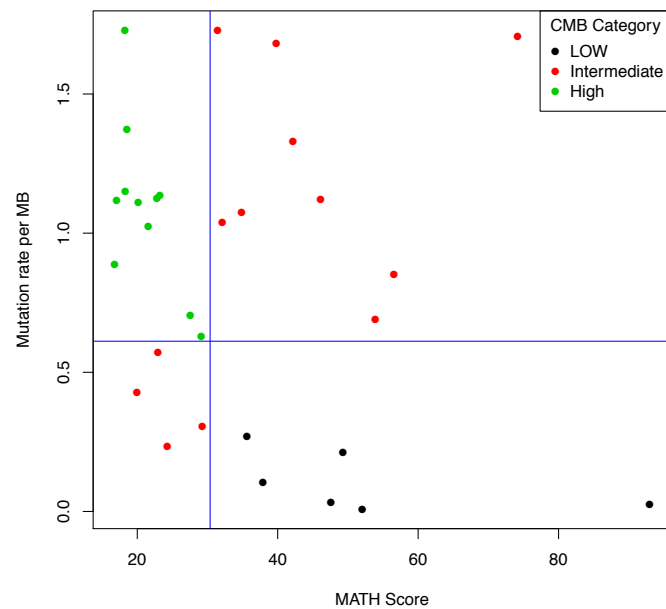
Distributions of MR and MATH scores in Stomach-AdenoCA



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

