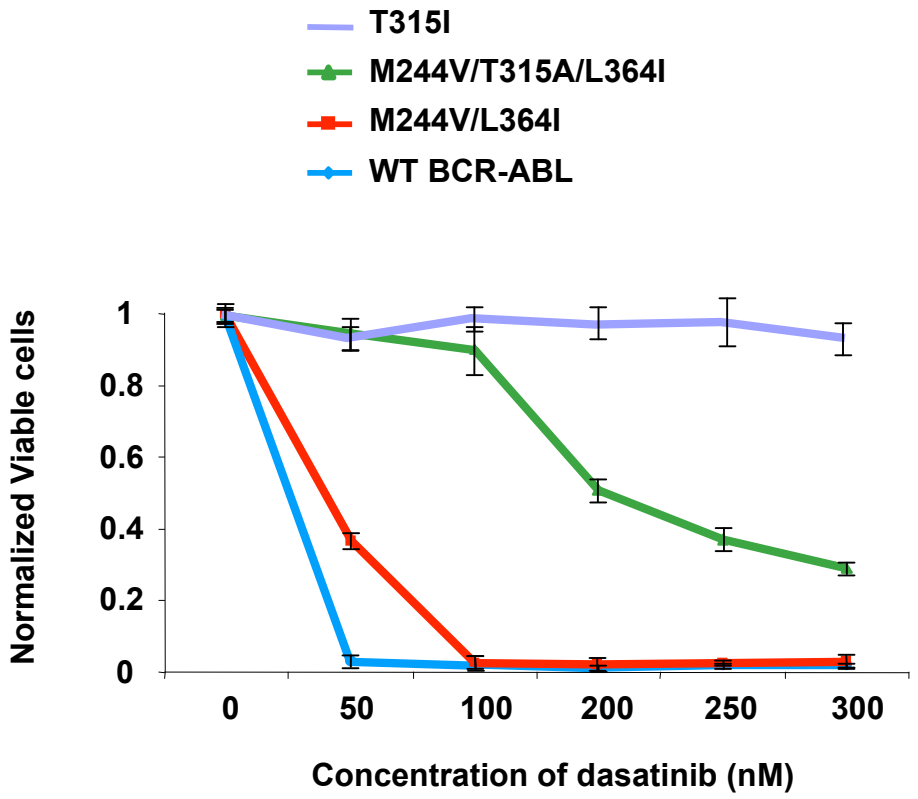
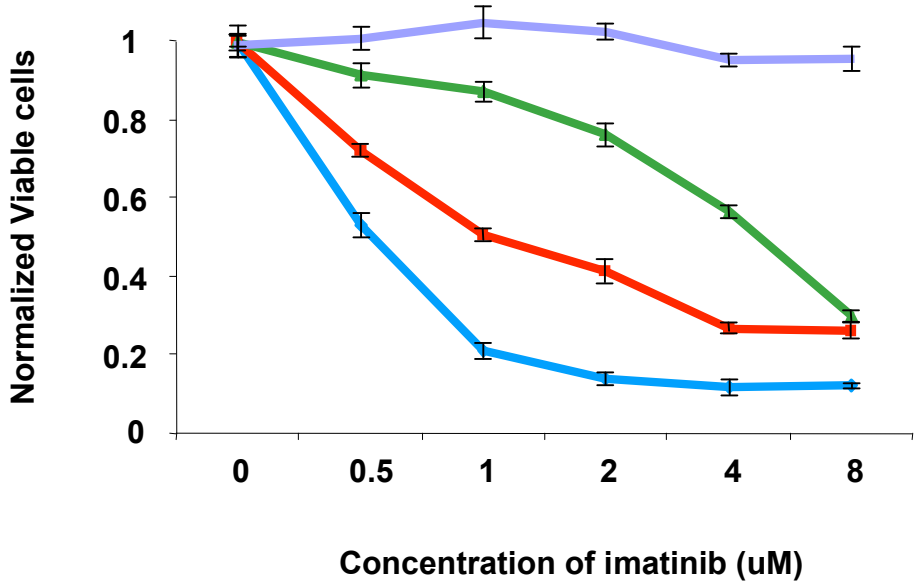
Supplemental Figure 1. A compound drug-resistant mutation in BCR-ABL that was clinically selected by sequential therapy retains relative resistance to both imatinib and dasatinib. Viability of Ba/F3 cells harboring various BCR-ABL isoforms in varying concentrations of dasatinib or imatinib.

Supplemental Figure 2. Enzymatic activity of select BCR-ABL kinase domain mutations. A) Phosphorylation kinetics of various Abltide concentrations by p210 and BCR-ABL mutants are plotted in a Michaelis-Menten graph. Reactions were performed in triplicate for 15 minutes at room temperature. BCR-ABL was immunoprecipitated from 293T cells transiently transfected with MSCV-BCR-ABL. Equal kinase concentrations were assured by Sypro ruby staining a gel containing a portion of the

immunoprecipitations with a myosin internal standard (shown in (B)). B) Autophosphorylation of p210 and BCR-ABL mutants was examined by isolating BCR-ABL as in (A), performing an in vitro kinase assay with no exogenous substrate, and performing autoradiography after SDS-PAGE.

Supplemental Figure 1





Supplemental Figure 2