Figure S9

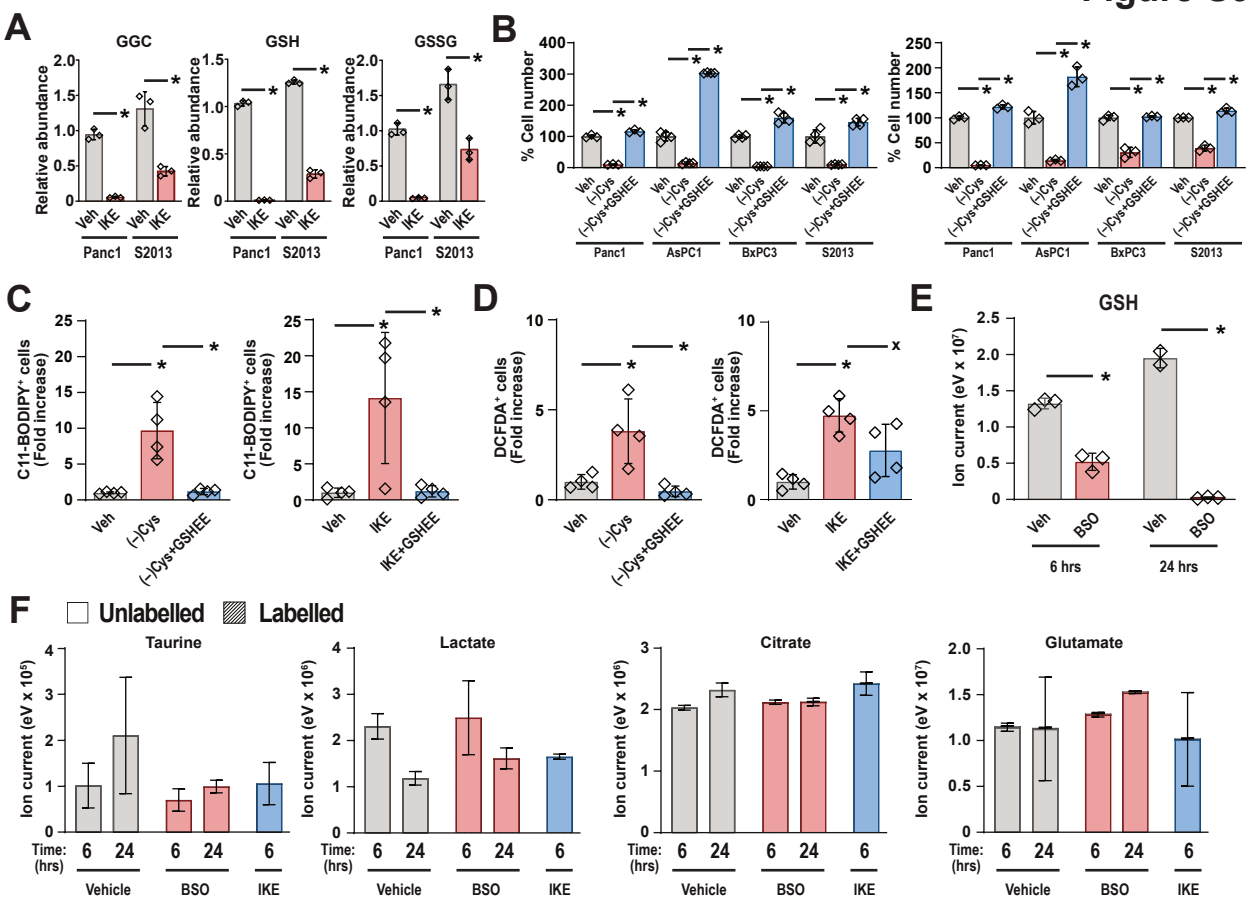

Fig. S9. Metabolomics analysis of cysteine utilization and rescue of cell death by cell permeable GSH. (**A**) Measurement of gamma glutamyl cysteine (gGC), GSH, and GSSG in two sensitive cell lines treated with 0.1% DMSO (Veh) or 5 μM IKE for six hours. Data are mean ± SD with n = 3 biological replicates. * $p < 0.05$, Student's t-test. (**B**) GSH-EE rescue of cystine withdrawal and system x_c^- inhibition in sensitive cell lines. Data are mean ± SEM with n = 3 independent experiments. * $p < 0.05$ by Tukey's test. (**C** and **D**) Flow cytometric analyses of sensitive cell lines grown without cystine (-cys) or with 5 μM IKE and in the presence of GSH-EE for 6-8 hours. Cells were stained with C-11 BODIPY and DCFDA to mark lipid oxidative stress and general oxidative stress, respectively. Data are means ± SD with n = 4 independent cell lines tested in triplicate. * $p < 0.05$ by Tukey's test. x = not significant. (**E**) GSH levels as measured by mass spectrometry in PANC-1 cells treated with vehicle or 600 μM BSO for listed timepoints. Data are means ± SD with n = at least 2 biological replicates. * $p < 0.05$ by Student's t test. (**F**) Measurement of labeled and unlabeled levels of taurine, lactate, glutamate, and citrate in PANC-1 treated with vehicle (0.05% DMSO), 5 μM IKE, or 600 μM BSO for indicated times. (All comparisons not significant by Tukey's test). No labeled species for these metabolites were detected.