

Statistical hypothesis testing is used while analyzing experimental data. This thesis is focused on multiple testing, which means testing many hypotheses simultaneously, and multiple testing problems occurring while running multiple hypotheses tests. These multiple testing problems are described and two errors, FWER (Family-Wise Error Rate) and FDR (False Discovery Rate), are defined. Selected multiple testing corrections are introduced and compared in detail using simulations regarding significance level and power. All of the discussed corrections control for the problem of multiple testing.