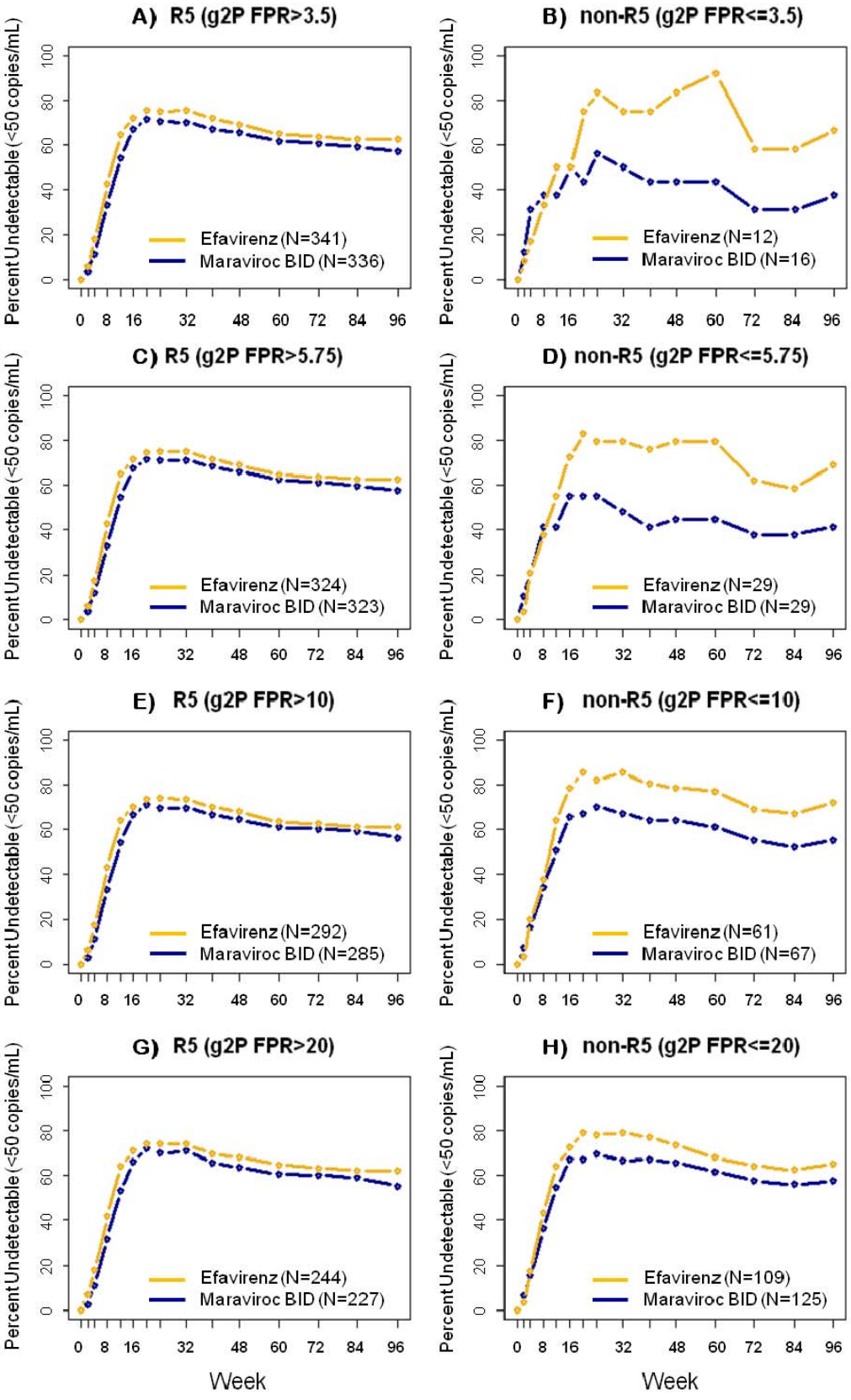
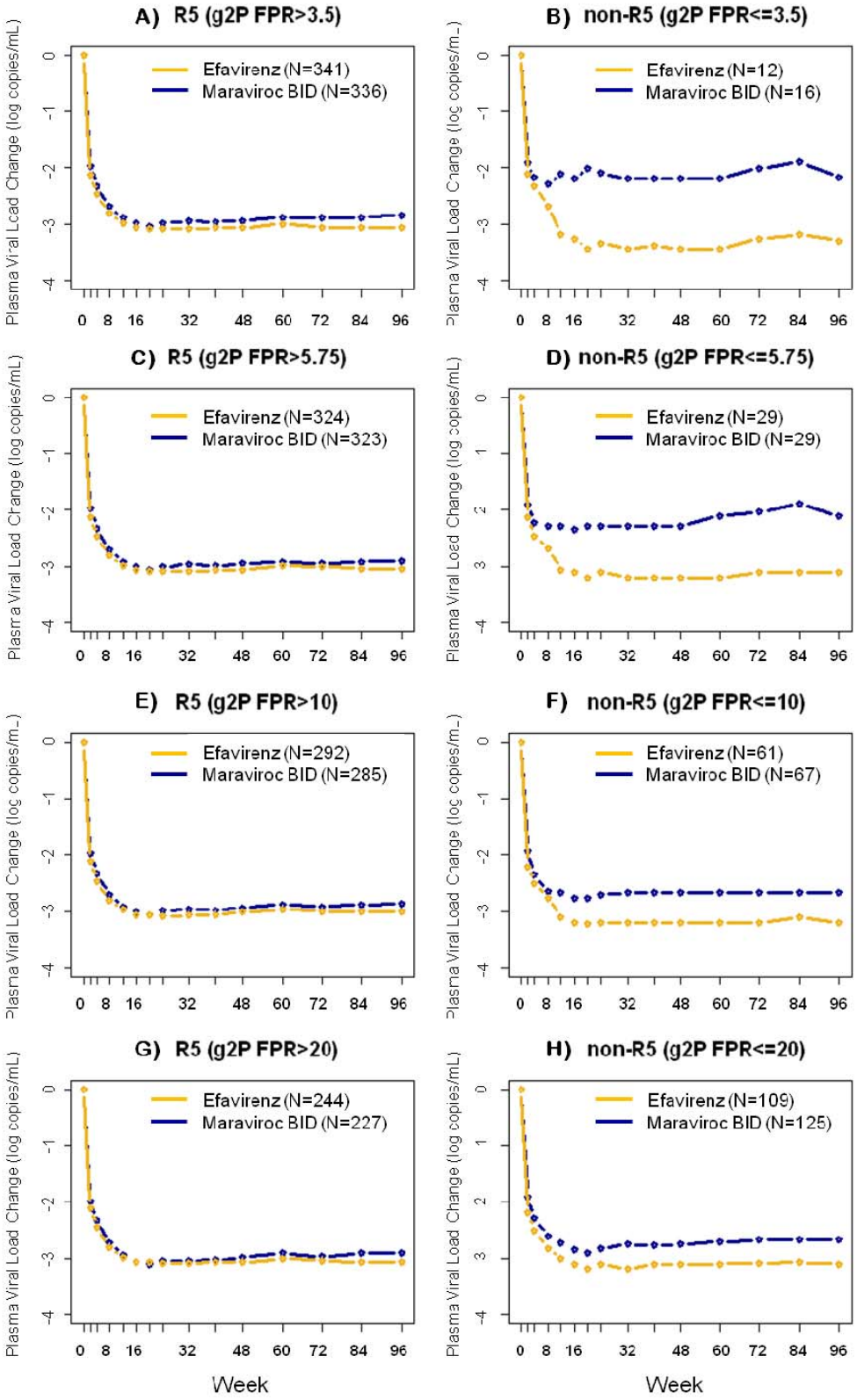
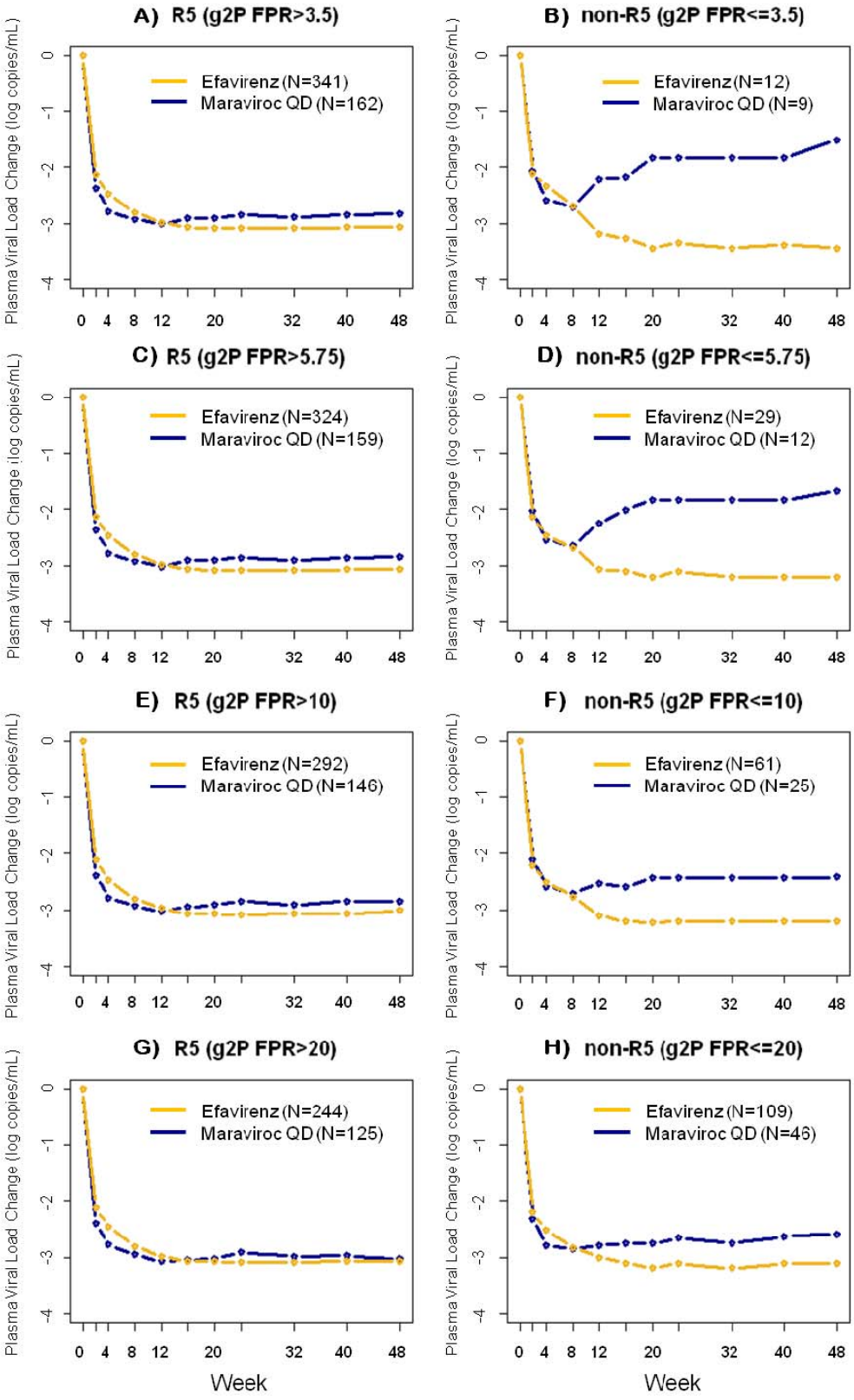


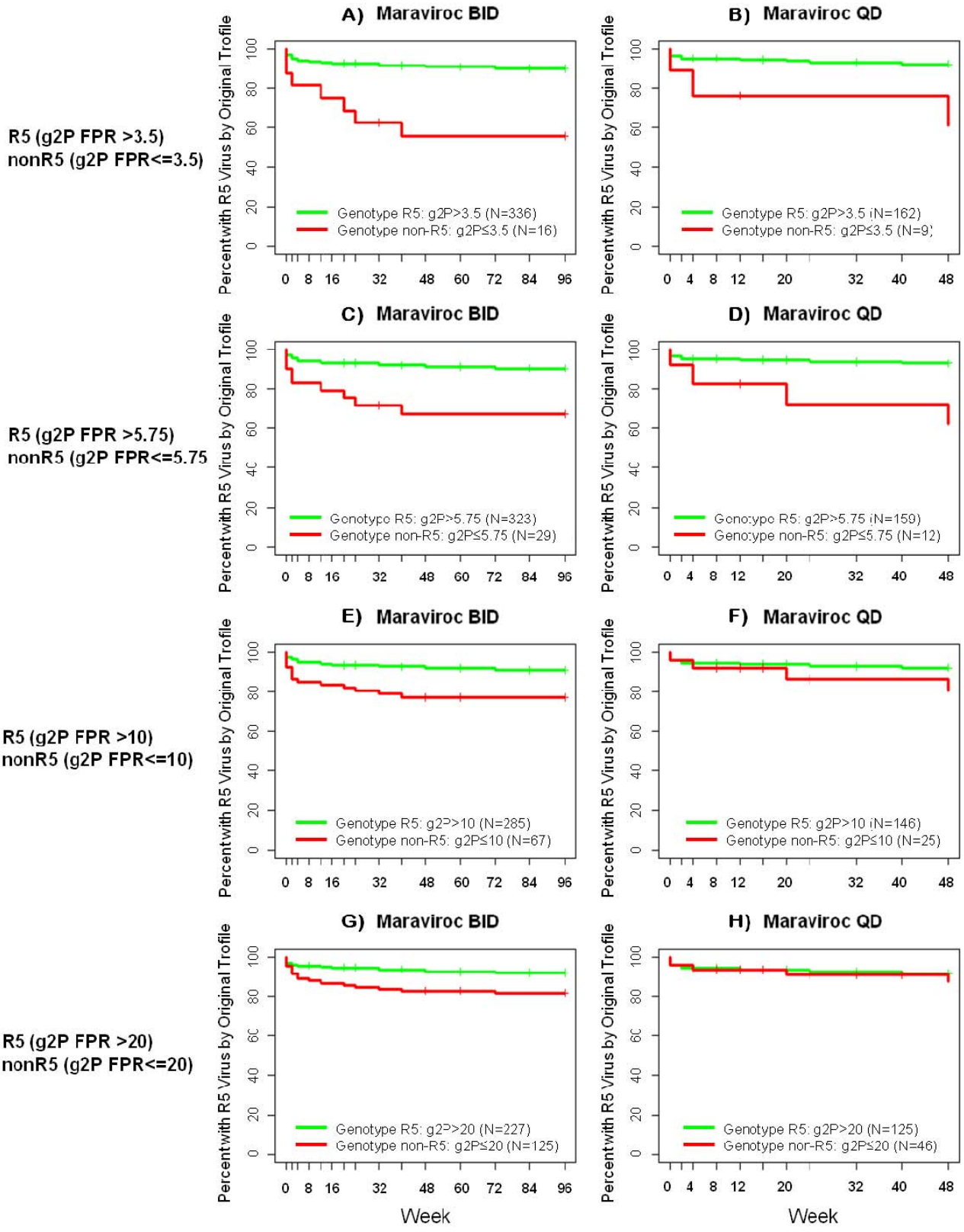
Supplemental Digital Content Figure 1. Percentage of patients with undetectable plasma HIV following the start of maraviroc twice daily (BID) compared to efavirenz in patients re-screened using a V3-genotypic tropism assay at various geno2pheno (g2P) FPR cutoff points. Patients enrolled in the MERIT trial were initially screened as having R5 virus by the Original Trofile Assay. Patients were retrospectively screened by V3 genotyping using the g2P algorithm applying four popular FPR cutoff points (A) B) FPR 3.5; C) D) FPR 5.75; E) F) FPR 10; and G) H) FPR 20), and re-stratified as having R5 or non-R5 virus. Virological response to therapy was compared between R5 and non-R5 patients receiving either maraviroc BID or efavirenz. The yellow line represents patient response to efavirenz; the blue line represents patient response to maraviroc.



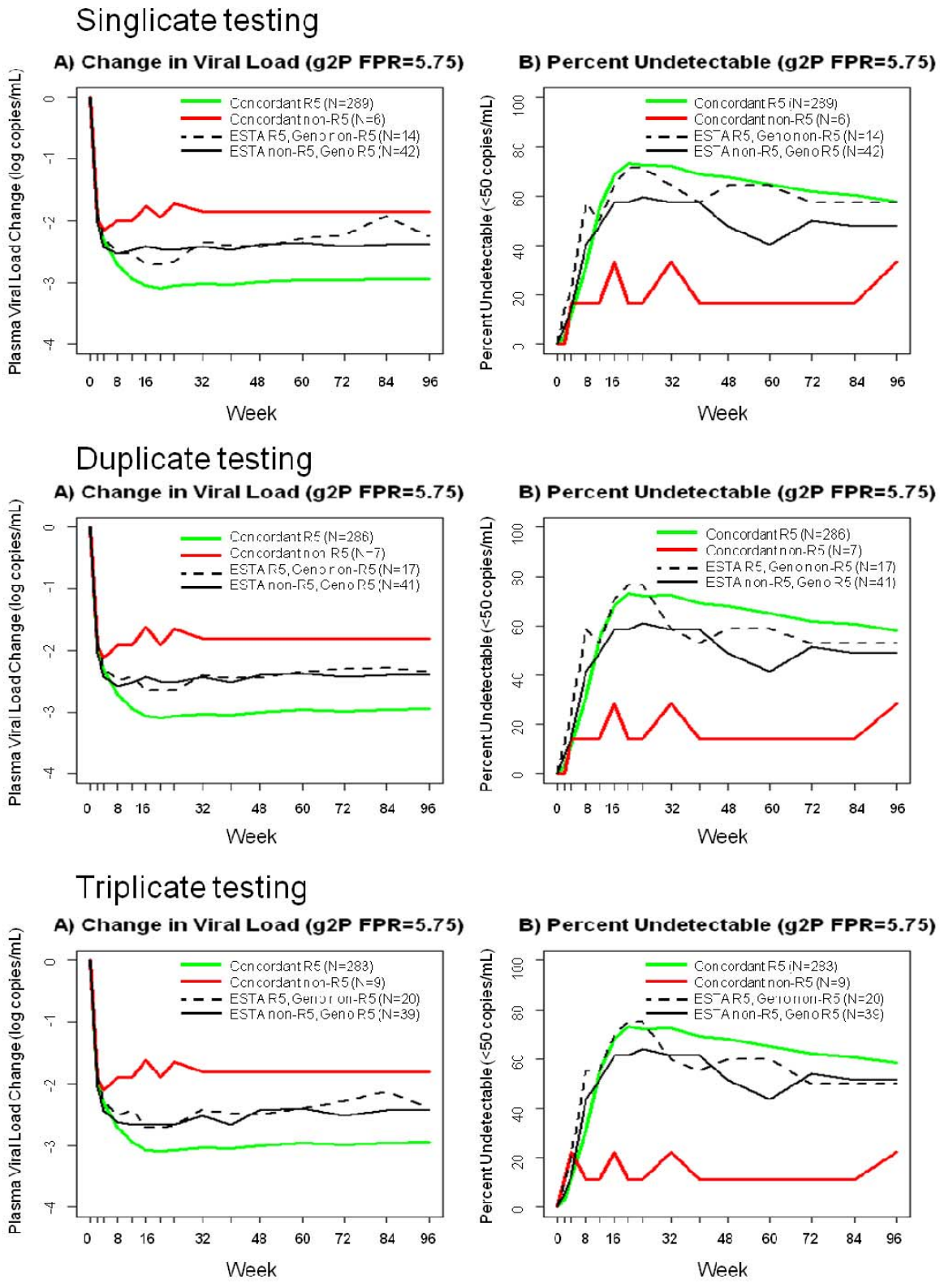
Supplemental Digital Content Figure 2. Change in plasma viral load following the start of maraviroc twice daily (BID) compared to efavirenz for patients in the MERIT trial re-screened using aV3-genotypic tropism assay at various false positive rate cutoff points. Enrollment in the MERIT trial was dependent on a R5 tropism screening result by the Original Trofile Assay. Patients were retrospectively screened by V3 genotyping using the g2P algorithm applying four popular FPR cutoff points (A) B) FPR 3.5; C) D) FPR 5.75; E) F) FPR 10; and G) H) FPR 20), and re-stratified as having R5 or non-R5 virus. The change in plasma viral load (log10 copies/mL) was compared between R5 and non-R5 patients receiving either maraviroc BID or efavirenz. The yellow line represents patient response to efavirenz; the blue line represents patient response to maraviroc.



Supplemental Digital Content Figure 3. Change in plasma viral load following the start of maraviroc once daily (QD) compared to efavirenz for patients re-screened using aV3-genotypic tropism assay at various false positive rate cutoff points. Patients in the MERIT trial were required to have R5 tropism by the Original Trofile Assay. Patients were retrospectively screened by V3 genotyping using the g2P algorithm applying four popular FPR cutoff points (A) B) FPR 3.5; C) D) FPR 5.75; E) F) FPR 10; and G) H) FPR 20), and re-stratified as having R5 or non-R5 virus. The change in plasma viral load (log10 copies/mL) was compared between R5 and non-R5 patients receiving either maraviroc QD or efavirenz. The yellow line represents patient response to efavirenz; the blue line represents patient response to maraviroc.



Supplemental Digital Content Figure 4. Time to change in tropism from R5 to non-R5 virus according to the original Trofile assay for patients re-screened using aV3-genotypic tropism assay at various false positive rate cutoff points. Enrollment in the MERIT study was limited to patients screened as having R5 virus by the original Trofile assay. The Trofile assay was performed at subsequent visits following the start of maraviroc where possible. Screening plasma samples were rescreened using the V3 genotypic assay, and re-stratified as being R5 (green line) or non-R5 (red line) for patients enrolled in the maraviroc BID arm or the maraviroc QD arm. Here we compared the time to change in tropism applying four popular g2p FPR cutoff points (A) B) FPR 3.5; C) D) FPR 5.75; E) F) FPR 10; and G) H) FPR 20).



Supplemental Digital Content Figure 5. The concordance and discordance between tropism results from the Enhanced Sensitivity Trofile Assay (ESTA) and population-based V3 genotype, a comparison of genotype testing in singlicate, duplicate and triplicate. Samples from the MERIT study were re-screened for tropism by both ESTA and V3 genotype and re-stratified as having R5 or non-R5 virus. Using the maraviroc BID population, concordance and discordance between tropism results were evaluated based on the number of replicates performed in the V3 genotype assay. Because re-screening was performed in triplicate, singlicate and duplicate testing were evaluated using the sequence(s) from the first or from the first and second replicates, respectively. The change in plasma viral load (A) and the percentage of the population able to suppress viral load <50 copies/mL (B) following the start of maraviroc were used to evaluate virological success. Green lines represent patients screened R5 by both assays; red lines represent patients screened non-R5 by both assays. Black lines indicate discordance in tropism call between the two assays.