Supplementary materials

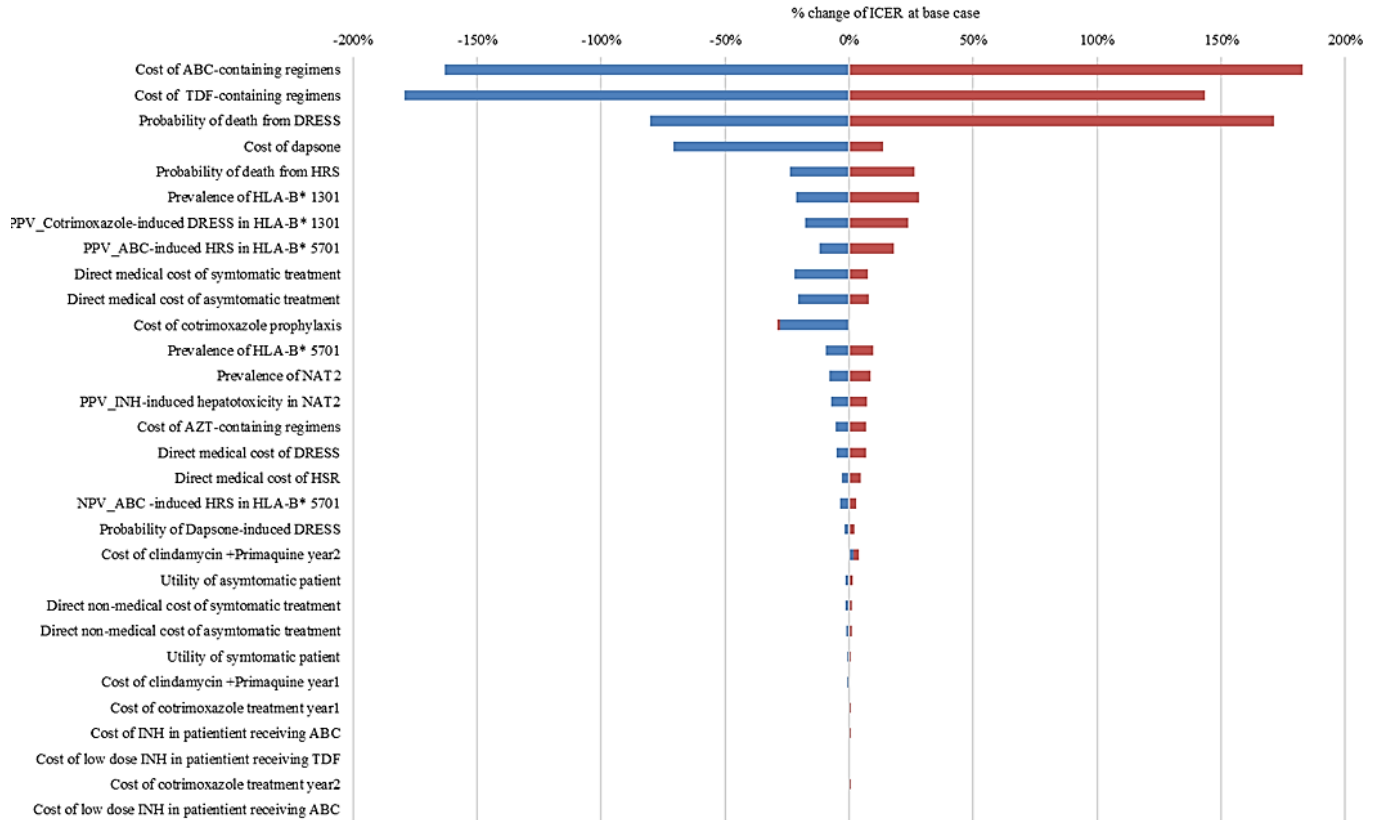**Table S1:** Results of scenario analysis

Figure S1: Tornado diagram of multiple-PGx compared with no-PGx testing

Figure S2: Cost-effectiveness plane of no-PGx testing, single-PGx testing, and multiple-PGx testing.
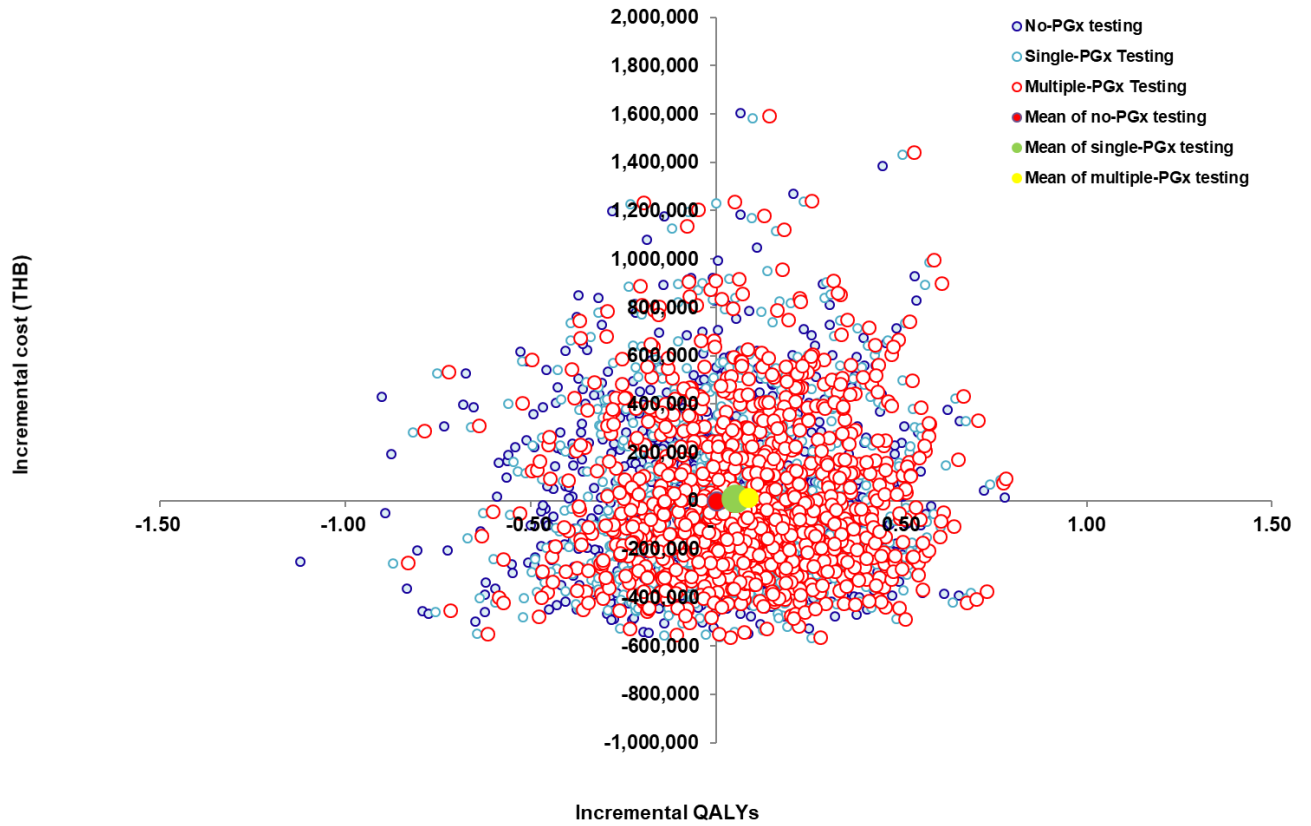
Table S1: Results of scenario analysis

Scenario	Incremental cost (per patient)	Incremental QALY (per patient)	ICER (Cost/QALY)
Base case (30-year-old)	-23,598	0.11	-209,272
Prevalence of *HLA-B*57:01* =1.1% (-84%)	-25,119	0.09	-292,523
Prevalence of *HLA-B*57:01* =9.5% (+42%)	-22,831	0.13	-180,749
Prevalence of *HLA-B*13:01*=0% (-100%)	-27,157	0.07	-394,041
Prevalence of *HLA-B*13:01*=28% (+56%)	-21,576	0.14	-156,730
Prevalence of *NAT2* = 10% (-76%)	-25,146	0.09	-295,284
Prevalence of *NAT2* = 66% (+268%)	-22,376	0.13	-166,322
PPV_ABC = 0.302 (-50%)	-26,229	0.09	-290,594
PPV_ABC = 0.906 (+50%)	-20,970	0.14	-155,057
PPV_Co-trimoxazole = 0.2 (-50%)	-22,616	0.09	-254,681
PPV_Co-trimoxazole = 0.6 (+50%)	-24,580	0.14	-179,779
PPV_INH = 0.334 (-50%)	-24,603	0.09	-260,034
PPV_INH = 1 (+50%)	-22,590	0.13	-172,519

Abbreviations: ABC, abacavir; ICER, incremental cost-effectiveness ratio; INH, isoniazid; NAT2, N-Acetyltransferase 2; PPV, Positive Predictive value; QALY, Quality-Adjusted Life Year.

Figure S1: Tornado diagram of multiple-PGx compared with no-PGx testing

Abbreviations: ABC, abacavir; ADR, Adverse Drug Reaction; ART, Antiretroviral therapy; AZT, zidovudine; DRESS, Drug Rash with Eosinophilia and Systemic Symptoms; DTG, Dolutegravir, EFV, Efavirenz; FTC, Emtricitabine; HSR, hypersensitivity reaction; HLA, human leukocyte antigen; INH, isoniazid; *NAT2*, N-Acetyltransferase 2; NPV, Negative Predictive Value; NGS, Next Generation Sequencing; PCP, Pneumocystis pneumonia; PPV, Positive Predictive Value; NPV, Negative Predictive value TB; PGx, pharmacogenetic; Tuberculosis; TDF, Tenofovir.

Figure S2: Cost-effectiveness plane of no-PGx testing, single-PGx testing, and multiple-PGx testing.

Abbreviations: PGx, pharmacogenetic; QALYs, Quality Adjusted Life Years