Supplemental Table. All Two-predictor Proportional Hazards Models Assessed for Association of Hair Drug Concentrations and Time to Failure

Predictors	N	Events	HR	HR low-CI	HR high-CI	P-value
Model 1						
Mean Z-score	47	11	0.75	0.22	2.6	0.64
Mean-Z x months			0.94	0.71	1.22	0.63
Model 2						
Mean Z-score	47	11	0.68	0.28	1.6	0.37
Age			0.68	0.31	1.50	0.34
Model 3						
Mean Z-score	47	11	0.53	0.25	1.14	0.11
HIV			3.9	0.83	18.2	0.085
Model 4						
Mean Z-score	47	11	0.62	0.27	1.44	0.27
On PAS			1.23	0.36	4.2	0.74
Model 5						
Mean Z-score	47	11	0.60	0.27	1.33	0.21
On injectable			1.10	0.33	3.7	0.87
Model 6						
Mean Z-score	47	11	0.71	0.31	1.7	0.43
On TZD			2.9	0.60	14.2	0.18
Model 7						
Mean Z-score 5	47	11	0.87	0.20	3.8	0.85
Mean-Z5 x months			0.96	0.65	1.43	0.85
Model 8						
Mean Z-score 5	47	11	0.84	0.37	1.9	0.67
Age			0.63	0.29	1.37	0.24
Model 9						
Mean Z-score 5	47	11	0.71	0.36	1.41	0.33
HIV			3.5	0.74	16.1	0.11
Model 10						
Mean Z-score 5	47	11	0.82	0.37	1.8	0.61
On PAS			1.38	0.40	4.8	0.61
Model 11						
Mean Z-score 5	47	11	0.75	0.35	1.6	0.47
On injectable			1.14	0.33	3.9	0.84
Model 12						
Mean Z-score 5	47	11	0.90	0.42	1.9	0.77
On TZD			3.3	0.69	15.8	0.14
Model 13						
PZA	44	11	0.77	0.51	1.15	0.20
Age			0.66	0.29	1.50	0.32
Model 14						
PZA	44	11	0.69	0.46	1.03	0.071
HIV			3.3	0.70	15.6	0.13
Model 15						
PZA	44	11	0.74	0.50	1.10	0.13
On PAS			1.24	0.36	4.4	0.73
Model 16						
PZA	44	11	0.72	0.49	1.06	0.092
On injectable			0.93	0.28	3.1	0.90
Model 17						
PZA	44	11	0.79	0.53	1.16	0.23

Predictors	N	Events	HR	HR low-CI	HR high-CI	P-value
On TZD			2.8	0.58	13.9	0.20
Model 18						
CFZ	31	8	0.66	0.41	1.06	0.083
Age			0.76	0.32	1.8	0.54
Model 19						
CFZ	31	8	0.73	0.48	1.11	0.14
HIV			2.5	0.47	12.9	0.28
Model 20						
CFZ	31	8	0.67	0.41	1.10	0.11
On PAS			0.87	0.16	4.7	0.87
Model 21						
CFZ	31	8	0.70	0.46	1.09	0.11
On injectable			0.67	0.13	3.6	0.64
Model 22						
CFZ	31	8	0.76	0.48	1.21	0.25
On TZD			3.3	0.36	30	0.29

Abbreviations: HR, hazard ratio; CI, confidence interval; PZA, pyrazinamide; CFZ, clofazimine; PAS, para-amino salicylic acid; TZD, terizidone.

All tested two-predictor models, including each individual covariate defined *a priori*, are presented here. Estimated hazard ratios per one standard deviation increase in the predictor score or drug concentration are presented; hazard ratio for age was estimated per 10-year interval. The primary predictor (mean z-score) was derived as follows: participant-level mean Z-scores were derived via calculation of a Z-score for each hair concentration, and subsequently averaging those Z-scores across all relevant drugs for a given participant. Because INH, PZA, and CLZ concentrations were strongly right-skewed, they were logarithmically transformed before Z-score calculation. Because of potential greater efficacy in the setting of MDR-TB, a secondary predictor combining only BDQ, LZD, MFX, LFX, and CFZ ('mean Z-score 5'). We also examined a possible interaction of mean z-score with the time since last regimen change, with regimen change defined as starting two or more new drugs on the same day or on two consecutive days; this definition did not count re-starting drugs that had previously been taken. "On [drug X]" indicates that a patient was taking the drug at the time of hair sampling.