

Table S2 Comparison of plasma GCDCA-3G, GDCA-3G, CPI and CPIII performances in detecting different genetically-predicted OATP1B1 function groups versus normal function group (n=166)

| OATP1B1 biomarker | Mean AUPRC (95% CI) | F1 _{max} | Mean difference from GCDCA-3G (95% CI) | Mean AUROC (95% CI) | Difference from GCDCA-3G | |
|---|--------------------------|-------------------|--|----------------------|---------------------------|---------|
| | | | | | Mean (95% CI) | P value |
| Highly increased function (n=5), baseline AUPRC = 0.0292 and baseline AUROC = 0.5 | | | | | | |
| GCDCA-3G* | 0.202 (0.0227, 0.692) | 0.500 | - | 0.817 (0.751, 0.872) | - | - |
| GDCA-3G* | 0.0526 (0.00109, 0.738) | 0.162 | -0.149 (-0.0251, -0.545) | 0.641 (0.564, 0.713) | -0.177 (-0.0707, -0.282) | 0.00110 |
| CPI | 0.210 (0.0300, 0.696) | 0.545 | 0.00847 (-0.00951, 0.282) | 0.720 (0.647, 0.786) | -0.0970 (0.128, -0.322) | 0.398 |
| CPIII | 0.0509 (0.000995, 0.743) | 0.200 | -0.151 (-0.0288, -0.555) | 0.564 (0.486, 0.639) | -0.254 (-0.0641, -0.443) | 0.00870 |
| Increased function (n=59), baseline AUPRC = 0.262 and baseline AUROC = 0.5 | | | | | | |
| GCDCA-3G* | 0.351 (0.240, 0.480) | 0.451 | - | 0.610 (0.543, 0.674) | - | - |
| GDCA-3G* | 0.366 (0.253, 0.495) | 0.473 | 0.0150 (-0.0440, 0.0411) | 0.656 (0.590, 0.718) | 0.0460 (0.0354, -0.128) | 0.268 |
| CPI | 0.416 (0.298, 0.545) | 0.428 | 0.0658 (0.0236, 0.124) | 0.578 (0.511, 0.644) | -0.0317 (0.0637, -0.127) | 0.515 |
| CPIII | 0.306 (0.203, 0.434) | 0.417 | -0.0443 (-0.00538, -0.0676) | 0.531 (0.464, 0.598) | -0.0789 (0.0172, -0.175) | 0.108 |
| Decreased function (n=113), baseline AUPRC = 0.405 and baseline AUROC = 0.5 | | | | | | |
| GCDCA-3G* | 0.568 (0.475, 0.656) | 0.601 | - | 0.626 (0.567, 0.683) | - | - |
| GDCA-3G* | 0.532 (0.440, 0.621) | 0.593 | -0.0361 (-0.0129, -0.0628) | 0.627 (0.567, 0.684) | 0.0004 (-0.0676, 0.0684) | 0.991 |
| CPI | 0.489 (0.398, 0.581) | 0.577 | -0.0785 (-0.0564, -0.109) | 0.560 (0.500, 0.619) | -0.0663 (0.00807, -0.141) | 0.0806 |
| CPIII | 0.451 (0.362, 0.543) | 0.579 | -0.117 (0.00549, -0.244) | 0.528 (0.467, 0.588) | -0.0986 (0.0138, -0.211) | 0.0854 |
| Poor function (n=13), baseline AUPRC = 0.0726 and baseline AUROC = 0.5 | | | | | | |
| GCDCA-3G* | 0.961 (0.597, 0.998) | 0.897 | - | 0.997 (0.973, 1.000) | - | - |
| GDCA-3G* | 0.717 (0.431, 0.894) | 0.720 | -0.245 (-0.0753, -0.426) | 0.878 (0.821, 0.922) | -0.119 (0.0224, -0.260) | 0.0993 |
| CPI | 0.612 (0.341, 0.828) | 0.571 | -0.350 (-0.161, -0.555) | 0.895 (0.841, 0.936) | -0.101 (0.00877, -0.212) | 0.0712 |
| CPIII | 0.150 (0.0370, 0.447) | 0.267 | -0.812 (-0.678, -0.877) | 0.718 (0.646, 0.783) | -0.279 (-0.148, -0.410) | <0.0001 |

CPI and CPIII data are adjusted for sex, body weight and clinical trial. GCDCA-3G and GDCA-3G data are adjusted for sex. Phenotypes classified by *SLCO1B1* allele pairs: highly increased function phenotype, two increased function (*14 or *20) alleles; increased function phenotype, one normal function (*1 or *37) allele with one increased function allele; normal function phenotype, two normal function alleles; decreased function phenotype, one normal function allele or one increased function allele with one decreased function (*5 or *15) allele; poor function phenotype, two decreased function alleles; AUPRC, area under precision-recall curve; AUROC, area under receiver operating characteristic curve; CI, confidence interval; CPI, coproporphyrin I; CPIII, coproporphyrin III; GCDCA-3G, glycochenodeoxycholate 3-O-glucuronide; GDCA-3G, glycodeoxycholate 3-O-glucuronide; OATP1B1, organic anion transporting polypeptide 1B1. F1_{max} represents the maximum harmonic mean of the precision and recall over all measurement levels.

*These data were reanalyzed from a previously published study (Neuvonen, M. *et al. Clin. Pharmacol. Ther.* **109**, 646-657 (2021)).