

(GeT-RM PGx Study: 137 samples/28 genes) Loci and alleles detected by each assay

Assay (sample sets tested)	Affymetrix DMET (Tier 1)	GenMark eSensor <sup>1</sup> (Tier 1)	Luminex xTAG (Tier 1)	LifeTech Taqman LDT (Tiers 1 and 2)	Agena Bioscience iPLEX® ADME PGx Pro (Tiers 1 and 2)	Agena Bioscience CYP2D6, CYP2C9/VKOR C1, CYP2C19, UGT1A1 (Tiers 1 and 2)	Autogenomics CYP2D6, CYP3A4, CYP3A5, NAT2 (Tier 1)
<b>CYP1A1</b>	*2C, *3, *4, *5, *6, *7, *8, *9, *10, G45D, R279W, I286T, F381L, A463G				*2, *3, *4, *5, *6, *7, *8, *9		
<b>CYP1A2</b>	*1A, *1C, *1D, *1F, *1K, *1L, *2, *3, *4, *5, *6, *7, *8, *11, *15, *16				*1A, *1C, *1F, *1K, *1L, *7		
<b>CYP2A6</b>	*2, *4, *6, *7, *8, *9, *11, *13, *17, *20, *28, 387FS				*2, *5, *6, *7, *8, *9, *11, *12, *17, *20, *26, *1X2b, CNV(*4)		
<b>CYP2B6</b>	*2, *3, *4, *5, *6, *7, *8, *11, *12, *13, *14, *15, *16, *18, *19, *20, *21, *22, *26, *27, *28			*6, *18	*2, *6, *8, *13, *16, *28, CNV		
<b>CYP2C8</b>	*1A, *2, *3, *4, *5, *7, *8, *12, L390S, P404A			*2, *3, *4	*2, *3, *4, *5, *7, *8		

<b>CYP2C9</b>	*2, *3, *4, *5, *6, *9, *10, *11, *12, *13, *14, *15, *16, *25, Y358C	*2, *3	*2, *3, *4, *5, *6	*2, *3, *5, *6, *8, *11	*2, *3, *4, *5, *6, *8, *9, *10, *11, *12, *13, *15, *25, *27	*1A, *1B, *1C, *1D, *2A, *2B, *2C, *3A, *3B, *4, *5, *6, *7, *8, *9, *10, *11A, *11B, *12, *13, *14, *15, *16, *17, *18, *19, *20, *21, *22, *23, *24, *25, *26, *27, *28, *29, *30, *31, *32, *33, *34, *35	
<b>CYP2C19</b>	*2A, *2B, *3, *4, *5, *6, *7, *8, *9, *10, *12, *13, *14, *15, *17, 439FS, 241FS, V331I	*2, *3, *4, *5, *6, *7, *8, *9, *10, *13, *17	*2, *3, *4, *5, *6, *7, *8, *9, *10, *17	*2, *3, *4, *4B, *6, *8, *17	*1B, *2, *3, *4, *5A, *5B, *6, *7, *8, *12, *17	*1A, *1B, *1C, *2, *2B, *3A, *3B (*20), *4A, *4B, *5A, *5B, *6, *7, *8, *9, *10, *11, *12, *13, *14, *15, *16, *17, *18, *19, *20, *21, *22, *23, *24, *25, *26, *27, *28	

<b>CYP2D6</b>	*2, *3, *4, *5, *6, *7, *8, *9, *10, *11, *12, *14A, *14B, *15, *17, *18, *19, *20, *21, *29, *38, *40, *41, *42, *44, *56A, *56B, *64, S486T		*2, *3, *4, *5, *6, *7, *8, *9, *10, *11, *15, *17, *29, *35, *41, DUP	*2, *3, *4, *5, *6, *7, *9, *10, *17, *29, *41, XN, 1XN, 2XN, 4XN	*2A, *2L, *3, *4, *4M, *5, *6, *7, *8, *9, *10, *11, *12, *14A, *14B, *15, *17, *18, *19, *20, *21A, *21B, *30, *35?, *38, *40, *41, *42, *44, *56A, *56B, *58, *64, *69, CNV	*2, *2A, *2D, *2L, *2M, *3, *4, *4B, *4J, *4K, *4M, *4N;P, *5, *6, *6C, *7, *8, *9, *10A, *10B, *11, *12, *14A, *14B, *15, *17, *18, *19, *20, *21A, *21B, *27, *29, *30, *34, *35, *36, *38, *39, *40, *41, *42, *44, *45A, *56A, *56B, *57, *58, *63, *64, *65, *68, *69, *70, *71, *82, *83, *84	*2, *3, *4, *5, *6, *7, *8, *9, *10, *12, *14A, *14B, *17, *29, *41, *XN,
<b>CYP2E1</b>	*2, *3, *4, *5, *7A, *7B, *7C				*2, *7		
<b>CYP3A4</b>	*2, *3, *4, *5, *6, *7, *8, *10, *11, *12, *13, *14, *15, *16, *17, *18, *19, *20, K96E, I193V, S252A, I431T, 465FS,	*1B, *2, *3, *12, *17		*2, *22	*2, *6, *20, *22		*1B, *2, *3, *12, *17
<b>CYP3A5</b>	*1A, *2, *3B, *3C, *3D, *3F, *3G, *3K, *3L, *4, *5, *6, *7, *8, *9, S100Y	*1D, *2, *3, *3B, *6, *7, *8, *9		*3, *6, *7	*3, *3K, *5, *6, *7		*1D, *2, *3, *3B, *6, *7, *8, *9,

<b>CYP4F2</b>	*2, *3, W12C, P13R, G185V, L278F			*3			
<b>DPYD</b>	*2, *3, *4, *7, *8, *9A, *9B, *10, *11, *13, R21X, M166V			*2, *9	*2, *7, *8, *9, *10		
<b>GSTM1</b>	*A, *B, *0				*A, *B, CNV		
<b>GSTP1</b>	*A, *B, *C, D147Y				A, B, C, D		
<b>GSTT1</b>	*A, *B, A21T, F45C, V169I, *0				CNV		
<b>NAT1</b>	*4, *5, *11, *11C, *14, *15, *17, *19A, *19B, *22, *23, *27, *30, T207I				*4, *5, *11, *14, *15, *17, *19, *22		
<b>NAT2</b>	*4, *5, *5E, *6, *6J, *7, *7D, *10, *12D, *14, *14D, *14F, *17, *18, *19, L137F, K268R				*4, *5, *5A, *5C, *5D, *5E, *5G, *5J, *5K, *5P, *6A, *6B, *6C, *6E, *6F, *6I, *6N, *7A, *7B, *7C, *7D, *11, *12, *12B, *12C, *13, *14, *14B, *14C, *14D, *14E, *14F, *14G, *14I, *19		
<b>SLC15A2</b>	*2, *3, R57H, M704L				*2, *3		

<b>SLC22A2</b>	*2A, *2B, *3A, *6, *3D, *3E, *5, *7, *8, R463K				P54S, M165V, S270A, R400C, K432Q		
<b>SLCO1B1</b>	*1a, *1b, *2, *3, *4, *5, *6, *7, *8, *9, *10, *11, *12, *13, *14, *15, *16, *17, *18, *21, P336R			*5, *17, *21	*1A, *1B, *2, *3, *5, *9, *10, *11, *12, *13, *15		
<b>SLCO2B1</b>	*2, D215V				S464F (*3?)		
<b>TPMT</b>	*2, *3A, *3B, *3C, *3D, *4, *8, *24			*3A, *3B, *3C	*2, *3A, *3B, *3C, *4, *8		
<b>UGT1A1</b>	*6, *8, *12, *14, *15, *27, *28, *43, *45, *60, *62, *80, *93, *112, *28+60+9 3, *28+60, *27+28+6 0, *27+28+6 0+93,				*6A, *6B, *7, *27, *29, *60	*28, *36, *37	
<b>UGT2B7</b>	*1a, *1g, *2a, *2c, *2e, *3				*2		
<b>UGT2B15</b>	*2, *4, *5, A500T				Y85D(*2?)		
<b>UGT2B17</b>	H450Y, *2				CNV?		

<b>VKORC1</b>	H1, H2, H3, H4, H6, H7, H9, V29L, V45A, R58G, V66M, R98W, L128R	c.-1639G>A	c.- 1639G>A, c.85G>T (p.V29L), c.121G>T (p.A41S), c.134T>C (p.V45A), c.172A>G (p.R58G), c.196G>A (p.V66M), c.383T>G (p.L128R)	*2 (c.- 1639G> A)	*2, *3, *4	*2/H1, *2A, *2B, *3, *3F;BHT3, *4, *7RE, BHT2RE, BHT4, H2/H5, H4, H6, H7A, H7B, H8, H9	
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1 Assays do not include all genes or alleles