SUPPLEMENTARY INFORMATION

Genome-Wide Association Study of Liver Enzymes in Korean Children

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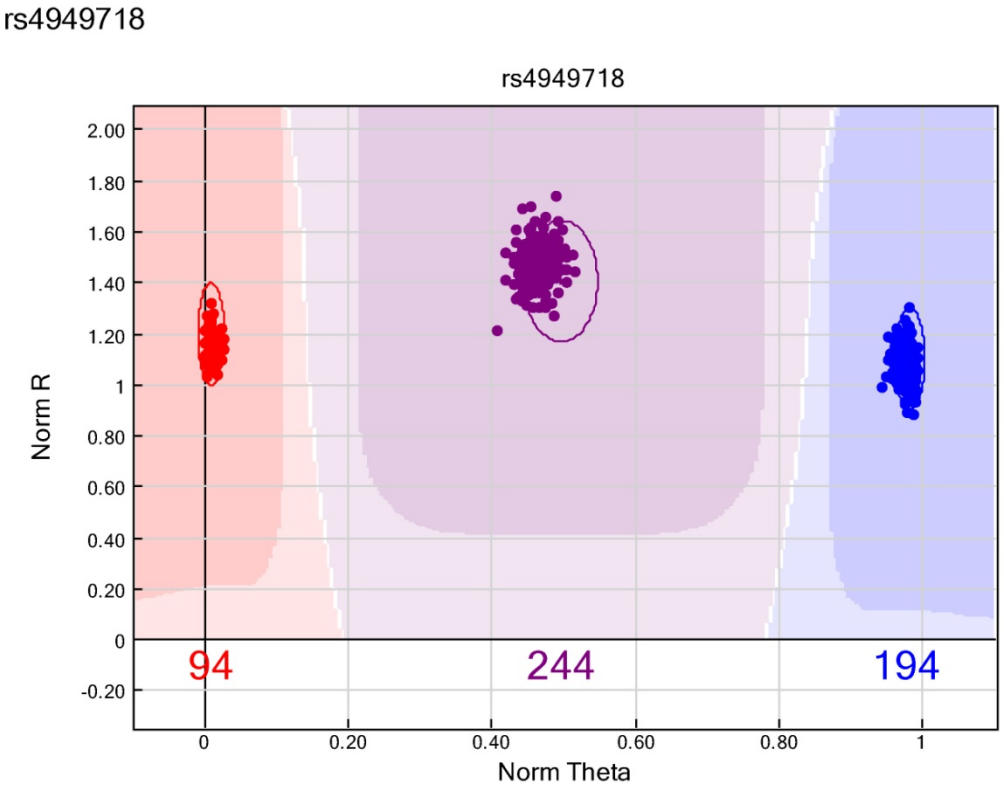
http://www.genominfo.org/src/sm/gni-11-149-s001.pdf.

Supplementary figure legends

Supplementary Fig. 1. Genotype clusters of single nucleotide polymorphisms (SNPs) associated with alanine transaminase (ALT) and/or aspartate transaminase (AST) levels. Cluster images of each SNP with the lowest p-values ($p < 1.0 \times 10^{-5}$) of association with ALT and AST levels. Genotype clustering was performed using GenomeStudio software (Illumina, San Diego, CA, USA).



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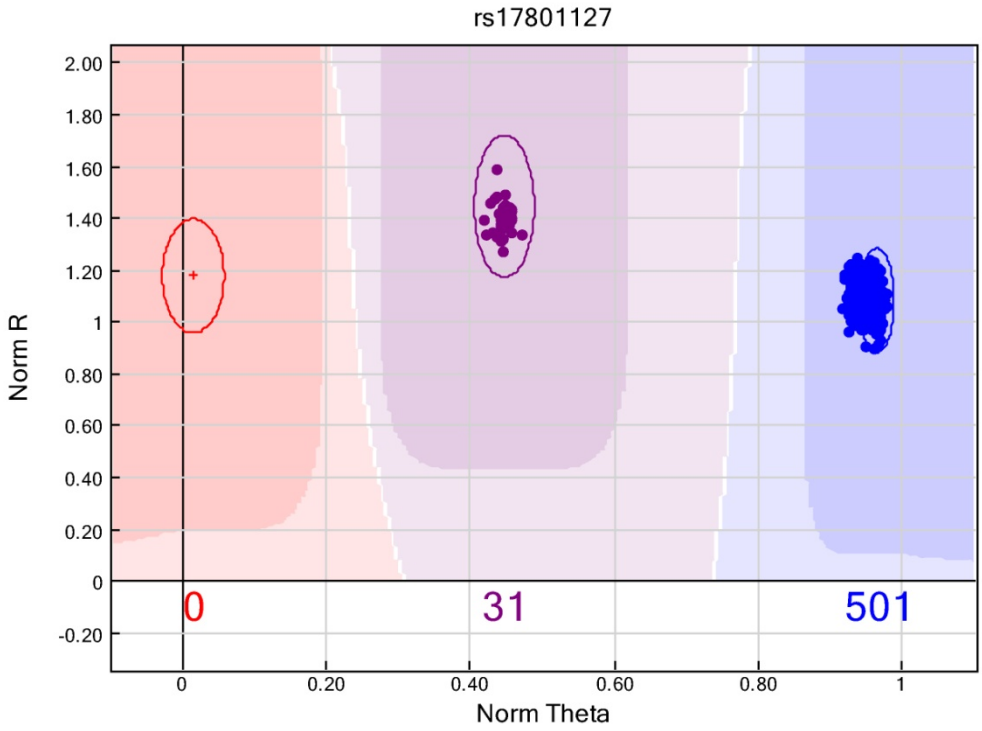

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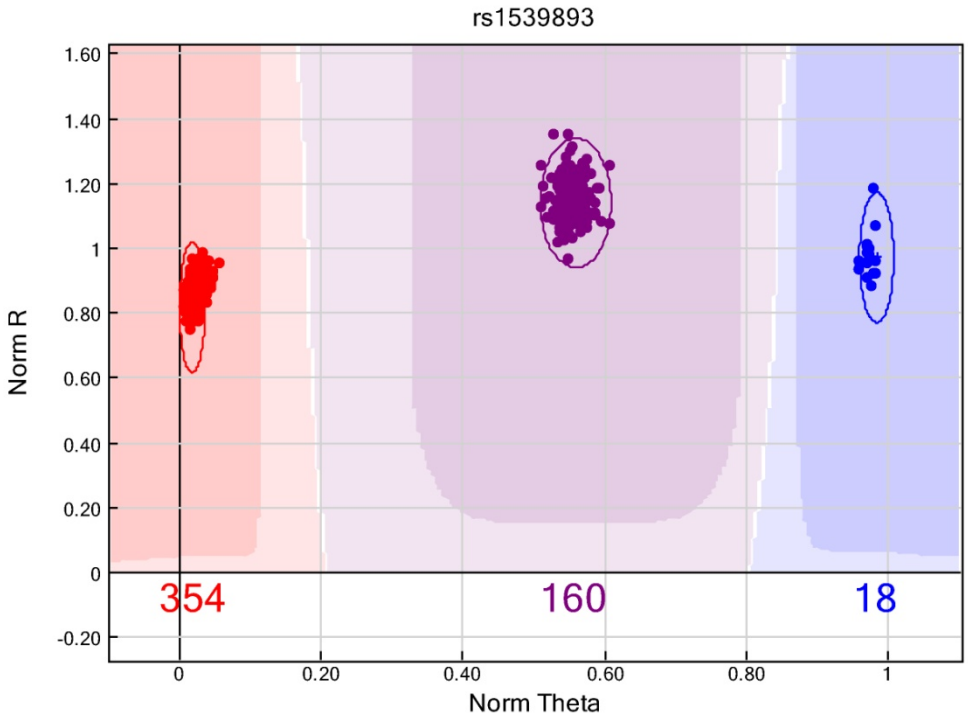

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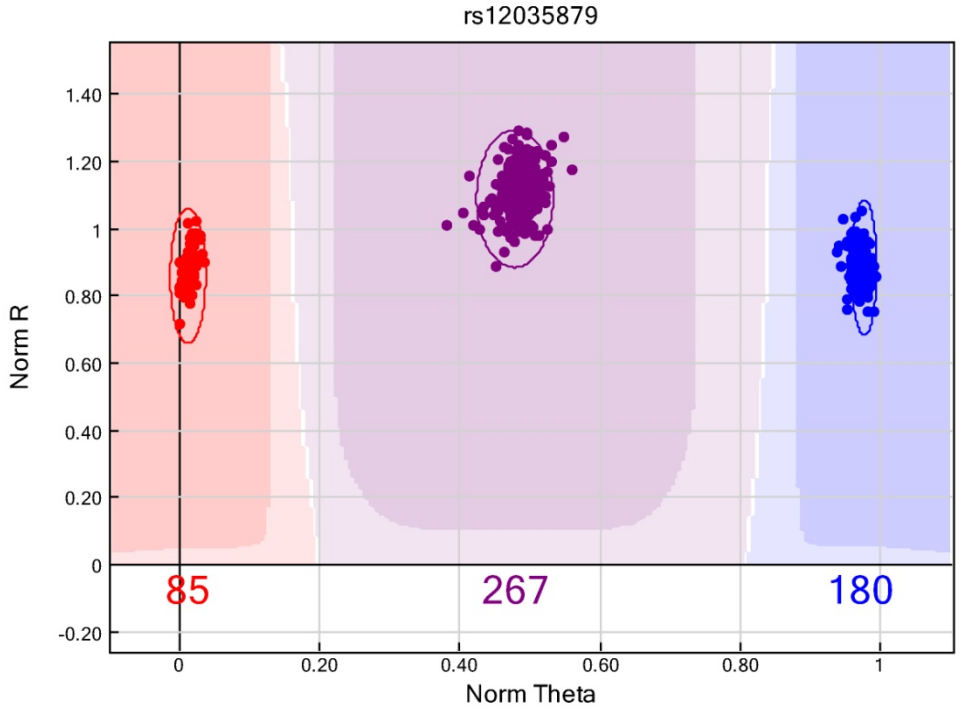

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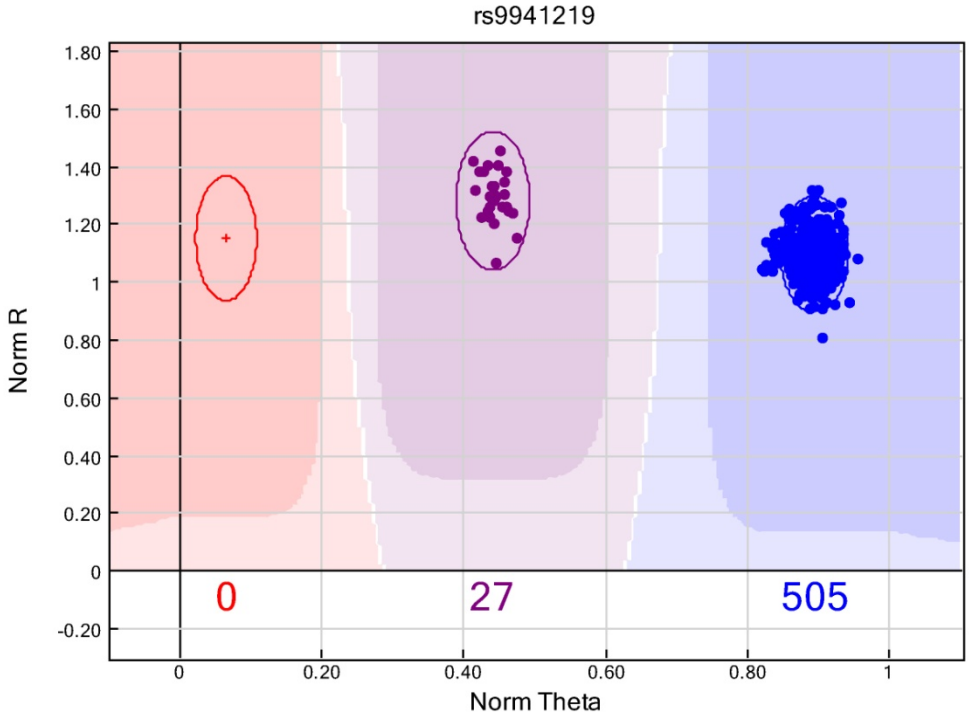

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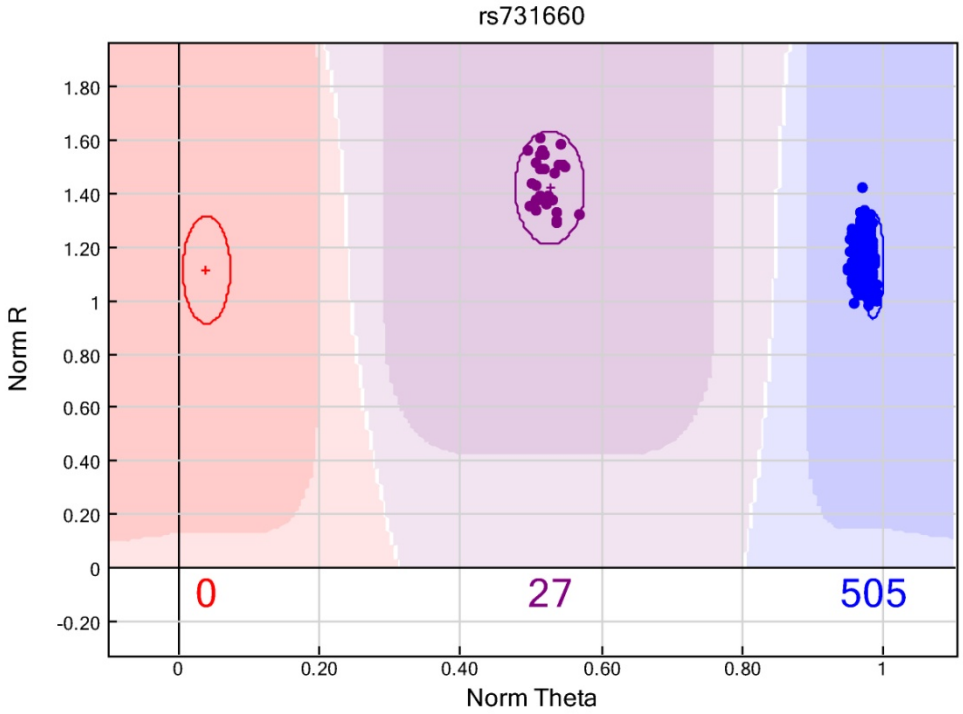

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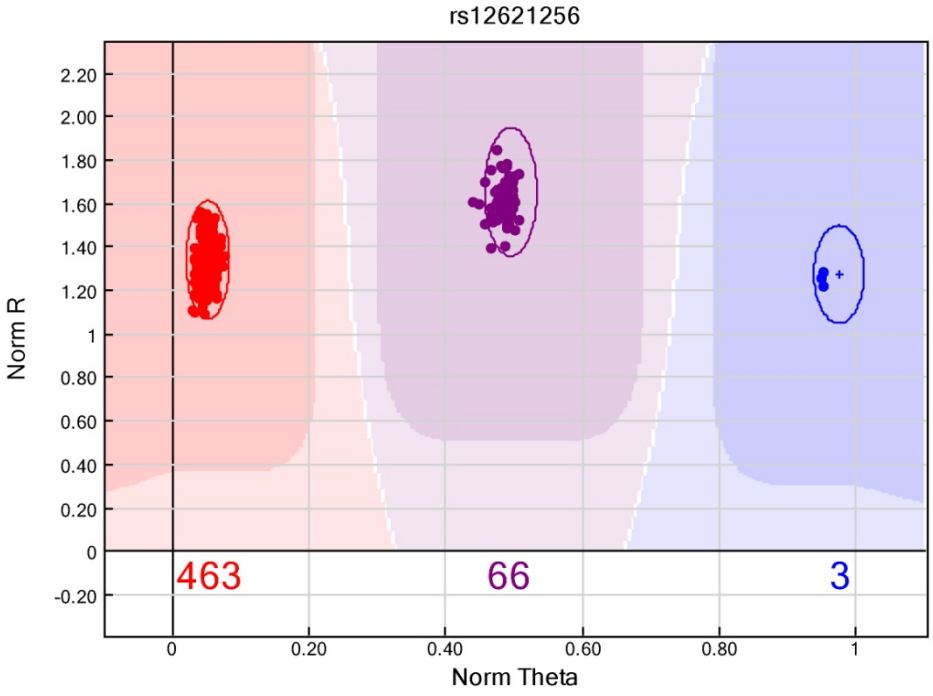

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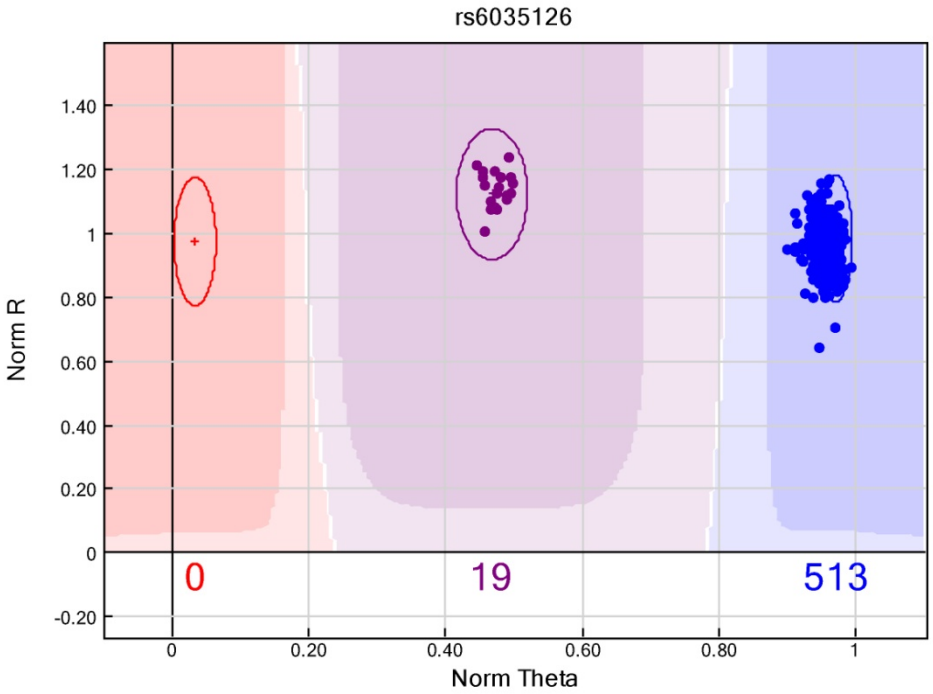

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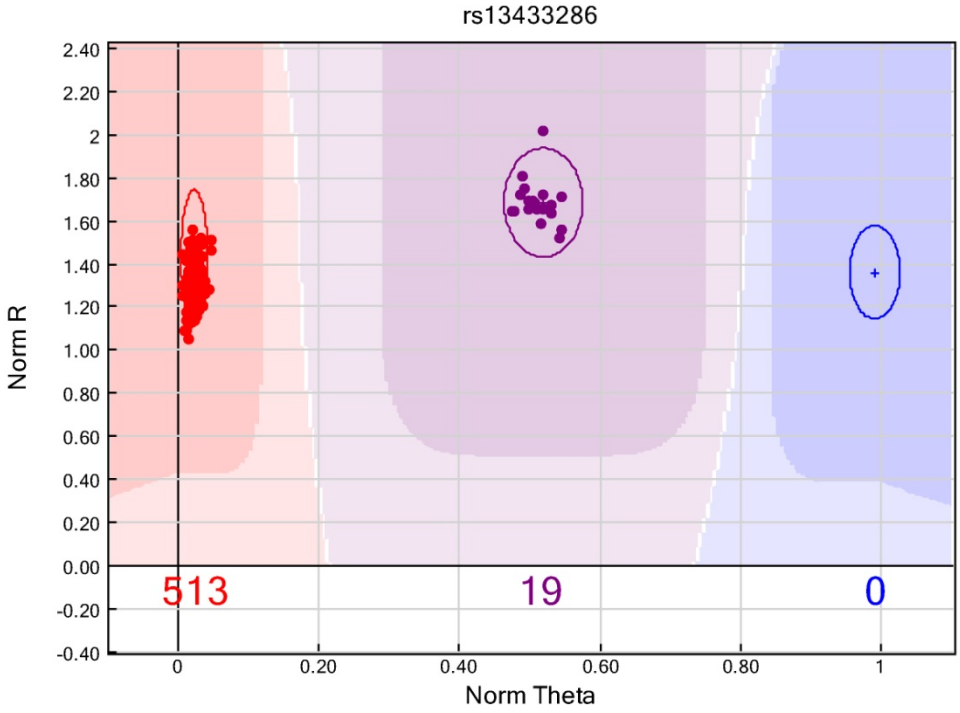

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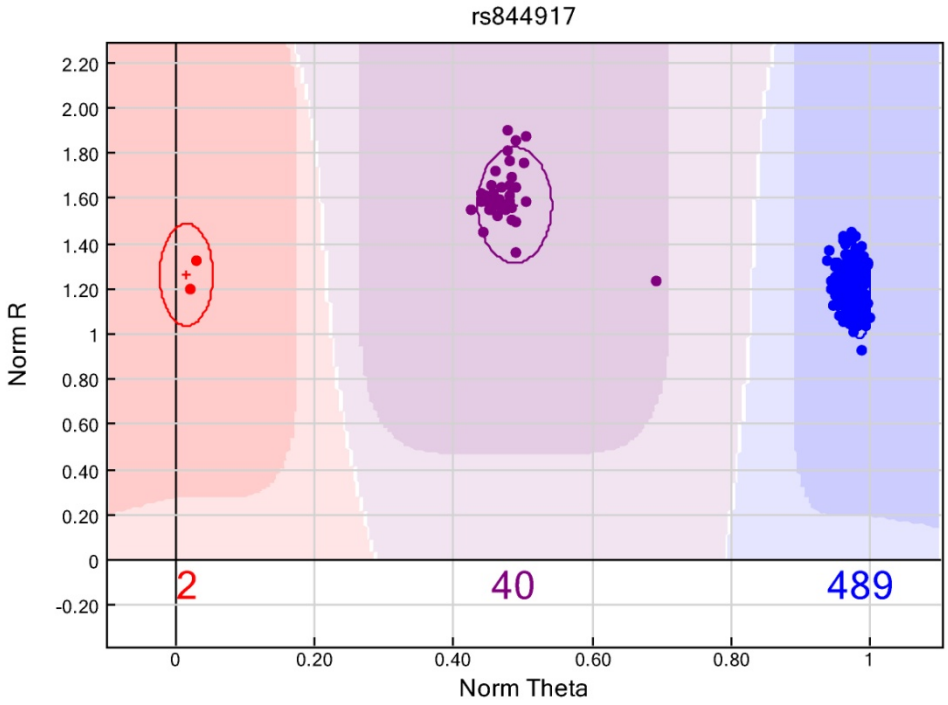

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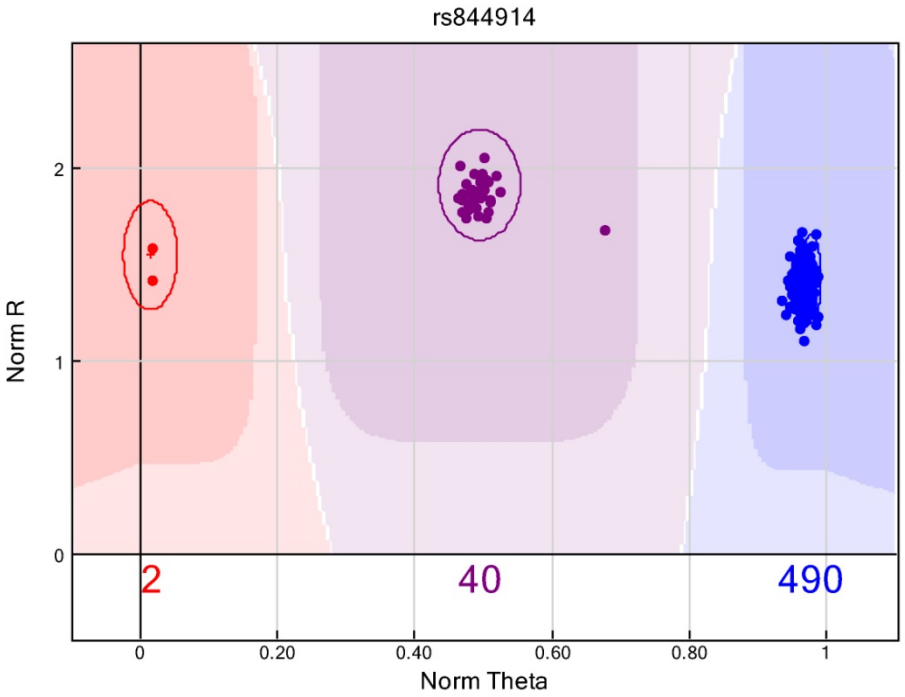

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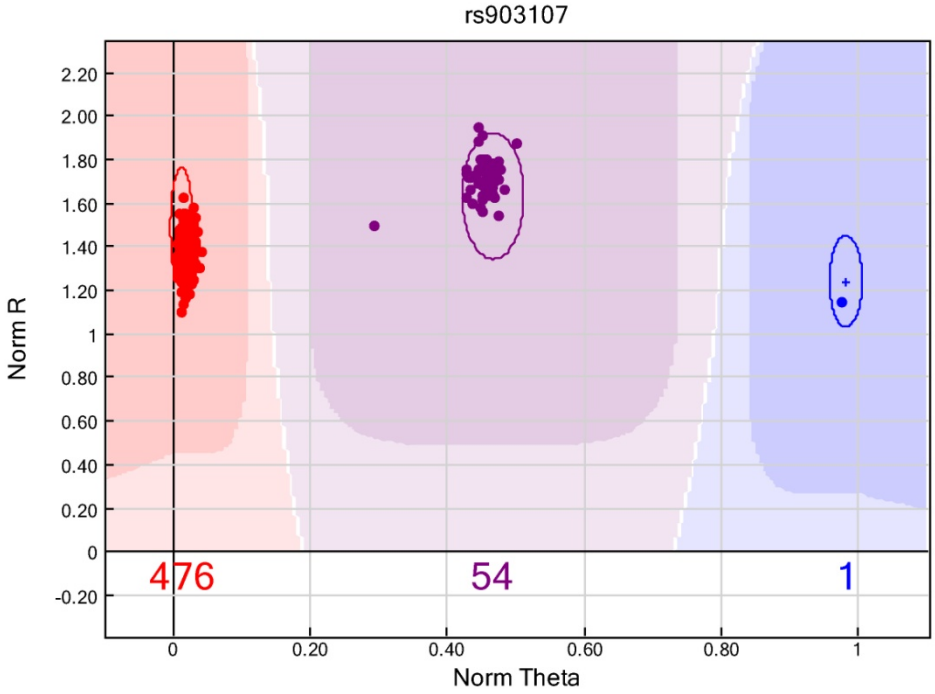

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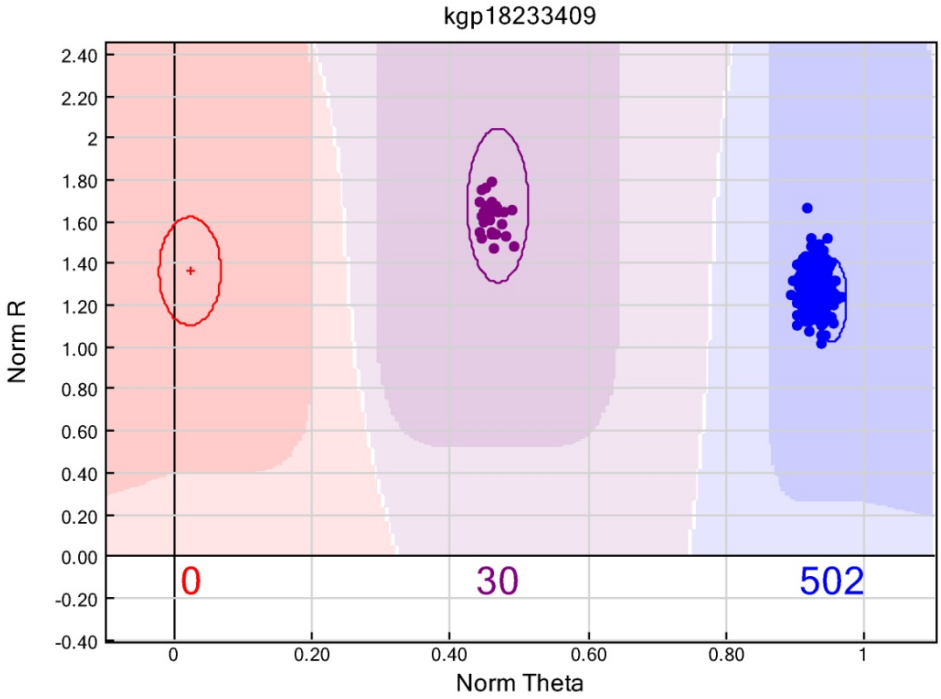

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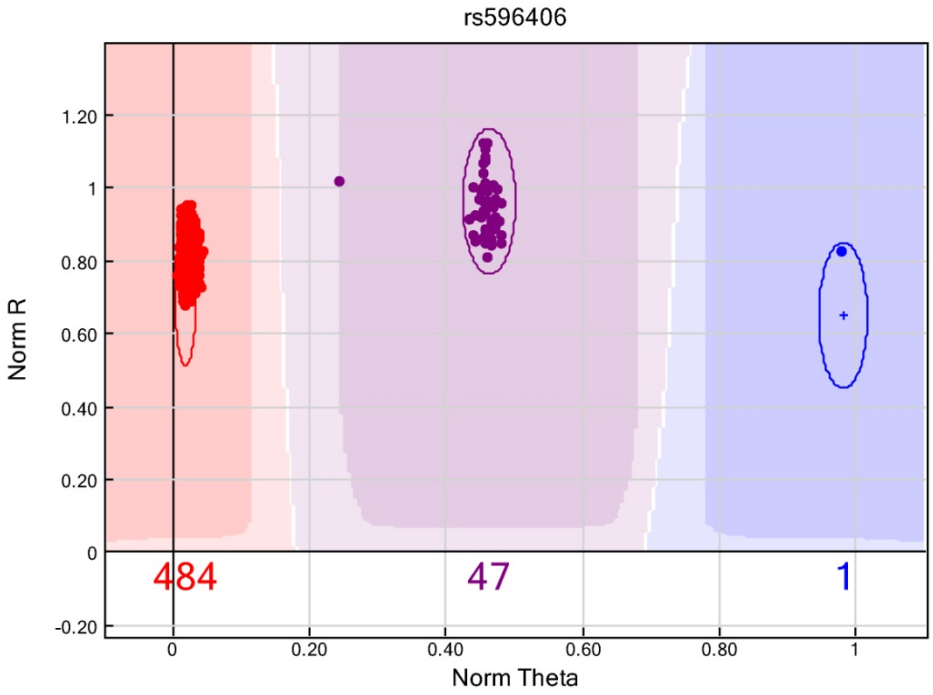

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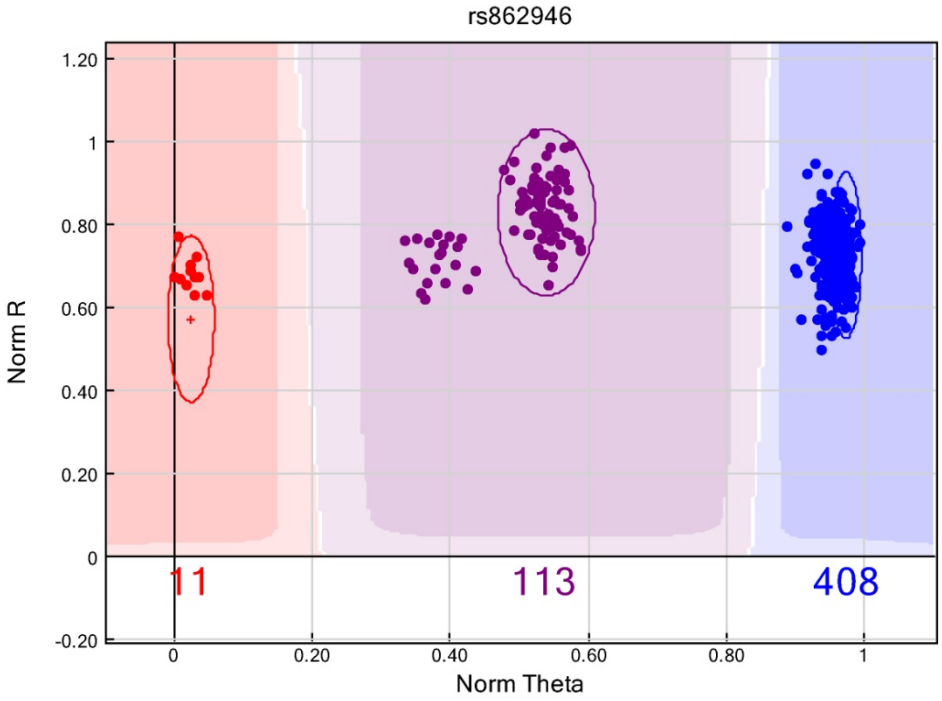

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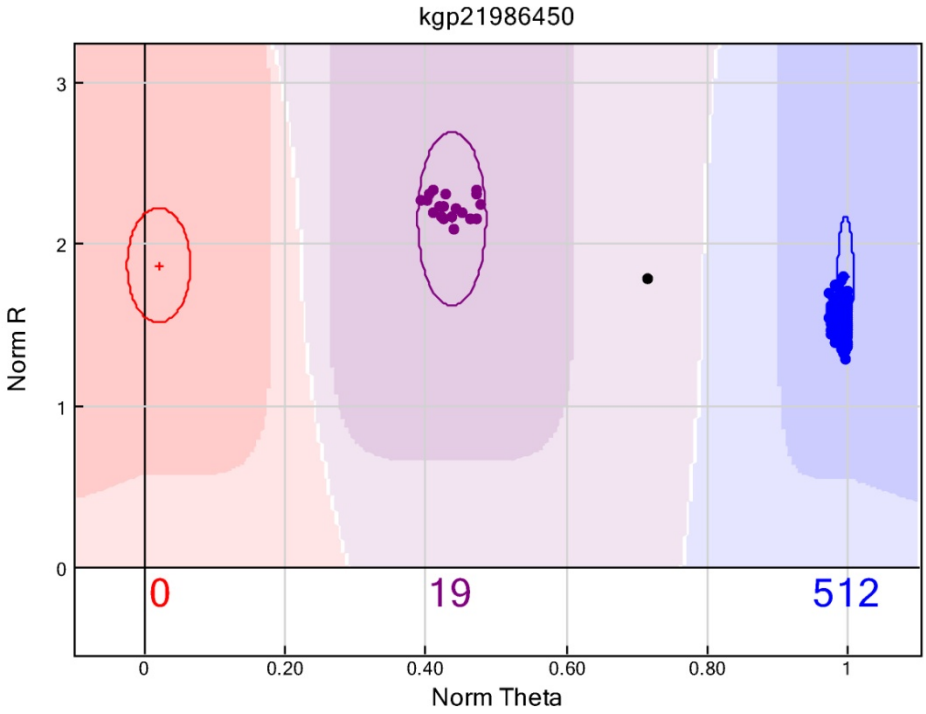

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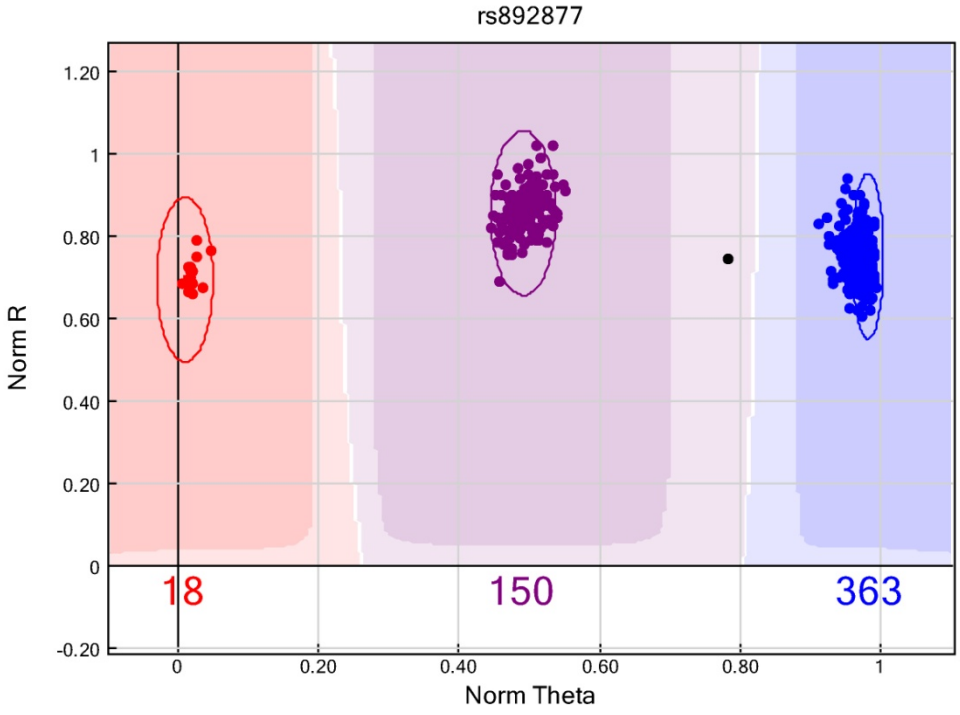

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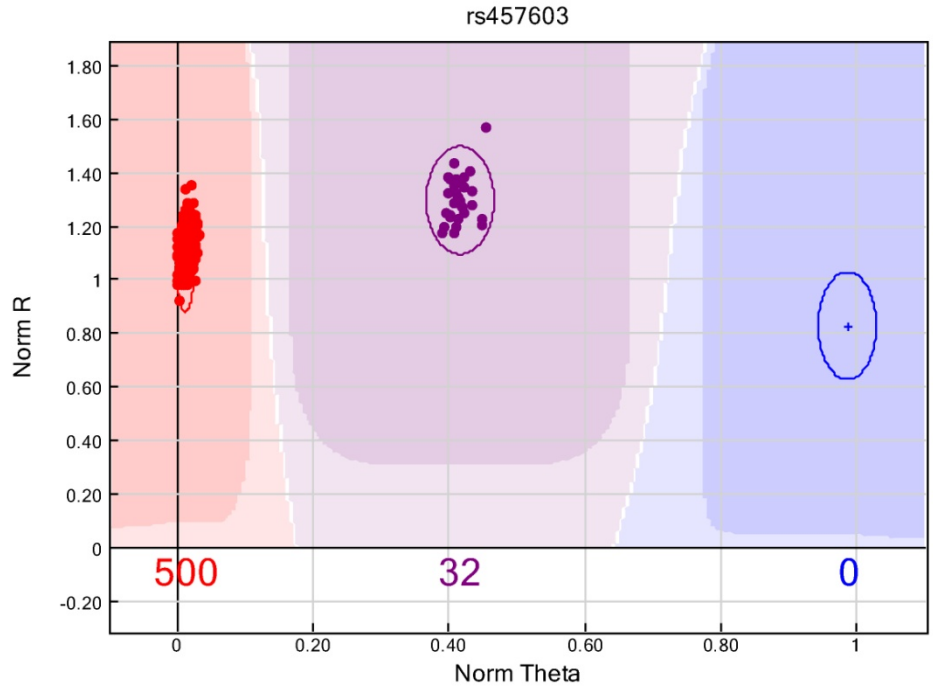

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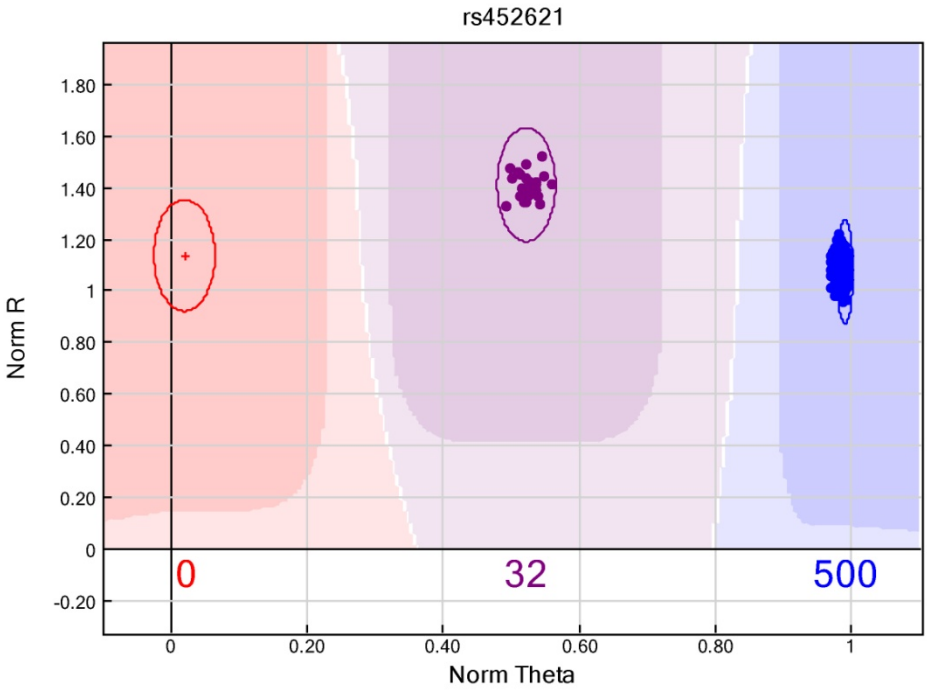

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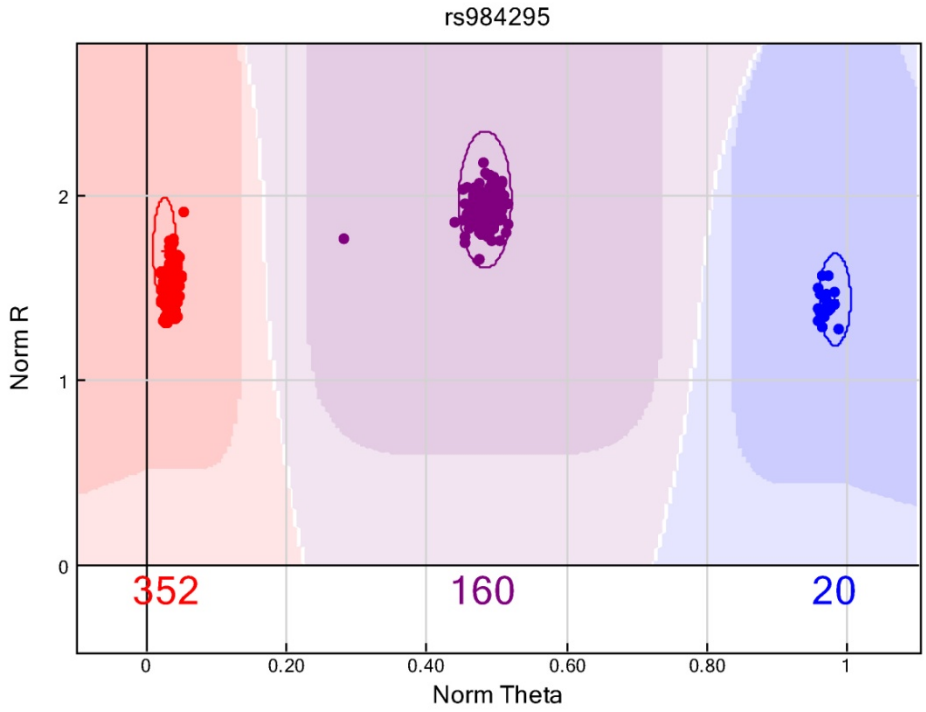

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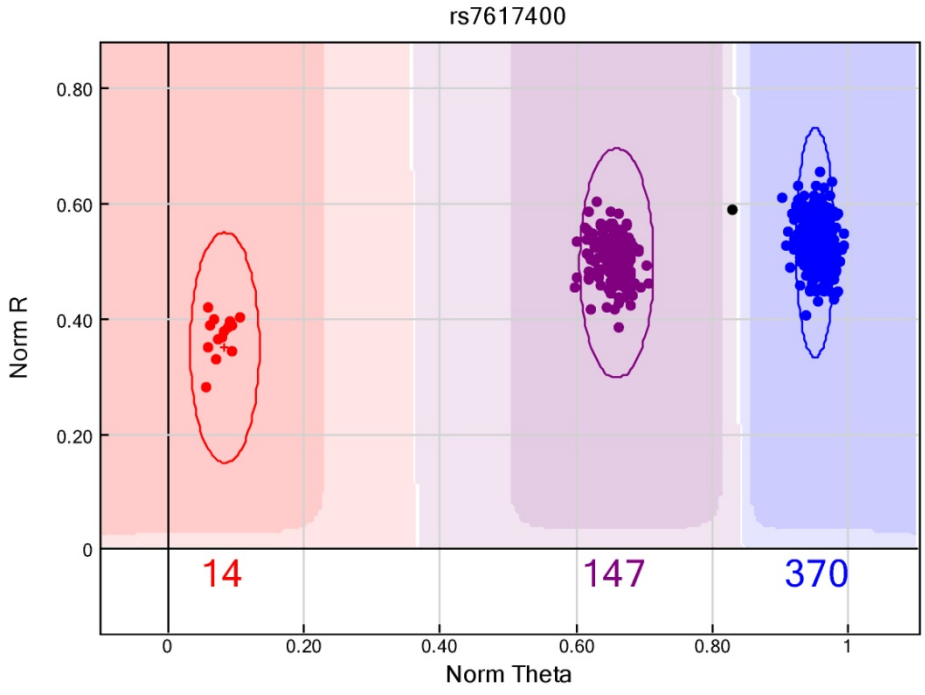

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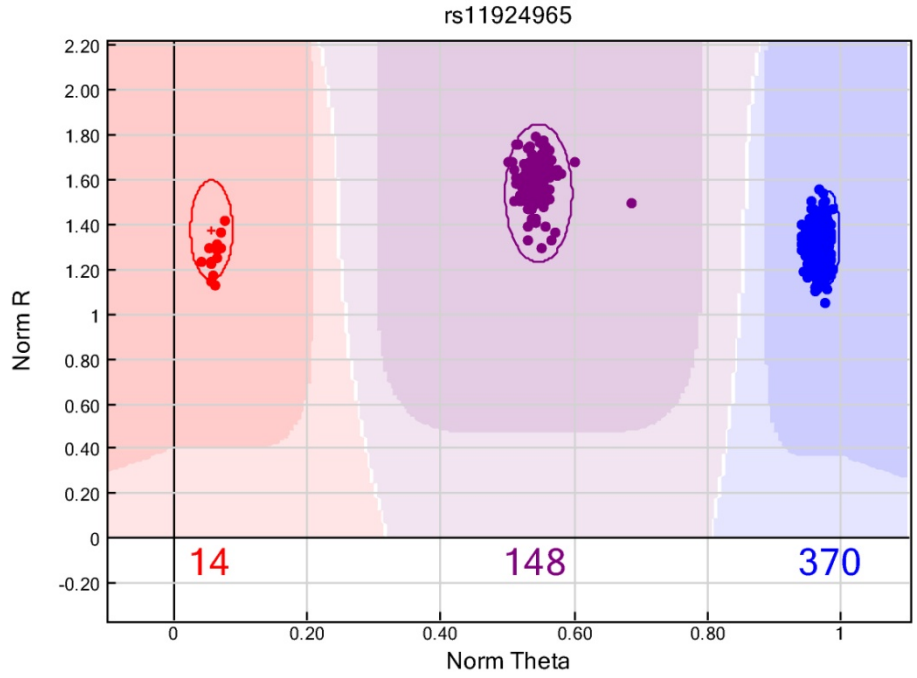

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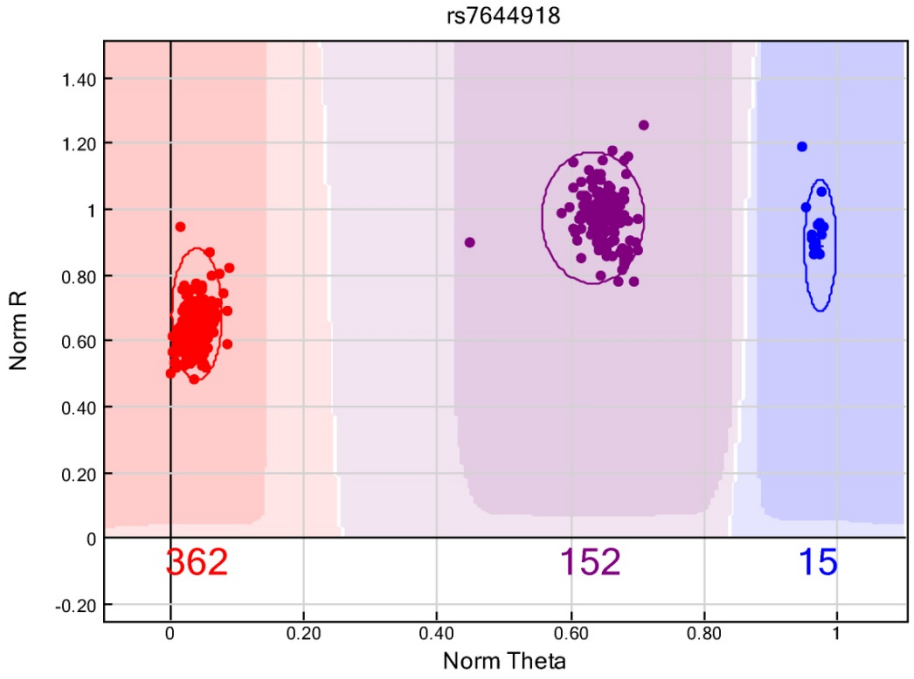

Supplementary Table 1. ALT and AST levels according to age and sex of study subjects

	ALT (IU/L)	AST (IU/L)
Sex		
Male	16.3 ± 12.5	24.6 ± 6.1
Female	12.9 ± 7.1	22 ± 5.3
Age (yr)		
8-9	13.1 ± 4.5	25.6 ± 4
9-10	14 ± 5.6	26.1 ± 5.3
10-11	-	-
11-12	16.3 ± 13.7	22.7 ± 6.7
12-13	12.9 ± 7.4	20.8 ± 4.2

Values are expressed as means ± standard deviations.
ALT, alanine transaminase; AST, aspartate transaminase.

Supplementary Table 2. Conditional analysis for multiple association loci

rs ID	Chr	Gene (nearest gene)	Position	Affected trait	Adjustment		
					$p_{unadjusted}$	$p_{adjusted}$	Covariate
rs4949718	1	*ST6GALNAC3*	76672052	ALT	1.87E-07	1.31E-02	AST
				AST	1.49E-06	1.42E-01	ALT
rs80311637	3	*ADAMTS9*	64511688	ALT	7.18E-06	1.44E-01	AST
				AST	1.85E-06	2.96E-02	ALT
rs596406	10	*CELF2*	11264671	ALT	9.18E-06	2.95E-01	AST
				AST	3.69E-07	7.05E-03	ALT

ALT, alanine aminotransferase; AST, aspartate aminotransferase.