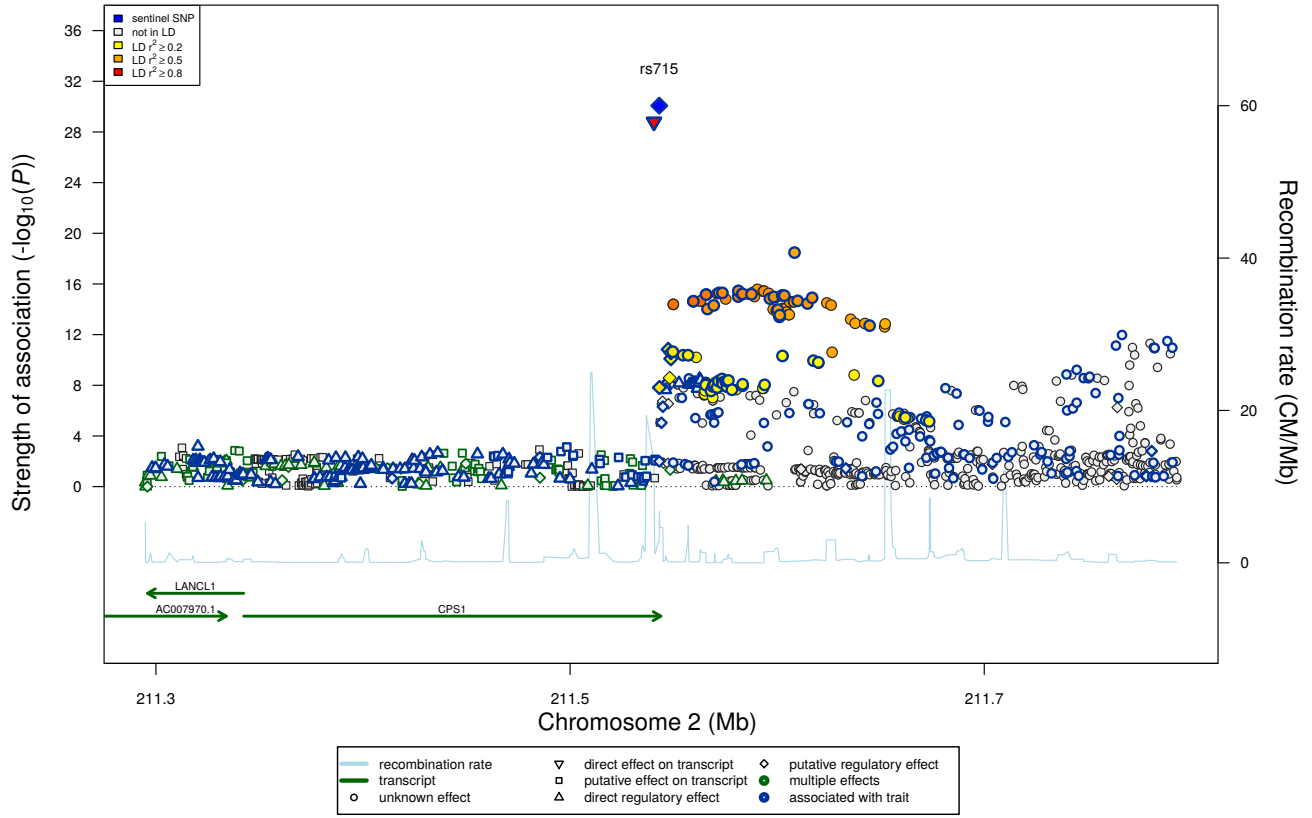
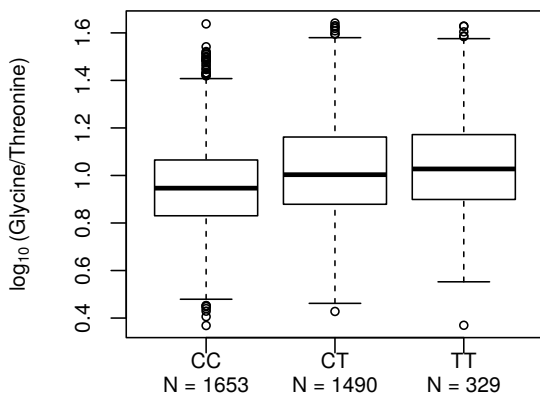


# GWAS with **targeted** metabolic traits - **CPS1** locus

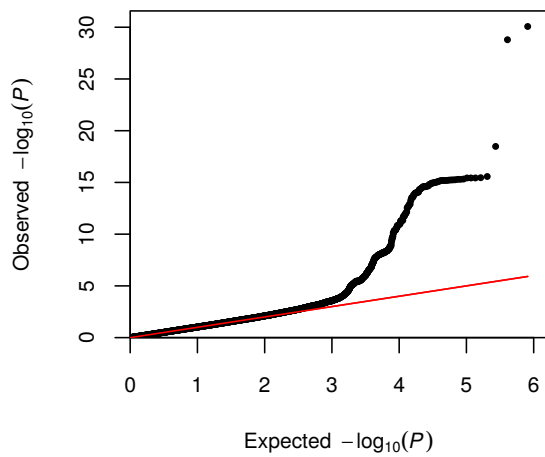
## Associations with Glycine/Threonine



Genotype of rs715

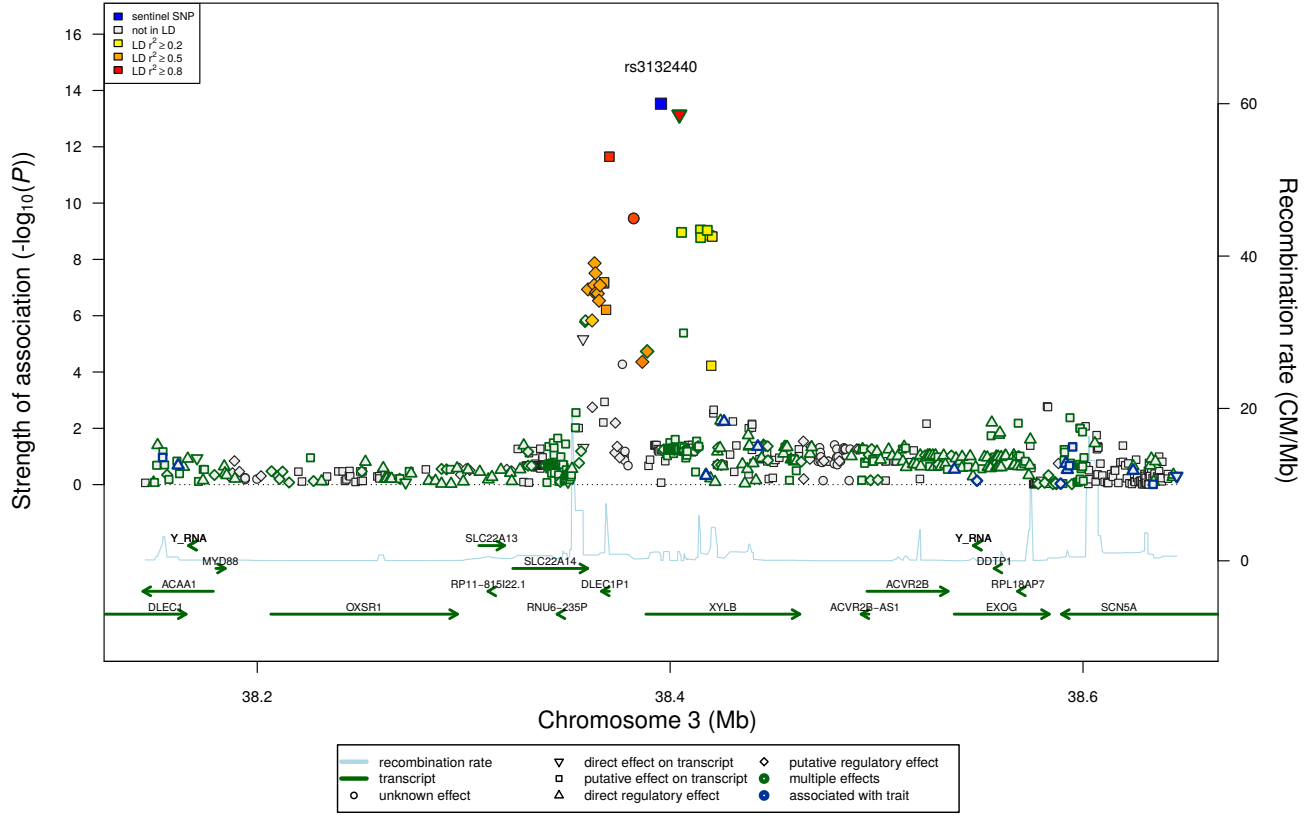


Genome-wide associations with Glycine/Threonine

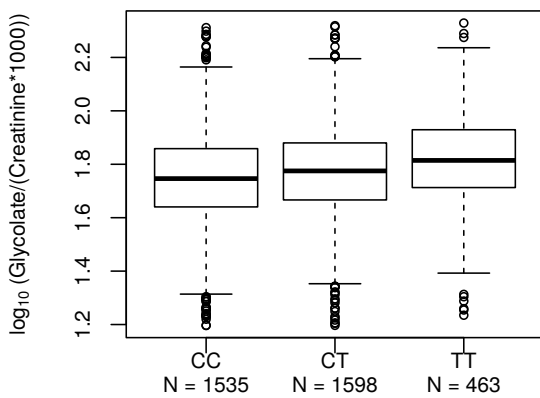


# GWAS with **targeted** metabolic traits - **XYLB** locus

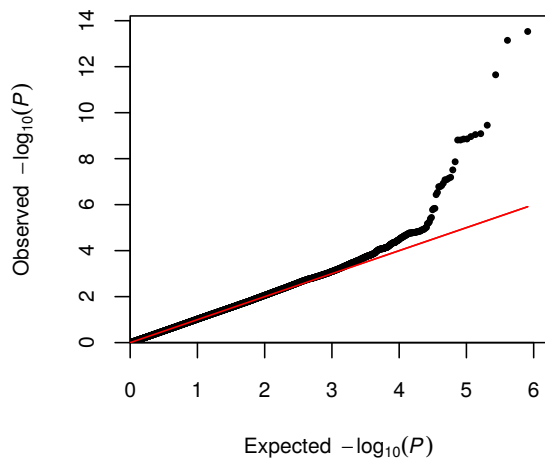
## Associations with Glycolate



Genotype of rs3132440

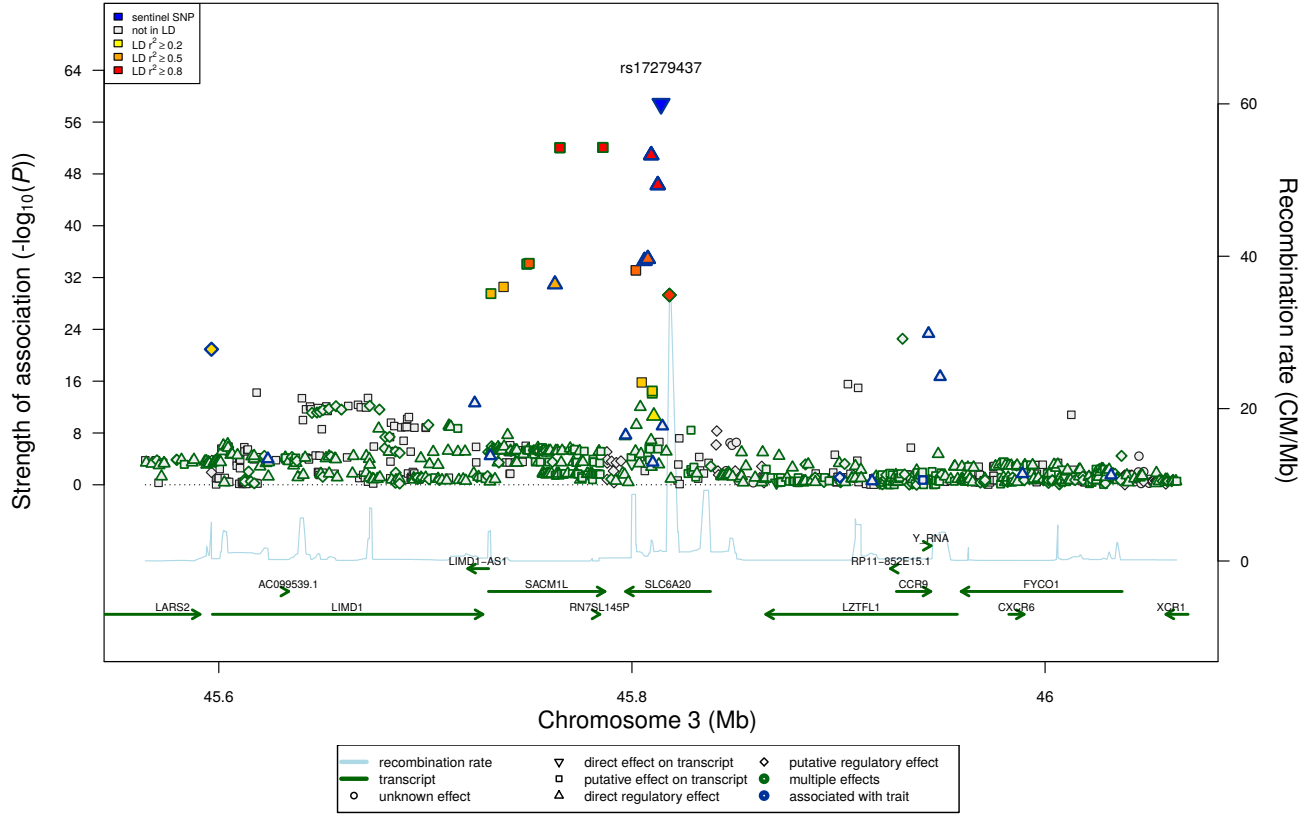


Genome-wide associations with Glycolate

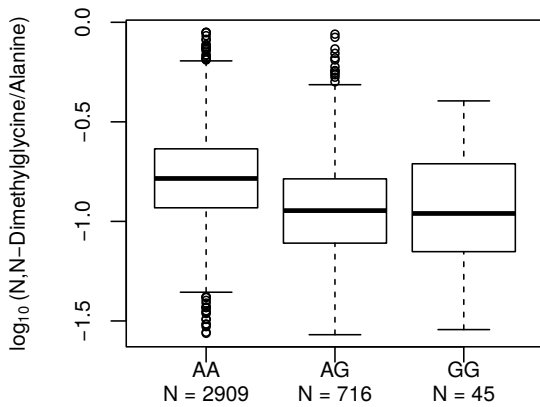


# GWAS with **targeted** metabolic traits - **SLC6A20** locus

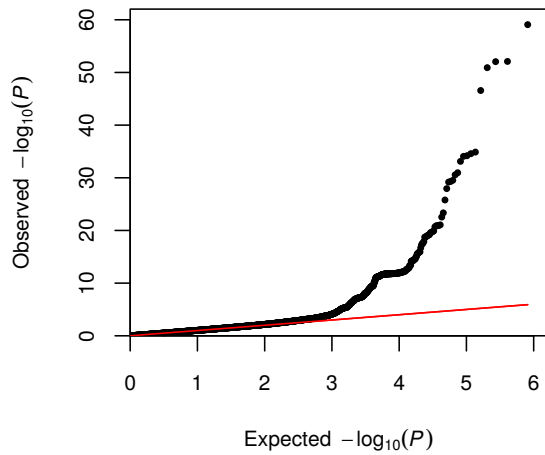
## Associations with N,N-Dimethylglycine/Alanine



Genotype of rs17279437

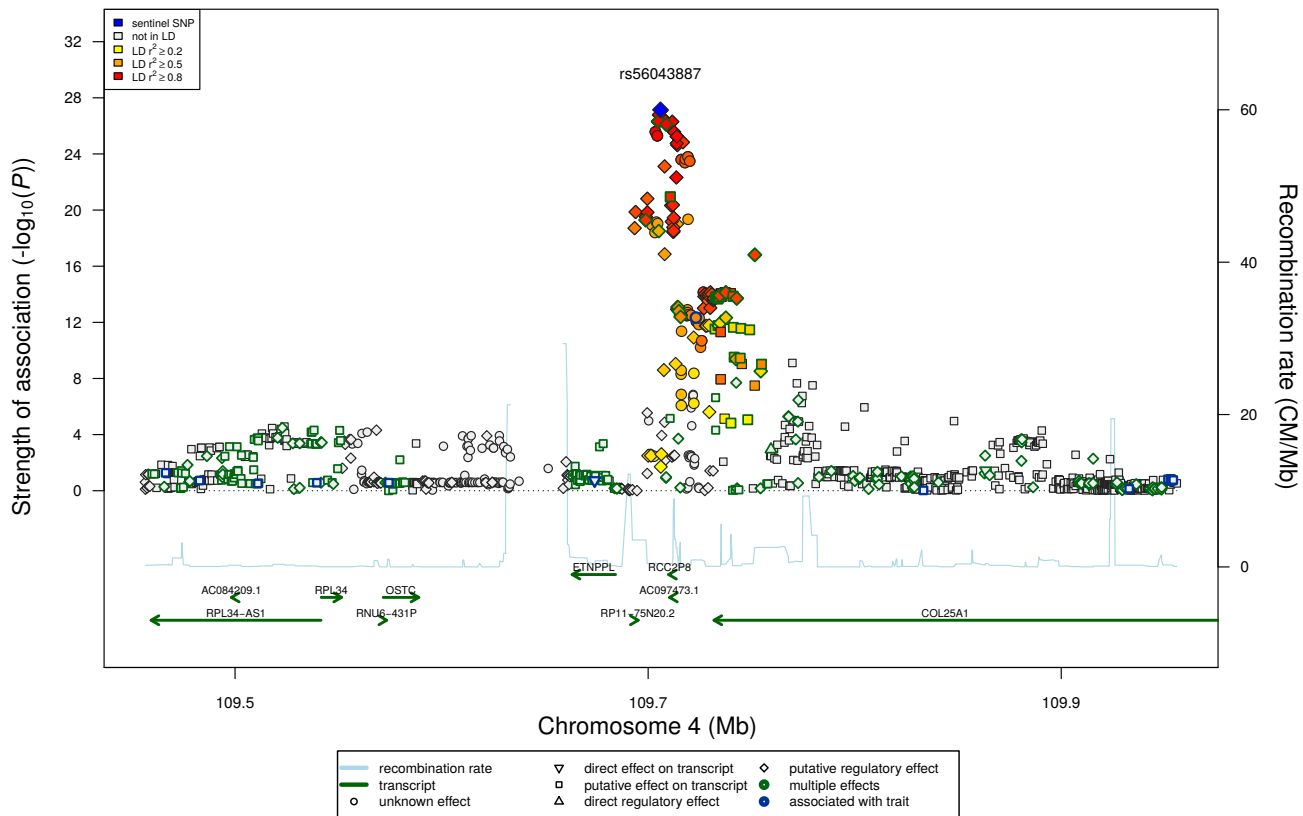


Genome-wide associations with N,N-Dimethylglycine/Alanine

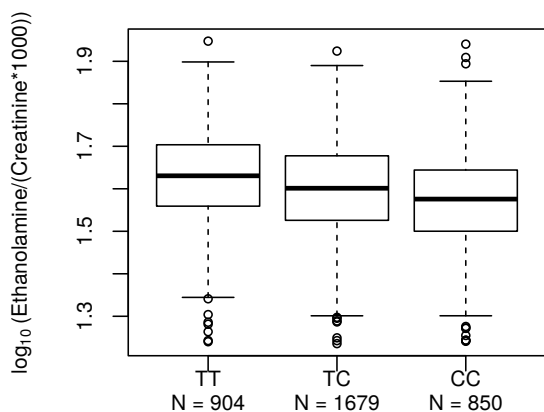


# GWAS with **targeted** metabolic traits - **ETNPPL** locus

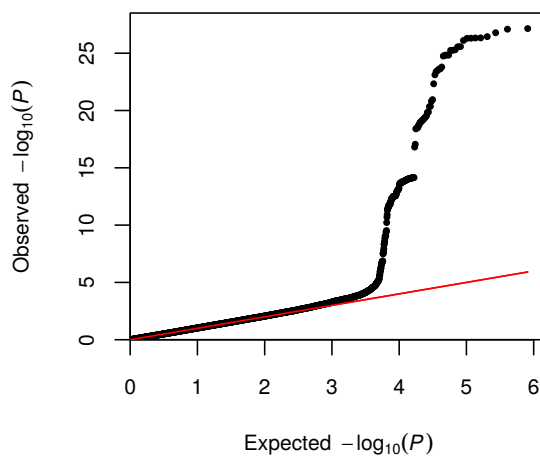
## Associations with Ethanolamine



Genotype of rs56043887

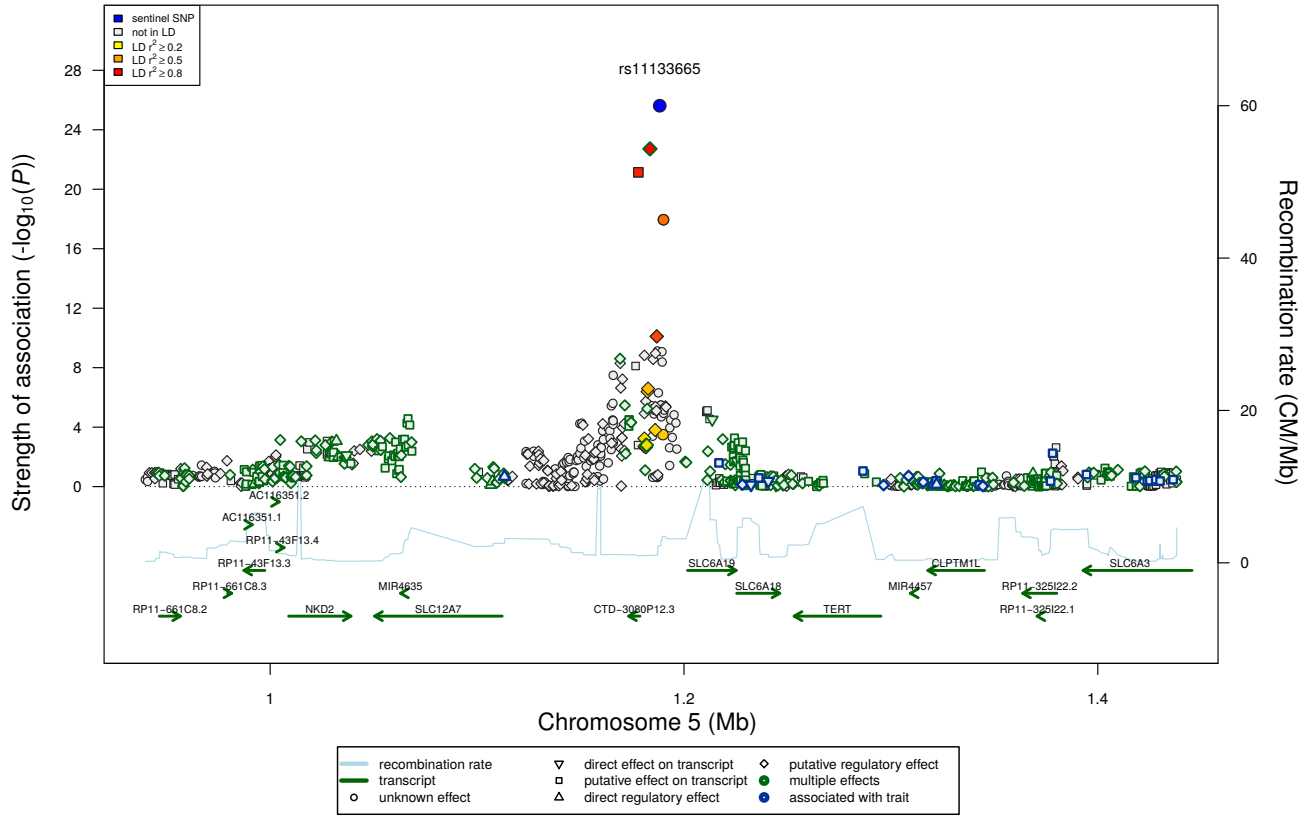


Genome-wide associations with Ethanolamine

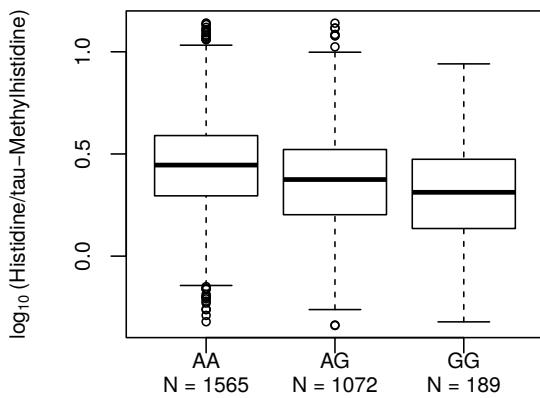


# GWAS with **targeted** metabolic traits - **SLC6A19** locus

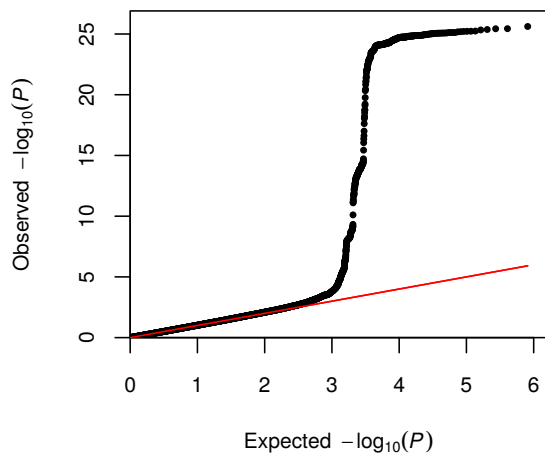
## Associations with Histidine/tau-Methylhistidine



Genotype of rs11133665

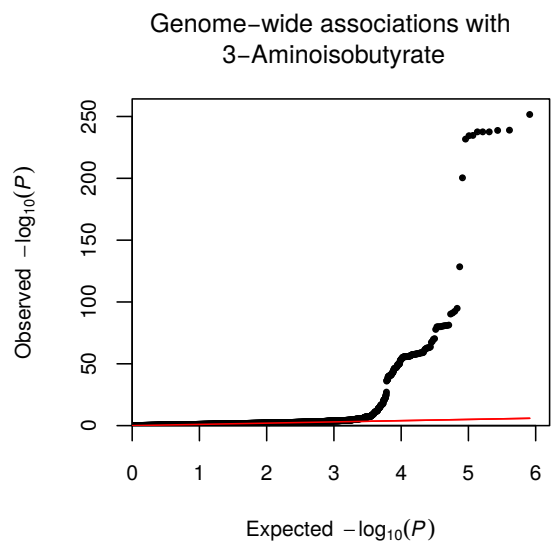
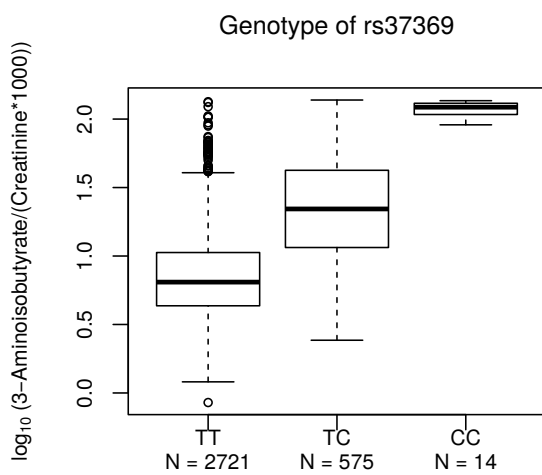
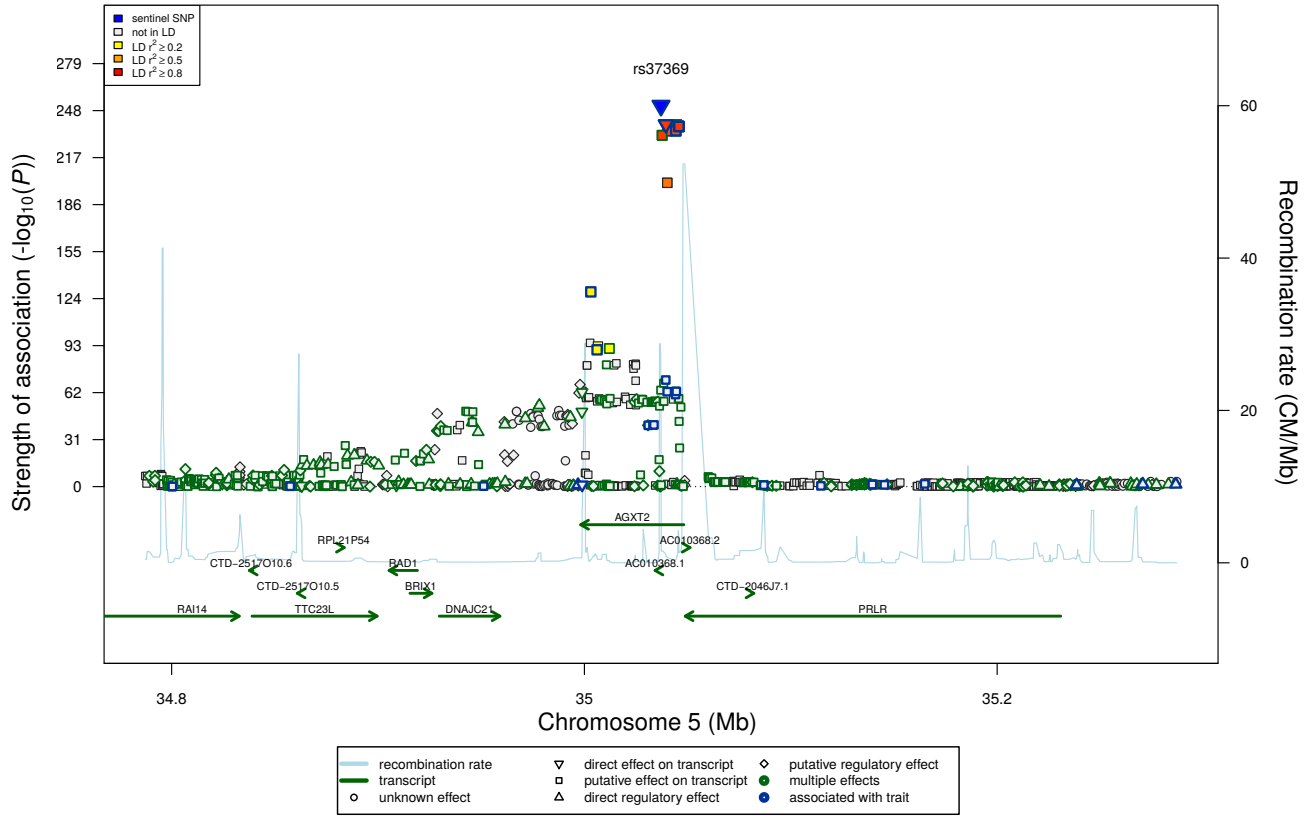


Genome-wide associations with Histidine/tau-Methylhistidine



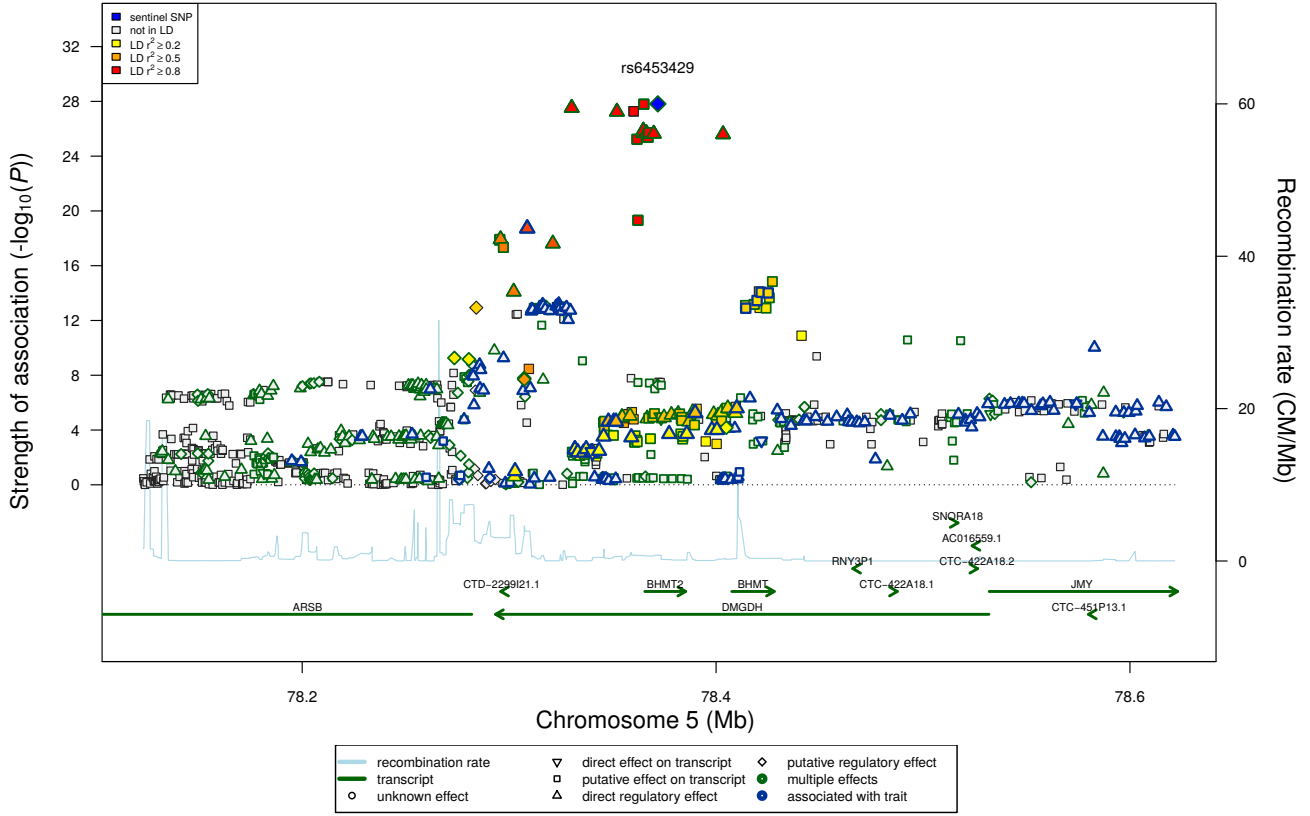
# GWAS with **targeted** metabolic traits - **AGXT2** locus

## Associations with 3-Aminoisobutyrate

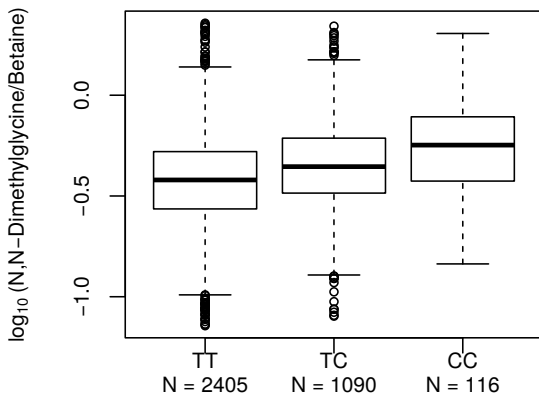


# GWAS with **targeted** metabolic traits - **DMGDH** locus

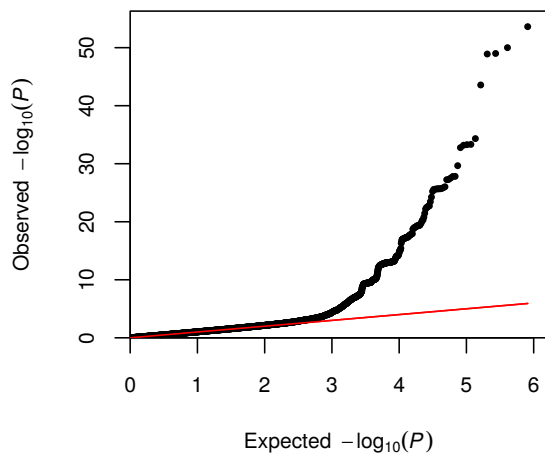
## Associations with N,N-Dimethylglycine/Betaine



Genotype of rs6453429

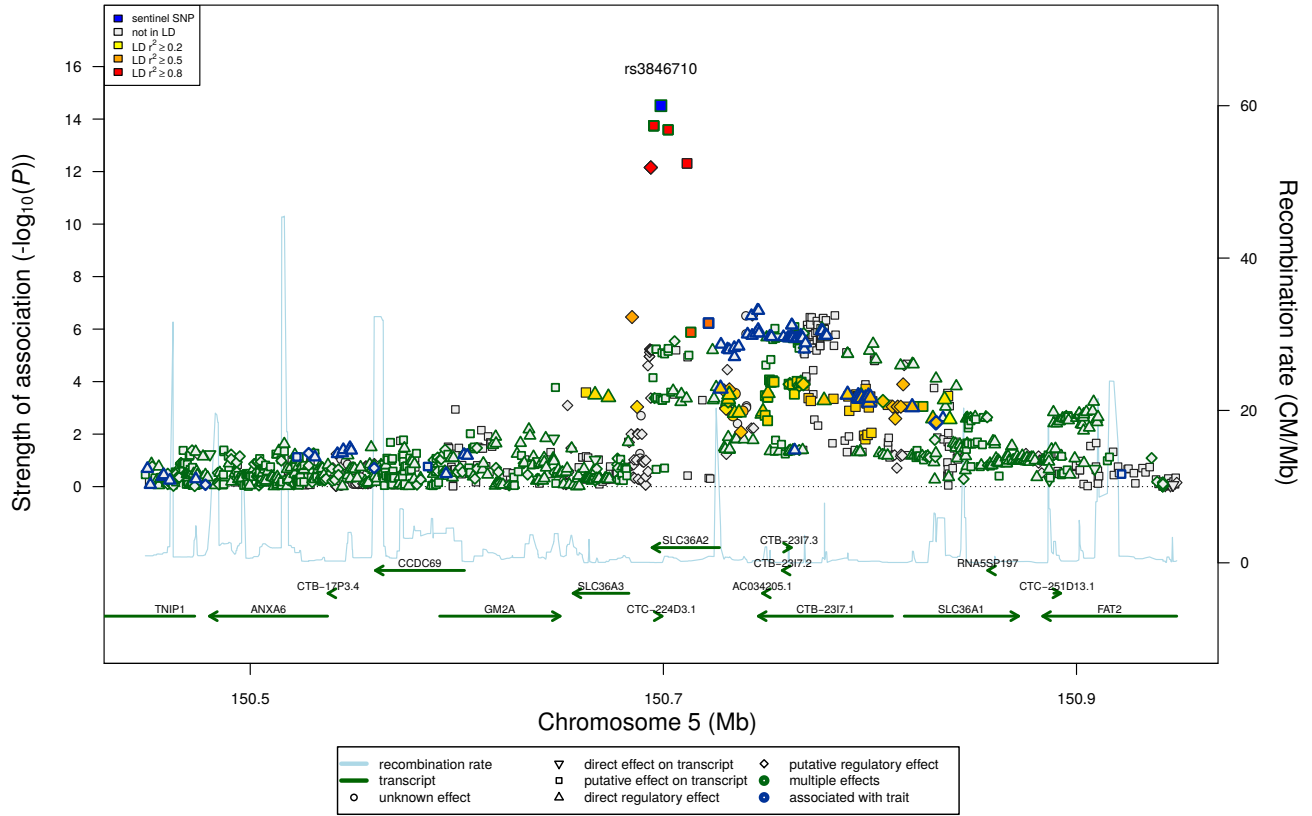


Genome-wide associations with N,N-Dimethylglycine/Betaine

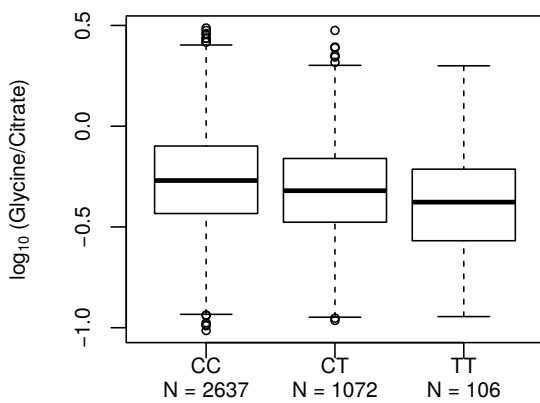


# GWAS with **targeted** metabolic traits - **SLC36A2** locus

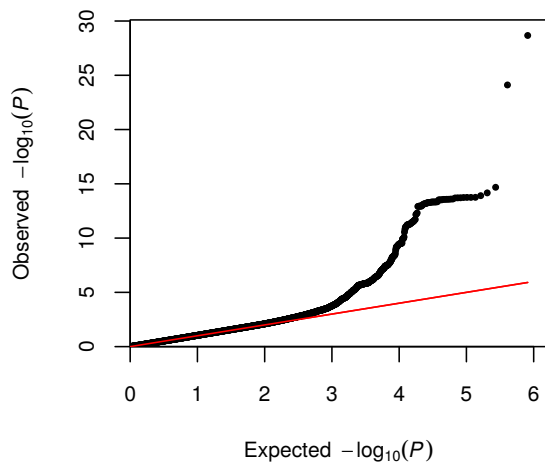
## Associations with Glycine/Citrate



Genotype of rs3846710



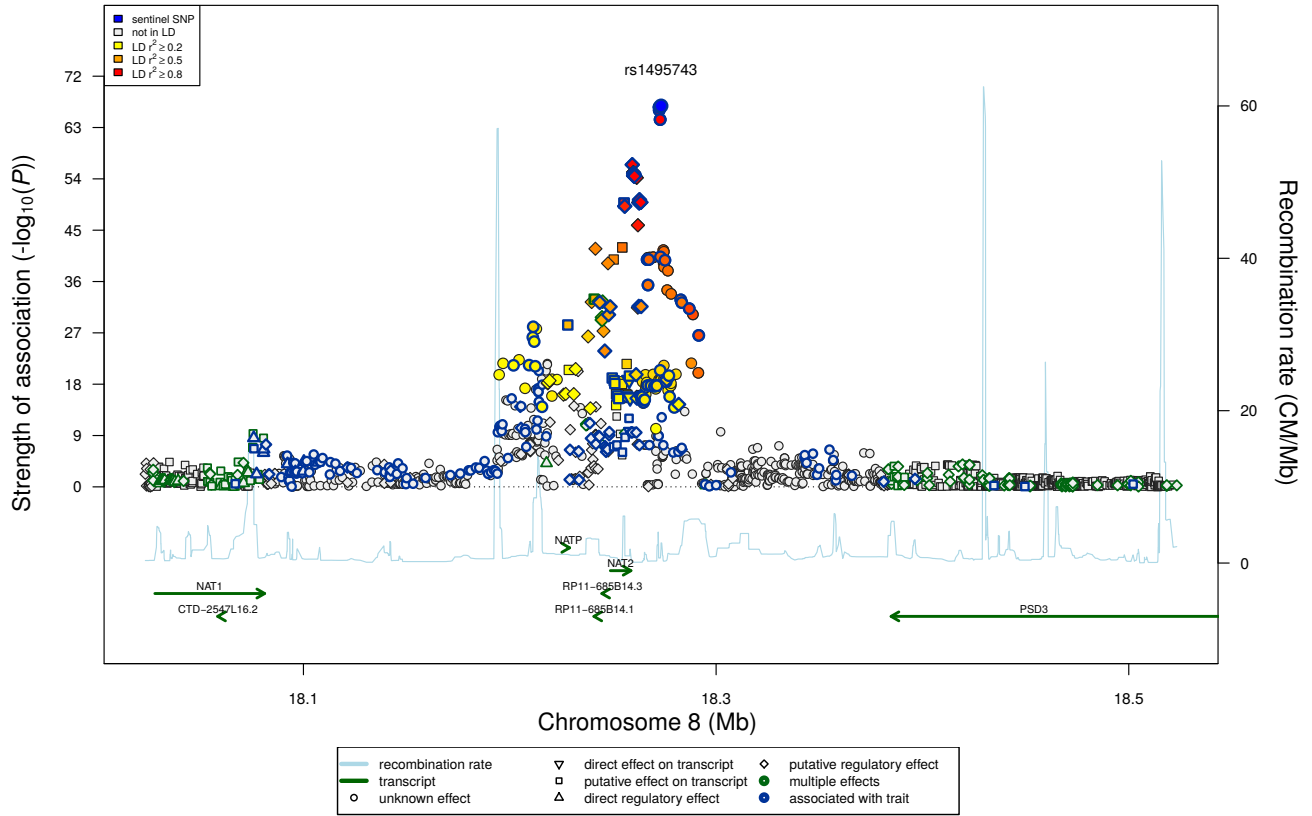
Genome-wide associations with Glycine/Citrate



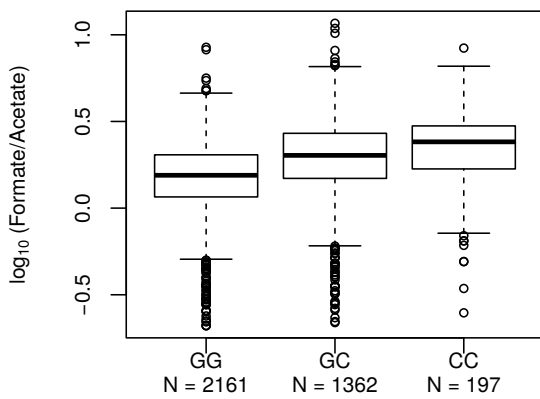


# GWAS with **targeted** metabolic traits - **NAT2** locus

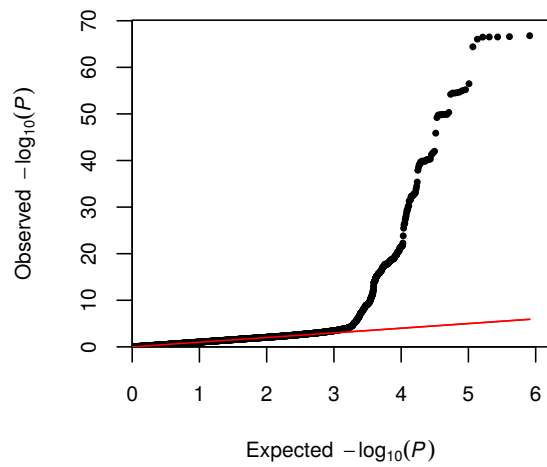
## Associations with Formate/Acetate



Genotype of rs1495743



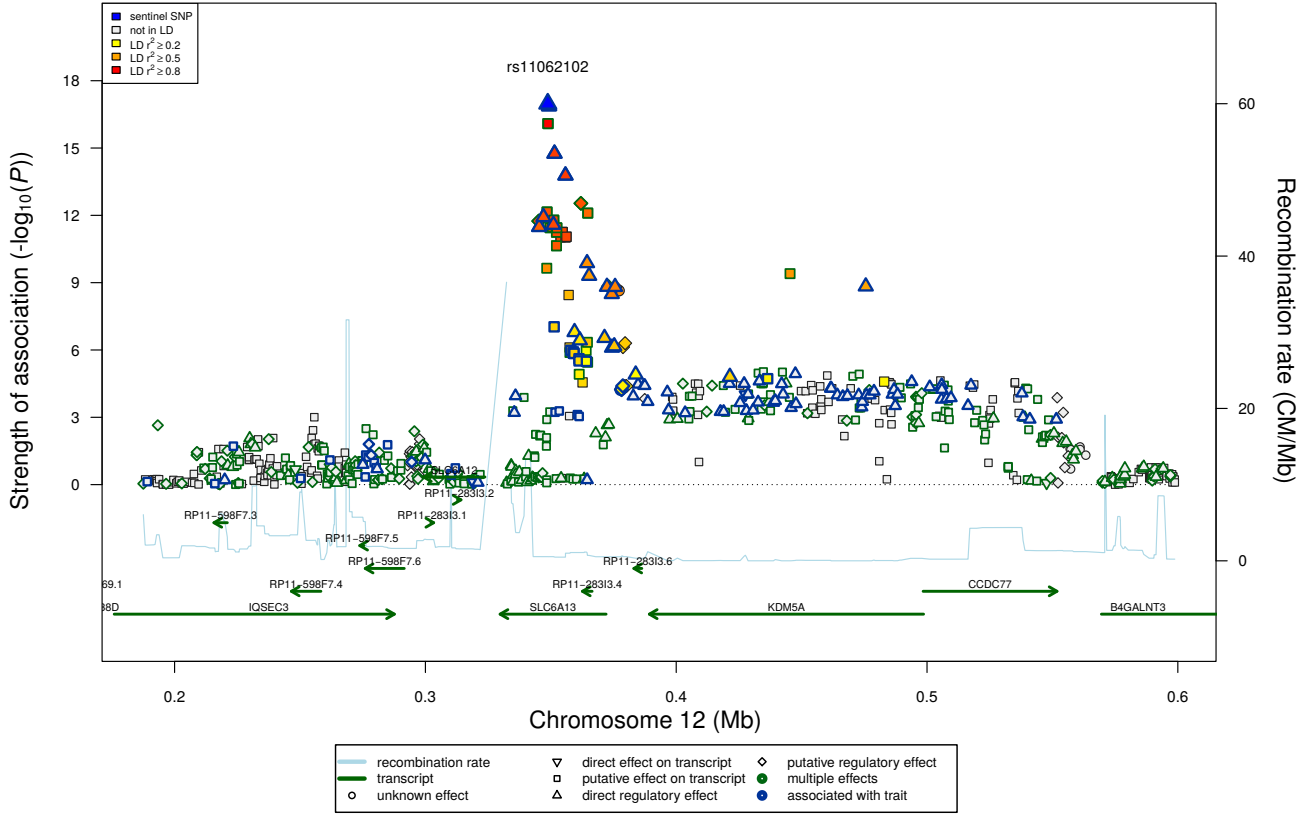
Genome-wide associations with Formate/Acetate



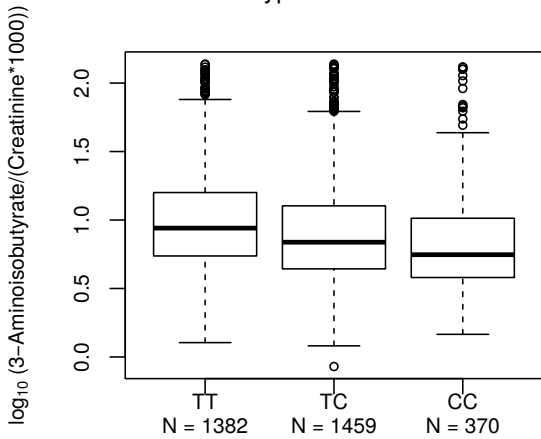


# GWAS with **targeted** metabolic traits - **SLC6A13** locus

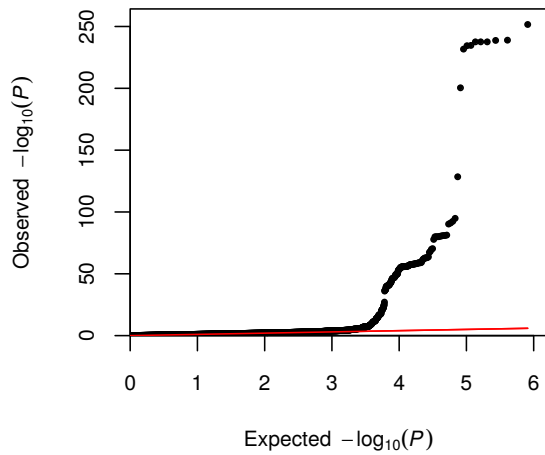
## Associations with 3-Aminoisobutyrate



Genotype of rs11062102

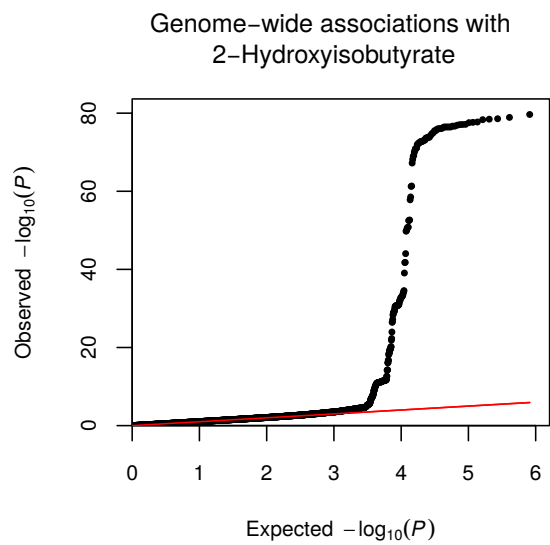
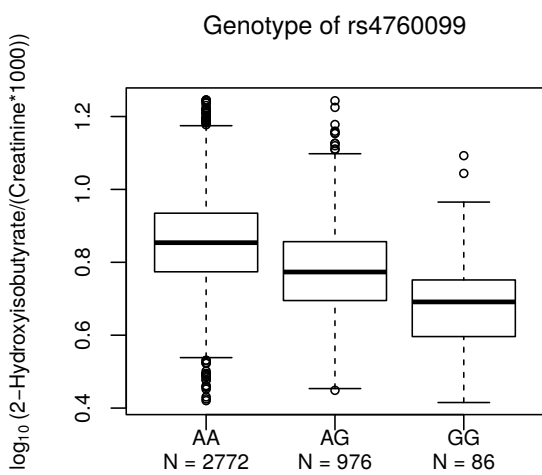
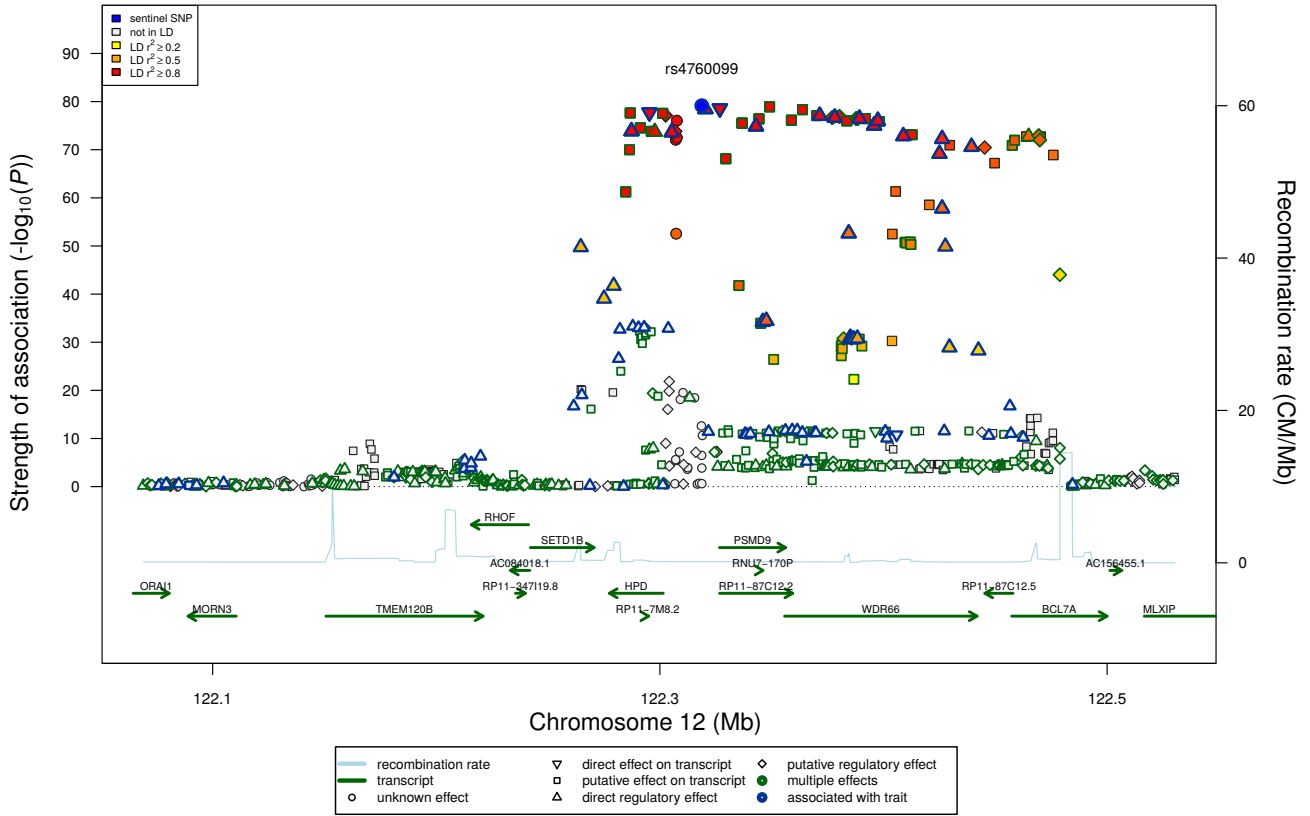


Genome-wide associations with 3-Aminoisobutyrate



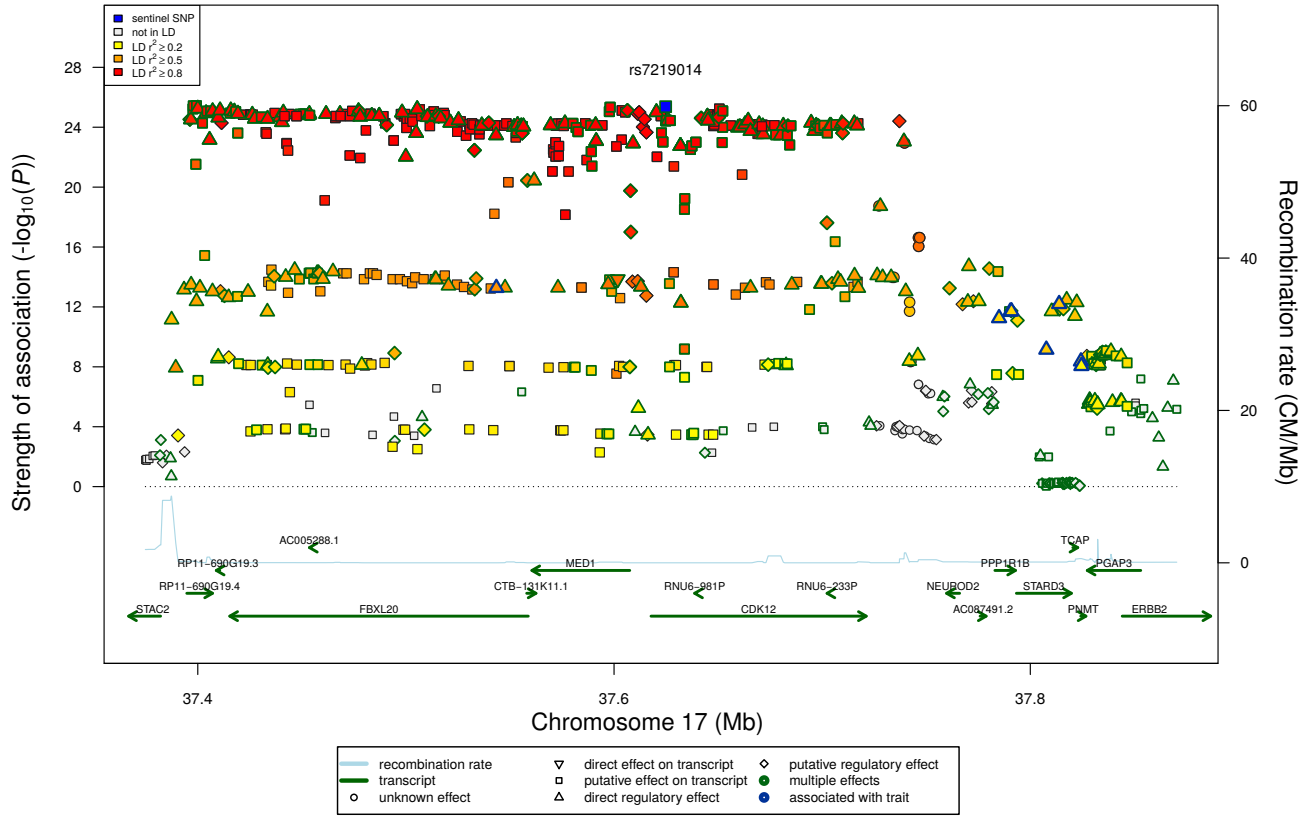
# GWAS with **targeted** metabolic traits - **HPD** locus

## Associations with 2-Hydroxyisobutyrate

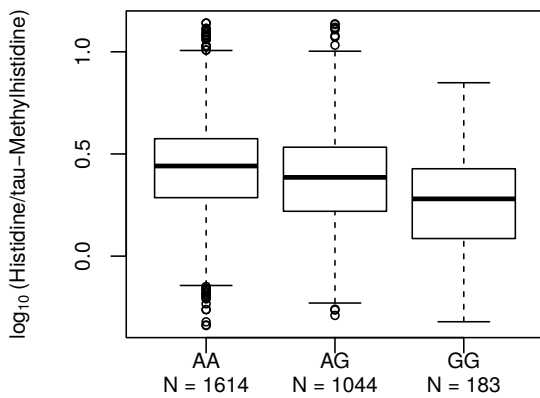


# GWAS with **targeted** metabolic traits - PNMT locus

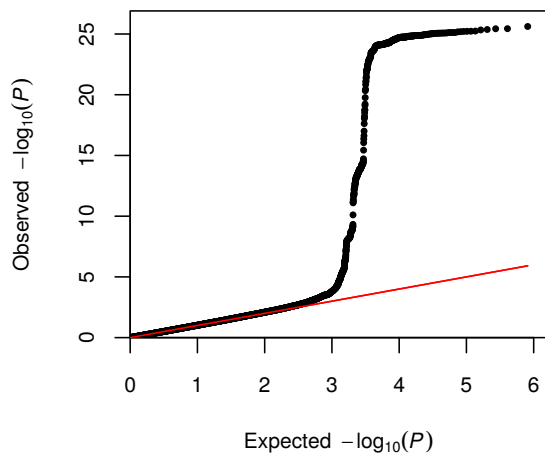
## Associations with Histidine/tau-Methylhistidine



Genotype of rs7219014

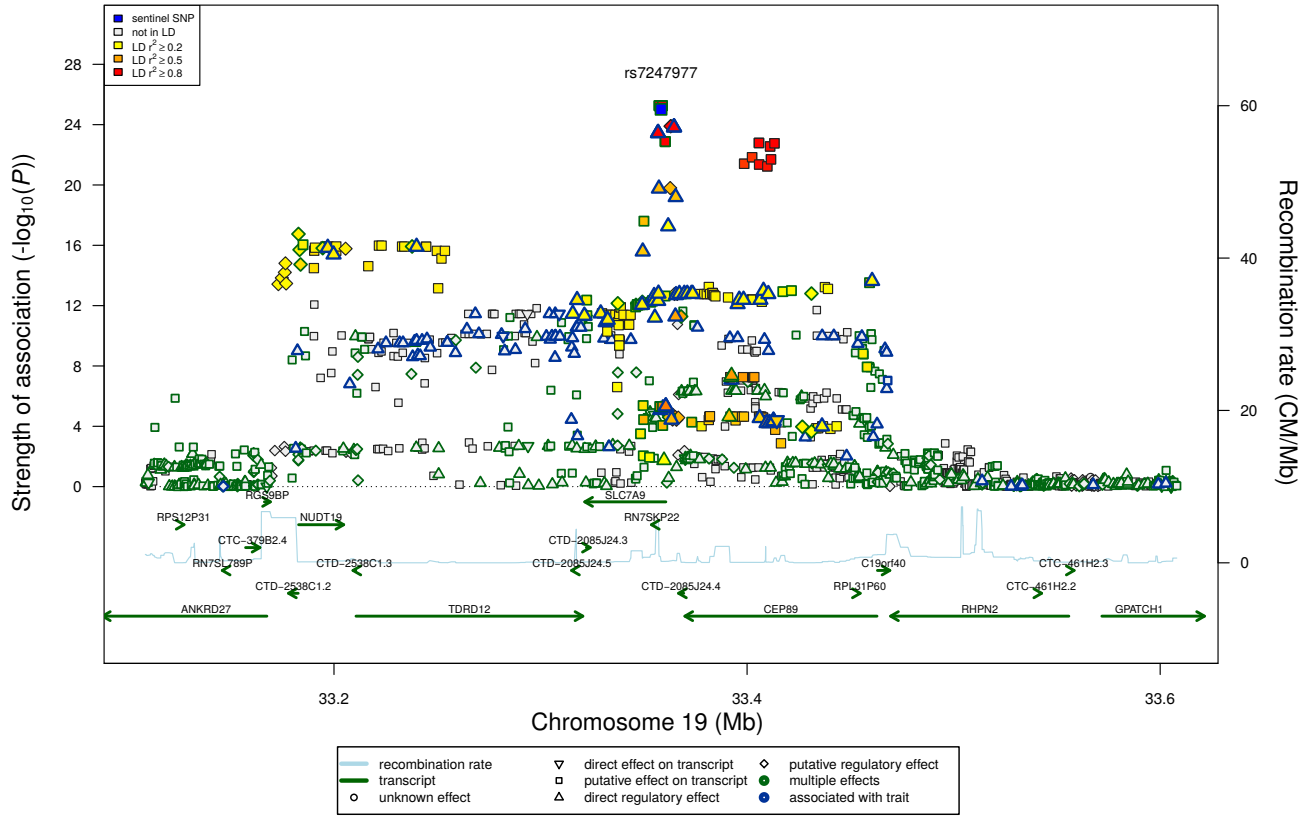


Genome-wide associations with Histidine/tau-Methylhistidine

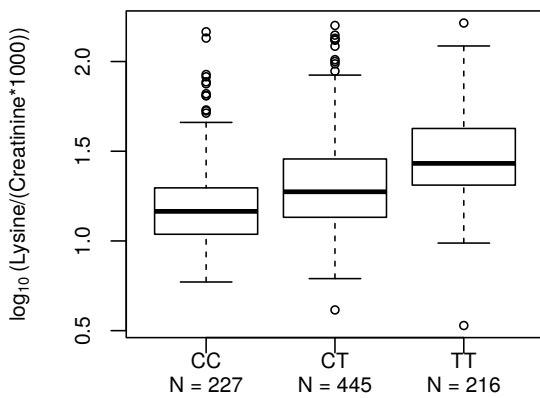


# GWAS with **targeted** metabolic traits - **SLC7A9** locus

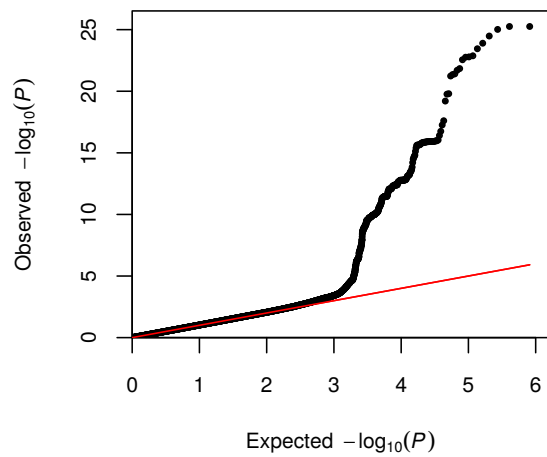
## Associations with Lysine



Genotype of rs7247977

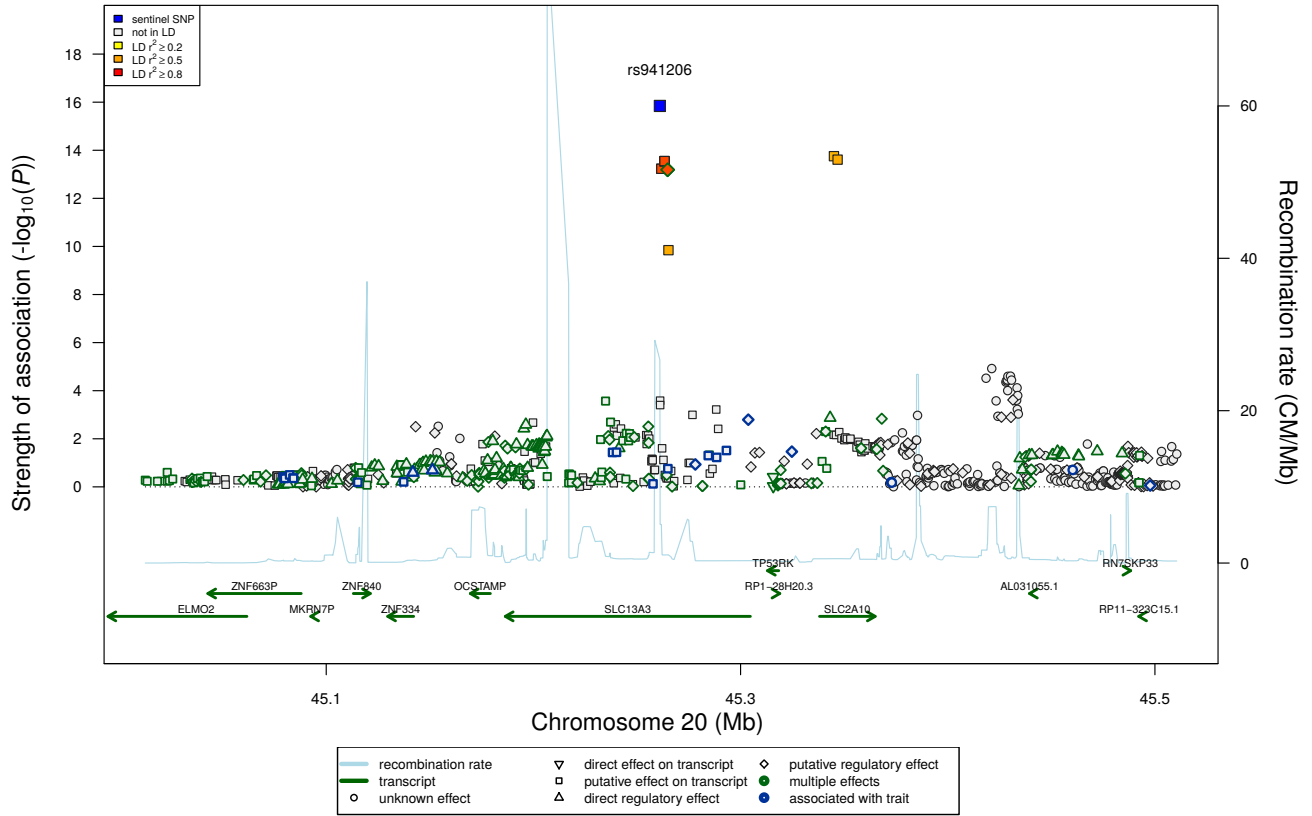


Genome-wide associations with Lysine

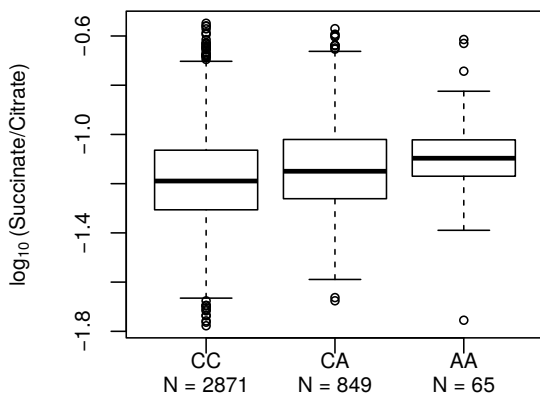


# GWAS with **targeted** metabolic traits - **SLC13A3** locus

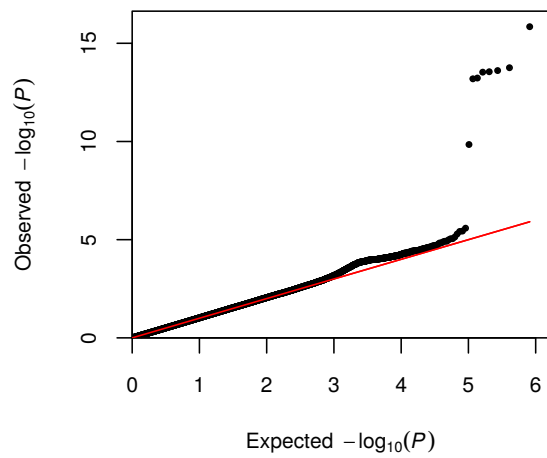
## Associations with Succinate/Citrate



Genotype of rs941206

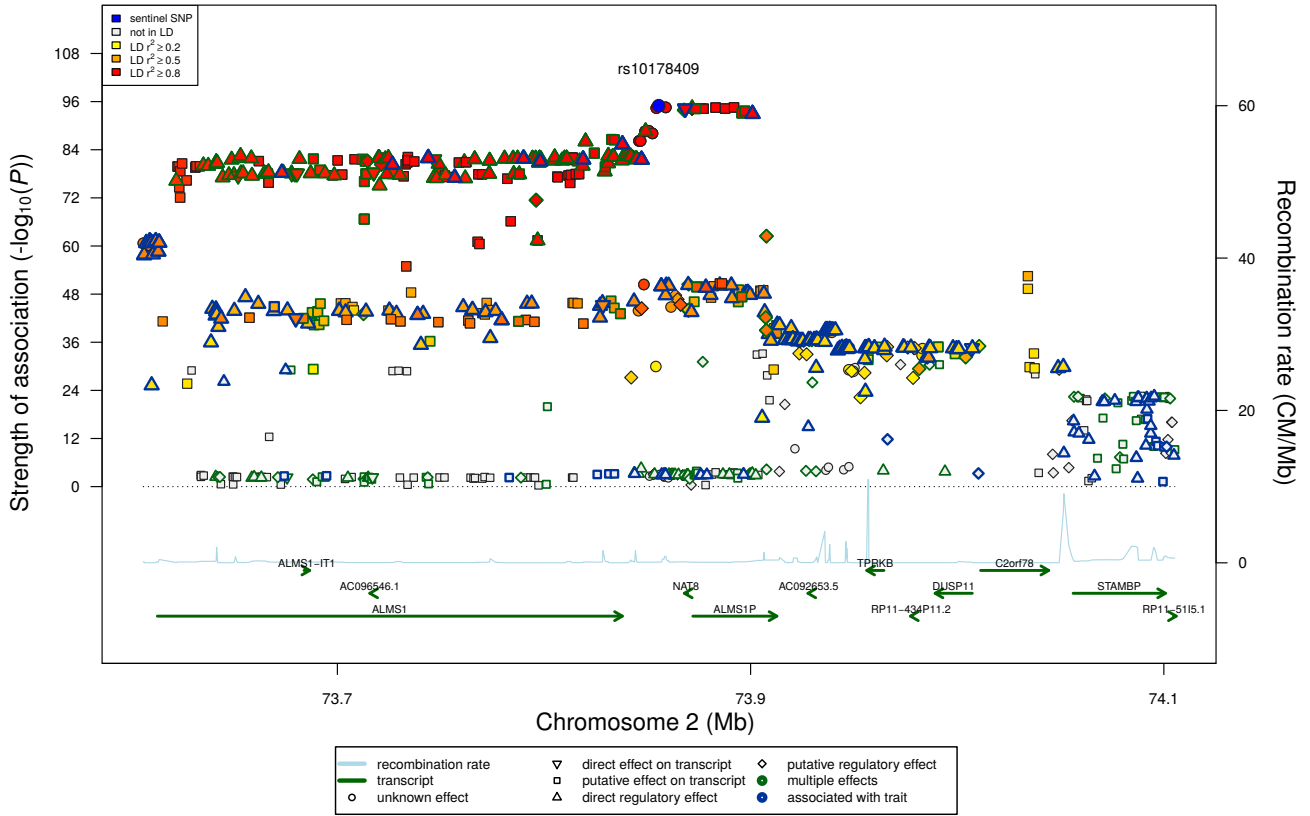


Genome-wide associations with Succinate/Citrate

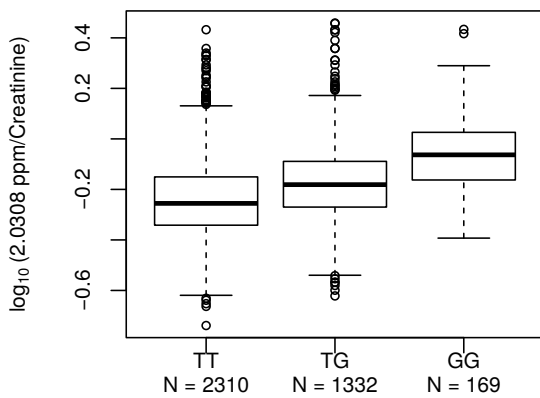


# GWAS with **non-targeted** metabolic traits - **NAT8** locus

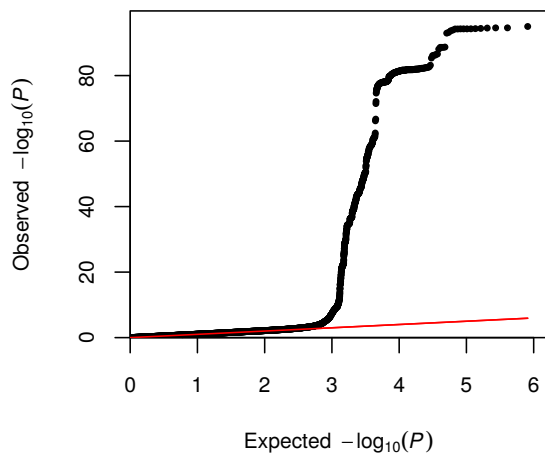
Associations with 2.0308 ppm



Genotype of rs10178409



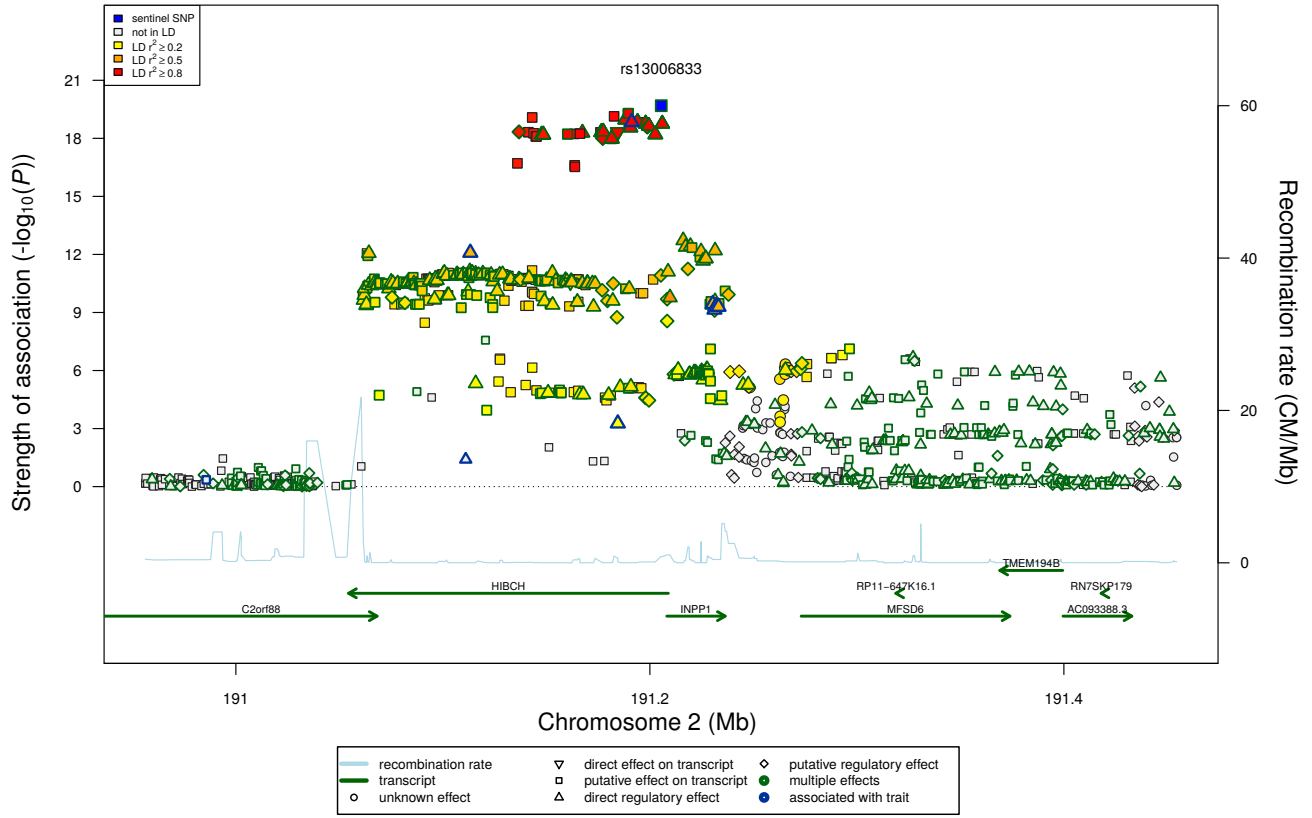
Genome-wide associations with 2.0308 ppm



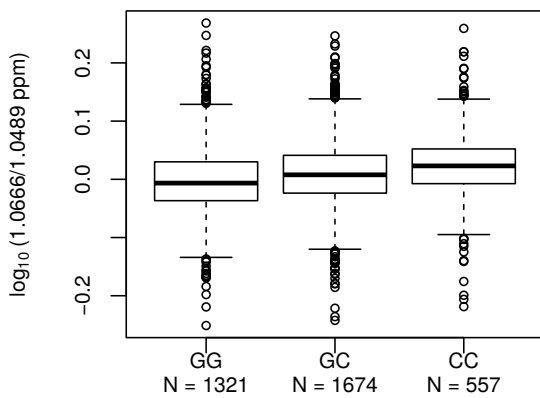


# GWAS with **non-targeted** metabolic traits - **HIBCH** locus

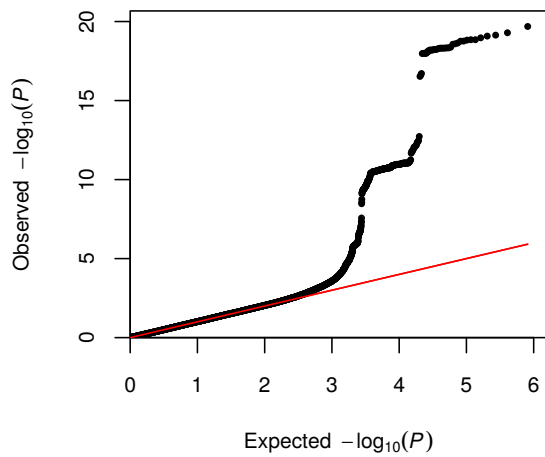
Associations with 1.0666/1.0489 ppm



Genotype of rs13006833

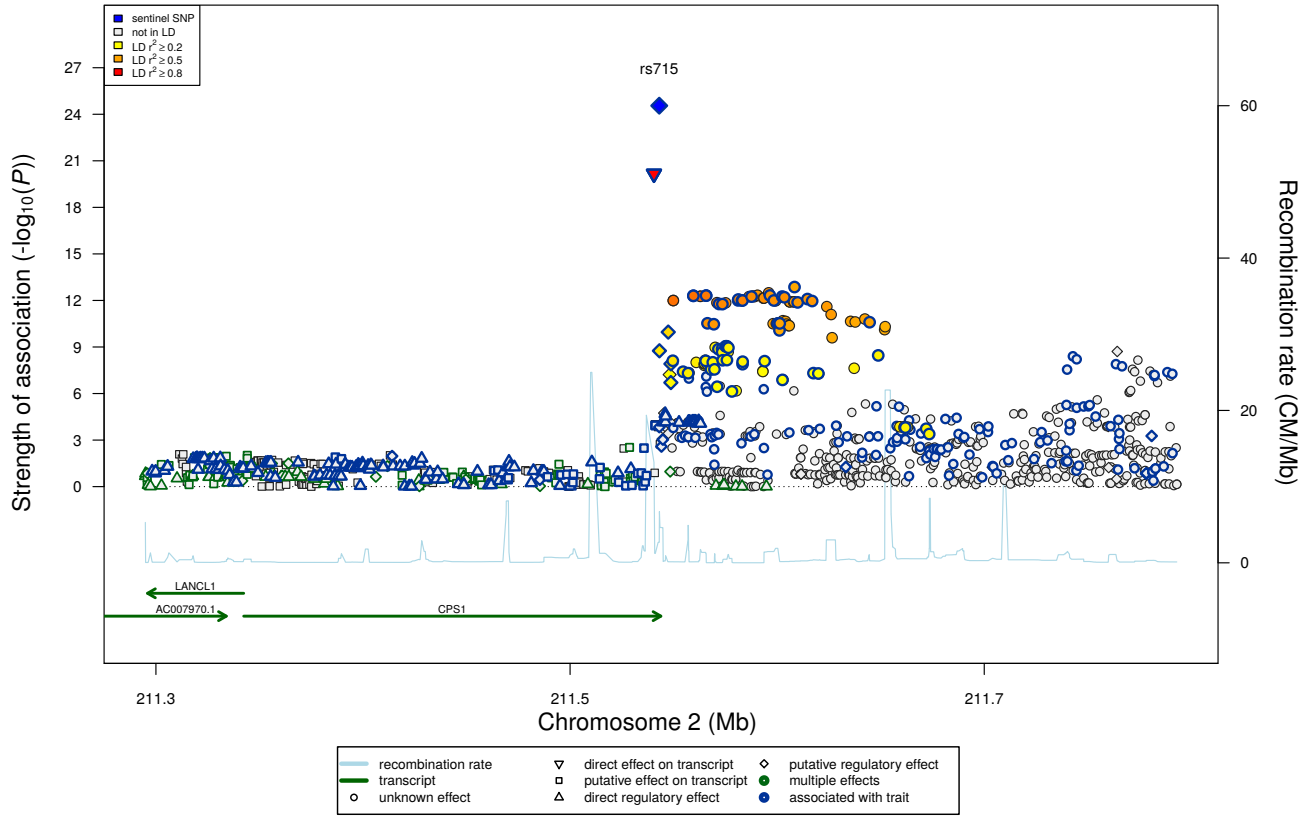


Genome-wide associations with 1.0666/1.0489 ppm

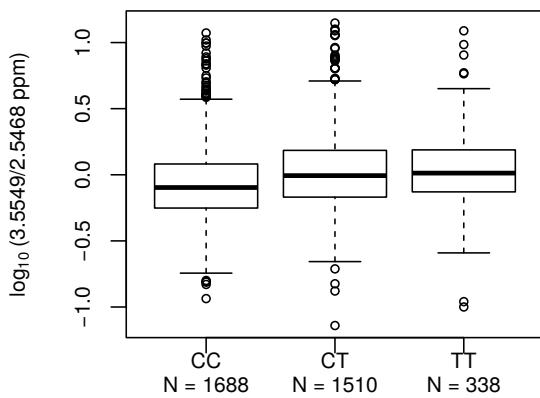


# GWAS with **non-targeted** metabolic traits - **CPS1** locus

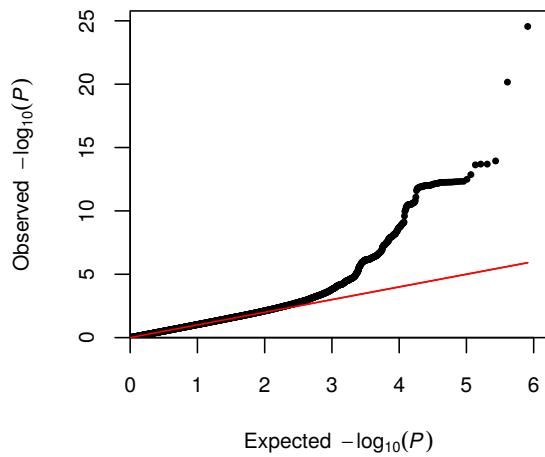
Associations with 3.5549/2.5468 ppm



Genotype of rs715

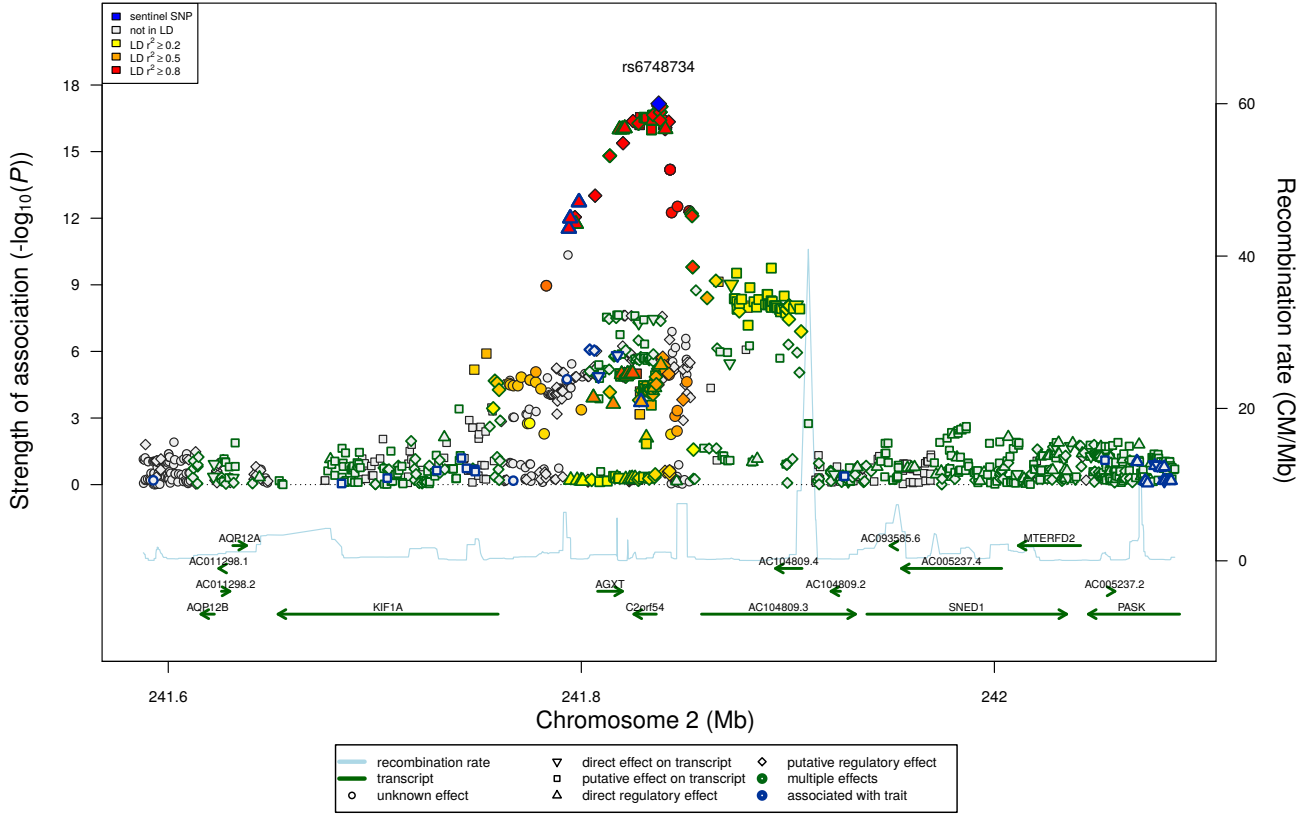


Genome-wide associations with 3.5549/2.5468 ppm

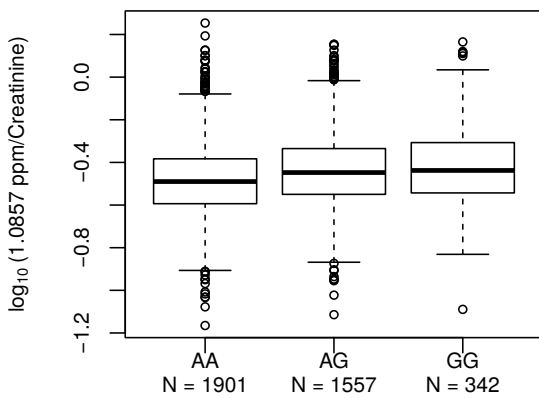


# GWAS with non-targeted metabolic traits - AGXT locus

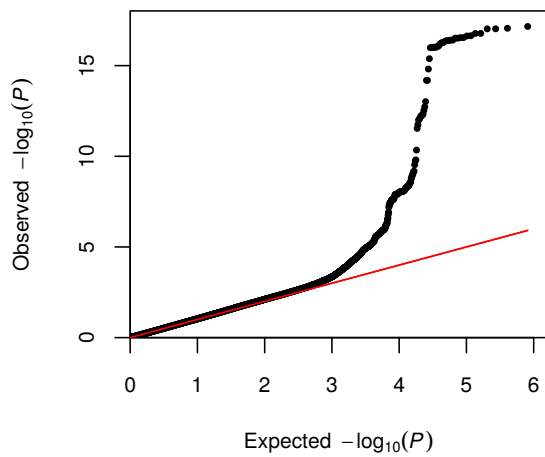
Associations with 1.0857 ppm



Genotype of rs6748734

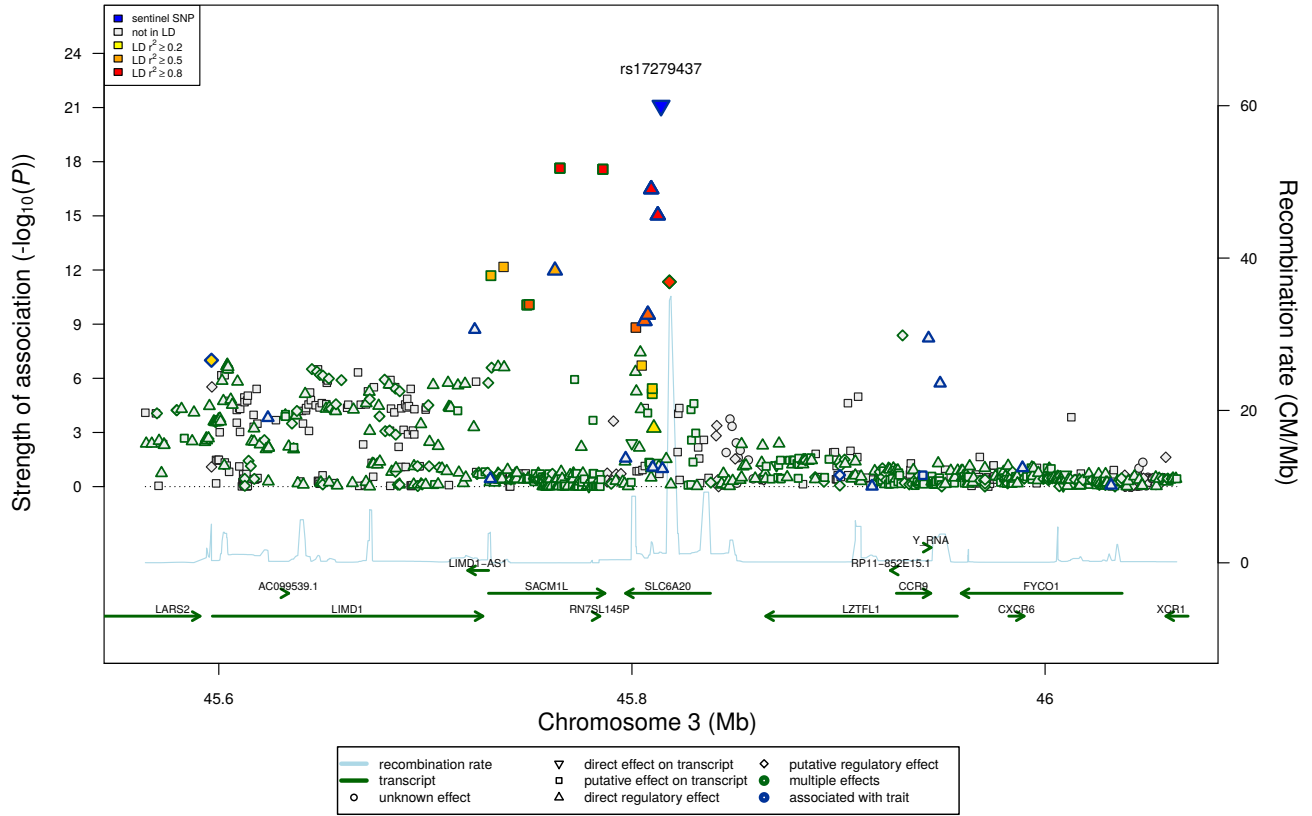


Genome-wide associations with 1.0857 ppm

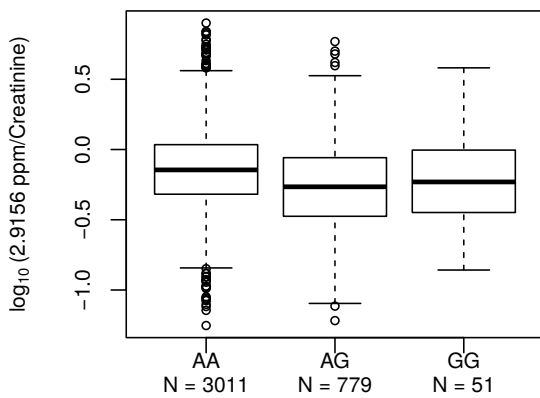


# GWAS with **non-targeted** metabolic traits - **SLC6A20** locus

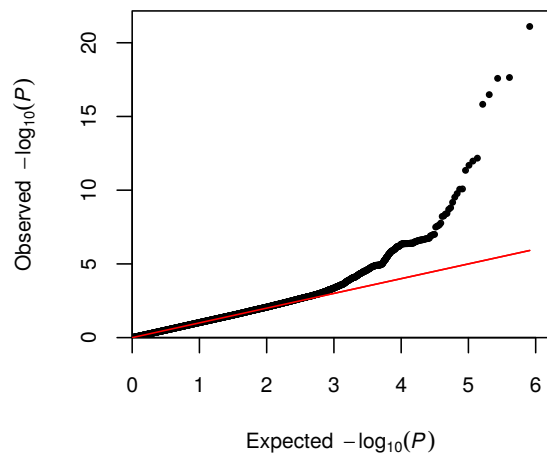
Associations with 2.9156 ppm



Genotype of rs17279437

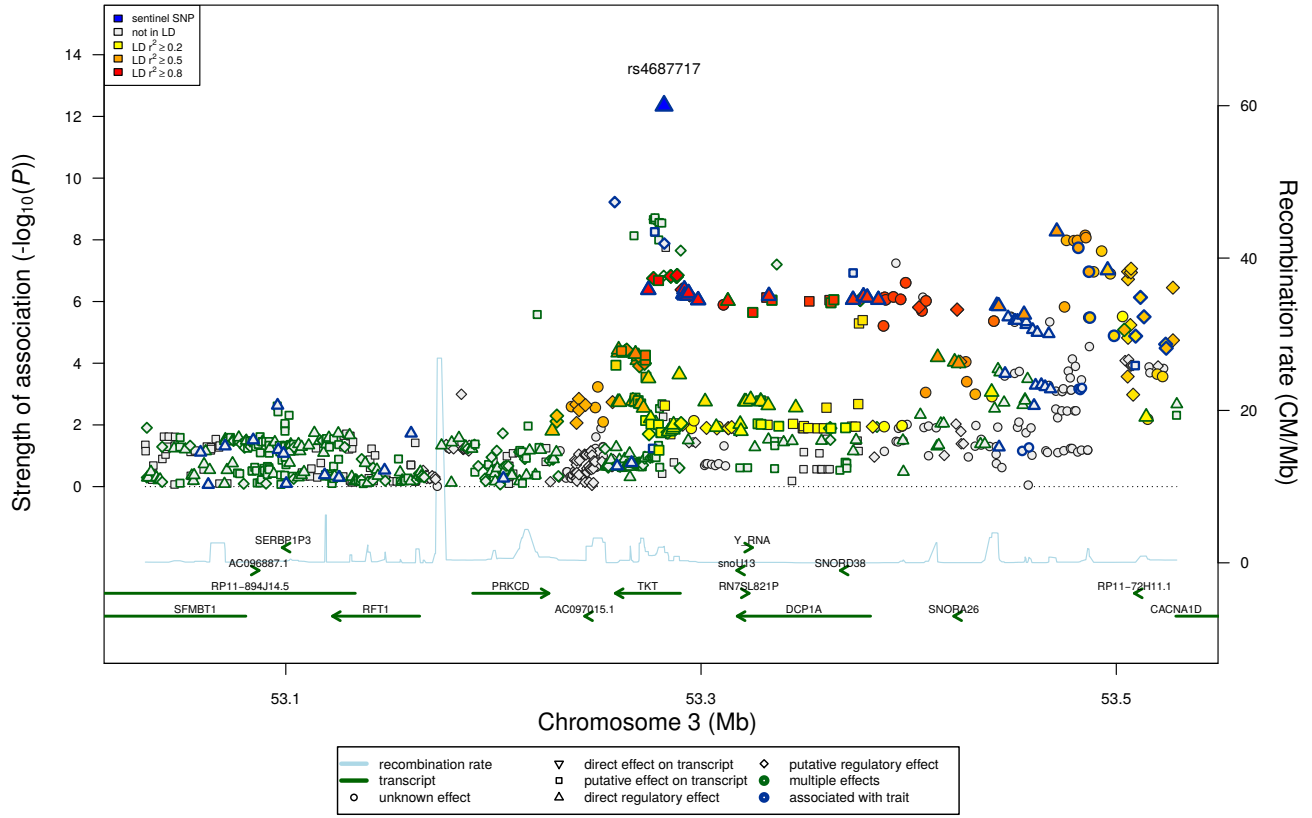


Genome-wide associations with 2.9156 ppm

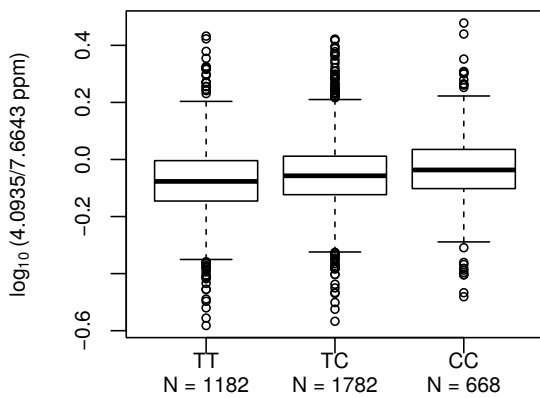


# GWAS with **non-targeted** metabolic traits - **TKT** locus

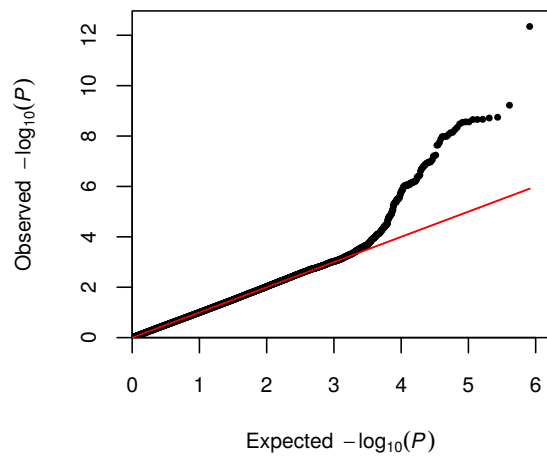
Associations with 4.0935/7.6643 ppm



Genotype of rs4687717

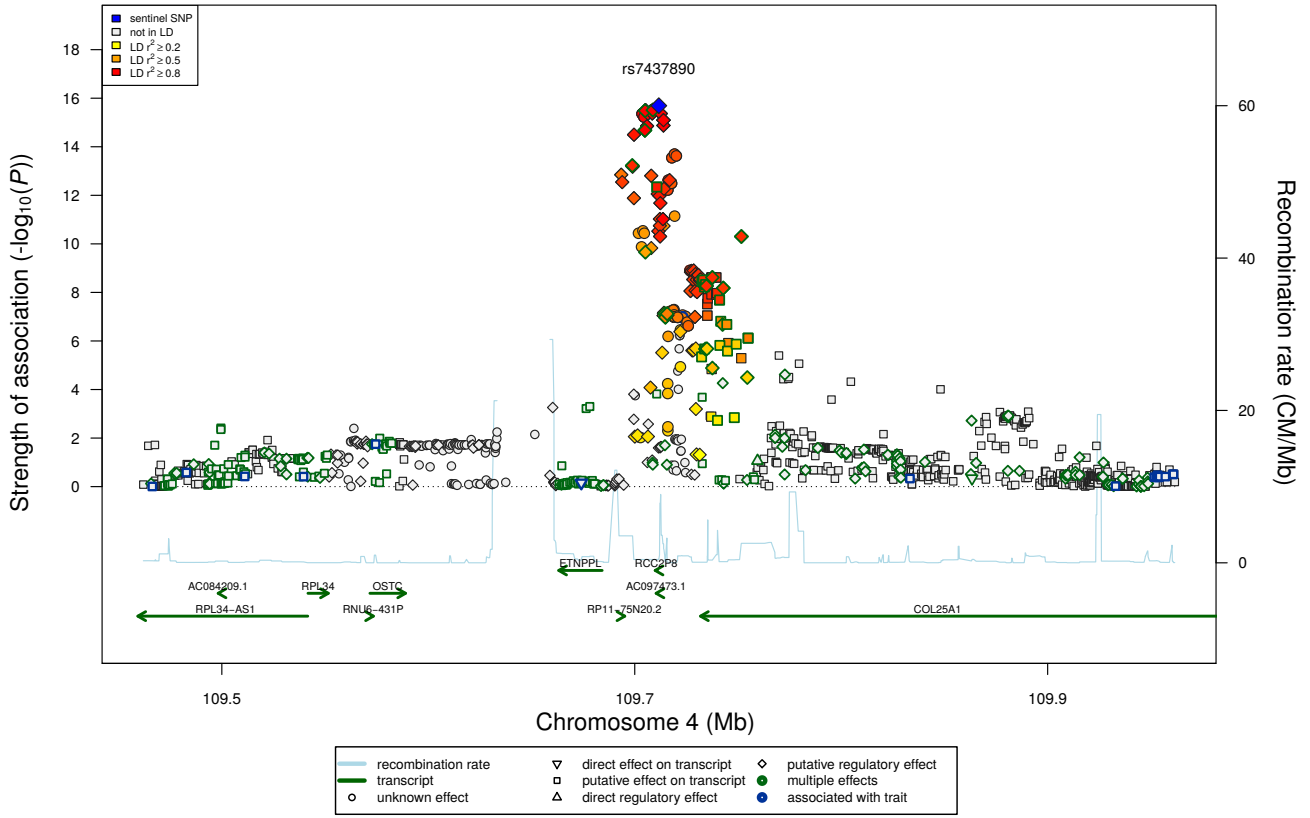


Genome-wide associations with 4.0935/7.6643 ppm

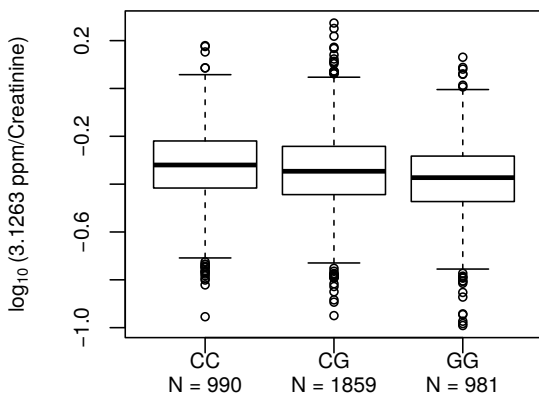


# GWAS with **non-targeted** metabolic traits - **ETNPPL** locus

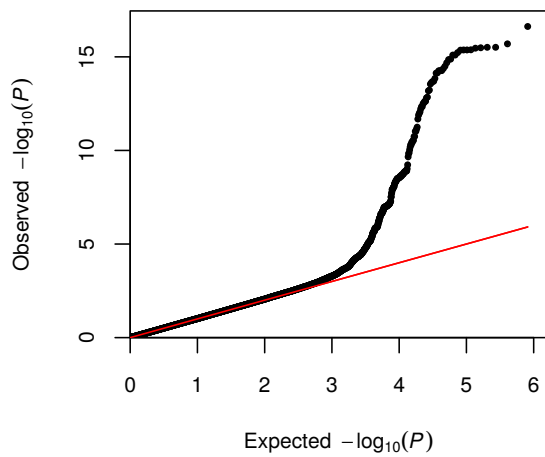
Associations with 3.1263 ppm



Genotype of rs7437890

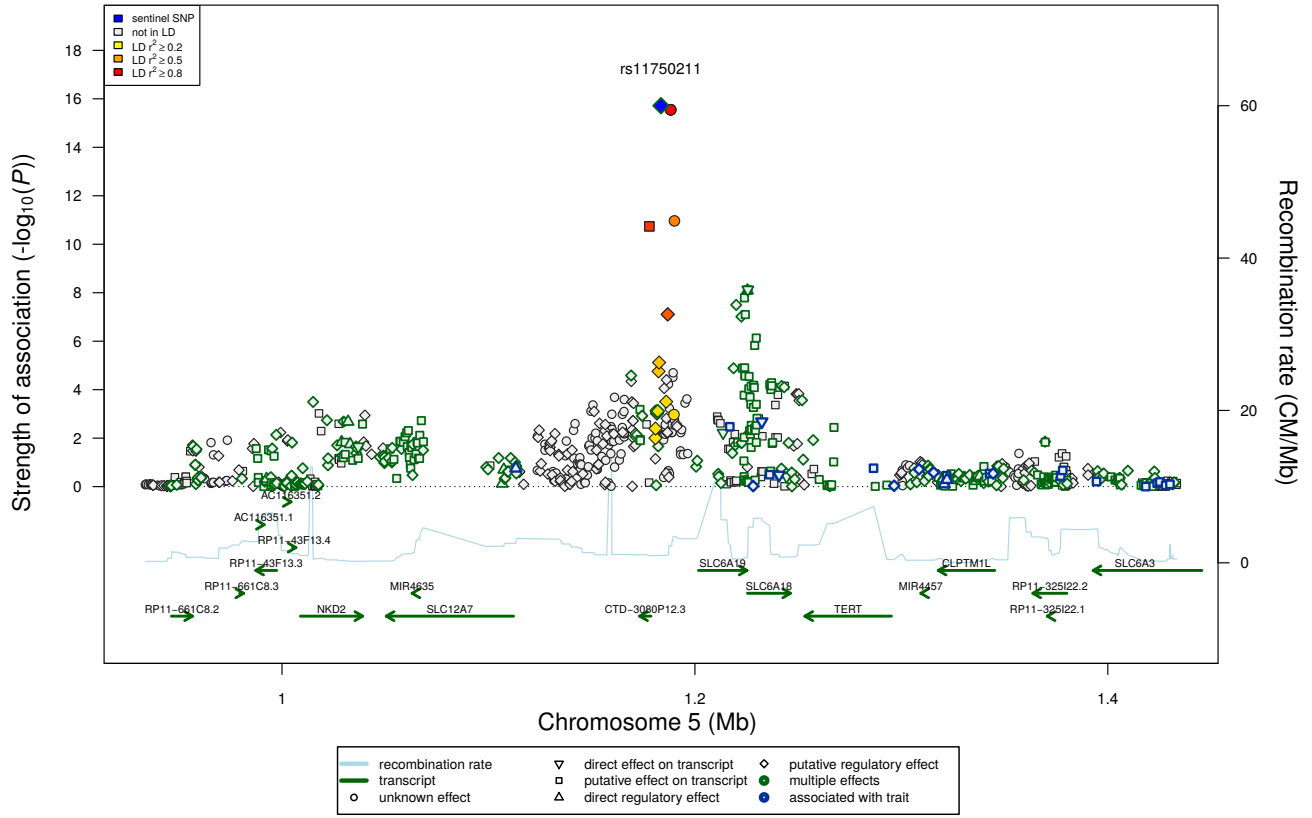


Genome-wide associations with 3.1263 ppm

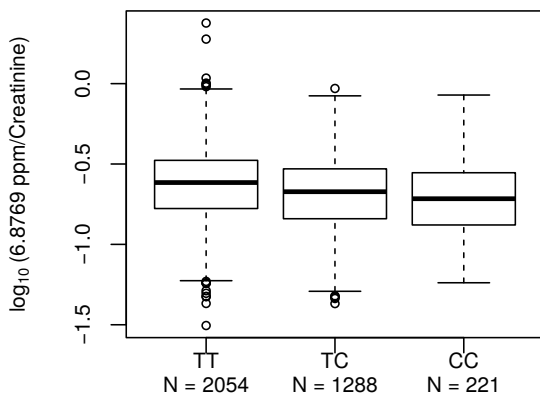


# GWAS with **non-targeted** metabolic traits - **SLC6A19** locus

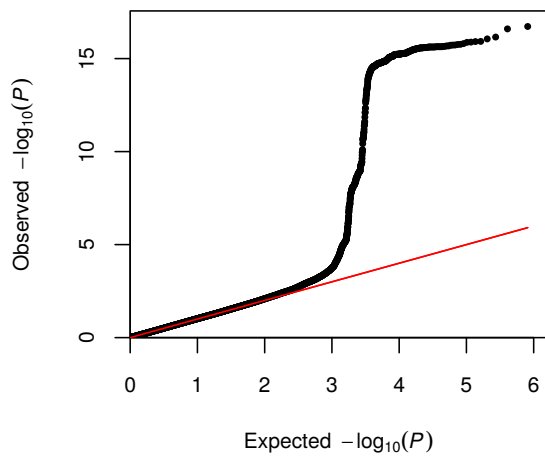
Associations with 6.8769 ppm



Genotype of rs11750211

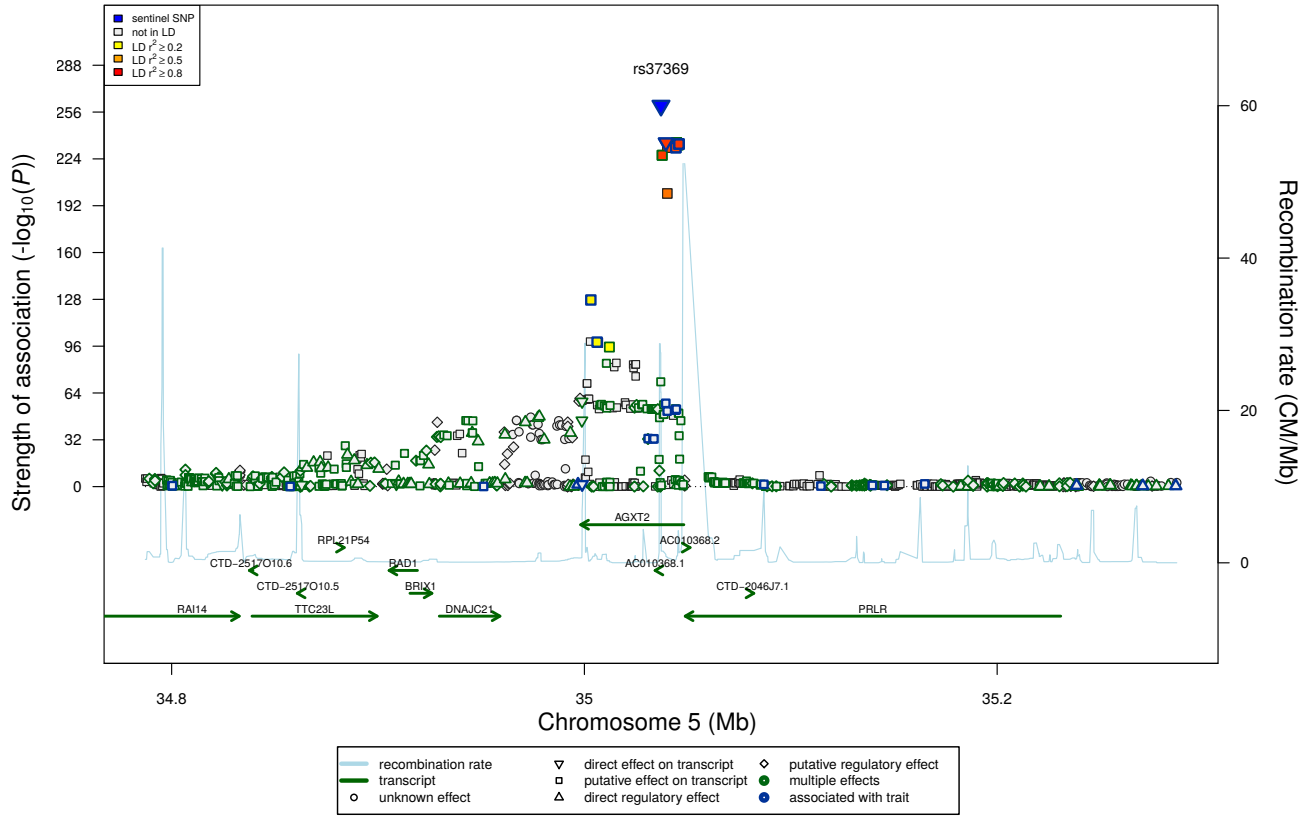


Genome-wide associations with 6.8769 ppm

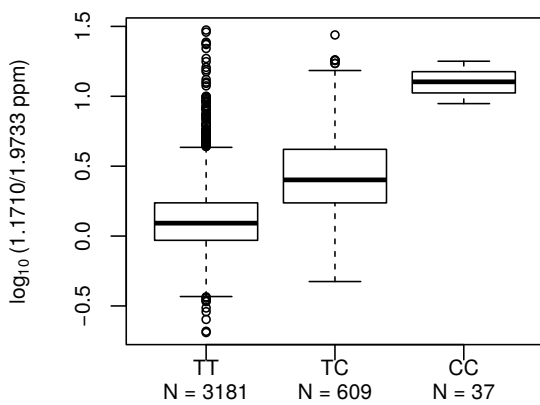


# GWAS with **non-targeted** metabolic traits - **AGXT2** locus

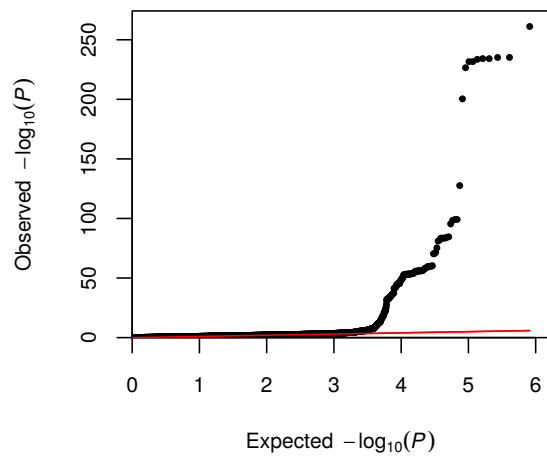
Associations with 1.1710/1.9733 ppm



Genotype of rs37369



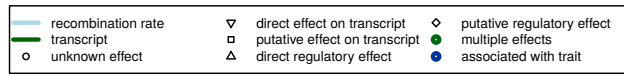
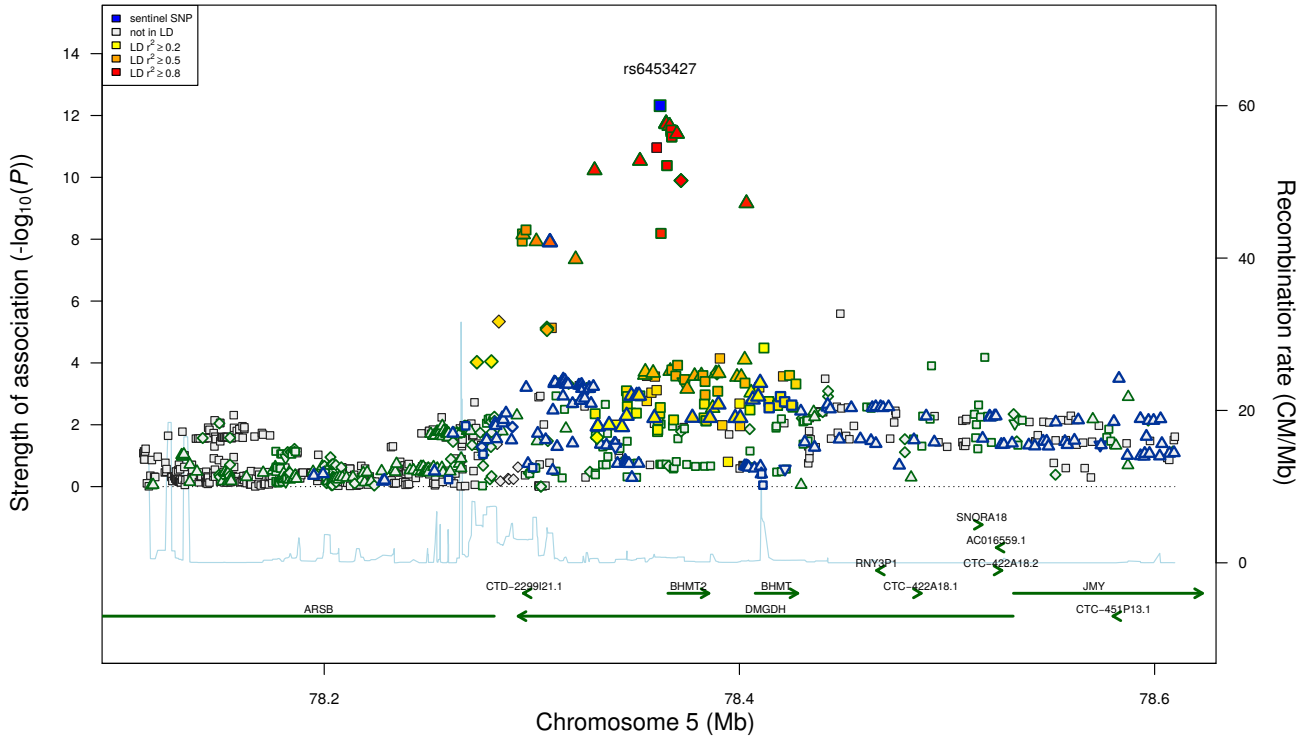
Genome-wide associations with 1.1710/1.9733 ppm



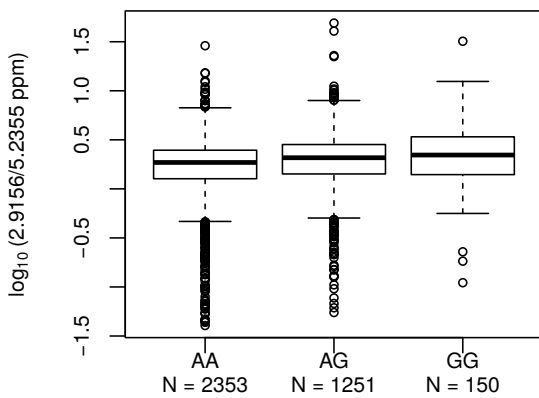


# GWAS with **non-targeted** metabolic traits - **DMGDH** locus

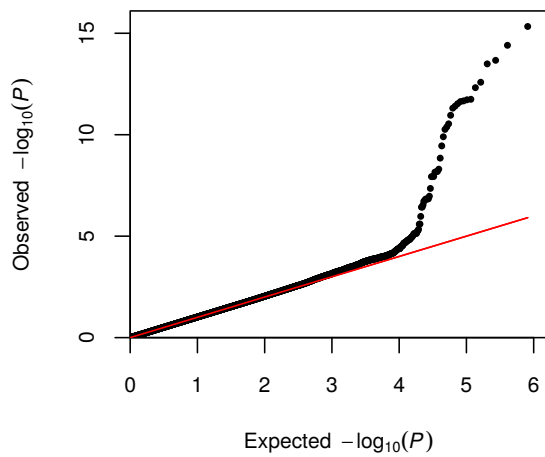
Associations with 2.9156/5.2355 ppm



Genotype of rs6453427

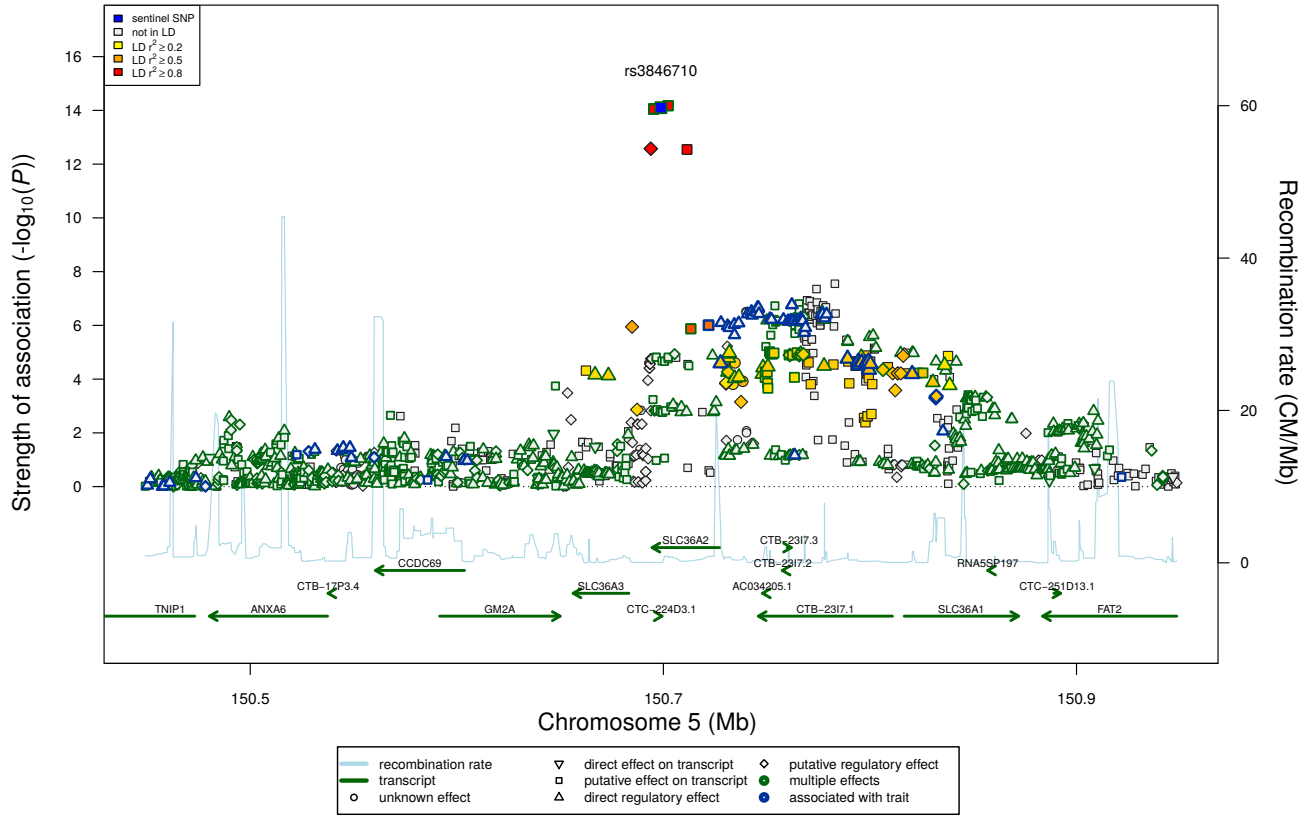


Genome-wide associations with 2.9156/5.2355 ppm

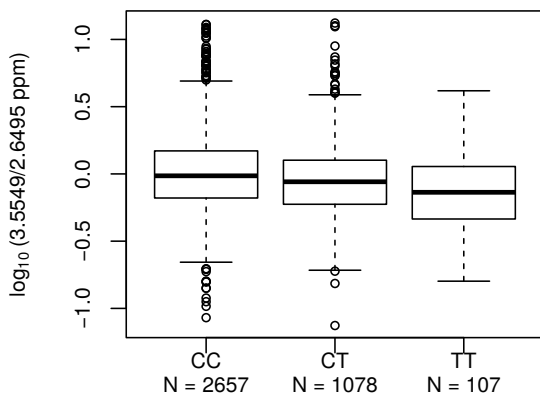


# GWAS with **non-targeted** metabolic traits - **SLC36A2** locus

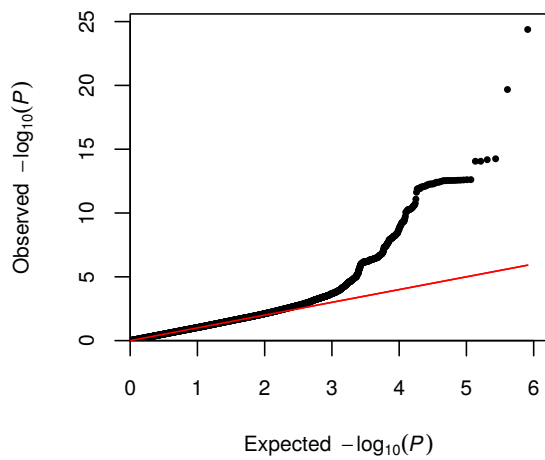
Associations with 3.5549/2.6495 ppm



Genotype of rs3846710

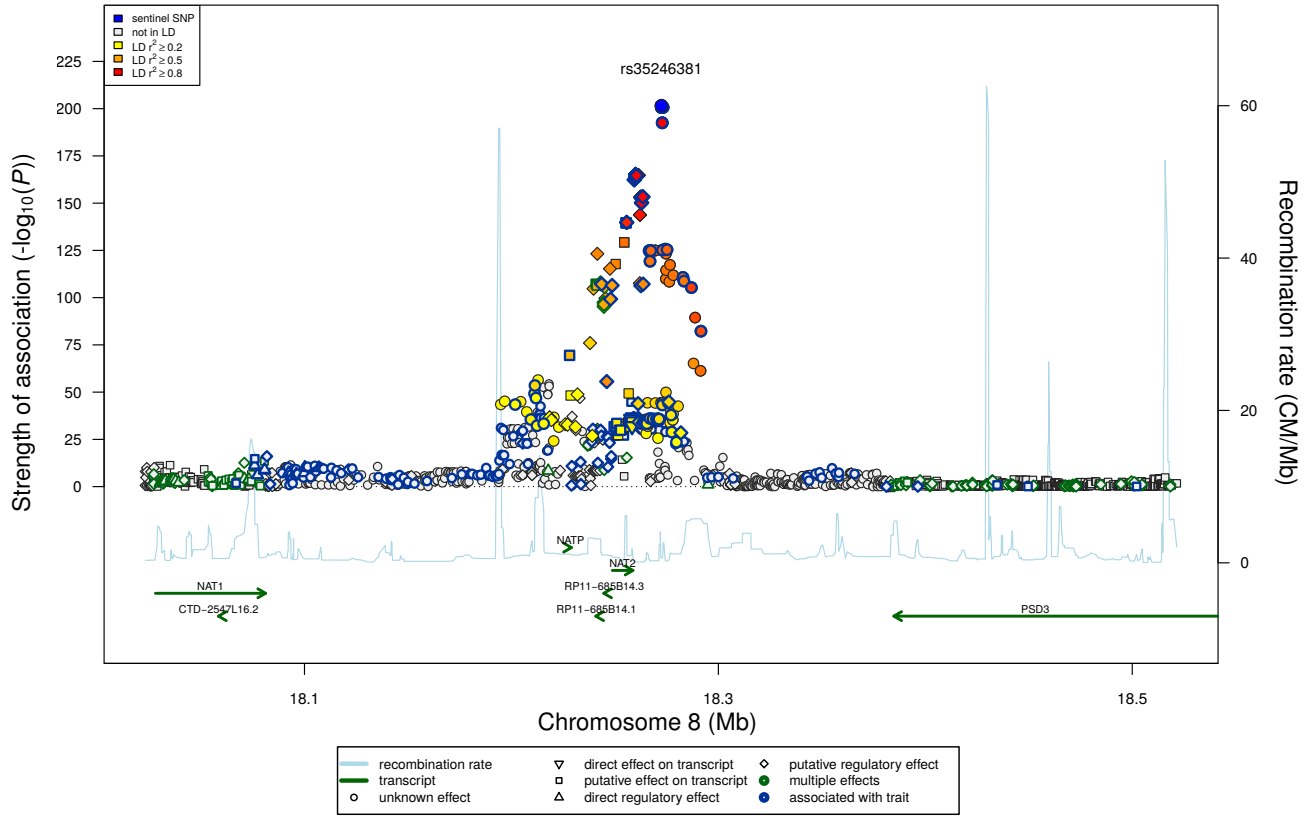


Genome-wide associations with 3.5549/2.6495 ppm

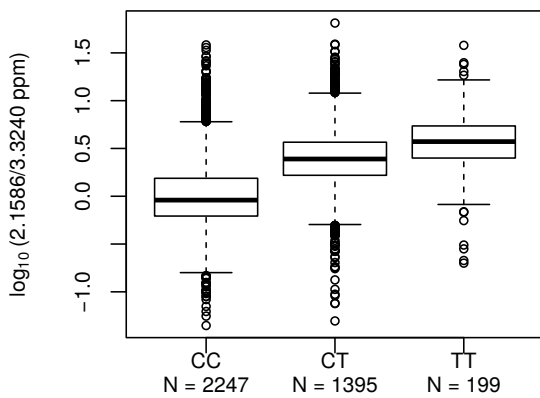


# GWAS with **non-targeted** metabolic traits - **NAT2** locus

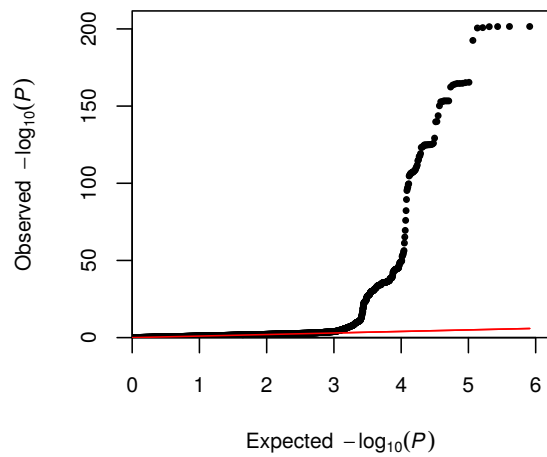
Associations with 2.1586/3.3240 ppm



Genotype of rs35246381

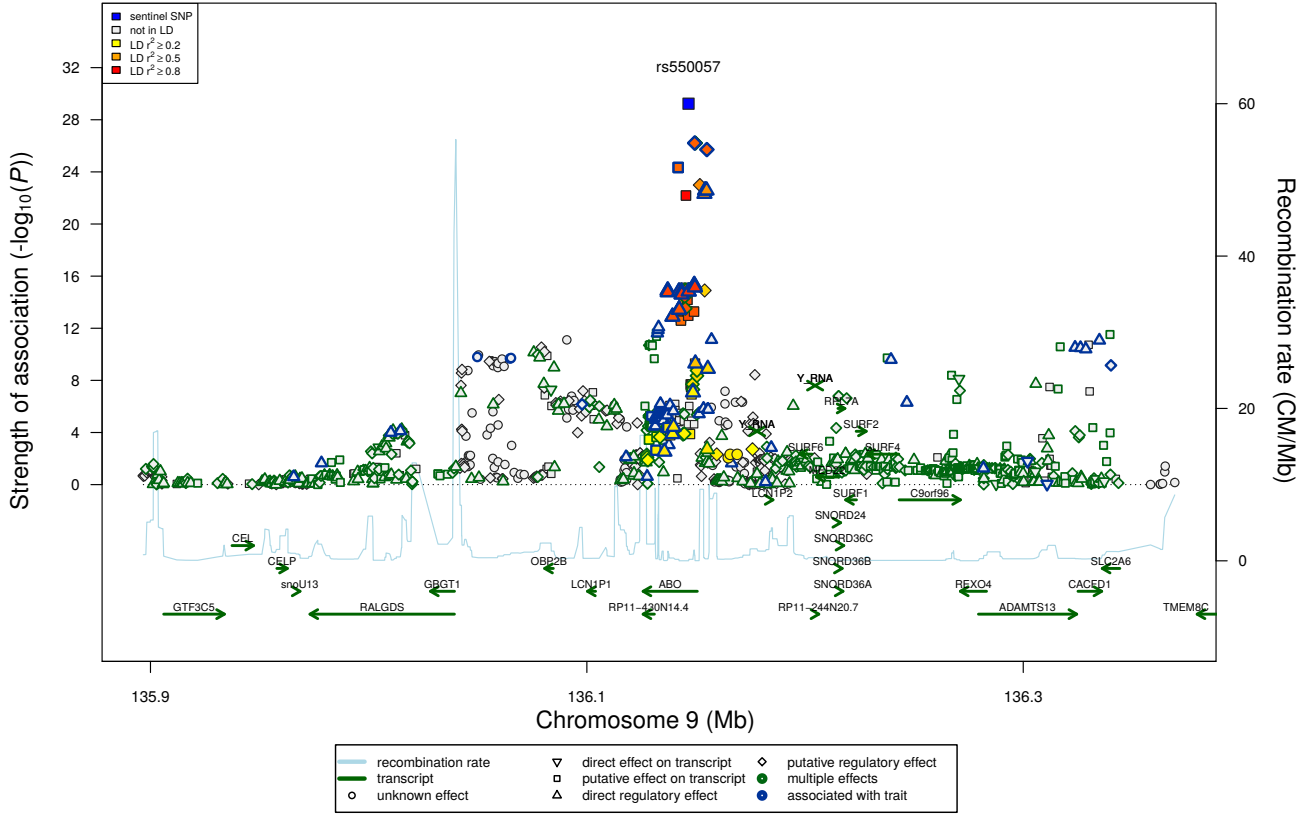


Genome-wide associations with 2.1586/3.3240 ppm

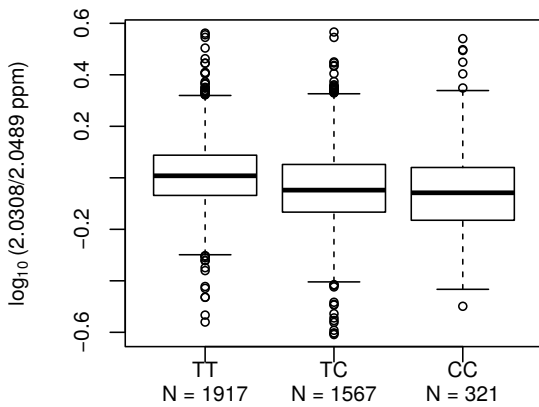


# GWAS with **non-targeted** metabolic traits - **ABO** locus

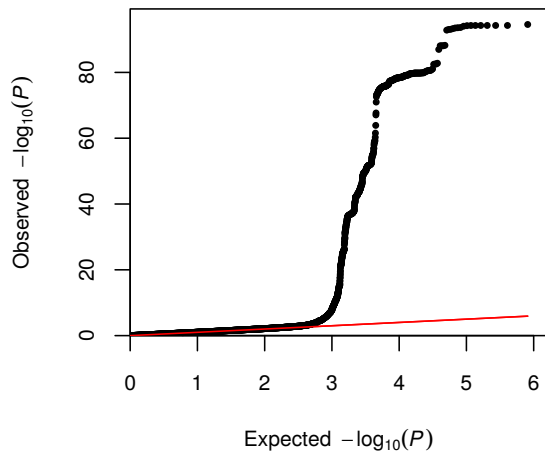
Associations with 2.0308/2.0489 ppm



Genotype of rs550057

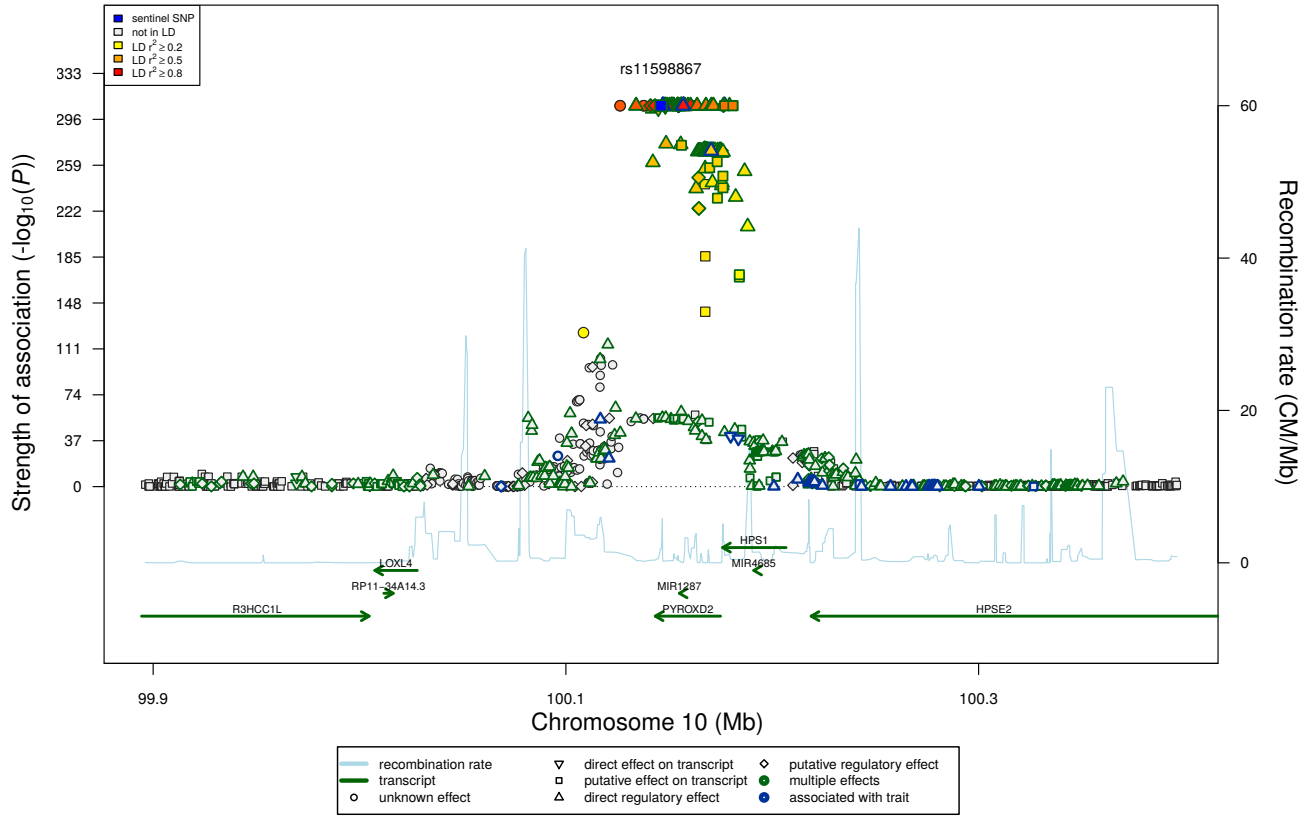


Genome-wide associations with 2.0308/2.0489 ppm

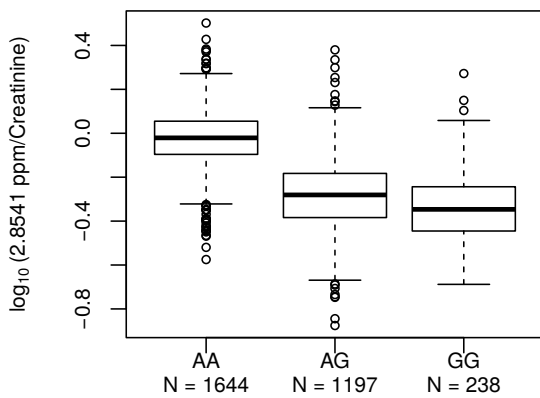


# GWAS with non-targeted metabolic traits - PYROXD2 locus

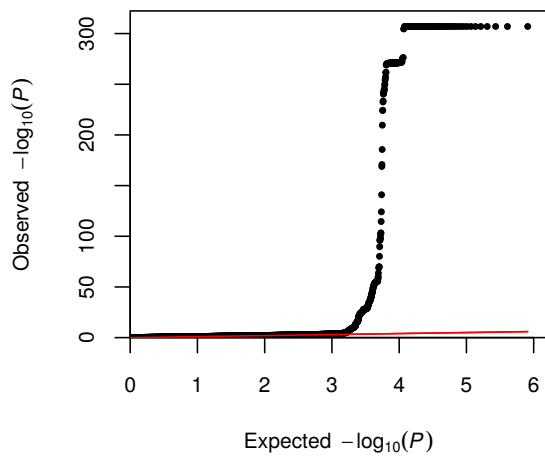
Associations with 2.8541 ppm



Genotype of rs11598867

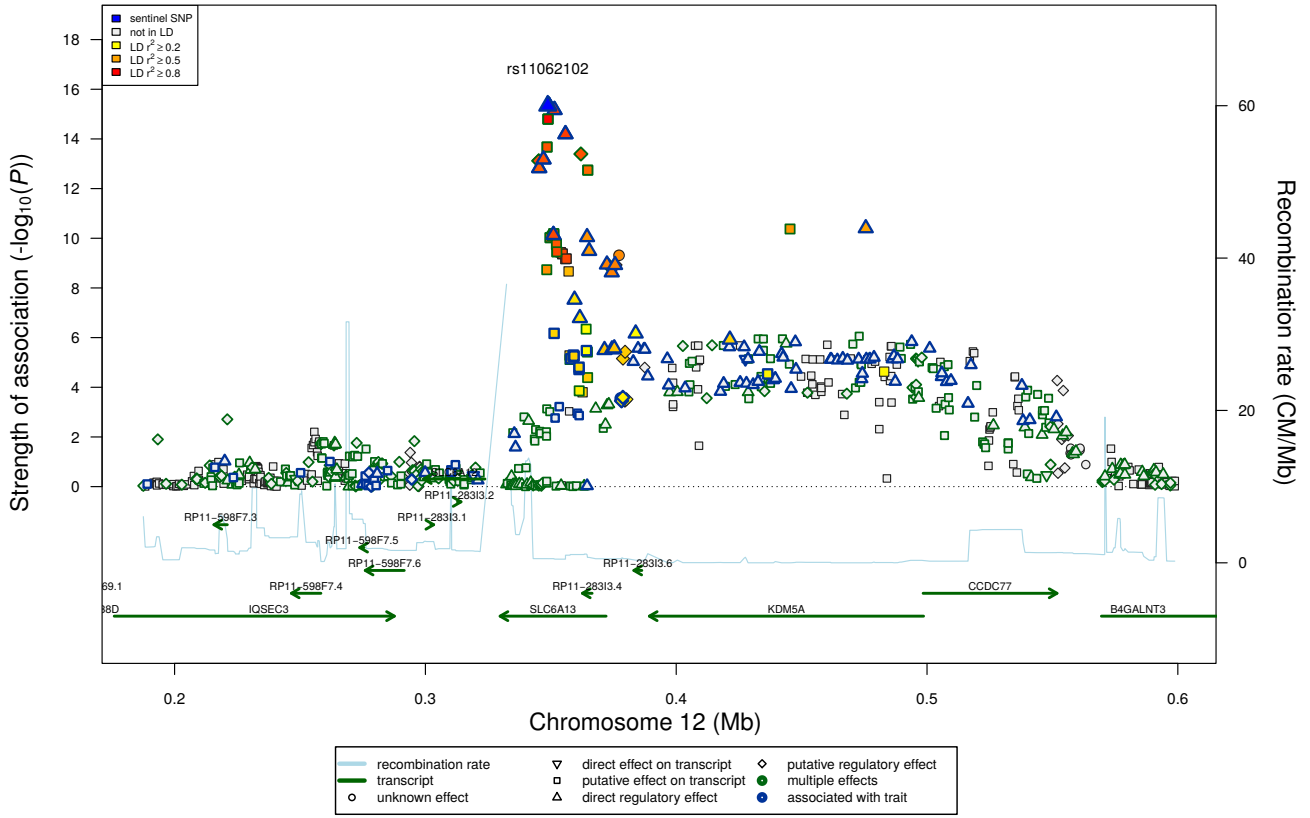


Genome-wide associations with 2.8541 ppm

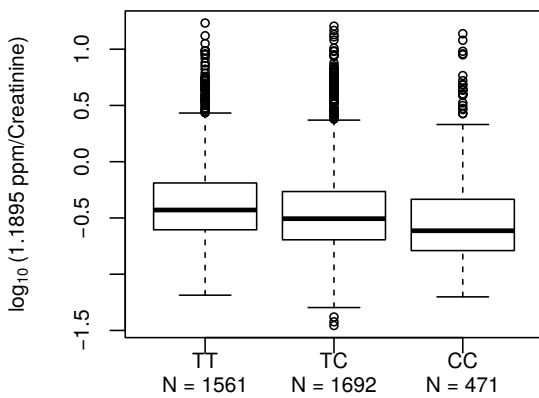


# GWAS with **non-targeted** metabolic traits - **SLC6A13** locus

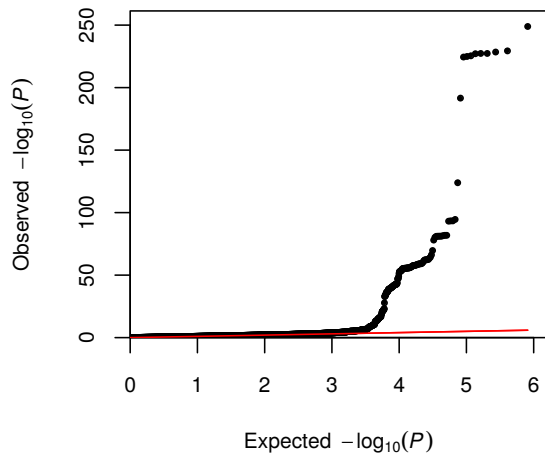
Associations with 1.1895 ppm



Genotype of rs11062102

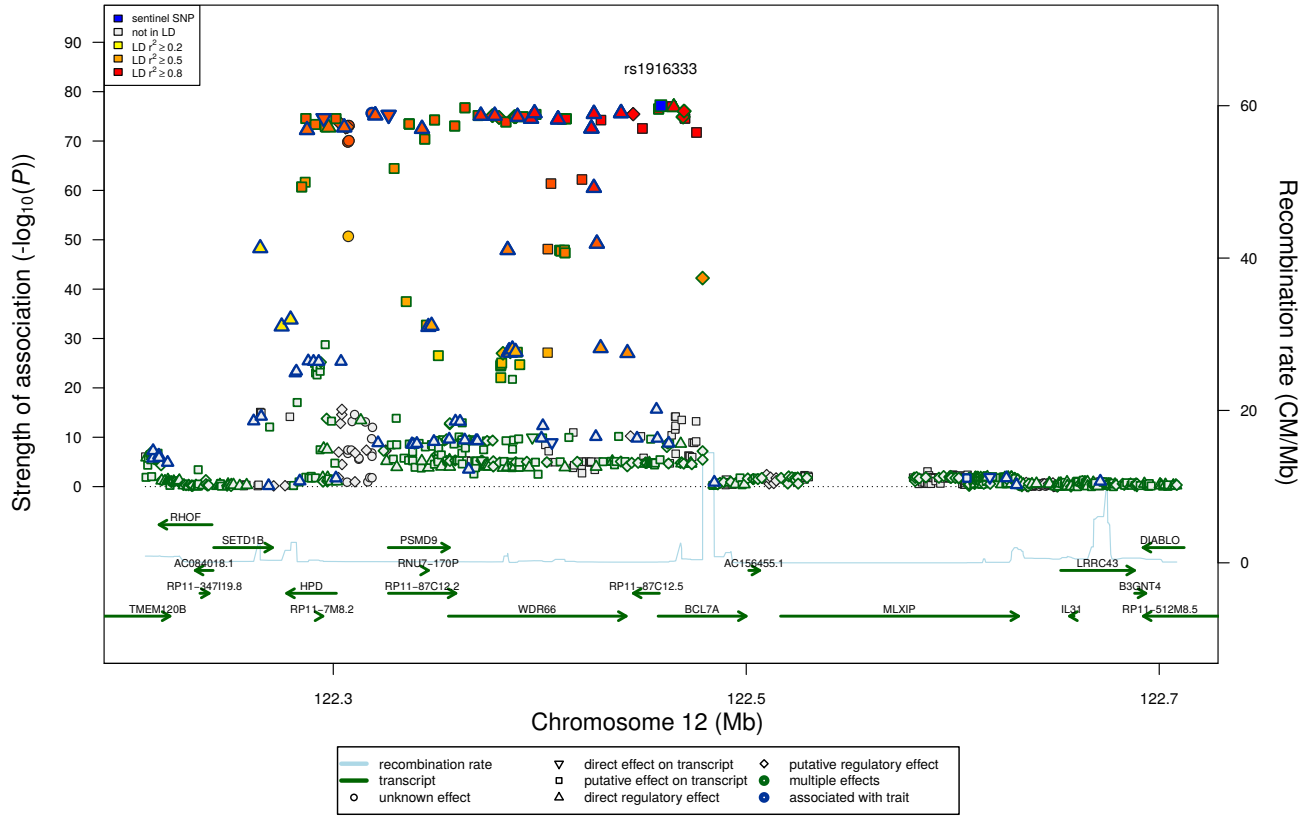


Genome-wide associations with 1.1895 ppm

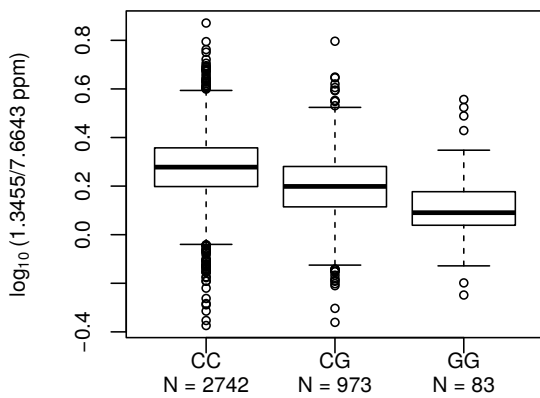


# GWAS with **non-targeted** metabolic traits - **HPD** locus

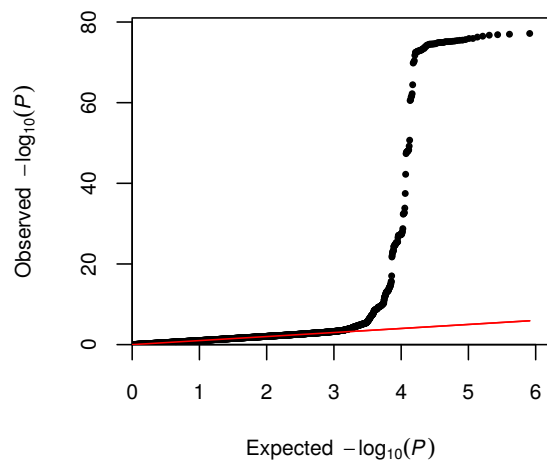
Associations with 1.3455/7.6643 ppm



Genotype of rs1916333

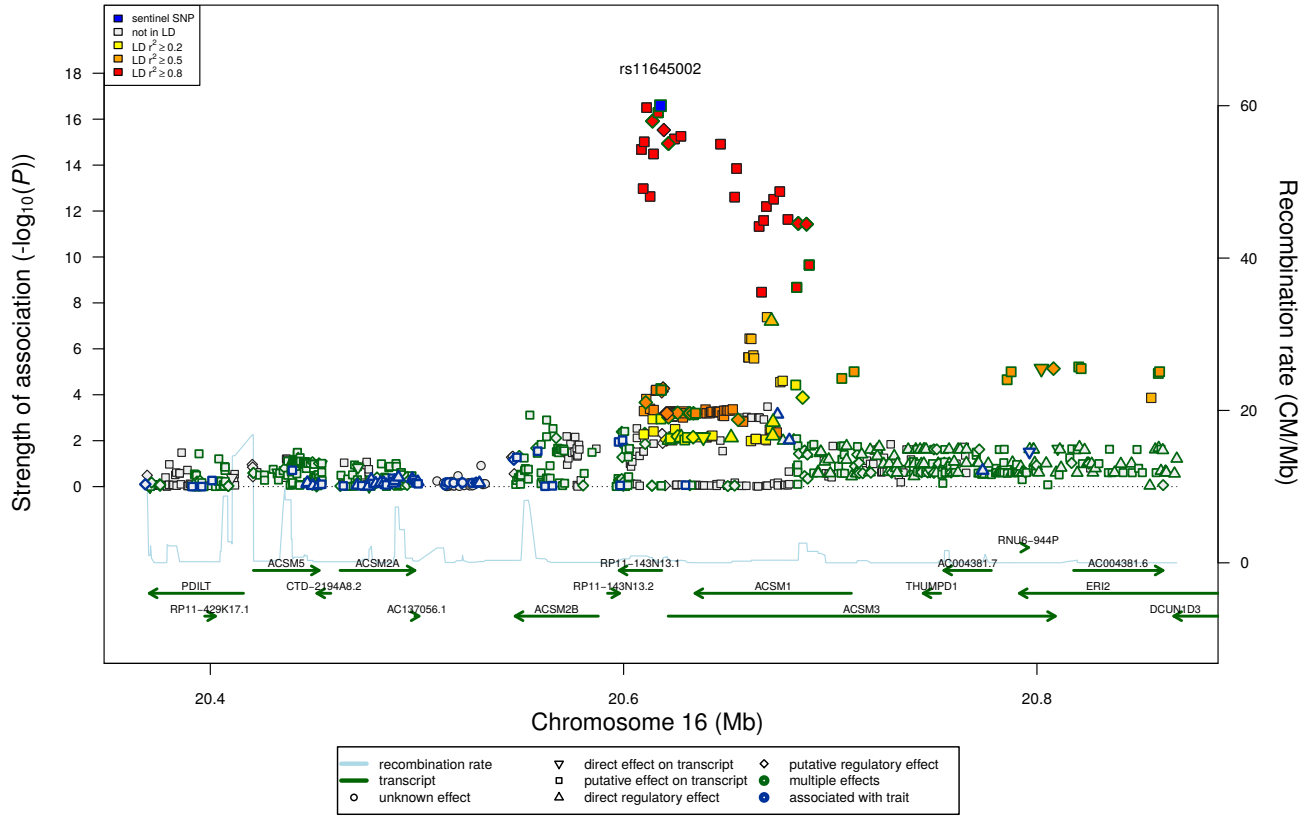


Genome-wide associations with 1.3455/7.6643 ppm

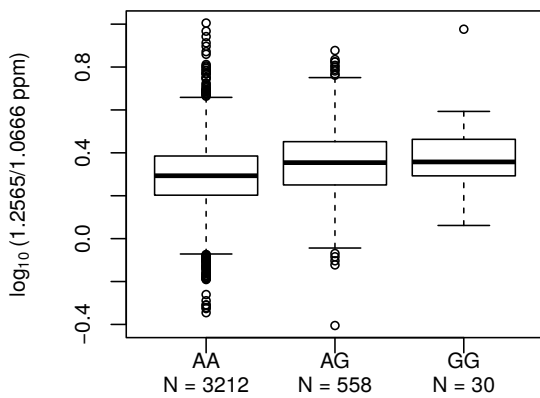


# GWAS with **non-targeted** metabolic traits - **ACSM3** locus

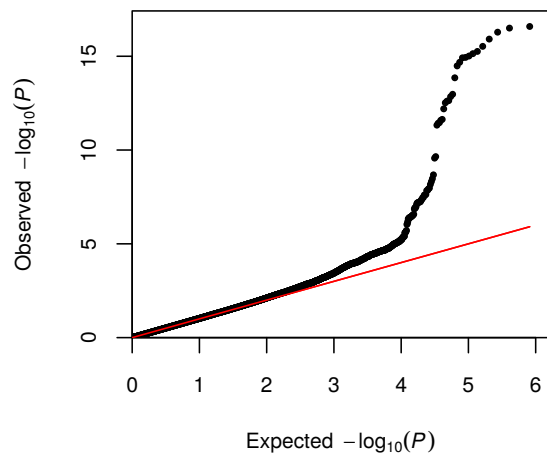
Associations with 1.2565/1.0666 ppm



Genotype of rs11645002



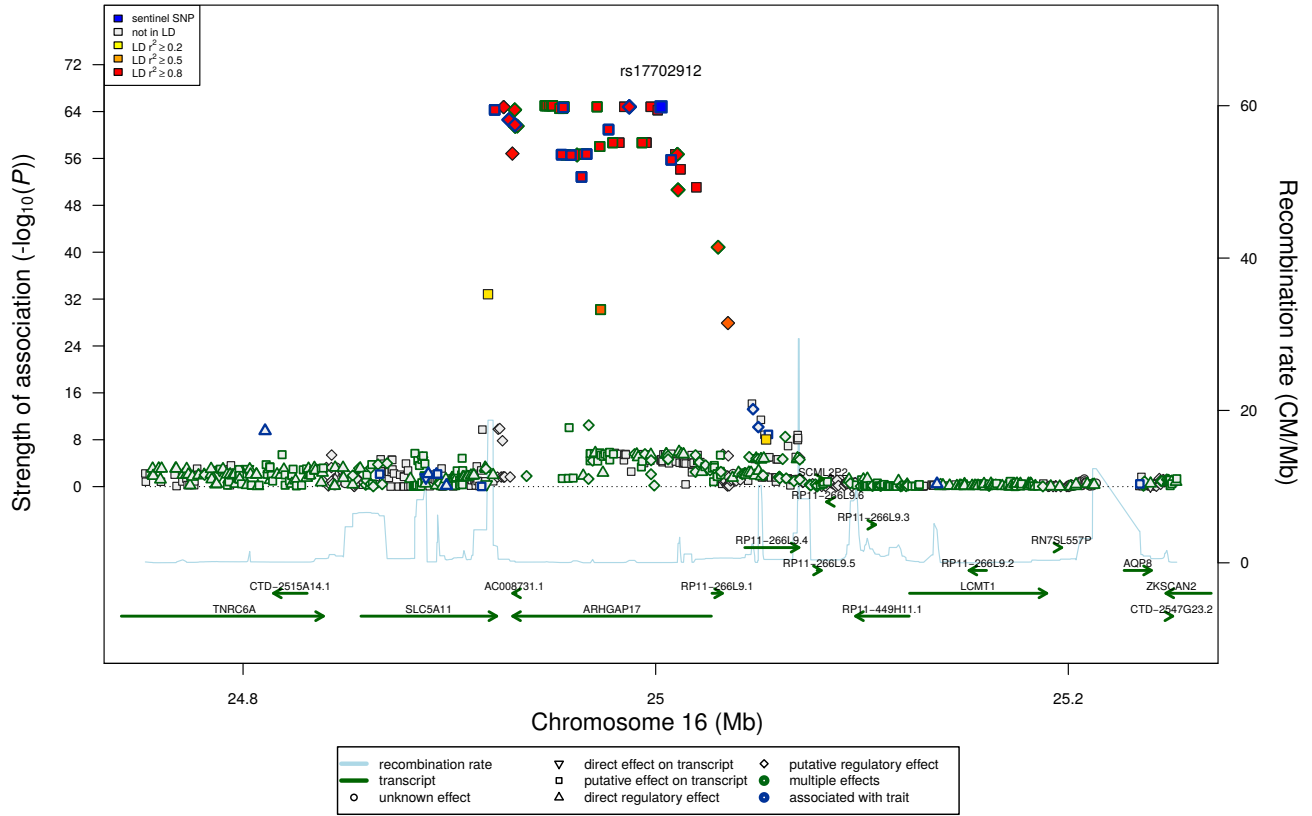
Genome-wide associations with 1.2565/1.0666 ppm



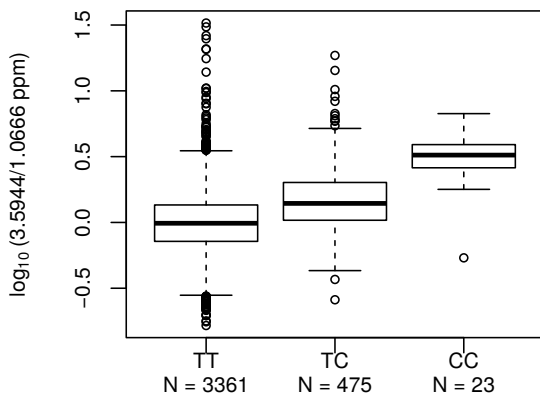


# GWAS with **non-targeted** metabolic traits - **SLC5A11** locus

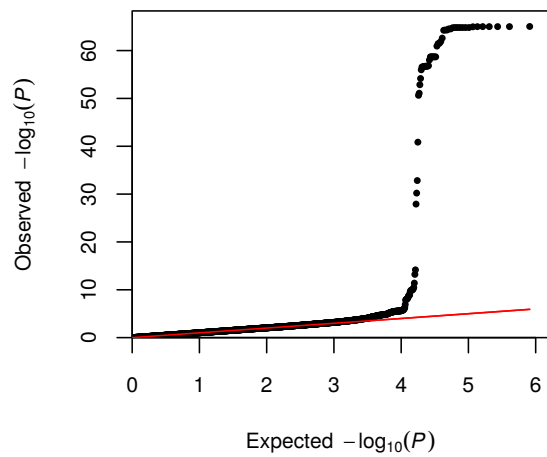
Associations with 3.5944/1.0666 ppm



Genotype of rs17702912

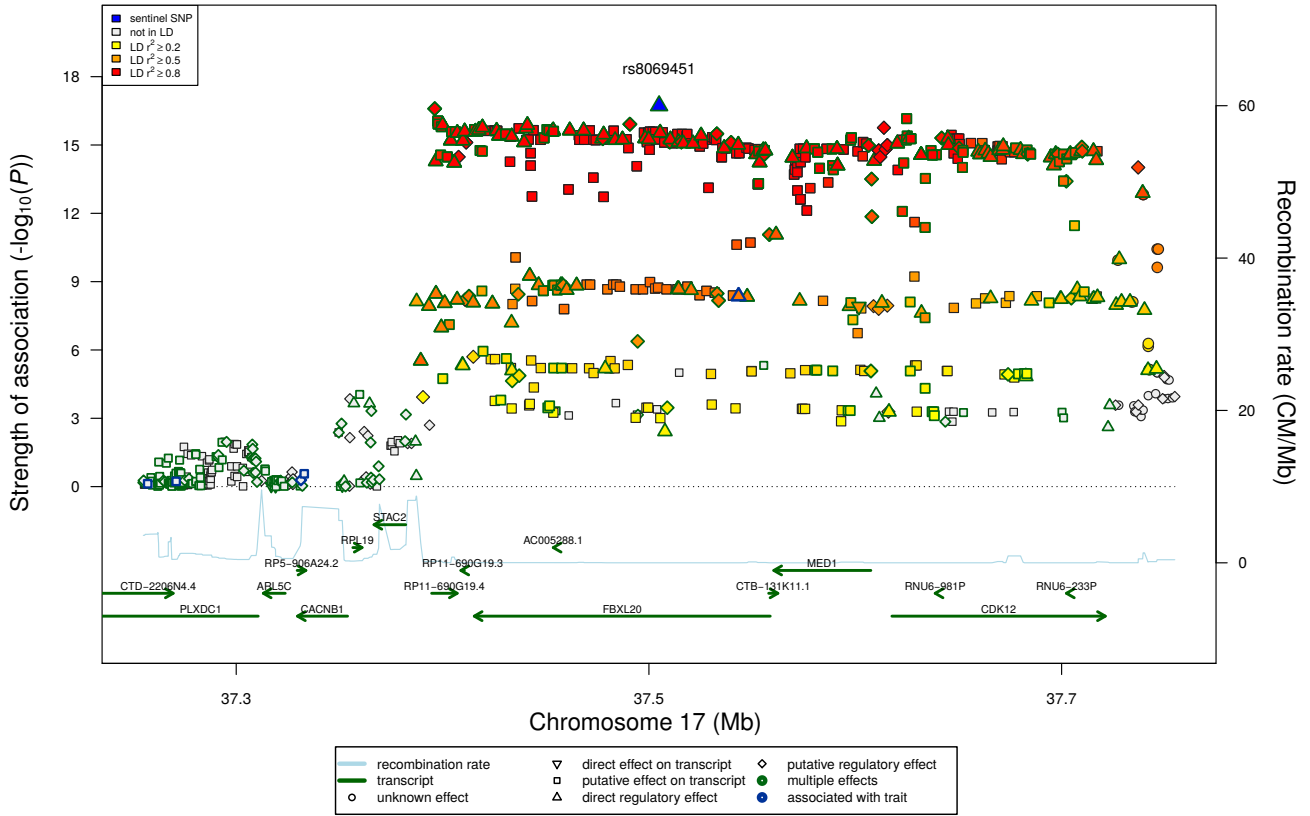


Genome-wide associations with 3.5944/1.0666 ppm

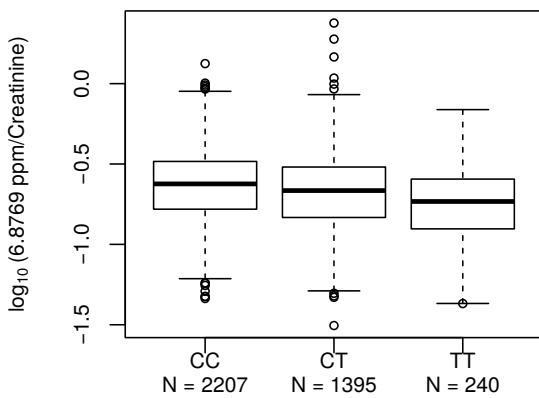


# GWAS with non-targeted metabolic traits - PNMT locus

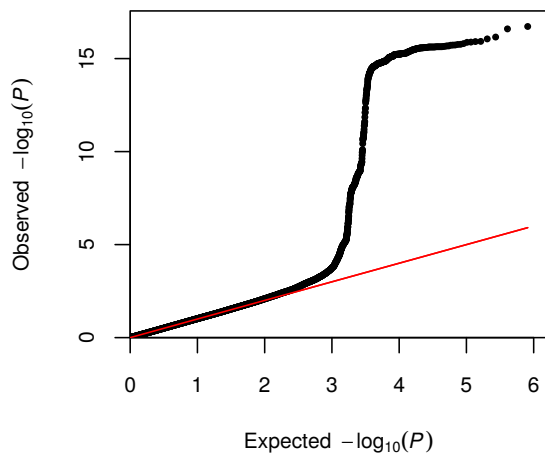
Associations with 6.8769 ppm



Genotype of rs8069451

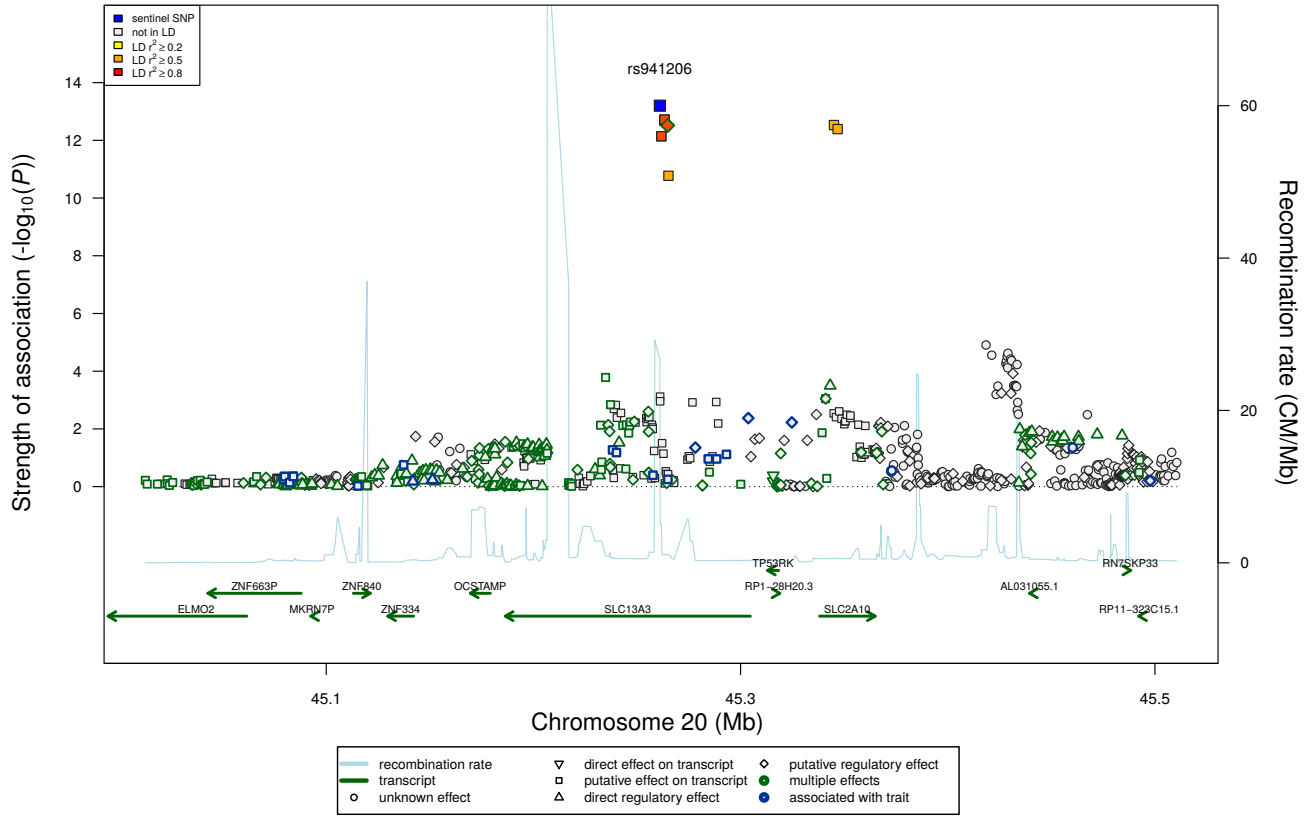


Genome-wide associations with 6.8769 ppm

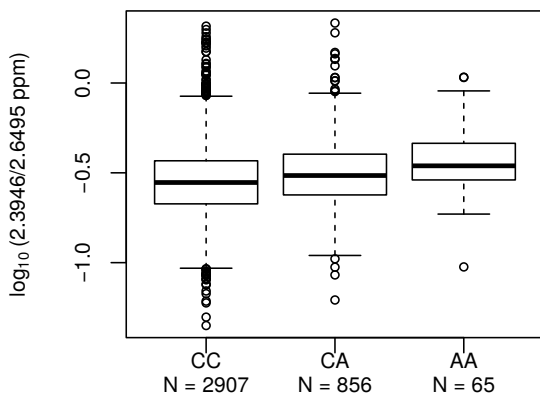


# GWAS with **non-targeted** metabolic traits - **SLC13A3** locus

Associations with 2.3946/2.6495 ppm



Genotype of rs941206



Genome-wide associations with 2.3946/2.6495 ppm

