

## **GWAS reveals loci associated with velopharyngeal dysfunction**

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## Supplementary text: Structured speech samples

Article: GWAS reveals loci associated with velopharyngeal dysfunction

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### *English*

You wished to know all about my grandfather. Well, he is nearly ninety-three years old; he dresses himself in an ancient black frock coat, usually minus several buttons, yet he still thinks as swiftly as ever. A long, flowing beard clings to his chin, giving those who observe him a pronounced feeling of the utmost respect. When he speaks, his voice is just a bit cracked and quivers a trifle. Twice each day he plays skillfully and with zest upon our small organ. Except in the winter when the ooze or snow or ice prevents, he slowly takes a short walk in the open air each day. We have often urged him to walk more and smoke less, but he always answers, "Banana oil!" Grandfather likes to be modern in his language.

### *Spanish*

La oveja es un animal herbívoro. Se alimenta de hierba. Habita en todos los climas. Es un animal manso y resistente. Se mueve constantemente, pero es dócil a la voz del pastor y se deja guiar por los perros. Todo es útil en la oveja. La lana sirve para fabricar vestidos, mantas y alfombras. La piel se usa para abrigos y objetos de adorno. Su carne es sabrosa y con su leche se hacen quesos.

### *Tagalog*

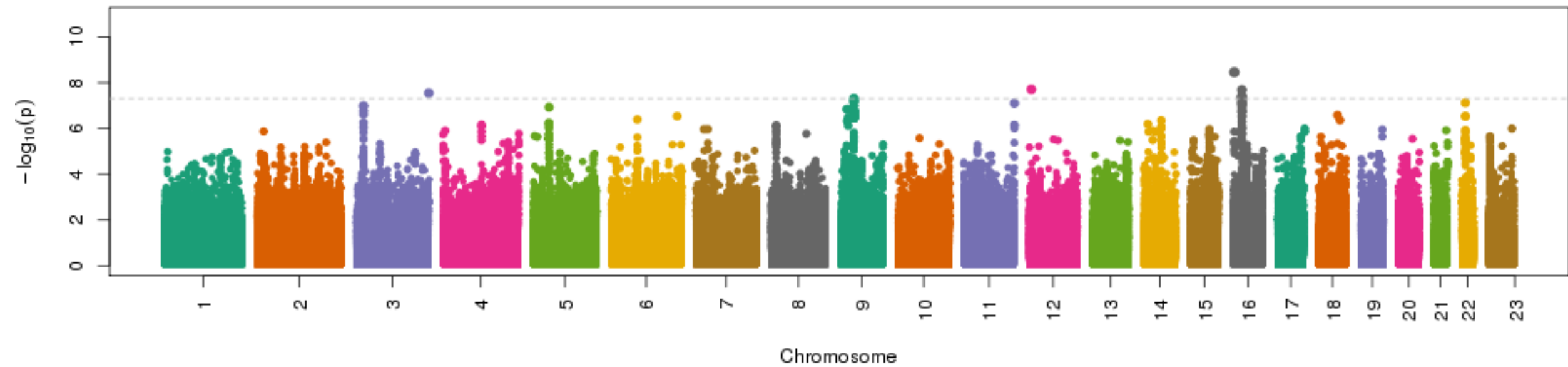
Ang Hardin. Sa tabi ng ilog ay may hardin, puno ng rosas, poinsetya, at sampaguita. Makulay ang bulaklak at mabango ang halimuyak. Gandang-ganda ako sa yabong ng mga halaman. Sa paligid nakakalat ang gumamela at dama de noche. Masarap amuyin ang mga bulaklak sa loob ng hardin. Nakagagaan din ng pakiramdam pagmasdan ang mga bulaklak. Maliwanag ang sikat ng araw sa hardin, kaya't ang mga halaman ay walang kupas ang mga kulay at bango. Madaling mahanap ang hardin na ito, dahil, sundan lang ang halimuyak at ang mga paru-paro.

# VPI

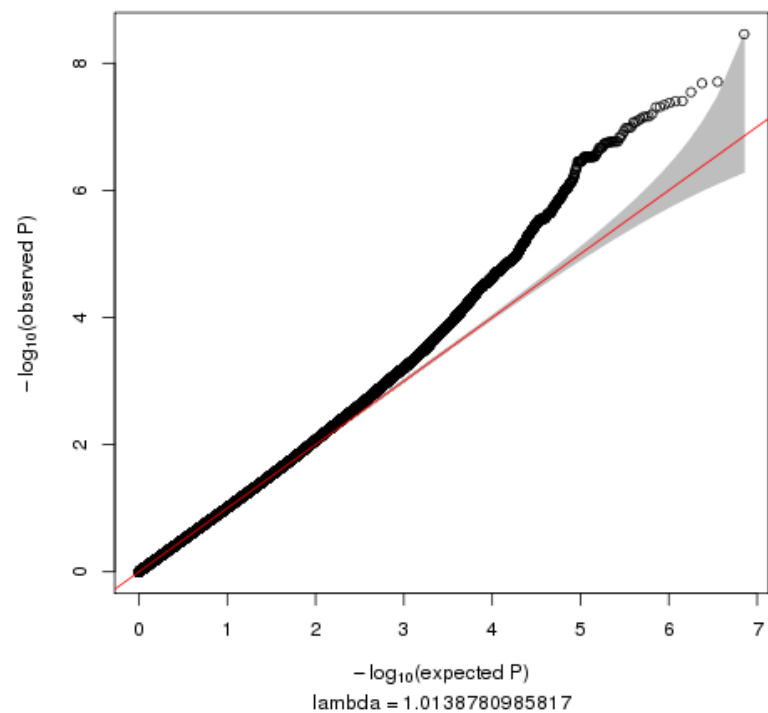
Figures

# Figure S1

**Fig S1** Manhattanplot and QQ plot of the genome-wide association study.  
Lamba=1.014



vpi in unaffected relatives (in families with history of CP)

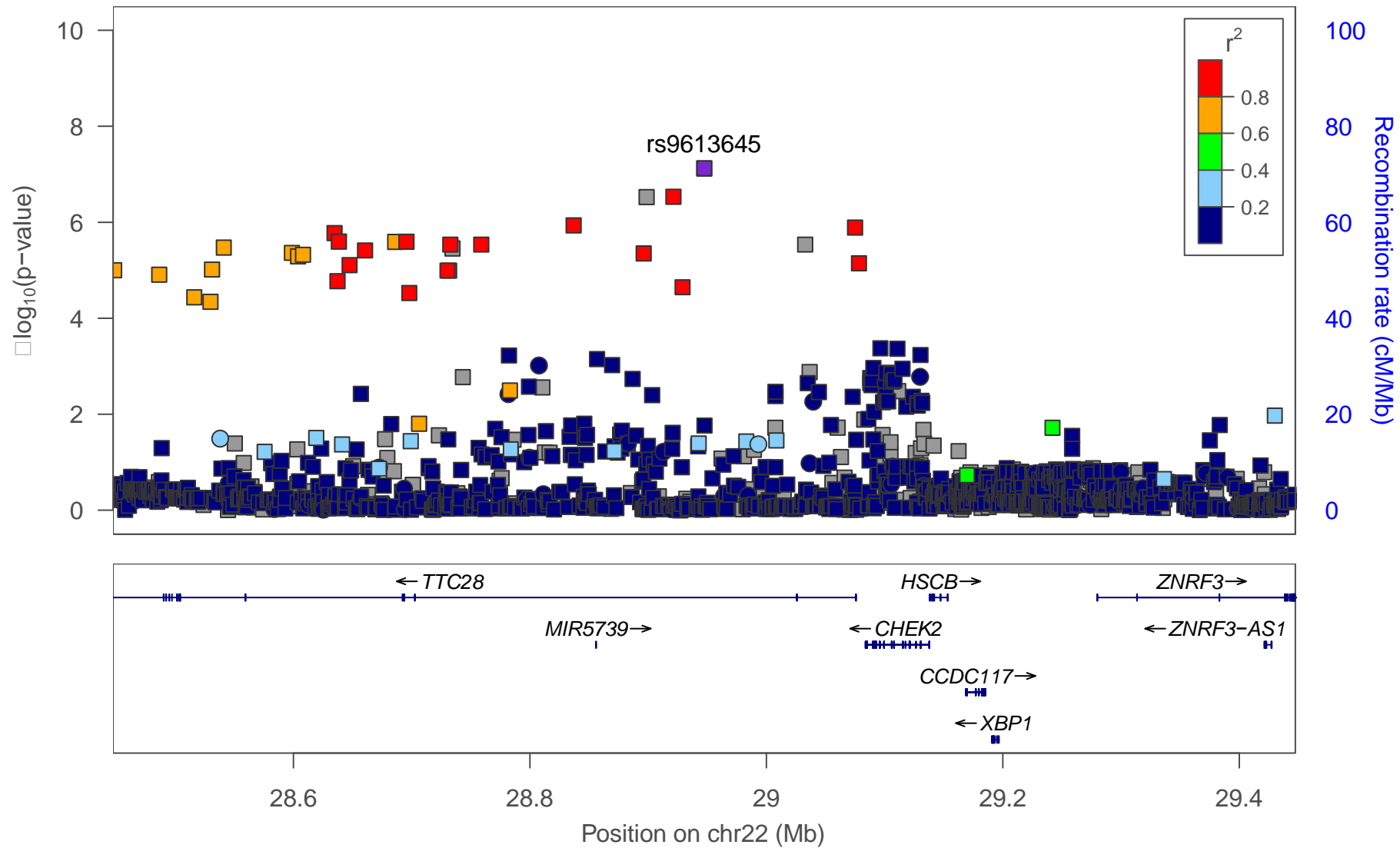


# Figure S2

**Fig S2** All LocusZoom plots of suggestive associations ( $p < 5 * 10E-07$ ). Genotype SNPs are represented by stars, imputed SNPs are represented by squares

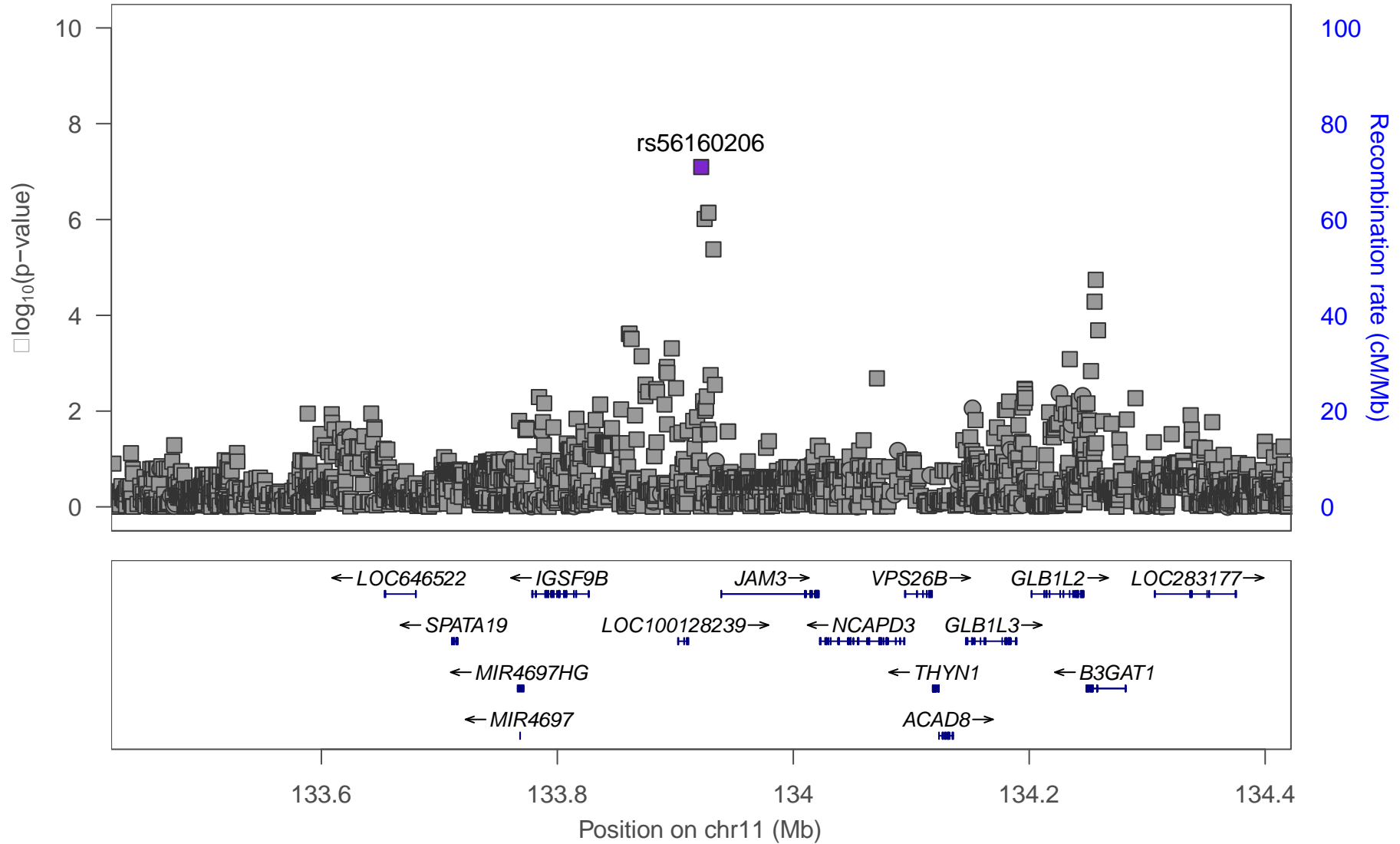
# 6\_rs9613645

Plotted SNPs



# 7\_rs56160206

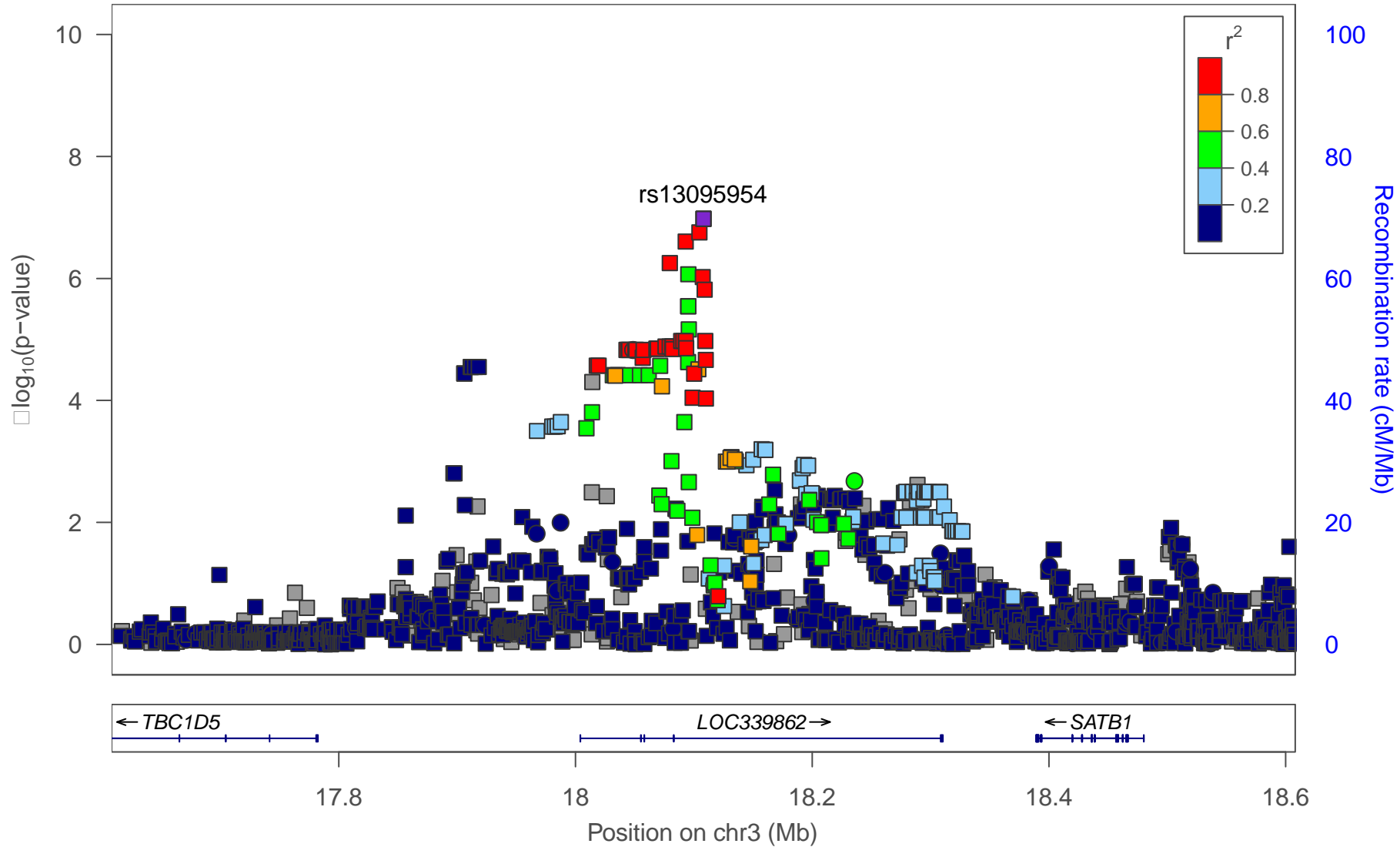
Plotted SNPs





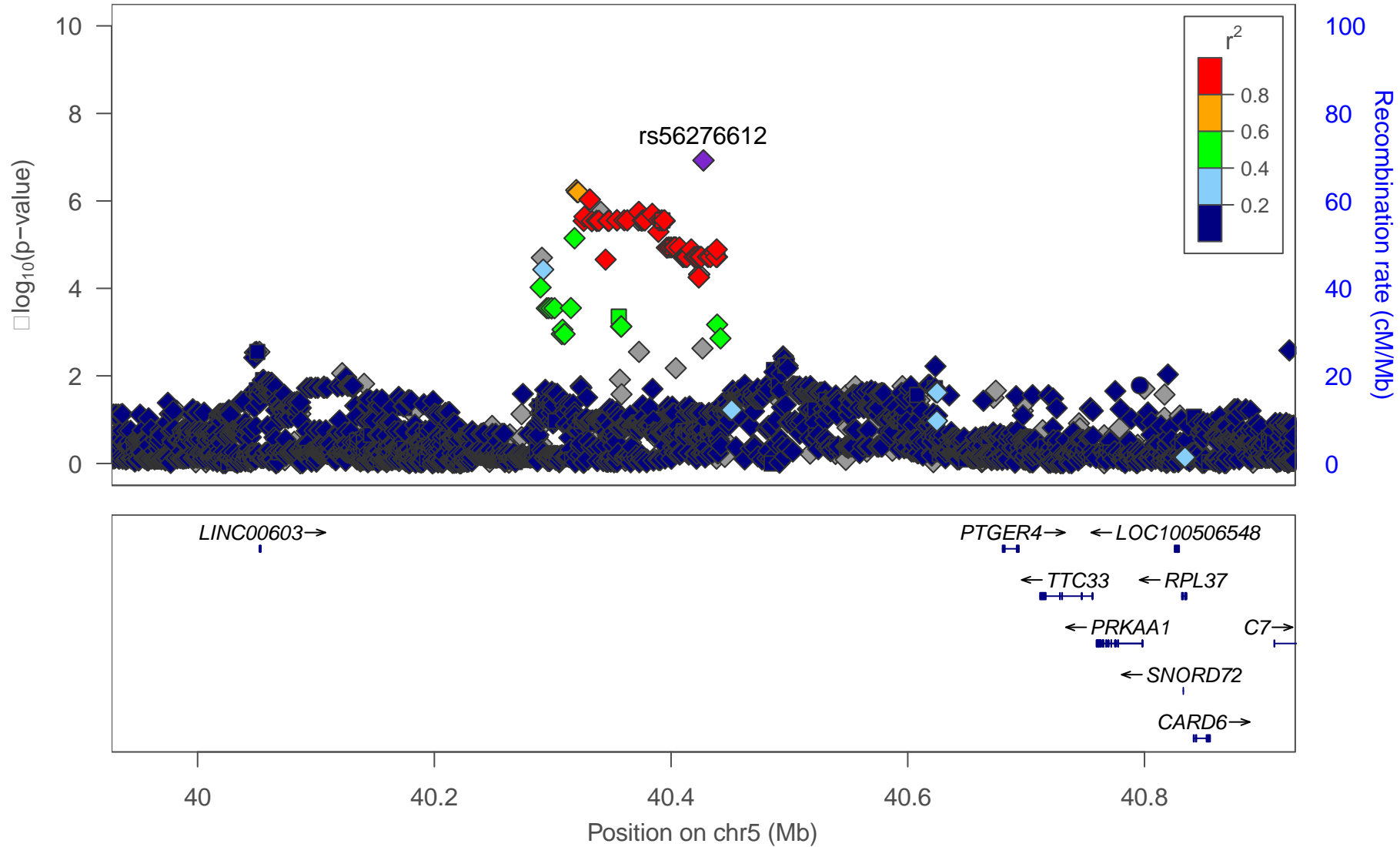
# 8\_rs13095954

Plotted SNPs



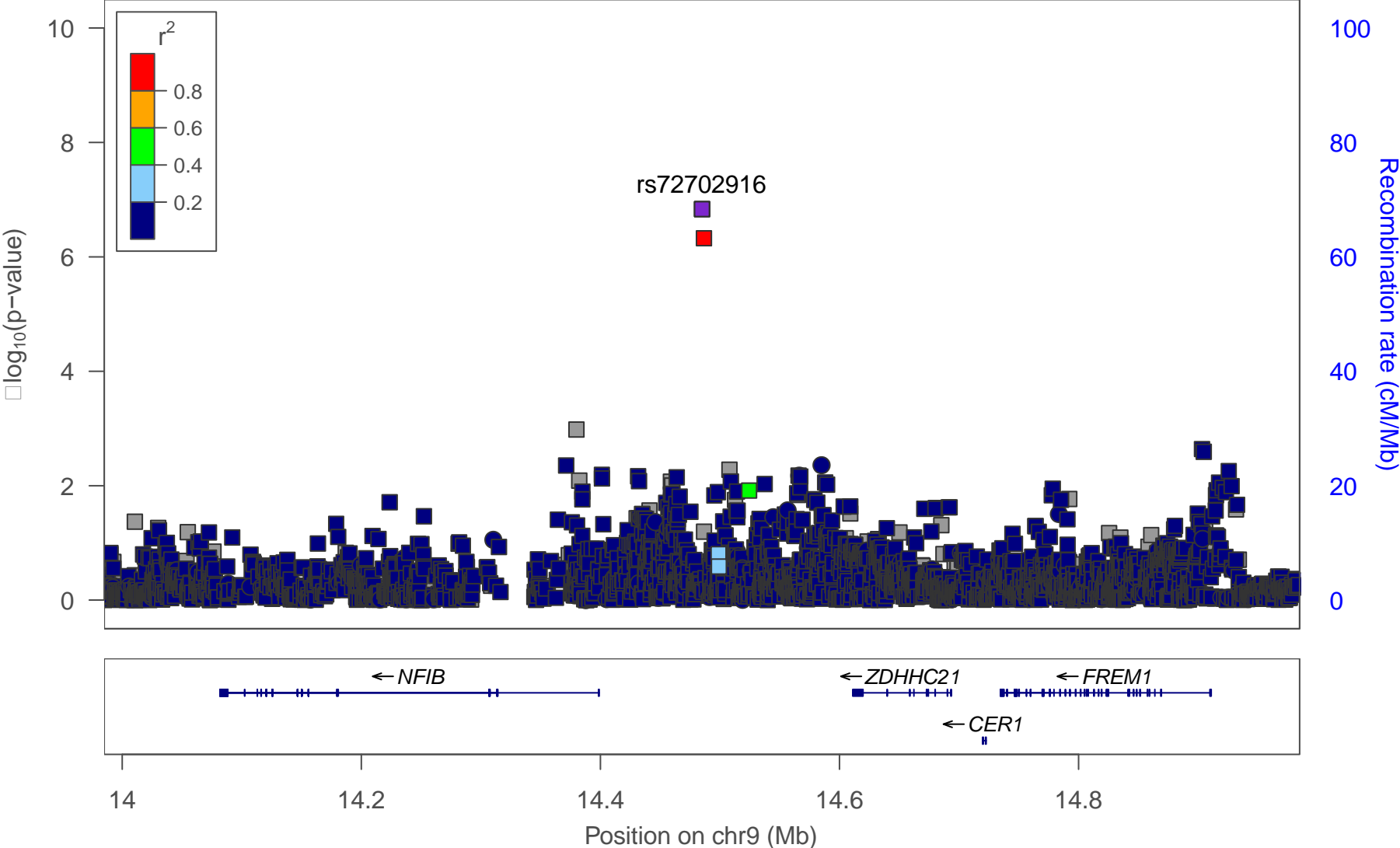
# 9\_rs56276612

Plotted SNPs



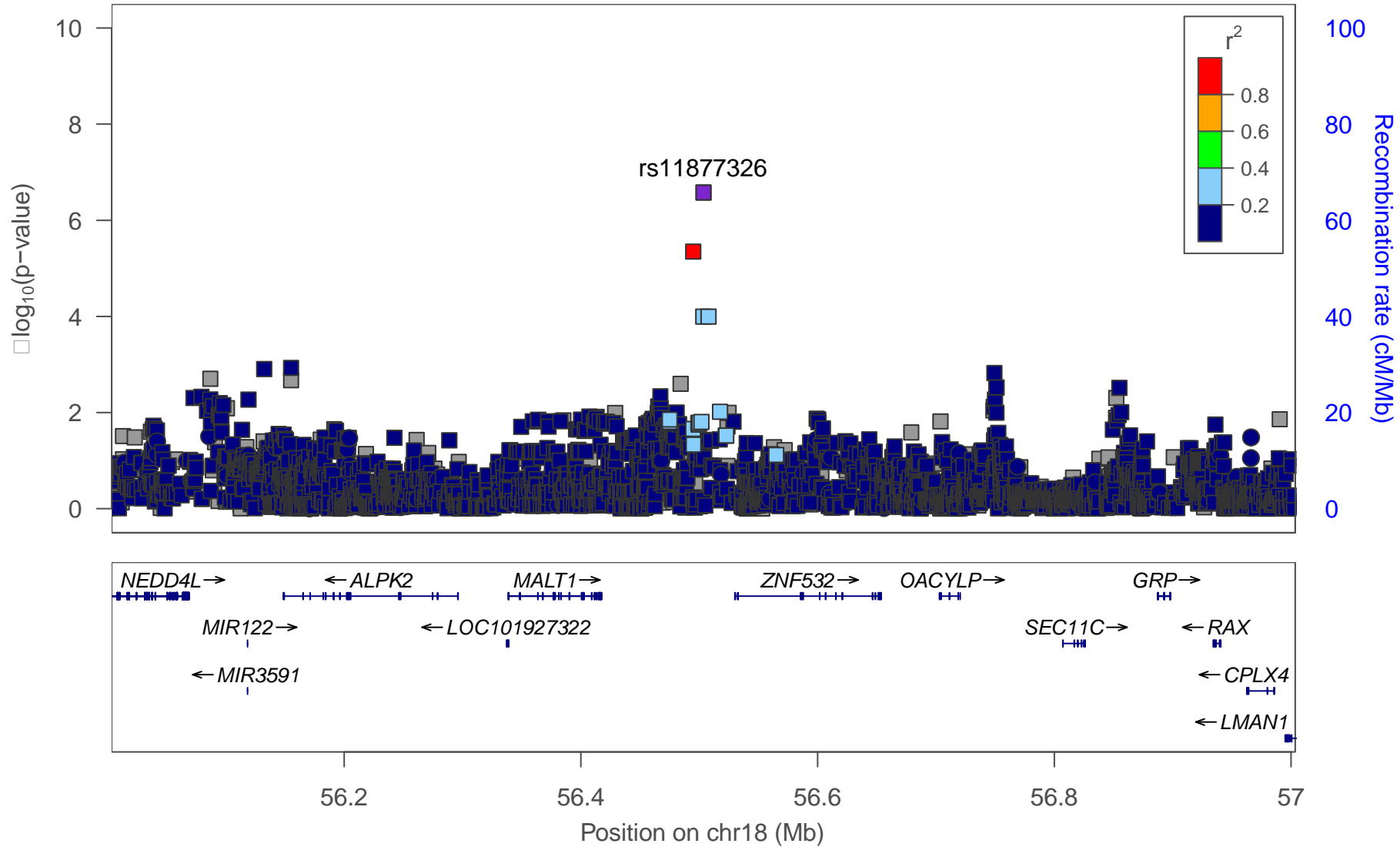
# 10\_rs72702916

Plotted SNPs



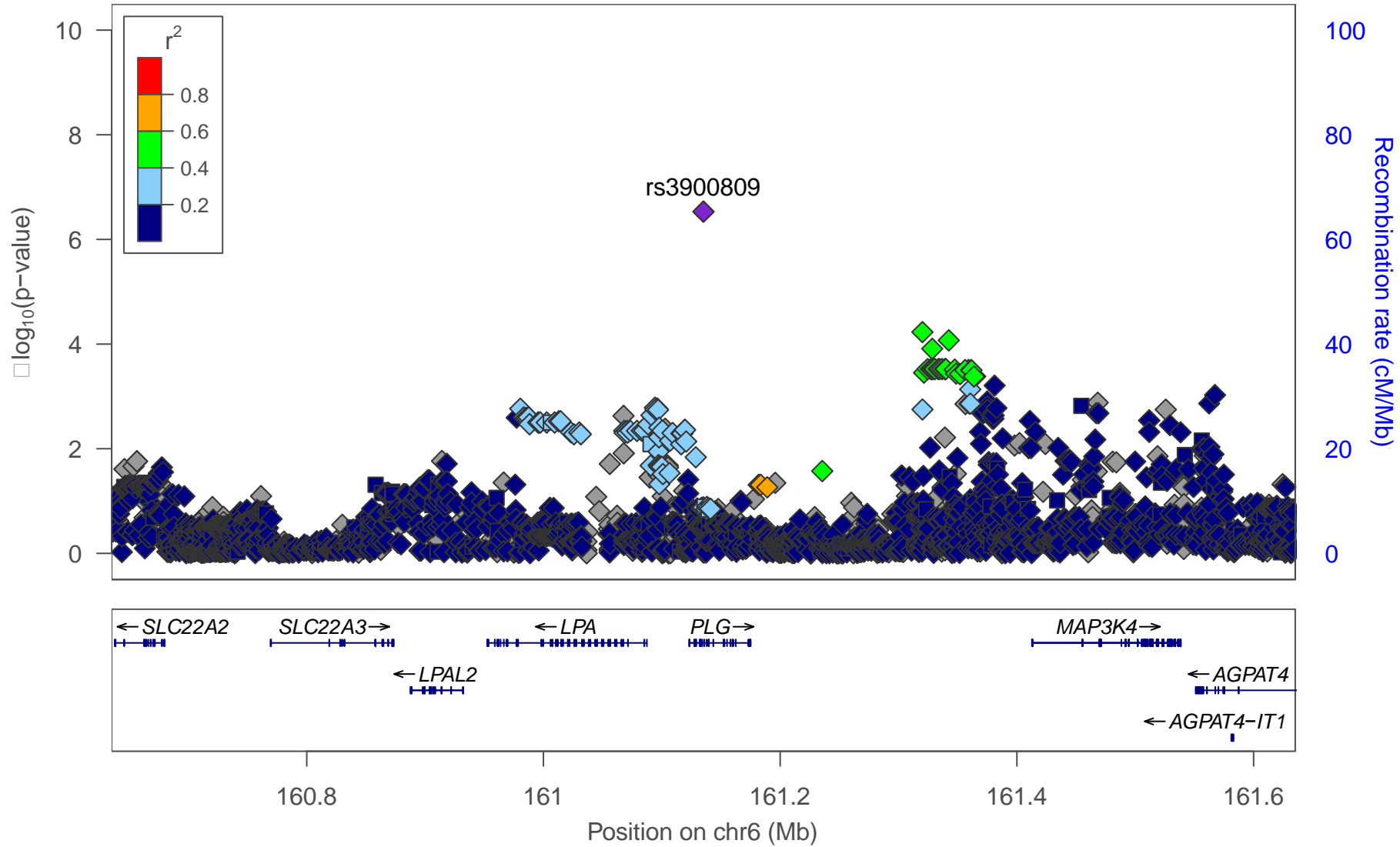
# 11\_rs11877326

Plotted SNPs



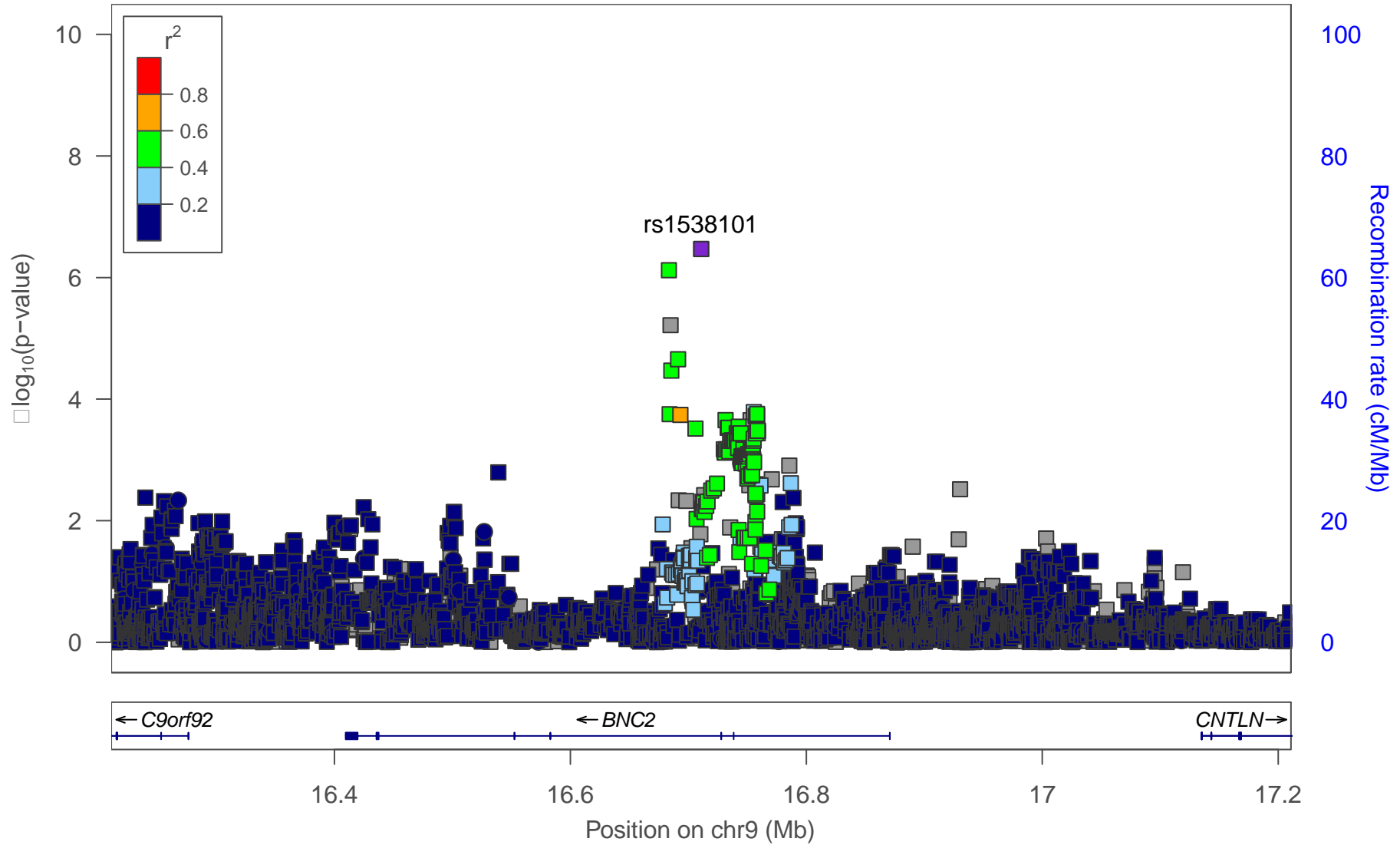
# 12\_rs3900809

Plotted SNPs



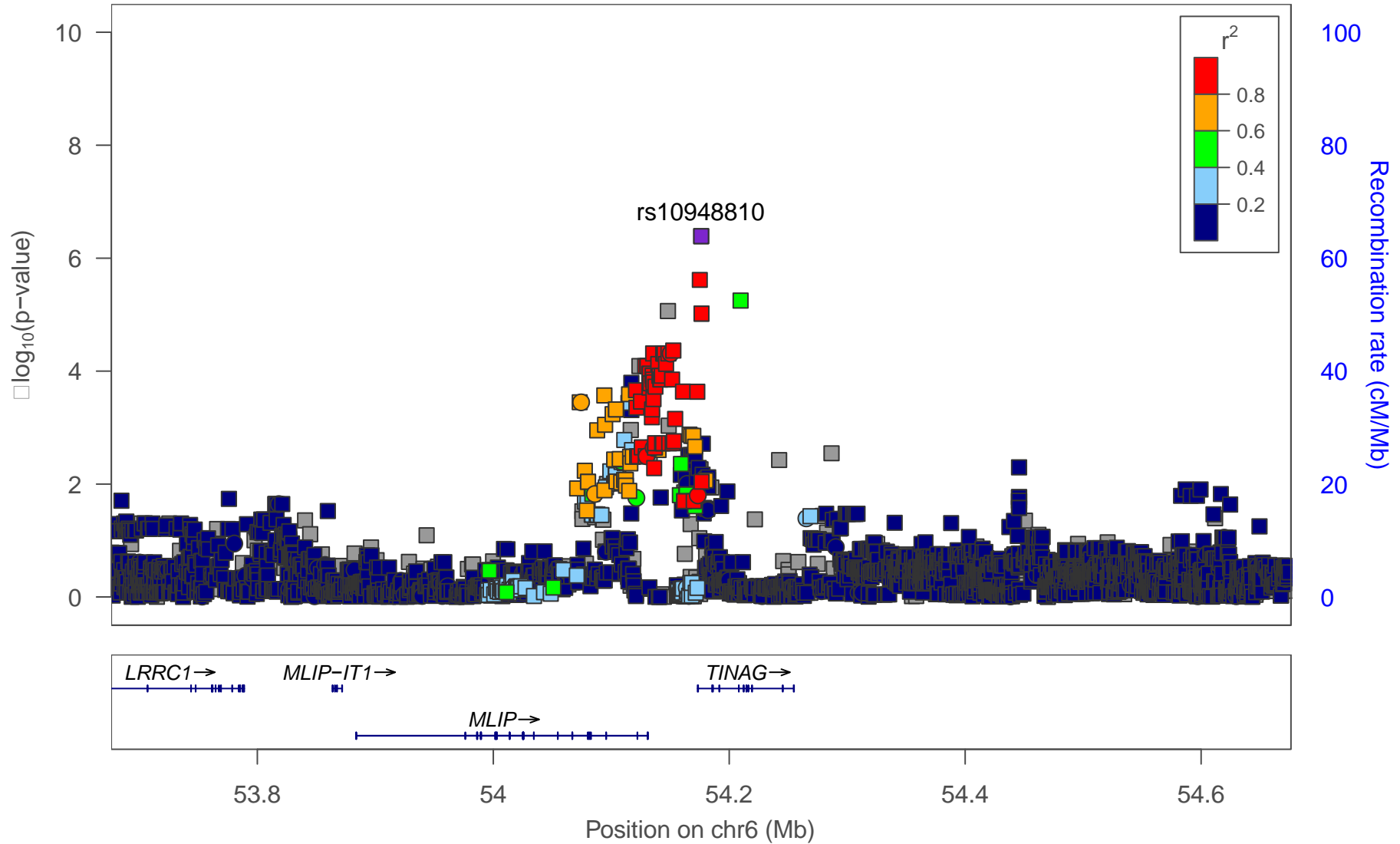
# 13\_rs1538101

Plotted SNPs



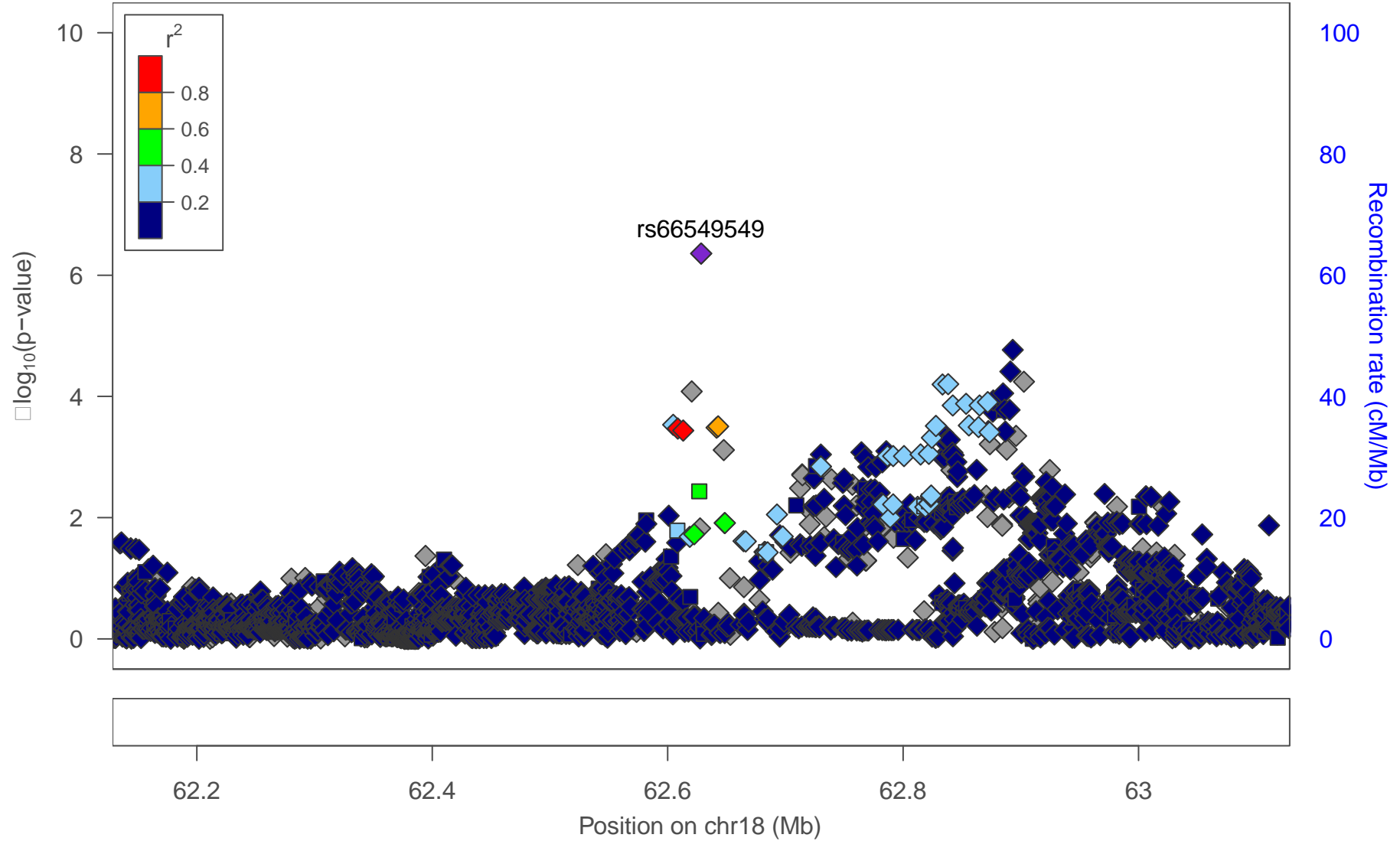
# 14\_rs10948810

Plotted SNPs



# 15\_rs66549549

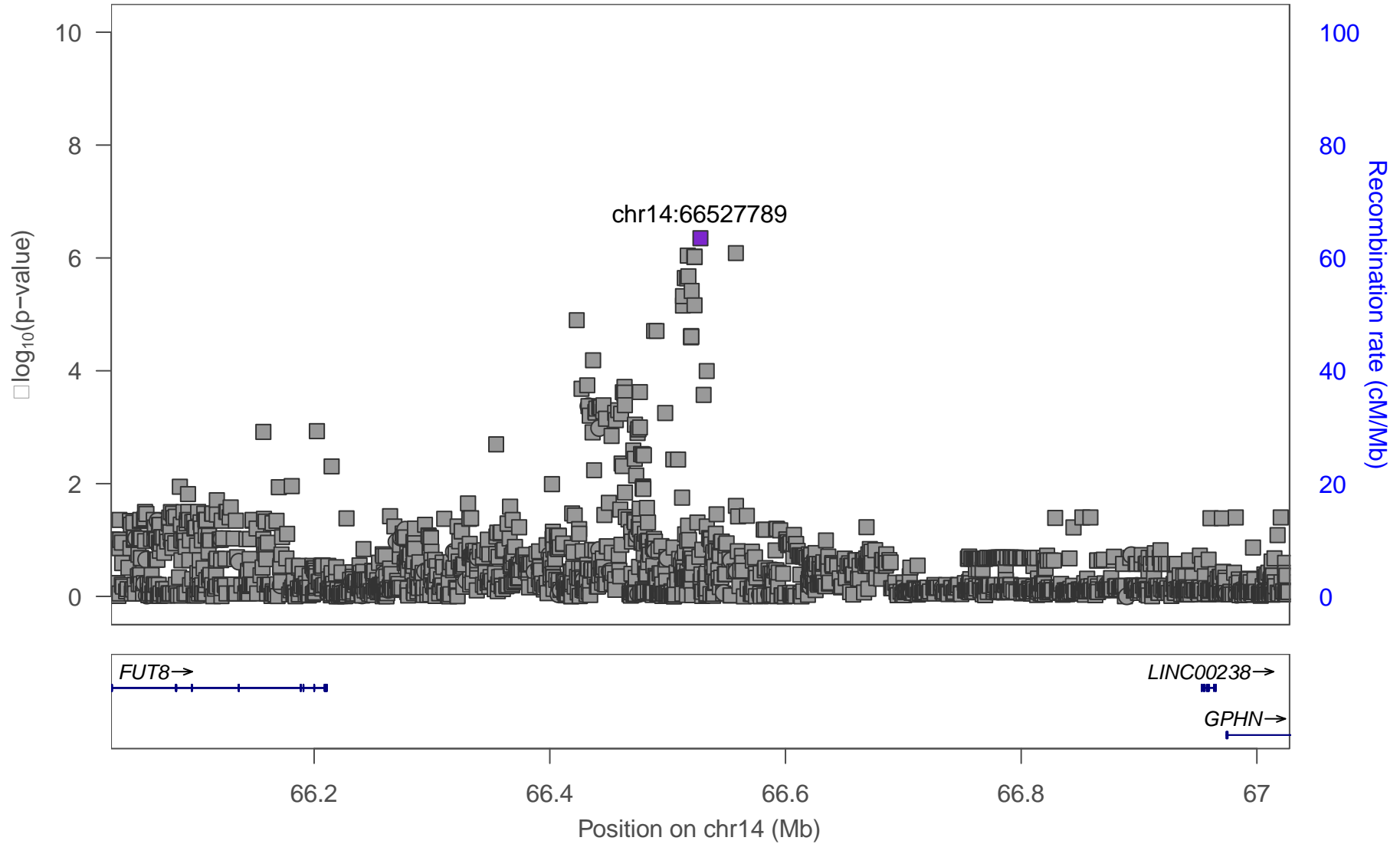
Plotted SNPs





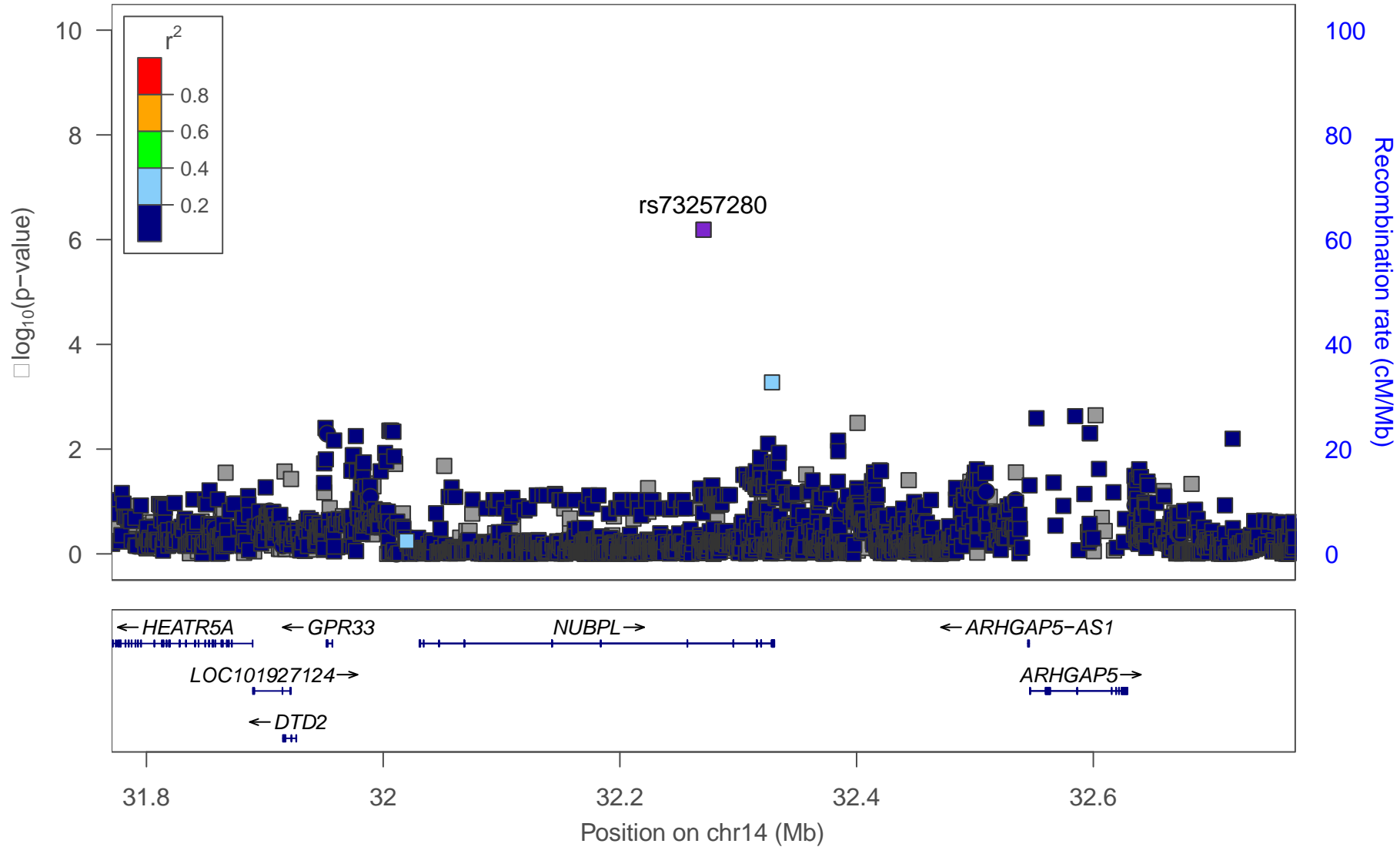
# 16\_chr14\_66527789

Plotted SNPs



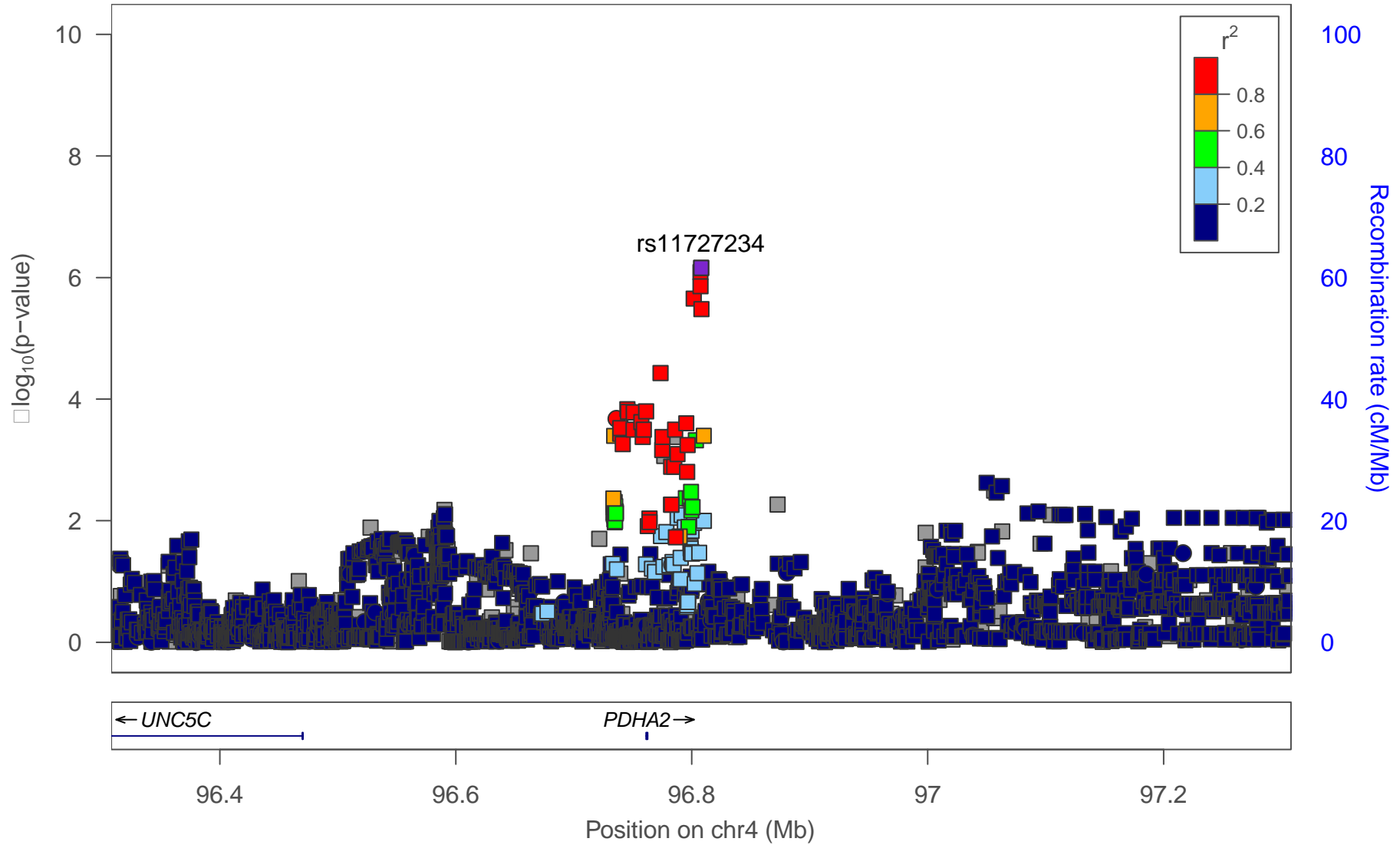
# 17\_rs73257280

Plotted SNPs



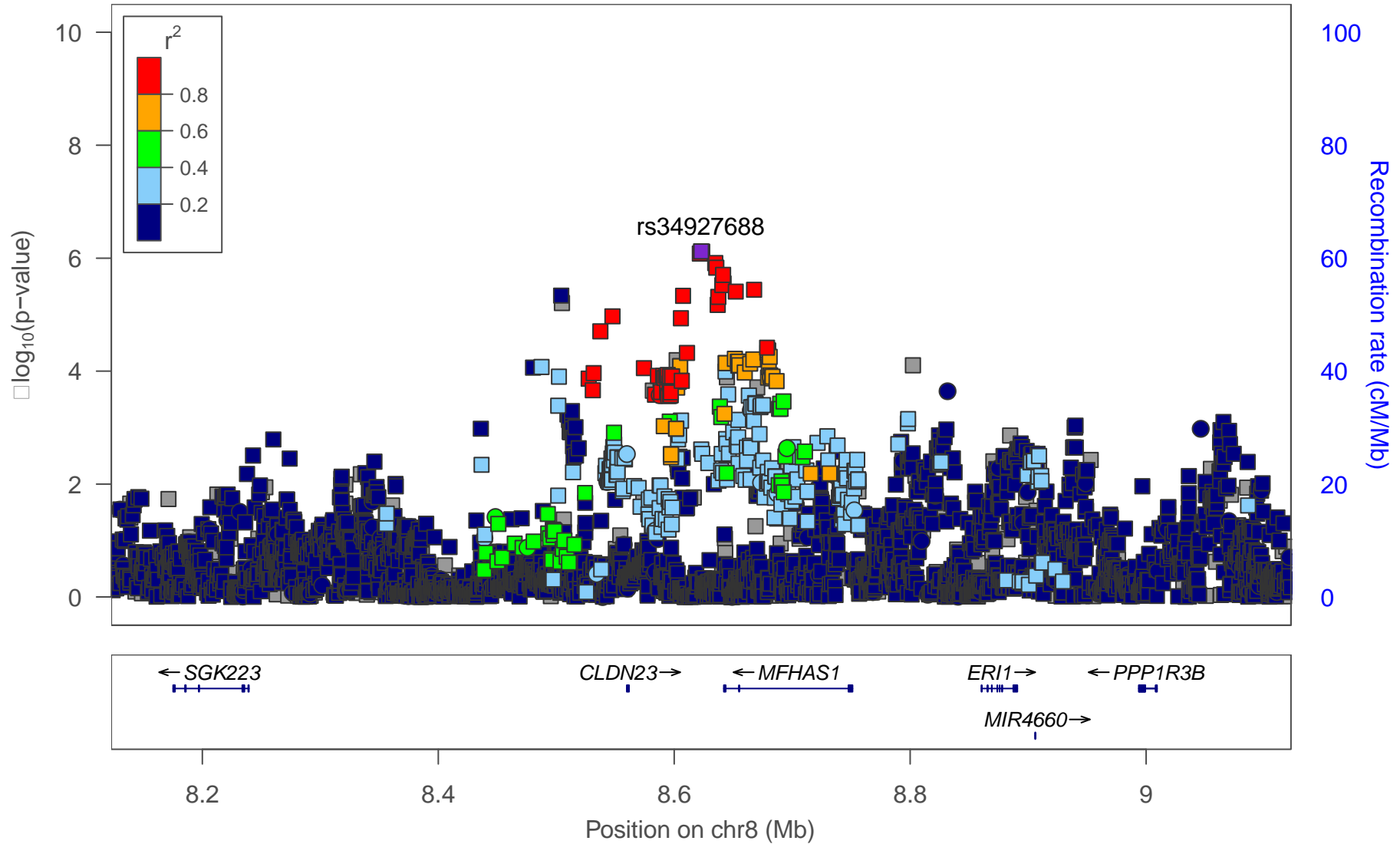
# 18\_rs11727234

Plotted SNPs



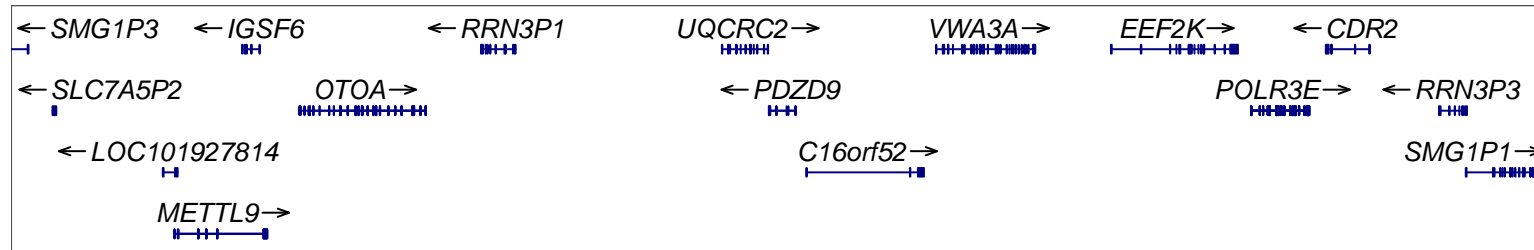
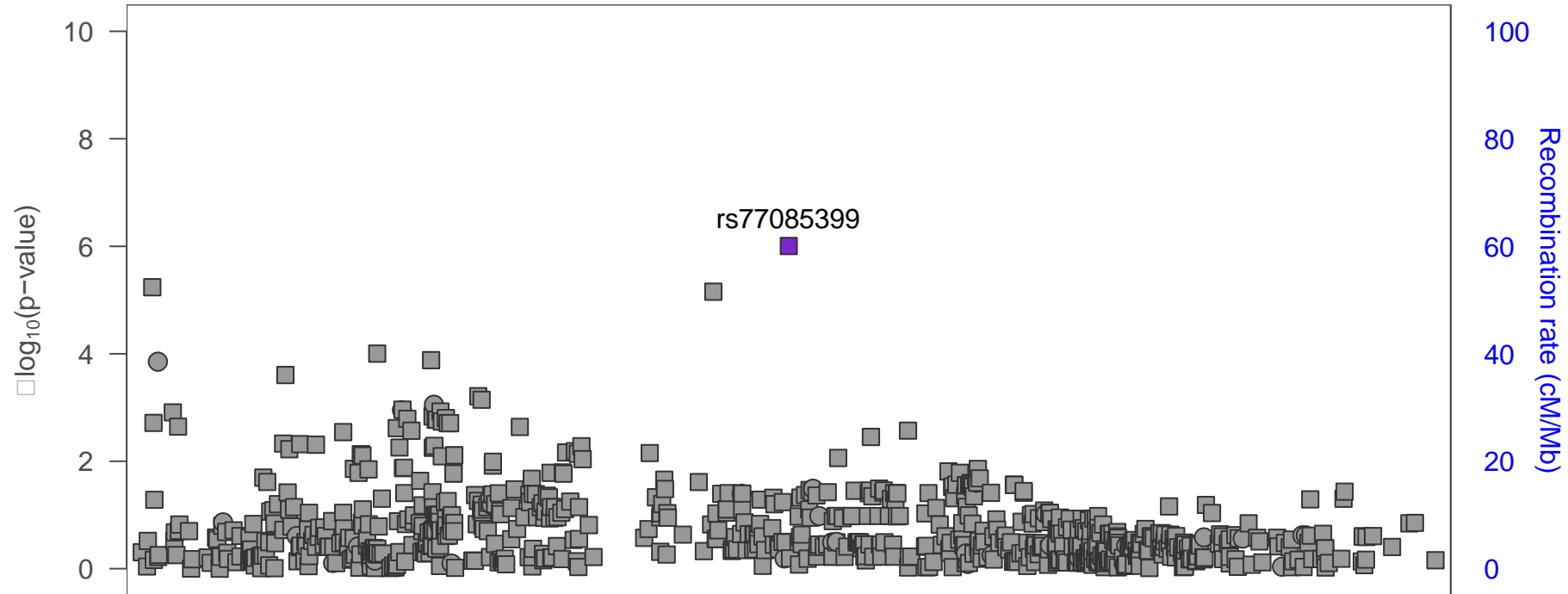
# 19\_rs34927688

Plotted SNPs



# 20\_rs77085399

Plotted SNPs 



21.6 21.8 22 22.2 22.4

Position on chr16 (Mb)