





Association analysis

- Case-control association analysis using PLINK v.1.9:
  - e.g. SNP rs12345.A>T
  - Fisher's exact test (with correction for multiple testing)
- 28 eQTL associated with infectious diseases

rs12345	Ref (A)	Alt (T)
Healthy	150	50
Diseased	80	120

# eQTLs are associated with pathogens

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- *E. coli*
  - 12 eQTLs in 4 genes
- *Mycoplasma* spp.
  - 13 eQTLs in 2 genes
- Swine influenza virus
  - 2 eQTLs in 2 genes
- Porcine reproductive and respiratory syndrome virus
  - 3 eQTLs in 1 gene

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