

# Genomic model with correlation between additive and dominance effects

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- **Backgrounds:**

- I. Additive and dominance effects assumed to be independent
- II. Magnitudes of additive and dominance effects at QTLs are related
- III. Wellmann and Bennewitz (2012) considered the relationships between additive and dominance in Bayesian approach

- **Conclusions:**

- 1) Assigning the most frequent allele as the reference allele orients a positive correlation between additive and dominance effects
- 2) Estimation easily by REML in breeding software
- 3) Genomic prediction significantly improved if accounting such correlation in a genomic model