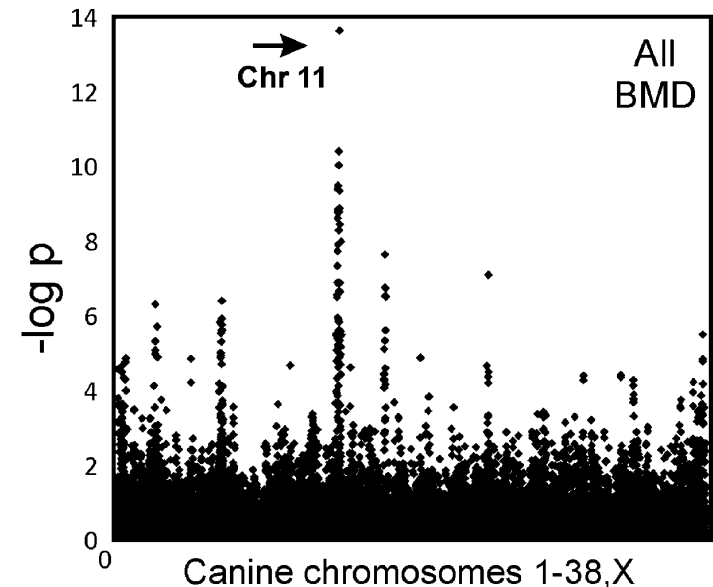


Histiocytic Sarcoma Genetic Research in Bernese Mountain Dogs

- Genome-wide association study (GWAS) reveals chromosome 11 locus associated with increased risk for HS in Bernese Mountain Dogs
- Genes at this locus are associated with human cancers
- Research is ongoing to identify a causative mutation that would result in a direct genetic test for HS susceptibility



Manhattan plot showing GWAS results for 242 case and 222 control Bernese Mountain Dogs. (Shearin et al. 2012)



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Publications

Shearin et al. 2012 The MTAP-CDKN2A Locus Confers Susceptibility to a Naturally Occurring Canine Cancer. *Cancer Epidemiol Biomarkers Prev.* 21:1019-27.

Parker et al. 2017 Genomic Analyses Reveal the Influence of Geographic Origin, Migration, and Hybridization on Modern Dog Breed Development. *Cell Rep.* 19:697-708.

