



Supplementary Item 4: Summary of estimates of variance and heritability obtained from a sire model for some osteochondrosis lesions.

Trait (osteochondrosis lesion site)	s^2_{Sire}	s^2_{Phen}	SE	h^2	SE	$h^2_{\text{Underlying}}$	PE	SE
Any osteochondrosis	0.002	0.178	0.006	0.05	0.04	0.11	0.11	0.04
Stifle cyst	0.000	0.036	0.001	0.00	0.00	0.00	0.01	0.04
Lateral trochlear ridge of distal femur	0.001	0.058	0.002	0.05	0.04	0.28	0.15	0.04
Any stifle osteochondrosis	0.001	0.089	0.003	0.06	0.04	0.23	0.13	0.04
Distal intermediate ridge of the tibia	0.000	0.035	0.001	0.01	0.03	0.08	0.01	0.03
Lateral trochlear ridge of talus	0.000	0.023	0.001	0.00	0.00	0.00	0.05	0.03
Any tarsal osteochondrosis	0.000	0.057	0.002	0.00	0.00	0.00	0.02	0.03
Dorso-proximal P1	0.000	0.036	0.001	0.02	0.03	0.09	0.00	0.04
Proximal sagittal ridge of MC/MT3	0.000	0.038	0.005	0.01	0.01	0.04	0.00	0.00
Any fetlock osteochondrosis	0.000	0.074	0.003	0.00	0.02	0.01	0.00	0.04

Key: s^2_{Sire} = variation attributable to the sire; s^2_{Phen} = variation attributable to the phenotype; SE = standard error of the column to the left; h^2 = heritability estimate; $h^2_{\text{underlying}}$ = underlying heritability estimate; PE = proportion of variation attributable to the permanent environment due to the dam. Significant estimates in bold italics.