



### Supplementary Item 3: Summary of estimates of variance and heritability obtained from an animal model for some osteochondrosis lesions.

Trait (osteochondrosis lesion site)	$s^2_{Anim}$	$s^2_{PE}$	$s^2_{Phen}$	SE	$h^2$	SE	$h^2_{Underlyin_g}$	PE	SE
Any osteochondrosis	0.012	0.024	0.203	0.007	0.07	0.04	<b>0.13</b>	<b>0.09</b>	0.04
Stifle cyst	0.000	0.000	0.036	0.001	0.00	0.00	0.00	0.01	0.04
Lateral trochlear ridge of distal femur	0.004	0.008	0.058	0.002	0.06	0.04	<b>0.24</b>	<b>0.13</b>	0.05
Any stifle osteochondrosis	0.005	0.010	0.089	0.003	0.06	0.04	<b>0.17</b>	<b>0.11</b>	0.04
Distal intermediate ridge of the tibia	0.001	0.000	0.035	0.001	0.02	0.03	<b>0.12</b>	0.00	0.03
Lateral trochlear ridge of talus	0.000	0.001	0.023	0.001	0.01	0.04	0.03	0.04	0.04
Any tarsal osteochondrosis	0.001	0.001	0.057	0.002	0.01	0.03	0.03	0.02	0.03
Dorso-proximal P1 lesion	0.000	0.000	0.036	0.001	0.00	0.02	0.02	0.00	0.04
Proximal sagittal ridge of MC/MT3	0.000	0.000	0.038	0.005	0.01	0.01	<b>0.06</b>	0.00	0.00
Any fetlock osteochondrosis	0.000	0.000	0.074	0.003	0.01	0.03	0.02	0.00	0.04

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