Table S4. Effects of genetic similarity on female fertility (pregnant yes/no) based on numbers of shared MHC antigens instead of the dichotomous sharing/no sharing. Likelihood ratio tests comparing GLMMs and GLMs with genetic markers (fixed factors) and/or stallion identity ("ID", random factor) and reference models (indicated in italics) to test the effects of **(A)** number of shared MHC antigens ("MHC", range 0 to 3), and **(B)** direct comparison of effects of number of shared MHC antigens and pairwise relatedness r in the subsample of 126 mares that allow for such a test. Significant p-values are emphasized in bold.

Model	Effect tested	d.f.	logL	χ^2	P
(A) MHC effects (191 mares)					
MHC + ID		3	-127.6		
ID	MHC sharing	2	-129.2	3.2	0.07
MHC	Stallion ID	2	-127.6	0.1	0.80
MHC + ID + IDxMHC	Stallion ID x MHC	4	-127.6	0.1	0.81
(B) MHC vs microsatellites (126 mares)					
MHC + r + ID		4	-80.0		
r + ID	MHC sharing	3	-85.5	10.9	**0.001**
MHC + ID	r	3	-80.1	0.03	0.86
MHC + r	Stallion ID	3	-80.0	0	1.0