

**Table S5.** Genomic prediction accuracy and bias for the relevant reference and validation datasets from univariate GBLUP analysis, data from Kemper et al. [1].

Reference dataset	Validation dataset	Accuracy			Bias		
		FY	MY	PY	FY	MY	PY
Holstein	Holstein	0.60	0.58	0.59	1.18	0.89	1.06
Hol_Jer	Holstein	0.61	0.59	0.59	1.20	0.90	1.05
Jersey	Jersey	0.56	0.62	0.67	0.88	0.93	1.20
Hol_Jer	Jersey	0.58	0.64	0.69	0.88	0.91	1.17
Hol_Jer	Aust Red	0.17	0.11	0.04	0.75	0.32	0.16