

Appendix C- Summary of genotyping and quality control of selected articles. Quality control was performed on each article using Hardy-Weinberg Equilibrium (HWE), Call Rate (CR) and Minor Allele Frequency (MAF) analyses. All information was extracted from each article.

Article (Publication Year)	Sample size	Trait	SNPChip	Approach	GWAS sig. criterion (value)	Quality control			
						HWE	GenCall	CR	MAF
SCHNEIDER, J. F. <i>et al.</i> (2012b)	1,152	Litter size (number of live births, stillbirths, and mummifications) and birth weight	Illumina PorcineSNP60 BeadChip (41,151)	Bayesian method	Additive genetic variance	$p < 1,0E - 6$	–	$\leq 80\%$	$\leq 0,05$
LEE Jae-Bong <i>et al.</i> (2014)	1,233	Number of teats	Illumina Porcine 60K BeadChip (31,568)	Linear model of mixed effects and regression	p value	$p < 0,001$	–	–	$< 0,05$
ARAKAWA, A. <i>et al.</i> (2015)	1,024	Number of teats	Illumina PorcineSNP60 v2 Genotyping BeadChip (36,588)	BayesC method	Additive genetic variance	$p > 0.01$	–	$> 90\%$	$> 1\%$
SELL-KUBIAK, E. <i>et al.</i> (2015)	26,4419 litters of 69,549 sows	Litter size (number of births)	Illumina PorcineSNP60 BeadChip (64,232)	Generalized Dual Hierarchical Linear Model; Bayesian method	Additive genetic variance	–	$< 0,15$	$< 95\%$	$< 0,01$
VERARDO, L. L. <i>et al.</i> (2015)	345	Number of teats	Illumina PorcineSNP60 BeadChip (384)	Hierarchical Bayesian Multiple Regression Model (Gaussian and Poisson)	Additive genetic variance	–	–	–	< 0.05

VERARDO, L.L. <i>et al.</i> (2016a)	3,983	Number of teats	Illumina PorcineSNP60 BeadChip (64.232) / (37.412 linha C), (37.782 linhas D)	Bayesian variable selection model	Additive genetic variance	$\chi^2 > 600$	–	<0,95	<0.01
VERARDO, L.L. <i>et al.</i> (2016b)	1,390	Number of stillborn piglets and number of teats	Illumina PorcineSNP60 BeadChip (41,647)	2 GBLUP models; Bayesian approach (Gaussian and Poisson)	Additive genetic variance	–	< 0.15	–	< 0.01
CHALKIAS, H. <i>et al.</i> (2017)	230	Number of teats, number of inverted teats and number of functional teats	Illumina Inc. PorcineSNP60K BeadChip (61,565)	Mixed linear model	p value	–	–	<95%	<0.05
WANG, Y. <i>et al.</i> (2018)	1,207	Litter size, weight, pregnancy and age at first childbirth	Illumina PorcineSNP80 BeadChip (51,443)	Mixed model	p value	P < 1,00E- 06	–	< 90%	< 0.03
ZHOU, L. <i>et al.</i> (2019)	269	Number of teats, body weight, body length, cannon circumference	Affymetrix Porcine SNP 55K Array (38,128)	Mixed linear model	p value	P < 10- 6	–	> 0,90	<0,01

JIANG, Y. <i>et al.</i> (2020)	3,121	Litter size	Illumina Porcine SNP80 BeadChip (68,528)	Mixed linear model	p value	$P < 10 \times 10^{-6}$	–	< 90%	<0,03
MOSCATELLI, G. <i>et al.</i> (2020)	821	Number of teats and presence of asymmetry	Illumina PorcineSNP60 BeadChip (50,069)	Mixed linear model	p value	$P > 0.0001$	–	>0.90	>0.02
ZHANWEI, Z. <i>et al.</i> (2020)	5,356	Number of teats	GeneSeek Porcine 50 K SNP Chip (50,915)	Multi-locus model	p value	$(P < 10^{-6})$	–	< 95%	< 0.01
LI, Yang <i>et al.</i> (2021)	982	Number of teats on the right, left, total and presence of symmetry (right and left teats)	Illumina Porcine SNP60 BeadChip (31,144)	Mixed model	p value	–	–	<0.98	>0.05