**Table S1.** **Distribution of GWAS SNPs’ genotypes in UF patients/healthy controls and their correspondence to the Hardy-Weinberg equilibrium**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SNP | Genotypes | Controls | *Ho (He)*1 | *p*2 | UF patients | *Ho* (*He*)3 | *p*4 |
| rs66998222*LOC102723323* | G/G | 218 (54.2%) | 0.3881(0.3883) | >0.05 | 401 (61.3%) | 0.3272(0.3468) | >0.05 |
| A/G | 156 (38.8%) | 214 (32.7%) |
| A/A | 28 (7%) | 39 (6%) |
| Maf(A) | 0.266 | 0.233 |
| rs59760198*DNM3* | C/C  | 124 (32%) | 0.5271(0.4859) | >0.05 | 199 (30.6%) | 0.5123(0.4922) | >0.05 |
| T/C | 204 (52.7%) | 333 (51.2%) |
| T/T | 59 (15.2%) | 118 (18.1%) |
| Maf(T) | 0.416 | 0.438 |
| rs10929757*GREB1* | C/C | 148 (36.9%) | 0.5062(0.4701) | >0.05 | 265 (40.6%) | 0.4487(0.4661) | >0.05 |
| C/A | 203 (50.6%) | 293 (44.9%) |
| A/A | 50 (12.5%) | 95 (14.6%) |
| Maf(A) | 0.378 | 0.37 |
| rs9419958*STN1* | C/C | 302 (75.1%) | 0.2114(0.2452) | **<0.01** | 447 (68.3%) | 0.2798(0.2908) | >0.05 |
| C/T | 85 (21.1%) | 183 (28%) |
| T/T | 15 (3.7%) | 24 (3.7%) |
| Maf(T) | 0.143 | 0.177 |
| rs1812266*LOC105375949* | G/G | 145 (36.1%) | 0.4851(0.4787) | >0.05 | 220 (33.6%) | 0.4801(0.4883) | >0.05 |
| C/G | 195 (48.5%) | 314 (48%) |
| C/C | 62 (15.4%) | 120 (18.4%) |
| Maf(C) | 0.397 | 0.424 |
| rs1986649*FOXO1* | C/C | 255 (63.6%) | 0.3416(0.3118) | >0.05 | 403 (61.6%) | 0.3471(0.3321) | >0.05 |
| C/T | 137 (34.2%) | 227 (34.7%) |
| T/T | 9 (2.2%) | 24 (3.7%) |
| Maf(T) | 0.193 | 0.21 |
| rs641760*PITPNM2* | C/C | 229 (57.5%) | 0.3794(0.3595) | >0.05 | 414 (63.5%) | 0.3282(0.3211) | >0.05 |
| C/T | 151 (37.9%) | 214 (32.8%) |
| T/T | 18 (4.5%) | 24 (3.7%) |
| Maf(T) | 0.235 | 0.201 |
| rs2235529*WNT4* | C/C | 291 (73.5%) | 0.2475(0.2428) | >0.05 | 472 (72.5%) | 0.2535(0.2525) | >0.05 |
| T/C | 98 (24.8%) | 165 (25.4%) |
| T/T | 7 (1.8%) | 14 (2.1%) |
| Maf(T) | 0.141 | 0.148 |
| rs2553772*LOC105376626* | G/G | 117 (29.3%) | 0.4887(0.4972) | >0.05 | 222 (34%) | 0.4640(0.4896) | >0.05 |
| T/G | 195 (48.9%) | 303 (46.4%) |
| T/T | 87 (21.8%) | 128 (19.6%) |
| Maf(G) | 0.462 | 0.428 |
| rs11031731*THEM7P, WT1* | G/G | 310 (77.1%) | 0.2164(0.2122) | >0.05 | 462 (70.6%) | 0.2661(0.2695) | >0.05 |
| A/G | 87 (21.6%) | 174 (26.6%) |
| A/A | 5 (1.2%) | 18 (2.8%) |
| Maf(A) | 0.121 | 0.161 |

1observed (Ho) and expected (He) heterozygosity in healthy controls; 2P-HWE in healthy controls; 3observed (Ho) and expected (He) heterozygosity in UF patients; 4P-HWE in UF patients**.** GWAS, genome-wide association studies; P-HWE, Hardy-Weinberg Equilibrium; *p*-value.SNP, single nucleotide polymorphism; UF, uterine fibroid.