

Supplementary Materilas: Leptin Receptor (rs1137101) and Brain-Derived Neurotrophic Factor (rs925946) Gene Variants Are Associated with Obesity in the Early- but Not in the Late-Onset Population of Hungarian Psoriatic Patients

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Table S1. Patient characteristics.

| | All Patients N = 574 | Early Onset N = 362 | Late Onset N = 212 | Early vs. Late Onset p-value |
|----------------------|-------------------------|------------------------|-----------------------|---------------------------------|
| Mean age (year) ± SD | 50.29 ± 15.55 | 43.92 ± 14.95 | 61.18 ± 9.24 | <0.001 |
| Gender (%) | | | | 0.072 |
| Male | 355 (61.8%) | 234 (64.6%) | 121 (57.1%) | |
| Female | 219 (38.2%) | 128 (35.4%) | 91 (42.9%) | |
| BMI (%) | | | | <0.001 |
| Normal weight | 122 (21.2%) | 95 (26.2%) | 27 (12.7%) | |
| Overweight | 183 (31.9%) | 115 (31.8%) | 68 (32.1%) | |
| Obese | 269 (46.9%) | 152 (42.0%) | 117 (55.2%) | |
| Familial form (%) | | | | <0.001 |
| Sporadic | 403 (70.2%) | 226 (62.4%) | 177 (83.5%) | |
| Familial | 171 (29.8%) | 136 (37.6%) | 35 (16.5%) | |
| Severity (%) | | | | 0.550 |
| Mild/Moderate | 117 (20.4%) | 71 (19.6%) | 46 (21.7%) | |
| Severe | 457 (79.6%) | 291 (80.4%) | 166 (78.3%) | |

SD – standard deviation.

Table S2. The studied genes, the effect alleles and the comparison of allele frequencies in the study groups.

| Gene/SNP | Effect Allele | Hungarian General Psoriatic Population | | P-Value |
|------------|---------------|--|----------------------------|----------|
| | | population (N = 2967) | (N = 574) | |
| | | Effect Allele Frequency | Effect Allele Frequency | |
| LEPR | | | | |
| rs1137101 | G | 0.4584 | 0.4649 | 0.6667 |
| NEGR1 | | | | |
| rs2815752 | A | 0.66 | 0.6906 | 0.03328 |
| TMEM18 | | | | |
| rs2867125 | C | 0.8145 | 0.8456 | 0.007857 |
| rs6548238 | C | 0.8137 | 0.8427 | 0.01307 |
| PPARG | | | | |
| rs1801282 | C | 0.8746 | 0.8661 | 0.4041 |
| ADIPOQ | | | | |
| rs2241766 | G | 0.1086 | 0.08843 | 0.02966 |
| rs1501299 | T | 0.288 | 0.2785 | 0.4912 |
| GNPDA2 | | | | |
| rs10938397 | G | 0.4539 | 0.4464 | 0.6204 |
| NPY | | | | |
| rs16139 | C | 0.04545 | 0.05013 | 0.4699 |

| | | | | |
|-------------|---|--------|--------|--------|
| <i>BDNF</i> | | | | |
| rs925946 | T | 0.2552 | 0.2711 | 0.2372 |
| rs6265 | C | 0.8036 | 0.8195 | 0.1852 |
| <i>UCP2</i> | | | | |
| rs660339 | G | 0.5926 | 0.6053 | 0.3958 |
| rs659366 | C | 0.632 | 0.6414 | 0.5323 |
| <i>FTO</i> | | | | |
| rs6499640 | A | 0.5878 | 0.6056 | 0.235 |
| rs1558902 | A | 0.453 | 0.4544 | 0.9285 |
| rs1121980 | A | 0.4682 | 0.4733 | 0.7343 |
| rs9939609 | A | 0.438 | 0.4471 | 0.5528 |
| rs9941349 | T | 0.447 | 0.453 | 0.22 |
| <i>MC4R</i> | | | | |
| rs17782313 | C | 0.222 | 0.2302 | 0.5219 |
| rs12970134 | A | 0.2429 | 0.2464 | 0.792 |

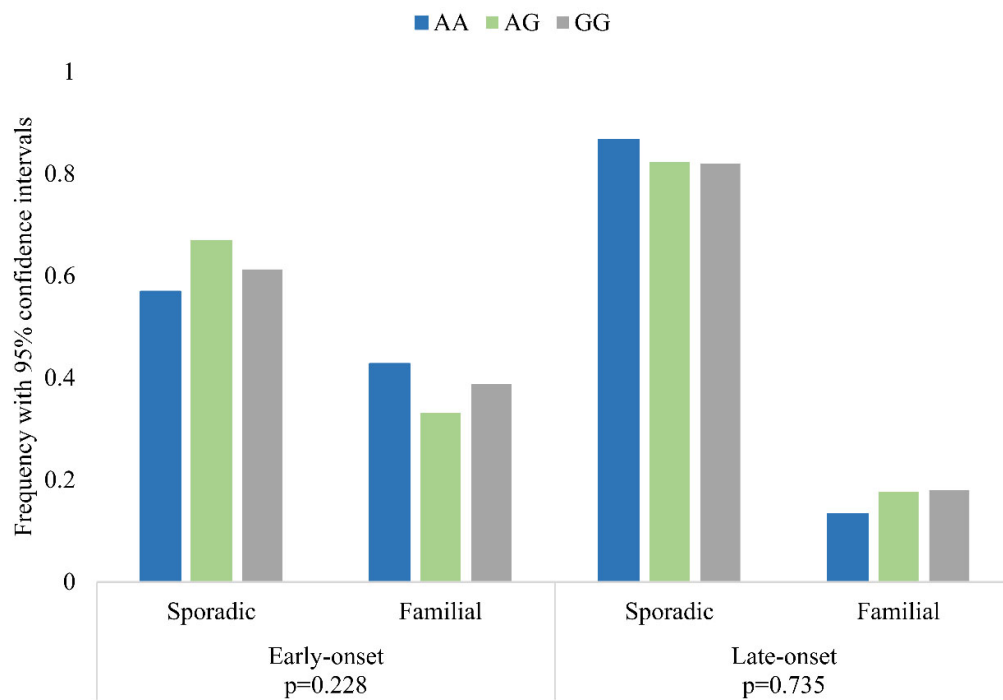


Figure S1. The frequency of different genotypes in sporadic and familial form among early- and late-onset psoriatic patients.