**Supplementary Table 7**: results of gene level meta-analysis with nominal p<5e-04. Only genes including at least two polymorphisms were reported. No gene was associated with the phenotypes of interest after multiple-testing correction. Chr=chromosome.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Phenotype** | **Gene** | **Description** | **Chr** | **N SNPs** | **Effect size** | **Z** | **p** |
| **TRD vs. response** | PTHLH | Parathyroid hormone like hormone | 12 | 42 | 5.67 | 3.74 | 9.11e-05 |
| PXN | Paxillin | 12 | 74 | 6.33 | 3.61 | 1.51e-04 |
| MTRNR2L6 | MT-RNR2 like 6 | 7 | 6 | 2 | 3.61 | 1.54e-04 |
| NEDD4 | Neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase | 15 | 617 | 17.67 | 3.67 | 3.78e-04 |
| SRGAP1 | SLIT-ROBO Rho GTPase activating protein 1 | 12 | 569 | 35 | 3.32 | 4.46e-04 |
| KRTAP15-1 | keratin associated protein 15-1 | 21 | 3 | 2.33 | 3.31 | 4.73e-04 |
| **TRD and responders % improv.** | C12orf57 | chromosome 12 open reading frame 57 | 12 | 9 | 3.67 | 3.66 | 1.25e-04 |
| PTHLH | Parathyroid hormone like hormone | 12 | 42 | 5.67 | 3.53 | 2.08e-04 |
| SRGAP1 | SLIT-ROBO Rho GTPase activating protein 1 | 12 | 569 | 35.00 | 3.53 | 2.15e-04 |
| MTRNR2L6 | MT-RNR2 like 6 | 7 | 6 | 2.00 | 3.39 | 3.50e-04 |
| MAP3K2 | Mitogen-activated protein kinase kinase kinase 2 | 2 | 86 | 4.33 | 3.35 | 4.05e-04 |
| **TRD vs. others** | KRTAP15-1 | keratin associated protein 15-1 | 21 | 3 | 2.33 | 3.7195 | 9.98e-05 |
| MYOZ3 | myozenin 3 | 5 | 44 | 2 | 3.5809 | 1.71e-04 |
| ADD2 | adducin 2 | 2 | 354 | 12.67 | 3.5602 | 1.85e-04 |
| RBM22 | RNA binding motif protein 22 | 5 | 10 | 3.67 | 3.4965 | 2.36e-04 |
| PTHLH | Parathyroid hormone like hormone | 12 | 42 | 5.67 | 3.3926 | 3.46e-04 |
| OR4D2 | Olfactory receptor family 4 subfamily D member 2 | 17 | 4 | 2 | 3.364 | 3.84e-04 |
| RHBDF1 | Rhomboid 5 homolog 1 | 16 | 42 | 6.33 | 3.3329 | 4.30e-04 |
| PLEKHA6 | Pleckstrin homology domain containing A6 | 1 | 451 | 11 | 3.3162 | 4.56e-04 |