Additional file 3: Table S3. Significantly BMI-associated miRNAs in different models.

| miRNA | BMI: adj age + sex (15) $\beta_{\Delta Ct}$ | $q$ | BMI: adj age + sex + BCPs (19) $\beta_{\Delta Ct}$ | $q$ | N | Accession | gene family | MIPF gene family | Chromo-some | strand |
|---|---|---|---|---|---|---|---|---|---|---|
| hsa-miR-106a-5p | 0.02 | 1.99E-02 | 0.02 | 5.82E-03 | 366 | MI0000113 | mir-17 | MIPF0000001 | chrX | - |
| hsa-miR-122-5p | -0.08 | 2.61E-05 | -0.08 | 2.25E-05 | 369 | MI0000442 | mir-122 | MIPF0000095 | chr18 | + |
| hsa-miR-143-3p | 0.04 | 2.61E-03 | 0.04 | 2.82E-03 | 314 | MI0000459 | mir-143 | MIPF0000094 | chr5 | + |
| hsa-miR-145-5p | 0.03 | 4.72E-03 | 0.03 | 1.13E-02 | 342 | MI0000461 | mir-145 | MIPF0000079 | chr5 | + |
| hsa-miR-148a-3p | -0.04 | 2.61E-05 | -0.04 | 2.25E-05 | 368 | MI0000253 | mir-148 | MIPF0000056 | chr7 | - |
| hsa-miR-185-5p | 0.02 | 1.32E-02 | 0.03 | 5.82E-03 | 370 | MI0000482 | mir-185 | MIPF0000202 | chr22 | + |
| hsa-miR-193b-3p | -0.05 | 1.99E-02 | -0.05 | 6.21E-03 | 208 | MI0003137 | mir-193 | MIPF0000082 | chr16 | + |
| hsa-miR-194-5p | -0.03 | 4.72E-03 | -0.04 | 1.68E-03 | 362 | MI0000488 | mir-194 | MIPF0000055 | chr1 | - |
| hsa-miR-19b-3p | | | 0.01 | 2.76E-02 | 368 | MI0000074 | mir-19 | MIPF0000011 | chr13 | + |
| hsa-miR-20a-5p | 0.02 | 3.16E-02 | 0.02 | 8.05E-03 | 367 | MI0000076 | mir-17 | MIPF0000001 | chr13 | + |
| hsa-miR-215 | -0.03 | 1.99E-02 | -0.03 | 3.50E-02 | 363 | MI0000291 | mir-192 | MIPF0000063 | chr1 | - |
| hsa-miR-365a-3p | -0.05 | 2.61E-03 | -0.06 | 1.63E-03 | 258 | MI0000767 | mir-365 | MIPF0000061 | chr16 | + |
| hsa-miR-486-5p | | | 0.02 | 3.44E-02 | 368 | MI0002470 | mir-486 | MIPF0000220 | chr8 | - |
| hsa-miR-505-3p | -0.05 | 1.02E-04 | -0.06 | 3.62E-05 | 309 | MI0003190 | mir-505 | MIPF0000217 | chrX | - |
| hsa-miR-885-5p | -0.05 | 1.99E-02 | -0.05 | 5.82E-03 | 315 | MI0005560 | mir-885 | MIPF0000532 | chr3 | - |
| hsa-miR-93-5p | 0.02 | 1.10E-02 | 0.02 | 3.21E-03 | 367 | MI0000095 | mir-17 | MIPF0000001 | chr7 | - |
| hsa-miR-99a-5p | -0.04 | 3.24E-03 | -0.04 | 2.63E-04 | 355 | MI0000101 | mir-10 | MIPF0000033 | chr21 | + |
| hsa-miR-18a-5p | | | 0.03 | 3.44E-02 | 351 | MI0000072 | mir-18 | MIPF0000001 | chr13 | + |
| hsa-let-7i-5p | | | 0.02 | 4.73E-02 | 367 | MI0000434 | let-7 | MIPF0000002 | chr12 | + |

BMI-associated miRNAs in different linear regression models. BMI: adj age + sex is adjusted for age and sex, BMI: adj age + sex + BCPs is additionally adjusted for BCPs.
$\beta_{\Delta Ct}$ : effect size, calculated on ΔCt values, (small ΔCt values indicate high miRNA levels), $\beta_{\Delta Ct} < 0$, positive association, implies higher miRNA levels with increasing BMI, $\beta_{\Delta Ct} > 0$ – negative association, indicate smaller miRNA levels with increasing BMI. $q$: corrected $p$-value using Benjamini-Hochberg multiple test correction. Accession number and additional information (gene family, MIPF gene family number, location on chromosome, strand) were derived from miRBase 21 (www.mirbase.org).