**Appendix: supplementary contents (Table S1, Table S2)**

**Table S1 Characteristics of patients with esophageal squamous cell carcinoma in**

**TCGA database (up to Jul 1, 2018)**

|  |  |
| --- | --- |
| **Variables** | **Case, n (%)** |
| Gender |  |
| Male | 117 （72.67） |
| Female | 44 （27.33） |
| Race |  |
| White | 93 （57.76） |
| Asia | 68 （42.24） |
| Age, years |  |
| ≤50 | 38 （23.60） |
| ＞50 | 123 （76.40） |
| Tumor grade |  |
| GⅠ | 27 （16.77） |
| GⅡ | 74 （45.96） |
| GⅢ-Ⅳ | 60 （37.27） |
| TNM stage |  |
| Ⅰ/Ⅱ | 51 （31.68） |
| Ⅲ/Ⅳ | 110 （68.32） |
| Lymph-node status |  |
| No metastasis | 10 （6.21） |
| Metastasis | 151 （93.79） |

**Table S2 Significant differentially expression of intersection miRNAs in ESCC**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name (miRNAs)** | **miRNA-Sequencing** | **Regulation** | **Fold-Change** | **-Log (FDR)** | **-Log (P)** |
| hsa-miR-205-5p | UCCUUCAUUCCACCGGAGUCUG | up | 76.60±8.55 | 4.36 | 5.33 |
| hsa-miR-200c-3p | UAAUACUGCCGGGUAAUGAUGGA | up | 43.95±1.10 | 7.00 | 7.00 |
| hsa-miR-183-5p | UAUGGCACUGGUAGAAUUCACU | up | 43.49±5.09 | 7.00 | 7.00 |
| hsa-miR-141-3p | UAACACUGUCUGGUAAAGAUGG | up | 43.11±1.65 | 7.00 | 7.00 |
| hsa-miR-182-5p | UUUGGCAAUGGUAGAACUCACACU | up | 24.36±2.84 | 7.00 | 7.00 |
| hsa-miR-200b-3p | UAAUACUGCCUGGUAAUGAUGA | up | 18.84±0.79 | 7.00 | 7.00 |
| hsa-miR-31-5p | AGGCAAGAUGCUGGCAUAGCU | up | 16.81±0.42 | 1.81 | 2.34 |
| hsa-miR-200a-3p | UAACACUGUCUGGUAACGAUGU | up | 15.08±0.79 | 5.59 | 6.30 |
| hsa-miR-224-5p | UCAAGUCACUAGUGGUUCCGUUUAG | up | 9.74±1.24 | 2.75 | 3.48 |
| hsa-miR-20b-5p | CAAAGUGCUCAUAGUGCAGGUAG | up | 5.86±0.62 | 1.54 | 2.03 |
| hsa-miR-21-3p | CAACACCAGUCGAUGGGCUGU | up | 5.46±0.57 | 3.53 | 4.36 |
| hsa-miR-15b-3p | CGAAUCAUUAUUUGCUGCUCUA | up | 4.92±0.39 | 5.27 | 6.37 |
| hsa-miR-15b-5p | UAGCAGCACAUCAUGGUUUACA | up | 4.71±0.21 | 5.72 | 6.15 |
| hsa-miR-425-5p | AAUGACACGAUCACUCCCGUUGA | up | 4.44±0.40 | 3.37 | 4.20 |
| hsa-miR-135b-5p | UAUGGCUUUUCAUUCCUAUGUGA | up | 4.17±0.67 | 1.63 | 2.14 |
| hsa-miR-93-5p | CAAAGUGCUGUUCGUGCAGGUAG | up | 3.97±0.23 | 4.09 | 4.99 |
| hsa-miR-185-5p | UGGAGAGAAAGGCAGUUCCUGA | up | 3.66±0.45 | 3.53 | 4.36 |
| hsa-miR-32-5p | UAUUGCACAUUACUAAGUUGCA | up | 3.62±0.18 | 4.19 | 5.16 |
| hsa-miR-200c-5p | CGUCUUACCCAGCAGUGUUUGG | up | 3.57±0.33 | 1.98 | 2.58 |
| hsa-miR-16-5p | UAGCAGCACGUAAAUAUUGGCG | up | 3.24±0.02 | 3.69 | 4.54 |
| hsa-miR-330-5p | UCUCUGGGCCUGUGUCUUAGGC | up | 3.13±0.14 | 1.77 | 2.31 |
| hsa-miR-106b-5p | UAAAGUGCUGACAGUGCAGAU | up | 2.99±0.12 | 3.78 | 4.66 |
| hsa-miR-33a-5p | GUGCAUUGUAGUUGCAUUGCA | up | 2.86±0.23 | 1.52 | 2.01 |
| hsa-miR-130b-3p | CAGUGCAAUGAUGAAAGGGCAU | up | 2.35±0.13 | 1.51 | 1.99 |
| hsa-miR-484 | UCAGGCUCAGUCCCCUCCCGAU | up | 2.29±0.09 | 2.20 | 2.81 |
| hsa-miR-133a-3p | UUUGGUCCCCUUCAACCAGCUG | down | -19.87±0.46 | 7.00 | 7.00 |
| hsa-miR-145-5p | GUCCAGUUUUCCCAGGAAUCCCU | down | -16.50±1.63 | 6.62 | 7.00 |
| hsa-miR-195-5p | UAGCAGCACAGAAAUAUUGGC | down | -6.91±0.93 | 4.34 | 5.28 |
| hsa-miR-143-3p | UGAGAUGAAGCACUGUAGCUC | down | -4.81±0.57 | 2.46 | 3.15 |
| hsa-miR-497-5p | CAGCAGCACACUGUGGUUUGU | down | -4.51±0.44 | 5.80 | 7.00 |
| hsa-miR-28-5p | AAGGAGCUCACAGUCUAUUGAG | down | -4.43±0.31 | 6.61 | 7.00 |
| hsa-miR-125a-5p | UCCCUGAGACCCUUUAACCUGUGA | down | -4.20±0.49 | 3.80 | 4.69 |
| hsa-miR-320a | GCCUUCUCUUCCCGGUUCUUCC | down | -2.82±0.28 | 2.51 | 3.17 |
| hsa-miR-101-3p | UACAGUACUGUGAUAACUGAA | down | -2.64±0.12 | 1.79 | 2.33 |
| hsa-miR-328-3p | CUGGCCCUCUCUGCCCUUCCGU | down | -2.33±0.11 | 2.40 | 3.06 |