**SUPPORTING INFORMATION ON THE INTERNET**

The following supporting information may be found in the online version of this article:

**Supplementary Tables:**

**Table S1.** **Genes sequences**

|  |  |
| --- | --- |
| Genes | Sequences(5’→3’) |
| hsa-miR-497-5p mimics | CAGCAGCACACUGUGGUUUGU |
| hsa-miR-497-5p inhibitor | ACAAACCACAGUGUGCUGCUG |
| MiR-NC | UCACAACCUCCUAGAAAGAGUAGA |
| Si-CEP55 | GGUUGAACGACAAACCAUAdTdT |
| Si-CEP55\_AS | UAUGGUUUGUCGUUCAACCdTdT |
| Si-NC | UUCUCCGAACGUGUCACGUTT |
| Si-NC \_AS | ACGUGACACGUUCGGAGAATT |

**Table S2.** **Primer sequences used for qRT-PCR.**

|  |  |
| --- | --- |
| Genes | Sequences(5’→3’) |
| CEP55-F | AGCGTCTACTGAGACTACTA |
| CEP55-R | AGCTGGGTTAAGTTTCAATG |
| HMGA2-F | CGGTGCCACCCACTACTCT |
| HMGA2-R | GCGGGTTGGGATCAGGAGTT |
| PTHLH -F | CCGTCCGATTTGGGTCTGAT |
| PTHLH -R | TTCTAGCCCACTCCCAGTCA |
| GAPDH-F | GGGAAACTGTGGCGTGAT |
| GAPDH-R | GAGTGGGTGTCGCTGTTGA |
| miR-497-5p-F | ACACTCCAGCTGGGCAGCAGCACACTGTGG |
| miR-497-5p-R | AGCCTCTGCGCACGTGTTC |
| U6-F | CTCGCTTCGGCAGCACA |
| U6-R | AACGCTTCACGAATTTGCGT |

**Table S3.** **Levels of genes (miR-497-5p, CEP55, and HMGA2) in bladder cancer subgroups (Non-muscle invasive and Muscle-invasive groups).**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene expression | NMIBC | MIBC | P |
| N (%) | N (%) |
| A | 13(32.5) | 19(63.3) |  |
| B | 9(22.5) | 3(10.0) | 0.035 |
| C | 18(45.0) | 8(26.7) |  |

A: CEP55high/miR-497-5plow/ HMGA2high

B: CEP55low/miR-497-5phigh / HMGA2low

C: Other

N: Numbers of people.

**Table S4.** **Levels of genes (miR-497-5p, CEP55, and HMGA2) in controls and bladder cancer groups. (low grade and high grade groups).**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene expression | Low grade | High grade | P |
| N (%) | N(%) |
| A | 11(31.4) | 21(60.0) |  |
| B | 8(22.9) | 4(11.4) | 0.054 |
| C | 16(45.7) | 10(17.1) |  |

A: CEP55 (+) /miR-497-5p (-)/ HMGA2 (+)

B: CEP55/ (-) miR-497-5p/ (+)/ HMGA2 (-)

C: Other

N: Numbers of people.

**Table S5.** **Levels of genes (miR-497-5p, CEP55, and HMGA2) in bladder cancer subgroups (Male and Female).**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene expression | Male | Female | P |
| N (%) | N (%) |
| A | 26(44.8) | 6(50.0) |  |
| B | 10(17.2) | 2(16.7) | 0.943 |
| C | 22(37.9) | 4(33.3) |  |

A: CEP55high/miR-497-5plow/ HMGA2high

B: CEP55low/miR-497-5phigh / HMGA2low

C: Other

N: Numbers of people.

**Table S6.** **Levels of genes (miR-497-5p, CEP55, and HMGA2) in bladder cancer subgroups (Age＞60 years and Age ≤60 years).**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene expression | ＞60 | ≤60 | P |
| N (%) | N (%) |
| A | 18(48.6) | 14(42.4) |  |
| B | 5(13.5) | 7(21.2) | 0.683 |
| C | 14(37.8) | 12(36.4) |  |

A: CEP55high/miR-497-5plow/ HMGA2high

B: CEP55low/miR-497-5phigh / HMGA2low

C: Other

N: Numbers of people.

**Table S7. Levels of genes (miR-497-5p, CEP55, and HMGA2) in bladder cancer subgroups (Smoking and No smoking).**

|  |  |  |  |
| --- | --- | --- | --- |
| Gene expression | Smoking | No smoking | P |
| N (%) | N (%) |
| A | 19(48.7) | 13(41.9) |  |
| B | 6(15.4) | 6(19.4) | 0.831 |
| C | 14(35.9) | 12(38.7) |  |

A: CEP55high/miR-497-5plow/ HMGA2high

B: CEP55low/miR-497-5phigh / HMGA2low

C: Other

N: Numbers of people.