| Group  | Age (years) | Pathological type                                      |
|-------|-------------|--------------------------------------------------------|
| HPV-16-1 | 53          | Cervical cancer<br>Invasive squamous cell carcinoma<br>Large cell<br>Non-keratinizing carcinoma |
| HPV-16-2 | 53          | Cervical cancer<br>Invasive squamous cell carcinoma<br>Large cell<br>Keratotic carcinoma |
| HPV-16-3 | 37          | Cervical cancer<br>basaloid squamous cell carcinoma    |
| HPV-18-1 | 47          | Cervical cancer<br>Invasive squamous cell carcinoma<br>Large cell<br>Keratotic carcinoma |
| HPV-18-2 | 42          | Cervical cancer<br>Invasive squamous cell carcinoma<br>Large cell<br>Keratotic carcinoma |
| HPV-18-3 | 38          | Cervical cancer<br>Moderately differentiated adenocarcinoma |
| Normol-1 | 47          | Normal cervical tissue                                 |
| Normol-2 | 47          | Normal cervical tissue                                 |
| Normol-3 | 51          | Normal cervical tissue                                 |

HPV, human papilloma virus.
Table SII. List of bisulfite PCR and sequencing primers.

| Sequence | Probe ID/primer name | Primer name | Base sequence (5’to3’) | 5’ Modification |
|----------|----------------------|-------------|------------------------|-----------------|
| 1        | cg24575234           | CHRM2-F (107 bp) | ATAGGGTTATAGATTAGTTAAGTGTTGAGA |                 |
|          |                      | CHRM2-R     | AAAAAACCACCCCCAAAACCTCTAAC | 5'-Biotin       |
|          |                      | CHRM2-S     | TGGGGGTGAAGTATTGT     |                 |
| 2        | cg20818778           | GNG4-F (97 bp) | GTGATTATAGTTTTTTTTTTTTTAGGGAAA |                 |
|          |                      | GNG4-R      | ACTTCTCTATTTCCCAAAAATTTCC | 5'-Biotin       |
|          |                      | GNG4-S      | TTTTGGGGAAATTTTAGTTTGA |                 |
| 3        | cg14289461           | LAMA4-F (91 bp) | GAGTTTTTTTATAGGGTTTTTAGGAAGATAAT |                 |
|          |                      | LAMA4-R     | ATAAAAACATCCCATACTACTACTACATAAA | 5'-Biotinva |
|          |                      | LAMA4-S     | TTTAGGGAAGATTTTAGTTTGTG |                 |
| 4        | cg06818777           | CHAD-F (99 bp) | GAGAGAGGGAGGAGTTTTTTTATTTAATT |                 |
|          |                      | CHAD-R      | CTTCCCATCCAAACACCCC | 5'-Biotin       |
|          |                      | CHAD-S      | ATTTTGTTGTTGTGTAGTTGTA |                 |
| 5        | cg08361126           | ITGA8-F (84 bp) | GGTGTTAGTTGGGTTTGGA |                 |
|          |                      | ITGA8-R     | AAACCTATTATTCTTTAAATAAAACTACA | 5'-Biotin   |
|          |                      | ITGA8-S     | AGTGGGAGGGTTTGGA |                 |
| 6        | cg06381931           | COL11A1-F (88 bp) | GGTGGTAGTAGGAATTTTTATTTTTGTGTA |                 |
|          |                      | COL11A1-R   | CAAAATAAACACACCAATAATCCACTAAAT | 5'-Biotin   |
|          |                      | COL11A1-S   | TAGGAGTAATTTTTATTTTTGTGTA |                 |
| 7        | cg08976810           | FGF10-F (52 bp) | GGGTTGTTTAGATTTTTGGAAGGT |                 |
|          |                      | FGF10-R     | TCCCCAAAAACAAAAATAACTTT | 5'-Biotin       |
|          |                      | FGF10-S     | TGGTTGTTAGATTTTTGGAAGGT |                 |
| 8        | cg20881548           | IGF1-F (60 bp) | GAGAGGATTTAACAGGAATTTTTTGTAATGA |                 |
|          |                      | IGF1-R      | ATCCCTCCACTTCTACAAAAACTT | 5'-Biotin       |
|          |                      | IGF1-S      | ATTTAAGGAATTTTTGTGTAATGAT |                 |
| 9        | cg08264401           | TEK-F (85 bp) | GGTTTTTTATTTTTAAGGTGTTTGTGTA | 5'-Biotin   |
|          |                      | TEK-R       | AATAACCAATCCTCTTTAACACTTCC |                 |
|          |                      | TEK-S       | CAAAACCTCCTACAACTCTC |                 |