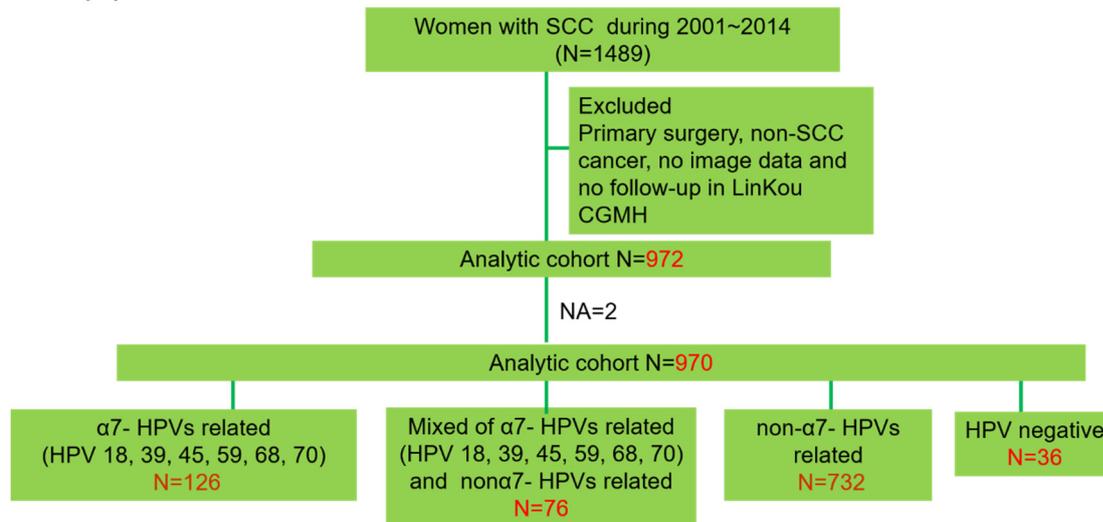
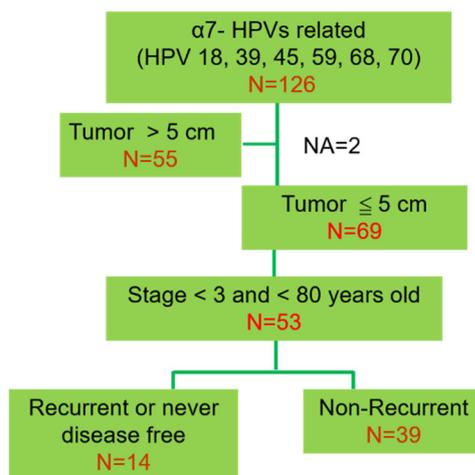


Supplementary Materials:

(A)

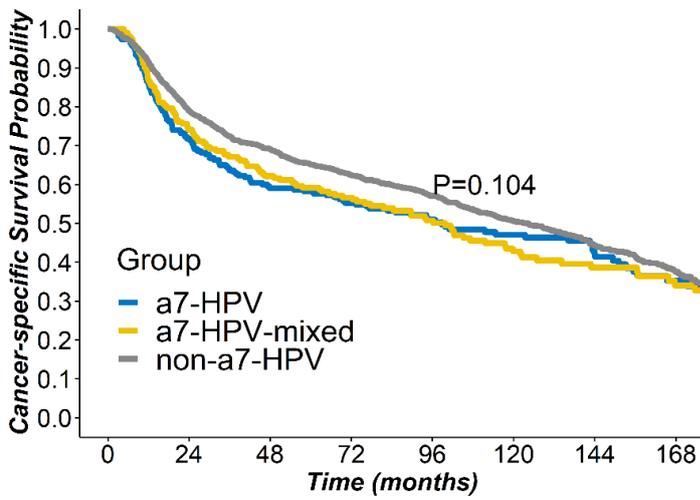


(B)



Supplementary Figure S1. A&B: Study flowchart.

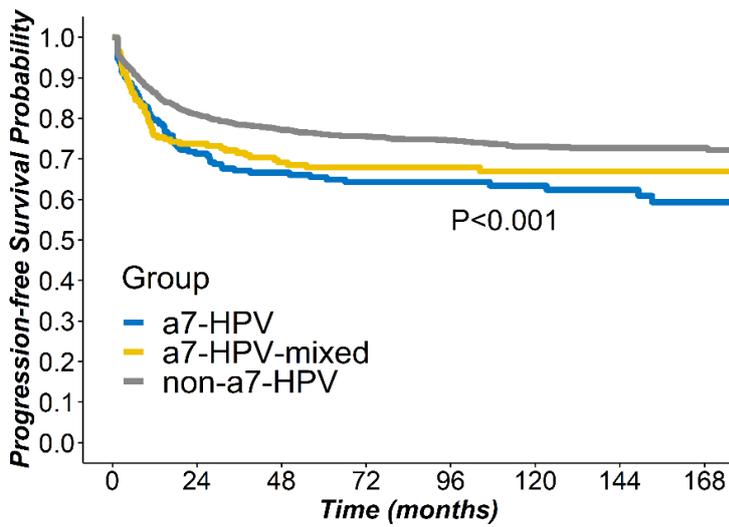
A



Number at risk

| | | | | | | | | |
|---|------|------|-----|-----|-----|-----|-----|-----|
| — | 224 | 159 | 130 | 114 | 82 | 67 | 50 | 26 |
| — | 201 | 149 | 124 | 109 | 80 | 59 | 41 | 28 |
| — | 1412 | 1101 | 937 | 779 | 597 | 418 | 276 | 167 |

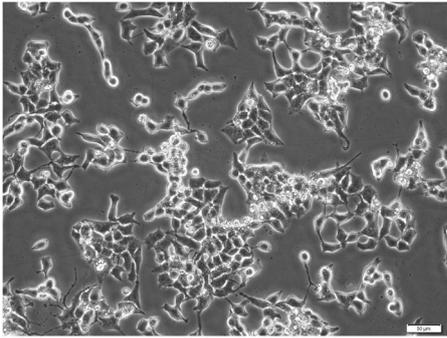
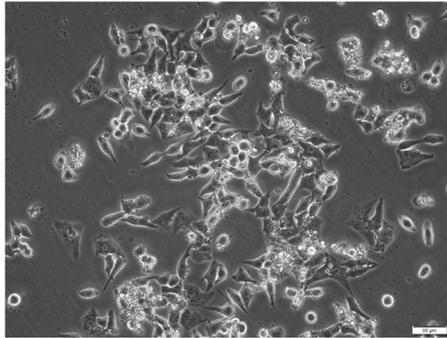
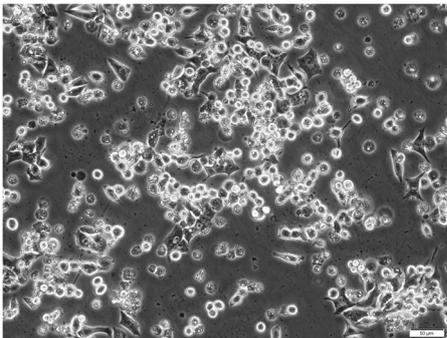
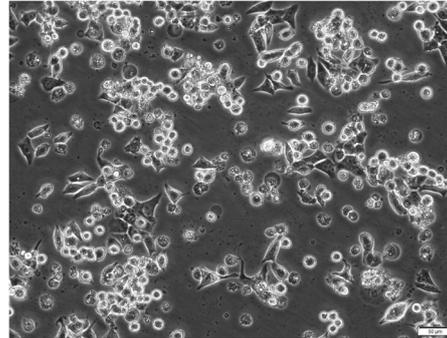
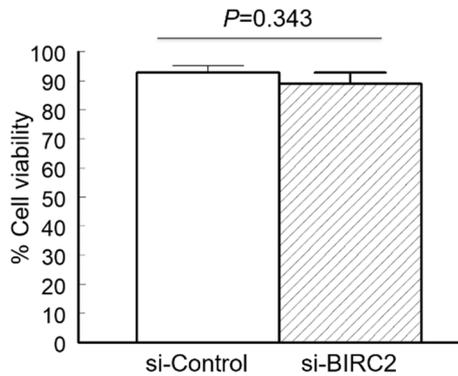
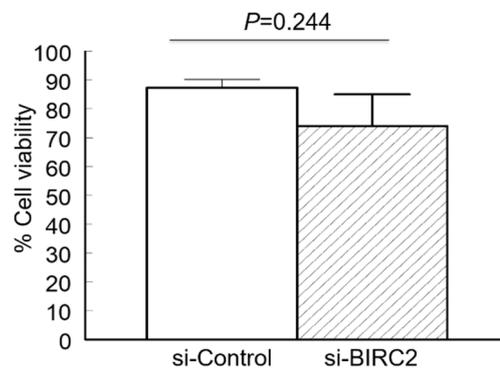
B



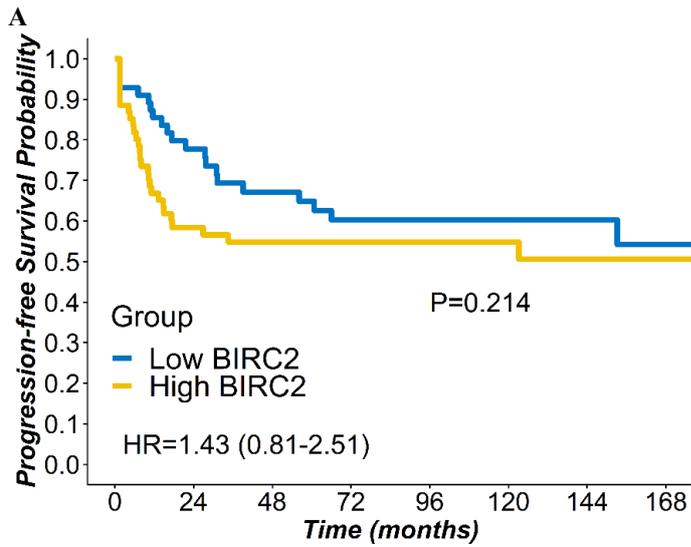
Number at risk

| | | | | | | | | |
|---|------|------|-----|-----|-----|-----|-----|-----|
| — | 224 | 139 | 122 | 106 | 78 | 64 | 48 | 25 |
| — | 201 | 135 | 113 | 101 | 76 | 56 | 40 | 27 |
| — | 1412 | 1023 | 871 | 733 | 571 | 394 | 261 | 159 |

Supplementary Figure S2. Kaplan–Meier survival curves presenting (A) CSS and (B) PFS according to HPV genotype (α 7-HPV, α 7 HPV-mixed, or non- α 7-HPV) in the 1993–2014 cohort.

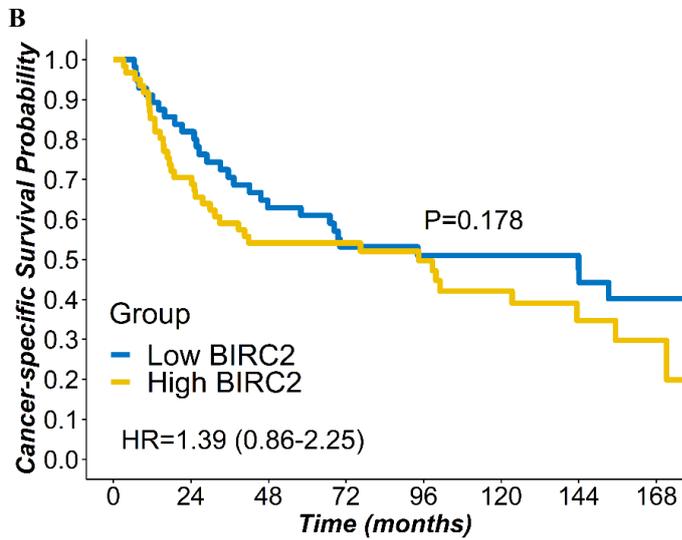
A HeLa-S3: si-Control**B HeLa-S3: si-BIRC2****C MS751: si-Control****D MS751: si-BIRC2****E HeLa-S3****F MS751**

Supplementary Figure S3. Effects on cervical cancer cell morphology and cell viability after siRNA for control (si-Control) or BIRC2 (si-BIRC2) treatment. (A~D) Representative cell morphology images of HeLa-S3 or MS751 cells were subjected to control or BIRC2 silencing using a specific siRNA for 72 h. Scale bar, 50µm. (E, F) HeLa-S3 or MS751 cells were treated with si-Control or si-BIRC2 for 72 h. Cell viability quantitatively analyzed by the trypan blue assay. The viability of the cells after transfection with si-Control or si-BIRC2 was 93 % and 89 % for HeLa-S3, and 87 % and 74 % for MS751, respectively. In the quantitative bar graph, the results are expressed as mean ± standard error of the mean.



Number at risk

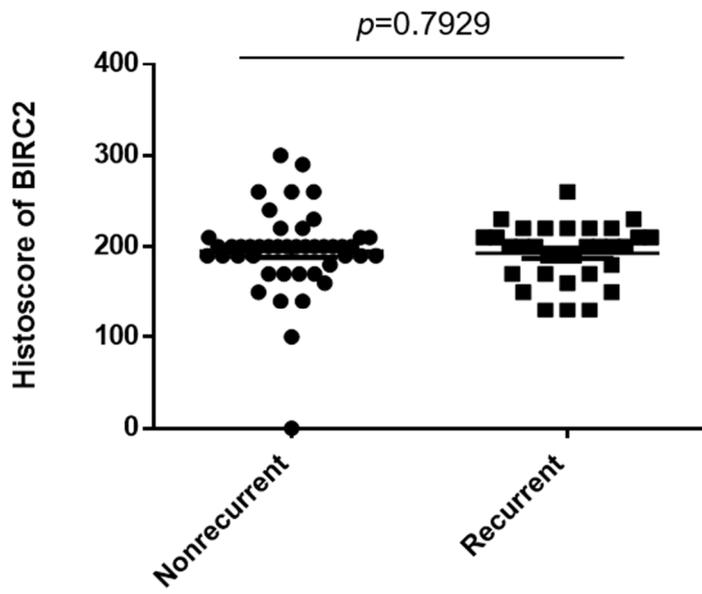
| | | | | | | | | |
|---|----|----|----|----|----|----|----|---|
| — | 56 | 39 | 30 | 24 | 21 | 17 | 13 | 7 |
| — | 61 | 33 | 31 | 25 | 20 | 14 | 7 | 3 |



Number at risk

| | | | | | | | | |
|---|----|----|----|----|----|----|----|---|
| — | 56 | 44 | 33 | 27 | 24 | 19 | 14 | 8 |
| — | 61 | 43 | 33 | 27 | 21 | 15 | 8 | 3 |

Supplementary Figure S4. Kaplan–Meier survival curves of **(A)** CSS and **(B)** PFS of α 7-HPV related SCC in the 2001–2014 cohort according to BIRC2 histoscores (>175 vs. \leq 175).



Supplementary Figure S5. BIRC2 histoscores in matched non- α 7-HPV-related cervical SCC according to recurrence/progression status.