Supplementary materials

Figure S1. Identification of clinically relevant subtypes of cervical cancer in GEO database. (A) The optimal number of clusters ($K$). (B) The cluster plot of 3 subtypes. (C) Kaplan-Meier plot of the three clusters. (D) The correlation heatmap of 3 subtypes. (E) Silhouette plot of three subtypes.

Table S1. The screened gene sets after univariable cox regression analysis.

| Gene sets and pathways                        | HR   | ln(HR) | HR 95% CL_L | ln(HR 95% CL_L) | HR 95% CL_U | ln(HR 95% CL_U) | p-value |
|-----------------------------------------------|------|--------|-------------|-----------------|-------------|-----------------|---------|
| T_GSE36888_UNTREATED_ED_VS_IL2_TREATED_S     | 3297.75 | 8.100  | 8.683       | 2.161           | 1252518     | 14.041          | 0.0075  |
| TAT5_AB_KNOCKIN_TCELL_2H_UP                  |      |        |             |                 |             |                 |         |
| N_HALLMARK_Angioogenesis                    | 665.258 | 6.500  | 17.521      | 2.863           | 25258.5     | 10.137          | 0.00046 |
| N_HALLMARK_Epithelial_Mesenchymal_Transition | 43.790 | 3.779  | 2.516       | 0.923           | 762.245     | 6.636           | 0.0095  |