

Figure S1. Flow cytometric analysis of the cell cycle of osimertinib-resistant and -sensitive cells. Flow cytometry plots showing the changes in cell cycle profile in (A) HCC827 and HCC827-OR cells, and (B) H1975 and H1975-OR cells after 24 h treatment with various concentrations of osimertinib.

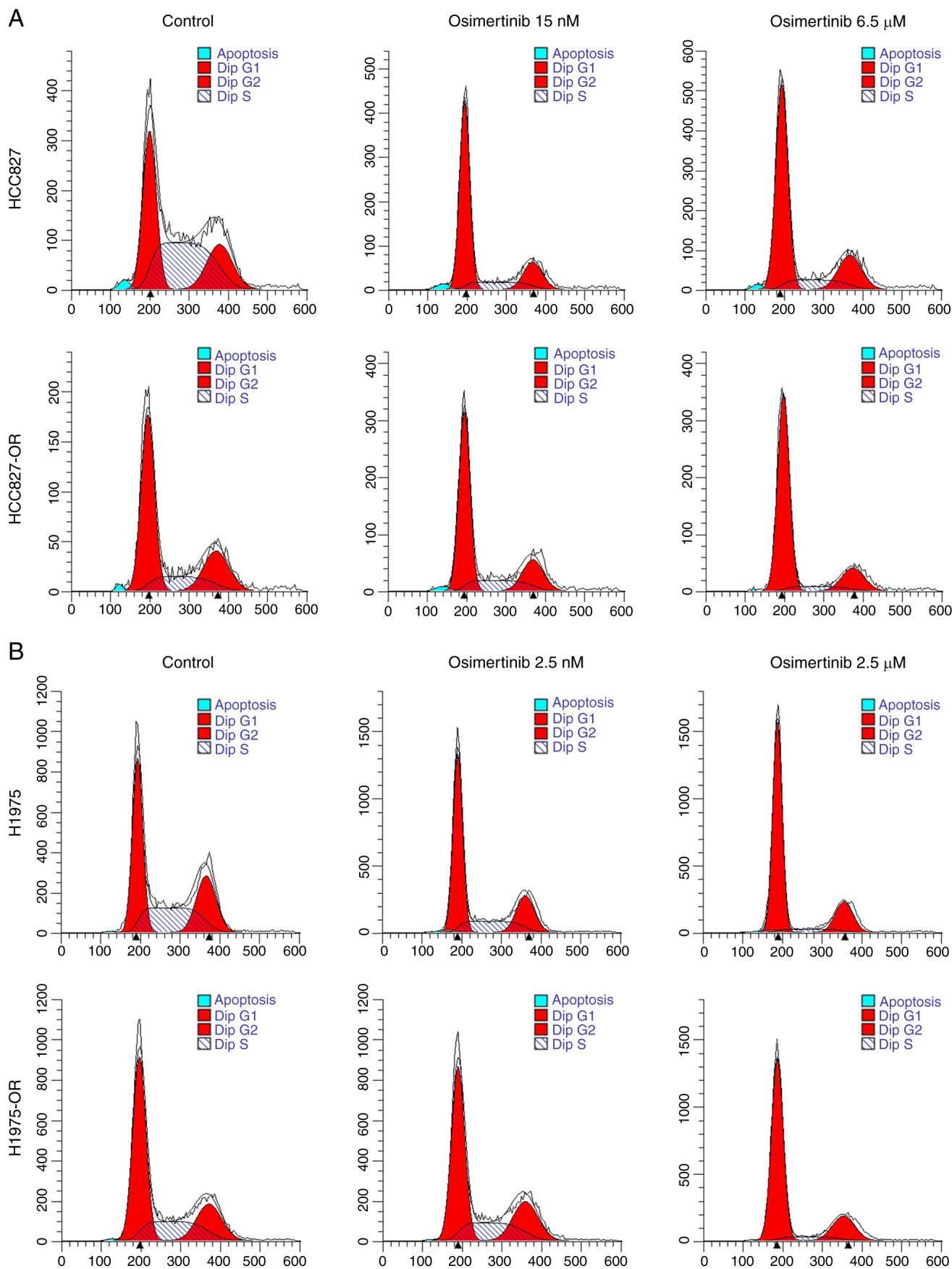


Figure S2. Validation of differentially expressed genes in osimertinib-resistant and -sensitive cells. RT-qPCR analysis of (A) upregulated or (B) downregulated genes in HCC827-OR cells. RT-qPCR analysis of (C) upregulated or (D) downregulated genes in H1975-OR cells. \*\*P<0.01. RT-qPCR, reverse transcription-quantitative PCR.

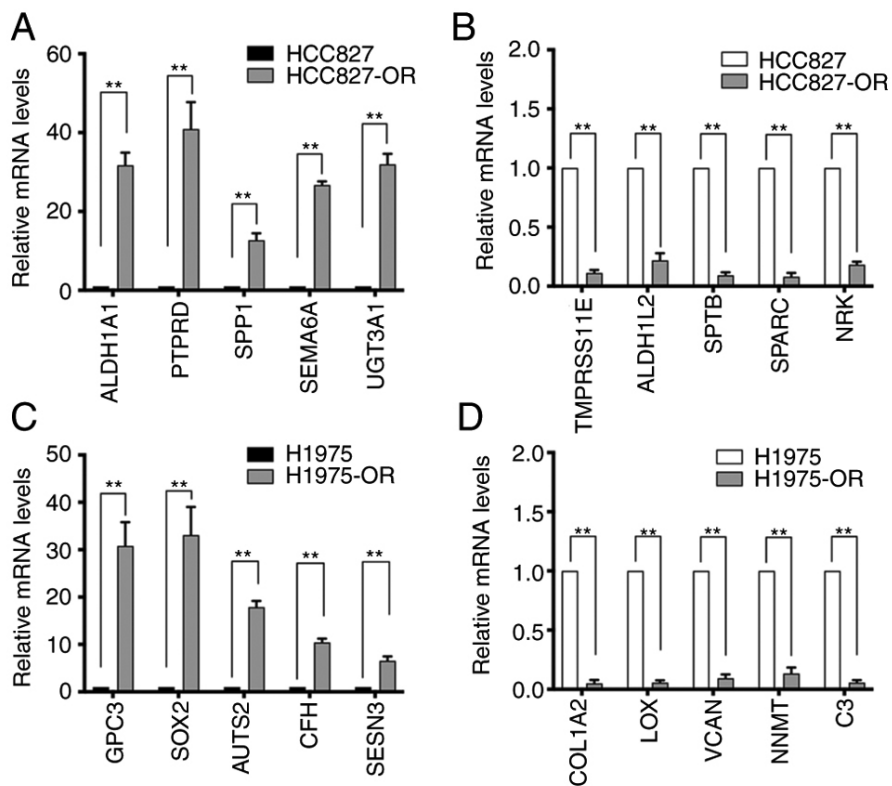


Figure S3. Effect of knockdown or overexpression of circPDLIM5 on HCC827-OR cells in terms of proliferation, migration, cell cycle progression and apoptosis. A total of 48 h post-transfection, (A) the apoptotic rates and (B) cell cycle progression of si-circPDLIM5-transfected HCC827-OR cells were determined by flow cytometry. (C) Expression of circPDLIM5 in HCC827-OR cells, as measured by reverse transcription-quantitative PCR analysis. Cell proliferation was significantly decreased in response to circPDLIM5 overexpression in HCC827-OR cells, as assessed by (D) Cell Counting Kit 8 and (E) colony formation assays. (F) Migration assays showed that circPDLIM5 was involved in the regulation of the migration of HCC827-OR cells. (G) Overexpression of circPDLIM5 had a positive effect on the apoptotic rate of osimertinib-resistant cells, as determined by flow cytometry. \* $P < 0.05$  and \*\* $P < 0.01$ . NC, negative control; si, small interfering.

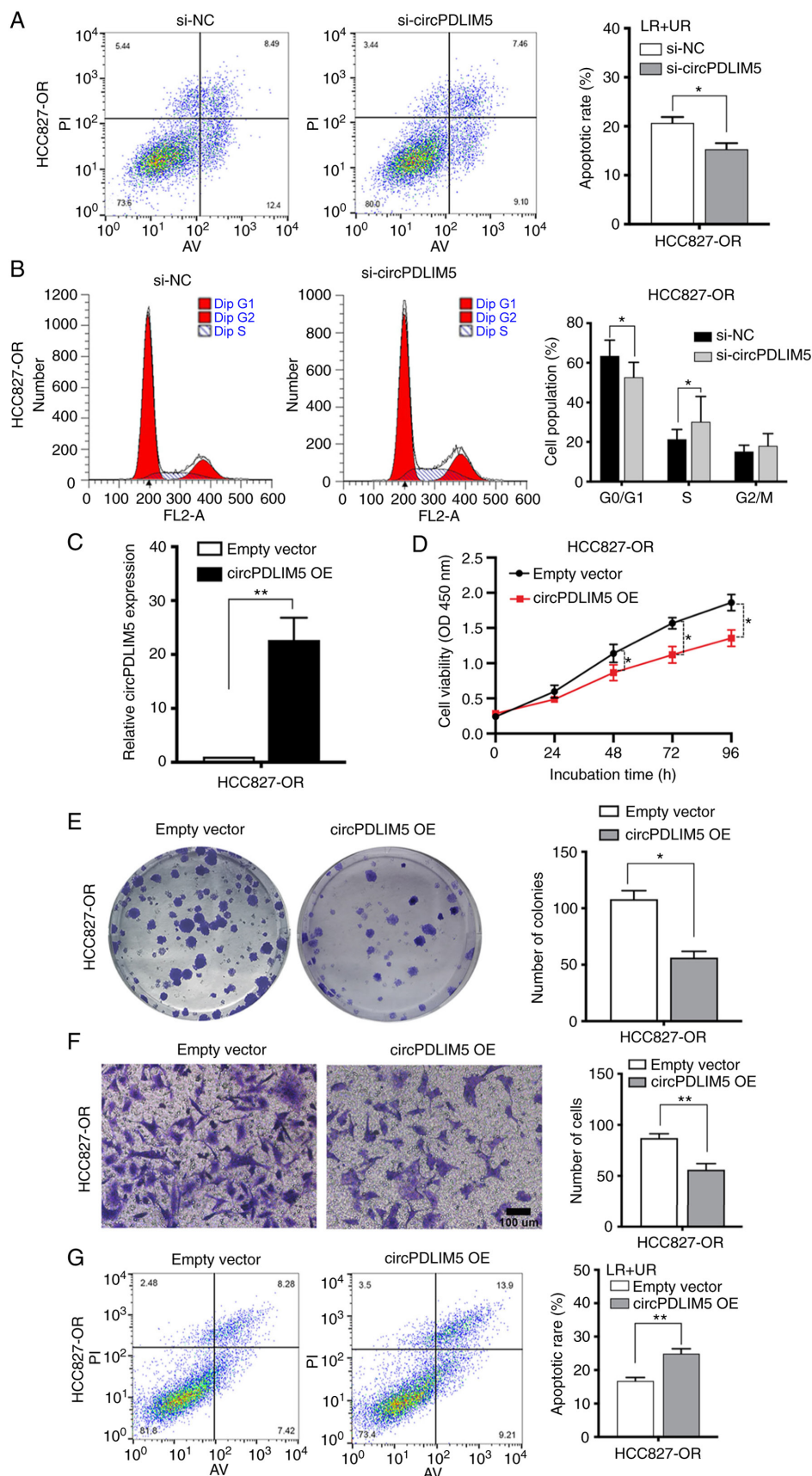


Figure S4. CircPPP4R1 regulates proliferation, migration, cell cycle progression and apoptosis of H1975-OR and H1975 cells *in vitro*. H1975-OR cells were transfected with si-circPPP4R1, (A) apoptotic rates and (B) cell cycle progression were assessed by flow cytometry. (C) Reverse transcription-quantitative PCR analysis of circPPP4R1 expression level in H1975 cells transfected with specific siRNAs. There was no statistically significant change in cell proliferation and migration of si-circPPP4R1-transfected H1975 cells, as determined by (D) Cell Counting Kit 8, (E) colony formation, (F) Transwell and (G) flow cytometry assays. \* $P < 0.05$  and \*\* $P < 0.01$ . NC, negative control; ns, not significant; si, small interfering.

