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## **Supplemental Information**

### **A piRNA-like Small RNA Induces Chemoresistance to Cisplatin-Based Therapy by Inhibiting Apoptosis in Lung Squamous Cell Carcinoma**

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## Supplementary Figures, Figure legends and Supplementary Table

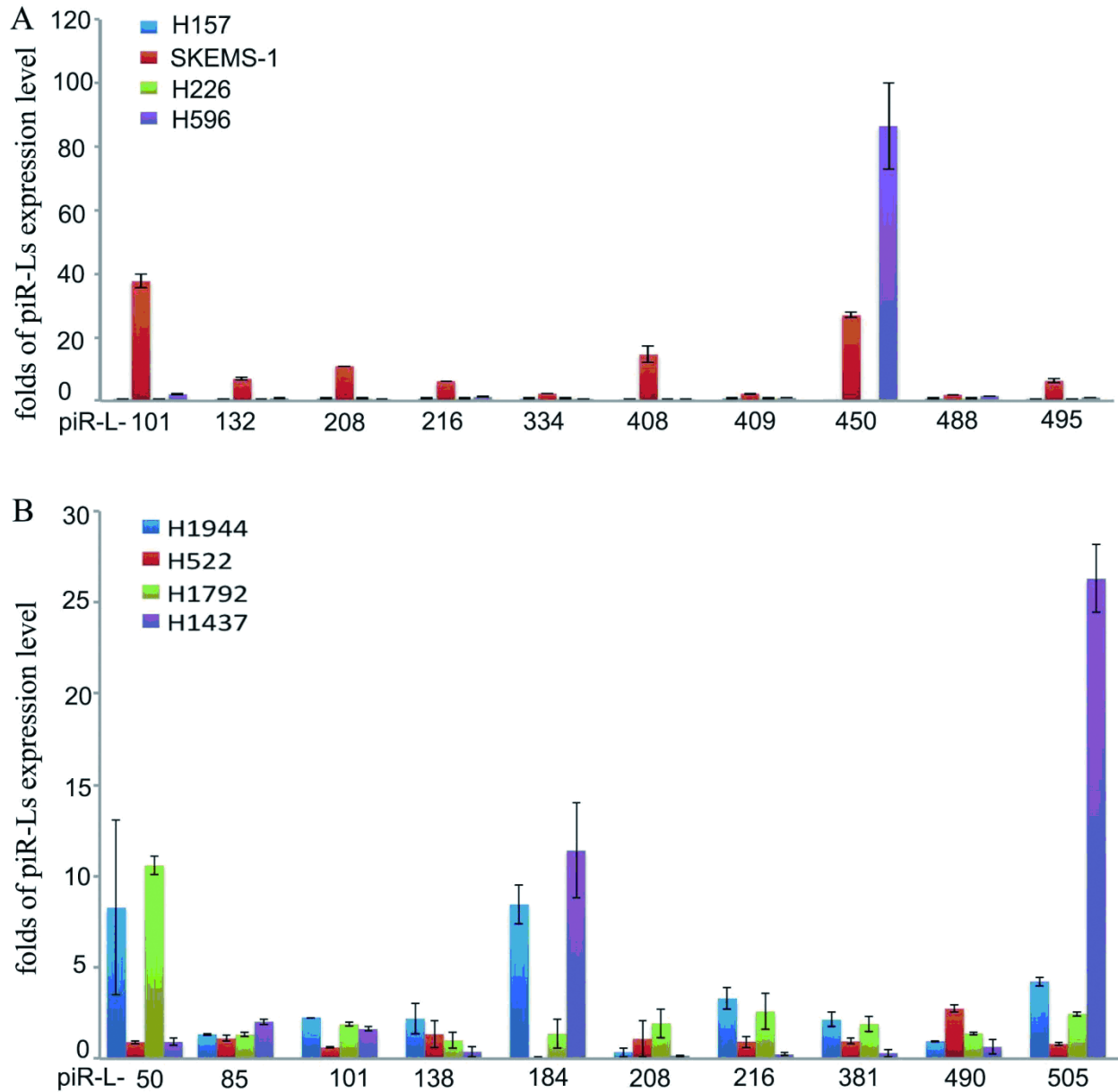


Figure S1. The changed folds of expression levels of LSCC-related and non-LSCC-related piR-Ls in LSCC and LADC treated with CDDP. (A) Relative expression levels of LSCC-related and non-LSCC-related piR-Ls in LSCC treated with CDDP. (B) Relative expression levels of LSCC-related and non-LSCC-related piR-Ls in LADC treated with CDDP. The level in cells treated with the corresponding control solutions (PBS or DMSO) was a control. Values are averages of three independent replicates, and error bars represent mean  $\pm$  SEM.

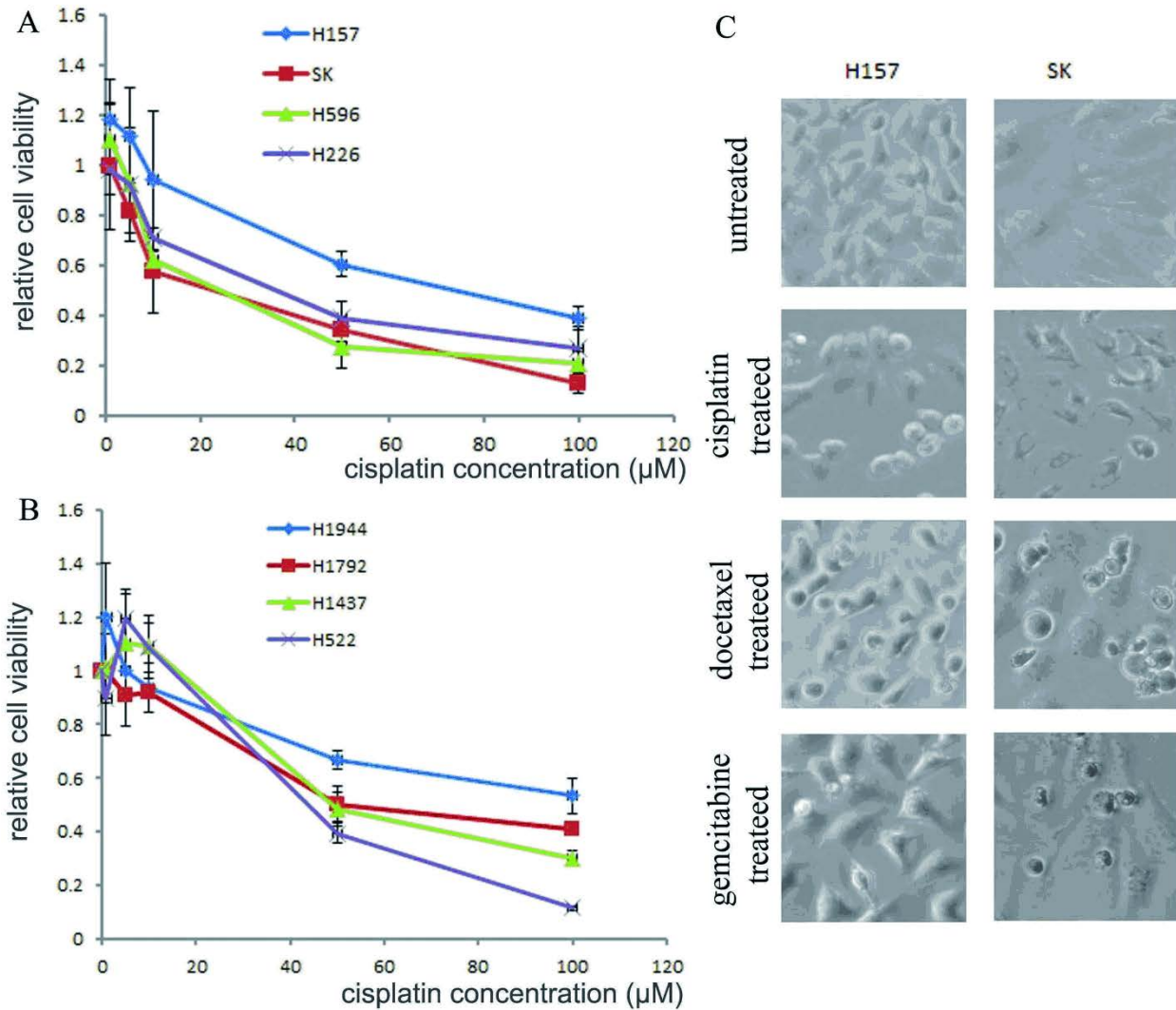


Figure S2. Responses of NSCLC cell lines to CDDP. (A) Response curves of LSCC cells to different concentrations of CDDP. (B) Response curves of LADC cells to different concentrations of CDDP. (C) Morphological changes of H157 and SKEMS-1 (SK) cells treated with different chemotherapeutic agents. Values are averages of three independent replicates, and error bars represent mean  $\pm$  SEM.

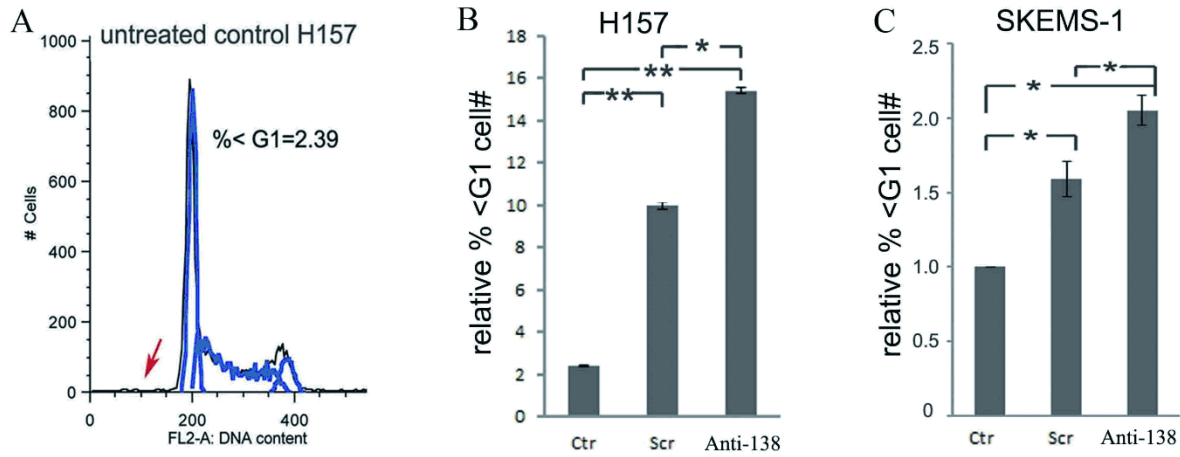


Figure S3. (A) Experimental controls for flow cytometer analysis. (B) Targeting the upregulated piR-L-138 by CDDP induced increased sub-G1 population. All values are averages of three independent replicates, the error bars reflect mean  $\pm$  SEM, and \* indicates  $P < 0.05$ , and \*\* indicates  $P < 0.01$ .

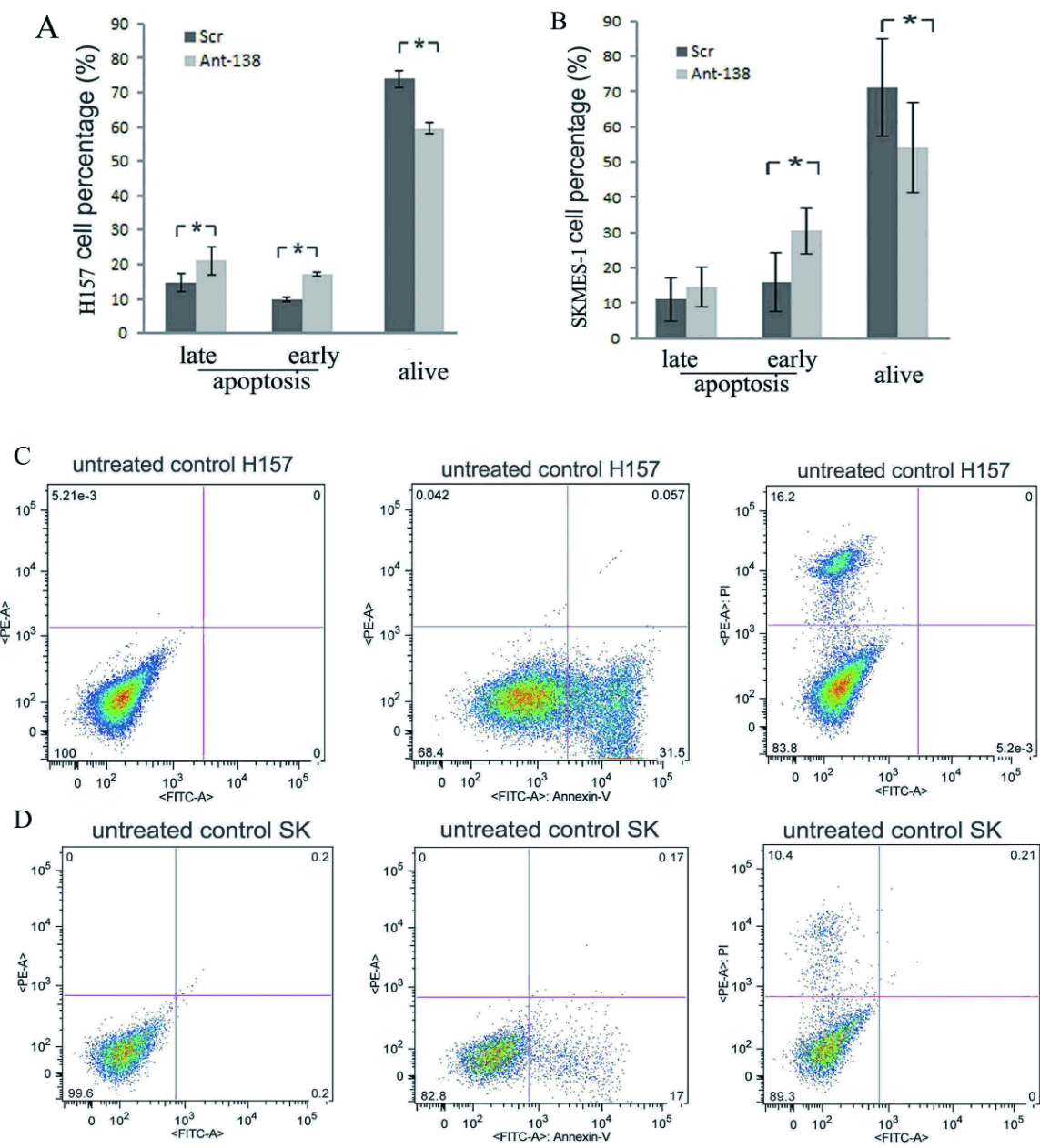


Figure S4. Percentages of Annexin-V-positive cells before and after piR-L-138 blocking in H157 (A) and SKMES-1 (B) cells treated with CDDP. Experimental controls for detecting Annexin-V levels in H157 (C) and in SKMES-1 cells (D). All values are averages of three independent replicates, the error bars reflect mean  $\pm$  SEM, and \* indicates  $P < 0.05$ .

Table S1

Table 1. IC<sub>50</sub> (uM) of cisplatin in NSCLC

cell line	IC <sub>50</sub>
H157	80
SKMES-1	10
H596	30
H226	40
H1944	100
H1792	50
H1437	50
H522	45