

Supplementary Materials: Extracellular Vesicles Act as Nano-Transporters of Tyrosine Kinase Inhibitors to Revert Iodine Avidity in Thyroid Cancer

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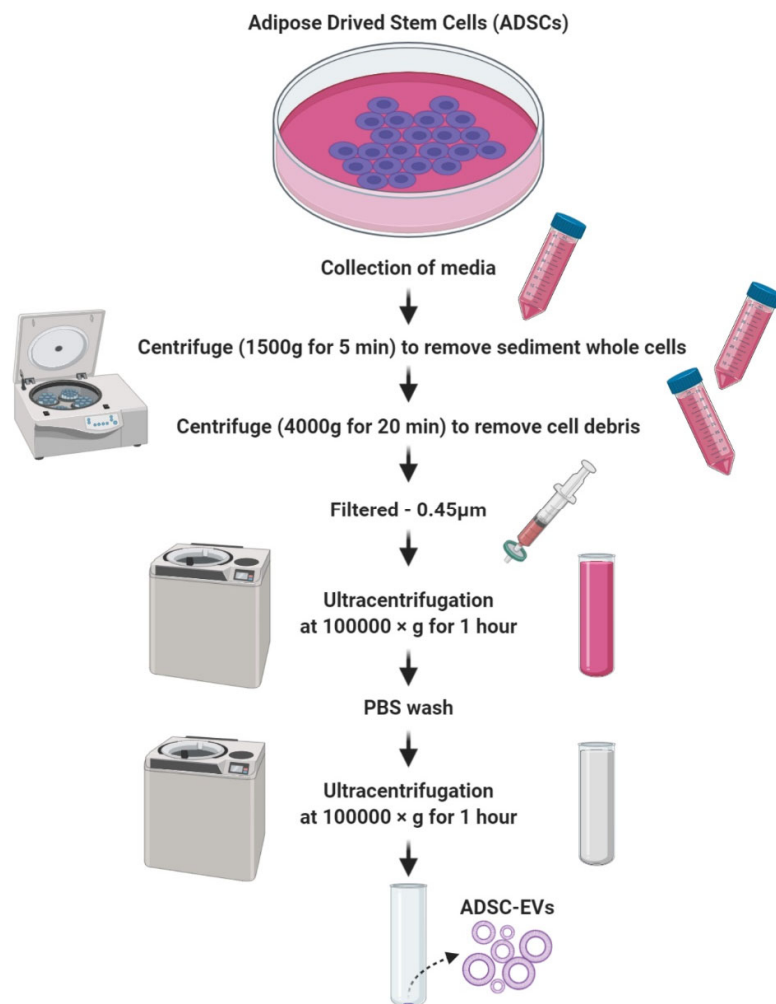


Figure S1. Isolation of EVs from ADSCs.

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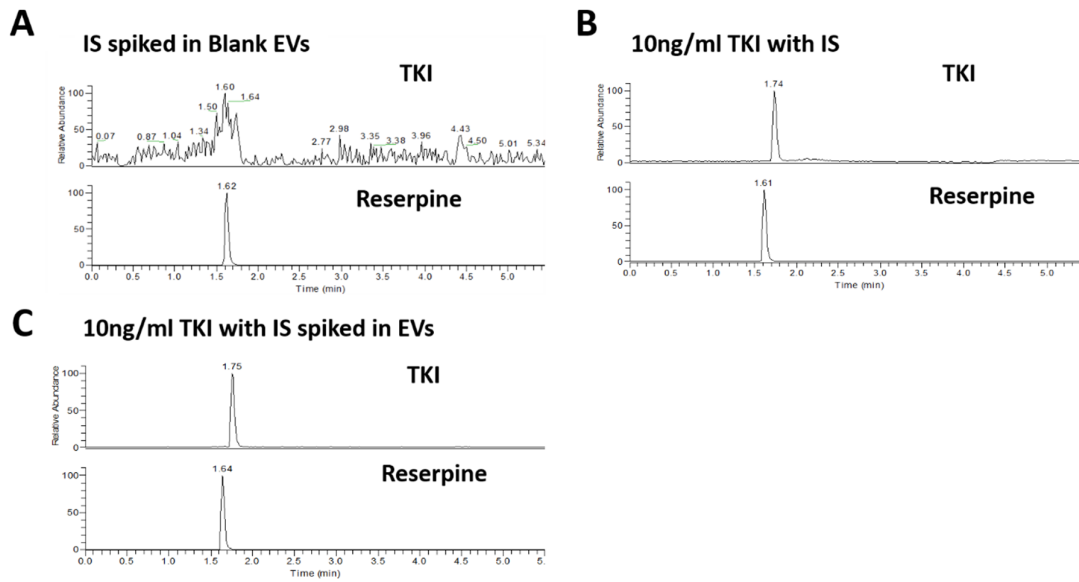


Figure S2. Extracted Ion Chromatogram of TKI and Internal Standard (IS). (A) Blank EV with IS. (B) Standard TKI with IS. (C) TKI with IS spiked in EVs.

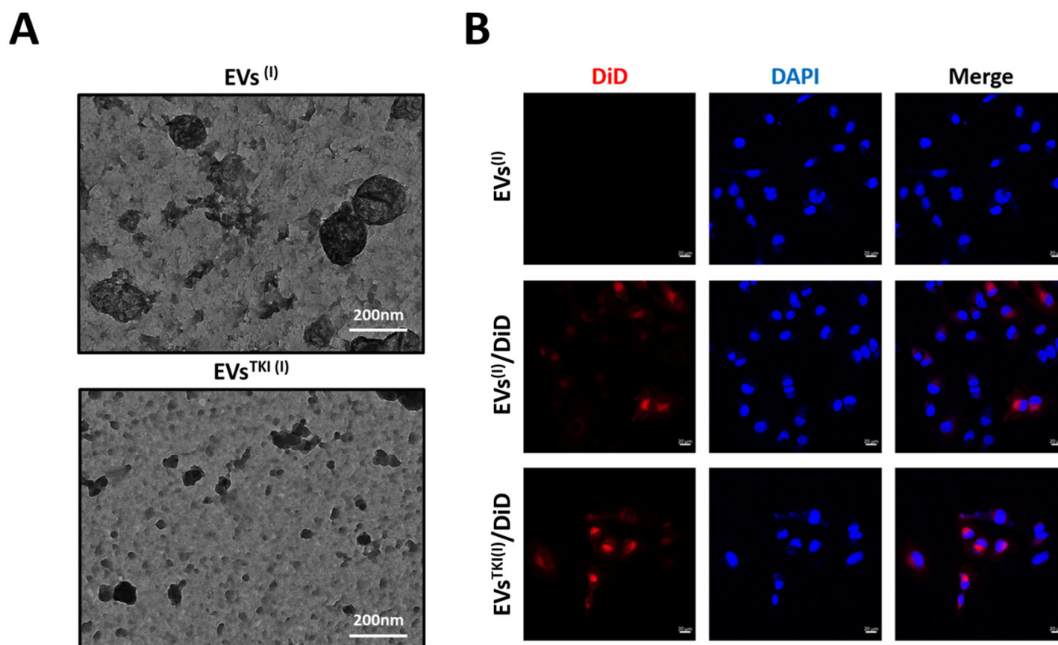


Figure S3. TKI Loading into EVs did not affect the morphology and internalization. (A) Morphologies of EVs^(l) and EVs^{TKI(l)} cells were confirmed by transmission electron microscopy (scale bar: 200 nm). (B) ATC cells (SW1736) were incubated with EVs^(l), EVs^(l)/DiD, or EVs^{TKI(l)}/DiD (scale bar: 20 μm).

Table S1. Summary of Intra-day and Inter-day TKI Concentrations in the EVs with RSD and Accuracy Calculations.

| Name of analyte | Nominal Concentration (ng/mL) | Intra-Day | | | | Inter Day | | | |
|-----------------|-------------------------------|--------------------------------|----------|-------------------|-----------------|--------------------------------|----------|-------------------|-----------------|
| | | Concentration Measured (ng/mL) | ± | Precision (% RSD) | Accuracy (% RE) | Concentration Measured (ng/mL) | ± | Precision (% RSD) | Accuracy (% RE) |
| TKI | 10 | 8.51 | ± 0.17 | 4.7 | 114.8 | 8.70 | ± 0.20 | 5.2 | 112.9 |
| | 100 | 86.90 | ± 0.71 | 1.8 | 113.1 | 85.61 | ± 2.21 | 5.5 | 114.4 |
| | 1000 | 914.57 | ± 19.54 | 4.8 | 108.5 | 932.59 | ± 5.00 | 1.2 | 106.7 |
| | 5000 | 5049.34 | ± 115.42 | 5.1 | 99.0 | 5688.81 | ± 107.50 | 4.2 | 86.3 |
| | 20000 | 19612.29 | ± 192.31 | 2.2 | 101.9 | 21066.42 | ± 264.46 | 2.8 | 94.7 |