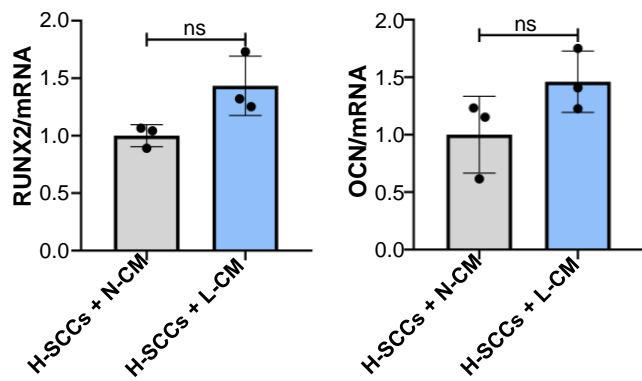


A



B

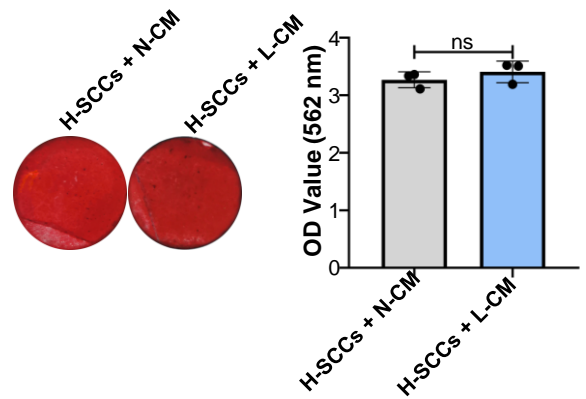


Figure S1. The effect of L-CM on the osteogenic differentiation of H-SCCs. (A) RT-qPCR was performed to investigate the expressions of *RUNX2* and *OCN* in H-SCCs stimulated with two-fold concentrated osteogenic induction medium mixed with equal volumes of N-CM or L-CM ( $n=3$ ). (B) Mineralized nodule formation in H-SCCs stimulated with two-fold concentrated osteogenic induction medium mixed with equal volumes of N-CM or L-CM was tested by Alizarin red staining ( $n=3$ ). N-CM: normal culture medium; L-CM: conditioned medium from L-SCCs.

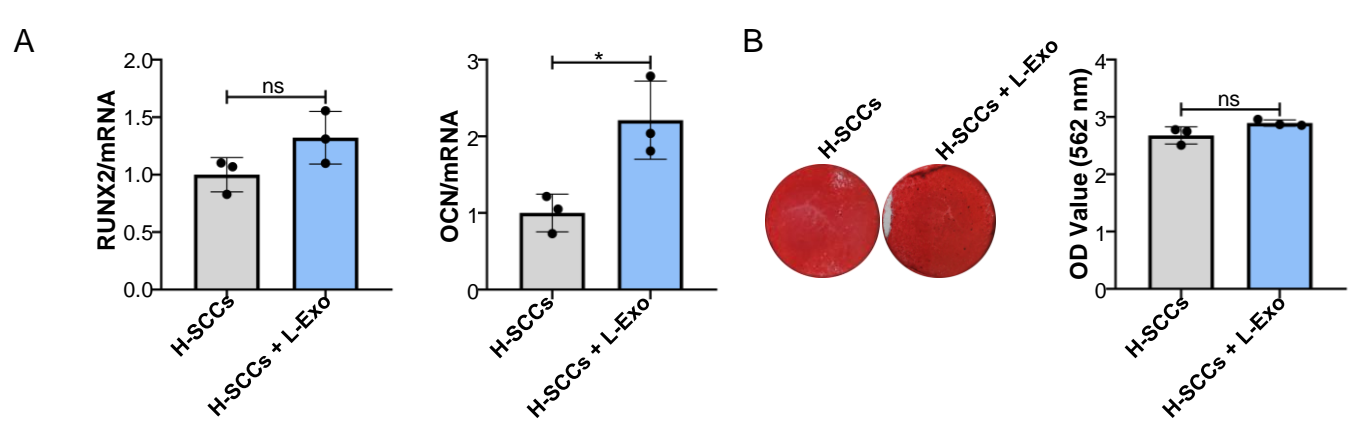


Figure S2. The effect of L-Exo on the osteogenic differentiation of H-SCCs. (A) RT-qPCR was performed to investigate the expressions of *RUNX2* and *OCN* in H-SCCs stimulated by osteogenic inducing fluid without exosomes or osteogenic inducing fluid containing 20  $\mu\text{g}/\text{mL}$  L-Exo ( $n=3$ ). (B) Mineralized nodule formation in H-SCCs stimulated by osteogenic inducing fluid without exosomes or osteogenic inducing fluid containing 20  $\mu\text{g}/\text{mL}$  L-Exo was tested by Alizarin red staining ( $n=3$ ). L-Exo: exosomes secreted by L-SCCs.

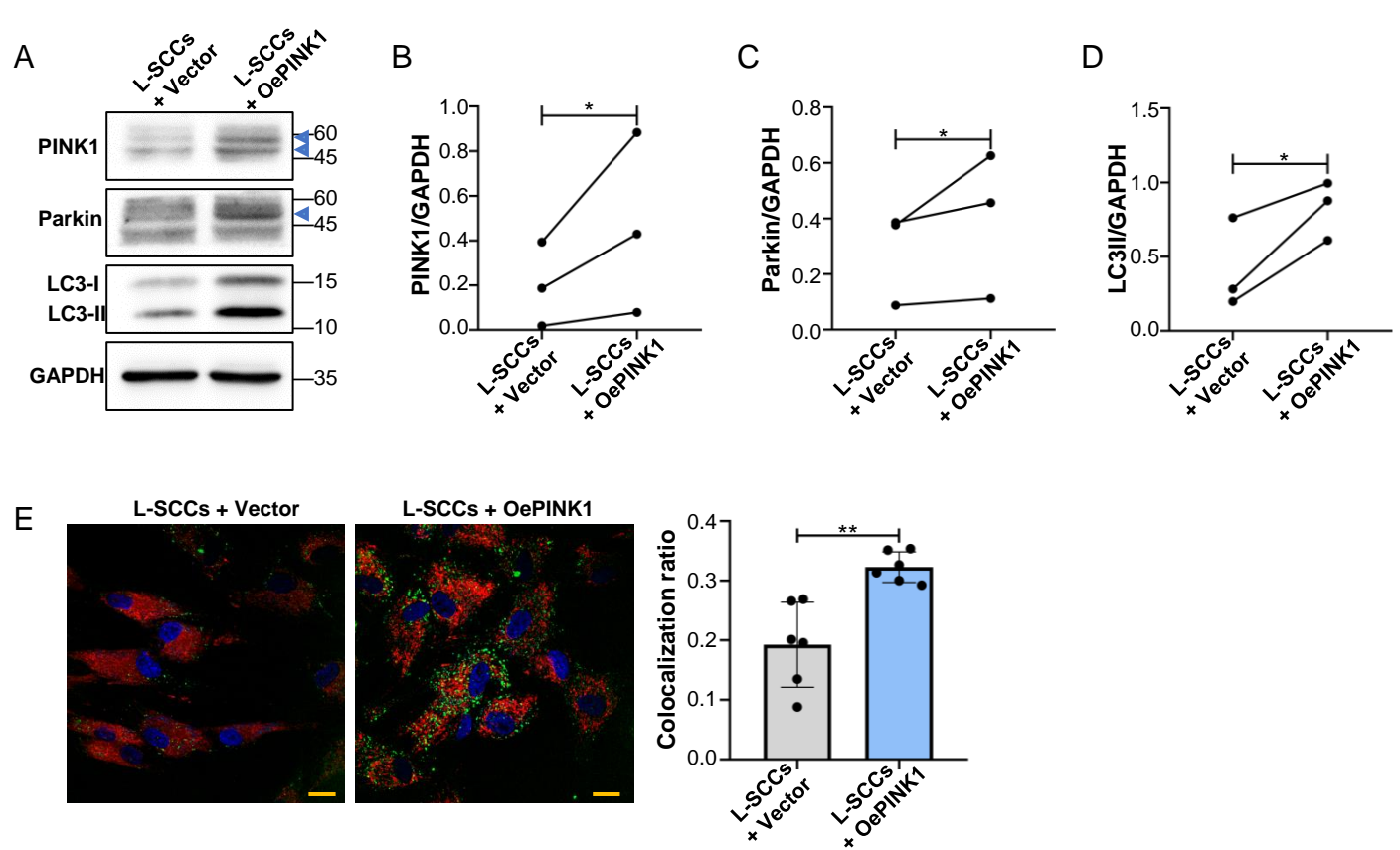


Figure S3. Overexpression of PINK1 leads to activation of PINK1/Parkin-mediated mitophagy in L-SCCs. (A-D) Proteins associated with PINK1/Parkin-mediated mitophagy in PINK1-overexpressing L-SCCs were tested by Western blot and quantified using ImageJ ( $n=3$ ). (E) The colocalization of mitochondria and lysosomes was assessed by fluorescence microscopy in PINK1-overexpressing L-SCCs ( $n=6$ ). Red: mitochondria; Green: lysosomes; Blue: nucleus. L-SCCs + vector: L-SCCs transfected with empty vector; L-SCCs + oePINK1: L-SCCs transfected with a PINK1 overexpression plasmid; the blue triangle represents the expected band for PINK1 or Parkin; scale bar: 20  $\mu\text{m}$ .