

SUPPLEMENTARY INFORMATION CAPTION:

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Heatmap of DE-mRNAs between PD treated A549 cells and the control

Supplementary Figure S2

DNA gel electrophoresis of hsa_circ_0001326, hsa_circ_0005870 and hsa_circ_0006990 amplification products

Supplementary Figure S3

Relative expression of DE-lncRNAs in PD treated A549 cells and the control

Supplementary Figure S4

The effect of PD on A549 cell 3D culture

Supplementary Data

Table S1. Divergent primers for DE-circRNAs

Name	F-primer (5'-3')	R-primer (5'-3')
hsa_circ_0001326	GTTGGTGAAAAGACCA AGGAGAG	GCTTCCTCAAACACAGACT CCTC
hsa_circ_0001946	CAGTGTCTGCAATATCC AGGGTT	TGGAAGACCTTGAGATTAT TGGAA
hsa_circ_0005870	AGTGGGATCCTCCTACT TGGG	ACTTGGCTGGGCATAACTC TTC
hsa_circ_0006702	TTTGAGACTGAAATGGC AGATCA	TCAGCCAATTTCCAAATCG TT
hsa_circ_0006990	TGGAAAGAGGCAAAAC CTGATG	CTACATCTGTGAAGGGGCC AAT

Table S2. Convergent primers for DE-circRNAs

Name	F-primer (5'-3')	R-primer (5'-3')
hsa_circ_0001326	GTGCTCTTTTGATGGA GAACA	CGGTGGTCCCAGTAGATAA GC
hsa_circ_0001946	CTTCCAACGTCTCCAGT GTG	AGTCGCTGGAAGACCCG
hsa_circ_0005870	GGGAAAGCCCAGGAGA TGATG	ACTATTGTAGTCACTGCTG CGG
hsa_circ_0006702	AAGCCCCAACATTACAG ACCG	GTCCACCATGTTCTCCACT CG
hsa_circ_0006990	TGGAAGCTGTGTGGAA AGAGG	GCGAGGTGCTGTAGTCTTC AC

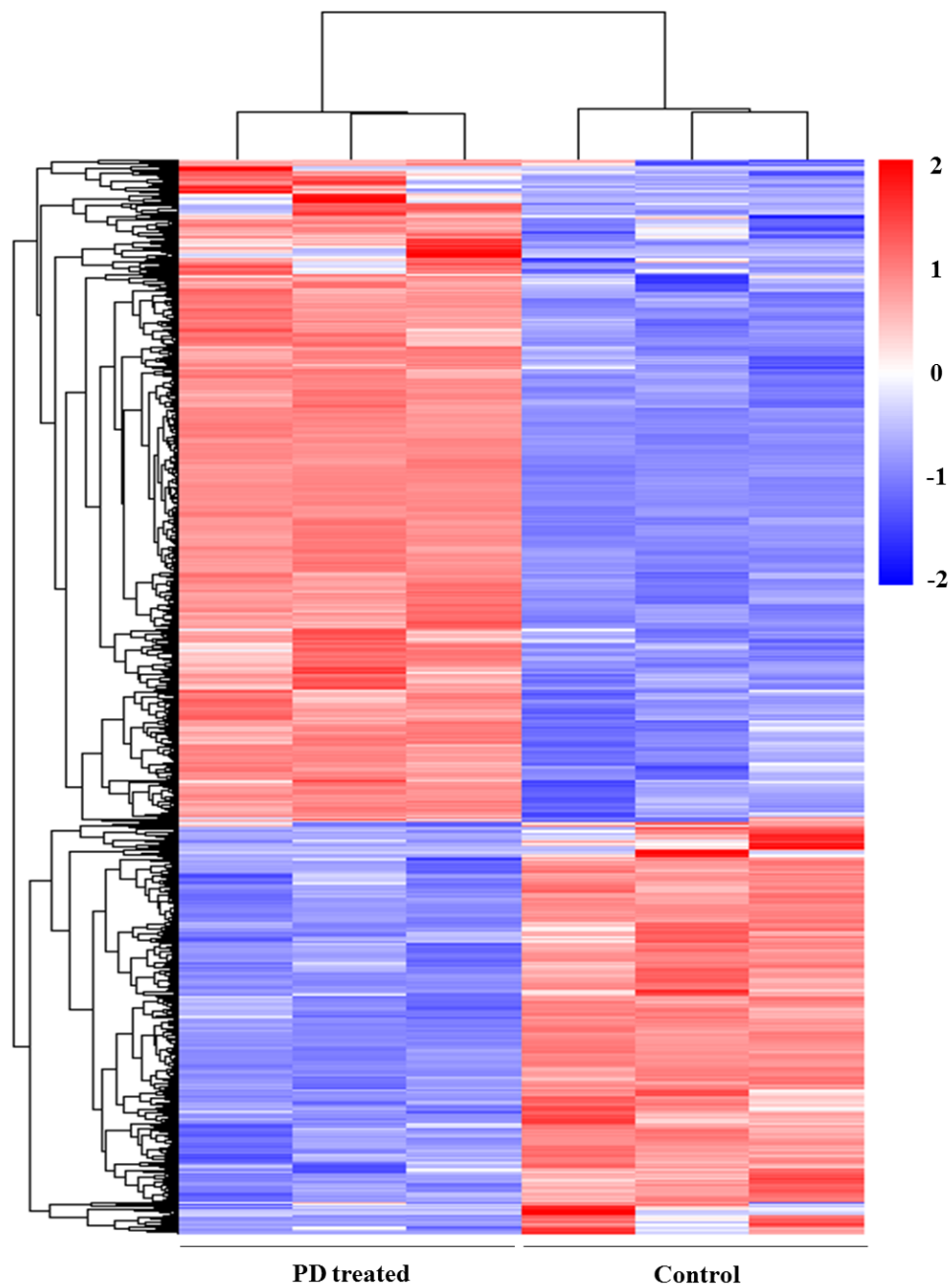


Figure S1. Heatmap of DE-mRNAs between PD treated A549 cells and the control. Red indicates upregulation, and blue indicates downregulation ($p\text{-adj} < 0.05$).

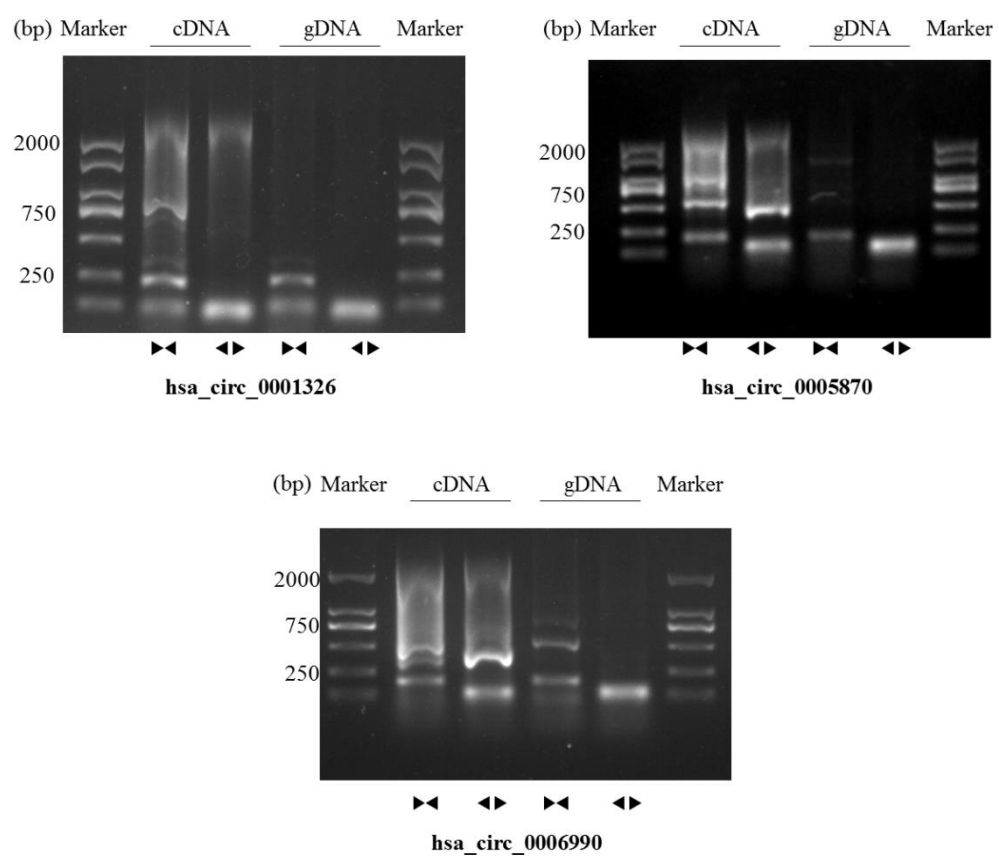


Figure S2. DNA gel electrophoresis of hsa_circ_0001326, hsa_circ_0005870 and hsa_circ_0006990 amplification products.

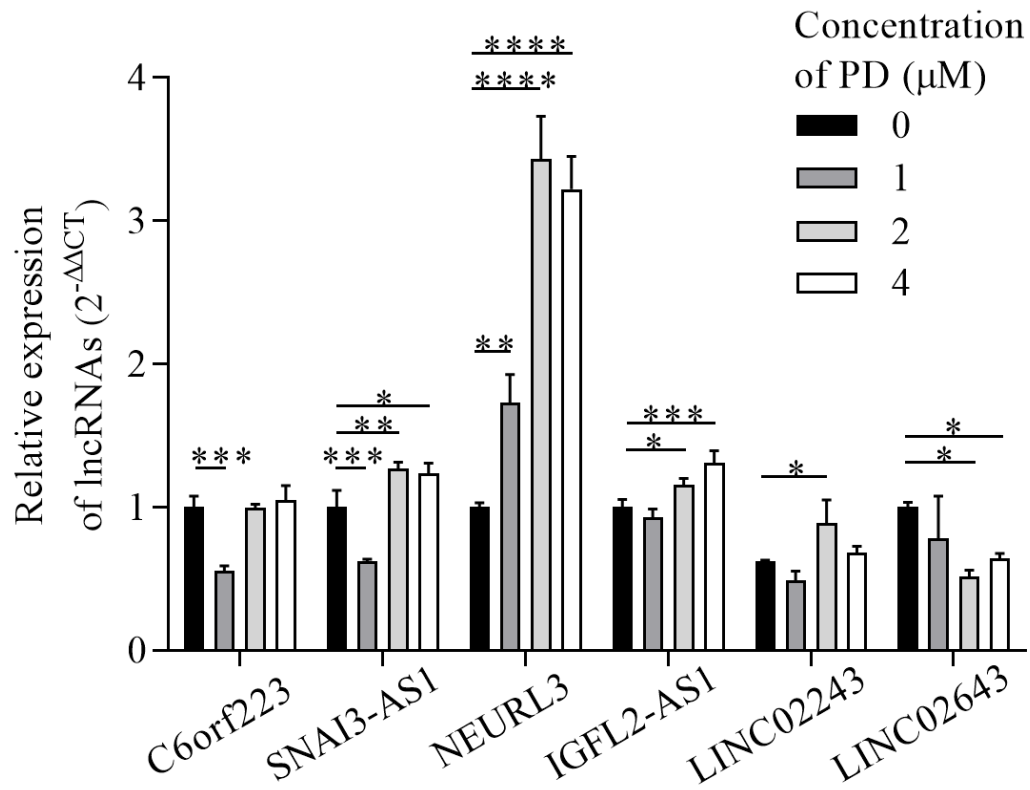


Figure S3. Relative expression of DE-lncRNAs in PD treated A549 cells and the control.

U6 is used as internal control. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$

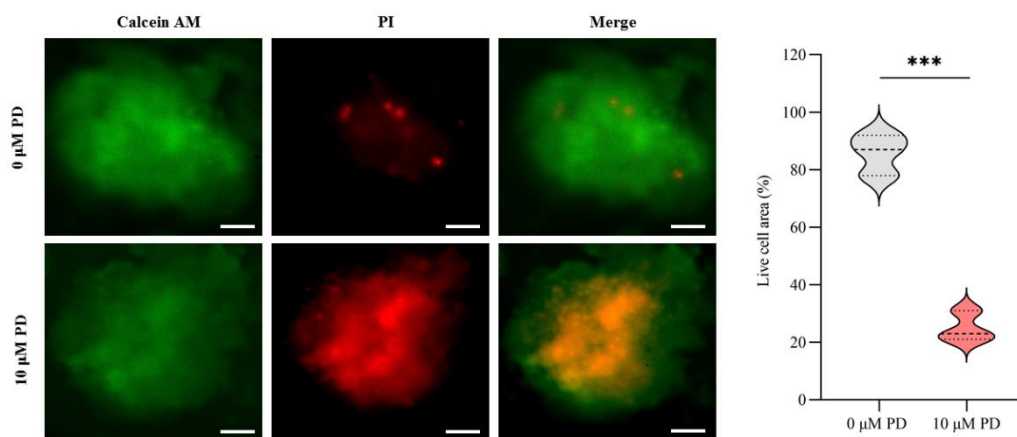


Figure S4. The effect of PD on A549 cell 3D culture.

Live cells are stained by Calcein-AM (green color), and dead cells are stained by PI (red color). Scale bar: 100 μm. *** $P < 0.001$

Supplementary Data

Hsa_circ_0001946 Sanger sequencing data (5'-3')

>AGTCGCTGGAAGACCCGGAGTTGTTGGAAGACCTTGACACAGGTGCCAT
CGGAAACCCTGGATATTGCAGACACTGGAAGACCTGAATGTCAGAAGATC
AGCACACTGGAGACGTTGGAAGACATGGATATTGAGCCAGTTGATGGAAG
ACTGGGTAGTTGTTGGAAGACATGAAGATGCTGGAAGACACAGAGATGCT
GGAAGACGTGGAGATGTTGGAAGACGAGCAGATGCTGGAAGCCCTGGAG
ATGCTGGAAGACCTGGAGATATAGGAAGACATGGATTTGTTGGAAGACGTA
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ATGGCTTGTTGGAAGACGTGGATTTTCTGGAAGACGTACCTTTGTTGGA
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GACACGGATTTCTGGAAGACCCGGATTTTTTGGGAAGCTATAGATTAAAG
GAAGACAAGGATTTTCTGGAAGACATGGATAGTCTGGAAGACCTGGAGGC
CATTGGAAGATGTGGATTTTCTGGAAGACATGGCTTTTTTGGGAAGACGTAG
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CGTGGATTTTCTGGAAGACTGGGAGGTTACTGGAAGACATGGATTTTCTGG
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TTTGGTGGGAAGACGTAGATTTTTTCTGGAAGACACTGACTGACTGGAAGAC
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ACATGGATTTCTGGAAGACGTGGATTTTCTGGAAGATCTGGATTTGGTG
GAAGACCAGTAATTGCTGGAAGACTGGATTTGCTGGAAGACTTGATTTACT
GGAAGACTTGGAGCTTCTTGGGAAGACATGGATTGTCCGGAAGACATGGATT
GTCTGGAAGATGTGGATTTTCTGGAAGCTCAGGATTATCTGGAAGACCTTG
AGATTATTGGAAGACTTGAAGTCGCTGGAAGACCCGGAGTTGTTGGAAGA
CCTTGACACAGGTGCCATCGGAAACCCTGGATATTGCAGACACTGGAAGA
CCTGAATGTCAGAAGATCAGCACACTGGAGACGTTGGAAG

Hsa_circ_0006702 Sanger sequencing data (5'-3')

>TTACACTGCAATCGCGTGTGCGCCCTTAAGCCCCAACATTACAGACCGGTG
GATCCTGTCCTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCA
GATCAGACACTCCTCTAATTTACAAAGCAGTGCCCAGCTGGTTTGTGCGAG
TGGAGAACATGGTGGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGG
TGAGCAGGTCCCAGAGTTGGTACGAGAAAAACGATTTGGAAATTGGCTGA
AAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACCCCC

ATCCCACTGTGGGTCAGCGATGACTTTGAGGAGGTGGTATGCATTGGGTCA
GTGGCGGAACTTGAAGAACTGTCAGGAGCAAAGATCTCAGATCTCCACAG
AGAGAGTGTTGACCACCTGACCATTCCCTTCACGCTGTGGGAAGGGATCCTT
GCACCGCATCTCTGAAGTGTTTGACTGTTGGTTTGAGAGTGGCAGCATGCC
CTATGCTCAGGTTCATTACCCGTTTGAAAACAAGAGGGAGTTTGAGGATGC
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CTCCCATGGTACAATGCCTATCGCTTCTTAATCCAGAACGTTCTGAGGCTCC
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GCTTCTTTGAGACTGAAATGGCAGATCAGACACTCCTCTAATTTACAAAGC
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CGCGAT