

# Publications

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## Recent Publications

Poh BM, Liew LC, Soh YA, Lai RC, Lim SK, Ho YS, Soh BS.

MSC-derived small extracellular vesicles exert cardioprotective effect through reducing VLCFAs and apoptosis in human cardiac organoid IRI model.

**Stem Cells** 2024 Feb 21:sxae015. doi: 10.1093/stmcls/sxae015. (IF:5.2)

Chia SPS, Pang JKS, Soh BS.

Current RNA strategies in Treating Cardiovascular Diseases.

**Molecular Therapy** 2024 Jan 29:S1525-0016(24)00028-5. doi: 10.1016/j.mthe.2024.01.028. (IF:12.4)

Liew LC, Poh BM, An O, Ho BX, Lim CYY, Pang JKS, Beh LY, Yang HH, Soh BS.

JAK2 as a surface marker for enrichment of human pluripotent stem cells-derived ventricular cardiomyocytes.

**Stem Cell Res Ther** 2023 Dec 13;14(1):367. doi: 10.1186/s13287-023-03610-2. (IF:8.393)

Huang J, Lee JZ, Rau CD, Pezhouman A, Yokota T, Miwa H, Feldman M, Kong TK, Yang Z, Tay WT, Pushkarsky I, Kim K, Parikh SS, Udani S, Soh BS, Gao C, Stiles L, Shirihai O, Knollmann BC, Ardehali R, Carlo DD, Wang Y.

Regulation of postnatal cardiomyocyte maturation by an RNA splicing regulator RBFox1.

**Circulation**. 2023 Oct 17;148(16):1263-1266. (IF:39.92)

Phua QH, Ng SY and Soh BS.

Mitochondria: a potential rejuvenation tool against aging.

**Aging and Disease**. 2023 Oct 3. Doi:10.14336/AD.2023.0712 (IF:9.46)

Ho BX, Pang JKS, Chen Y, Loh YH, An O, Yang HH, Seshachalam VP, Koh JLY, Chan WK, Ng SY, Soh BS.

Robust generation of human-chambered cardiac organoids from pluripotent stem cells for improved modelling of cardiovascular diseases.

**Stem Cell Res Ther**. 2022 Dec 21;13(1):529. Doi:10.1186/s13287-022-03215-1 (IF:8.393)

Karkhanis AV, Venkatesan G, Kambayashi R, Leow JWH, Han MQ, Izumi-Nakaseko H, Goto A, Pang JKS, Soh BS, Kojodjojo P, Sugiyama A and Chan ECY.

Site-directed deuteration of dronedarone preserves cytochrome P4502J2 activity and mitigates its cardiac adverse effects in canine arrhythmic hearts.

**Acta Pharmaceutica Sinica B.** 2022 Oct;12(10):3905-3923. doi:

10.1016/j.apsb.2022.03.008 (IF:14.2)

Chia SPS, Kong SLY, Pang JKS, Soh BS.

3D Human Organoids: the next "viral" model for Molecular Basis of Infectious Diseases.

**Biomedicines.** 2022 Jun 28;10(7):1541. doi: 10.3390/biomedicines10071541. (IF: 5.612)

Pang JKS, Chia S, Zhang J, Szyniarowski P, Stewart C, Yang H, Chan WK, Ng SY, Soh BS.

Characterizing arrhythmia using machine learning analysis of  $\text{Ca}^{2+}$  cycling in human cardiomyocytes.

**Stem Cell Reports.** 2022 Aug 9;17(8):1810-1823. doi: 10.1016/j.stemcr.2022.06.005. (IF: 7.765)

Pang JKS, Ho BX, Chan WK, Soh BS.

Insights to heart development and cardiac disease models using pluripotent stem cell derived 3D organoids.

**Front Cell Dev Biol.** 2021 Dec 2;9:788955. doi: 10.3389/fcell.2021.788955. (IF: 6.684)

Ho BX\*, Yu H\*, Pang JKS, Hor JH, Liew LC, Szyniarowski P, Lim YY, An O, Yang HH, Stewart CL, Chan WK, Ng SY, Soh BS.

Up-regulation of JAK-STAT pathway promotes maturation of human embryonic stem cell-derived cardiomyocytes.

**Stem Cell Reports.** 2021 Nov 2:S2213-6711(21)00544-0. (IF: 7.765)

Phua QH, Han HA, Soh BS.

Translational stem cell therapy: Vascularized skin grafts in skin repair and regeneration.

**J Transl Med.** 2021 Feb 18;19(1):83. doi: 10.1186/s12967-021-02752-2. (IF:8.44)

Hor JH, Santosa M, Lim V, Ho BX, Taylor A, Khong ZJ, Ravits J, Fan Y, Liou YC, Soh BS\*, Ng SY\*.

ALS motor neurons exhibit hallmark metabolic defects that are rescued by SIRT3 activation.

**Cell Death and Differentiation.** 2021 Apr;28(4):1379-1397. doi: 10.1038/s41418-020-00664-0. (IF:12.4)

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Grossmann TN, Waldmann H.

A protein tertiary structure mimetic modulator of the Hippo signalling pathway.

**Nat Commun.** 2020 Oct 27;11(1):5425. doi: 10.1038/s41467-020-19224-8. (IF:17.69)

Liew LC, Ho BX, Soh BS.

Mending a broken heart: Current strategies and limitations of cell-based therapy.

**Stem Cell Res Ther.** 2020 Mar 26;11(1):138. doi: 10.1186/s13287-020-01648-0.

Han HA, Pang JKS, Soh BS.

Mitigating off-target effects in CRISPR/Cas9-mediated in vivo gene editing.

**J Mol Med (Berl).** 2020 Mar 20. doi: 10.1007/s00109-020-01893-z.

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Organoid cultures of MELAS neural cells reveal hyperactive Notch signaling that impacts neurodevelopment.

**Cell Death Dis.** 2020 Mar 13;11(3):182. doi: 10.1038/s41419-020-2383-6. (\*Co-corresponding author).

Pang JKS, Phua QH, Soh BS.

Applications of miRNAs in cardiac development, disease progression and regeneration.

**Stem Cell Res Ther.** 2019 Nov 21;10(1):336. doi: 10.1186/s13287-019-1451-2.

Pek NMQ, Phua QH, Ho BX, Pang JKS, Hor JH, An O, Yang HH, Yu Y, Fan Y, Ng SY, Soh BS.

Mitochondrial 3243A > G mutation confers pro-atherogenic and pro-inflammatory properties in MELAS iPS derived endothelial cells.

**Cell Death Dis.** 2019 Oct 22;10(11):802. doi: 10.1038/s41419-019-2036-9.

Lim GS, Hor JH, Ho NRY, Wong CY, Ng SY, Soh BS\*, Shao H\*.

Microhexagon gradient array directs spatial diversification of spinal motor neurons.

**Theranostics.** 2019 Jan 1;9(2):311-323. doi: 10.7150/thno.29755.

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Fan Y#, Ho XB#, Pang JKS, Pek MQN, Hor JH, Ng SY\*, Soh BS\*.

Wnt/β-catenin mediated signaling re-activates proliferation of matured cardiomyocytes.

**Stem Cell Res Ther.** 2018 Dec 7;9(1):338. doi: 10.1186/s13287-018-1086-8. (\*Co-corresponding author).

Li Y, Kang XJ, Pang JKS, Soh BS, Yu Y, Fan Y.

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**Curr Stem Cell Res Ther.** 2017 Jan 12. [Epub ahead of print]

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**Cell Stem Cell.** 2015 Aug 26. pii: S1934-5909(15)00358-6. (\*co-first author)

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**Cell Res.** 2014 Dec;24(12):1420-32. (Featured article) (\*co-first author).

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