

DAFTAR PUSTAKA

- Anderson, C. M., Hu, J., Barnes, R. M., Heidt, A. B., Cornelissen, I., & Black, B. L. (2015). Myocyte enhancer factor 2C function in skeletal muscle is required for normal growth and glucose metabolism in mice. *Skeletal Muscle*, 5(1), 7. <https://doi.org/10.1186/s13395-015-0031-0>
- Badorff, C., Brandes, R. P., Popp, R., Rupp, S., Urbich, C., Aicher, A., Dimmeler, S. (2003). Transdifferentiation of blood-derived human adult endothelial progenitor cells into functionally active cardiomyocytes. *Circulation*, 107(7), 1024–1032. <https://doi.org/10.1161/01.CIR.0000051460.85800.BB>
- Batta, K., Florkowska, M., Kouskoff, V., & Lacaud, G. (2014). Direct Reprogramming of Murine Fibroblasts to Hematopoietic Progenitor Cells. *Cell Reports*, 9(5), 1871–1884. <https://doi.org/10.1016/j.celrep.2014.11.002>
- Batty, J. A., Lima, J. A. C., & Kunadian, V. (2016). Direct cellular reprogramming for cardiac repair and regeneration. *European Journal of Heart Failure*, 18(2), 145–156. <https://doi.org/10.1002/ejhf.446>
- Burba, I., Colombo, G. I., Staszewsky, L. I., De Simone, M., Devanna, P., Nanni, S., ... Pesce, M. (2011). Histone Deacetylase Inhibition Enhances Self Renewal and Cardioprotection by Human Cord Blood-Derived CD34+ Cells. *PLoS ONE*, 6(7), e22158. <https://doi.org/10.1371/journal.pone.0022158>
- Chachques, J. C., Salanson-Lajos, C., Lajos, P., Shafy, A., Alshamry, A., & Carpentier, A. (2005). Cellular cardiomyoplasty for myocardial regeneration. *Asian Cardiovascular and Thoracic Annals*, 13(3), 287–296. <https://doi.org/10.1177/021849230501300322>
- Chen, J., Mandel, E. M., Thomson, J. M., Wu, Q., & Thomas, E. (2006). The role of microRNA-1 and microRNA-133 in skeletal muscle proliferation and differentiation. *Nat Genet*, 38(2), 228–233. <https://doi.org/10.1038/ng1725>

- Chistiakov, D. A., Orekhov, A. N., & Bobryshev, Y. V. (2016). Cardiac-specific miRNA in cardiogenesis, heart function, and cardiac pathology (with focus on myocardial infarction). *Journal of Molecular and Cellular Cardiology*, *94*, 107–121. <https://doi.org/10.1016/j.yjmcc.2016.03.015>
- Cieślak-Pobuda, A., Knoflach, V., Ringh, M. V., Stark, J., Likus, W., Siemianowicz, K., ... Łos, M. J. (2017). Transdifferentiation and reprogramming: Overview of the processes, their similarities and differences. *Biochimica et Biophysica Acta - Molecular Cell Research*, *1864*(7), 1359–1369. <https://doi.org/10.1016/j.bbamcr.2017.04.017>
- Dimmeler, S., Burchfield, J., & Zeiher, A. M. (2008). Cell-based therapy of myocardial infarction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, *28*(2), 208–216. <https://doi.org/10.1161/ATVBAHA.107.155317>
- Doulatov, S., Notta, F., Laurenti, E., & Dick, J. E. (2012, February 3). Hematopoiesis: A human perspective. *Cell Stem Cell*, Vol. 10, pp. 120–136. <https://doi.org/10.1016/j.stem.2012.01.006>
- Duan, L., Xiong, X., Liu, Y., & Wang, J. (2014, November 1). MiRNA-1: Functional roles and dysregulation in heart disease. *Molecular BioSystems*, Vol. 10, pp. 2775–2782. <https://doi.org/10.1039/c4mb00338a>
- Feng, Y. L., & Yu, X. Y. (2011). Cardinal roles of miRNA in cardiac development and disease. *Science China Life Sciences*, *54*(12), 1113–1120. <https://doi.org/10.1007/s11427-011-4257-8>
- Fu, J.-D., & Srivastava, D. (2015). Direct Reprogramming of Fibroblasts into Cardiomyocytes for Cardiac Regenerative Medicine. *Circulation Journal*, *79*(2), 245–254. <https://doi.org/10.1253/circj.CJ-14-1372>
- Garbem, JC and Lee, RT ‘ Cardiac Stem cell Therapy and the Promise of Heart Regeneration’, *Cell Stem Cell Perspective* 12. 2013, pp 689-95
- Hamano K, Nishida M, Hirata K, Mikamo K, Li T, Harada M, Miura T, Matsuzaki M, E. K. (2001). Local Implantation of Autologous Bone Marrow Cells for Therapeutic Angiogenesis in Patients With Ischemic Heart Disease. *Japanese Circulation Journal*, *65*(September), 845–847.

- Hanson, K. P., Jung, J. P., Tran, Q. A., Hsu, S.-P. P., Iida, R., Ajeti, V., ... Ogle, B. M. (2012). Spatial and Temporal Analysis of Extracellular Matrix Proteins in the Developing Murine Heart: A Blueprint for Regeneration. *Tissue Engineering Part A*, 19(9–10), 1132–1143.
<https://doi.org/10.1089/ten.tea.2012.0316>
- Hinitz, Y., Williams, V. C., Sweetman, D., Donn, T. M., Ma, T. P., Moens, C. B., & Hughes, S. M. (2011). Defective cranial skeletal development, larval lethality and haploinsufficiency in Myod mutant zebrafish. *Developmental Biology*, 358(1), 102–112. <https://doi.org/10.1016/j.ydbio.2011.07.015>
- Huang, P., Zhang, L., Gao, Y., He, Z., Yao, D., Wu, Z., ... Hui, L. (2014). Direct reprogramming of human fibroblasts to functional and expandable hepatocytes. *Cell Stem Cell*, 14(3), 370–384.
<https://doi.org/10.1016/j.stem.2014.01.003>
- Ieda, M., Fu, J., Delgado-Olguin, P., Vedantham, V., Hayashi, Y., Bruneau, B., & Srivastava, D. (2010). Direct Reprogramming of Fibroblasts into Functional Cardiomyocytes by Defined Factors. *Cell*, 142(3), 375–386.
<https://doi.org/10.1016/j.cell.2010.07.002> Direct
- Izarra, A., Moscoso, I., Levent, E., Cañón, S., Cerrada, I., Díez-Juan, A., Bernad, A. (2014). MiR-133a enhances the protective capacity of cardiac progenitors cells after myocardial infarction. *Stem Cell Reports*, 3(6), 1029–1042. <https://doi.org/10.1016/j.stemcr.2014.10.010>
- Jayawardena, T., Egemnazarov, B., Finch, E. A., Zhang, L., Payne, J. A., Pandya, K., Dzau, V. J. (2012). MicroRNA-mediated in vitro and in vivo Direct Reprogramming of Cardiac Fibroblasts to Cardiomyocytes. *Circulation Research*, 110(11), 1465–1473.
<https://doi.org/10.1161/CIRCRESAHA.112.269035> MicroRNA-mediated
- Jin, H. Y., Gonzalez-Martin, A., Miletic, A. V., Lai, M., Knight, S., Sabouri-Ghomi, M., Xiao, C. (2015). Transfection of microRNA mimics should be used with caution. *Frontiers in Genetics*, 6(DEC).
<https://doi.org/10.3389/fgene.2015.00340>

- Kaestner, L., Scholz, A., & Lipp, P. (2015, March 15). Conceptual and technical aspects of transfection and gene delivery. *Bioorganic and Medicinal Chemistry Letters*, Vol. 25, pp. 1171–1176.
<https://doi.org/10.1016/j.bmcl.2015.01.018>
- Kim, H. S., & Lee, M. K. (2016). β -Cell regeneration through the transdifferentiation of pancreatic cells: Pancreatic progenitor cells in the pancreas. *Journal of Diabetes Investigation*, 7(3), 286–296.
<https://doi.org/10.1111/jdi.12475>
- Kuppusamy, K. T., Sperber, H., & Baker, H. R.-. (2013). MicroRNA Regulation and Role in Stem Cell Maintenance, Cardiac Differentiation and Hypertrophy. *Current Molecular Medicine*, 13(5), 757–764.
<https://doi.org/10.2174/1566524011313050007>
- Li, P., Wei, X., Guan, Y., Chen, Q., Zhao, T., Sun, C., & Wei, L. (2014). MicroRNA-1 regulates chondrocyte phenotype by repressing histone deacetylase 4 during growth plate development. *The FASEB Journal*, 13, 1–12. <https://doi.org/10.1096/fj.13-249318>
- Loh, Y., Agarwal, S., Park, I., Urbach, A., Huo, H., Heffner, G. C., ... Kim, K. (2009). Generation of induced pluripotent stem cells from human blood Brief report Generation of induced pluripotent stem cells from human blood. *Blood*, 113, 5476–5479. <https://doi.org/10.1182/blood-2009-02-204800>
- Lu, T. Y., Lin, B., Li, Y., Arora, A., Han, L., Cui, C., Yang, L. (2013). Overexpression of microRNA-1 promotes cardiomyocyte commitment from human cardiovascular progenitors via suppressing WNT and FGF signaling pathways. *Journal of Molecular and Cellular Cardiology*, 63, 146–154.
<https://doi.org/10.1016/j.yjmcc.2013.07.019>
- Mackie, A. R., & Losordo, D. W. (2011). CD34-positive stem cells: in the treatment of heart and vascular disease in human beings. *Texas Heart Institute Journal*, 38(5), 474–485. Retrieved from :
<http://www.ncbi.nlm.nih.gov/pubmed/22163120>
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC3231531>

- Malizia, A. P., & Wang, D.-Z. (2011). miRNA in Cardiomyocyte Development. *Wiley Interdiscip Rev Syst Biol Med*, 3(2), 183–190.
<https://doi.org/10.1002/wsbm.111.miRNA>
- Meng, X., Su, R. J., Baylink, D. J., Neises, A., Kiroyan, J. B., Lee, W. Y. W., ... Zhang, X. B. (2013). Rapid and efficient reprogramming of human fetal and adult blood CD34 + cells into mesenchymal stem cells with a single factor. *Cell Research*, 23(5), 658–672. <https://doi.org/10.1038/cr.2013.40>
- Menon, S., Shailendra, S., Renda, A., Longaker, M., & Quarto, N. (2016). An Overview of Direct Somatic Reprogramming : The Ins and Outs of iPSCs. *Int. j. Mol. Sci.*, 17(141), 1–20. <https://doi.org/10.3390/ijms17010141>
- Molday, R. S., Yen, S. P. S., & Rembaum, A. (1977). Application of magnetic microspheres in labelling and separation of cells. *Nature*, 268(5619), 437–438. <https://doi.org/10.1038/268437a0>
- Monaghan, M. G., Holeiter, M., Layland, S. L., & Schenke-Layland, K. (2016). Cardiomyocyte generation from somatic sources - current status and future directions. *Current Opinion in Biotechnology*, 40(Mi), 49–55.
<https://doi.org/10.1016/j.copbio.2016.02.014>
- Nygren, J. M., Jovinge, S., Breitbach, M., Säwén, P., Röhl, W., Hescheler, J., Jacobsen, S. E. W. (2004). Bone marrow-derived hematopoietic cells generate cardiomyocytes at a low frequency through cell fusion, but not transdifferentiation. *Nature Medicine*, 10(5), 494–501.
<https://doi.org/10.1038/nm1040>
- O'Brien, J. O., Hayder, H., Zayed, Y., & Peng, C. (2018). Overview of MicroRNA Biogenesis , Mechanisms of Actions , and Circulation. *Frontiers in Endocrinology*, 9(August), 1–12.
<https://doi.org/10.3389/fendo.2018.00402>
- Ogawa, S., Tagawa, Y., Kamiyoshi, A., Suzuki, A., Nakayama, J., Hashikura, Y., & Miyagawa, S. (2005). Original Article Crucial Roles of Mesodermal Cell Lineages in a Murine Embryonic Stem. *Stem Cells*, 23, 903–913.
<https://doi.org/10.1634/stemcells.2004-0295>

- Ong, S., Lee, W. H., Kodo, K., & Wu, J. C. (2015). MicroRNA-mediated regulation of differentiation and trans-differentiation in stem cells. *Advanced Drug Delivery Reviews*.
<https://doi.org/10.1016/j.addr.2015.04.004>
- Plouffe, B. D., Murthy, S. K., & Lewis, L. H. (2015). Fundamentals and Application of Magnetic Particles in Cell Isolation and Enrichment. *Reports on Progress in Physics. Physical Society (Great Britain)*, 78(1), 016601.
<https://doi.org/10.1088/0034-4885/78/1/016601>
- Raab, S., Klingenstein, M., Liebau, S., & Linta, L. (2014). A Comparative View on Human Somatic Cell Sources for iPSC Generation. *Stem Cells International*, 2014, 1–12. <https://doi.org/10.1155/2014/768391>
- Rajala, K., Pekkanen-Mattila, M., & Aalto-Setälä, K. (2011). Cardiac differentiation of human pluripotent stem cells. *Stem Cells International*, 16(8), 1663–1668. <https://doi.org/10.1111/j.1582-4934.2012.01528.x>
- Rantam F.A, Ferdiansyah, Purwati.. Stem Cell, Mesenchymal, Hematopoetik, dan model aplikasi. AUP. 2014
- Romagnani, P., Lasagni, L., & Romagnani, S. (2006). Peripheral blood as a source of stem cells for regenerative medicine. *Expert Opinion on Biological Therapy*, 6(3), 193–202.
<https://doi.org/10.1517/14712598.6.3.193>
- Roth, G. A., Johnson, C., Abajobir, A., Abd-Allah, F., Abera, S. F., Abyu, G., ... Murray, C. (2017). Global, Regional, and National Burden of Cardiovascular Diseases for 10 Causes, 1990 to 2015. *Journal of the American College of Cardiology*, 70(1), 1–25.
<https://doi.org/10.1016/j.jacc.2017.04.052>
- Saraiva, C., Esteves, M., & Bernardino, L. (2017). MicroRNA: basic concepts and implications for regeneration and repair of neurodegenerative diseases. *Biochemical Pharmacology*. <https://doi.org/10.1016/j.bcp.2017.07.008>
- Serradifalco, C., Di Felice, V., & Zummo, G. (2013). MicroRNA and Cardiac Stem Cell Therapy. *Journal of Clinical & Experimental Cardiology*, 01(S11). <https://doi.org/10.4172/2155-9880.s11-001>

- Shiba, Y., Hauch, K. D., & Laflamme, M. (2009). Cardiac Applications for Human Pluripotent Stem Cells. *Curr Pharm Des*, 46(2), 220–231. <https://doi.org/10.1016/j.freeradbiomed.2008.10.025>
- Srivastava, A. (2017). Cardiovascular Diseases: Recent Developments in Regenerative Medicine. *Journal of Stem Cell Research & Therapeutics*, 3(2), 241–244. <https://doi.org/10.15406/jsrt.2017.03.00095>
- Takahashi, K., Tanabe, K., Ohnuki, M., Narita, M., Ichisaka, T., Tomoda, K., & Yamanaka, S. (2007). Induction of pluripotent stem cells from adult human fibroblasts by defined factors. *Cell*, 131, 861–872. <https://doi.org/10.1097/01.ogx.0000305204.97355.0d>
- Takahashi, Kazutoshi, & Yamanaka, S. (2006). Induction of pluripotent stem cells from mouse embryonic and adult fibroblast cultures by defined factors. *Cell*, 126(4), 663–676. <https://doi.org/10.1016/j.cell.2006.07.024>
- Takaya, T., Ono, K., Kawamura, T., Takanabe, R., Kaichi, S., Morimoto, T., Hasegawa, K. (2009). MicroRNA-1 and microRNA-133 in spontaneous myocardial differentiation of mouse embryonic stem cells. *Circulation Journal*, 73(8), 1492–1497. <https://doi.org/10.1253/circj.CJ-08-1032>
- Vierbuchen, T., Ostermeier, A., Pang, Z. P., Kokubu, Y., Thomas, C., & Wernig, M. (2010). Direct conversion of fibroblasts to functional neurons by defined factors. *Nature*, 463(7284), 1035–1041.
- Wang, H., Li, X., Gao, S., Sun, X., & Fang, H. (2015). Transdifferentiation via transcription factors or microRNAs: Current status and perspective. *Differentiation*, 90(4–5), 69–76. <https://doi.org/10.1016/j.diff.2015.10.002>
- Wang, Z., Qin, G., & Zhao, T. (2015). Histone Deacetylase 4 (HDAC4): Mechanism of Regulations and Biological Functions. *Epigenomics*, 6(1), 139–150. <https://doi.org/10.2217/epi.13.73>
- Winter, J., Jung, S., Keller, S., Gregory, R., & Diederichs, S. (2009). Many roads to maturity: microRNA biogenesis pathways and their regulation. *Nature Cell Biology*, 11(3), 228–234. <https://doi.org/10.1109/NSSMIC.2014.7430807>

Zhao, Yuanbiao, Londono, P., Cao, Y., Sharpe, E. J., Proenza, C., O'Rourke, R., Song, K. (2015). High-efficiency reprogramming of fibroblasts into cardiomyocytes requires suppression of pro-fibrotic signalling. *Nature Communications*, 6. <https://doi.org/10.1038/ncomms9243>