

DAFTAR PUSTAKA

- Abdul N, Dixom D, Walker A, Horabin J, Smith N, Weir DJ, et al. Fibrosis is a common outcome following total knee arthroplasty. *Scientific Reports*. 2015;5(164169):1–13.
- Ahrani I, Zarandi NP, Maharloei MK, Monabati A, Attari A, Ahrari S. Adipose tissue derived multipotent mesenchymal stromal cell can be isolated using serum. *Iranian Red Crescent Medical Journal*. 2013;15(4):324–333.
- Alwi I. Perkembangan terapi sel punca (stem cell) pada penyakit jantung: Masa kini dan harapan masa depan. *Medica Hospitalia*. 2012;1(2):71–79.
- Amin HZ. Terapi stem cell untuk infark miokard akut. *eJournal Kedokteran Indonesia*. 2013;1(2):156–164.
- Arden N, Blanco F, Cooper C, Guermazi A, Hayashi D, Hunter D, et al. *Atlas of osteoarthritis*. London: Springer Healthcare; 2015.
- Arthritis Research UK National Primary Care Centre. *Osteoarthritis in general practice, data and perspectives*. London: Keele University; 2013.
- Ashkavand Z, Malekinejad H, Vishwanath BS. The pathophysiology of osteoarthritis. *Journal of Pharmacy Research*. 2013;7(1):132–138.
- Ayral X, Pickering EH, Woodworth TG, Mackillop N, Dougados M. Synovitis: A potential predictive factor of structural progression of medial tibiofemoral knee osteoarthritis - results of a 1 year longitudinal arthroscopic study in 422 patients. *Osteoarthritis Cartilage*. 2005;13(5):361–367.
- Baksh DS, Tuan RS. Adult mesenchymal stem cell: Characterization, differentiation, and application in cell and gene therapy. *Molecular Medicine*. 2004;8(3):301–316.
- Balitbang Kemenkes RI. *Riset kesehatan dasar: Riskesdas*. Jakarta: Balitbang Kemenkes RI; 2013.
- BD Biosciences. *Flow cytometry*. Diakses tanggal 7 Agustus 2017 dari <http://www.m.bdbiosciences.com/us/s/flowcytometry>

Blagojevic M, Jinks C, Jeffery A, Jordan KP. Risk factors for onset of osteoarthritis of the knee in older adults: A systematic review and meta-analysis. *Osteoarthritis Cartilage*. 2010;18(1):24–33.

Boeuf S, Richter W. Chondrogenesis of mesenchymal stem cells: Role of the tissue source and inducing factors. *Stem Cell Research & Therapy*. 2010;1(4):31.

Broujeni ME, Gowda P, Johnson J, Rao J, Saremy S. The proliferation and differentiation capacity of bone marrow-derived human mesenchymal stem cells in early and late doubling. *Asian Journal of Biochemistry*. 2012;7(1):27–36.

Butler W. *Animal cell culture & technology*. Philadelphia: Taylor and Francis Publisher; 2003.

Chaganti RK, Lane NE. Risk factors for incident osteoarthritis of the hip and knee. *Current Reviews in Musculoskeletal Medicine*. 2011;4(3):99–104.

Choate B, Paz R. *Stem cell and society*. [Bachelor Project Report]. Massachusetts, USA: Worcester Polytechnic Institute; 2011.

de Bari C, Dell’Accio F, Tylzanowski P, Luyten FP. Multipotent mesenchymal stem cells from adult human synovial membrane. *Arthritis and Rheumatism*. 2001;44(8):1928–1942.

de Coppi P, Bartsch G, Siddiqui MM, Xu T, Santos CC, Perin L. Isolation of amniotic stem cell lines with potential for therapy. *Nature Biotechnology*. 2007;25(5):100–106.

Dipiro JT, Talber RL, Yee GC, Matzke GR, Wells BG, Posey LM. *Pharmacotherapy: A pathophysiologic approach* (8th Edition). New York: The McGraw-Hill Companies; 2011.

Direktorat Bina Farmasi Komunitas dan Klinik Ditjen Bina Kefarmasian dan Alat Kesehatan Departemen Kesehatan. *Pharmaceutical care untuk pasien penyakit arthritis reumatik*. Jakarta: Departemen Kesehatan; 2006.

Dominici M, Blanc KL, Mueller I, Slaper I, Marini FC, Krause DS, et al. Minimal criteria for defining multipotent mesenchymal stromal cells. *The International Society for Cellular Therapy*. 2006;8(4):315–317.



Donnenberg VS, Henning U, Attila T. Cytometry in stem cell research and therapy. *The Journal of The International Society for Analytical Cytology*. 2013;83(1):1–4.

Doyle A, Griffiths JB. *Cell of animal cells: A manual of basic technique* (5th Edition). New York: John Willey & Sons Inc; 1998.

Ene R, Sinescu RD, Ene P, Cristoiu MM, Cristoiu FC. Synovial inflammation in patients with different stages of knee osteoarthritis. *Romanian Journal of Morphology and Embryology*. 2015;56(1):169–173.

European Science Foundation. *Stem cell research and regenerative medicine: Focus on european policy and scientific contributions*. Strasbourg, France: European Science Foundation; 2013.

Foran JRH. Total knee replacement. Diakses tanggal 10 Agustus 2017 dari <http://orthoinfo.aaos.org/topic.cfm?topic=a00389>

Futami I, Ishijima M, Kaneko H, Tsuji K, Tomikawa NI, Sadatsuki R, Muneta T, Hirasawa EA, Sekiya I, Kaneko K. Isolation and characterization of multipotential mesenchymal cells from the mouse synovium. *Plos One*. 2012;7(9):1–12.

Gabaev I, Steinbruck L, Pokoyski C, Pich A, Stanton RJ, Schwinzer R, et al. The human cytomegalovirus UL11 protein interacts with the receptor tyrosine phosphatase CD45, resulting in functional paralysis of T cells. *Plos Pathogens*. 2011;7(12):1–43.

Gelber AC, Hochberg MC, Mead LA, Wang NY, Wigley FM, Klag MJ. Joint injury in young adults and risk for subsequent knee and hip osteoarthritis. *Annals of Internal Medicine*. 2000;133(5):321–328.

Gibco. *Cell culture basics handbook*. UK: ThermoFisher Scientific; 2015.

Gilbert SF. *Developmental biology* (10th Edition). Finlandia: The University of Helsinki, Swarthmore College; 2014.

Haeryfar SM, Hoskin DW. Thy-1: More than a mouse pan-T cell marker. *Journal of Immunology*. 2004;173(6):3581–3588.

- Halim D, Murti H, Sandra F, Boediono A, Djuwanto T, Setiawan B. Stem cell dasar teori & aplikasi klinis. Jakarta: Erlangga; 2010.
- Harvanova D, Tothova T, Sarissky M, Amrichova J, Rosocha J. Isolation and characterization of synovial mesenchymal stem cells. *Folia Biologica*. 2011;57:119–124.
- Hernandez C, Diaz-Heredia J, Berraquero ML, Crespo P, Loza E. Pre-operative predictive factors of post-operative pain in patients with hip or knee arthroplasty: A systematic review. *Rheumatologia Clinica*. 2015;11(6):361–380.
- Hoff P, Buttgerit F, Burmester GR, Jakstadt M, Gabre T, Andreas K, et al. Osteoarthritis synovial fluid activates pro-inflammatory cytokines in primary human chondrocytes. *International Orthopedics*. 2013;37(1):145–151.
- Huang J, Ge M, Lu S, Shi J, Yu W, Li X, et al. Impaired autophagy in adult bone marrow CD34+ cells of patients with aplastic anemia: Possible pathogenic significance. *Plos One*. 2016;11(3):1–17.
- Huang S, Xu L, Sun Y, Wu T, Wang K, Li G. An improved protocol for isolation and culture of mesenchymal stem cells from mouse bone marrow. *Journal of Orthopaedic Translation*. 2015;3(1):26–33.
- Hunter DJ. In the clinic: Osteoarthritis. *Annals of Internal Medicine*. 2007;147(3):1–16.
- Jannah M. Ekspresi gen kolagen tipe I dan gen kolagen tipe III pada jaringan sinovial pasien osteoarthritis lutut dari beberapa rumah sakit di kota padang. [Skripsi]. Padang: Universitas Andalas; 2017.
- Jiang Y, Jahagirdar BN, Reinhardt RL, Schwartz RE, Keene CD, Ortiz-Gonzalez XR, et al. Pluripotency of mesenchymal stem cells derived from adult marrow. *Nature*. 2007;418(6893):41–49.
- Khairunnisa A. Ekspresi gen interleukin 4 dan gen interleukin 6 pada jaringan sinovial pasien osteoarthritis lutut derajat IV dari beberapa rumah sakit di kota padang. [Skripsi]. Padang: Universitas Andalas; 2017.

Kolf CM, Cho E, Tuan RS. Biology of adult mesenchymal stem cell: Regulation of niche, self-renewal and differentiation. *Arthritis Research & Therapy*. 2007;9(1):204–214.

Krasnokutsky S, Attur M, Palmer G, Samuels J, Abramson SB. Current concepts in the pathogenesis of osteoarthritis. *Osteoarthritis and Cartilage*. 2008;16(3):51–53.

Krawetz RJ, Wu YE, Martin L, Rattner JB, Matyas JR, Hart DA. Synovial fluid progenitors expressing CD90+ from normal but not osteoarthritic joints undergo chondrogenic differentiation without micro-mass culture. *Plos One*. 2012;7(8):1–10.

Lane NE. Clinical practice: Osteoarthritis of the hip. *The New England Journal of Medicine*. 2007;357(14):1413–1421.

Lopez-Novoa JM, Bernabeu C. Atlas of genetics and cytogenetics in oncology and haematology. Diakses tanggal 3 Juli 2017 dari http://www.atlasgeneticsoncology.org/Genes/GC_ENG.html

Maharani EP. Faktor-faktor risiko osteoarthritis lutut. [Tesis]. Semarang: Universitas Diponegoro; 2007.

Marlina, Jannah M, Khairunnisa A, Zalmi MA, Ali H, Rahmadian R, et al. Cross sectional evaluation of interleukin-4 and collagen type-1 in knee osteoarthritis. *Research Journal of Pharmaceutical, Biological, and Chemical Sciences*. 2017;8(1):122–126.

Marsland D, Kapoor S. *Crash course rheumatology and orthopedics (2nd Edition)*. Philadelphia: Elsevier; 2008.

Menteri Kesehatan RI. Peraturan Menteri Kesehatan RI Nomor 50 Tahun 2012 tentang penyelenggaraan laboratorium sel punca untuk aplikasi klinis. Lembaran Negara RI Tahun 2012 Nomor 1249. Jakarta: Sekretariat Negara; 2012.

Mitalipov S, Wolf D. *Engineering of stem cells: Advances in biochemical engineering/biotechnology*. Heidelberg, Germany: Springer; 2009.

Moore KL, Persaud TVN, Torchia AG. *Before we are born: Essentials of embryology and birth defects*. Philadelphia: Elsevier; 2013.

Narasipura SD, Wojciechowski JC, Charles N, Liesveld JL, King MR. P-selectin coated microtube for enrichment of CD3+ hematopoietic stem and progenitor cells from human bone marrow. *Clinical Chemistry*. 2007;54(1):77–85.

Ogata Y, Mabuchi Y, Yoshida M, Suto EG, Suzuki N, Muneta T, Sekiya I, Akazawa C. Purified human synovium mesenchymal stem cells as a good resource for cartilage regeneration. *Plos One*. 2015;10(6):1–12.

Palmer SH. Total knee arthroplasty. Medscape. Diakses tanggal 12 Mei 2017 dari <http://emedicine.medscape.com/article/1250275overview#showall>

Price SA, Lorraine MW. Patofisiologi konsep klinis proses-proses penyakit (edisi keenam). Jakarta: EGC; 2003.

Rege TA, Hagood JS. Thy-1 as a regulator of cell-cell and cell-matrix interactions in axon regeneration, apoptosis, adhesion, migration, cancer, and fibrosis. *The FASEB Journal*. 2006;20(8):1045–1054.

Richardot P, Tabassi NCB, Toh L, Marottez H, Bay-Jensen AC, Miossec P, et al. Nitrated type III collagen as a biological marker of nitric oxide-mediated synovial tissue metabolism in osteoarthritis. *Osteoarthritis and Cartilage*. 2009;17(10):1362–1367.

Rodriguez PC, Arroyave IH, Mejia G, Garcia LF. Detection of alloantibodies against non-HLA antigens in kidney transplantation by flow cytometry. *Clinical Transplant*. 2000;14(5):472–478.

Rollin R, Marco F, Jover JA, García-Asenjo JA, Rodríguez E, López-Durán L, et al. Early lymphocyte activation in the synovial microenvironment in patients with osteoarthritis: Comparison with rheumatoid arthritis patients and healthy controls. *Rheumatology International*. 2008;28(8):757–764.

Sadhana U. Patologi anatomi (edisi kedua). Semarang: Badan Penerbit Universitas Diponegoro; 2011.

Sakaguchi Y, Sekiya I, Yagishita K, Muneta T. Comparison of human stem cells derived from various mesenchymal tissues. *Arthritis and Rheumatism*. 2005;52(8):2521–2529.

Segawa Y, Muneta T, Makino H, Nimura A, Mochizuki T, Ju YJ, Ezura Y, Umezawa A, Sekiya I. Mesenchymal stem cells derived from synovium, meniscus, anterior cruciate ligament, and articular chondrocytes share similar gene expression profiles. *Journal of Orthopaedic Research*. 2009;27(4):435–442.

Sellam J, Barenbaum F. The role of synovitis in pathophysiology and clinical symptoms of osteoarthritis. *Nature Reviews Rheumatology*. 2010;6(11):625–635.

Soeroso J, Isbagio H, Kalim H, Broto R, Pramudiyo R. Osteoarthritis: Buku ajar ilmu penyakit dalam (edisi keempat). Jakarta: Pusat Penerbitan Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Indonesia; 2006.

Susanti D. Pengaruh kompres hangat jahe terhadap penurunan skala nyeri arthritis reumatoid pada lansia di ptsw kasih sayang ibu batu sangkar. [Skripsi]. Bukittinggi: Fakultas Ilmu Kesehatan dan MIPA Universitas Muhammadiyah Sumatera Barat; 2014.

Trifan M, Perez-Iratxeta C, Andrade-Navarro MA, Ionescu D. Text mining and semantic search with a predicate argument structure database. Las Vegas, USA: International Conference on Bioinformatics & Computational Biology, BIOCOMP, Volume 2; 2009.

Tuch BE. Stem cells – a clinical update. *Australian Family Physician*. 2006;35(9):719–721.

Ulloa-Montoya F, Verfaillie CM, Hu WS. Culture system for pluripotent stem cells. *Journal of Biosciences and Bioengineering*. 2005;100(1):12–27.

Valdes AM, Loughlin J, Oene MW, Chapman K. Sex and ethnic differences in the association of ASPN, CALM1, COL2A1, COMP, and FRZb with genetic susceptibility to osteoarthritis of the knee. *Arthritis and Rheumatism*. 2007;56(1):137–146.

Waddel DD. Integrating viscosupplementation into a comprehensive osteoarthritis treatment program. *Medscape*. Diakses tanggal 21 Juni 2017 dari <http://www.medscape.org/viewarticle/537370>

Wells BG, Dipiro JT, Terry LS, Cecily VD. *Pharmacotherapy handbook* (7th Edition). New York: McGraw-Hill Companies; 2009.

Winoto A. Comparative analysis of mesenchymal stem cells from bone marrow and adipose tissue for osteogenic differentiation. *Majalah Orthopedi Indonesia*. 2010;38(1):1–7.

Zare H, Shooshtari P, Gupta A, Brinkman RR. Data reduction for spectral clustering to analyze high throughput flow cytometry data. *BMC Bioinformatics*. 2010;11(403):1–16.

Zhang, B. CD73: A novel target for cancer immunotherapy. *Cancer Research*. 2010;70(16):6407–6411.

