

DAFTAR PUSTAKA

- Afanasyev BV, Elstner EE, Zander AR (2009). A.J. Friedenstein, founder of the mesenchymal stem cell concept. *Cell Ther & Transpl.*, 1(4):35-37
- Arrington ED, Smith WJ, Chambers HG, Bucknell AL, Davino NA. (1996). Complications of iliac crest bone graft harvesting. *Clin Orthop.* 329: 300-9
- Axelrad WT, Kakar S, Einhorn TA. (2009). "Biological and biophysical technologies for enhancement of fracture repair." In Bucholz RW, Heckman JD, Court-Brown C, Tornetta P, Koval JK, Wirth MA. *Rockwood and Green's Fractures in Adults.* Lippincott William & Wilkins.. Pp 105
- van Baardewijk LJ, van der Ende J, Lissenberg-Thunnissen S, Romijn LM, Hawinkels LJA, Sier CFM, Schipper IB (2013). Circulating bone morphogenetic protein levels and delayed fracture healing. *International Orthopaedics (SICOT)* 37:523–527
- Bailo M, Soncini M, Vertua E, Signoroni PB, Sanzone S, Lombardi G. (2004). Engraftment potential of human amnion and chorion cells derived from term placenta. *Transplantation*; 78:1439–48.
- Baksh D, Song L, Tuan RS. (2004). Adult mesenchymal stem cells characterization, differentiation, and application in cell and gene therapy. *J cell Mol Med.* 8(3):301-16.
- Banwart JC, Asher MA, Hassanein RS. (1995). Iliac crest bone graft harvest donor site morbidity: a statistical evaluation. *Spine.*;20:1055-1060.
- Baraniak PR, McDevitt TC (2010). Stem cell paracrine actions and tissue regeneration. *Reg Med.* 5(1): 121-143
- Barbash IM, Chouraqui P, Baron J. (2003). Systemic delivery of bone marrow-derived mesenchymal stem cells to the infarcted myocardium: feasibility, cell migration, and body distribution. *Circulation.*;108:863-8.
- Bilic, G.; Zeisberger, S.M.; Mallik, A.S.; Zimmermann, R.; Zisch, A.H. (2008) Comparative characterization of cultured human term amnion epithelial and mesenchymal stromal cells for application in cell therapy. *Cell Transplant.*, 17: 955-968
- Bongso A, Lee EH. (2005). Stem cells: their definition, classification and sources. In: *Stem cells from bench to bedside.* World Scientific Publishing Co. Pte.Ltd, Singapore:1-13.
- Bouler, J.M., Trecant M, Delecrin J, Royer J, Passuti N, Daculsi G. (1996). Macroporous Biphasic Calcium Phosphate Ceramics: Influence of Five Synthesis Parameters on Compressive Strength. *J.Biomed. Mater. Res.* 32:603–609.
- Bruder SP, Jaiswal N, Haynesworth SE. (1997). Growth kinetics, self-renewal, and the osteogenic potential of purified human mesenchymal stem cells during extensive subcultivation and following cryo-preservation. *J Cell Biochem.* 64(2):278-294

- Bruder SP, Kraus KH, Goldberg VM, Kadiyala S (1998). The effect of implants loaded with autologous mesenchymal stem cells on the healing of canine segmental bone defects. *J Bone Joint Surg Am.* 80(7): 985–96.
- Caplan AI (2007). Fundamental of stem cells tissue engineering. In: Fisher JP, Mikos AG, Bronzino JD (editors). *Tissue engineering*. CRC Press, Boca Raton: 1-1, 1-9
- Caplan AI, Dennis JE (2006). Mesenchymal stem cells as trophic mediators. *J Cell Biochem* 98: 1076–1084.
- Carlson BM (2004). *Human embryology and developmental biology updated edition*. Philadelphia: Mosby;. pp 59.
- Chen GQ, Deng CX, Li YP (2012). TGF- β and BMP signaling in osteoblast differentiation and bone formation. Review. *Int'l J Biol Sci.* 8(2):272-288
- Chen M, Wang X, Ye Z, Zhang Y, Zhou Y, Tan WS (2011). A modular approach to the engineering of a centimeter-sized bone tissue construct with human amniotic mesenchymal stem cells-laden microcarriers. *Biomaterials.* 32: 7532–7542.
- Chu, TM, Orton DG, Hollister SJ, Feinberg SE. (2002). Halloran JW. Mechanical and in vivo performance of hydroxyapatite implants with controlled architectures. *Biomater.;* 3:1283–1293
- Claes, Recknagel S, Ignatius A (2012). Fracture healing under healthy and inflammatory condition. Review. *Nat. Rev. Rheumatol.* 8:133–143
- Colton CK (1995). Implantable biohybrid artificial organs. *Cell Transplant.;* 4: 415-436.
- Cross JC (1998). Formation of the placenta and extraembryonic membranes. *Ann N Y Acad Sci.* 857: 23–32.
- Crossley DA (2001). Rabbit Dentistry: Basic Principles; in: TNAVC 2001 Small Animal and Exotics Proceedings, Vol. 15 pp. 852-854
- Diaz-Prado S, Muinos-Lopez E, Hermida-Gomez T (2010). Multilineage differentiation potential of cells isolated from the human amniotic membrane. *Journal of Cellular. Biochemistry.* 111(4): 846–857.
- Diaz-Prado S, Munos-Lopez E, Hermida-Gomez T (2011). Human amniotic membrane as an alternative source of stem cells for regenerative medicine. *Differentiation.* 81(3): 162–171.
- Dvorak MM. (2004): Physiological changes in extracellular calcium concentration directly control osteoblast function in the absence of calciotropic hormones. *Proc. Natl Acad. Sci. USA,* 101(14):5140–5145
- Ellis E. Surgical management of oral pathologic lesions. in Peterson LJ (editor). (2008). *Contemporary oral and maxillofacial surgery.* 4th ed. Mosby Year Book Inc., St. Louis

- Eslaminejad MB, Bagheri F. (2009). Tissue Engineering Approach for Reconstructing Bone Defects Using Mesenchymal Stem Cells. *Yakhteh Med J.*, 11(3): 263-272.
- Eslaminejad MB, Jafarian M, Khojasteh A, Mashhadi Abbas F, Dehghan MM, Houshmand B (2007). Enhancing ectopic bone formation in canine masseter muscle by loading mesenchymal stem cells onto natural bovine bone minerals. *Iranian J Vet Surg.*; 2(4): 25-35.
- Farflex. <http://medical-dictionary.thefreedictionary.com/Jawbone+> (anatomy). Downloaded on 26 Nov 2012.
- Fassina L, Saino E, De Angelis MG, Magenes G, Benazzo F, Visai L. (2010). Low-Power Ultrasounds as a Tool to Culture Human Osteoblasts inside Cancellous Hydroxyapatite. *Bioinorg Chem Appl.* 2010: 456240.
- Ferdiansyah (2010). Regenerasi pada massive bone defect dengan bovine hydroxyapatite sebagai scaffold mesenchymal stem cell. Disertasi pada Ujian Terbuka. Pasca Sarjana Universitas Airlangga Surabaya.
- Fernyhough JC, Schimandle JJ. (1992). Chronic donor site pain complicating bone graft harvesting from the posterior iliac crest for spinal fusion. *Spine* 17 (12): 1474-80.
- Fierro FA, Kalomoiris S, Sondergaard CS, Nolte JA (2011) Effects on Proliferation and Differentiation of Multipotent Bone Marrow Stromal Cells Engineered to Express Growth Factors for Combined Cell and Gene Therapy. *Stem Cells.* 29:1727–1737
- Foster RD, Anthony JP, Sharma A, Pogrel MA (1999). Vascularized bone flaps versus nonvascularized bone grafts for mandibular reconstruction: an outcome analysis of primary bony union and endosseous implant success. *Head Neck*, 21:66
- Franceschi RT, Xiao G (2003). Regulation of the osteoblastspecific transcription factor, Runx2: responsiveness to multiple signal transduction pathways. *J Cell Biochem.* 88(3): 446-454.
- Friedlaender, G. (1987). Current concept reviews: Bone grafts-Basic Science rationale for Clinical applications. *J Bone & Joint Surg.* 69-A(5):786-90
- Gazit D, Ebner R, Kahn AJ, Derynek R (1993). Modulation of expression and cell surface binding of members of the transforming growth factor-B superfamily during retinoic acid-induced osteoblastic differentiation of multipotential mesenchymal cells. *Mol. Endocrinol.*; 7:189-98
- Gazit S, Aslan H, Gafni Y, Kimelman N, Pelled G, Gazit D. Mesenchymal stem cell. (2011). In Atala A, Lanza R, Thomson J, Nerem R. Principles of regenerative medicine. 2nd ed. Academic Press, Elsevier, London, Pp 318
- Gerstenfeld LC, Cullinane DM, Barnes GL, Graves DT, Einhorn TA. (2003). Fracture healing as a post-natal developmental process: molecular, spatial, and temporal aspects of its regulation. *J Cell Biochem.* 88(5):873-84

- Goldstein AS (2007). "Cell adhesion". In Fisher JP, Mikos AG, Bronzino JD. Tissue engineering. CRC Press, Boca Raton, London. Chapter 5
- Granero-Molto F, Myers TJ, Weis JA, Longobardi L, Li T, Yun Yan, Case N, Rubin J, Spagnoli A (2011). Mesenchymal Stem Cells Expressing Insulin-Like Growth Factor-I (MSCIGF) Promote Fracture Healing and Restore New Bone Formation in Irs1 Knockout Mice: Analyses of MSCIGF Autocrine and Paracrine Regenerative Effects. *Stem Cells*. 29:1537–1548
- Green RM. (2006). Ethical Considerations. In: Lanza R, Gearhart J, Hogan B et al. (editors), *Essential of stem cell biology*. Elsevier Academic Press. London., 489-494
- Gutwald R, Haberstroh J, Kuschnierz J, Kister C, Lysek DA, Maglione, Xavier SP, Oshima T, Schmelzeisen R, Sauerbier S. (2010). Mesenchymal stem cells and inorganic bovine bone mineral in sinus augmentation: comparison with augmentation by autologous bone in adult sheep. *Br J Oral Maxfac Surg*. 48(4):285-290
- Hämmerle Ch, Olah Aj, Schmid J, Fluckiger L, Gogolewski S, Winkler Jr, Lang Np. (1997) The biological effect of natural bone mineral on bone neoformation on the rabbit skull. *Clin Oral Implants Res*; 8: 198-207
- Hanada K, Solchaga LA, Caplan AI., Hering TM, Goldberg VM, Yoo JU, Johnstone B (2001). BMP-2 induction and TGF-beta-1 modulation of rat periosteal cell chondrogenesis. *J Cell Biochem*; 81:284-94
- Hazell P (2008). <https://courses.stu.qmul.ac.uk/smd/kb/microanatomy/bone/answers/index.htm>. Queen Mary University of London, downloaded at 26 Nov 2012.
- Heary RF, Schlenk RP, Sacchieri TA, Barone D, Brotea C. (2002). Persistent iliac crest donor site pain: independent outcome assessment. *Neurosurgery*. 50(3):510-6; discussion 516-7.
- Hocking AM, Gibran NS. (2010). Mesenchymal stem cells: paracrine signaling and differentiation during cutaneous wound repair. *Exp Cell Res* 316: 2213–2219.
- Holy CE, Volenec FJ, Geesin J, Bruder SP. (2007). Bone Regeneration. In Lanza R, Langer R, Vacanti J. *Principles of tissue engineering*. 3rd ed. Vol.2. Elsevier Academic Press, Burlington, p 845-860.
- Horowitz I, Bodner L. (1989). Use of xenograft bone with aspirated bone marrow for treatment of cystic defect of the jaws. *Head & Neck*; 11:516-523
- Hung SC, Pochampally RR, Chen SC, Hsu SC, Prockop DJ (2007). Angiogenic effects of human multipotent stromal cell conditioned medium activate the PI3K-Akt pathway in hypoxic endothelial cells to inhibit apoptosis, increase survival, and stimulate angiogenesis. *Stem Cells*; 25: 2363–2370.
- Hutmacher DW. (2001). Scaffold design and fabrication technologies for engineering tissues – state of the art and future perspective. *J. Biomat. Sci. Polym. Ed.*, 12:107-124

- Ilancheran S, Michalska A, Peh G, Wallace EM, Pera M, Manuelpillai U. (2007). Stem cells derived from human fetal membranes display multilineage differentiation potential. *Biol Reprod*; 77:577-588
- Ilancheran S, Moodley Y, Manuelpillai U (2009). Human Fetal Membranes: a source of stem cells for tissue regeneration and repair? *Placenta*; 30:2-10
- Insausti, C.L.; Blanquer, M.; Bleda, P.; Iniesta, P.; Majado, M.J.; Castellanos, G.; Moraleda, J.M (2010). The amniotic membrane as a source of stem cells. *Histol Histopathol*; 25:91-98.
- In 't Anker PS, Scherjon SA, Kleijburg-van der Keur, C, de Groot-Swings GM, Claas FH, Fibbe WE, Kanhai HH (2004). Isolation of mesenchymal stem cells of fetal or maternal origin from human placenta. *Stem Cells*; 22: 1338-1345.
- Jadlowiec JA, Celil AB, Hollinger JO. (2003). Bone tissue engineering: recent advances and promising therapeutic agents. *Expert Opin Biol Ther*; 3(3):409-423.
- Jafarian M, Eslaminejad MB, Khojasteh A, Mashhadi Abbas F, Dehghan MM, Hassanizadeh R (2008). Marrow-derived mesenchymal stem cells-directed bone regeneration in the dog mandible: a comparison between biphasic calcium phosphate and natural bone mineral. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 105: e14-e24.
- Kadam SS, Sudhaka Mr, Nair PD, Bhonde RR (2010). Reversal of experimental diabetes in mice by transplantation of neo-islets generated from human amnion-derived mesenchymal stromal cells using immuno-isolatory macrocapsules. *Cytotherapy*. 12(8): 982–991.
- Kanczler JM, Oreffo ROC (2008). Osteogenesis and angiogenesis: the potential for engineering bone. *Eur Cells & Mater*. 15: 100-114
- Kang JW, Koo HC, Hwang SY, Kang SK, Ra JC, Lee MH, Park YH (2012). Immunomodulatory effects of human amniotic membrane-derived mesenchymal stem cells. *J Vet. Sci*. 13:23-31
- Kern B, Shen J, Starbuck M, Karsenty G. (2001). Cbfa1 contributes to the osteoblast-specific expression of type I collagen genes. *J. Biol. Chem*. 276:7101-7107
- Khojasteh A, Eslaminejad MB, Nazarian H (2008). Mesenchymal stem cells enhance bone regeneration in rat calvarial critical size defects more than platelete-rich plasma. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.*; 106(3): 356-362
- Kim J, Kang HM, Kim H, Kim MR, Kwon HC, Gye MC (2007). Ex vivo characteristics of human amniotic membrane-derived stem cells. *Cloning Stem Cells*. 9:581-594
- Kirker-Head CA (2000). Potential applications and delivery strategies for bone morphogenetic proteins. *Adv Drug Deliv Rev.*; 43: 65-92

- Komori T, Yagi H, Nomura S, Yamaguchi A, Sasaki J, Deguchi K, Shimizu Y, Bronson RT, Gao YH, Inada M, Sato M, Okamoto R, Kitamura Y, Yoshiki S, Kishimoto T. (1997). Targeted disruption of *Cbfa1* results in a complete lack of bone formation owing to maturational arrest of osteoblasts. *Cell*. 89:775-764
- Kon E, Muraglia A, Corsi A, Bianco P, Marcacci M, Martin I (2000). Autologous bone marrow stromal cells loaded onto porous hydroxyapatite ceramic accelerate bone repair in :244-61critical-size defects of sheep long bones. *J Biomed Mater Res*. 49(3): 328-337.
- Koq A, Emin N, Elqin E, Elqin YM (2008). In vitro osteogenic differentiation of rat mesenchymal stem cells in a microgravity bioreactor. *J Bioactive Comp Polym*. 23(3):244-61
- Kruyt MC, Wilson CE, de Bruijn JD, van Blitterswijk CA, Oner CF, Verbout AJ (2006). The effect of cell-based bone tissue engineering in a goat transverse process model. *Biomaterials*; 29:5099–106.
- Kubo M, Sonoda Y, Muramatsu R, Usui M. (2001). Immunogenicity of human amniotic membrane in experimental xenotransplantation. *Invest Ophthalmol Vis Sci*. 42:1539-1546
- Kukreja S, Raza HKT, Agrawal AC. (2010). Iliac Crest Bone Graft Harvesting: Prospective Study Of Various Techniques And Donor Site Morbidity. *Internet J Orthop Surg*. 18 (1):1
- Lacey DC, Simmons PJ, Graves SE, Hamilton JA (2009). Pro-inflammatory cytokines inhibit osteogenic differentiation from stem cells: implication for bone repair during inflammation. *Osteoarthritis Cartilage*, 17(6):735-42
- Langer R, Vacanti JP. (1993). Tissue engineering. *Science*. 260: 920-926.
- Li H, Chu Y, Zhang Z. (2012). Construction of bilayered tissue-engineered skin with human amniotic mesenchymal cells and human amniotic epithelial cells,” *Artificial Organs*. *Artif Organs*. 36(10): 911-9.
- Li L, & Xie T (2005). Stem cell niche: structure and function. *Annu. Rev. Cell Dev. Biol*. 21, 605–631
- Lian JB, Stein GS, Aubin JE. (2003). Bone formation: maturation and functional activities of osteoblast lineage cells. In *Primers on the metabolic bone diseases and disorders of mineral metabolism*. Favus MJ ed. American Society for Bone and Mineral Research. Washington DC. Chapter 3.
- Lin L, Chow KL, Leng Y (2009). Study of hydroxyapatite osteoinductivity with an osteogenic differentiation of mesenchymal stem cells. *J Biomed Mater Res A*; 89(2):326-35

- Lin ZW, Wang JS, Lin LJ, Zhang JW, Liu YL, Ming Shuai, Qi Li. (2014). Effects of BMP2 and VEGF165 on the osteogenic differentiation of rat bone marrow-derived mesenchymal stem cells. *Exp Ther Med.* 7(3): 625–629.
- Lind M, Bünger C (2001). Factors stimulating bone formation. *Eur Spine. J* 10: S102-S109.
- Linde A, Hedner E. (1995). Recombinant bone morphogenetic protein-2 enhances bone healing, guided by osteopromotive E-PTFE membranes:an experimental study in rats. *Calcif. Tissue Int.*, 56:549-553.
- Lindenmair A, Hatlapatka T, Kollwig G, Hennerbichler S, Gabriel C, Wolbank S, Redl H, Kasper C. (2012). Mesenchymal Stem or Stromal Cells from Amnion and Umbilical Cord Tissue and Their Potential for Clinical Applications. *Cells*, 1, 1061-1088
- Liu YX, Cox SR, Morita T, Kourembanas S (1995). Hypoxia regulates vascular endothelial growth factor gene expression in endothelial cells. *Circulation Research.* 77: 638-643
- Mabuchi Y, Houlihan DD, Akazawa C, Okano H, Matsuzaki Y. (2013). Prospective isolation of murine and human bone marrow mesenchymal stem cells based on surface markers Review Article. *Stem Cells International*, Volume 2013
- Mastrogiacomo M, Corsi A, Francioso E, Di Comite M, Monetti F, Scaglione S, Favia A, Crovace A, Bianco P, Cancedda R. 2006. Reconstruction of extensive long bone defects in sheep using resorbable bioceramics based on silicon stabilized tricalciumphosphate. *Tissue Eng* 12:1261–1273
- Martin I, Wendt D, Heberer M (2004). The role of bioreactors in tissue engineering. *Trends Biotechnol.* 22(2): 80-86.
- Matsuo K, Irie N (2008). Osteoclast–osteoblast communication. *Arch Biochem Biophys.* 473:201–209.
- Meyer U, Weismann HP. (2005) Bone and cartilage engineering. Springer-Verlag, Berlin. 1-6
- Miki T (2011). Amnion-derived stem cells: in quest of clinical applications. *Stem Cell Research and Therapy*, vol. 2, no. 3, article 25,.
- Miki T, Lehmann T, Cai H, Stolz DB, Strom SC. (2005). Stem cell characteristics of amniotic epithelial cells. *Stem Cells.* 23:1549-1559
- Moore KL, Persaud TVN (2003). Before we are born: essentials of embryology and birth defects. Philadelphia: Saunders;. pp 107.
- Muguruma Y. (2006). Reconstitution of the functional human hematopoietic micro-environment derived from human mesenchymal stem cells in the murine bone marrow compartment. *Blood.* 107:1878–1888
- Muraglia A, Cancedda R, Quarto R (2000). Clonal mesenchymal progenitors from human bone marrow differentiate in vitro according to a hierarchical model. *J Cell Sci.* 113:1161-6.

- Murphy JM, Fink DJ, Hunziker EB, Barry FP. (2003). Stem cell therapy in a caprine model of osteoarthritis. *Arthritis Rheum.* 48:3464-74.
- Murphy CM, Haugh MG, O'Brien FJ. (2010). [The effect of mean pore size on cell attachment, proliferation and migration in collagen-glycosaminoglycan scaffolds for bone tissue engineering.](#) *Biomaterials.* 31(3):461-6.
- Muschler GE, Nakamoto C, Griffith LG (2004) Engineering principles of clinical cell-based tissue engineering. *J Bone Joint Surg*, 86-A, S2:41-55
- Nakamura H (2007). Morphology, Function, and Differentiation of Bone Cells. Review. *J Hard Tiss Biol* 16[1]:15-22
- Niknejad N, Peirovi H, Jorjani M, Ahmadiani A, Ghanavi J, Seifalian AM (2008). Properties of the amniotic membrane for potential use in tissue engineering *Euro Cell & Mat.* 15: 88-99
- Nikovits W, Stockdale FE. (2007). Gene expression, cell determination, and differentiation. In: Lanza R, Langer R, Vacanti J. *Principles of tissue engineering.* 3rd ed. Elsevier Academic Press. Burlington, MA. p.130
- O'Brien F (2011). Biomaterials and scaffolds for tissue engineering. *Materials Today.* 14(3)
- O'Brien FJ, Harley BA, Yannas IV, Gibson LJ. (2005). The effect of pore size on cell adhesion in collagen-GAG scaffolds. *Biomaterials.* 26(4):433-41
- Ogawa T, Ohmura M, Ohbo K. (2005). The niche for spermatogonial stem cells in the mammalian testis. *Intl J Hematology.* 82:381-388
- Oh S, Oh N, Appleford M, Ong JL. (2006) Bioceramics for tissue engineering applications – a Rossant review. *Am J Biochem & Biotech.* 2(2):49-56
- Osathanon T, Linnes ML, Rajachar RM, Ratner BD, Somerman MJ, Giachelli CM. (2008). Microporous nanofibrous fibrin-based scaffolds for bone tissue engineering. *Biomaterials* 29(30), 4091–4099
- Padilla S, Roman J, Vallet-Regi M (2002). Synthesis of porous hydroxyapatites by combination of gelcasting and foams burn out methods. *J Mater Sci Mater Med.*, 13:1193–1197.
- Parolini O, Alviano F, Bagnara GP, Bilic G, Buhring HJ, Evangelista M. (2008). Concise review: isolation and characterization of cells from human term placenta: outcome of the first international workshop on placenta derived stem cells. *Stem Cells.* 26:300-311
- Parolini O, Soncini M, Evangelista M, Schmidt D (2009). “Amniotic membrane and amniotic fluid-derived cells: potential tools for regenerative medicine?” *Reg Med.* 4(2): 275–291

- Petite H, Viateau V, Bensaid W, Meunier A, de Pollak C, Bourguignon M. (2000). Tissue-engineered bone regeneration. *Nat Biotechnol*; 9:959–63
- Porchet F, Jaques B. (1996). Unusual complications at iliac crest bone graft donor site: experience with two cases. *Neurosurgery*. 39(4):856-859
- Portmann-Lanz CB, Schoeberlein A, Huber A, Sager R, Malek A, Holzgreve W. (2006). Placental mesenchymal stem cells as potential autologous graft for pre- and perinatal neuroregeneration. *Am J Obstet Gynecol*. 194:664-673
- Potier E, Ferreira E, Andriamanalijaona R, Pujol JP, Oudina K, Logeart-Avramoglou D, Petite H (2007). Hypoxia affects mesenchymal stromal cell osteogenic differentiation and angiogenic factor expression. *Bone* 40: 1078-1087
- Pountos I, Jones E, Tzioupis C, et al. Growing bone and cartilage (2006). The role of mesenchymal stem cells. *J Bone Joint Surg Br*. 88:421-6.
- Pountos I, Corscadden D, Emery P, Giannoudis PV. (2007). Mesenchymal stem cell tissue engineering: techniques for isolation, expansion and application. *Injury* 38S4:S23-33
- Pramono C. (2011). Mandibular reconstruction using non-vascularized autogenous bone graft applied in decorticated cortical bone. *Italian J Maxillofac. Surg*. 22(1):47-56.
- Quarto R, Kutepov SM, Kon E (2001). Repair of large bone defects with the use of autologous bone marrow stromal cells. *N Eng J Med*; 344:385-386
- Randall MW. (2004). Bony reconstruction of the jaws. In Miloro M (editor). *Peterson's principles of oral and maxillofacial surgery*. 2nd ed. BC Decker Inc., London., p 783
- Rantam FA, Ferdiansyah, Nasronudin (2009). Stem cell exploration; methods of isolation and culture. Airlangga University Press. Surabaya
- Reddi AH. (1997). Bone morphogenetic proteins: an unconventional approach to isolation of first mammalian morphogens. *Cytokine Growth Factor Rev*. 8: 11-20.
- Reddi AH. (2007). Morphogenesis and tissue engineering. In Lanza R, Langer R, Vacanti J. *Principles of tissue engineering* 3rd ed. Elsevier Academic Press. Burlington, MA.. p 117
- Rennie K, Gruslin A, Hengstschlager M, Pei DQ, Cai JL, Nikaido T, Yaghoub MB (2012). Applications of Amniotic Membrane and Fluid in Stem Cell Biology and Regenerative Medicine. Review Article. *Stem Cells International* vol. 2012
- Rossant J, Howard L (2002). Signaling pathways in vascular development. *Annu Rev Cell Dev Biol*. 18:541-73
- Sakaguchi Y, Sekiya I, Yagishita K. (2004). Suspended cells from trabecular bone by collagenase digestion become virtually identical to mesenchymal stem cells obtained from marrow aspirates. *Blood*. 104:2728-35.

- Sakaguchi Y, Sekiya I, Yagishita K, Muneta T. (2005). Comparison of human stem cells derived from various mesenchymal tissues. Superiority of synovium as a cell source. *Arthr & Rheum*, 52(8):2521-2529
- Sakuragawa N, Kakinuma K, Kikuchi A (2004). Human amnion mesenchyme cells express phenotypes of neuroglial progenitor cells. *J Neuroscience Res*, 78(2):208–214
- Schmitz JP, Hollinger JO. (1986). The critical size defect as an experimental model for craniomandibulofacial nonunions. Perspective of tissue engineering. *Clin Orthop Relat Res*. 205:299-308.
- Schonmeyer BH, Soares M, Avraham T, Clavin NW, Gwalli F, Mehrara BJ (2010). Vascular endothelial growth factor inhibit bone morphogenetic protein 2 expression in rat mesenchymal stem cells. *Tiss Eng (A)*. 16(2):653-662
- Shi Y, Su J, Roberts AI, Shou P, Rabson AB, Ren G (2012). How mesenchymal stem cells interact with tissue immune responses. *Trends Immunol*. 33: 136–143.
- Shweiki D, Itin A, Soffer D, Keshet E (1992). Vascular endothelial growth factor induced by hypoxia may mediate hypoxia-initiated angiogenesis. *Nature*. 359:843-845
- Sikavitsas VI, Bancroft GN, Mikos AG (2002). Formation of three-dimensional cell/polymer constructs for bone tissue engineering in a spinner flask and a rotating wall vessel bioreactor. *J Biomed Mater Res*. 62:136-148.
- Solomon A, Rosenblatt M, Monroy D, Ji Z, Pflugfelder SC, Tseng SCG. (2001). Suppression of interleukin 1 (alpha) and interleukin-1 (beta) in human limbal epithelial cells cultured on the amniotic membrane stromal matrix. *Br J Ophthalmol*. 85:444-449
- Soncini M, Vertua E, Gibelli L, Zorzi F, Denegri HJ, Evangelista M. (2008). Isolation and characterization of mesenchymal cells from human fetal membranes. *J Tissue Eng Regen Med*. 1:296-305
- Sotiropoulos PA, Perez SA, Salagianni M, Baxevanis CN, Papamichail M (2006). Characterization of the optimal culture conditions for clinical scale production of human mesenchymal stem cells. *Stem Cells*, 24(2):462-471
- Sutherland RM, Sordat B, Bamat J, Gabbert H, Bourrat B, Mueller-Klieser W (1986). Oxygenation and differentiation in multicellular spheroids of human colon carcinoma. *Cancer Res* 46:5320-29
- Suzawa M, Takeuchi Y, Fukumoto S, Kato S, Ueno N, Miyazano K, Matsumoto T, Fujita T (1999). Extracellular matrix-associated bone morphogenetic proteins are essential for differentiation of murine osteoblastic cells in vitro. *Endocrinology* 140: 2125-31
- Tamagawa T, Oi S, Ishiwata I, Ishikawa H, Nakamura Y (2008). Differentiation of mesenchymal cells derived from human amniotic membranes into hepatocyte-like cells in vitro. *Hum Cell*. 20:77-84
- Tammela T, Enholm B, Alitalo K, Paavonen K (2005). The biology of vascular endothelial growth factors. *Cardiovasc Res*. 65:550-63

- Tanaka S, Matsuzaka K, Sato D, Inoue T (2007). Characteristic of newly formed bone during guided bone regeneration: analysis of cbfa-1, osteocalcin, and VEGF expression. *J Oral Implantol.* 33(6):321-326
- Tancred DC, McCormack BA, Carr AJ (1998). A synthetic bone implant macroscopically identical to cancellous bone. *Biomaterials* 19:2303-2311
- Tang Y, Wu X, Lei W, Pang L, Wan C, Shi Z (2009). TGF- β 1-induced Migration of Bone Mesenchymal Stem Cells Couples Bone Resorption and Formation. *Nat Med.* 15(7):757-765
- Tatsuyama K, Maezawa Y, Baba H, Imamura Y, Fukuda M (2000). Expression of various growth factors for cell proliferation and cytodifferentiation during fracture repair of bone. *Eur J Histochem* 44: 269-278
- Thomas CB, Kellam JF, Burg KL (2004). Comparative Study of Bone Cell Culture Methods for Tissue Engineering Applications. *J ASTM intl.*, 1:1-17.
- Toda A, Okabe M, Yoshida T, Nikaido T (2007). The potential of amniotic membrane/ amnion-derived cells for regeneration of various tissues. Critical review. *J Pharmacol Sci* 105, 215-228.
- Tong Yin, Li LH. (2006). The stem cell niches in bone. *J Clin Invest.* 116(5): 1195-1201.
- Tseng SCG, Li DQ, Ma X (1999). Suppression of transforming growth factor-beta isoforms, TGF-receptor type II, and myofibroblast differentiation in cultured human corneal and limbal fibroblasts by amniotic membrane matrix. *J Cell Physiol* 179:325-335.
- Tsuji H, Miyoshi S, Ikegami Y (2010). Xenografted human amniotic membrane-derived mesenchymal stem cells are immunologically tolerated and transdifferentiated into cardiomyocytes. *Circulation Research*, 106(10): 1613-1623.
- Uchida S, Sakai A, Kudo H, Otomo H, Watanuki M, Tanaka M, Nagaashima M, Nakamura T (2003). Vascular endothelial growth factor is expressed along with its receptors during the healing process of bone and bone marrow after drill-hole injury in rats. *Bone.* 32: 491-501
- Wang FS, Yang KD, Kuo YR, Wang CJ, Sheen-Chen SM, Huang HC, Chen YJ. (2003). Temporal and spatial expression of bone morphogenetic proteins in extracorporeal shock wave-promoted healing of segmental defect. *Bone* 32:387-396
- Wang M, Yoshida A, Kawashima H, Ishizaki M, Takahashi H, Hori J (2006). Immunogenicity and antigenicity of allogeneic amniotic epithelial transplants grafted to the cornea, conjunctiva, and anterior chamber. *Inv Ophthalmol Vis Sci.* 47:1522-1532.
- Wei JP, Nawata M, Wakitani S, Kametani K, Ota M, Toda A, Konishi I, Ebara S, Nikaido T. (2009). Human amniotic mesenchymal cells differentiate into chondrocytes. *Cloning Stem Cells*; 11, 19-26.
- Wiesmann H, Joos U, Meyer U (2004). Biological and biophysical principles in extracorporeal bone tissue engineering. Part II. *Int J Oral Maxillofac Surg.* 33: 523-530.

- Wilson A, Oser GM, Jaworski M, Blanco-Bose WE, Laurenti E, Adolphe C, Essers MA, Macdonald HR, Trumpp A (2007). Dormant and self-renewing hematopoietic stem cells and their niches. *Ann. NY Acad. Sci.* 1106, 64–75.
- Wong C, Inman E, Spaethe R, Helgerson S. (2003). Fibrin-based biomaterials to deliver human growth factors. *Thromb Haemost*; 89: 573-582.
- Wolbank S, Peterbauer A, Fahrner M, Hennerbichler S, van Griensven M, Stadler G. (2007). Dose-dependent immunomodulatory effect of human stem cells from amniotic membrane: a comparison with human mesenchymal stem cells from adipose tissue. *Tissue Eng*; 13:1173–83.
- Yannas IV. (2005) Facts and Theories of induced organ regeneration. *Adv. Biochem Eng Biotechnol.* 93:1-31
- Yuan J, Cui L, Zhang WJ, Liu W, Cao YL. (2007). Repair of canine mandibular bone defects with bone marrow stromal cells and porous beta tricalcium phosphate. *Biomaterials.* 28:1005-1013.
- Yue H, [Zhang ZY](#), [Zhu HG](#), [Qiu WL](#), [Jiang XQ](#), [Wei Guo](#) (2007). Experimental study on reconstruction of segmental mandible defects using tissue engineered bone combined bone marrow stromal cells with three-dimensional tricalcium phosphate. [The J Craniofac Surg.](#) 18(4):800-5.
- Yulianto I, Rindiastuti Y, Alaydrus L, Fibrianto YH (2012). Immunomodulatory properties of amniotic membrane mesenchymal stem cell-conditioned media. *Indon J Dermatol Venereol.* 1(1):14-18
- Zhang D, Jiang M, Miao D (2011). Transplanted human amniotic membrane-derived mesenchymal stem cells ameliorate carbon tetrachloride-induced liver cirrhosis in mouse. *PLoS ONE*, vol. 6, no. 2
- Zhi Li, Zu BL (2005). Repair of mandible defect with tissue engineering in rabbits. *ANZ J. Surg.* 75: 1017-1021