

DAFTAR PUSTAKA

- ADA, 2017. American Diabetes Association : Standards of Medical Care in Diabetes-2017. *The Journal of Clinical and Applied Research and Education*, pp. S6-S120.
- Alvarez, L. et al., 2004. Effect of Hemodialysis and Renal Failure on Serum Biochemical Markers of Bone Turnover. *Journal of Bone and Mineral Metabolism*, pp. 254-259.
- Barrett, K. E., Barman, S. M., Boltano, S. & Brook, H. L., 2012. Endocrine Functions of the Pancreas & Regulation of Carbohydrate Metabolism. In: *Ganong's Review of Medical Physiology Twenty fourth Edition*. New York: The McGraw-Hill Companies, Inc., pp. 431-451.
- Baz, B., Riveline, J. P. & Gautier, J. F., 2016. Gestational Diabetes Mellitus : Definition, Aetiological and Clinical Aspects. *European Journal of Endocrinology*, pp. R43-R52.
- Beck, G. R. et al., 2013. The Effect of Thiazolidinediones (TZD) on Human Bone Marrow Stromal Cell Differentiation in Vitro and in TZD-Treated Patients with Type 2 Diabetes. *Translation Research*, 3(16), pp. 145-155.
- Betts, J. G. D. P. et al., 2013. *Anatomy & Physiology*. Texas: OpenStax College.
- Bone, H. G. et al., 2013. Effects of Pioglitazone on Bone in Postmenopausal Women with Impaired Fasting Glucose or Impaired Glucose Tolerance : a Randomized, Double-Blind, Placebo-Controlled Study. *The Journal of Clinical Endocrinology & Metabolism*, pp. 4691-4701.
- Bringhurst, F. R., Demay, M. B., Krane, S. M. & Kronenberg, H. M., 2015. Bone and Mineral Metabolism in Health and Disease. In: D. L. Kasper, et al. eds. *Harrison's Principles of Internal Medicine*. New York: McGraw-Hill Education, pp. 2454-2466.
- Budde, K. et al., 2003. The Pharmacokinetics of Pioglitazone in Patients with Impaired Renal Function. *The British Journal of Clinical Pharmacology*, Volume 55, pp. 368-374.
- Cavalier, E. et al., 2016. The Role of Biochemical of Bone Turnover Markers in Osteoporosis and Metabolic Bone Disease : a Consensus Paper of the Belgian Bone

- Club. *International Osteoporosis Foundation and National Osteoporosis Foundation.*
- Chen, C. H. & Kuo, T. R., 2017. Bone Biomarker for the Clinical Assessment of Osteoporosis : Recent Developments and Future Perspectives. *Biomarker Research*, pp. 1-9.
- Czernik, B. L., 2010. Bone Loss in Diabetes : Use of Antidiabetic Thiazolidinediones and Secondary Osteoporosis. *Current Osteoporosis Report*, Volume 8, pp. 178-184.
- Czernik, B. L., 2010. PPAR in Bone : The Role in Bone Cell Differentiation and Regulation of Energy Metabolism. *Current Osteoporosis Reports*, pp. 84-90.
- Desouza, C. V. & Shivaswamy, V., 2010. Pioglitazone in the Treatment of Type 2 Diabetes : Safety and Efficacy Review. *Clinical Medicine Insights : Endocrinology and Diabetes*, Volume 3, pp. 43-51.
- Eastell, R. & Szulc, P., 2017. Osteoporosis 2 : Use of Bone Turnover Markers in Postmenopausal Osteoporosis. *Lancet Diabetes Endocrinol* , pp. 1-16
- Eckland, D. A. & Danhof, M., 2000. CLinical Pharmacokinetics of Pioglitazone. *Experimental and Clinical Endocrinology & Diabetes*, Volume 2, pp. S234-S242.
- Finnes, T. E. et al., 2014. Procollagen Type 1 Amino-Terminal Propeptide (P1NP) and Risk of Hip Fractures in Elderly Norwegian Men and Women. A NOREPOS Study. *Bone*, Issue 64, pp. 1-7
- Geldenhuys, W. J., Funk, M. O., Barnes, K. F. & Carroll, R. T., 2010. Structure-based Design of a Thiazolidinedione which Targets the Mitochondrial Protein mitoNEET. *Bioorganic & Medicinal Chemistry Letters*, Volume 20, pp. 819-823.
- Ghodsi, M. et al., 2016. Mechanisms Involved in Altered Bone Metabolism in Diabetes : a Narrative Review. *Journal of Diabetes & Metabolic Disorders* , 15(52), pp. 1-9
- Gillies, P. S. & Dunn, C. J., 2000. Pioglitazone. *Drugs*, 2(60), pp. 333-343.
- Goldenberg, R. & Punthakee, Z., 2013. Definition, Classification and Diagnosis of Diabetes, Prediabetes, and Metabolic Syndrome. *Canadian Journal of Diabetes*, pp. S8-S11.

- Gorniak, B. G., 2014. Peroxisome Proliferator-Activated Receptors and their Ligands : Nutritional and Clinical Implications-a Review. *Nutrition Journal*, 13(17), pp. 1-10.
- Gossiel, F. et al., 2014. Establishing Reference Intervals for Bone Turnover Markers in Healthy Postmenopausal Women in a Nonfasting State. *Bonekey Report*, 3(573), pp. 1-27
- Greenblatt, M., Tsai, J. N. & Wein, M. N., 2017. Bone Turnover Markers in the Diagnosis and Monitoring of Metabolic Bone Disease. *Clinical Chemistry*, pp. 464-474.
- Grey, A. et al., 2014. The Skeletal Effects of Pioglitazone in Type 2 Diabetes or Impaired Glucose Tolerance : a Randomized Controlled Trial. *European Journal of Endocrinology*, pp. 255-265.
- Grey, A., 2009. Thiazolidinedione-Induced Skeletal Fragility-Mechanisms and Implications. *Diabetes, Obesity, and Metabolism*, pp. 275-284.
- Hampson, G., 2012. Biochemical Markers in Bone Diseases. In: I. Fogelman, G. Gnanasegaran & H. V. D. Wall, eds. *Radionuclide and Hybrid Bone Imaging*. Berlin: Springer-Verlag Berlin Heidelberg, pp. 109-127.
- Hauer, H., 2002. The Mode of Action of Thiazolidinediones. *Diabetes/Metabolism Research and Reviews*, Volume 18, pp. S10-S15.
- Hlaing, T. T. & Compston, J. E., 2014. Biochemical Markers of Bone Turnover-Uses and Limitations. *Annals of Clinical Biochemistry*, pp. 189-201.
- Irons, B., 2013. New Pharmacotherapies for Type 2 Diabetes. *PSAP : Cardiology/Endocrinology*, pp. 5-21.
- Jenkins, N. et al., 2013. Age-Related Reference Intervals for Bone Turnover Markers from an Australian Reference Population. *Bone*, Volume 55, pp. 271-276.
- Khan, S. E. et al., 2008. Rosiglitazone-Associated Fractures in Type 2 Diabetes. *Diabetes Care*, 31(5), pp. 845-851.

- Kini, U. & Nandeesh, 2012. Physiology of Bone Formation, Remodeling, and Metabolism. In: I. Fogelman, G. Gnanasegaran & H. V. D. Wall, eds. *Radionuclide and Hybrid Bone Imaging*. Berlin: Springer-Verlag Berlin Heidelberg, pp. 29-53.
- Koivula, M.-K., Risteli, L. & Risteli, J., 2012. Measurement of Aminoterminal Propeptide of Type I Procollagen (P1NP) in Serum. *Clinical Biochemistry*, pp. 921-926.
- Krentz, A. J. & Bailey, C. J., 2005. Oral Antidiabetic Agents : Current Role in Type 2 Diabetes Mellitus. *Drugs*, 3(65), pp. 385-411.
- Krishnaswami, A., Kumar, S. R. & Lewis, J. M., 2010. Thiazolidinediones : a 2010 Perspective. *The Permanente Journal*, 14(3), pp. 64-72.
- Kroon, L. A. & Williams, C., 2013. Diabetes Mellitus. In: *Koda-Kimble and Young's Applied Therapeutics : The clinical Use of Drugs Tenth Edition*. New York: Lippincott Williams & Wilkins, a Wolter Kluwer Business , pp. 1223-1300.
- Kuo, T. R. & Chen, C. H., 2017. Bone Biomarker for the Clinical Assessment of Osteoporosis : Recent Developments and Future Perspectives. *Biomarker Research*, pp. 1-9.
- Lau, A. & Harper, W., 2007. Thiazolidinediones and their Effect on Bone Metabolism : a Review. *Canadian Journal of Diabetes*, 4(31), pp. 378-383.
- Loke, Y. K., Singh, S. & Furberg, C. D., 2009. Long-Term Use of Thiazolidinediones and Fractures in Type 2 Diabetes : a Meta-analysis. *Canadian Medical Association or Its Licensors*, 180(1), pp. 32-39.
- Masharani, U., 2018. Diabetes Mellitus & Hypoglycemia. In: *Current Medical Diagnosis & Treatment Fifty-Seventh Edition*. New York: McGraw-Hill Education., pp. 1241-1268.
- Mazziotti, G., Canalis, E. & Giustina, A., 2010. Drug-induced Osteoporosis : Mechanisms and Clinical Implications. *The American Journal of Medicine*, 123(10), pp. 877-884.
- Meneses, M. J. et al., 2015. Antidiabetic Drugs : Mechanisms of Action and Potential Outcomes on Cellular Metabolism. *Current Pharmaceutical Design*, 21(25), pp. 3606-3620.

- Michelsen, J. et al., 2013. Reference Intervals for Serum Concentrations of Three Bone Turnover Markers for Men and Women. *Bone*, Volume 57, pp. 399-404.
- Naylor, K. E. & Eastell, R., 2006. Measurement of Biochemical Markers of Bone Formation. In: M. J. Seibel, S. P. Robins & J. P. Bilezikian, eds. *Dynamics of Bone and Cartilage Metabolism*. London: Academic Press, pp. 529-533.
- Panday, K., Gona, A. & Humphrey, M. B., 2014. Medication-Induced Osteoporosis : Screening and Treatment Strategies. *Therapeutic Advances in Musculoskeletal Disease*, 6(5), pp. 185-202.
- Patromas, S. & Koulouris, S., 2006. Thiazolidinediones : Antidiabetic Drugs with Cardiovascular Effects. *Hellenic Journal of Cardiology*, Volume 47, pp. 352-360.
- Pearson, E. R. & McCrimmon, R. J., 2014. Diabetes Mellitus. In: *Davidson's Principles and Practice of Medicine 22nd Edition*. New York: Elsevier Limited, pp. 797-836.
- PERKENI, 2015. *Konsensus : Pengelolaan dan Pencegahan Diabetes Melitus tipe 2 di Indonesia*. Jakarta: Pengurus Besar Perkumpulan Endokrinologi Indonesia.
- Power, A. C., 2015. Diabetes Mellitus : Diagnosis, Classification, and Pathophysiology. In: *Harrison's Principles of Internal Medicine*. New York: McGraw-Hill Education., pp. 2399-2435.
- Pratley, R. E., 2013. The Early Treatment of Type 2 Diabetes. *The American Journal of Medicine*, pp. s2-s9.
- Ralston, S. H., 2013. Bone Structure and Metabolism. *Medicine*, 41(10), pp. 581-595.
- Ralston, S. H. & McInnes, I. B., 2014. Rheumatology and Bone Disease. In: B. R. Walker, N. R. Colledge, S. H. Ralston & I. D. Penman, eds. *Davidson's Principles and Practice of Medicine 22nd Edition*. New York: Elsevier Limited, pp. 1058-1064.
- Rey, A. et al., 2014. The Skeletal Effects of Pioglitazone in Type 2 Diabetes or Impaired Glucose Tolerance : a Randomized Controlled Trial. *European Journal of Endocrinology*, pp. 255-265.
- Rizzoli, R., 2010. *Atlas of Postmenopausal Osteoporosis*. 3th ed. UK: Current Medicine Group, a part of Springer Science+Business Media.

- Rosen, C. J. & Bouxsein, M. L., 2006. Mechanisms of Disease : is osteoporosis the obesity of bone?. *Rheumatology : Nature Clinical Practice*, 2(1), pp. 35-43.
- Samoszuk, M., Leuther, M. & Hoyle, N., 2008. Role of Serum P1NP measurement for Monitoring Treatment in Osteoporosis. *Biomarkers in Medicine*, 5(2), pp. 495-508.
- Sawczuk, M. G. et al., 2017. Serum level of Interleukin-6 (IL-6) and N-terminal Propeptide of Procollagen Type I (P1NP) in Patients with Liver Disease. *Scandinavian Journal of Clinical and Laboratory Investigation*, pp. 1-6.
- Selimovic, E. K., Valjevac, A. & Hadxovic, D. A., 2013. The Utility of Procollagen Type 1 N-TerminalA Propeptide for the Bone Status Assessment in Postmenopausal Women. *Bosnian Journal of Basic Medical Sciences*, 13(4), pp. 259-265.
- Shu, A. et al., 2012. Bone Structure and Turnover in Type 2 Diabetes Mellitus. *Osteoporosis International*, 2(23), pp. 635-641.
- Silva, R. F. et al., 2015. Biology of Bone Tissue : Structure, Function and Factors that Influence Bone Cells. *Biomed Research International*, pp. 1-17.
- Smits, P. & Tack, C. J. J., 2006. Thiazolidinedione Derivates in Type 2 Diabetes Mellitus. *The NNetherlands Journal of Medicine*, pp. 166-174.
- Teti, A. & Rucci, N., 2010. The Unexpected Links between Bone and the Immune System. *Medicographia*, 32(4), pp. 341-348.
- Tuchendler, D. & Bolanowski, M., 2014. The Influence of Thyroid Dysfunction on Bone Metabolism. *Tuchendler and Bolanowski Thyroid Research*, 7(12), pp. 1-5.
- Vassalle, C. & Pagani, F., 2016. Biomarkers of Bone Turnover : Potential, Challenges and Pitfalls from the Laboratory Point of View. *Rheumatology (Sunnyvale)*, pp. 1-7.
- Veliky, M. M., Shandrenko, S. G. & Zaitseva, O. V., 2015. Biochemical Markers of Bone Collagen Type I Metabolism. *The Ukrainian Biochemical Journal*, pp. 21-32.
- Verma, S. H. & Sharma, S. K., 2016. a Study of Effects of Pioglitazone and Rosiglitazone on Various Parameters in Patients of Type-2 Diabetes Mellitus with Special Reference to Lipid Profile. *Journal of the Association of Physicians of India*, pp. 24-28.

- Vijay, S. K., Mishra, M., Kumar, H. & Tripathi, K., 2009. Effect of Pioglitazone and Rosiglitazone on Mediators of Endothelial Dysfunction, Markers of Angiogenesis and Inflammatory Cytokines in Type-2 Diabetes. *Acta Diabetologica*, pp. 27-33.
- Viscoli, C. M. et al., 2016. Pioglitazone and Risk for Bone Fracture : Safety Data from a Randomized Clinical Trial. *The Journal of Clinical Endocrinology & Metabolism*, pp. 1-15.
- Walsh, J. S., 2014. Normal Bone Physiology Remodelling and its Hormonal Regulation. *Basic Science*, pp. 1-6.
- Waugh, J. et al., 2006. Pioglitazone : a Review of its Use in Type 2 Diabetes Mellitus. *Adis Drug Evaluation*, 1(66), pp. 85-109.
- Wei, W. & Wan, Y., 2011. Thiazolidinediones on PPAR γ : the Roles in Bone Remodeling. *PPAR Research*, pp. 1-10.
- Wheater, G. et al., 2013. The Clinical Utility of Bone Marker Measurements on Osteoporosis. *Journal of Translational Medicine*, pp. 1-14.
- WHO, 2016. *Global Report on Diabetes*. Geneva: World Health Organization.
- Widmaier, E. P., Raff, H. & Strang, K. T., 2014. *Vander's Human Physiology : the Mechanisms of Body Function*. 13th ed. New York: The McGraw-Hill Companies, Inc.
- Xia, W. B. & Xu, L., 2014. Chinese Bone Turnover Marker Study : Reference Ranges for C-Terminal Telopeptide of Type I Collagen and Procollagen I N-Terminal Peptide by Age and Gender. *PLoS ONE*, 9(8), pp. 1-7.
- Xiao, W. H. et al., 2013. The Effect of Pioglitazone on Biochemical Markers of Bone Turnover in the Patients with Type 2 Diabetes. *International Journal of Endocrinology*, pp. 1-6.
- Zaitseva, O. V., Shandrenko, S. G. & Veliky, M. M., 2015. Biochemical Markers of Bone Collagen Type I Metabolism. *The Ukrainian Biochemical Journal*, pp. 21-32.