

DAFTAR PUSTAKA

1. Levin A, Stevens PE, Bilous RW, Coresh J, De Francisco AL, De Jong PE, et al. Kidney disease improving global outcomes (KDIGO) CKD work group. KDIGO 2012 clinical practice guideline for the evaluation and management of chronic kidney disease. *Kidney int suppl.* 2013;3(1):1–50.
2. Jankowski J, Floege J, Fliser D, Boehm M, Marx N. Cardiovascular disease in chronic kidney disease: pathophysiological insights and therapeutic options. *Circulation.* 2021;143(11):1157–72.
3. Bikbov B, Purcell CA, Levey AS, Smith M, Abdoli A, Abebe M, et al. Global, regional, and national burden of chronic kidney disease 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2020;395:709–33.
4. Bello AK, McIsaac M, Okpechi IG, Johnson DW, Jha V, Harris DC, et al. International Society of Nephrology Global Kidney Health Atlas: structures, organization, and services for the management of kidney failure in North America and the Caribbean. *Kidney int suppl.* 2021;11(2):66–76.
5. Indonesia PN. 11th Report of Indonesian renal registry 2018. Jakarta: Perhimpunan Nefrologi Indonesia. 2018.
6. Instalasi Rekam Medik RSUP. Dr. M. Djamil Padang. Data rekam medik penyakit ginjal kronis 2015 - September 2017 bagian rawat jalan dan rawat inap RSUP Dr. M. Djamil Padang. 2017.
7. Hill NR, Samuel T F, Jason L O, Jennifer A H, Christopher, O’Callaghan Lasserson DS, et al. Global Prevalence of Chronic Kidney Disease A systemic review and metaanalysis. *PLoS One.* 2016;1–18
8. Ketut S. Penyakit Ginjal Kronik. Buku ajar ilmu penyakit dalam. Jakarta: Internal Publishing. 2009;1035–40
9. Simona Mihai EC, Ionela Daniela Popescu A-ME, Laura Georgiana Necula GA, Tanase C. Inflammation and Chronic Kidney Disease: Current Approaches and Recent Advances. *Rev Phys Technol.* 2018;32:137–44.

10. Sørensen J, Subhi Y, Molbeck CR, Nielsen MK, Sørensen TL. Plasma levels of matrix metalloprotease MMP-9 and tissue inhibitor TIMP-1 in caucasian patients with polypoidal choroidal vasculopathy. *Vis*. 2020;4(2):1–8.
11. Cobo G, Lindholm B, Stenvinkel P. Chronic inflammation in end-stage renal disease and dialysis. *Nephrol Dial Transplant*. 2018;33:35–40.
12. Xu G, Luo K, Liu H, Huang T, Fang X, Tu W. The progress of inflammation and oxidative stress in patients with chronic kidney disease. *Renal Failure*. 2015;37(1):45–9.
13. Rodríguez-Sánchez E, Navarro-García JA, Aceves-Ripoll J, Álvarez-Llamas G, Segura J, Barderas MG, et al. Association between renal dysfunction and metalloproteinase MMP-9 activity in hypertensive patients. *Nefrologia*. 2019;39(2):184–91.
14. Garlanda C, Bottazzi B, Magrini E, Inforzato A, Mantovani A. PTX3, a humoral pattern recognition molecule, in innate immunity, tissue repair, and cancer. *Physiol Rev*. 2018;98(2):623–39.
15. Presta M, Camozzi M, Salvatori G, Rusnati M. Role of the soluble pattern recognition receptor PTX3 in vascular biology. *J Cell Mol Med*. 2007;11(4):723–38.
16. Doni A, Stravalaci M, Inforzato A, Magrini E, Mantovani A, Garlanda C, et al. The long pentraxin PTX3 as a link between innate immunity, tissue remodeling, and cancer. *Front Immunol*. 2019;10:1–13.
17. Small D, Coombes J, Bennet, Johnson, Gobe. Oxidative stress, antioxidant therapies and chronic kidney disease. *J Asian Pasific Soc Nephrol*. 2012;17:311–21.
18. Hung TW, Tsai JP, Lin SH, Lee CH, Hsieh YH, Chang HR. Pentraxin 3 Activates JNK Signaling and Regulates the Epithelial-To-Mesenchymal Transition in Renal Fibrosis. *Cell Physiol Biochem*. 2016;40(5):1029–38.
19. Sjöberg B, Qureshi AR, Heimbürger O, Stenvinkel P, Lind L, Larsson A, et al. Association between levels of pentraxin 3 and incidence of chronic kidney disease in the elderly. *J Intern Med*. 2016;279(2):173–9.

20. Zlibut A, Bocsan IC, Agoston-Coldea L. Pentraxin-3 and endothelial dysfunction. Vol. 91, *Advances in Clinical Chemistry*. Elsevier; 2019. 163–179.
21. Bieniaś B, Sikora P. Urinary metalloproteinases and tissue inhibitors of metalloproteinases as potential early biomarkers for renal fibrosis in children with nephrotic syndrome. *Med US*. 2018;97(8).
22. Brew K, Dinakarpandian D, Nagase H. Tissue inhibitors of metalloproteinases: Evolution, structure and function. *Biochim Biophys Acta - Protein Struct Mol Enzymol*. 2000;1477(12):267–83.
23. Tan RJ, Liu Y. Matrix metalloproteinases in kidney homeostasis and diseases. *Am J Physiol - Ren Physiol*. 2012;302(11).
24. Qing-Hua G, Ju-Ming L, Chang-Yu P, Zhao-Hui L, Xiao-Man Z, Yi-Ming M. The kidney expression of matrix metalloproteinase-9 in the diabetic nephropathy of Kkay mice. *J Diabetes Complications*. 2008;22(6):408–12.
25. Fornoni A, Wang Y, Lenz O, Striker LJ, Striker GE. Association of a decreased number of repeats in the matrix metalloproteinase-9 promoter with glomerulosclerosis susceptibility in mice. *J Am Soc Nephrol*. 2002;13(8):2068–76.
26. Moranne O, Froissart M, Rossert J, Gauci C, Boffa J, Haymann JP, et al. Timing of onset of ckd-related metabolic complications. *J Am Soc Nephrol*. 2009;164–71.
27. Catania JM, Chen G, Parrish AR. Role of matrix metalloproteinases in renal pathophysiologies. *Am J Physiol - Ren Physiol*. 2007;292(3):200-20.
28. Sjöberg B, Qureshi AR, Anderstam B, Alvestrand A, Bárány P. Pentraxin 3, a sensitive early marker of hemodialysis-induced inflammation. *Blood Purif*. 2013;34(3–4):290–7.
29. Bowe B, Xie Y, Li T, Mokdad AH, Xian H. Changes in the US burden of chronic kidney disease from 2002 to 2016: an analysis of the global burden of disease study. *JAMA*. 2018
30. Raghavan R, Eknayan G. What is chronic kidney disease? *Manag Chronic*

- Kidney Dis. 2014;(3):3–13.
31. Kemenentrian Kesehatan Republik Indonesia. Hasil riset kesehatan dasar tahun 2018. Vol. 53, Badan Penelitian dan Pengembangan Kesehatan. 2018. 1689–1699.
 32. Thomas R, Kanso A, Sedor JR. Chronic kidney disease and its complications. *Prim Care Clin Off Pract*. 2008;35(2):329–44.
 33. Wang H, Naghavi M, Allen C, Barber RM, Carter A, Casey DC, et al. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015; a systematic analysis for the global burden of disease study 2015. *Lancet*. 2016;388(10053):1459–544.
 34. Lousa I, Reis F, Beirão I, Alves R, Belo L, Santos-Silva A. New potential biomarkers for chronic kidney disease management- a review of the literature. *Int J Mol Sci*. 2021;22(1):1–37.
 35. Culleton BF, Hemmelgarn BR. Is chronic kidney disease a cardiovascular disease risk factor. *Semin Dial*. 2003;16(2):95–100.
 36. Valente MJ, Rocha S, Coimbra S, Catarino C, Rocha-Pereira P, Bronze-Da-Rocha E, et al. Long pentraxin 3 as a broader biomarker for multiple risk factors in end-stage renal disease: Association with all-cause mortality. *Mediator Inflamm*. 2019;2019–2030.
 37. Inforzato A, Jaillon S, Moalli F, Barbati E, Bonavita E, Bottazzi B, et al. The long pentraxin PTX3 at the crossroads between innate immunity and tissue remodelling. *Tissue Antigens*. 2011;77(4):271–82.
 38. Lee IJ, Hilliard BA, Ulas M, Yu D, Vangala C, Rao S, et al. Monocyte and plasma expression of TAM ligand and receptor in renal failure: Links to unregulated immunity and chronic inflammation. *Expert Rev Clin Immunol*. 2015;158(2):231–41.
 39. Gajjala PR, Sanati M, Jankowski J. Cellular and molecular mechanisms of chronic kidney disease with diabetes mellitus and cardiovascular diseases as its comorbidities. *Front Immunol*. 2015;6(2):1–15.
 40. Moore KJ, Sheedy FJ, Fisher EA. Macrophages in atherosclerosis: A dynamic

- balance. *Nat Rev Immunol*. 2013;13(10):709–21.
41. Cobo G, Jankowska M, Stenvinkel P, Lindholm B. Inflammation in Chronic Kidney Disease. Fourth Edition *Chronic Kidney Disease, Dialysis, and Transplantation*. Elsevier; 2019. 208–223.
 42. Kuo, Ko-Lin. Oxidative stress in chronic kidney disease. *Ren Replace Ther*. 2018;4:1–9.
 43. Cachofeiro V, Goicochea M, De Vinuesa SG, Oubiña P, Lahera V, Luño J. Oxidative stress and inflammation, a link between chronic kidney disease and cardiovascular disease. *Kidney Int*. 2008;74:S4–9.
 44. Vassalotti JA, Centor R, Turner BJ, Greer RC, Choi M, Sequist TD. Practical approach to detection and management of chronic kidney disease for the primary care clinician. *Am J Med*. 2016;129(2):153–162.
 45. Vinodh Kumar B, Mohan T. Retrospective comparison of estimated GFR using 2006 MDRD, 2009 CKD-EPI and cockcroft-gault with 24 hour urine creatinine clearance. *J Clin Diagnostic Res*. 2017;11(5):9–12.
 46. Mantovani A, Garlanda C, Doni A, Bottazzi B. Pentraxins in innate immunity: From C- reactive protein to the long pentraxin PTX3. *J Clin Immunol*. 2008;28(1):1–13.
 47. Porte R, Davoudian S, Asgari F, Parente R, Mantovani A, Garlanda C, et al. The long pentraxin PTX3 as a humoral innate immunity functional player and biomarker of infections and sepsis. *Front Immunol*. 2019;10:1–11.
 48. Jaillon S, Galdiero MR, Del Prete D, Cassatella MA, Garlanda C, Mantovani A. Neutrophils in innate and adaptive immunity. *Semin Immunopathol*. 2013;35(4):377–94.
 49. Garlanda C, Bottazzi B, Bastone A, Mantovani A. Pentraxins at the crossroads between innate immunity, inflammation, matrix deposition, and female fertility. *Annu Rev Immunol*. 2005;23(8):337–66.
 50. Bottazzi B, Doni A, Garlanda C, Mantovani A. An integrated view of humoral innate immunity: Pentraxins as a paradigm. *Annu Rev Immunol*. 2010;28:157–83.

51. Norata GD, Marchesi P, Pirillo A, Uboldi P, Chiesa G, Maina V, et al. Long Pentraxin 3, a key component of innate immunity, is modulated by high-density lipoproteins in endothelial cells. *Arterioscler Thromb Vasc Biol.* 2008;28:925–931.
52. El-Senousy FM, Elwakeel EM, Mohamed RE. Study of Pentraxin-3 as an early marker of diabetic nephropathy in type 2 diabetes mellitus. *Int J Diabetes Res.* 2018;7(3):41–9.
53. Han B, Mura M, Andrade CF, Okutani D, Lodyga M, Dos Santos CC, et al. TNFalpha- induced long pentraxin PTX3 expression in human lung epithelial cells via JNK. *J Immunol.* 2005 Dec;175(12):8303–11.
54. Willeke F, Assad A, Findeisen P, Schromm E, Grobholz R, von Gerstenbergk B, et al. Overexpression of a member of the pentraxin family (PTX3) in human soft tissue liposarcoma. *Eur J Cancer.* 2006;42(15):2639–46.
55. Doni A, Mantovani G, Porta C, Tuckermann J, Reichardt HM, Kleiman A, et al. Cell- specific regulation of PTX3 by glucocorticoid hormones in hematopoietic and nonhematopoietic cells. *J Biol Chem.* 2008;283(44):29983–92.
56. Doni A. Regulation of PTX3, a key component of humoral innate immunity in human dendritic cells: stimulation by IL-10 and inhibition by IFN- γ . *J Leukoc Biol.* 2006;79(4):797–802.
57. Salio M, Chimenti S, Angelis N De, Molla F, Maina V, Nebuloni M, et al. Cardioprotective function of the long pentraxin PTX3 in acute myocardial infarction. *Circulation.* 2008;117(8):1055–64.
58. Giacomini A, Ghedini GC, Presta M, Ronca R. Long pentraxin 3: A novel multifaceted player in cancer. *Biochim Biophys Acta.* 2018;1869(1):53–63.
59. Rolph MS, Zimmer S, Bottazzi B, Garlanda C, Mantovani A, Hansson GK. Production of the long pentraxin PTX3 in advanced atherosclerotic plaques. *Arterioscler Thromb Vasc Biol.* 2002;22(5).
60. Suliman ME, Yilmaz MI, Carrero JJ, Qureshi AR, Saglam M, Ipcioglu OM, et al. Novel links between the long pentraxin 3, endothelial dysfunction, and

- albuminuria in early and advanced chronic kidney disease. *Clin J Am Soc Nephrol*. 2008;3(4):976–85.
61. Matsui S, Ishii J, Kitagawa F, Kuno A, Hattori K, Ishikawa M, et al. Pentraxin 3 in unstable angina and non-ST-segment elevation myocardial infarction. *Atherosclerosis*. 2010;210(1):220–5.
 62. Sjöberg B, Qureshi AR, Heimbürger O. Association between levels of pentraxin 3 and incidence of chronic kidney disease in the elderly. *J Intern*. 2016; 124111–2420.
 63. Geng J, Huang C, Jiang S. Roles and regulation of the matrix metalloproteinase system in parturition. *Mol Reprod Dev*. 2016;83(4):276–86.
 64. Ikeda U, Shimada K. Matrix metalloproteinases in vascular remodeling. *Connect Tissue*. 2002;34(4):343–50.
 65. Demedts IK, Morel-Montero A, Lebecque S, Pacheco Y, Cataldo D, Joos GF, et al. Elevated MMP-12 protein levels in induced sputum from patients with COPD. *Thorax*. 2006;61(3):196–201.
 66. Maskos K. Crystal structures of MMPs in complex with physiological and pharmacological inhibitors. *Biochimie*. 2005;87:249–63.
 67. Nagase H, Visse R, Murphy G. Structure and function of matrix metalloproteinases and TIMPs. *Cardiovasc Res*. 2006;69(3):562–73.
 68. Wang X, Khalil RA. Matrix metalloproteinases, vascular remodeling, and vascular disease. *advances in pharmacology*. Elsevier Inc.; 2018;81(1):241–330.
 69. Vandooren J, Born B, Solomonov I, Zajac E, Saldova R, Senske M, et al. Circular trimers of gelatinase B/matrix metalloproteinase-9 constitute a distinct population of functional enzyme molecules differentially regulated by tissue inhibitor of metalloproteinases-1. *Biochem J*. 2015;465:259–70.
 70. Bülow RD, Boor P. Extracellular Matrix in Kidney Fibrosis: More Than Just a Scaffold. *J Histochem Cytochem*. 2019;67(9):643–61.
 71. Amin M, Pushpakumar S, Muradashvili N, Kundu S, Tyagi SC, Sen U. Regulation and involvement of matrix metalloproteinases in vascular diseases

- 3 . General concepts of MMPs. *Front Biosci.* 2016;89–118.
72. Zheng G, Lyons JG, Thian KT, Wang Y, Hsu TT, Min D, et al. Disruption of E-cadherin by matrix metalloproteinase directly mediates epithelial-mesenchymal transition downstream of transforming growth factor- β 1 in renal tubular epithelial cells. *Am J Pathol.* 2009;175(2):580–91.
73. Sounni NE, Paye A, Host L, Noël A. MT-MMPs as regulators of vessel stability associated with angiogenesis. *Front Pharmacol.* 2011;2(5):1–11.
74. Visse R, Nagase H. Matrix metalloproteinases and tissue inhibitors of metalloproteinases: Structure, function, and biochemistry. *Circ Res.* 2003;92(8):827–39.
75. Nissenson AR, Nichols WK. Necrotizing panniculitis in a morbidly obese patient with end- stage renal disease. *Perit Dial Int.* 1998;18(5):546–53.
76. Fassett RG, Driver R, Healy H, Ranganathan D, Ratanjee S, Robertson IK, et al. Comparison of markers of oxidative stress, inflammation and arterial stiffness between incident hemodialysis and peritoneal dialysis patients an observational study. *BMC Nephrol.* 2009;10(1):1–7.
77. Han B, Mura M, Andrade CF, Okutani D, Lodyga M, dos Santos CC, et al. Plasma pentraxin 3 in patients with chronic kidney disease: Associations with renal function, protein-energy wasting, cardiovascular disease, and mortality. *Clin J Am Soc Nephrol.* 2013;2(5):709–21.
78. Cai G, Zhang X, Hong Q, Shao F, Shang X, Fu B, et al. Tissue inhibitor of metalloproteinase-1 exacerbated renal interstitial fibrosis through enhancing inflammation. *Nephrol Dial Transplant.* 2008;23(6):1861–75.
79. Bengatta S, Arnould C, Letavernier E, Monge M, De Préneuf HM, Werb Z, et al. MMP9 and SCF protect from apoptosis in acute kidney injury. *J Am Soc Nephrol.* 2009;20(4):787–97.
80. Chang HR, Yang SF, Li ML, Lin CC, Hsieh YS, Lian J Da. Relationships between circulating matrix metalloproteinase-2 and -9 and renal function in patients with chronic kidney disease. *Clin Chim Acta.* 2006;366(1–2):243–8.
81. El-Senousy FM, Elwakeel EM, Mohamed RE. Study of Pentraxin-3 as an early

- marker of diabetic nephropathy in diabetes mellitus. *Int J Diabetes Res.* 2018;(3);41-9.
82. Friese RS, Rao F, Khandrika S, Thomas B, Ziegler MG, Schmid-Schbein GW, et al. Matrix metalloproteinase: discrete elevation in essential hypertension and hypertensive end-stage renal disease. *Clin Exp Hypertens.* 2009; 31 (7): 521–33.
83. Ariani G. Korelasi antara endhotelin-1 serum dengan rasio albumin kreatinin urin pada pasien penyakit ginjal kronik (Tesis). Fakultas Kedokteran Universitas Andalas. 2021.
84. Liu P, Quinn RR, Lam NN, Al-Wahsh H, Sood MM, Tangri N, et al. Progression and regression of chronic kidney disease by age among adults in a population-based cohort in Alberta, Canada. *JAMA Netw Open.* 2021;4(6):1–13.
85. Mihai S, Codrici E, Popescu ID, Enciu AM, Rusu E, Zilisteanu D, et al. Inflammation-related patterns in the clinical staging and severity assessment of chronic kidney disease. *Dis Markers.* 2019;2019–25.
86. Goldberg I, Krause I. The role of gender in chronic kidney disease. *Emj.* 2016.58–64.
87. Dubey AK, Sahoo J, Vairappan B, Haridasan S, Parameswaran S, Priyamvada PS. Correction of metabolic acidosis improves muscle mass and renal function in chronic kidney disease stages 3 and 4; a randomized controlled trial. *Nephrol Dial Transplant.* 2020;35(1):121–9.
88. Tong M, Carrero JJ, Qureshi AR, Anderstam B, Heimbürger O, Bárány P, et al. Plasma pentraxin 3 in patients with chronic kidney disease: Associations with renal function, protein-energy wasting, cardiovascular disease, and mortality. *Clin J Am Soc Nephrol.* 2007;2(5):889–97.
89. Krzanowski M, Krzanowska K, Gajda M, Dumnicka P, Dziewier A, Woziwodka K, et al. Pentraxin 3 as a new indicator of cardiovascular-related death in patients with advanced chronic kidney disease. *Pol arch med wewn.* 2017;1403–38

90. Garasto S, Fusco S, Corica F, Rosignuolo M, Marino A, Montesanto A, et al. Estimating glomerular filtration rate in older people. *Biomed Res Int*. 2014;2014–20
91. Armstrong C. JNC 8 guidelines for the management of hypertension in adults. *Am Fam Physician*. 2014;90(7):503–4.
92. Gürsu M, Aydın Z, Öztürk S, Karadağ S, Uzun S, Döventaş Erdoğan Y, et al. Is pentraxin-3 a stronger marker of inflammation than C-reactive protein in chronic kidney disease? *Turkish Nephrol Dial Transplant J*. 2014;23(2):131–6.
93. Sarnak MJ, Levey AS, Schoolwerth AC, Coresh J, Culeton B, Hamm LL, et al. Kidney disease as a risk factor for development of cardiovascular disease: a statement from the american heart association councils on kidney in cardiovascular disease, high blood pressure research, clinical cardiology, and epidemiology and prevention. *Hypertension*. 2003;42(5):1050–65.
94. Nasution SA. Hubungan kadar pentraxin 3 pada pasien penyakit ginjal kronik yang menjalani hemodialisa dengan lamanya pasien menjalani hemodialisa (Tesis). Fakultas Kedokteran Universitas Sumatera Utara. 2020.
95. Yamasaki K, Kurimura M, Kasai T, Sagara M, Kodama T, Inoue K. Determination of physiological plasma pentraxin 3 (PTX3) levels in healthy populations. *Clin Chem Lab Med*. 2009;47(4):471–7.
96. Dell'Oglio MP, Simone S, Ciccone M, Corciulo R, Gesualdo M, Zito A, et al. Neutrophil-dependent pentraxin-3 and reactive oxygen species production modulate endothelial dysfunction in haemodialysis patients. *Nephrol Dial Transplant*. 2017;32(9):1540–9.
97. El Sabai Aziza A, El Hadidi Eman S, Al Hala A, El Sayed Engy. Pentraxin 3 in hemodialysis patients: relationship to comorbidities. *Saudi J Kidney Dis Transpl*. 2016;27(4):701–9.
98. Wardoyo EY, Nainggolan G, Hustrini NM, Setiati Siti. Factors Associated with arterial stiffness in chronic hemodialysis patients in Jakarta: the role of hemodialysis frequency and Pentraxin 3. *Acta Med Indones – Indones J Intern Med*. 2021;53(2):177-184.

99. Dewi YP. Performa formula cockcroft-gault, MDRD dan CKD-EPI.(Tesis). Fak Kedokt Univ Gajah Mada. 2015;(5).
100. Evans M, Van Stralen KJ, Schön S, Prütz KG, Stendahl M, Rippe B, et al. Glomerular filtration rate-estimating equations for patients with advanced chronic kidney disease. *Nephrol Dial Transplant*. 2013;28(10):2518–26.
101. Dai L, Golembiewska E, Lindholm B, Stenvinkel P. End-stage renal disease, inflammation and cardiovascular outcomes. *Contrib Nephrol*. 2017;191:32–43.
102. García-Tejeda AU, Sampieri CL, Suárez-Torres I, Morales-Romero J, Demeneghi-Marini VP, Hernández-Hernández ME, et al. Association of urinary activity of MMP-9 with renal impairment in Mexican patients with type 2 diabetes mellitus. *PeerJ*. 2018;2018(12):1–15.
103. Tan TK, Zheng G, Hsu TT, Wang Y, Lee VWS, Tian X, et al. Macrophage matrix metalloproteinase-9 mediates epithelial-mesenchymal transition in vitro in murine renal tubular cells. *Am J Pathol*. 2010;176(3):1256–70.
104. Kui Tan T, Zheng G, Hsu TT, Ra Lee S, Zhang J, Zhao Y, et al. Matrix metalloproteinase-9 of tubular and macrophage origin contributes to the pathogenesis of renal fibrosis via macrophage recruitment through osteopontin cleavage. *Lab Invest*. 2013;93(4):434–49.
105. Li S Yuan, Huang P H, Yang An-Hang, Tarng D, Yang Wu Chang, Lin Ching-Ching, et al. Matrix metalloproteinase-9 deficiency attenuates diabetic nephropathy by modulation of podocyte function and dedifferentiation. *Kidney Int*. 2014;86(2):358–69.
106. Ma Ruilian, Zhang Wei, Tiansong Wang, He Ximin, Huang Zichong, Zu Jingou, et al. Pentraxin3, long expression in mononuclear cells of patients with acute coronary syndrome: correlation with C-reactive protein and matrix metalloproteinase-9 levels. *Journal of Int Med Research*. 2014;42(3):677–83.