

## DAFTAR PUSTAKA

1. Fava A, Petri M. Systemic lupus erythematosus: Diagnosis and clinical management. *J Autoimmun.* 2019;96:1–13.
2. Tian J, Zhang D, Yao X, Huang Y, Lu Q. Global epidemiology of systemic lupus erythematosus: a comprehensive systematic analysis and modelling study. *Ann Rheum Dis.* 2023;82(3):351–6.
3. Pons-Estel GJ, Ugarte-Gil MF, Alarcón GS. Epidemiology of systemic lupus erythematosus. *Expert Rev Clin Immunol.* 2017;13(8):799–814.
4. Fatoye F, Gebrye T, Mbada C. Global and regional prevalence and incidence of systemic lupus erythematosus in low-and-middle income countries: a systematic review and meta-analysis. *Rheumatol Int.* 2022;42(12):2097–107.
5. Rees F, Doherty M, Grainge MJ, Lanyon P, Zhang W. The worldwide incidence and prevalence of systemic lupus erythematosus: a systematic review of epidemiological studies. *Rheumatology.* 2017;56(11):1945–61.
6. Hamijoyo L, Candrianita S, Rahmadi AR, Dewi S, Darmawan G, Suryajaya BS, et al. The clinical characteristics of systemic lupus erythematosus patients in Indonesia: a cohort registry from an Indonesia-based tertiary referral hospital. *Lupus.* 2019;28(13):1604–9.
7. Sumariyono S, Kalim H, Setyohadi B, Hidayat R, Najirman, Hamijoyo L, et al. Rekomendasi Perhimpunan Reumatologi Indonesia Diagnosis dan Pengelolaan Lupus Eritematosus Sistemik: Penilaian pasien LES. Jakarta. Perhimpunan Reumatologi Indonesia. 2019.
8. Somers EC, Marder W, Cagnoli P, Lewis EE, DeGuire P, Gordon C, et al. Population-Based Incidence and Prevalence of Systemic Lupus Erythematosus: The Michigan Lupus Epidemiology and Surveillance Program. *Arthritis & Rheumatology.* 2014;66(2):369–78.
9. Jakes RW, Bae S, Louthrenoo W, Mok C, Navarra S V, Kwon N. Systematic review of the epidemiology of systemic lupus erythematosus in the Asia-Pacific region: Prevalence, incidence, clinical features, and mortality. *Arthritis Care Res (Hoboken).* 2012;64(2):159–68.

10. Yu H, Nagafuchi Y, Fujio K. Clinical and Immunological Biomarkers for Systemic Lupus Erythematosus. *Biomolecules*. 2021;11(7):928.
11. Yu SL, Kuan WP, Wong CK, Li EK, Tam LS. Immunopathological Roles of Cytokines, Chemokines, Signaling Molecules, and Pattern-Recognition Receptors in Systemic Lupus Erythematosus. *Clin Dev Immunol*. 2012;2012:1–14.
12. Živković V, Cvetković T, Mitić B, Stamenković B, Stojanović S, Radovanović-Dinić B, et al. Monocyte chemoattractant protein-1 as a marker of systemic lupus erythematosus: an observational study. *Rheumatol Int*. 2018;38(6):1003–8.
13. Hahn BH, McMahon M. Harrison's Principles of Internal Medicine : Systemic Lupus Erythematosus [online]. 21st ed. New York : McGraw-Hill Education; 2022. Available from: [accessmedicine.mhmedical.com/content.aspx?aid=1190522276](https://accessmedicine.mhmedical.com/content.aspx?aid=1190522276)
14. Mende R, Vincent FB, Kandane-Rathnayake R, Koelmeyer R, Lin E, Chang J, et al. Analysis of Serum Interleukin (IL)-1 $\beta$  and IL-18 in Systemic Lupus Erythematosus. *Front Immunol*. 2018;9.
15. Umare V, Pradhan V, Nadkar M, Rajadhyaksha A, Patwardhan M, Ghosh KK, et al. Effect of Proinflammatory Cytokines (IL-6, TNF- $\alpha$ , and IL-1 $\beta$ ) on Clinical Manifestations in Indian SLE Patients. *Mediators Inflamm*. 2014;2014:1–8.
16. Iikuni N. Raised monocyte chemotactic protein-1 (MCP-1)/CCL2 in cerebrospinal fluid of patients with neuropsychiatric lupus. *Ann Rheum Dis*. 2006;65(2):253–6.
17. González LA, Ugarte-Gil MF, Alarcón GS. Systemic lupus erythematosus: The search for the ideal biomarker. *Lupus*. 2021;30(2):181–203.
18. Sandhu V, Quan M. SLE and Serum Complement: Causative, Concomitant or Coincidental? *Open Rheumatol J*. 2017;11(1):113–22.
19. McCarthy EM, Smith S, Lee RZ, Cunnane G, Doran MF, Donnelly S, et al. The association of cytokines with disease activity and damage scores in systemic lupus erythematosus patients. *Rheumatology*. 2014;53(9):1586–94.

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20. Yao Y, Wang JB, Xin MM, Li H, Liu B, Wang LL, et al. Balance between inflammatory and regulatory cytokines in systemic lupus erythematosus. *Genetics and Molecular Research*. 2016;15(2).
  21. Choe JY, Kim SK. Serum TWEAK as a biomarker for disease activity of systemic lupus erythematosus. *Inflammation Research*. 2016;65(6):479–88.
  22. Petrackova A, Smrzova A, Gajdos P, Schubertova M, Schneiderova P, Kromer P, et al. Serum protein pattern associated with organ damage and lupus nephritis in systemic lupus erythematosus revealed by PEA immunoassay. *Clin Proteomics*. 2017;14(1):32.
  23. Umare VD, Pradhan VD, Rajadhyaksha AG, Ghosh K, Nadkarni AH. A functional SNP MCP-1 (-2518A/G) predispose to renal disorder in Indian Systemic Lupus Erythematosus patients. *Cytokine*. 2017;96:189–94.
  24. Gupta R, Yadav A, Aggarwal A. Longitudinal assessment of monocyte chemoattractant protein-1 in lupus nephritis as a biomarker of disease activity. *Clin Rheumatol*. 2016;35(11):2707–14.
  25. Gomes R. Lupus Nephritis: Role of Serum Complement Levels as Prognostic Marker. *J Clin Res Rep*. 2020;6(1):01–5.
  26. Abas IH, Tambunan BA, Awalia A. The Correlation between Serum C3 and C4 Complement Levels with Disease Activity Systemic Lupus Eritematosus Patients In Dr. Soetomo Hospital, Surabaya. *Current Internal Medicine Research and Practice Surabaya Journal*. 2021;2(1):1.
  27. Weinstein A, Alexander R V, Zack DJ. A Review of Complement Activation in SLE. *Curr Rheumatol Rep*. 2021;23(3):16.
  28. Narayanan K, Marwaha V, Shanmuganandan K, Shankar S. Correlation between Systemic Lupus Erythematosus Disease Activity Index, C3, C4 and Anti-dsDNA Antibodies. *Med J Armed Forces India*. 2010;66(2):102–7.
  29. Uribe AG, Vilá LM, McGwin G, Sanchez ML, Reveille JD, Alarcón GS. The Systemic Lupus Activity Measure-revised, the Mexican Systemic Lupus Erythematosus Disease Activity Index (SLEDAI), and a modified SLEDAI-2K are adequate instruments to measure disease activity in systemic lupus erythematosus. *J Rheumatol*. 2004;31(10):1934–40.

30. Ahmedullah AK, Islam MN, Islam MA. Assessment of Disease Activity in Systemic Lupus Erythematosus: Validation of Four Common Clinical Indices. *Int J Med Res Prof.* 2020;2020(6):117–23.
31. Moulton VR, Suarez-Fueyo A, Meidan E, Li H, Mizui M, Tsokos GC. Pathogenesis of Human Systemic Lupus Erythematosus: A Cellular Perspective. *Trends Mol Med.* 2017;23(7):615–35.
32. Kuo CF, Grainge MJ, Valdes AM, See LC, Luo SF, Yu KH, et al. Familial Aggregation of Systemic Lupus Erythematosus and Coaggregation of Autoimmune Diseases in Affected Families. *JAMA Intern Med.* 2015;175(9):1518.
33. Deng Y, Tsao BP. Genetic susceptibility to systemic lupus erythematosus in the genomic era. *Nat Rev Rheumatol.* 2010;6(12):683–92.
34. Renaudineau Y, Youinou P. Epigenetics and Autoimmunity, with Special Emphasis on Methylation. *Keio J Med.* 2011;60(1):10–6.
35. Kang I, Quan T, Nolasco H, Park SH, Hong MS, Crouch J, et al. Defective Control of Latent Epstein-Barr Virus Infection in Systemic Lupus Erythematosus. *The Journal of Immunology.* 2004;172(2):1287–94.
36. Khan D, Dai R, Ansar Ahmed S. Sex differences and estrogen regulation of miRNAs in lupus, a prototypical autoimmune disease. *Cell Immunol.* 2015;294(2):70–9.
37. Karrar S, Cunningham Graham DS. Review: Abnormal B Cell Development in Systemic Lupus Erythematosus: What the Genetics Tell Us. *Arthritis & Rheumatology.* 2018;70(4):496–507.
38. Kaul A, Gordon C, Crow MK, Touma Z, Urowitz MB, van Vollenhoven R, et al. Systemic lupus erythematosus. *Nat Rev Dis Primers.* 2016;2(1):16039.
39. Baechler EC, Batliwalla FM, Karypis G, Gaffney PM, Ortmann WA, Espe KJ, et al. Interferon-inducible gene expression signature in peripheral blood cells of patients with severe lupus. *Proceedings of the National Academy of Sciences.* 2003;100(5):2610–5.
40. Leffler J, Ciacma K, Gullstrand B, Bengtsson AA, Martin M, Blom AM. A subset of patients with systemic lupus erythematosus fails to degrade DNA

- from multiple clinically relevant sources. *Arthritis Res Ther.* 2015;17(1):205.
41. Accapezzato D, Caccavale R, Paroli MP, Gioia C, Nguyen BL, Spadea L, et al. Advances in the Pathogenesis and Treatment of Systemic Lupus Erythematosus. *Int J Mol Sci.* 2023;24(7):6578.
  42. Coutinho AE, Chapman KE. The anti-inflammatory and immunosuppressive effects of glucocorticoids, recent developments and mechanistic insights. *Mol Cell Endocrinol.* 2011;335(1):2–13.
  43. Cavalli G, Colafrancesco S, Emmi G, Imazio M, Lopalco G, Maggio MC, et al. Interleukin 1 $\alpha$ : a comprehensive review on the role of IL-1 $\alpha$  in the pathogenesis and treatment of autoimmune and inflammatory diseases. *Autoimmun Rev.* 2021;20(3):102763.
  44. Ushio A, Arakaki R, Yamada A, Saito M, Tsunematsu T, Kudo Y, et al. Crucial roles of macrophages in the pathogenesis of autoimmune disease. *World J Immunol.* 2017;7(1):1.
  45. Yang S, Zhao M, Jia S. Macrophage: Key player in the pathogenesis of autoimmune diseases. *Front Immunol.* 2023;14.
  46. Rivera Vargas T, Martin F, Apetoh L. Role of interleukin-1-family cytokines on effector CD4 T cell differentiation. *World J Immunol.* 2017;7(2):24.
  47. Killick J, Morisse G, Sieger D, Astier AL. Complement as a regulator of adaptive immunity. *Semin Immunopathol.* 2018;40(1):37–48.
  48. Waterman WR, Xu LL, Tetradis S, Motyckova G, Tsukada J, Saito K, et al. Glucocorticoid inhibits the human pro-interleukin 1 $\beta$  gene (IL1B) by decreasing DNA binding of transactivators to the signal-responsive enhancer. *Mol Immunol.* 2006;43(7):773–82.
  49. Dinarello CA. Interleukin-1 in the pathogenesis and treatment of inflammatory diseases. *Blood.* 2011;117(14):3720–32.
  50. Pisoni CN, Reina S, Arakaki D, Eimon A, Carrizo C, Borda E. Elevated IL-1 $\beta$  levels in anti-Ro/SSA connective tissue diseases patients with prolonged corrected QTc interval. *Clin Exp Rheumatol.* 2015;33(5):715–20.

51. Matsumoto H, Ogura H, Shimizu K, Ikeda M, Hirose T, Matsuura H, et al. The clinical importance of a cytokine network in the acute phase of sepsis. *Sci Rep.* 2018;8(1):13995.
52. Equils O, Kellogg C, McGregor J, Gravett M, Neal-Perry G, Gabay C. The role of the IL-1 system in pregnancy and the use of IL-1 system markers to identify women at risk for pregnancy complications†. *Biol Reprod.* 2020;103(4):684–94.
53. Lin J, Kakkar V, Lu X. Impact of MCP -1 in Atherosclerosis. *Curr Pharm Des.* 2014;20(28):4580–8.
54. Mohammad LA, Atef DM, Abul-Saoud AM. Association of monocyte chemoattractant protein 1 (MCP-1) gene polymorphism with lupus nephritis in Egyptian patients. *Hum Immunol.* 2015;76(10):724–8.
55. Alharazy S, Kong NCT, Mohd M, Shah SA, Ba'in A, Abdul Gafor AH. Urine Monocyte Chemoattractant Protein-1 and Lupus Nephritis Disease Activity: Preliminary Report of a Prospective Longitudinal Study. *Autoimmune Dis.* 2015;2015:1–13.
56. Ghafoori-Fard S, Shahir M, Taheri M, Salimi A. A review on the role of chemokines in the pathogenesis of systemic lupus erythematosus. *Cytokine.* 2021;146:155640.
57. Singh S, Anshita D, Ravichandiran V. MCP-1: Function, regulation, and involvement in disease. *Int Immunopharmacol.* 2021;101:107598.
58. Susanti H, Iriane VM, Dharmanata S, Handono K, Widijanti A, Gunawan A, et al. Analysis of urinary TGF- $\beta$ 1, MCP-1, NGAL, and IL-17 as biomarkers for lupus nephritis. *Pathophysiology.* 2015;22(1):65–71.
59. Quintana LF, Jayne D. Sustained remission in lupus nephritis: still a hard road ahead. *Nephrology Dialysis Transplantation.* 2016;31(12):2011–8.
60. Lu M, Xu W, Gao B, Xiong S. Blunting Autoantigen-induced FOXO3a Protein Phosphorylation and Degradation Is a Novel Pathway of Glucocorticoids for the Treatment of Systemic Lupus Erythematosus. *Journal of Biological Chemistry.* 2016;291(38):19900–12.

61. Deshmane SL, Kremlev S, Amini S, Sawaya BE. Monocyte Chemoattractant Protein-1 (MCP-1): An Overview. *Journal of Interferon & Cytokine Research*. 2009;29(6):313–26.
62. Chen Z, Li C, Yu J. Monocyte chemoattractant protein-1 as a potential marker for patients with sepsis: a systematic review and meta-analysis. *Front Med (Lausanne)*. 2023;10.
63. Delanghe JR, Speeckaert R, Speeckaert MM. Complement C3 and its polymorphism: biological and clinical consequences. *Pathology*. 2014;46(1):1–10.
64. Ayano M, Horiuchi T. Complement as a Biomarker for Systemic Lupus Erythematosus. *Biomolecules*. 2023;13(2):367.
65. Leffler J, Bengtsson AA, Blom AM. The complement system in systemic lupus erythematosus: an update. *Ann Rheum Dis*. 2014;73(9):1601–6.
66. Capecchi R, Puxeddu I, Pratesi F, Migliorini P. New biomarkers in SLE: from bench to bedside. *Rheumatology*. 2020;59(Supplement\_5):12–8.
67. Lu M, Xu W, Gao B, Xiong S. Blunting Autoantigen-induced FOXO3a Protein Phosphorylation and Degradation Is a Novel Pathway of Glucocorticoids for the Treatment of Systemic Lupus Erythematosus. *Journal of Biological Chemistry*. 2016;291(38):19900–12.
68. Liu J, Wang Y, Wang X. Effect of combined use of prednisone and immunosuppressive therapy in patients with systemic lupus erythematosus, and its influence on incidence of adverse reactions. *Tropical Journal of Pharmaceutical Research*. 2022;21(6):1295–300.
69. Ballanti E, Perricone C, di Muzio G, Kroegler B, Chimenti MS, Graceffa D, et al. Role of the complement system in rheumatoid arthritis and psoriatic arthritis: Relationship with anti-TNF inhibitors. *Autoimmun Rev*. 2011;10(10):617–23.
70. Kennelly MA, Killeen SL, Phillips CM, Alberdi G, Lindsay KL, Mehegan J, et al. Maternal C3 complement and C-reactive protein and pregnancy and fetal outcomes: A secondary analysis of the PEARS RCT-An mHealth-supported, lifestyle intervention among pregnant women with overweight and obesity. *Cytokine*. 2022;149:155748.

71. Zinelli A, Mangoni AA. Serum Complement C3 and C4 and COVID-19 Severity and Mortality: A Systematic Review and Meta-Analysis With Meta-Regression. *Front Immunol*. 2021;12.
72. Yang P, Zhu Z, Zang Y, Bu X, Xu T, Zhong C, et al. Increased Serum Complement C3 Levels Are Associated With Adverse Clinical Outcomes After Ischemic Stroke. *Stroke*. 2021;52(3):868–77.
73. Zhang J, Wang Y, Zhang R, Li H, Han Q, Guo R, et al. Implication of decreased serum complement 3 in patients with diabetic nephropathy. *Acta Diabetol*. 2018;55(1):31–9.
74. Vedel-Krogh S, Rasmussen KL, Nordestgaard BG, Nielsen SF. Complement C3 and allergic asthma: a cohort study of the general population. *European Respiratory Journal*. 2021;57(2):2000645.
75. Aringer M, Costenbader K, Daikh D, Brinks R, Mosca M, Ramsey-Goldman R, et al. 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Systemic Lupus Erythematosus. *Arthritis & Rheumatology*. 2019;71(9):1400–12.
76. Justiz Vaillant AA, Goyal A, Varacallo M. Systemic Lupus Erythematosus : Introduction [online]. Treasure Island (FL). StatPearls Publishing. 2023. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535405/>
77. Petri M, Orbai A, Alarcón GS, Gordon C, Merrill JT, Fortin PR, et al. Derivation and validation of the Systemic Lupus International Collaborating Clinics classification criteria for systemic lupus erythematosus. *Arthritis Rheum*. 2012;64(8):2677–86.
78. Aringer M, Costenbader K, Johnson SR. Assessing the EULAR/ACR classification criteria for patients with systemic lupus erythematosus. *Expert Rev Clin Immunol*. 2022;18(2):135–44.
79. Etchegaray-Morales I, Méndez-Martínez S, Jiménez-Hernández C, Mendoza-Pinto C, Alonso-García NE, Montiel-Jarquín A, et al. Factors Associated with Health-Related Quality of Life in Mexican Lupus Patients Using the LupusQol. *PLoS One*. 2017;12(1):e0170209.
80. Suszek D, Dubaj M, Bigosiński K, Dembowska A, Kaniewski M, Sielwanowska W et al. Usefulness in daily practice of the Systemic Lupus

- Erythematosus Disease Activity Index 2000 scale and the Systemic Lupus Erythematosus Disease Activity Score index for assessing the activity of systemic lupus erythematosus. *Rheumatology*. 2024;62(3):187-95.
81. Nikolopoulos DS, Kostopoulou M, Pieta A, Flouda S, Chavatza K, et al. Transition to severe phenotype in systemic lupus erythematosus initially presenting with non-severe disease: implications for the management of early disease. *Lupus Science & Medicine*. 2020;7:e000394.
  82. Battaglia M, Garrett-Sinha LA. Bacterial infections in lupus: Roles in promoting immune activation and in pathogenesis of the disease. *J Transl Autoimmun*. 2021;4:100078
  83. Rao M, Mikdashi J. A Framework to Overcome Challenges in the Management of Infections in Patients with Systemic Lupus Erythematosus. *Open Access Rheumatol*. 2023 Jul;Volume 15:125–37.
  84. Trentin F, Signorini V, Manca ML, Cascarano G, Gualtieri L, Schilirò D, et al. Gender differences in SLE: report from a cohort of 417 Caucasian patients. *Lupus Science & Medicine* 2023;10:e000880.
  85. Brinks R, Hoyer A, Weber S, Fischer-Betz R, Sander O, Richter JG, et al. Age-specific and sex-specific incidence of systemic lupus erythematosus: an estimate from cross-sectional claims data of 2.3 million people in the German statutory health insurance 2002. *Lupus Science & Medicine* 2016;3:e000181.
  86. Weckerle CE, Niewold TB. The unexplained female predominance of systemic lupus erythematosus: clues from genetic and cytokine studies. *Clin Rev Allergy Immunol*. 2011;40(1):42-9.
  87. Nowling TK, Gilkeson GS. Mechanisms of tissue injury in lupus nephritis. *Arthritis Res Ther*. 2011; 13: 250.
  88. Xiaoli Z, Shengqian X, Jing C, Shanyu C, Jianhua X. Study on the relationship between complement C3 level and disease activity intensity of systemic lupus erythematosus. *Chinese Journal of General Practitioners*. 2016; 15(5): 375-378.
  89. Pan L, Lu MP, Wang JH, et al. Patogenesis imunologis dan pengobatan lupus eritematosus sistemik. *World J Pediatr*. 2020; 16:19–30.

90. Duarte-Delgado NP, Segura K, Gómez O, Pulido S, Tovar-Sánchez C, Bello-Guartero JM, et al. Cytokine profiles and their correlation with clinical and blood parameters in rheumatoid arthritis and systemic lupus erythematosus. *Sci Rep.* 2024;14:23475.
91. Ruchakorn N, Ngamjanyaporn P, Suangtamai T, Kafaksom T, Polpanumas C, Petpisit V, et al. Performance of cytokine models in predicting SLE activity. *Arthritis Res Ther.* 2019;21(1):287.
92. López-Villanueva RF, Valencia-Pacheco G, Zapata-Vázquez R, López-Suárez R, Castro-Sansores C. Seguimiento de la actividad clínica y del dano orgánico acumulado en una cohorte de pacientes con lupus eritematoso sistémico de la península de Yucatán, México (1995–2016). *Reumatol Clin.* 2023;19:106–113.
93. Etchegaray-Morales I, Méndez-Martínez S, Jiménez-Hernández C, Mendoza-Pinto C, Alonso-García NE, Montiel-Jarquín A, et al. Factors Associated with Health-Related Quality of Life in Mexican Lupus Patients Using the LupusQol. *PLoS One.* 2017;12(1):e0170209.
94. Liu Y, Xu K, Xiang Y, Ma B, Li H, Li Y, et al. Role of MCP-1 as an inflammatory biomarker in nephropathy. *Front. Immunol.* 2024; 14:1303076.
95. Lima G, Soto-Vega E, Atisha-Fregoso Y, Sánchez-Guerrero J, Vallejo M, Vargas-Alarcón G et al. MCP-1, RANTES, and SDF-1 polymorphisms in Mexican patients with systemic lupus erythematosus. *Human Immunology.* 2007; 68(12), 980–985.
96. Lim JP, Leung B, Ding YY, Tay L, Ismail NH, Yeo A, Yew S, Chong MS. Monocyte chemoattractant protein-1: a proinflammatory cytokine elevated in sarcopenic obesity. *Clin Interv Aging.* 2015;10:605-609
97. Broekhuizen LN, van Wijk DF, Vink H, Stalmach A, Crozier A, Hutten BA, et al. Reduction of monocyte chemoattractant protein 1 and macrophage migration inhibitory factor by a polyphenol-rich extract in subjects with clustered cardiometabolic risk factors. *British Journal of Nutrition.* 2011;106(9):1416–22.

98. Deo R, Khera A, McGuire DK, Murphy SA, de P Meo Neto J, Morrow DA, et al. Association among plasma levels of monocyte chemoattractant protein-1, traditional cardiovascular risk factors, and subclinical atherosclerosis. *Journal of the American College of Cardiology*. 2004; 44(9):1812–1818.
99. Raymond WD, Eilertsen GØ, Shanmugakumar S, Nossent JC. The Impact of Cytokines on the Health-Related Quality of Life in Patients with Systemic Lupus Erythematosus. *J Clin Med*. 2019;8(6):857.
100. Moossavi M, Shojaee M, Mollashahi A, Poodineh J, Moossavi S Z, et al. Effects of Interleukin Families Polymorphisms on Systemic Lupus Erythematosus: Focus on Interleukin-1. *Gene Cell Tissue*. 2018;5(1):e69365.
101. Italiani P, Manca ML, Angelotti F, Melillo D, Pratesi F, et al. IL-1 family cytokines and soluble receptors in systemic lupus erythematosus. *Arthritis Research & Therapy*. *Arthritis Research & Therapy*. 2018; 20:27
102. Rashad NM, Soliman MH, El-Shal AS, Said D, Samir GM. Effect of interleukin-1 $\beta$  gene polymorphisms on clinicopathological features and disease activity of systemic lupus erythematosus. *Egypt J Intern Med*. 2019; 31:235–242.
103. Finucane OM, Lyons CL, Murphy AM, Reynolds CM, Klinger R, Healy NP, et al. Monounsaturated fatty acid-enriched high-fat diets impede adipose NLRP3 inflammasome-mediated IL-1 $\beta$  secretion and insulin resistance despite obesity. *Diabetes*. 2015;64(6):2116-28.
104. D'Esposito V, Di Tolla MF, Lecce M, Cavalli F, Libutti M, Misso S, et al. Lifestyle and Dietary Habits Affect Plasma Levels of Specific Cytokines in Healthy Subjects. *Front Nutr*. 2022;9:913176.
105. Bing C. Is interleukin-1 $\beta$  a culprit in macrophage-adipocyte crosstalk in obesity? *Adipocyte*. 2015;4(2):149-52.
106. Cepika AM, Bendelja K, Vergles JM, Malenica B, Kapitanovic S, Gagro A. Monocyte response to LPS after exposure to corticosteroids and chloroquine with implications for systemic lupus erythematosus. *Scand J Immunol*. 2010;72(5):434-43.

107. Walport MJ. Complement and Systemic Lupus Erythematosus. *Arthritis Res.* 2002; 4 (suppl 3):S279-S293
108. Hertle E, van Greevenbroek MMJ, Stehouwer CDA. Complement C3: an emerging risk factor in cardiometabolic disease. *Diabetologia.* 2012;55:881– 884.
109. Liu J, Wang Y, Wang X. Effect of combined use of prednisone and immunosuppressive therapy in patients with systemic lupus erythematosus, and its influence on incidence of adverse reactions. *Tropical Journal of Pharmaceutical Research.* 2022; 21(6): 1295-1300.
110. Lockshin MD, Barbhaiya M, Izmirly P, Buyon JP, Crow MK. SLE: reconciling heterogeneity. *Lupus Science & Medicine.* 2019;6:e000280.
111. Allen ME, Rus V, Szeto GL. Leveraging Heterogeneity in Systemic Lupus Erythematosus for New Therapies. *Trends Mol Med.* 2021;27(2):152-171.
112. Castellini-Pérez O, Povedano E, Barturen G, Martínez-Bueno M, Iakovliev A, Kerick M et al. Molecular subtypes explain lupus epigenomic heterogeneity unveiling new regulatory genetic risk variants. *Npj Genom. Med.* 2024. 9: 38.
113. Alarcón-Riquelme ME. The heterogeneity of systemic lupus erythematosus: Looking for a molecular answer. *Rev Colomb Reumatol.* 2021;28(S1):31– 38