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The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management

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Abstract

Tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection pose significant challenges for disease diagnosis and management, with immune dysfunction playing a central role in disease progression. L-selectin, a cell adhesion molecule involved in immune cell trafficking, has emerged as a key player in TB-HIV coinfection, influencing disease pathogenesis and clinical outcomes. This review examines the role of L-selectin in TB and HIV coinfection, focusing on its implications for disease diagnosis and management. We discuss the mechanisms underlying L-selectin-mediated immune dysfunction, its impact on disease progression, and potential diagnostic and therapeutic strategies targeting L-selectin pathways.

Introduction

Tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection presents a formidable challenge in global healthcare, particularly in regions with high prevalence rates of both diseases. The convergence of TB and HIV poses unique clinical complexities, as HIV-induced immunosuppression significantly heightens the risk of TB infection and disease progression. Coinfected individuals often experience more severe forms of TB and face increased morbidity and mortality compared to those with TB alone. Managing TB-HIV coinfection requires a multifaceted approach that addresses both infectious diseases and the underlying immune dysfunction. Immune dysfunction plays a central role in the pathogenesis of TB-HIV coinfection,

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with dysregulated immune responses contributing to disease progression and clinical outcomes. L-selectin, a cell adhesion molecule expressed on leukocytes, has emerged as a key mediator of immune cell trafficking and activation in TB and HIV infection. Its role in orchestrating immune responses at the cellular level makes it a compelling target for understanding disease mechanisms and developing targeted interventions. Understanding the role of L-selectin in TB-HIV coinfection is essential for elucidating disease pathogenesis and identifying potential diagnostic and therapeutic strategies. By exploring the implications of L-selectin dysregulation in coinfection, researchers can gain valuable insights into the interplay between TB and HIV and their effects on the immune system. This knowledge may inform the development of novel biomarkers for disease diagnosis and prognosis, as well as the design of innovative therapeutic interventions aimed at restoring immune competence and improving clinical outcomes.[1-30]

In this review, we aim to comprehensively examine the role of L-selectin in TB and HIV coinfection, with a focus on its implications for disease diagnosis and management. We will discuss the mechanisms underlying L-selectin-mediated immune dysfunction, its impact on disease progression, and potential diagnostic and therapeutic strategies targeting L-selectin pathways. By synthesizing current research findings and exploring future directions, we hope to contribute to a better understanding of TB-HIV coinfection and facilitate the development of more effective strategies for disease management.[31-41]

L-selectin in Immune Dysfunction

L-selectin, a cell adhesion molecule expressed predominantly on leukocytes, plays a critical role in orchestrating immune responses and maintaining immune homeostasis. Its primary function lies in facilitating the adhesion of leukocytes to endothelial cells, thereby mediating their extravasation from the bloodstream into sites of infection or inflammation. In the context of tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection, dysregulation of L-selectin pathways contributes to immune dysfunction and disease progression. One aspect of L-selectin's involvement in immune dysfunction lies in its role in modulating leukocyte trafficking dynamics. Dysregulated expression or function of L-selectin can disrupt the coordinated recruitment of immune cells to sites of infection, impairing the host's ability to mount an effective immune response against pathogens such as Mycobacterium tuberculosis and HIV. This dysregulation may manifest as altered leukocyte migration patterns, reduced immune cell infiltration into infected tissues, or impaired immune surveillance, all of which can compromise host defense mechanisms and exacerbate disease severity in TB-HIV coinfection.[42-60]

Furthermore, L-selectin is intricately involved in immune cell activation and effector functions. Its engagement with endothelial ligands triggers signaling cascades within leukocytes, leading to cellular activation and the initiation of immune responses. Dysregulated L-selectin signaling pathways may result in aberrant immune cell activation or polarization, contributing to chronic inflammation, tissue damage, and immunopathology in TB-HIV coinfection. Moreover, altered L-selectin signaling may impair immune cell interactions and cross-talk, further exacerbating

immune dysfunction and undermining host defense mechanisms against TB and HIV. The dysregulation of L-selectin in TB-HIV coinfection extends beyond its direct effects on immune cell trafficking and activation. Emerging evidence suggests that L-selectin may also influence immune cell differentiation, survival, and function, thereby shaping the overall immune response to TB and HIV. Dysfunctional L-selectin pathways may skew immune cell phenotypes or impair their ability to mount effective antipathogen responses, ultimately contributing to immune evasion, disease progression, and treatment resistance in coinfection.[61-78]

Implications for Disease Diagnosis

The dysregulation of L-selectin pathways in tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection carries significant implications for disease diagnosis. Given the central role of L-selectin in immune cell trafficking and activation, alterations in its expression levels or function may serve as valuable biomarkers for disease diagnosis and prognosis in TB-HIV coinfection. Firstly, changes in L-selectin expression levels on circulating leukocytes may reflect the underlying immune dysfunction in TB-HIV coinfection. Quantitative assessment of L-selectin expression using flow cytometry or immunohistochemistry could provide insights into the severity of immune dysregulation and disease progression. Elevated or decreased levels of L-selectin expression may correlate with disease activity, treatment response, or clinical outcomes, serving as potential indicators of disease severity or prognosis in TB-HIV coinfection. Additionally, L-selectin may hold diagnostic value as a biomarker for identifying individuals at increased risk of TB or HIV coinfection. Altered L-selectin expression patterns may precede clinical manifestations of coinfection, providing an opportunity for early detection and intervention. Screening assays targeting L-selectin expression levels or function in peripheral blood samples could aid in the identification of individuals at heightened risk of TB-HIV coinfection, enabling timely diagnostic testing and initiation of appropriate treatment strategies. Furthermore, L-selectin-targeted imaging techniques may offer non-invasive approaches for disease diagnosis and monitoring in TB-HIV coinfection. Molecular imaging modalities, such as positron emission tomography (PET) or magnetic resonance imaging (MRI), could be coupled with L-selectin-specific probes to visualize immune cell trafficking dynamics in vivo. By tracking the migration of L-selectin-expressing immune cells to sites of infection or inflammation, these imaging approaches could provide valuable diagnostic information, allowing for early detection of TB-HIV coinfection and assessment of treatment response.[79-109]

Therapeutic Targeting of L-selectin Pathways

Therapeutic targeting of L-selectin pathways represents a promising approach for managing tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection. Given the pivotal role of L-selectin in immune cell trafficking and activation, interventions aimed at modulating its expression, blocking its interactions with endothelial ligands, or enhancing its signaling pathways hold significant therapeutic potential. One strategy for therapeutic targeting of L-selectin pathways involves modulating its expression levels on immune cells. Upregulation of L-selectin expression

could enhance immune cell trafficking to sites of infection, thereby improving host defense mechanisms against TB and HIV. Conversely, downregulation of L-selectin expression may be beneficial in certain contexts, such as reducing excessive leukocyte infiltration and inflammation in chronic infections. Pharmacological agents or biological therapies that selectively modulate L-selectin expression levels could offer precise control over immune cell trafficking dynamics and contribute to improved clinical outcomes in TB-HIV coinfection.[110-126]

Therapeutic targeting of L-selectin pathways represents a promising approach for managing tuberculosis (TB) and human immunodeficiency virus (HIV) coinfection. Given the pivotal role of L-selectin in immune cell trafficking and activation, interventions aimed at modulating its expression, blocking its interactions with endothelial ligands, or enhancing its signaling pathways hold significant therapeutic potential. One strategy for therapeutic targeting of L-selectin pathways involves modulating its expression levels on immune cells. Upregulation of L-selectin expression could enhance immune cell trafficking to sites of infection, thereby improving host defense mechanisms against TB and HIV. Conversely, downregulation of L-selectin expression may be beneficial in certain contexts, such as reducing excessive leukocyte infiltration and inflammation in chronic infections. Another therapeutic approach involves blocking L-selectin interactions with endothelial ligands, thereby inhibiting immune cell extravasation into inflamed tissues. Monoclonal antibodies or small molecule inhibitors targeting L-selectin-ligand interactions have shown promise in preclinical models of inflammatory diseases and could be further explored for their therapeutic efficacy in TB-HIV coinfection. By preventing the initial adhesion of leukocytes to the endothelial surface, these agents could reduce tissue damage, inflammation, and immunopathology associated with TB and HIV coinfection.[127-139]

Enhancing L-selectin signaling represents another avenue for therapeutic intervention. Augmenting L-selectin-mediated signaling pathways could promote immune cell activation and effector functions, thereby enhancing host defense mechanisms against TB and HIV. This approach may involve the use of agonistic antibodies or small molecule agonists targeting L-selectin receptors or downstream signaling molecules. By potentiating L-selectin-mediated immune responses, these agents could improve immune cell trafficking and function in TB-HIV coinfection, ultimately contributing to better clinical outcomes. Combination therapies targeting multiple components of the L-selectin pathway may offer synergistic effects and improved therapeutic outcomes. For example, combining agents that modulate L-selectin expression with those targeting its interactions with endothelial ligands could provide complementary mechanisms of action, resulting in enhanced control over immune cell trafficking dynamics and immune responses. Similarly, combining L-selectin-targeted therapies with existing anti-TB or antiretroviral therapies could potentiate their efficacy and improve clinical outcomes in TB-HIV coinfection.[140-145]

Conclusion

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L-selectin plays a critical role in TB-HIV coinfection, influencing disease pathogenesis and clinical outcomes. Understanding the implications of L-selectin in disease diagnosis and management is essential for developing personalized therapeutic approaches and improving patient outcomes.

References

1. Nath A. Neurologic complications of human immunodeficiency virus infection. Continuum: Lifelong Learning in Neurology. 2015;21(6):1557-1576.
2. Nookala AR, Mitra J, Chaudhari NS, Hegde ML, Kumar A. An overview of human immunodeficiency virus type 1-associated common neurological complications: does aging pose a challenge? Journal of Alzheimer's Disease. 2017;60(s1):S169-S193.
3. Almodovar S. The complexity of HIV persistence and pathogenesis in the lung under antiretroviral therapy: challenges beyond AIDS. Viral immunology. 2014;27(5):186-199.
4. Obeagu EI. An update on susceptibility of individuals to diseases based on ABO blood groups. Int. J. Curr. Res. Med. Sci. 2019;5(3):1-8.
5. Obeagu EI, Babar Q, Vincent CC, Okafor CJ, Eze R, Chijioke UO, Ibekwe AM, Uduchi IO. Pulmonary Embolism in Covid-19 Pandemic: A Threat to Recovery of the Infected Patients. Journal of Pharmaceutical Research International. 2021;33(42A):90-98.
6. Obeagu EI, Obeagu GU. Platelet-Driven Modulation of HIV: Unraveling Interactions and Implications. Journal home page: http://www. journalijiar. com. 2024;12(01).
7. Onuigwe FU, Ambi H, Uchechukwu NJ, Obeagu EI. Platelet Dysfunction in Diabetes Mellitus. Elite Journal of Medicine. 2024;2(2):1-7.
8. Obeagu EI, Obeagu GU. Studies on platlets diagnostic indexes in patients with acute myeloid leukaemia in Uganda. Int. J. Curr. Res. Med. Sci. 2023;9(1):24-27.
9. Obeagu EI, Okechukwu PU, Alum EU, Obeagu GU, Opoku D, Scott GY, Amekpor F. Platelets as actors in inflammation and immunity: A fulcrum in immunity. Int. J. Adv. Res. Biol. Sci. 2023;10(3):81-89.
10. Obeagu EI, Mbabazi A, Obeagu GU, Muhimbura E, Igwe MC, Owunna TA, Okafor CJ, Jakheng SP. Evaluation of Platelets and Some Inflammation Markers of Patients with Acute Myeloid Leukaemia In A Tertiary Hospital In Uganda. Madonna University journal of Medicine and Health Sciences ISSN: 2814-3035. 2022;2(3):78-84.
11. Obeagu EI, Obeagu GU. Platelet Distribution Width (PDW) as a Prognostic Marker for Anemia Severity in HIV Patients: A Comprehensive Review. Journal home page: http://www. journalijiar. com.;12(01).
12. Ifeanyi OE, Favour AA, Prayer NN. Updates on Human Immunodeficiency Virus and Platelets. Int. J. Adv. Res. Biol. Sci. 2020;7(6):1-7.
13. Obeagu EI, Muhimbura E, Kagenderezo BP, Nakyeyune S, Obeagu GU. An Insight of Interleukin-6 and Fibrinogen: In Regulating the Immune System. J Biomed Sci. 2022;11(10):83.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

14. Obeagu EI, Okwuanaso CB, Edoho SH, Obeagu GU. Under-nutrition among HIV-exposed Uninfected Children: A Review of African Perspective. Madonna University journal of Medicine and Health Sciences. 2022;2(3):120-127.
15. Obeagu EI, Alum EU, Obeagu GU. Factors associated with prevalence of HIV among youths: A review of Africa perspective. Madonna University journal of Medicine and Health Sciences. 2023;3(1):13-18. https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/93.
16. Obeagu EI. A Review of Challenges and Coping Strategies Faced by HIV/AIDS Discordant Couples. Madonna University journal of Medicine and Health Sciences. 2023 ;3(1):7-12. https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/91.
17. Obeagu EI, Obeagu GU. An update on premalignant cervical lesions and cervical cancer screening services among HIV positive women. J Pub Health Nutri. 2023; 6 (2). 2023; 141:1-2. links/63e538ed64252375639dd0df/An-update-on-premalignant-cervical-lesions-and-cervical-cancer-screening-services-among-HIV-positive-women.pdf.
18. Ezeoru VC, Enweani IB, Ochiabuto O, Nwachukwu AC, Ogbonna US, Obeagu EI. Prevalence of Malaria with Anaemia and HIV status in women of reproductive age in Onitsha, Nigeria. Journal of Pharmaceutical Research International. 2021;33(4):10-19.
19. Omo-Emmanuel UK, Chinedum OK, Obeagu EI. Evaluation of laboratory logistics management information system in HIV/AIDS comprehensive health facilities in Bayelsa State, Nigeria. Int J Curr Res Med Sci. 2017;3(1): 21-38.DOI: 10.22192/ijcrms.2017.03.01.004
20. Obeagu EI, Obeagu GU, Musiimenta E, Bot YS, Hassan AO. Factors contributing to low utilization of HIV counseling and testing services. Int. J. Curr. Res. Med. Sci. 2023;9(2): 1-5.DOI: 10.22192/ijcrms.2023.09.02.001
21. Obeagu EI, Obeagu GU. An update on survival of people living with HIV in Nigeria. J Pub Health Nutri. 2022; 5 (6). 2022;129. links/645b4bfcf3512f1cc5885784/An-update-on-survival-of-people-living-with-HIV-in-Nigeria.pdf.
22. Offie DC, Obeagu EI, Akueshi C, Njab JE, Ekanem EE, Dike PN, Oguh DN. Facilitators and barriers to retention in HIV care among HIV infected MSM attending Community Health Center Yaba, Lagos Nigeria. Journal of Pharmaceutical Research International. 2021;33(52B):10-19.
23. Obeagu EI, Ogbonna US, Nwachukwu AC, Ochiabuto O, Enweani IB, Ezeoru VC. Prevalence of Malaria with Anaemia and HIV status in women of reproductive age in Onitsha, Nigeria. Journal of Pharmaceutical Research International. 2021;33(4):10-19.
24. Obeagu EI, Muhimbura E, Kagenderezo BP, Nakyeyune S, Obeagu GU. An Insight of Interleukin-6 and Fibrinogen: In Regulating the Immune System. J Biomed Sci. 2022;11(10):83.
25. Okoroiwu IL, Obeagu EI, Vivian Egwim V. Assessment of White Blood Cell Count and Platelet Count in Women on Hormonal Contraceptives in Owerri, Imo State, Nigeria. J Res Med Dent Sci. 2021;9(12):498-501.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

26. Obeagu EI, Okoroiwu IL, Obeagu GU. Relationship between Thrombopoietin and Interleukin 3: A Review. Int J Curr Res Chem Pharm. Sci. 2022;9(1):7-13.
27. Ukonu UC, Nwosu DC, Okoroiwu LI, Dike-Ndudim JN, Ukonu GO, Obeagu EI. Evaluation of Alloantibodies to human platelet antigen and Leucocyte antigen class 1 in Multitransfused patients in Owerri, Imo state. Int. J. Curr. Res. Med. Sci. 2023;9(1):38-44.
28. Obeagu EI. Gestational Thrombocytopaenia. J Gynecol Women's Health. 2023;25(3):556163.
29. Okoroiwu IL, Obeagu EI, Obeagu GU. Determination of clot retraction in preganant women attending antenatal clinic in federal medical centre Owerri, Nigeria. Madonna University Journal of Medicine and Health Sciences. 2022;2(2):91-97.
30. Ezimah AC, Obeagu EI, Asur A, Ezimah UA, Ezimah CO. Absolute platelet count in adult patients with musculoskeletal pain: Current perspectives. Int. J. Curr. Res. Med. Sci. 2016;2(2):30-7.
31. Anyiam AF, Musa Muhibi MA, Iyare G, Omosigho PO, Olaniyan MF, Arinze-Anyiam OC, Oluwafemi E, Obeagu EI. Effects of different Extracts of Phyllantus amarus on selected haematological and haemostatic parameters of Leukemic Wistar Rats. Elite Journal of Medica Science. 2024;2(1):23-43.
32. Okoroiwu IL, Obeagu EI, Anaebo QB, Walter O. Evaluation of activated partial thromboplastin time and prothrombin time in HIV and TB patients in Owerri metropolis. J Pharm Res Int. 2022;21:29-34.
33. Obeagu EI, Ikpenwa JN, Chukwueze CM, Obeagu GU. Evaluation of protein C, protein S and fibrinogen of pregnant women in Owerri Metropolis. Madonna University Journal of Medicine and Health Sciences ISSN: 2814-3035. 2022 Apr 18;2(1):292-8.
34. Oloro OH, Oke TO, Obeagu EI. Evaluation of coagulation profile patients with pulmonary tuberculosis and human immunodeficiency virus in Owo, Ondo state, Nigeria. Madonna University journal of Medicine and Health Sciences ISSN: 2814-3035. 2022 Oct 16;2(3):110-9.
35. Ohale AC, Obeagu EI, Mark HA, Okoli CC, Ezepue CB, Ohanu CE, Okongwu UC, Nlemadim CI, Ekeigwe IB, Okeke OA. The Sub–Acute Effects of Raw Honey on Prothrombin Time, Activated Partial Thromboplastin Time and Platelet Values in Albino Wistar Rats. Journal of Advances in Medicine and Medical Research. 2020 Oct 1;32(17):68-73.
36. Odo M, Ochei KC, Obeagu EI, Barinaadaa A, Eteng UE, Ikpeme M, Bassey JO, Paul AO. TB Infection Control in TB/HIV Settings in Cross River State, Nigeria: Policy Vs Practice. Journal of Pharmaceutical Research International. 2020;32(22):101-119.
37. Obeagu EI, Eze VU, Alaeboh EA, Ochei KC. Determination of haematocrit level and iron profile study among persons living with HIV in Umuahia, Abia State, Nigeria. J BioInnovation. 2016; 5:464-471. links/592bb4990f7e9b9979a975cf/DETERMINATION-OF-HAEMATOCRIT-LEVEL-AND-IRON-PROFILE-STUDY-AMONG-PERSONS-LIVING-WITH-HIV-IN-UMUAHIA-ABIA-STATE-NIGERIA.pdf.
38. Ifeanyi OE, Obeagu GU. The values of prothrombin time among HIV positive patients in FMC owerri. International Journal of Current Microbiology and Applied Sciences.

2015;4(4):911-916. https://www.academia.edu/download/38320140/Obeagu_Emmanuel_Ifeanyi_and_Obeagu__Getrude_Uzoma2.EMMA1.pdf.

39. Izuchukwu IF, Ozims SJ, Agu GC, Obeagu EI, Onu I, Amah H, Nwosu DC, Nwanjo HU, Edward A, Arunsi MO. Knowledge of preventive measures and management of HIV/AIDS victims among parents in Umuna Orlu community of Imo state Nigeria. Int. J. Adv. Res. Biol. Sci. 2016;3(10): 55-65.DOI; 10.22192/ijarbs.2016.03.10.009
40. Chinedu K, Takim AE, Obeagu EI, Chinazor UD, Eloghosa O, Ojong OE, Odunze U. HIV and TB co-infection among patients who used Directly Observed Treatment Short-course centres in Yenagoa, Nigeria. IOSR J Pharm Biol Sci. 2017;12(4):70-75. links/5988ab6d0f7e9b6c8539f73d/HIV-and-TB-co-infection-among-patients-who-used-Directly-Observed-Treatment-Short-course-centres-in-Yenagoa-Nigeria.pdf
41. Oloro OH, Oke TO, Obeagu EI. Evaluation of Coagulation Profile Patients with Pulmonary Tuberculosis and Human Immunodeficiency Virus in Owo, Ondo State, Nigeria. Madonna University journal of Medicine and Health Sciences. 2022;2(3):110-119.
42. Nwosu DC, Obeagu EI, Nkwocha BC, Nwanna CA, Nwanjo HU, Amadike JN, Elendu HN, Ofoedeme CN, Ozims SJ, Nwankpa P. Change in Lipid Peroxidation Marker (MDA) and Non enzymatic Antioxidants (VIT C & E) in HIV Seropositive Children in an Urban Community of Abia State. Nigeria. J. Bio. Innov. 2016;5(1):24-30. links/5ae735e9a6fdcc5b33eb8d6a/CHANGE-IN-LIPID-PEROXIDATION-MARKER-MDAAND-NON-ENZYMATIC-ANTIOXIDANTS-VIT-C-E-IN-HIV-SEROPOSITIVE-CHILDREN-IN-AN-URBAN-COMMUNITY-OF-ABIA-STATE-NIGERIA.pdf.
43. Igwe CM, Obeagu IE, Ogbuabor OA. Clinical characteristics of people living with HIV/AIDS on ART in 2014 at tertiary health institutions in Enugu, Nigeria. J Pub Health Nutri. 2022; 5 (6). 2022;130. links/645a166f5762c95ac3817d32/Clinical-characteristics-of-people-living-with-HIV-AIDS-on-ART-in-2014-at-tertiary-health-institutions-in-Enugu.pdf.
44. Ifeanyi OE, Obeagu GU, Ijeoma FO, Chioma UI. The values of activated partial thromboplastin time (APTT) among HIV positive patients in FMC Owerri. Int J Curr Res Aca Rev. 2015; 3:139-144. https://www.academia.edu/download/38320159/Obeagu_Emmanuel_Ifeanyi3__et_al.IJCRAR.pdf.
45. Obiomah CF, Obeagu EI, Ochei KC, Swem CA, Amachukwu BO. Hematological indices o HIV seropositive subjects in Nnamdi Azikiwe University teaching hospital (NAUTH), Nnewi. Ann Clin Lab Res. 2018;6(1):1-4. links/5aa2bb17a6fdccd544b7526e/Haematological-Indices-of-HIV-Seropositive-Subjects-at-Nnamdi-Azikiwe.pdf
46. Reno TA, Tarnus L, Tracy R, Landay AL, Sereti I, Apetrei C, Pandrea I. The youngbloods. Get together. Hypercoagulation, complement, and NET formation in HIV/SIV pathogenesis. Frontiers in Virology. 2022; 1:795373.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

47. Obeagu EI, Ogunnaya FU. Pregnancyinduced Haematological Changes: A Key to Maternal and Child Health. European Journal of Biomedical. 2023;10(8):42-43.
48. Obeagu EI, Chikelu IM, Obarezi TN, Ogbuabor BN, Anaebo QB. Haematological effects of fluted pumpkin (Telfairia occidentalis) leaves in rats. International Journal of Life Sciences Biotechnology and Pharma Research. 2014;3(1):172-182.
49. Alum EU, Ugwu OP, Aja PM, Obeagu EI, Inya JE, Onyeije AP, Agu E, Awuchi CG. Restorative effects of ethanolic leaf extract of Datura stramonium against methotrexate-induced hematological impairments. Cogent Food & Agriculture. 2023;9(1):2258774.
50. Igwe MC, Obeagu EI. Determination of the Effect of Methanol Extract of Tetrapleura Tetraptera Fruit Osmotic Fragility of Erythrocytes, Platelet Aggregation and Phospholipase A2 Activity. Ann. Clin. Lab. Res. 2018; 6:250-255.
51. Obeagu EF, Onyenweaku FC, Nwobodo HA, Ochei KC, Ochiabuto Ogochukwu MT, Onwuasoanya UF. Impact of HIV and hepatitis b virus coinfection on selected haematological markers of the patients in Umuahia, Abia State, Nigeria. Ann Clin Lab Res. 2017;5(2):175.
52. Obeagu EI, Adepoju OJ, Okafor CJ, Obeagu GU, Ibekwe AM, Okpala PU, Agu CC. Assessment of Haematological Changes in Pregnant Women of Ido, Ondo State, Nigeria. J Res Med Dent Sci. 2021;9(4):145-148.
53. Ifeanyi OE, Obeagu GU. The values of prothrombin time among HIV positive patients in FMC owerri. International Journal of Current Microbiology and Applied Sciences. 2015;4(4):911-6.
54. Okorie HM, Obeagu EI, Eze EN, Jeremiah ZA. Assessment of coagulation parameters in malaria infected pregnant women in Imo state, Nigeria. International Journal of Current Research in Medical Sciences. 2018;4(9):41-9.
55. Obeagu EI, Babar Q, Vincent CC, Okafor CJ, Eze R, Chijioke UO, Ibekwe AM, Uduchi IO. Pulmonary Embolism in Covid-19 Pandemic: A Threat to Recovery of the Infected Patients. Journal of Pharmaceutical Research International. 2021 Aug 26;33(42A):90-8.
56. Ifeanyi OE, Obeagu GU, Ijeoma FO, Chioma UI. The values of activated partial thromboplastin time (APTT) among HIV positive patients in FMC Owerri. Int J Curr Res Aca Rev. 2015;3:139-44.
57. Edward Henry SI, Obeagu EI. Assessment of the Serum Iron Status of Preeclampsia Subjects in Aba, Abia State. Elite Journal of Haematology. 2024;2(1):10-8.
58. Omo-Emmanuel UK, Ochei KC, Osuala EO, Obeagu EI, Onwuasoanya UF. Impact of prevention of mother to child transmission (PMTCT) of HIV on positivity rate in Kafanchan, Nigeria. Int. J. Curr. Res. Med. Sci. 2017;3(2): 28-34.DOI: 10.22192/ijcrms.2017.03.02.005
59. Aizaz M, Abbas FA, Abbas A, Tabassum S, Obeagu EI. Alarming rise in HIV cases in Pakistan: Challenges and future recommendations at hand. Health Science Reports. 2023;6(8):e1450.
60. Obeagu EI, Amekpor F, Scott GY. An update of human immunodeficiency virus infection: Bleeding disorders. J Pub Health Nutri. 2023; 6 (1). 2023;139.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

links/645b4a6c2edb8e5f094d9bd9/An-update-of-human-immunodeficiency-virus-infection-Bleeding.pdf.

61. Obeagu EI, Scott GY, Amekpor F, Ofodile AC, Edoho SH, Ahamefula C. Prevention of New Cases of Human Immunodeficiency Virus: Pragmatic Approaches of Saving Life in Developing Countries. Madonna University journal of Medicine and Health Sciences. 2022;2(3):128-134. https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/86.
62. Walter O, Anaebo QB, Obeagu EI, Okoroiwu IL. Evaluation of Activated Partial Thromboplastin Time and Prothrombin Time in HIV and TB Patients in Owerri Metropolis. Journal of Pharmaceutical Research International. 2022:29-34.
63. Odo M, Ochei KC, Obeagu EI, Barinaadaa A, Eteng EU, Ikpeme M, Bassey JO, Paul AO. Cascade variabilities in TB case finding among people living with HIV and the use of IPT: assessment in three levels of care in cross River State, Nigeria. Journal of Pharmaceutical Research International. 2020;32(24):9-18.
64. Jakheng SP, Obeagu EI. Seroprevalence of human immunodeficiency virus based on demographic and risk factors among pregnant women attending clinics in Zaria Metropolis, Nigeria. J Pub Health Nutri. 2022; 5 (8). 2022;137. links/6317a6b1acd814437f0ad268/Seroprevalence-of-human-immunodeficiency-virus-based-on-demographic-and-risk-factors-among-pregnant-women-attending-clinics-in-Zaria-Metropolis-Nigeria.pdf.
65. Obeagu EI, Obeagu GU. A Review of knowledge, attitudes and socio-demographic factors associated with non-adherence to antiretroviral therapy among people living with HIV/AIDS. Int. J. Adv. Res. Biol. Sci. 2023;10(9):135-142.DOI: 10.22192/ijarbs.2023.10.09.015 links/6516faa61e2386049de5e828/A-Review-of-knowledge-attitudes-and-socio-demographic-factors-associated-with-non-adherence-to-antiretroviral-therapy-among-people-living-with-HIV-AIDS.pdf
66. Obeagu EI, Onuoha EC. Tuberculosis among HIV Patients: A review of Prevalence and Associated Factors. Int. J. Adv. Res. Biol. Sci. 2023;10(9):128-134.DOI: 10.22192/ijarbs.2023.10.09.014 links/6516f938b0df2f20a2f8b0e0/Tuberculosis-among-HIV-Patients-A-review-of-Prevalence-and-Associated-Factors.pdf.
67. Obeagu EI, Ibeh NC, Nwobodo HA, Ochei KC, Iwegbulam CP. Haematological indices of malaria patients coinfected with HIV in Umuahia. Int. J. Curr. Res. Med. Sci. 2017;3(5):100-104.DOI: 10.22192/ijcrms.2017.03.05.014 https://www.academia.edu/download/54317126/Haematological_indices_of_malaria_patients_coinfected_with_HIV.pdf
68. Oke OT, Eyitayo EF, Obeagu EI. Inhalation effect of insecticides on some Haematological parameters of rabbits. Int. J. Curr. Res. Chem. Pharm. Sci. 2022;9(9):1-9.
69. Obeagu EI, Obeagu GU, Obiezu J, Ezeonwumelu C, Ogunnaya FU, Ngwoke AO, Emeka-Obi OR, Ugwu OP. Hematologic Support in HIV Patients: Blood Transfusion Strategies and Immunological Considerations. APPLIED SCIENCES (NIJBAS). 2023;3(3).

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

70. Ifeanyi OE, Obeagu GU. The values of prothrombin time among HIV positive patients in FMC owerri. International Journal of Current Microbiology and Applied Sciences. 2015;4(4):911-6.
71. Offie DC, Ibekwe AM, Agu CC, Esimai BN, Okpala PU, Obeagu EI, Ufelle SA, Ogbonna LN. Fibrinogen and C-Reactive Protein Significance in Children Infected by Plasmodium falciparum Species in Enugu, Enugu State, Nigeria. Journal of Pharmaceutical Research International. 2021;33(15):1-8.
72. Obeagu E, Nwosu D, Obeagu III G. Antithrombin III: A Review. Int. J. Curr. Res. Biol. Med. 2022;7(2):20-27.
73. Jakheng SP, Obeagu EI, Abdullahi IO, Jakheng EW, Chukwueze CM, Eze GC, Essien UC, Madekwe CC, Madekwe CC, Vidya S, Kumar S. Distribution Rate of Chlamydial Infection According to Demographic Factors among Pregnant Women Attending Clinics in Zaria Metropolis, Kaduna State, Nigeria. South Asian Journal of Research in Microbiology. 2022;13(2):26-31.
74. Viola N, Kimono E, Nuruh N, Obeagu EI. Factors Hindering Elimination of Mother to Child Transmission of HIV Service Uptake among HIV Positive Women at Comboni Hospital Kyamuhunga Bushenyi District. Asian Journal of Dental and Health Sciences. 2023;3(2):7-14. http://ajdhs.com/index.php/journal/article/view/39.
75. Okorie HM, Obeagu Emmanuel I, Okpoli Henry CH, Chukwu Stella N. Comparative study of enzyme linked immunosorbent assay (Elisa) and rapid test screening methods on HIV, Hbsag, Hcv and Syphilis among voluntary donors in. Owerri, Nigeria. J Clin Commun Med. 2020;2(3):180-183.DOI: **DOI:** 10.32474/JCCM.2020.02.000137 links/5f344530458515b7291bd95f/Comparative-Study-of-Enzyme-Linked-Immunosorbent-Assay-ElISA-and-Rapid-Test-Screening-Methods-on-HIV-HBsAg-HCV-and-Syphilis-among-Voluntary-Donors-in-Owerri-Nigeria.pdf.
76. Ezugwu UM, Onyenekwe CC, Ukibe NR, Ahaneku JE, Onah CE, Obeagu EI, Emeje PI, Awalu JC, Igbokwe GE. Use of ATP, GTP, ADP and AMP as an Index of Energy Utilization and Storage in HIV Infected Individuals at NAUTH, Nigeria: A Longitudinal, Prospective, Case-Controlled Study. Journal of Pharmaceutical Research International. 2021;33(47A):78-84.
77. Emannuel G, Martin O, Peter OS, Obeagu EI, Daniel K. Factors Influencing Early Neonatal Adverse Outcomes among Women with HIV with Post Dated Pregnancies Delivering at Kampala International University Teaching Hospital, Uganda. Asian Journal of Pregnancy and Childbirth. 2023 Jul 29;6(1):203-211. http://research.sdpublishers.net/id/eprint/2819/.
78. Igwe MC, Obeagu EI, Ogbuabor AO, Eze GC, Ikpenwa JN, Eze-Steven PE. Socio-Demographic Variables of People Living with HIV/AIDS Initiated on ART in 2014 at Tertiary Health Institution in Enugu State. Asian Journal of Research in Infectious Diseases. 2022;10(4):1-7.
79. Vincent CC, Obeagu EI, Agu IS, Ukeagu NC, Onyekachi-Chigbu AC. Adherence to Antiretroviral Therapy among HIV/AIDS in Federal Medical Centre, Owerri. Journal of Pharmaceutical Research International. 2021;33(57A):360-368.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

80. Igwe MC, Obeagu EI, Ogbuabor AO. ANALYSIS OF THE FACTORS AND PREDICTORS OF ADHERENCE TO HEALTHCARE OF PEOPLE LIVING WITH HIV/AIDS IN TERTIARY HEALTH INSTITUTIONS IN ENUGU STATE. Madonna University journal of Medicine and Health Sciences. 2022;2(3):42-57. https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/75.
81. Madekwe CC, Madekwe CC, Obeagu EI. Inequality of monitoring in Human Immunodeficiency Virus, Tuberculosis and Malaria: A Review. Madonna University journal of Medicine and Health Sciences. 2022;2(3):6-15. https://madonnauniversity.edu.ng/journals/index.php/medicine/article/view/69
82. Echendu GE, Vincent CC, Ibebuike J, Asodike M, Naze N, Chinedu EP, Ohale B, Obeagu EI. WEIGHTS OF INFANTS BORN TO HIV INFECTED MOTHERS: A PROSPECTIVE COHORT STUDY IN FEDERAL MEDICAL CENTRE, OWERRI, IMO STATE. European Journal of Pharmaceutical and Medical Research, 2023; 10(8): 564-568
83. Nwosu DC, Nwanjo HU, Okolie NJ, Ikeh K, Ajero CM, Dike J, Ojiegbe GC, Oze GO, Obeagu EI, Nnatunanya I, Azuonwu O. BIOCHEMICAL ALTERATIONS IN ADULT HIV PATIENTS ON ANTIRETRQVIRAL THERAPY. World Journal of Pharmacy and Pharmaceutical Sciences, 2015; 4(3): 153-160**.** links/5a4fd0500f7e9bbc10526b38/BIOCHEMICAL-ALTERATIONS-IN-ADULT-HIV-PATIENTS-ON-ANTIRETRQVIRAL-THERAPY.pdf.
84. Obeagu EI, Obeagu GU. Effect of CD4 Counts on Coagulation Parameters among HIV Positive Patients in Federal Medical Centre, Owerri, Nigeria. Int. J. Curr. Res. Biosci. Plant Biol. 2015;2(4):45-49.
85. Obeagu EI, Nwosu DC. Adverse drug reactions in HIV/AIDS patients on highly active antiretro viral therapy: a review of prevalence. Int. J. Curr. Res. Chem. Pharm. Sci. 2019;6(12):45-8.DOI: 10.22192/ijcrcps.2019.06.12.004 links/650aba1582f01628f0335795/Adverse-drug-reactions-in-HIV-AIDS-patients-on-highly-active-antiretro-viral-therapy-a-review-of-prevalence.pdf.
86. Obeagu EI, Scott GY, Amekpor F, Obeagu GU. Implications of CD4/CD8 ratios in Human Immunodeficiency Virus infections. Int. J. Curr. Res. Med. Sci. 2023;9(2):6-13.DOI: 10.22192/ijcrms.2023.09.02.002 links/645a4a462edb8e5f094ad37c/Implications-of-CD4-CD8-ratios-in-Human-Immunodeficiency-Virus-infections.pdf.
87. Obeagu EI, Ochei KC, Okeke EI, Anode AC. Assessment of the level of haemoglobin and erythropoietin in persons living with HIV in Umuahia. Int. J. Curr. Res. Med. Sci. 2016;2(4):29-33. links/5711c47508aeebe07c02496b/Assessment-of-the-level-of-haemoglobin-and-erythropoietin-in-persons-living-with-HIV-in-Umuahia.pdf.
88. Gavins FN, Stokes KY, editors. Vascular responses to pathogens. Academic Press; 2015.
89. Ifeanyi OE, Obeagu GU. The Values of CD4 Count, among HIV Positive Patients in FMC Owerri. Int. J. Curr. Microbiol. App. Sci. 2015;4(4):906-910. https://www.academia.edu/download/38320134/Obeagu_Emmanuel_Ifeanyi_and_Obeagu__Getrude_Uzoma.EMMA2.pdf.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

90. Obeagu EI, Okeke EI, Anonde Andrew C. Evaluation of haemoglobin and iron profile study among persons living with HIV in Umuahia, Abia state, Nigeria. Int. J. Curr. Res. Biol. Med. 2016;1(2):1-5.
91. Alum EU, Ugwu OP, Obeagu EI, Okon MB. Curtailing HIV/AIDS Spread: Impact of Religious Leaders. Newport International Journal of Research in Medical Sciences (NIJRMS). 2023;3(2):28-31.
92. Obeagu EI, Obeagu GU, Paul-Chima UO. Stigma Associated With HIV. AIDS: A Review. Newport International Journal of Public Health and Pharmacy (NIJPP). 2023;3(2):64-67.
93. Alum EU, Obeagu EI, Ugwu OP, Aja PM, Okon MB. HIV Infection and Cardiovascular diseases: The obnoxious Duos. Newport International Journal of Research in Medical Sciences (NIJRMS). 2023;3(2):95-99.
94. Ibebuike JE, Nwokike GI, Nwosu DC, Obeagu EI. A Retrospective Study on Human Immune Deficiency Virus among Pregnant Women Attending Antenatal Clinic in Imo State University Teaching Hospital. *International Journal of Medical Science and Dental Research,* 2018; 1 (2):08-14. https://www.ijmsdr.org/published%20paper/li1i2/A%20Retrospective%20Study%20on%20Human%20Immune%20Deficiency%20Virus%20among%20Pregnant%20Women%20Attending%20Antenatal%20Clinic%20in%20Imo%20State%20University%20Teaching%20Hospital.pdf.
95. Obeagu EI, Obarezi TN, Omeh YN, Okoro NK, Eze OB. Assessment of some haematological and biochemical parametrs in HIV patients before receiving treatment in Aba, Abia State, Nigeria. Res J Pharma Biol Chem Sci. 2014; 5:825-830.
96. Obeagu EI, Obarezi TN, Ogbuabor BN, Anaebo QB, Eze GC. Pattern of total white blood cell and differential count values in HIV positive patients receiving treatment in Federal Teaching Hospital Abakaliki, Ebonyi State, Nigeria. International Journal of Life Science, Biotechnology and Pharama Research. 2014; 391:186-189.
97. Obeagu EI. A Review of Challenges and Coping Strategies Faced by HIV/AIDS Discordant Couples. Madonna University journal of Medicine and Health Sciences. 2023; 3 (1): 7-12.
98. Oloro OH, Obeagu EI. A Systematic Review on Some Coagulation Profile in HIV Infection. International Journal of Innovative and Applied Research. 2022;10(5):1-11.
99. Nwosu DC, Obeagu EI, Nkwuocha BC, Nwanna CA, Nwanjo HU, Amadike JN, Ezemma MC, Okpomeshine EA, Ozims SJ, Agu GC. Alterations in superoxide dismutiase, vitamins C and E in HIV infected children in Umuahia, Abia state. International Journal of Advanced Research in Biological Sciences. 2015;2(11):268-271.
100. Obeagu EI, Malot S, Obeagu GU, Ugwu OP. HIV resistance in patients with Sickle Cell Anaemia. Newport International Journal of Scientific and Experimental Sciences (NIJSES). 2023;3(2):56-59.
101. Ifeanyi OE, Uzoma OG, Stella EI, Chinedum OK, Abum SC. Vitamin D and insulin resistance in HIV sero positive individuals in Umudike. Int. J. Curr. Res. Med. Sci. 2018;4(2):104-108.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

102. Ifeanyi OE, Leticia OI, Nwosu D, Chinedum OK. A Review on blood borne viral infections: universal precautions. Int. J. Adv. Res. Biol. Sci. 2018;5(6):60-66.
103. Nwovu AI, Ifeanyi OE, Uzoma OG, Nwebonyi NS. Occurrence of Some Blood Borne Viral Infection and Adherence to Universal Precautions among Laboratory Staff in Federal Teaching Hospital Abakaliki Ebonyi State. Arch Blood Transfus Disord. 2018;1(2).
104. Chinedu K, Takim AE, Obeagu EI, Chinazor UD, Eloghosa O, Ojong OE, Odunze U. HIV and TB co-infection among patients who used Directly Observed Treatment Short-course centres in Yenagoa, Nigeria. IOSR J Pharm Biol Sci. 2017;12(4):70-75.
105. Offie DC, Obeagu EI, Akueshi C, Njab JE, Ekanem EE, Dike PN, Oguh DN. Facilitators and barriers to retention in HIV care among HIV infected MSM attending Community Health Center Yaba, Lagos Nigeria. Journal of Pharmaceutical Research International. 2021;33(52B):10-19.
106. Obeagu EI, Obeagu GU, Ede MO, Odo EO, Buhari HA. Translation of HIV/AIDS knowledge into behavior change among secondary school adolescents in Uganda: A review. Medicine (Baltimore). 2023;102(49): e36599. doi: 10.1097/MD.0000000000036599. PMID: 38065920; PMCID: PMC10713174.
107. Anyiam AF, Arinze-Anyiam OC, Irondi EA, Obeagu EI. Distribution of ABO and rhesus blood grouping with HIV infection among blood donors in Ekiti State Nigeria. Medicine (Baltimore). 2023;102(47): e36342. doi: 10.1097/MD.0000000000036342. PMID: 38013335; PMCID: PMC10681551.
108. Echefu SN, Udosen JE, Akwiwu EC, Akpotuzor JO, Obeagu EI. Effect of Dolutegravir regimen against other regimens on some hematological parameters, CD4 count and viral load of people living with HIV infection in South Eastern Nigeria. Medicine (Baltimore). 2023;102(47): e35910. doi: 10.1097/MD.0000000000035910. PMID: 38013350; PMCID: PMC10681510.
109. Opeyemi AA, Obeagu EI. Regulations of malaria in children with human immunodeficiency virus infection: A review. Medicine (Baltimore). 2023;102(46): e36166. doi: 10.1097/MD.0000000000036166. PMID: 37986340; PMCID: PMC10659731.
110. Alum EU, Obeagu EI, Ugwu OPC, Samson AO, Adepoju AO, Amusa MO. Inclusion of nutritional counseling and mental health services in HIV/AIDS management: A paradigm shift. Medicine (Baltimore). 2023;102(41): e35673. doi: 10.1097/MD.0000000000035673. PMID: 37832059; PMCID: PMC10578718.
111. Aizaz M, Abbas FA, Abbas A, Tabassum S, Obeagu EI. Alarming rise in HIV cases in Pakistan: Challenges and future recommendations at hand. Health Sci Rep. 2023;6(8): e1450. doi: 10.1002/hsr2.1450. PMID: 37520460; PMCID: PMC10375546.
112. Obeagu EI, Obeagu GU, Obiezu J, Ezeonwumelu C, Ogunnaya FU, Ngwoke AO, Emeka-Obi OR, Ugwu OP. Hematologic Support in HIV Patients: Blood Transfusion Strategies and Immunological Considerations. APPLIED SCIENCES (NIJBAS). 2023;3(3).

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

113. Obeagu EI, Ubosi NI, Uzoma G. Storms and Struggles: Managing HIV Amid Natural Disasters. Int. J. Curr. Res. Chem. Pharm. Sci. 2023;10(11):14-25.
114. Obeagu EI, Obeagu GU. Human Immunodeficiency Virus and tuberculosis infection: A review of prevalence of associated factors. Int. J. Adv. Multidiscip. Res. 2023;10(10):56-62.
115. Obeagu EI, Malot S, Obeagu GU, Ugwu OP. HIV resistance in patients with Sickle Cell Anaemia. Newport International Journal of Scientific and Experimental Sciences (NIJSES). 2023;3(2):56-9.
116. Alum EU, Ugwu OP, Obeagu EI, Aja PM, Okon MB, Uti DE. Reducing HIV Infection Rate in Women: A Catalyst to reducing HIV Infection pervasiveness in Africa. International Journal of Innovative and Applied Research. 2023;11(10):01-6.
117. Obeagu EI, Obeagu GU. Unmasking the Truth: Addressing Stigma in the Fight Against HIV. Elite Journal of Public Health. 2024;2(1):8-22.
118. Obeagu EI, Obeagu GU, Okwuanaso CB. Optimizing Immune Health in HIV Patients through Nutrition: A Review. Elite Journal of Immunology. 2024;2(1):14-33.
119. Obeagu EI, Obeagu GU. Utilization of immunological ratios in HIV: Implications for monitoring and therapeutic strategies. Medicine. 2024;103(9):e37354.
120. Obeagu EI, Obeagu GU. CD8 Dynamics in HIV Infection: A Synoptic Review. Elite Journal of Immunology. 2024;2(1):1-3.
121. Obeagu EI, Obeagu GU. Implications of B Lymphocyte Dysfunction in HIV/AIDS. Elite Journal of Immunology. 2024;2(1):34-46.
122. Obeagu EI, Obeagu GU. Maternal Influence on Infant Immunological Responses to HIV: A Review. Elite Journal of Laboratory Medicine. 2024;2(1):46-58.
123. Obeagu EI, Obeagu GU. Understanding B Lymphocyte Functions in HIV Infection: Implications for Immune Dysfunction and Therapeutic Strategies. Elite Journal of Medicine. 2024;2(1):35-46.
124. Obeagu EI, Obeagu GU. Platelet-Driven Modulation of HIV: Unraveling Interactions and Implications. Journal home page: http://www. journalijiar. com.;12(01).
125. Obeagu EI, Anyiam AF, Obeagu GU. Managing Hematological Complications in HIV: Erythropoietin Considerations. Elite Journal of HIV. 2024;2(1):65-78.
126. Obeagu EI, Obeagu GU, Hauwa BA, Umar AI. Hematocrit Variations in HIV Patients Co-infected with Malaria: A Comprehensive Review. Journal home page: http://www. journalijiar. com.;12(01).
127. ObeaguEI AA, Obeagu GU. Synergistic Effects of Blood Transfusion and HIV in Children Under 5 Years with Severe Malaria: A Review. Elite Journal of HIV. 2024;2(1):31-50.
128. Obeagu EI, Anyiam AF, Obeagu GU. Unveiling B Cell Mediated Immunity in HIV Infection: Insights, Challenges, and Potential Therapeutic Avenues. Elite Journal of HIV. 2024;2(1):1-5.
129. Obeagu EI, Obeagu GU. Hematocrit Fluctuations in HIV Patients Co-infected with Malaria Parasites: A Comprehensive Review. Int. J. Curr. Res. Med. Sci. 2024;10(1):25-36.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

130. Obeagu EI, Obeagu GU. Transfusion Therapy in HIV: Risk Mitigation and Benefits for Improved Patient Outcomes. Sciences. 2024;4(1):32-7.
131. Obeagu EI, Obeagu GU. Mental Health and Psychosocial Effects of natural disaster on HIV Patients. Sciences. 2024;4(1):38-44.
132. Obeagu EI, Obeagu GU. Eosinophil-Associated Changes in Neonatal Thymic T Regulatory Cell Populations in HIV-Infected Pregnancies. Elite Journal of Health Science. 2024;2(1):33-42.
133. Obeagu EI, Obeagu GU. Advances in Understanding the Impact of Blood Transfusion on Anemia Resolution in HIV-Positive Children with Severe Malaria: A Comprehensive Review. Elite Journal of Haematology. 2024;2(1):26-41.
134. Obeagu EI, Ayogu EE, Obeagu GU. Interactions between Blood Transfusion and Antiretroviral Medications: Implications for Patient Care. Elite Journal of Medicine. 2024;2(2):104-15.
135. Obeagu EI, Obeagu GU. Maternal Eosinophilic Responses in HIV-Positive Pregnant Women: Unraveling Immunological Dynamics for Improved Maternal-Fetal Health. Elite Journal of Immunology. 2024;2(1):47-64.
136. Obeagu EI, Anyanwu CN, Obeagu GU. Challenges and Considerations in Managing Blood Transfusion for Individuals with HIV. Elite Journal of HIV. 2024;2(2):1-7.
137. Obeagu EI, Ubosi NI, Obeagu GU, Akram M. Early Infant Diagnosis: Key to Breaking the Chain of HIV Transmission. Elite Journal of Public Health. 2024;2(1):52-61.
138. Obeagu EI, Obeagu GU. Understanding Hematocrit Fluctuations in HIV-Malaria Coinfection for Improved Management. Elite Journal of Public Health. 2024;2(1):22-34.
139. Obeagu EI, Obeagu GU. The Impact of Erythropoietin on Preeclampsia in HIV-Positive Women: A Review. Elite Journal of Nursing and Health Science. 2024;2(1):21-31.
140. Obeagu EI, Obeagu GU. Platelet Distribution Width (PDW) as a Prognostic Marker for Anemia Severity in HIV Patients: A Comprehensive Review. Journal home page: http://www. journalijiar. com.;12(01).
141. Madzime M, Rossouw TM, Theron AJ, Anderson R, Steel HC. Interactions of HIV and antiretroviral therapy with neutrophils and platelets. Frontiers in immunology. 2021; 12:634386.
142. Khawaja AA, Taylor KA, Lovell AO, Nelson M, Gazzard B, Boffito M, Emerson M. HIV antivirals affect endothelial activation and endothelial-platelet crosstalk. Circulation Research. 2020;127(11):1365-1380.
143. Laurence J, Elhadad S, Ahamed J. HIV-associated cardiovascular disease: importance of platelet activation and cardiac fibrosis in the setting of specific antiretroviral therapies. Open Heart. 2018;5(2):e000823.
144. Akinosoglou K, Kolosaka M, Schinas G, Delastic AL, Antonopoulou S, Perperis A, Marangos M, Mouzaki A, Gogos C. Association of Antiretroviral Therapy with Platelet Function and Systemic Inflammatory Response in People Living with HIV: A Cross-Sectional Study. Microorganisms. 2023;11(4):958.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51

145. Reno TA, Tarnus L, Tracy R, Landay AL, Sereti I, Apetrei C, Pandrea I. The youngbloods. Get together. Hypercoagulation, complement, and NET formation in HIV/SIV pathogenesis. Frontiers in Virology. 2022; 1:795373.

Citation: Obeagu EI, Obeagu GU. The Role of L-selectin in Tuberculosis and HIV Coinfection: Implications for Disease Diagnosis and Management. Elite Journal of Public Health, 2024; 2 (1): 35-51