

†

2021 Vol.15(6)



TB ALERT

(a fortnightly publication from NIRT Library)

ICMR-National Institute for Research in Tuberculosis



1. Abdu M, Ali Y, Anteneh S, Yesuf M, Birhanu A, Mohamed S, et al. Determinant factors for the occurrence of tuberculosis after initiation of antiretroviral treatment among adult patients living with HIV at Dessie Referral Hospital, South Wollo, Northeast Ethiopia, 2020. A case-control study. *PLoS One.* 2021;16(3):e0248490. <https://www.ncbi.nlm.nih.gov/pubmed/33724992>.
2. Adu-Gyamfi C, Savulescu D, Mikhathani L, Otwombe K, Salazar-Austin N, Chaisson R, et al. Plasma kynurenine-to-tryptophan ratio, a highly sensitive blood-based diagnostic tool for Tuberculosis in HIV-infected pregnant women. *Clin Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33718949>.
3. Aladesanmi AO, Ojuawo OB, Aladesanmi OO, Fawibe AE, Desalu OO, Ojuawo AB, et al. Diagnosis of latent tuberculosis among HIV infected patients in Ilorin, Nigeria using tuberculin skin test and interferon gamma release assay. *Pan Afr Med J.* 2021;38:24. <https://www.ncbi.nlm.nih.gov/pubmed/33777292>.
4. Alemu A, Wubie Aycheh M, Dilnessa T. Tuberculosis and Human Immunodeficiency Virus Co-Infection and Associated Factors at Debre Markos Comprehensive Specialized Hospital, Northwest Ethiopia: A Four-Year Retrospective Study. *HIV AIDS (Auckl).* 2021;13:293-9. <https://www.ncbi.nlm.nih.gov/pubmed/33758551>.
5. Alffenaar JW, Martson AG, Heysell SK, Cho JG, Patanwala A, Burch G, et al. Therapeutic Drug Monitoring in Non-Tuberculosis Mycobacteria Infections. *Clin Pharmacokinet.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33751415>.
6. Ali S, Ehtram A, Arora N, Manjunath P, Roy D, Ehtesham NZ, et al. The M. tuberculosis Rv1523 Methyltransferase Promotes Drug Resistance Through Methylation-Mediated Cell Wall Remodeling and Modulates Macrophages Immune Responses. *Front Cell Infect Microbiol.* 2021;11:622487. <https://www.ncbi.nlm.nih.gov/pubmed/33777836>.
7. Ali ZA, Mankhi AA, Ad'hiah AH. Significance of the chemokine CXCL10 and human beta-defensin-3 as biomarkers of pulmonary tuberculosis. *Tuberculosis (Edinb).* 2021;128:102078. <https://www.ncbi.nlm.nih.gov/pubmed/33773403>.
8. Alsberge JB, Safi M, Peng MY, Jumper JM. Presumed intraretinal tuberculosis: case report with multimodal imaging including optical coherence tomography angiography. *Retin Cases Brief Rep.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33731603>.
9. Ameke S, Asare P, Aboagye SY, Otchere ID, Osei-Wusu S, Yeboah-Manu D, et al. Molecular epidemiology of Mycobacterium tuberculosis complex in the Volta Region of Ghana. *PLoS One.* 2021;16(3):e0238898. <https://www.ncbi.nlm.nih.gov/pubmed/33730036>.
10. Andargie A, Molla A, Tadese F, Zewdie S. Lost to follow-up and associated factors among patients with drug resistant tuberculosis in Ethiopia: A systematic review and meta-analysis. *PLoS One.* 2021;16(3):e0248687. <https://www.ncbi.nlm.nih.gov/pubmed/33735231>.
11. Aninagyei E, Ayivor-Djanie R, Attoh J, Dakorah MP, Ginko MN, Acheampong DO. Molecular detection of Mycobacterium tuberculosis in blood stained sputum samples using GeneXpert PCR assay. *Diagn Microbiol Infect Dis.* 2021;100(3):115363. <https://www.ncbi.nlm.nih.gov/pubmed/33743471>.

12. Apriani I, McAllister S, Sharples K, Aini IN, Nurhasanah H, Ratnaningsih DF, et al. High risk of Mycobacterium tuberculosis infection among medical and nursing students in Indonesia: a 1-year prospective study. *Trans R Soc Trop Med Hyg.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33721022>.
13. Ardizzone E, Ariza E, Mulengwa D, Mpala Q, de La Tour R, Maphalala G, et al. Thin layer agar-based direct phenotypic drug-susceptibility testing on sputum in Eswatini rapidly detects Mycobacterium tuberculosis growth and rifampicin resistance, otherwise missed by WHO endorsed diagnostic tests. *Antimicrob Agents Chemother.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33722892>.
14. Badawi A, Liu CJ. Obesity and Prevalence of Latent Tuberculosis: A Population-Based Survey. *Infect Dis (Auckl).* 2021;14:1178633721994607. <https://www.ncbi.nlm.nih.gov/pubmed/33716508>.
15. Baguma R, Mbandi SK, Rodo MJ, Erasmus M, Day J, Makhetha L, et al. Inflammatory Determinants of Differential Tuberculosis Risk in Pre-Adolescent Children and Young Adults. *Front Immunol.* 2021;12:639965. <https://www.ncbi.nlm.nih.gov/pubmed/33717192>.
16. Balashvili D, Gandhi NR, Kim S, Hughes M, Mave V, Mendoza-Ticona A, et al. Resistance to Mycobacterium tuberculosis infection among household contacts: a multinational study. *Clin Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33772550>.
17. Basham CA, Karim ME, Cook VJ, Patrick DM, Johnston JC. Post-tuberculosis airway disease: A population-based cohort study of people immigrating to British Columbia, Canada, 1985-2015. *EClinicalMedicine.* 2021;33:100752. <https://www.ncbi.nlm.nih.gov/pubmed/33718847>.
18. Behr MA, Kaufmann E, Duffin J, Edelstein PH, Ramakrishnan L. Latent Tuberculosis: Two Centuries of Confusion. *Am J Respir Crit Care Med.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33761302>.
19. Bie S, Hu X, Zhang H, Wang K, Dou Z. Influential factors and spatial-temporal distribution of tuberculosis in mainland China. *Sci Rep.* 2021;11(1):6274. <https://www.ncbi.nlm.nih.gov/pubmed/33737676>.
20. Bihon A, Zinabu S, Muktar Y, Assefa A. Human and bovine tuberculosis knowledge, attitude and practice (KAP) among cattle owners in Ethiopia. *Heliyon.* 2021;7(3):e06325. <https://www.ncbi.nlm.nih.gov/pubmed/33748453>.
21. Bohlbro AS, Hvingelby VS, Rudolf F, Wejse C, Patsche CB. Active case-finding of tuberculosis in general populations and at-risk groups: a systematic review and meta-analysis. *Eur Respir J.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33766950>.
22. Bouchentouf R. [Chest wall tuberculosis]. *Rev Prat.* 2020;70(10):1104. <https://www.ncbi.nlm.nih.gov/pubmed/33739653>.

23. Bouzouita I, Draoui H, Cabibbe AM, Essalah L, Bejaoui S, Trovato A, et al. Performance of the GenoType MTBDRsl V 2.0 for detecting second-line drugs resistance of *Mycobacterium tuberculosis* isolates in Tunisia. *Res Microbiol.* 2021;103816. <https://www.ncbi.nlm.nih.gov/pubmed/33737037>.
24. Boyd AT, Lodiongo DK, Benson JM, Aragaw S, Pasquale MS, Ayalneh H, et al. Implementation of tuberculosis preventive treatment among people living with HIV, South Sudan. *Bull World Health Organ.* 2021;99(1):34-40. <https://www.ncbi.nlm.nih.gov/pubmed/33716332>.
25. Bui DP, Chandran SS, Oren E, Brown HE, Harris RB, Knight GM, et al. Community transmission of multidrug-resistant tuberculosis is associated with activity space overlap in Lima, Peru. *BMC Infect Dis.* 2021;21(1):275. <https://www.ncbi.nlm.nih.gov/pubmed/33736597>.
26. Burke RM, Nliwasa M, Feasey HRA, Chaisson LH, Golub JE, Naufal F, et al. Community-based active case-finding interventions for tuberculosis: a systematic review. *Lancet Public Health.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765456>.
27. Caminero JA, Garcia-Garcia JM, Cayla JA, Garcia-Perez FJ, Palacios JJ, Ruiz-Manzano J. Drug Resistant Tuberculosis: New WHO Definitions and Their Implication in the SEPAR Guideline. *Arch Bronconeumol.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33775450>.
28. Chablon M, Jabi R, Id Mbarek A, Seghrouchni N, Bouziane M. Isolated Splenic Tuberculosis in an Immunocompetent Patient: A Rare Case. *Cureus.* 2021;13(2):e13463. <https://www.ncbi.nlm.nih.gov/pubmed/33777552>.
29. Chakaya J, Khan M, Ntoumi F, Aklillu E, Fatima R, Mwaba P, et al. Global Tuberculosis Report 2020 - Reflections on the Global TB burden, treatment and prevention efforts. *Int J Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716195>.
30. Chapman NG, Dalton SC, Hore TA. Hepatobiliary tuberculosis: a notorious mimic to be considered within the differential diagnosis of cholangiocarcinoma. *ANZ J Surg.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33764616>.
31. Charles M, Richard M, Reichler MR, Koama JB, Morose W, Fitter DL. Treatment success for patients with tuberculosis receiving care in areas severely affected by Hurricane Matthew - Haiti, 2016. *PLoS One.* 2021;16(3):e0247750. <https://www.ncbi.nlm.nih.gov/pubmed/33730043>.
32. Charoensakulchai S, Lertpheantum C, Aksornpusitpong C, Trakulsuk P, Sakboonyarat B, Rangsin R, et al. Six-year trend and risk factors of unsuccessful pulmonary tuberculosis treatment outcomes in Thai Community Hospital. *BMC Res Notes.* 2021;14(1):89. <https://www.ncbi.nlm.nih.gov/pubmed/33750450>.
33. Chen C, Yin Y, Xu H, Chen G. Early clinical outcomes of one-stage total hip arthroplasty for the treatment of advanced hip tuberculosis. *J Orthop Surg (Hong Kong).* 2021;29(1):23094990211000143. <https://www.ncbi.nlm.nih.gov/pubmed/33745383>.
34. Chendi BH, Snyders CI, Tonby K, Jenum S, Kidd M, Walzl G, et al. A Plasma 5-Marker Host Biosignature Identifies Tuberculosis in High and Low Endemic Countries. *Front Immunol.* 2021;12:608846. <https://www.ncbi.nlm.nih.gov/pubmed/33732236>.

35. Cheng N, Wu S, Luo X, Xu C, Lou Q, Zhu J, et al. A Comparative Study of Chest Computed Tomography Findings: 1030 Cases of Drug-Sensitive Tuberculosis versus 516 Cases of Drug-Resistant Tuberculosis. *Infect Drug Resist.* 2021;14:1115-28.
<https://www.ncbi.nlm.nih.gov/pubmed/33776457>.
36. Chipeio ML, Sayah A, Hunter CJ. Spinal Tuberculosis. *Am J Trop Med Hyg.* 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33720843>.
37. Cho T, Khatchadourian C, Nguyen H, Dara Y, Jung S, Venketaraman V. A review of the BCG vaccine and other approaches toward tuberculosis eradication. *Hum Vaccin Immunother.* 2021;1-17.
<https://www.ncbi.nlm.nih.gov/pubmed/33769193>.
38. Choudhary N, Abera H, Naik RB. Tuberculosis Presenting With Acute Myocarditis and Systolic Heart Failure. *Cureus.* 2021;13(2):e13229. <https://www.ncbi.nlm.nih.gov/pubmed/33728179>.
39. Chun ZM, Jun JQ. Drug-Resistant *Mycobacterium tuberculosis* Isolates from New and Previously Treated TB Patients in China, 2017-2019. *Rev Soc Bras Med Trop.* 2021;54:e0728.
<https://www.ncbi.nlm.nih.gov/pubmed/33759925>.
40. Conceicao EC, Salvato RS, Gomes KM, Guimaraes A, da Conceicao ML, Souza EGRJP, et al. Molecular epidemiology of *Mycobacterium tuberculosis* in Brazil before the whole genome sequencing era: a literature review. *Mem Inst Oswaldo Cruz.* 2021;116:e200517.
<https://www.ncbi.nlm.nih.gov/pubmed/33729319>.
41. Cords O, Martinez L, Warren JL, O'Marr JM, Walter KS, Cohen T, et al. Incidence and prevalence of tuberculosis in incarcerated populations: a systematic review and meta-analysis. *Lancet Public Health.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765455>.
42. Coronel Teixeira R, D IJ, Gomez C, Arce D, Roman M, Quintana Y, et al. The electronic nose as a rule-out test for tuberculosis in an indigenous population. *J Intern Med.* 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33720468>.
43. Cox H, Loveday M. Building resilience needs to be central to treating drug-resistant tuberculosis. *Lancet Glob Health.* 2021;9(4):e381-e2. <https://www.ncbi.nlm.nih.gov/pubmed/33740401>.
44. Czeczot AM, Roth CD, Ducati RG, Pissinate K, Rambo RS, Timmers L, et al. 8-Mercaptoguanine-based inhibitors of *Mycobacterium tuberculosis* dihydroneopterin aldolase: synthesis, in vitro inhibition and docking studies. *J Enzyme Inhib Med Chem* [Internet]. 2021 Dec; 36(1):[847-55 pp.]. Available <https://www.ncbi.nlm.nih.gov/pubmed/33752554>.
45. Daftary A, Mondal S, Zelnick J, Friedland G, Seepamore B, Boodhram R, et al. Dynamic needs and challenges of people with drug-resistant tuberculosis and HIV in South Africa: a qualitative study. *Lancet Glob Health.* 2021;9(4):e479-e88.
<https://www.ncbi.nlm.nih.gov/pubmed/33740409>.
46. De Maio F, Salustri A, Battah B, Palucci I, Marchionni F, Bellesi S, et al. PE_PGRS3 ensures provision of the vital phospholipids cardiolipin and phosphatidylinositols by promoting the interaction between *M. tuberculosis* and host cells. *Virulence.* 2021;12(1):868-84.
<https://www.ncbi.nlm.nih.gov/pubmed/33757409>.

47. de Mendonca EB, Schmaltz CA, Sant'Anna FM, Vizzoni AG, Mendes-de-Almeida DP, de Oliveira RVC, et al. Correction: Anemia in tuberculosis cases: A biomarker of severity? *PLoS One*. 2021;16(3):e0249545. <https://www.ncbi.nlm.nih.gov/pubmed/33780517>.
48. de Vasconcellos K, Ramjathan P, Singh D. The utility of point-of-care urinary lipoarabinomannan testing for the diagnosis of tuberculosis in critically ill patients: a prospective observational study. *BMC Infect Dis*. 2021;21(1):281. <https://www.ncbi.nlm.nih.gov/pubmed/33740905>.
49. DeAtley T, Workman L, Theron G, Belard S, Prins M, Bateman L, et al. The child ecosystem and childhood pulmonary tuberculosis: A South African perspective. *Pediatr Pulmonol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765350>.
50. Deutsch-Feldman M, Pratt RH, Price SF, Tsang CA, Self JL. Tuberculosis - United States, 2020. *MMWR Morb Mortal Wkly Rep*. 2021;70(12):409-14. <https://www.ncbi.nlm.nih.gov/pubmed/33764959>.
51. Ding WM, Tang SJ, Fu Y. [Attention should be paid to the early and correct classification and staging of diagnosis of tracheobronchial tuberculosis]. *Zhonghua Jie He He Hu Xi Za Zhi*. 2021;44(3):167-9. <https://www.ncbi.nlm.nih.gov/pubmed/33721931>.
52. Dos Santos MC, Scaini JLR, Lopes MVC, Rodrigues BG, Silva NO, Borges CRL, et al. Mefloquine synergism with anti-tuberculosis drugs and correlation to membrane effects: Biologic, spectroscopic and molecular dynamics simulations studies. *Bioorg Chem*. 2021;110:104786. <https://www.ncbi.nlm.nih.gov/pubmed/33740676>.
53. Du L, Zhang Y, Lv X, Duan Y, Shi X, Ji H, et al. Prevalence of Multidrug-Resistant Tuberculosis in Dalian, China: A Retrospective Study. *Infect Drug Resist*. 2021;14:1037-47. <https://www.ncbi.nlm.nih.gov/pubmed/33758518>.
54. Dwivedy A, Ashraf A, Jha B, Kumar D, Agarwal N, Biswal BK. De novo histidine biosynthesis protects *Mycobacterium tuberculosis* from host IFN-gamma mediated histidine starvation. *Commun Biol*. 2021;4(1):410. <https://www.ncbi.nlm.nih.gov/pubmed/33767335>.
55. Ehtram A, Shariq M, Ali S, Quadir N, Sheikh JA, Ahmad F, et al. Teleological cooption of *Mycobacterium tuberculosis* PE/PPE proteins as porins: Role in molecular immigration and emigration. *Int J Med Microbiol*. 2021;311(3):151495. <https://www.ncbi.nlm.nih.gov/pubmed/33730677>.
56. El Halabi J, Palmer N, McDuffie M, Golub JJ, Fox K, Kohane I, et al. Measuring health-care delays among privately insured patients with tuberculosis in the USA: an observational cohort study. *Lancet Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33770534>.
57. Elziny MM, Ghazy A, Elfert KA, Aboukamar M. Case Report: Development of Miliary Pulmonary Tuberculosis in a Patient with Peritoneal Tuberculosis after COVID-19 Upper Respiratory Tract Infection. *Am J Trop Med Hyg*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33784243>.

58. Eurosurveillance editorial t. World Tuberculosis Day 2021: keeping an eye on the 2030 target. *Euro Surveill.* 2021;26(11). <https://www.ncbi.nlm.nih.gov/pubmed/33739253>.
59. Fatima R, Akhtar N, Yaqoob A, A DH, M SK. Building better tuberculosis control systems in a post-COVID world: learning from Pakistan during the COVID-19 pandemic. *Int J Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33744479>.
60. Fox GJ, Anh NT, Coleman M, Trajman A, Velen K, Marais BJ. Implementing tuberculosis preventive treatment in high-prevalence settings. *Int J Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716196>.
61. Frigati LJ, Wilkinson KA, le Roux S, Brown K, Ruzive S, Githinji L, et al. Tuberculosis infection and disease in South African adolescents with perinatally acquired HIV on antiretroviral therapy: a cohort study. *J Int AIDS Soc.* 2021;24(3):e25671. <https://www.ncbi.nlm.nih.gov/pubmed/33719199>.
62. Fruh J, Stich A, Muller A. [Unusual presentation of late reactivated tuberculosis in immunosenescence after nine decades latency]. *Dtsch Med Wochenschr.* 2021;146(6):399-402. <https://www.ncbi.nlm.nih.gov/pubmed/33735926>.
63. Fukunaga R, Glaziou P, Harris JB, Date A, Floyd K, Kasaeva T. Epidemiology of Tuberculosis and Progress Toward Meeting Global Targets - Worldwide, 2019. *MMWR Morb Mortal Wkly Rep.* 2021;70(12):427-30. <https://www.ncbi.nlm.nih.gov/pubmed/33764960>.
64. Fusani L, Tersigni C, Chiappini E, Venturini E, Galli L. Old biomarkers in tuberculosis management: are they still useful? a systematic review. *Expert Rev Anti Infect Ther.* 2021;1-13. <https://www.ncbi.nlm.nih.gov/pubmed/33722116>.
65. Gao JT, Du J, Wu GH, Pei Y, Gao MQ, Martinez L, et al. Bedaquiline-containing regimens in patients with pulmonary multidrug-resistant tuberculosis in China: focus on the safety. *Infect Dis Poverty.* 2021;10(1):32. <https://www.ncbi.nlm.nih.gov/pubmed/33736710>.
66. Garg B, Mehta N. Letter to the Editor on "It's Never Too Late: Neurological Outcome of Delayed Decompression in Tuberculosis of Spine" by Rathod et al. *Global Spine J.* 2021;11(3):418-9. <https://www.ncbi.nlm.nih.gov/pubmed/33764179>.
67. Gliddon HD, Kaforou M, Alikian M, Habgood-Coote D, Zhou C, Oni T, et al. Identification of Reduced Host Transcriptomic Signatures for Tuberculosis Disease and Digital PCR-Based Validation and Quantification. *Front Immunol.* 2021;12:637164. <https://www.ncbi.nlm.nih.gov/pubmed/33763081>.
68. Gomez M, Archer M, Barona D, Wang H, Ordoubadi M, Bin Karim S, et al. Microparticle Encapsulation of a Tuberculosis Subunit Vaccine Candidate containing a Nanoemulsion Adjuvant via Spray Drying. *Eur J Pharm Biopharm.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33753213>.

69. Govindan SA, Yadav R, Vaidya PC, Sethi S, Mehra N, Das RR, et al. Comparison of performances of loop-mediated isothermal amplification, XPERT MTB/RIF and BACTEC MGIT in the diagnosis of childhood tuberculosis. *J Paediatr Child Health*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33719163>.
70. Grijota MD, Montero N, Luque MJ, Diaz-Jurado M, Sabe N, Perez-Recio S, et al. Tuberculosis prevention in patients undergoing kidney transplantation: a nurse-led program for screening and treatment. *Transpl Infect Dis*. 2021;e13603. <https://www.ncbi.nlm.nih.gov/pubmed/33745229>.
71. Guo R, Passi K, Jain CK. Tuberculosis Diagnostics and Localization in Chest X-Rays via Deep Learning Models. *Front Artif Intell*. 2020;3:583427. <https://www.ncbi.nlm.nih.gov/pubmed/33733221>.
72. Gupta A, Pandey S, Yadav JS. A Review on Recent Trends in Green Synthesis of Gold Nanoparticles for Tuberculosis. *Adv Pharm Bull*. 2021;11(1):10-27. <https://www.ncbi.nlm.nih.gov/pubmed/33747849>.
73. Gupta RK, Lule SA, Krutikov M, Gosce L, Green N, Southern J, et al. Screening for tuberculosis among high-risk groups attending London Emergency Departments: A prospective observational study. *Eur Respir J*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33737408>.
74. Gutierrez J, Kroon EE, Moller M, Stein CM. Phenotype Definition for "Resisters" to Mycobacterium tuberculosis Infection in the Literature-A Review and Recommendations. *Front Immunol*. 2021;12:619988. <https://www.ncbi.nlm.nih.gov/pubmed/33717116>.
75. Gutierrez-Gonzalez LH, Juarez E, Carranza C, Carreto-Binaghi LE, Alejandre A, Cabello-Gutierrez C, et al. Immunological Aspects of Diagnosis and Management of Childhood Tuberculosis. *Infect Drug Resist*. 2021;14:929-46. <https://www.ncbi.nlm.nih.gov/pubmed/33727834>.
76. Hadifar S, Mostafaei S, Behrouzi A, Fateh A, Riahi P, Siadat SD, et al. Strain-specific behavior of Mycobacterium tuberculosis in A549 lung cancer cell line. *BMC Bioinformatics*. 2021;22(1):154. <https://www.ncbi.nlm.nih.gov/pubmed/33765916>.
77. Hajizadeh A, Lotfi T, Falzon D, Mertz D, Nieuwlaat R, Gebreselassie N, et al. Recommendation mapping of the World Health Organization's guidelines on tuberculosis: A new approach to digitizing and presenting recommendations. *J Clin Epidemiol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33762142>.
78. Han WM, Mahikul W, Pouplin T, Lawpoolsri S, White LJ, Pan-Ngum W. Assessing the impacts of short-course multidrug-resistant tuberculosis treatment in the Southeast Asia Region using a mathematical modeling approach. *PLoS One*. 2021;16(3):e0248846. <https://www.ncbi.nlm.nih.gov/pubmed/33770104>.
79. Heffernan C. Tuberculosis in Canada: who counts? *Can J Public Health*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33742312>.

80. Heffernan C, Paulsen C, Asadi L, Egedahl ML, Rowe BH, Barrie J, et al. Individual and public health consequences associated with a missed diagnosis of pulmonary tuberculosis in the emergency department: A retrospective cohort study. *PLoS One*. 2021;16(3):e0248493. <https://www.ncbi.nlm.nih.gov/pubmed/33750959>.
81. Herman B, Sirichokchatchawan W, Pongpanich S, Nantasesamat C. Development and performance of CUHAS-ROBUST application for pulmonary rifampicin-resistance tuberculosis screening in Indonesia. *PLoS One*. 2021;16(3):e0249243. <https://www.ncbi.nlm.nih.gov/pubmed/33765092>.
82. Hohlfeld ASJ, Mathebula L, Pienaar ED, Abrams A, Lutje V, Ndwandwe D, et al. Tuberculosis treatment intervention trials in Africa: A cross-sectional bibliographic study and spatial analysis. *PLoS One*. 2021;16(3):e0248621. <https://www.ncbi.nlm.nih.gov/pubmed/33739989>.
83. Huddart S, Singh M, Jha N, Benedetti A, Pai M. Case fatality and recurrent tuberculosis among patients managed in the private sector: A cohort study in Patna, India. *PLoS One*. 2021;16(3):e0249225. <https://www.ncbi.nlm.nih.gov/pubmed/33770134>.
84. Ignatius EH, Dooley KE. A leap forward in assessing host-directed therapies for tuberculosis. *Lancet Respir Med*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33740467>.
85. Israrahmed A, Agarwal S, Singh S, Lal H. 'Frosted liver' appearance in serohepatitis variant of hepatic tuberculosis. *BMJ Case Rep*. 2021;14(3). <https://www.ncbi.nlm.nih.gov/pubmed/33727304>.
86. Jacob JJ, Paul PAM. Infections in Endocrinology: Tuberculosis. In: Feingold KR, Anawalt B, Boyce A, Chrousos G, de Herder WW, Dungan K, et al., editors. *Endotext*. South Dartmouth (MA)2000. <https://www.ncbi.nlm.nih.gov/pubmed/33734657>.
87. Jakhar D, Gupta RK, Sarin N. Dermoscopy of Tuberculosis Verrucosa Cutis. *Indian Dermatol Online J*. 2021;12(1):206-7. <https://www.ncbi.nlm.nih.gov/pubmed/33768061>.
88. James V, Samuel J, Ong GY. Pediatric Abdominal Tuberculosis With Calcified Intra-abdominal Lymph Nodes Identified by Point-of-Care Ultrasound. *Pediatr Emerg Care*. 2021;37(4):226-9. <https://www.ncbi.nlm.nih.gov/pubmed/33780407>.
89. Jetty R. Tuberculosis among First Nations, Inuit and Metis children and youth in Canada: Beyond medical management. *Paediatr Child Health*. 2021;26(2):e78-e81. <https://www.ncbi.nlm.nih.gov/pubmed/33747314>.
90. Jiang WX, Huang F, Tang SL, Wang N, Du X, Zhang H, et al. Implementing a new tuberculosis surveillance system in Zhejiang, Jilin and Ningxia: improvements, challenges and implications for China's National Health Information System. *Infect Dis Poverty*. 2021;10(1):22. <https://www.ncbi.nlm.nih.gov/pubmed/33750465>.
91. Kadota JL, Nabwire S, Nalugwa T, White JS, Cattamanchi A, Katamba A, et al. Patient Perspectives and Willingness to Accept Incentives for Tuberculosis Diagnostic Evaluation in Uganda. *Value Health Reg Issues*. 2021;25:48-56. <https://www.ncbi.nlm.nih.gov/pubmed/33773327>.

92. Kaptan Y, Suner A, Tas MN, Oksel F, Aksu K, Sayiner A. Tuberculosis despite latent infection screening and treatment in patients receiving TNF inhibitor therapy. *Clin Rheumatol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33745083>.
93. Kaya A, Kaya SY, Zerdali E, Can A. Female Genital Tuberculosis: Five Case Reports. *Gynecol Minim Invasive Ther*. 2021;10(1):41-3. <https://www.ncbi.nlm.nih.gov/pubmed/33747772>.
94. Kebede W, Abebe G, Gudina EK, Kedir E, Tran TN, Van Rie A. The role of chest radiography in the diagnosis of bacteriologically confirmed pulmonary tuberculosis in hospitalised Xpert MTB/RIF-negative patients. *ERJ Open Res*. 2021;7(1). <https://www.ncbi.nlm.nih.gov/pubmed/33778045>.
95. Kiran D, Basaraba RJ. Lactate Metabolism and Signaling in Tuberculosis and Cancer: A Comparative Review. *Front Cell Infect Microbiol*. 2021;11:624607. <https://www.ncbi.nlm.nih.gov/pubmed/33718271>.
96. Kizito E, Musaazi J, Mutesasira K, Twinomugisha F, Namwanje H, Kiyemba T, et al. Risk factors for mortality among patients diagnosed with multi-drug resistant tuberculosis in Uganda-a case-control study. *BMC Infect Dis*. 2021;21(1):292. <https://www.ncbi.nlm.nih.gov/pubmed/33752637>.
97. Kizny Gordon A, Marais B, Walker TM, Sintchenko V. Clinical and public health utility of Mycobacterium tuberculosis whole genome sequencing. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716192>.
98. Kontturi A, Kekomaki S, Soini H, Ollgren J, Salo E. Paediatric tuberculosis during universal and selective Bacillus Calmette-Guerin vaccination policy: a nationwide population-based retrospective study, Finland, 1995-2015. *Euro Surveill*. 2021;26(11). <https://www.ncbi.nlm.nih.gov/pubmed/33739257>.
99. Kuan MM. Surveillance of tuberculosis and treatment outcomes following screening and therapy interventions among marriage-migrants and labor-migrants from high TB endemic countries in Taiwan. *PeerJ*. 2021;9:e10332. <https://www.ncbi.nlm.nih.gov/pubmed/33777506>.
100. Kwizera R, Katende A, Bongomin F, Nakiyingi L, Kirenga BJ. Misdiagnosis of chronic pulmonary aspergillosis as pulmonary tuberculosis at a tertiary care center in Uganda: a case series. *J Med Case Rep*. 2021;15(1):140. <https://www.ncbi.nlm.nih.gov/pubmed/33781313>.
101. Labuda SM, McDaniel C, Talwar A, Braumuller A, Parker S, McGaha S, et al. Tuberculosis Outbreak Associated With Delayed Diagnosis and Long Infectious Periods in Rural Arkansas, 2010-2018. *Public Health Rep*. 2021;33354921999167. <https://www.ncbi.nlm.nih.gov/pubmed/33729050>.
102. Lam C, Martinez E, Crighton T, Furlong C, Donnan E, Marais BJ, et al. Value of routine whole genome sequencing for Mycobacterium tuberculosis drug resistance detection. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33753222>.
103. Lane R. Nicole Salazar-Austin: emerging tuberculosis-HIV research leader. *Lancet*. 2021;397(10280):1172. <https://www.ncbi.nlm.nih.gov/pubmed/33743844>.

104. Lei Y, Cao X, Xu W, Yang B, Xu Y, Zhou W, et al. Rv3722c Promotes Mycobacterium tuberculosis Survival in Macrophages by Interacting With TRAF3. *Front Cell Infect Microbiol*. 2021;11:627798. <https://www.ncbi.nlm.nih.gov/pubmed/33718275>.
105. Letertre O, Anii V, Jullie ML, Milpied B, Seneschal J, Darrigade AS. Linear immunoglobulin A bullous dermatosis associated with disseminated tuberculosis. *Int J Dermatol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33742695>.
106. Levine S, Beatty K. Correction to Investigating beta-Lactam Drug Targets in Mycobacterium tuberculosis Using Chemical Probes. *ACS Infect Dis*. 2021;461-70. <https://www.ncbi.nlm.nih.gov/pubmed/33759488>.
107. Li S, Wang X, Zhao Y, Yang J, Cui T, Zhao ZJ, et al. Association of PTPN22-C1858T Polymorphism With Susceptibility to Mycobacterium tuberculosis and Mycobacterium leprae Infection: A Meta-Analysis. *Front Immunol*. 2021;12:592841. <https://www.ncbi.nlm.nih.gov/pubmed/33717071>.
108. Li SJ, Li YF, Song WM, Zhang QY, Liu SQ, Xu TT, et al. Population aging and trends of pulmonary tuberculosis incidence in the elderly. *BMC Infect Dis*. 2021;21(1):302. <https://www.ncbi.nlm.nih.gov/pubmed/33765943>.
109. Li X, Wang J, Yang Z, Song Q. Diagnostic values of peripheral blood T-cell spot of tuberculosis assay (T-SPOT.TB) and magnetic resonance imaging for osteoarticular tuberculosis: a case-control study. *Aging (Albany NY)*. 2021;13. <https://www.ncbi.nlm.nih.gov/pubmed/33744856>.
110. Li Z, Wang M, Zhong H, Huang X, Wu X, Zhang X, et al. Impact of MASP2 gene polymorphism and gene-tea drinking interaction on susceptibility to tuberculosis. *Sci Rep*. 2021;11(1):6544. <https://www.ncbi.nlm.nih.gov/pubmed/33753877>.
111. Libardo MDJ, Duncombe CJ, Green SR, Wyatt PG, Thompson S, Ray PC, et al. Resistance of Mycobacterium tuberculosis to indole 4-carboxamides occurs through alterations in drug metabolism and tryptophan biosynthesis. *Cell Chem Biol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765439>.
112. Lin HY, Hu HC. Cervical Tuberculosis Combined With Papillary Thyroid Carcinoma With Lateral Neck Metastasis. *Ear Nose Throat J*. 2021;1455613211000598. <https://www.ncbi.nlm.nih.gov/pubmed/33729896>.
113. Lin L, Ke Z, Cheng S. Efficacy and safety of short-term chemotherapy for patients with spinal tuberculosis undergoing surgery in Chinese population: a meta-analysis. *J Orthop Surg Res*. 2021;16(1):229. <https://www.ncbi.nlm.nih.gov/pubmed/33781290>.
114. Lisanwork Arage L, Deybasso HA, Yilma Gebremichael D, Gintamo Nuramo B, Negash Mekuria Z. Determinants of Drug-Induced Hepatotoxicity Among Patients with Human Immunodeficiency Virus Taking a High Dose of Rifapentine Plus Isoniazid Drugs at the All Africa Leprosy Tuberculosis Rehabilitation and Training Center in Addis Ababa, Ethiopia. *HIV AIDS (Auckl)*. 2021;13:307-14. <https://www.ncbi.nlm.nih.gov/pubmed/33758553>.

115. Liu Y, Rebollo-Ramirez S, Larrouy-Maumus G. Metabolomics reveals that the cAMP receptor protein regulates nitrogen and peptidoglycan synthesis in *Mycobacterium tuberculosis*. *RSC Adv.* 2020;10(44):26212-9. <https://www.ncbi.nlm.nih.gov/pubmed/33747441>.
116. Long Q, Huang F, Huan ST, Zhao YL. Scale-up of a comprehensive model to improve tuberculosis control in China: lessons learned and the way forward. *Infect Dis Poverty*. 2021;10(1):41. <https://www.ncbi.nlm.nih.gov/pubmed/33766122>.
117. Long Q, Jiang WX, Zhang H, Cheng J, Tang SL, Wang WB. Multi-source financing for tuberculosis treatment in China: key issues and challenges. *Infect Dis Poverty*. 2021;10(1):17. <https://www.ncbi.nlm.nih.gov/pubmed/33750460>.
118. Lopez-Lopez JP, Posada-Martinez EL, Saldaña C, Wyss F, Ponte-Negretti CI, Alexander B, et al. Tuberculosis and the Heart. *J Am Heart Assoc.* 2021:e019435. <https://www.ncbi.nlm.nih.gov/pubmed/33733808>.
119. Luo LZ, Luo L, Lu ZB, Ding Y, Luo HL, Zhou L, et al. [The efficacy of balloon dilatation in clinical improving period for patients who suffered from actively caseating endobronchial tuberculosis and central airway stenosis]. *Zhonghua Jie He He Hu Xi Za Zhi*. 2021;44(3):237-42. <https://www.ncbi.nlm.nih.gov/pubmed/33721938>.
120. Ma P, Luo T, Ge L, Chen Z, Wang X, Zhao R, et al. Compensatory effects of *M. tuberculosis* rpoB mutations outside the rifampicin resistance-determining region. *Emerg Microbes Infect.* 2021:1-39. <https://www.ncbi.nlm.nih.gov/pubmed/33775224>.
121. Maeyama JI, Iho S, Suzuki F, Hayashi D, Yamamoto T, Yamazaki T, et al. Evaluation of a booster tuberculosis vaccine containing mycobacterial DNA-binding protein 1 and CpG oligodeoxynucleotide G9.1 using a Guinea pig model that elicits immunity to *Bacillus Calmette-Guerin*. *Tuberculosis (Edinb)*. 2021;128:102067. <https://www.ncbi.nlm.nih.gov/pubmed/33752142>.
122. Maharjan B, Gopali RS, Zhang Y. A scoping review on climate change and tuberculosis. *Int J Biometeorol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33728507>.
123. Malabad JCM, Ang CF, Palabrica FAR, Cajucom MAM, Gloriani NG, Villanueva S, et al. Molecular epidemiology of *Mycobacterium tuberculosis* in adult Filipino TB-HIV co-infected patients. *Int J Tuberc Lung Dis.* 2021;25(4):285-91. <https://www.ncbi.nlm.nih.gov/pubmed/33762072>.
124. Malik AA, Farooq S, Jaswal M, Khan H, Nasir K, Fareed U, et al. Safety and feasibility of 1 month of daily rifapentine plus isoniazid to prevent tuberculosis in children and adolescents: a prospective cohort study. *Lancet Child Adolesc Health*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33770510>.
125. Marais BJ, Verkuij S, Casenghi M, Triasih R, Hesseling AC, Mandalakas AM, et al. Paediatric tuberculosis - new advances to close persistent gaps. *Int J Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716193>.

126. Matsuda JDS, Wanke B, Balieiro A, Santos C, Cavalcante R, Muniz MM, et al. Prevalence of pulmonary mycoses in smear-negative patients with suspected tuberculosis in the Brazilian Amazon. *Rev Iberoam Micol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33775537>.
127. Meier NR, Battegay M, Ottenhoff THM, Furrer H, Nemeth J, Ritz N. HIV-Infected Patients Developing Tuberculosis Disease Show Early Changes in the Immune Response to Novel Mycobacterium tuberculosis Antigens. *Front Immunol*. 2021;12:620622. <https://www.ncbi.nlm.nih.gov/pubmed/33777000>.
128. Menardo F, Rutaihwa LK, Zwyer M, Borrell S, Comas I, Conceicao EC, et al. Local adaptation in populations of Mycobacterium tuberculosis endemic to the Indian Ocean Rim. *F1000Res*. 2021;10:60. <https://www.ncbi.nlm.nih.gov/pubmed/33732436>.
129. Mitchell EMH, Adejumo OA, Abdur-Razzaq H, Ogbudebe C, Chukwueme N, Olorunju SB, et al. Hybrid Approach to Estimation of Underreporting of Tuberculosis Case Notification in High-Burden Settings With Weak Surveillance Infrastructure: Design and Implementation of an Inventory Study. *JMIR Public Health Surveill*. 2021;7(3):e22352. <https://www.ncbi.nlm.nih.gov/pubmed/33720030>.
130. Modlin SJ, Marbach T, Werngren J, Mansjo M, Hoffner SE, Valafar F. Atypical Genetic Basis of Pyrazinamide Resistance in Mono-resistant Mycobacterium tuberculosis. *Antimicrob Agents Chemother*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33722890>.
131. Morris TC, Hoggart CJ, Chegou NN, Kidd M, Oni T, Goliath R, et al. Evaluation of Host Serum Protein Biomarkers of Tuberculosis in sub-Saharan Africa. *Front Immunol*. 2021;12:639174. <https://www.ncbi.nlm.nih.gov/pubmed/33717190>.
132. Morrison H, McShane H. Local Pulmonary Immunological Biomarkers in Tuberculosis. *Front Immunol*. 2021;12:640916. <https://www.ncbi.nlm.nih.gov/pubmed/33746984>.
133. Nachega JB, Kapata N, Sam-Agudu NA, Declerdt EH, Katoto P, Nagu T, et al. Minimizing the Impact of the Triple Burden of COVID-19, Tuberculosis and HIV on Health Services in sub-Saharan Africa. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33757874>.
134. Nagu TJ, Mboka MA, Nkrumbih ZF, Shayo G, Mizinduko MM, Komba EV, et al. Clinical and Imaging Features of Adults with Recurrent Pulmonary Tuberculosis - A Prospective Case-Controlled Study. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716197>.
135. Naz S, Dabral S, Nagarajan SN, Arora D, Singh LV, Kumar P, et al. Compromised base excision repair pathway in Mycobacterium tuberculosis imparts superior adaptability in the host. *PLoS Pathog*. 2021;17(3):e1009452. <https://www.ncbi.nlm.nih.gov/pubmed/33740020>.
136. Nienaber A, Hayford FEA, Variava E, Martinson N, Malan L. The Manipulation of the Lipid Mediator Metabolism as Adjunct Host-Directed Therapy in Tuberculosis. *Front Immunol*. 2021;12:623941. <https://www.ncbi.nlm.nih.gov/pubmed/33777003>.
137. Nkereuwem E, Kampmann B, Togun T. The need to prioritise childhood tuberculosis case detection. *Lancet*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765409>.

138. Ntombela T, Seupersad A, Maseko S, Ibeji CU, Tolufashe G, Maphumulo SI, et al. Mechanistic insight on the inhibition of D, D-carboxypeptidase from *Mycobacterium tuberculosis* by beta-lactam antibiotics: an ONIOM acylation study. *J Biomol Struct Dyn.* 2021;1-11.
<https://www.ncbi.nlm.nih.gov/pubmed/33719919>.
139. Obeidat AE, Namiki T, Murakami TT. More Than Just a Polyp: Diagnosis of Tuberculosis From a Screening Colonoscopy. *Cureus.* 2021;13(2):e13216.
<https://www.ncbi.nlm.nih.gov/pubmed/33728169>.
140. Ohene SA, Bonsu F, Adusi-Poku Y, Dzata F, Bakker M. Case finding of tuberculosis among mining communities in Ghana. *PLoS One.* 2021;16(3):e0248718.
<https://www.ncbi.nlm.nih.gov/pubmed/33735298>.
141. Olupot B, Adrawa N, Bajunirwe F, Izudi J. HIV infection modifies the relationship between distance to a health facility and treatment success rate for tuberculosis in rural eastern Uganda. *J Clin Tuberc Other Mycobact Dis.* 2021;23:100226.
<https://www.ncbi.nlm.nih.gov/pubmed/33732899>.
142. Ortiz-Brizuela E, Menzies D. Tuberculosis active case-finding: looking for cases in all the right places? *Lancet Public Health.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765457>.
143. Ota M, Hoshino Y, Hirao S. Analysis of 605 tuberculosis outbreaks in Japan, 1993–2015: time, place, and transmission site. *Epidemiol Infect.* 2021;1-21.
<https://www.ncbi.nlm.nih.gov/pubmed/33745484>.
144. Oxладе O, Benedetti A, Adjibimey M, Alsdurf H, Anagonou S, Cook VJ, et al. Effectiveness and cost-effectiveness of a health systems intervention for latent tuberculosis infection management (ACT4): a cluster-randomised trial. *Lancet Public Health.* 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33765453>.
145. Palacios A, Gupta S, Rodriguez GM, Prados-Rosales R. Extracellular vesicles in the context of *Mycobacterium tuberculosis* infection. *Mol Immunol.* 2021;133:175-81.
<https://www.ncbi.nlm.nih.gov/pubmed/33743266>.
146. Pampaloni A, Locatelli ME, Rullo EV, Alaimo S, Cosentino F, Marino A, et al. "Diagnosis on the Dock" project: a proactive screening program for diagnosing pulmonary tuberculosis in disembarking refugees and new SEI model. *Int J Infect Dis.* 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33737130>.
147. Pinto-Carta R, Sierra-Arango F, Vasquez-Roldan M, Perez-Riveros ED. Peripancreatic lymph node tuberculosis diagnosed by endoscopic ultrasound. *JGH Open.* 2021;5(3):401-3.
<https://www.ncbi.nlm.nih.gov/pubmed/33732889>.
148. Prihadi JC, Putra AC, Wahyudi Y. Biopsy-confirmed Genitourinary Tuberculosis in a Secondary Health Care Hospital: An Evidence-based Clinical Review. *Res Rep Urol.* 2021;13:133-7.
<https://www.ncbi.nlm.nih.gov/pubmed/33763390>.

149. Qiang L, Zhang Y, Liu CH. Mycobacterium tuberculosis effector proteins: functional multiplicity and regulatory diversity. *Cell Mol Immunol*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33772098>.
150. Ranzani OT, Pescarini JM, Martinez L, Garcia-Basteiro AL. Increasing tuberculosis burden in Latin America: an alarming trend for global control efforts. *BMJ Glob Health*. 2021;6(3). <https://www.ncbi.nlm.nih.gov/pubmed/33762254>.
151. Rathod TN, Sathe AH, Marathe NA. Response to Letter to the Editor on "It's Never Too Late: Neurological Outcome of Delayed Decompression in Tuberculosis of Spine". *Global Spine J*. 2021;11(3):420-1. <https://www.ncbi.nlm.nih.gov/pubmed/33764178>.
152. Rosenfeld G, Gabrielian A, Wang Q, Gu J, Hurt DE, Long A, et al. Radiologist observations of computed tomography (CT) images predict treatment outcome in TB Portals, a real-world database of tuberculosis (TB) cases. *PLoS One*. 2021;16(3):e0247906. <https://www.ncbi.nlm.nih.gov/pubmed/33730021>.
153. Rudolf F, Abate E, Moges B, Mendes AM, Mengistu MY, Sifna A, et al. Increasing smear positive tuberculosis detection using a clinical score - A stepped wedge multicenter trial from Africa. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33757875>.
154. Ruhwald M, Carmona S, Pai M. Learning from COVID-19 to reimagine tuberculosis diagnosis. *Lancet Microbe*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33778790>.
155. Rupani MP, Shah CJ, Dave JD, Trivedi AV, Mehta KG. 'We are not aware of notification of tuberculosis': A mixed-methods study among private practitioners from western India. *Int J Health Plann Manag*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33735506>.
156. Sahu S, Ditiu L, Sachdeva KS, Zumla A. Recovering from the Impact of the Covid-19 Pandemic and Accelerating to Achieving the United Nations General Assembly Tuberculosis Targets. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33716198>.
157. Saiboonjan B, Roytrakul S, Sangka A, Lulitanond V, Faksri K, Namwat W. Proteomic analysis of drug-susceptible and multidrug-resistant nonreplicating Beijing strains of Mycobacterium tuberculosis cultured in vitro. *Biochem Biophys Rep*. 2021;26:100960. <https://www.ncbi.nlm.nih.gov/pubmed/33748436>.
158. Santra S, Garg S, Basu S, Sharma N, Singh MM, Khanna A. The effect of a mhealth intervention on anti-tuberculosis medication adherence in Delhi, India: A quasi-experimental study. *Indian J Public Health*. 2021;65(1):34-8. <https://www.ncbi.nlm.nih.gov/pubmed/33753687>.
159. Schmidt CM, Lovero KL, Carvalho FR, Dos Santos DCM, Barros A, Quintanilha AP, et al. Corrigendum to "Serum anti-Mce1A immunoglobulin detection as a tool for differential diagnosis of tuberculosis and latent tuberculosis infection in children and adolescents" [Tuberculosis 120 (2020) 101893]. *Tuberculosis (Edinb)*. 2021;127:101936. <https://www.ncbi.nlm.nih.gov/pubmed/33715786>.

160. Schultz J, Beeson A, Newton T, Gannon J, Frank A, Franco-Paredes C, et al. Impact of An Internal Medicine-Pediatrics Residency Quality Improvement Project to Increase Latent Tuberculosis Screening. *Am J Med Sci*. 2020. <https://www.ncbi.nlm.nih.gov/pubmed/33775427>.
161. Seki M, Choi H, Kim K, Whang J, Sung J, Mitarai S. Tuberculosis: A persistent unpleasant neighbour of humans. *J Infect Public Health*. 2021;14(4):508-13. <https://www.ncbi.nlm.nih.gov/pubmed/33743373>.
162. Shang YY, Chu NH. [Analysis of resistance to clofazimine in tuberculosis patients]. *Zhonghua Jie He He Hu Xi Za Zhi*. 2021;44(3):225-9. <https://www.ncbi.nlm.nih.gov/pubmed/33721936>.
163. Shanmugam S, Bachmann NL, Martinez E, Menon R, Narendran G, Narayanan S, et al. Whole genome sequencing based differentiation between re-infection and relapse in Indian patients with tuberculosis recurrence, with and without HIV co-infection. *Int J Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33741489>.
164. Shapiro AE, Ross JM, Yao M, Schiller I, Kohli M, Dendukuri N, et al. Xpert MTB/RIF and Xpert Ultra assays for screening for pulmonary tuberculosis and rifampicin resistance in adults, irrespective of signs or symptoms. *Cochrane Database Syst Rev*. 2021;3:CD013694. <https://www.ncbi.nlm.nih.gov/pubmed/33755189>.
165. Shariq M, Quadir N, Sharma N, Singh J, Sheikh JA, Khubaib M, et al. Mycobacterium tuberculosis RipA Dampens TLR4-Mediated Host Protective Response Using a Multi-Pronged Approach Involving Autophagy, Apoptosis, Metabolic Repurposing, and Immune Modulation. *Front Immunol*. 2021;12:636644. <https://www.ncbi.nlm.nih.gov/pubmed/33746976>.
166. Shim B, Songmen S, Xenakis J, Sapire J. Laryngeal involvement in a patient with active postprimary tuberculosis: Case report of a rare extrapulmonary manifestation. *Radiol Case Rep*. 2021;16(5):1169-72. <https://www.ncbi.nlm.nih.gov/pubmed/33777282>.
167. Shrestha SK, Bhattacharai RB, Joshi LR, Adhikari N, Shrestha SK, Basnet R, et al. Knowledge, Attitude, and Practices on Drug-Resistant Tuberculosis Infection Control in Nepal: A Cross-Sectional Study. *Tuberc Res Treat*. 2021;2021:6615180. <https://www.ncbi.nlm.nih.gov/pubmed/33747563>.
168. Siddiqi K, Novotny TE. The syndemic challenge of tuberculosis and tobacco use. *Tob Induc Dis*. 2021;19:20. <https://www.ncbi.nlm.nih.gov/pubmed/33767604>.
169. Sinha P, Lonnroth K, Bhargava A, Heysell SK, Sarkar S, Salgame P, et al. Food for thought: addressing undernutrition to end tuberculosis. *Lancet Infect Dis*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33770535>.
170. Smith GC, Budgey R. Simulating the next steps in badger control for bovine tuberculosis in England. *PLoS One*. 2021;16(3):e0248426. <https://www.ncbi.nlm.nih.gov/pubmed/33735292>.

171. Song YJ, Cho SK, Kim H, Kim HW, Nam E, Bae SC, et al. Risk of Tuberculosis Development in Patients with Rheumatoid Arthritis Receiving Targeted Therapy: a Prospective Single Center Cohort Study. *J Korean Med Sci*. 2021;36(10):e70.
<https://www.ncbi.nlm.nih.gov/pubmed/33724737>.
172. Spener-Gomes R, Costa AG, de Melo HF, de Souza AB, Beraldi-Magalhaes F, Jesus JS, et al. Examination of respiratory specimens improves microbiological diagnosis of patients with presumptive extrapulmonary tuberculosis. *Int J Infect Dis*. 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33722683>.
173. Stroh GR, Peikert T, Escalante P. Active and latent tuberculosis infections in patients treated with immune checkpoint inhibitors in a non-endemic tuberculosis area. *Cancer Immunol Immunother*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33770211>.
174. Sundar S, Thangamani L, Piramanayagam S. Computational identification of significant immunogenic epitopes of the putative outer membrane proteins from *Mycobacterium tuberculosis*. *J Genet Eng Biotechnol*. 2021;19(1):48.
<https://www.ncbi.nlm.nih.gov/pubmed/33779881>.
175. The Lancet Public H. Renewing the fight to end tuberculosis. *Lancet Public Health*. 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33780658>.
176. Tintinger GR, Theron AJ, Steel HC, Cholo MC, Nel JG, Feldman C, et al. Submission for Special Issue: The Role of Platelet Activation in the Pathophysiology of HIV, Tuberculosis, and Pneumococcal Disease. Bedaquiline Suppresses ADP-Mediated Activation of Human Platelets In Vitro via Interference With Phosphatidylinositol 3-Kinase. *Front Immunol*. 2020;11:621148.
<https://www.ncbi.nlm.nih.gov/pubmed/33717055>.
177. Toom DAD, Gosheger G, Schneider KN. Osseous Tuberculosis. *Dtsch Arztebl Int*. 2021;118(3):36. <https://www.ncbi.nlm.nih.gov/pubmed/33759754>.
178. Velen K, Charalambous S. Tuberculosis in prisons: an unintended sentence? *Lancet Public Health*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33765454>.
179. Verma H, Nagar S, Vohra S, Pandey S, Lal D, Negi RK, et al. Genome analyses of 174 strains of *Mycobacterium tuberculosis* provide insight into the evolution of drug resistance and reveal potential drug targets. *Microb Genom*. 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33750515>.
180. Vessiere A, Font H, Gabillard D, Adonis-Koffi L, Borand L, Chabala C, et al. Impact of systematic early tuberculosis detection using Xpert MTB/RIF Ultra in children with severe pneumonia in high tuberculosis burden countries (TB-Speed pneumonia): a stepped wedge cluster randomized trial. *BMC Pediatr*. 2021;21(1):136.
<https://www.ncbi.nlm.nih.gov/pubmed/33743621>.
181. Wadee R, Wadee AA. The Pathology of Lymphocytes, Histiocytes, and Immune Mechanisms in *Mycobacterium tuberculosis* Granulomas. *Am J Trop Med Hyg*. 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33720848>.

182. Wahid A, Ahmad N, Ghafoor A, Latif A, Saleem F, Khan S, et al. Effectiveness of Shorter Treatment Regimen in Multidrug-Resistant Tuberculosis Patients in Pakistan: A Multicenter Retrospective Record Review. *Am J Trop Med Hyg*. 2021; <https://www.ncbi.nlm.nih.gov/pubmed/33724924>.
183. Wallis RS, Ginindza S, Beattie T, Arjun N, Likoti M, Edward VA, et al. Adjunctive host-directed therapies for pulmonary tuberculosis: a prospective, open-label, phase 2, randomised controlled trial. *Lancet Respir Med*. 2021; <https://www.ncbi.nlm.nih.gov/pubmed/33740465>.
184. Wang N, Guo L, Shewade HD, Thekkur P, Zhang H, Yuan YL, et al. Effect of using electronic medication monitors on tuberculosis treatment outcomes in China: a longitudinal ecological study. *Infect Dis Poverty*. 2021;10(1):29. <https://www.ncbi.nlm.nih.gov/pubmed/33731213>.
185. Wang ZY, Zhang LJ, Liu YH, Jiang WX, Tang SL, Liu XY. Process evaluation of E-learning in continuing medical education: evidence from the China-Gates Foundation Tuberculosis Control Program. *Infect Dis Poverty*. 2021;10(1):23. <https://www.ncbi.nlm.nih.gov/pubmed/33750423>.
186. Weisz GM, Gal A. Research on Tuberculosis in Nazi Germany and the Cruelest Medical Experiments on Jewish Children: An Observational Review. *Isr Med Assoc J*. 2021;23(3):160-4. <https://www.ncbi.nlm.nih.gov/pubmed/33734628>.
187. Wilkinson KA, Schneider-Luftman D, Lai R, Barrington C, Jhilmeet N, Lowe DM, et al. Antiretroviral Treatment-Induced Decrease in Immune Activation Contributes to Reduced Susceptibility to Tuberculosis in HIV-1/Mtb Co-infected Persons. *Front Immunol*. 2021;12:645446. <https://www.ncbi.nlm.nih.gov/pubmed/33746987>
188. Wingfield T, Karmadwala F, MacPherson P, Millington KA, Walker NF, Cuevas LE, et al. Challenges and opportunities to end tuberculosis in the COVID-19 era. *Lancet Respir Med [Internet]*. 2021 Mar 24 PMC7988354 Health Trials, MR/V004832/1), the Medical Research Council (MRC), Department for International Development, the Academy of Medical Sciences, and the Swedish Health Research Council. LEC is supported by grants from the European and Developing Countries Clinical Trial Partnership (EDCTP, DRIA2014-309), the MRC, the TB REACH Initiative of the Stop TB Partnership (STBP/TBREACH//GSA/W5-07), the Wellcome Trust (contract pending), and the Health Protection Research Unit for Emerging and Zoonotic Infections. PM is funded by the Wellcome Trust (206575/Z/17/Z). KAM works on projects funded with UK aid from the UK Government. SBS is supported by the National Institute for Health Research Global Health Research Unit on Lung Health and TB in Africa at the Liverpool School of Tropical Medicine (16/136/35) and the Foreign, Commonwealth and Development Office Research Programme Leaving no-one behind, transforming gendered pathways to health for TB (LIGHT PO8614). All authors declare no competing interests]. <https://www.ncbi.nlm.nih.gov/pubmed/33773121>.
189. Wong M, Coit JM, Mendoza M, Chiang SS, Marin H, Galea JT, et al. Incident Tuberculosis Diagnoses in Children at High Risk for Disease. *Open Forum Infect Dis*. 2021;8(3):ofab075. <https://www.ncbi.nlm.nih.gov/pubmed/33738322>.

190. Xiao W, Huang D, Li S, Zhou S, Wei X, Chen B, et al. Delayed diagnosis of tuberculosis in patients with diabetes mellitus co-morbidity and its associated factors in Zhejiang Province, China. *BMC Infect Dis.* 2021;21(1):272. <https://www.ncbi.nlm.nih.gov/pubmed/33736610>.
191. Xing W, Zhang R, Jiang W, Zhang T, Pender M, Zhou J, et al. Adherence to Multidrug Resistant Tuberculosis Treatment and Case Management in Chongqing, China - A Mixed Method Research Study. *Infect Drug Resist.* 2021;14:999-1012. <https://www.ncbi.nlm.nih.gov/pubmed/33758516>.
192. Xu F, Tian L, Li Y, Zhang X, Qi Y, Jing Z, et al. High prevalence of extrapulmonary tuberculosis in dairy farms: Evidence for possible gastrointestinal transmission. *PLoS One.* 2021;16(3):e0249341. <https://www.ncbi.nlm.nih.gov/pubmed/33784364>.
193. Xu H, Blair RV, Veazey RS, Wang X. Immunopathogenesis in HIV-associated pediatric tuberculosis. *Pediatr Res.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33731810>.
194. Yan C, Lin J, Li H, Xu J, Zhang T, Chen H, et al. Cycle-Consistent Generative Adversarial Network: Effect on Radiation Dose Reduction and Image Quality Improvement in Ultralow-Dose CT for Evaluation of Pulmonary Tuberculosis. *Korean J Radiol.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33739634>.
195. Yang Y, Zhang S, Dong Z, Xu Y, Hu X, Jiang G, et al. Sublobectomy is a safe alternative for localized cavitary pulmonary tuberculosis. *J Cardiothorac Surg.* 2021;16(1):22. <https://www.ncbi.nlm.nih.gov/pubmed/33731162>.
196. Yousefi Avarvand A, Meshkat Z, Khademi F, Tafaghodi M. Immunogenicity of HspX/EsxS fusion protein of Mycobacterium tuberculosis along with ISCOMATRIX and PLUSCOM nano-adjuvants after subcutaneous administration in animal model. *Microb Pathog.* 2021;104842. <https://www.ncbi.nlm.nih.gov/pubmed/33762199>.
197. Yu J, Kim HC, Hong SB, Choi S, Lee GD, Kim DK, et al. Successful Lobar Lung Transplant From a Marginal Deceased Donor With a History of Treated Pulmonary Tuberculosis: A Case Report. *Exp Clin Transplant.* 2021;19(3):280-3. <https://www.ncbi.nlm.nih.gov/pubmed/33719948>.
198. Zeng MC, Jia QJ, Tang LM. rpoB gene mutations in rifampin-resistant Mycobacterium tuberculosis isolates from rural areas of Zhejiang, China. *J Int Med Res.* 2021;49(3):300060521997596. <https://www.ncbi.nlm.nih.gov/pubmed/33715498>.
199. Zhang M, Wang X, Zhu Y, Chen S, Chen B, Liu Z. Associations of genetic variants at TAP1 and TAP2 with pulmonary tuberculosis risk among the Chinese population. *Epidemiol Infect.* 2021;1-14. <https://www.ncbi.nlm.nih.gov/pubmed/33736739>.
200. Zumla A, Chakaya J, Khan M, Fatima R, Wejse C, Al-Abri S, et al. World Tuberculosis Day 2021 Theme - 'The Clock is Ticking' - and the world is running out of time to deliver the United Nations General Assembly commitments to End TB due to the COVID-19 pandemic. *Int J Infect Dis.* 2021. <https://www.ncbi.nlm.nih.gov/pubmed/33746094>.



our other publications...



NIRT Library
National Institute for Research in Tuberculosis
(Indian Council of Medical Research)
1, Mayor Sathyamoorthy Road
Chetpet, Chennai 600031
Tel: 91 44 28369637 | Fax: 91 44 28362525
Email: nirtlibrary@nirt.res.in