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1. Abebaw Y, Kebede A, Eshetu K, Tesfaye E, Tadesse M, Sinshaw W, et al. Quality assurance practices in tuberculosis diagnostic health facilities in Ethiopia. *PLoS One*. 2022;17(6):e0269601. <https://www.ncbi.nlm.nih.gov/pubmed/35679308>.
2. Abramovitch RB. Targeting tuberculosis - an interview with Robert Abramovitch. *Future Med Chem*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35698911>.
3. Abugu LI, Iwuagwu TE, Seer-Uke EN, Yohanna W, Obi IR, Eze DN, et al. Tuberculosis infection control in health care facilities in Enugu State, Nigeria: a cross-sectional facility-based study. *Pan Afr Med J*. 2022;41:181. <https://www.ncbi.nlm.nih.gov/pubmed/35655688>.
4. Alene KA, Murray MB, van de Water BJ, Becerra MC, Atalell KA, Nicol MP, et al. Treatment Outcomes Among Pregnant Patients With Multidrug-Resistant Tuberculosis: A Systematic Review and Meta-analysis. *JAMA Netw Open*. 2022;5(6):e2216527. <https://www.ncbi.nlm.nih.gov/pubmed/35687333>.
5. Alsukait SF, Alsaad AB, Alotaibi GF, Alsaif FM, Alotaibi HM. Conversion Rate of Tuberculosis Screening Tests among Dermatology Patients Treated with Tumor Necrosis Factor Inhibitors. *Indian J Dermatol*. 2022;67(1):1-4. <https://www.ncbi.nlm.nih.gov/pubmed/35656235>.
6. Antonio-Arques V, Franch-Nadal J, Moreno-Martinez A, Real J, Orcau A, Mauricio D, et al. Subjects With Diabetes Mellitus Are at Increased Risk for Developing Tuberculosis: A Cohort Study in an Inner-City District of Barcelona (Spain). *Front Public Health*. 2022;10:789952. <https://www.ncbi.nlm.nih.gov/pubmed/35677764>.
7. Bai X, Gao P, Qian K, Yang J, Deng H, Fu T, et al. A Highly Sensitive and Specific Detection Method for Mycobacterium tuberculosis Fluoroquinolone Resistance Mutations Utilizing the CRISPR-Cas13a System. *Front Microbiol*. 2022;13:847373. <https://www.ncbi.nlm.nih.gov/pubmed/35633684>.
8. Barathi A, Krishnamoorthy Y, Sinha P, Horsburgh C, Hochberg N, Johnson E, et al. Effect of treatment adherence on the association between sex and unfavourable treatment outcomes among tuberculosis patients in Puducherry, India: a mediation analysis. *J Public Health (Oxf)*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35692180>.
9. Belachew T, Yaheya S, Tilahun N, Gebrie E, Seid R, Nega T, et al. Multidrug-Resistant Tuberculosis Treatment Outcome and Associated Factors at the University of Gondar Comprehensive Specialized Hospital: A Ten-Year Retrospective Study. *Infect Drug Resist*. 2022;15:2891-9. <https://www.ncbi.nlm.nih.gov/pubmed/35686191>.
10. Belete TM. Recent Progress in the Development of Novel Mycobacterium Cell Wall Inhibitor to Combat Drug-Resistant Tuberculosis. *Microbiol Insights*. 2022;15:11786361221099878. <https://www.ncbi.nlm.nih.gov/pubmed/35645569>.
11. Ben Salem S, Khouna A, Benkaraache M, Zizi N, Dikhaye S. [Cutaneous gums revealing multifocal tuberculosis]. *Rev Prat*. 2022;72(4):420. <https://www.ncbi.nlm.nih.gov/pubmed/35638989>.

12. Bernardo MNG, Alberto IRI, Alberto NRI, Eala MAB, Roa CC, Jr. The way forward for drug-resistant tuberculosis in the Philippines. *Lancet Infect Dis.* 2022;22(6):760. <https://www.ncbi.nlm.nih.gov/pubmed/35643095>.
13. Berra TZ, Ramos ACV, Arroyo LH, Delpino FM, de Almeida Crispim J, Alves YM, et al. Risk-prone territories for spreading tuberculosis, temporal trends and their determinants in a high burden city from Sao Paulo State, Brazil. *BMC Infect Dis.* 2022;22(1):515. <https://www.ncbi.nlm.nih.gov/pubmed/35655177>.
14. Berry C, du Cros P, Fielding K, Gajewski S, Kazounis E, McHugh TD, et al. TB-PRACTECAL: study protocol for a randomised, controlled, open-label, phase II-III trial to evaluate the safety and efficacy of regimens containing bedaquiline and pretomanid for the treatment of adult patients with pulmonary multidrug-resistant tuberculosis. *Trials.* 2022;23(1):484. <https://www.ncbi.nlm.nih.gov/pubmed/35698158>.
15. Boloko L, Schutz C, Sibiyana N, Balfour A, Ward A, Shey M, et al. Xpert Ultra testing of blood in severe HIV-associated tuberculosis to detect and measure Mycobacterium tuberculosis blood stream infection: a diagnostic and disease biomarker cohort study. *Lancet Microbe.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35644157>.
16. Butler J, Barry S. Rare case of cystic anterior mediastinal tuberculosis in an immunocompetent patient. *Respirol Case Rep.* 2022;10(7):e0987. <https://www.ncbi.nlm.nih.gov/pubmed/35685851>.
17. Caceres G, Calderon R, Ugarte-Gil C. Tuberculosis and comorbidities: treatment challenges in patients with comorbid diabetes mellitus and depression. *Ther Adv Infect Dis.* 2022;9:20499361221095831. <https://www.ncbi.nlm.nih.gov/pubmed/35646347>.
18. Cai L, Wang G, Zhang P, Hu X, Zhang H, Wang F, et al. The Progress of the Prevention and Treatment of Vitamin D to Tuberculosis. *Front Nutr.* 2022;9:873890. <https://www.ncbi.nlm.nih.gov/pubmed/35662926>.
19. Chen JH, Lee CH, Lee MR, Huang PY, Yen TH, Lee MC, et al. Bisphosphonate Use Is Not Associated With Tuberculosis Risk Among Patients With Osteoporosis: A Nationwide Cohort Study. *J Clin Pharmacol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35644012>.
20. Chen L, Liu C, Liang T, Ye Z, Huang S, Chen J, et al. Monocyte-to-Lymphocyte Ratio Was an Independent Factor of the Severity of Spinal Tuberculosis. *Oxid Med Cell Longev.* 2022;2022:7340330. <https://www.ncbi.nlm.nih.gov/pubmed/35633888>.
21. Chen P, Peng W, Qu R, He Y, Liu T, Huang J, et al. Fluorescence Aptasensor of Tuberculosis Interferon-gamma in Clinical Samples Regulated by Steric Hindrance and Selective Identification. *Anal Chem.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35694824>.
22. Chen Q, Hu C, Lu W, Hang T, Shao Y, Chen C, et al. Characteristics of alveolar macrophages in bronchioalveolar lavage fluids from active tuberculosis patients identified by single-cell RNA sequencing. *J Biomed Res.* 2022:167-80. <https://www.ncbi.nlm.nih.gov/pubmed/35635159>.

23. Chen WT, Liu ZC, Li MS, Zhou Y, Liang SJ, Yang Y. Tuberculosis-associated hemophagocytic lymphohistiocytosis misdiagnosed as systemic lupus erythematosus: A case report. *World J Clin Cases*. 2022;10(10):3178-87. <https://www.ncbi.nlm.nih.gov/pubmed/35647112>.
24. Cheng P, Wang L, Gong W. Cellular Immunity of Patients with Tuberculosis Combined with Diabetes. *J Immunol Res*. 2022;2022:6837745. <https://www.ncbi.nlm.nih.gov/pubmed/35692502>.
25. Cole MS, Howe MD, Buonomo JA, Sharma S, Lamont EA, Brody SI, et al. Cephem-Pyrazinoic Acid Conjugates: Circumventing Resistance in Mycobacterium tuberculosis. *Chemistry*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35697660>.
26. Comin J, Madacki J, Rabanaque I, Zuniga-Anton M, Ibarz D, Cebollada A, et al. The MtZ Strain: Molecular Characteristics and Outbreak Investigation of the Most Successful Mycobacterium tuberculosis Strain in Aragon Using Whole-Genome Sequencing. *Front Cell Infect Microbiol*. 2022;12:887134. <https://www.ncbi.nlm.nih.gov/pubmed/35685752>.
27. Da Silva de Sousa GG, Yamamura M, Moura de Araujo MF, Vieira Ramos AC, Arcencio RA, Pereira de Jesus Costa AC, et al. Vulnerable territories to tuberculosis-diabetes mellitus comorbidity in a northeastern Brazilian scenario. *J Infect Dev Ctries*. 2022;16(5):813-20. <https://www.ncbi.nlm.nih.gov/pubmed/35656952>.
28. Dahale AS, Puri AS, Verma A, Sachdeva S, Dalal A, Banerjee D. Extrapulmonary Tuberculosis in Cirrhosis: Too Familiar-Too Much Unknown. *J Clin Exp Hepatol*. 2022;12(3):1021-2. <https://www.ncbi.nlm.nih.gov/pubmed/35677517>.
29. Dahlan RH, Ompusunggu SE, Gondowardojo YRB, Priambodo R, Anugerah SW. Spinal tuberculosis: A case series and a literature review. *Surg Neurol Int*. 2022;13:196. <https://www.ncbi.nlm.nih.gov/pubmed/35673664>.
30. de Carvalho LPS. Gene-drug potency screening in M. tuberculosis. *Nat Microbiol*. 2022;7(6):743-4. <https://www.ncbi.nlm.nih.gov/pubmed/35637332>.
31. de Macedo Couto R, Santana GO, Ranzani OT, Waldman EA. One Health and surveillance of zoonotic tuberculosis in selected low-income, middle-income and high-income countries: A systematic review. *PLoS Negl Trop Dis*. 2022;16(6):e0010428. <https://www.ncbi.nlm.nih.gov/pubmed/35666731>.
32. Diriba G, Kebede A, Tola HH, Alemu A, Yenew B, Moga S, et al. Utility of line probe assay in detecting drug resistance and the associated mutations in patients with extrapulmonary tuberculosis in Addis Ababa, Ethiopia. *SAGE Open Med*. 2022;10:20503121221098241. <https://www.ncbi.nlm.nih.gov/pubmed/35646363>.
33. Dong J, Wang H. Multisystemic tuberculosis presenting with pulmonary, pleura, intestinal and bone involvement. *Am J Med Sci*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35675862>.
34. Dychiao RGK, Capistrano MPR, Flores GP, Yap CDD. Barriers to tuberculosis care in the Philippines. *Lancet Respir Med*. 2022;10(6):e55. <https://www.ncbi.nlm.nih.gov/pubmed/35659010>.

35. El-Masry OS, Muzaaheed. Incidence and assessment of demography-related risk factors associated with pulmonary tuberculosis in Saudi Arabia: A retrospective analysis. *Pak J Med Sci.* 2022;38(4Part-II):850-4. <https://www.ncbi.nlm.nih.gov/pubmed/35634615>.
36. Elston DM. Letter from the editor: Cost-effectiveness of tuberculosis screening in patients already on biologic therapy Link to JAAD-D-21-03004. *J Am Acad Dermatol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35643245>.
37. Esmail H, Narendran G, Nunn A. Drug-resistant tuberculosis: Promising progress with a note of caution. *Indian J Med Res.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35647946>.
38. Eun HJ, Lee J, Kang SJ, Lee BJ. The structural and functional investigation of the VapBC43 complex from *Mycobacterium tuberculosis*. *Biochem Biophys Res Commun.* 2022;616:19-25. <https://www.ncbi.nlm.nih.gov/pubmed/35636251>.
39. Fang XE, Chen DP, Tang LL, Mao YJ. Association between depression and malnutrition in pulmonary tuberculosis patients: A cross-sectional study. *World J Clin Cases.* 2022;10(14):4395-403. <https://www.ncbi.nlm.nih.gov/pubmed/35663071>.
40. Farina E, D'Amore C, Lancella L, Boccuzzi E, Ciofi Degli Atti ML, Reale A, et al. Alert sign and symptoms for the early diagnosis of pulmonary tuberculosis: analysis of patients followed by a tertiary pediatric hospital. *Ital J Pediatr.* 2022;48(1):90. <https://www.ncbi.nlm.nih.gov/pubmed/35698090>.
41. Finsterer J, Matovu D, Fiorini AC, Scorza FA. Consider cerebral tuberculosis as differential of SARS-CoV-2-associated acute, haemorrhagic, necrotising encephalitis. *Egypt J Neurol Psychiatr Neurosurg.* 2022;58(1):66. <https://www.ncbi.nlm.nih.gov/pubmed/35677886>.
42. Foreman TW, Nelson CE, Kauffman KD, Lora NE, Vinhaes CL, Dorosky DE, et al. CD4 T cells are rapidly depleted from tuberculosis granulomas following acute SIV co-infection. *Cell Rep.* 2022;39(9):110896. <https://www.ncbi.nlm.nih.gov/pubmed/35649361>.
43. Garcia-Basteiro AL, White RG, Tait D, Schmidt AC, Rangaka MX, Quaife M, et al. End-point definition and trial design to advance tuberculosis vaccine development. *Eur Respir Rev.* 2022;31(164). <https://www.ncbi.nlm.nih.gov/pubmed/35675923>.
44. Gartini S, Ramdani A, Rhazari M, Thouil A, Kouismi H, Aharmim M, et al. Exceptional association of hepatic and pancreatic tuberculosis mimicking metastatic pancreatic neoplasia: A case report and review of the literature. *Ann Med Surg (Lond).* 2022;77:103717. <https://www.ncbi.nlm.nih.gov/pubmed/35638024>.
45. Gausi K, Chirehwa M, Ignatius EH, Court R, Sun X, Moran L, et al. Pharmacokinetics of standard versus high-dose isoniazid for treatment of multidrug-resistant tuberculosis. *J Antimicrob Chemother.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35678468>.
46. Getachew S, Medhin G, Asres A, Abebe G, Ameni G. Traditional medicinal plants used in the treatment of tuberculosis in Ethiopia: A systematic review. *Heliyon.* 2022;8(5):e09478. <https://www.ncbi.nlm.nih.gov/pubmed/35647341>.

47. Gioseffi JR, Batista R, Brignol SM. Tuberculosis, vulnerabilities, and HIV in homeless persons: a systematic review. *Rev Saude Publica*. 2022;56:43. <https://www.ncbi.nlm.nih.gov/pubmed/35649090>.
48. Goodall RL, Sanders K, Bronson G, Gurumurthy M, Torrea G, Meredith S, et al. Keeping up with the guidelines: design changes to the STREAM stage 2 randomised controlled non-inferiority trial for rifampicin-resistant tuberculosis. *Trials*. 2022;23(1):474. <https://www.ncbi.nlm.nih.gov/pubmed/35672833>.
49. Guan LS, Jun TK, Azman M, Baki MM. Primary Laryngeal Tuberculosis Manifesting as Irregular Vocal Fold Lesion. *Turk Arch Otorhinolaryngol*. 2022;60(1):47-52. <https://www.ncbi.nlm.nih.gov/pubmed/35634235>.
50. Gullon Blanco JA, Rodrigo Sanz T, Alvarez Navascues F, Tabernero Huguet E, Sabria Mestres J, Garcia-Garcia JM, et al. Tuberculosis contacts study: Organization and prevalence of latent tuberculosis infection. *Arch Bronconeumol*. 2021;57(7):509-11. <https://www.ncbi.nlm.nih.gov/pubmed/35698967>.
51. Gunther G, Saathoff E, Rachow A, Ekandjo H, Diergaardt A, Marais N, et al. Clinical Evaluation of a Line-Probe Assay for Tuberculosis Detection and Drug-Resistance Prediction in Namibia. *Microbiol Spectr*. 2022:e0025922. <https://www.ncbi.nlm.nih.gov/pubmed/35670620>.
52. Guo Q, Bi J, Lin Q, Ye T, Wang Z, Wang Z, et al. Whole Genome Sequencing Identifies Novel Mutations Associated With Bedaquiline Resistance in Mycobacterium tuberculosis. *Front Cell Infect Microbiol*. 2022;12:807095. <https://www.ncbi.nlm.nih.gov/pubmed/35694543>.
53. Gurer Giray B, Aslanturk A, Simsek H, Ozgur D, Kilic S, Aslan G. Determination of genetic diversity of multidrug-resistant Mycobacterium tuberculosis strains in Turkey using 15 locus MIRU-VNTR and spoligotyping methods. *Pathog Glob Health*. 2022:1-7. <https://www.ncbi.nlm.nih.gov/pubmed/35642888>.
54. Hall MB, Coin LJM. Assessment of the 2021 WHO Mycobacterium tuberculosis drug resistance mutation catalogue on an independent dataset. *Lancet Microbe*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35659881>.
55. Hanwarinroj C, Thongdee P, Sukchit D, Taveepanich S, Kamsri P, Punkvang A, et al. In silico design of novel quinazoline-based compounds as potential Mycobacterium tuberculosis PknB inhibitors through 2D and 3D-QSAR, molecular dynamics simulations combined with pharmacokinetic predictions. *J Mol Graph Model*. 2022;115:108231. <https://www.ncbi.nlm.nih.gov/pubmed/35667143>.
56. Hatami H, Sotgiu G, Bostanghadiri N, Abadi SSD, Mesgarpour B, Goudarzi H, et al. Bedaquiline-containing regimens and multidrug-resistant tuberculosis: a systematic review and meta-analysis. *J Bras Pneumol*. 2022;48(2):e20210384. <https://www.ncbi.nlm.nih.gov/pubmed/35649043>.
57. Horsburgh CR, Jo Y, Nichols B, Jenkins HE, Russell CA, White LF. The contribution of reinfection to annual rate of tuberculosis infection (ARI) and incidence of TB disease. *Clin Infect Dis*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35666515>.

58. Houben R, Esmail H, Cobelens F, Williams CML, Coussens AK. Tuberculosis prevalence: beyond the tip of the iceberg. *Lancet Respir Med.* 2022;10(6):537-9. <https://www.ncbi.nlm.nih.gov/pubmed/35659006>.
59. Huang K, Hu CY, Yang XY, Zhang Y, Wang XQ, Zhang KD, et al. Contributions of ambient temperature and relative humidity to the risk of tuberculosis admissions: A multicity study in Central China. *Sci Total Environ.* 2022;838(Pt 3):156272. <https://www.ncbi.nlm.nih.gov/pubmed/35644395>.
60. Huang W, Fang Z, Luo S, Lin S, Xu L, Yan B, et al. The effect of BCG vaccination and risk factors for latent tuberculosis infection among college freshmen in China. *Int J Infect Dis.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35700876>.
61. Huang Z, LaCourse SM, Kay AW, Stern J, Escudero JN, Youngquist BM, et al. CRISPR detection of circulating cell-free Mycobacterium tuberculosis DNA in adults and children, including children with HIV: a molecular diagnostics study. *Lancet Microbe.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35659882>.
62. Huang Z, Luo W, Xu D, Guo F, Yang M, Zhu Y, et al. Discovery and preclinical profile of sudapyridine (WX-081), a novel anti-tuberculosis agent. *Bioorg Med Chem Lett.* 2022;71:128824. <https://www.ncbi.nlm.nih.gov/pubmed/35636648>.
63. Imtiaz S, Batubara EM. Diagnostic value of bronchoscopy in sputum-negative pulmonary tuberculosis patients and its correlation with clinicoradiological features. *Ann Thorac Med.* 2022;17(2):124-31. <https://www.ncbi.nlm.nih.gov/pubmed/35651890>.
64. Indirawati NN, Yuniastuti E, Yulianti M, Nasir UZ, Wulandari D, Rinaldi I. Lateral Flow Urine Lipoarabinomannan Assay for Extrapulmonary Tuberculosis Diagnosis in Hiv Positive Adults. *Int J Infect Dis.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35690363>.
65. Iqbal Z, Khan MA, Aziz A, Nasir SM. Time for culture conversion and its associated factors in multidrug-resistant tuberculosis patients at a tertiary level hospital in Peshawar, Pakistan. *Pak J Med Sci.* 2022;38(4Part-II):1009-15. <https://www.ncbi.nlm.nih.gov/pubmed/35634598>.
66. Jeong D, Kang HY, Kim J, Lee H, Yoo BN, Kim HS, et al. Cohort Profile: Korean Tuberculosis and Post-Tuberculosis Cohort Constructed by Linking the Korean National Tuberculosis Surveillance System and National Health Information Database. *J Prev Med Public Health.* 2022;55(3):253-62. <https://www.ncbi.nlm.nih.gov/pubmed/35677999>.
67. Jia Q, Maslesa-Galic S, Nava S, Horwitz MA. Listeria-Vectored Multiantigenic Tuberculosis Vaccine Enhances Protective Immunity against Aerosol Challenge with Virulent Mycobacterium tuberculosis in BCG-Immunized C57BL/6 and BALB/c Mice. *mBio.* 2022:e0068722. <https://www.ncbi.nlm.nih.gov/pubmed/35642945>.
68. Jiang Y, Zhao X, Fan Z. Intelligence Classification Algorithm-Based Drug-Resistant Pulmonary Tuberculosis Computed Tomography Imaging Features and Influencing Factors. *Comput Intell Neurosci.* 2022;2022:3141807. <https://www.ncbi.nlm.nih.gov/pubmed/35634067>.

69. Kamra E, Alam D, Singh V, Kumar M, Chauhan M, Mehta PK. Diagnosis of urogenital tuberculosis by multiplex-nested PCR targeting mpt64 (Rv1980c) and IS6110: comparison with multiplex PCR and GeneXpert(R) MTB/RIF. *Lett Appl Microbiol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35673975>.
70. Kang TG, Kwon KW, Kim K, Lee I, Kim MJ, Ha SJ, et al. Viral coinfection promotes tuberculosis immunopathogenesis by type I IFN signaling-dependent impediment of Th1 cell pulmonary influx. *Nat Commun.* 2022;13(1):3155. <https://www.ncbi.nlm.nih.gov/pubmed/35672321>.
71. Khalili SA, Yaquobi FA, Abri BA, Thuhli KA, Marshoudi SA, Rawahi BA, et al. Assessing Oman's knowledge, attitude and practice regarding tuberculosis: a cross-sectional study that calls for action. *Int J Infect Dis.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35697196>.
72. Khan A, Amedu OS, Kumar P, Chukwurah A, Kolawole OA, Unedu OR. Tuberculosis of Patella Complicated by Synovitis of Knee Joint: A Case Report. *Cureus.* 2022;14(4):e24618. <https://www.ncbi.nlm.nih.gov/pubmed/35651461>.
73. Khan MA, Perveen F, Khan MA, Jameel M, Khan N, Tahir Z, et al. Process evaluation of chest camps for increased tuberculosis case finding in Punjab, Pakistan. *Aust J Prim Health.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35638126>.
74. Khan N, Das A. Can the personalized medicine approach contribute in controlling tuberculosis in general and India in particular? *Precis Clin Med.* 2020;3(3):240-3. <https://www.ncbi.nlm.nih.gov/pubmed/35694414>.
75. Khongyot T, Laopaiboonkun S, Kawpradid T, Jitkamrop K, Chanphakphoom T, Uitrakul S. Levofloxacin Use in Patients with Suspected Tuberculosis in a Community Hospital, Thailand: A Pilot Study. *Adv Pharmacol Pharm Sci.* 2022;2022:5647071. <https://www.ncbi.nlm.nih.gov/pubmed/35692873>.
76. Khor IS, Lim JL, Ngu NH, Lam YF, Kumaresh RL. Tree-in-Bud Opacities: Not only tuberculosis. *Med J Malaysia.* 2022;77(3):397-8. <https://www.ncbi.nlm.nih.gov/pubmed/35638499>.
77. Khoza LJ, Kumar P, Dube A, Demana PH, Choonara YE. Insights into innovative therapeutics for drug-resistant tuberculosis: Host-directed therapy and autophagy inducing modified nanoparticles. *Int J Pharm.* 2022;622:121893. <https://www.ncbi.nlm.nih.gov/pubmed/35680110>.
78. Kleinwaks G, Schmit V, Morrison J. Corrigendum to "Considering human challenge trials for tuberculosis vaccine development" [Vaccine 40(2) (2022) 173-174]. *Vaccine.* 2022;40(29):3984. <https://www.ncbi.nlm.nih.gov/pubmed/35641359>.
79. Kumar R, Singh N, Chauhan A, Kumar M, Bhatta RS, Singh SK. Mycobacterium tuberculosis survival and biofilm formation studies: effect of D-amino acids, D-cycloserine and its components. *J Antibiot (Tokyo).* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35650279>.

80. Kumari U, Ghani A, Abbas F. Time to Reconsider the Inhaled Drugs for Tuberculosis. *J Coll Physicians Surg Pak.* 2022;32(6):831-2. <https://www.ncbi.nlm.nih.gov/pubmed/35686426>.
81. Kura MM, Sodhi A, Chavhan S, Kadu P. Lichenoid Drug Eruption Progressing into Erythroderma in A Case of Cervical Scrofuloderma Due to Multi Drug-Resistant Tuberculosis. *Indian J Dermatol.* 2022;67(1):77-9. <https://www.ncbi.nlm.nih.gov/pubmed/35656242>.
82. Kuwabara G, Yamada K, Tanaka K, Nozuchi S, Imoto W, Shibata W, et al. A Case of Muscle Biopsy-proven Drug-induced Microscopic Polyangiitis in a Patient with Tuberculosis. *Intern Med.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35650134>.
83. Lalwani SS, Jain MJ, Vardhan VD, Yadav VD, Lakkadsha TM, Saifee SSH. Rehabilitation towards functional independence in patient with abdominal tuberculosis undergone abdominal surgery: a case report. *Pan Afr Med J.* 2022;41:195. <https://www.ncbi.nlm.nih.gov/pubmed/35685106>.
84. Larenas-Munoz F, Sanchez-Carvajal JM, Galan-Relano A, Ruedas-Torres I, Vera-Salmoral E, Gomez-Gascon L, et al. The Role of Histopathology as a Complementary Diagnostic Tool in the Monitoring of Bovine Tuberculosis. *Front Vet Sci.* 2022;9:816190. <https://www.ncbi.nlm.nih.gov/pubmed/35647097>.
85. Lazarchik A, Nyaruhirira AU, Chiang CY, Wares F, Horsburgh CR. Global availability of susceptibility testing for second-line anti-tuberculosis agents. *Int J Tuberc Lung Dis.* 2022;26(6):524-8. <https://www.ncbi.nlm.nih.gov/pubmed/35650708>.
86. Le Gal L, de Chargere B, Guyon A, Quilhot P, Agbo-Godeau S, Rochefort J. [A revealing oral tuberculosis]. *Rev Prat.* 2022;72(3):289. <https://www.ncbi.nlm.nih.gov/pubmed/35638954>.
87. Li J, Yang T, Hong C, Yang Z, Wu L, Gao Q, et al. Whole-Genome Sequencing for Resistance Level Prediction in Multidrug-Resistant Tuberculosis. *Microbiol Spectr.* 2022:e0271421. <https://www.ncbi.nlm.nih.gov/pubmed/35658579>.
88. Li S, Poulton NC, Chang JS, Azadian ZA, DeJesus MA, Ruecker N, et al. CRISPRi chemical genetics and comparative genomics identify genes mediating drug potency in Mycobacterium tuberculosis. *Nat Microbiol.* 2022;7(6):766-79. <https://www.ncbi.nlm.nih.gov/pubmed/35637331>.
89. Liao F, Huang Z, Xu R, Luo Z, Qi W, Fan B, et al. Analysis of misdiagnosis and 18F-FDG PET/CT findings of lymph node tuberculosis. *J Xray Sci Technol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35694951>.
90. Lin ZZ, Chen D, Liu S, Yu JH, Liu SR, Zhu ML. Mycobacterium tuberculosis bacteremia in a human immunodeficiency virus-negative patient with liver cirrhosis: A case report. *World J Clin Cases.* 2022;10(10):3284-90. <https://www.ncbi.nlm.nih.gov/pubmed/35647124>.
91. Liu HT, Fu L, Wang B, Wang N, Li DS, Ding YM, et al. [Study on the pharmacodynamic activity of combinations with the new anti-tuberculosis drug pyrifazimine in vitro and in vivo in mouse]. *Zhonghua Jie He He Hu Xi Za Zhi.* 2022;45(6):560-6. <https://www.ncbi.nlm.nih.gov/pubmed/35658380>.

92. Liu K, Ai L, Pan J, Fei F, Chen S, Zhang Y, et al. Survival Analysis and Associated Factors for Pulmonary Tuberculosis Death: Evidence from the Information System of Tuberculosis Disease and Mortality Surveillance in China. *Risk Manag Healthc Policy*. 2022;15:1167-78. <https://www.ncbi.nlm.nih.gov/pubmed/35669895>.
93. Liu K, Wang D, Yao C, Qiao M, Li Q, Ren W, et al. Increased Tuberculosis Incidence Due to Immunotherapy Based on PD-1 and PD-L1 Blockade: A Systematic Review and Meta-Analysis. *Front Immunol*. 2022;13:727220. <https://www.ncbi.nlm.nih.gov/pubmed/35663958>.
94. Liu Q, Chen X, Dai X. The association of cytokine gene polymorphisms with tuberculosis susceptibility in several regional populations. *Cytokine*. 2022;156:155915. <https://www.ncbi.nlm.nih.gov/pubmed/35653894>.
95. Liu Q, Qiu B, Li G, Yang T, Tao B, Martinez L, et al. Tuberculosis reinfection and relapse in eastern China: A prospective study using whole-genome sequencing. *Clin Microbiol Infect*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35700940>.
96. Liu YY, Shi J, Chu P, Wu TY, Li L, Pang Y, et al. [Exploratory study on detection of drug resistance of Mycobacterium tuberculosis in sputum specimens by next-generation sequencing]. *Zhonghua Jie He He Hu Xi Za Zhi*. 2022;45(6):552-9. <https://www.ncbi.nlm.nih.gov/pubmed/35658379>.
97. Luo D, Wu J, Liu Y, Li P, Liang X, Xiao S, et al. Overexpression of VPS11 antagonizes the promoting effect of miR-542-3p on Mycobacterium tuberculosis survival in macrophages by regulating autophagy. *Microb Pathog*. 2022;169:105609. <https://www.ncbi.nlm.nih.gov/pubmed/35662671>.
98. Ma S, Zhou Z, Yu H, Zhong J, Xiong J, Xu J, et al. Global Spinal Realignment After Osteotomized Debridement in Active Lumbar Spinal Tuberculosis: Correlation with Patient-Reported Outcomes. *World Neurosurg*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35659592>.
99. Ma ZT, Wang N, He F, Liu XF, Shen X. Spatial-temporal Analysis of Tuberculosis at the Community Level in the Baoshan District, Shanghai 2014-2019. *Biomed Environ Sci*. 2022;35(5):458-62. <https://www.ncbi.nlm.nih.gov/pubmed/35676817>.
100. Maciel EL, Golub JE, Silva J, Chaisson RE. Tuberculosis: a deadly and neglected disease in the COVID-19 era. *J Bras Pneumol*. 2022;48(3):e20220056. <https://www.ncbi.nlm.nih.gov/pubmed/35674546>.
101. Magoulopoulou A, Qian X, Peditama Setiabudiawan T, Marco Salas S, Yokota C, Rottenberg ME, et al. Spatial Resolution of Mycobacterium tuberculosis Bacteria and Their Surrounding Immune Environments Based on Selected Key Transcripts in Mouse Lungs. *Front Immunol*. 2022;13:876321. <https://www.ncbi.nlm.nih.gov/pubmed/35663950>.
102. Marais BJ, Graham SM. The Value of Chest Radiography in Tuberculosis Preventive Treatment (TPT) Screening in Children and Adolescents. *Am J Respir Crit Care Med*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35653694>.

103. Martins M, Carvalho L, Carvalho T, Gomes I. Impact of the COVID-19 pandemic on in-hospital diagnosis of tuberculosis in non-HIV patients. *Pulmonology*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35697607>.
104. Mathad JS, Queiroz ATL, Bhosale R, Alexander M, Naik S, Kulkarni V, et al. Transcriptional analysis for tuberculosis in pregnant women from the PRACHITi study. *Clin Infect Dis*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35686302>.
105. Mathebula L, Mapahla L, Nurkhametova D, Ziganshina LE, Mazinu M, Jordan E, et al. Planned, ongoing and completed tuberculosis treatment trials in Brazil, Russia, India, China and South Africa: a 2019 cross-sectional descriptive analysis. *BMJ Open*. 2022;12(6):e057941. <https://www.ncbi.nlm.nih.gov/pubmed/35680261>.
106. Matteucci KC, Correa AAS, Costa DL. Recent Advances in Host-Directed Therapies for Tuberculosis and Malaria. *Front Cell Infect Microbiol*. 2022;12:905278. <https://www.ncbi.nlm.nih.gov/pubmed/35669122>.
107. Maya-Hoyos M, Mata-Espinosa D, Lopez-Torres MO, Tovar-Vazquez B, Barrios-Payan J, Leon-Contreras JC, et al. The ctpF Gene Encoding a Calcium P-Type ATPase of the Plasma Membrane Contributes to Full Virulence of Mycobacterium tuberculosis. *Int J Mol Sci*. 2022;23(11). <https://www.ncbi.nlm.nih.gov/pubmed/35682696>.
108. Meaza A, Tola HH, Eshetu K, Mindaye T, Medhin G, Gumi B. Tuberculosis among refugees and migrant populations: Systematic review. *PLoS One*. 2022;17(6):e0268696. <https://www.ncbi.nlm.nih.gov/pubmed/35679258>.
109. Meregildo-Rodriguez ED, Chunga-Chevez EV, Gianmarco RL, Vasquez-Tirado GA. Further insights into the role of statins against active tuberculosis: systematic review and meta-analysis. *Infect Med*. 2022;30(2):194-203. <https://www.ncbi.nlm.nih.gov/pubmed/35693063>.
110. Mishra A, Singh VK, Jagannath C, Subbian S, Restrepo BI, Gauduin MC, et al. Human Macrophages Exhibit GM-CSF Dependent Restriction of Mycobacterium tuberculosis Infection via Regulating Their Self-Survival, Differentiation and Metabolism. *Front Immunol*. 2022;13:859116. <https://www.ncbi.nlm.nih.gov/pubmed/35634283>.
111. Mocanu AI, Mocanu H, Moldovan C, Soare I, Niculet E, Tatu AL, et al. Some Manifestations of Tuberculosis in Otorhinolaryngology - Case Series and a Short Review of Related Data from South-Eastern Europe. *Infect Drug Resist*. 2022;15:2753-62. <https://www.ncbi.nlm.nih.gov/pubmed/35668856>.
112. Mohammed KAS, Khudhair GS, Al-Rabai DB. Prevalence and Drug Resistance Pattern of Mycobacterium tuberculosis Isolated from Tuberculosis Patients in Basra, Iraq. *Pol J Microbiol*. 2022;71(2):205-15. <https://www.ncbi.nlm.nih.gov/pubmed/35675816>.
113. Montalvo R, Diaz A, Montalvo J, Pomazongo M, Montalvo M, Tunque E. Disseminated paracoccidioidomycosis associated with lymph node tuberculosis in a non immunocompromised child. *IDCases*. 2022;29:e01507. <https://www.ncbi.nlm.nih.gov/pubmed/35663608>.

114. Montoya JC, Malabad JCM, Ang CF, Reyes LT, Basilio RP, Lim DR, et al. Molecular characterization of drug-resistant Mycobacterium tuberculosis among Filipino patients derived from the national tuberculosis prevalence survey Philippines 2016. *Tuberculosis (Edinb)*. 2022;135:102211. <https://www.ncbi.nlm.nih.gov/pubmed/35636102>.
115. Mor P, Dahiya B, Sharma S, Sheoran A, Parshad S, Malhotra P, et al. Diagnosis of peritoneal tuberculosis by real-time immuno-PCR assay based on detection of a cocktail of Mycobacterium tuberculosis CFP-10 and HspX proteins. *Expert Rev Gastroenterol Hepatol*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35678762>.
116. Nagendran S, Balasubramanian S, Irfan N. Virtually screened novel sulfathiazole derivatives as a potential drug candidate for methicillin-resistant Staphylococcus aureus and multidrug-resistant tuberculosis. *J Biomol Struct Dyn*. 2022:1-10. <https://www.ncbi.nlm.nih.gov/pubmed/35635120>.
117. Nakamura S, Muramae N, Fujisawa A, Yasuda N, Okano M, Mori K, et al. Hemophagocytic Syndrome-Like Tuberculosis-Immune Reconstitution Inflammatory Syndrome After the Initiation of Hepatic Tuberculosis Treatment. *Cureus*. 2022;14(5):e24644. <https://www.ncbi.nlm.nih.gov/pubmed/35663666>.
118. Nakiyingi L, Baluku JB, Ssengooba W, Namiro SM, Buyego P, Kimuli I, et al. Recurrent pneumothorax in a human immunodeficiency virus-positive patient with multidrug-resistant tuberculosis: a rare case of bronchopleural fistula: a case report. *J Med Case Rep*. 2022;16(1):214. <https://www.ncbi.nlm.nih.gov/pubmed/35637524>.
119. Neema S, Sandhu S, Mukherjee S, Vashisht D, Vendhan S, Sinha A, et al. Comparison of Interferon Gamma Release Assay and Tuberculin Skin Test for Diagnosis of Latent Tuberculosis in Psoriasis Patients Planned for Systemic Therapy. *Indian J Dermatol*. 2022;67(1):19-25. <https://www.ncbi.nlm.nih.gov/pubmed/35656280>.
120. Negi S, Pahari S, Das DK, Khan N, Agrewala JN. Corrigendum: Curdian Limits Mycobacterium tuberculosis Survival Through STAT-1 Regulated Nitric Oxide Production. *Front Microbiol*. 2022;13:924981. <https://www.ncbi.nlm.nih.gov/pubmed/35663892>.
121. Nestic V, Marinkovic D, Matovic K, Radakovic M, Davitkov D, Vaskovic N, et al. Avian tuberculosis in a free-living Eurasian griffon vulture. *J Vet Diagn Invest*. 2022:10406387221102432. <https://www.ncbi.nlm.nih.gov/pubmed/35673774>.
122. Nguyen HV, de Haas P, Nguyen HB, Nguyen NV, Cobelens FGJ, Mirtskhulava V, et al. Discordant results of Xpert MTB/Rif assay and BACTEC MGIT 960 liquid culture to detect Mycobacterium tuberculosis in community screening in Vietnam. *BMC Infect Dis*. 2022;22(1):506. <https://www.ncbi.nlm.nih.gov/pubmed/35641936>.
123. Niazkar HR, Zibae B, Razavi SB, Ghanaeian K, Talebzadeh V, Vosugh NH. Evaluation of tuberculosis infection in COVID-19 patients: a case of tuberculosis and COVID-19 co-infection. *Egypt J Intern Med*. 2022;34(1):46. <https://www.ncbi.nlm.nih.gov/pubmed/35669934>.
124. Niedermeyer S, Draenert R, Beck A, Todorova R, Jung A, Biczok AM, et al. Spinal Tuberculosis within the Vertebral Arch Mimicking a Malignant Tumor: Case Report. *J Neurol Surg A Cent Eur Neurosurg*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35668672>.

125. Niu H, Bai C, Li F, Ma L, He J, Shi X, et al. Pyrazinamide enhances persistence of T-cell memory induced by tuberculosis subunit vaccine LT70. *Tuberculosis (Edinb)*. 2022;135:102220. <https://www.ncbi.nlm.nih.gov/pubmed/35679762>.
126. Nsengiyumva NP, Campbell JR, Oxlade O, Vesga JF, Lienhardt C, Trajman A, et al. Scaling up target regimens for tuberculosis preventive treatment in Brazil and South Africa: An analysis of costs and cost-effectiveness. *PLoS Med*. 2022;19(6):e1004032. <https://www.ncbi.nlm.nih.gov/pubmed/35696431>.
127. Ntinginya NE, Te Brake L, Sabi I, Chamba N, Kilonzo K, Laizer S, et al. Rifapentine and isoniazid for prevention of tuberculosis in people with diabetes (PROTID): protocol for a randomised controlled trial. *Trials*. 2022;23(1):480. <https://www.ncbi.nlm.nih.gov/pubmed/35689272>.
128. Ohgiya M, Sasaki Y, Yamane A, Nakamura S, Matsui H. A 73-year-old man with loss of consciousness during treatment for miliary tuberculosis. *Respirol Case Rep*. 2022;10(6):e0981. <https://www.ncbi.nlm.nih.gov/pubmed/35664634>.
129. Olivenca F, Nunes A, Macedo R, Pires D, Silveiro C, Anes E, et al. Uncovering Beta-Lactam Susceptibility Patterns in Clinical Isolates of Mycobacterium tuberculosis through Whole-Genome Sequencing. *Microbiol Spectr*. 2022:e0067422. <https://www.ncbi.nlm.nih.gov/pubmed/35695524>.
130. Pan XH, Xu JK, Pan L, Wang CH, Huang XQ, Qiu JK, et al. Concurrent severe pulmonary tuberculosis with Evans syndrome: a case report with literature review. *BMC Infect Dis*. 2022;22(1):533. <https://www.ncbi.nlm.nih.gov/pubmed/35692044>.
131. Pantha S, Aguinaldo MJ, Hasan-Ul-Bari SM, Chowdhury S, Dendup U, Gupta RD, et al. Facilitators and Barriers to Implementation of a Childhood Tuberculosis Control Program in Bangladesh: A Mixed-Methods Study from BRAC Urban DOTS Centres in Dhaka. *Nurs Rep*. 2022;12(2):371-86. <https://www.ncbi.nlm.nih.gov/pubmed/35645362>.
132. Pelissari DM, Saita NM, Monroe AA, Diaz-Quijano FA. Environmental factors associated with the time to tuberculosis diagnosis in prisoners in Sao Paulo, Brazil. *Am J Infect Control*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35644298>.
133. Pelzer PT, Smit Y, Tiemersma EW, Huong NT, Nhung NV, Cobelens F. Does BCG vaccination protect against infection with M. tuberculosis? *Int J Tuberc Lung Dis*. 2022;26(6):529-36. <https://www.ncbi.nlm.nih.gov/pubmed/35650705>.
134. Petnak T, Eksombatchai D, Chesdachai S, Lertjitbanjong P, Taweeseedt P, Pornchai A, et al. Diagnostic accuracy of interferon-gamma release assays for diagnosis of smear-negative pulmonary tuberculosis: a systematic review and meta-analysis. *BMC Pulm Med*. 2022;22(1):219. <https://www.ncbi.nlm.nih.gov/pubmed/35668411>.
135. Piotto D, Nicacio A, Neto A, Mourao AF, Oliveira-Ramos F, Campanilho-Marques R, et al. Spotlight on latent tuberculosis infection screening for juvenile idiopathic arthritis in two countries, comparing high and low risk patients. *Adv Rheumatol*. 2022;62(1):20. <https://www.ncbi.nlm.nih.gov/pubmed/35689240>.

136. Pitaloka DAE, Syamsunarno M, Abdulah R, Chaidir L. Omics Biomarkers for Monitoring Tuberculosis Treatment: A Mini-Review of Recent Insights and Future Approaches. *Infect Drug Resist.* 2022;15:2703-11. <https://www.ncbi.nlm.nih.gov/pubmed/35664683>.
137. Porter M, Choshi P, Pedretti S, Chimbete T, Smith R, Meintjes G, et al. IFN-gamma ELISpot in Severe Cutaneous Adverse Reactions to First-line Anti-tuberculosis Drugs in an HIV Endemic Setting. *J Invest Dermatol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35659939>.
138. Pradhan A, Koirala P, Bhandari SS, Dutta S, Garcia-Grau P, Sampath H, et al. Internalized and Perceived Stigma and Depression in Pulmonary Tuberculosis: Do They Explain the Relationship Between Drug Sensitivity Status and Adherence? *Front Psychiatry.* 2022;13:869647. <https://www.ncbi.nlm.nih.gov/pubmed/35664495>.
139. Qiu Y, Tang M, Zeng W, Feng X, Pan M, Li W, et al. Clinical findings and predictive factors for positive anti-interferon-gamma autoantibodies in patients suffering from a non-tuberculosis mycobacteria or *Talaromyces marneffeii* infection: a multicenter prospective cohort study. *Sci Rep.* 2022;12(1):9069. <https://www.ncbi.nlm.nih.gov/pubmed/35641599>.
140. Quan DH, Kwong AJ, Hansbro PM, Britton WJ. No smoke without fire: the impact of cigarette smoking on the immune control of tuberculosis. *Eur Respir Rev.* 2022;31(164). <https://www.ncbi.nlm.nih.gov/pubmed/35675921>.
141. Quinonez CG, Lee JJ, Lim J, Odell M, Lawson CP, Anyogu A, et al. Fatty acid metabolism of *Mycobacterium tuberculosis*: A double-edged sword. *Microb Cell.* 2022;9(5):123-5. <https://www.ncbi.nlm.nih.gov/pubmed/35647177>.
142. Rakotorahalahy R, Randrianandrasana S, Rajaobelison T, Ralaivao RA, Ramiliarijaona L, Rakotoarisoa AJC. [Tuberculosis of the chest wall: Report of a case at the Joseph Ravoahangy Andrianavalona Teaching Hospital, Antananarivo, Madagascar]. *Med Trop Sante Int.* 2021;1(3). <https://www.ncbi.nlm.nih.gov/pubmed/35686166>.
143. Rathod TN, Kolur SS, Yadav VK, Prabhu RM. Functional outcomes in the management of cervicothoracic junction tuberculosis. *Surg Neurol Int.* 2022;13:198. <https://www.ncbi.nlm.nih.gov/pubmed/35673661>.
144. Refaya AK, Ramanujam H, Ramalingam M, Rao GVS, Ravikumar D, Sangamithrai MD, et al. Tuberculosis caused by *Mycobacterium orygis* in wild ungulates in Chennai, South India. *Transbound Emerg Dis.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35678472>.
145. Renoux MC, Dutronc S, Kollen L, Theret S, Moreau J. A Case of Disseminated Tuberculosis in a Child with Crohn's Disease After Treatment with Azathioprine, Adalimumab and Ustekinumab. *Arch Bronconeumol.* 2021;57(8):552-4. <https://www.ncbi.nlm.nih.gov/pubmed/35699039>.
146. Rindi L. Rapid Molecular Diagnosis of Extra-Pulmonary Tuberculosis by Xpert/RIF Ultra. *Front Microbiol.* 2022;13:817661. <https://www.ncbi.nlm.nih.gov/pubmed/35633667>.

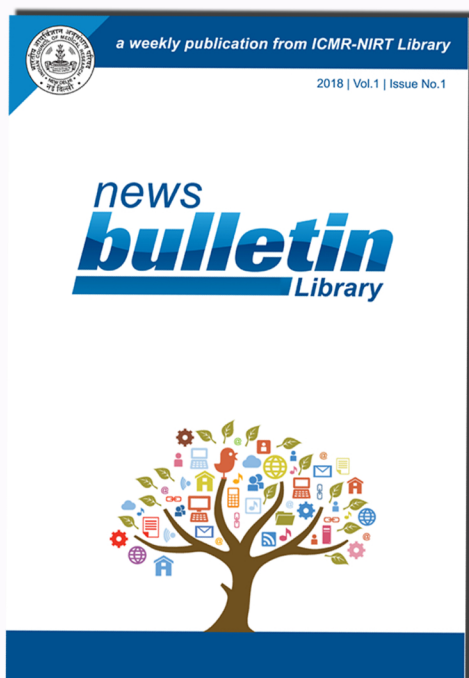
147. Rodriguez GM, Sharma N, Biswas A, Sharma N. The Iron Response of Mycobacterium tuberculosis and Its Implications for Tuberculosis Pathogenesis and Novel Therapeutics. *Front Cell Infect Microbiol.* 2022;12:876667. <https://www.ncbi.nlm.nih.gov/pubmed/35646739>.
148. Ryan JM, Dobos KM, Kruh-Garcia NA. Mycobacterium tuberculosis Extracellular Vesicle Enrichment through Size Exclusion Chromatography. *J Vis Exp.* 2022(183). <https://www.ncbi.nlm.nih.gov/pubmed/35661678>.
149. Sachdeva K, Kumar P, Kante B, Vuyyuru SK, Mohta S, Ranjan MK, et al. Interferon-gamma release assay has poor diagnostic accuracy in differentiating intestinal tuberculosis from Crohn's disease in tuberculosis endemic areas. *Intest Res.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35686294>.
150. Sahoo SK, Ahmad MN, Kaul G, Nanduri S, Dasgupta A, Chopra S, et al. Synthesis and evaluation of triazole congeners of nitro-benzothiazinones potentially active against drug resistant Mycobacterium tuberculosis demonstrating bactericidal efficacy. *RSC Med Chem.* 2022;13(5):585-93. <https://www.ncbi.nlm.nih.gov/pubmed/35694687>.
151. Said B, Nuwagira E, Liyoyo A, Arinaitwe R, Gitige C, Mushagara R, et al. Early empiric anti-Mycobacterium tuberculosis therapy for sepsis in sub-Saharan Africa: a protocol of a randomised clinical trial. *BMJ Open.* 2022;12(6):e061953. <https://www.ncbi.nlm.nih.gov/pubmed/35667721>.
152. Selvaraju S, Malaisamy M, Dolla CK, Murali L, Karikalan N, Saravanan B, et al. Application of mobile phone technology as intervention for the management of tuberculosis patients diagnosed through community survey. *Indian J Med Res.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35645094>.
153. Seo H, Kim S, Mahmud HA, Islam MI, Yoon Y, Cho HD, et al. A novel class of antimicrobial drugs selectively targets a Mycobacterium tuberculosis PE-PGRS protein. *PLoS Biol.* 2022;20(5):e3001648. <https://www.ncbi.nlm.nih.gov/pubmed/35639773>.
154. Shahzad M, Andrews SC, Ul-Haq Z. Exploring the role of Microbiome in Susceptibility, Treatment Response and Outcome among Tuberculosis Patients from Pakistan: study protocol for a prospective cohort study (Micro-STOP). *BMJ Open.* 2022;12(6):e058463. <https://www.ncbi.nlm.nih.gov/pubmed/35672071>.
155. Sheerin D, Abhimanyu, Peton N, Vo W, Allison CC, Wang X, et al. Immunopathogenic overlap between COVID-19 and tuberculosis identified from transcriptomic meta-analysis and human macrophage infection. *iScience.* 2022:104464. <https://www.ncbi.nlm.nih.gov/pubmed/35634577>.
156. Sheikhpour M, Delorme V, Kasaeian A, Amiri V, Masoumi M, Sadeghinia M, et al. An effective nano drug delivery and combination therapy for the treatment of Tuberculosis. *Sci Rep.* 2022;12(1):9591. <https://www.ncbi.nlm.nih.gov/pubmed/35688860>.
157. Shi Y, Guo W, Hu W, Li X, Shangguan Y, Feng X, et al. Aortic Involvement in Disseminated Tuberculosis - Challenges Beyond the Diagnosis. *Infect Drug Resist.* 2022;15:2633-8. <https://www.ncbi.nlm.nih.gov/pubmed/35634580>.

158. Siamisang K, Rankgoane-Pono G, Madisa TM, Mudiayi T, Tlhakanelo JT. Outcomes and predictors of tuberculosis mortality in Kweneng West District, Botswana: a retrospective cohort study. *Pan Afr Med J.* 2022;42:1. <https://www.ncbi.nlm.nih.gov/pubmed/35685381>.
159. Silva F, Enaud R, Creissen E, Henao-Tamayo M, Delhaes L, Izzo A. Mouse Subcutaneous BCG Vaccination and Mycobacterium tuberculosis Infection Alter the Lung and Gut Microbiota. *Microbiol Spectr.* 2022:e0169321. <https://www.ncbi.nlm.nih.gov/pubmed/35652642>.
160. Simmons JD, Dill-McFarland KA, Stein CM, Van PT, Chihota V, Ntshiqha T, et al. Monocyte Transcriptional Responses to Mycobacterium tuberculosis Associate with Resistance to Tuberculin Skin Test and Interferon Gamma Release Assay Conversion. *mSphere.* 2022:e0015922. <https://www.ncbi.nlm.nih.gov/pubmed/35695527>.
161. Singh S, Bolz M, Cornelius A, Desvignes L. Intravenous BCG driven antigen recognition in a murine tuberculosis model. *Comp Immunol Microbiol Infect Dis.* 2022;87:101838. <https://www.ncbi.nlm.nih.gov/pubmed/35700556>.
162. Sinha S, Gupta G, Biswas S, Gupta K, Singh PP, Jain R, et al. Coronin-1 levels in patients with tuberculosis. *Indian J Med Res.* 2021;154(6):866-70. <https://www.ncbi.nlm.nih.gov/pubmed/35662092>.
163. Soares P, Aguiar A, Leite A, Duarte R, Nunes C. Ecological factors associated with areas of high tuberculosis diagnosis delay. *Public Health.* 2022;208:32-9. <https://www.ncbi.nlm.nih.gov/pubmed/35687953>.
164. Sun LL, Dong S, Xu JL, Zhu JX, Liu J. Clinical diagnosis and treatment of primary thyroid tuberculosis: a retrospective study. *Sao Paulo Med J.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35674611>.
165. Suttels V, Wachinou P, Toit JD, Boillat-Blanco N, Hartley MA. Ultrasound for point-of-care sputum-free tuberculosis detection: Building collaborative standardized image-banks. *EBioMedicine.* 2022;81:104078. <https://www.ncbi.nlm.nih.gov/pubmed/35649304>.
166. Tanaka S, Hagiya H, Otsuka F. Tuberculous Aortic Aneurysm Developed with Miliary Tuberculosis. *QJM.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35678564>.
167. Tanneau L, Karlsson MO, Diacon AH, Shenje J, De Los Rios J, Wiesner L, et al. Population Pharmacokinetics of Delamanid and its Main Metabolite DM-6705 in Drug-Resistant Tuberculosis Patients Receiving Delamanid Alone or Coadministered with Bedaquiline. *Clin Pharmacokinet.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35668346>.
168. Teco-Cortes JA, Lazos-Ochoa M. Disseminated Tuberculosis. *Arch Bronconeumol.* 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35691785>.
169. The Lancet Respiratory M. Tackling tuberculosis: what lies beneath the surface? *Lancet Respir Med.* 2022;10(6):525. <https://www.ncbi.nlm.nih.gov/pubmed/35659005>.

170. Thompson RR, Kityamuwesi A, Kuan A, Oyuku D, Tucker A, Ferguson O, et al. Cost and Cost-Effectiveness of a Digital Adherence Technology for Tuberculosis Treatment Support in Uganda. *Value Health*. 2022;25(6):924-30. <https://www.ncbi.nlm.nih.gov/pubmed/35667781>.
171. Tomasi FG, Hall AMJ, Schweber JTP, Dulberger CL, McGowen K, Liu Q, et al. A tRNA-Acetylating Toxin and Detoxifying Enzyme in Mycobacterium tuberculosis. *Microbiol Spectr*. 2022:e0058022. <https://www.ncbi.nlm.nih.gov/pubmed/35638832>.
172. Turuk J, Giri S, Das D, Pati S. Reliability of MPT64 rapid test in identifying Mycobacterium tuberculosis complex. *Indian J Med Microbiol*. 2022. <https://www.ncbi.nlm.nih.gov/pubmed/35637094>.
173. Ueckermann V, Lebre P, Geldenhuys J, Hoosien E, Cowan D, van Rensburg LJ, et al. The lung microbiome in HIV-positive patients with active pulmonary tuberculosis. *Sci Rep*. 2022;12(1):8975. <https://www.ncbi.nlm.nih.gov/pubmed/35643931>.
174. Uwishema O, Badri R, Onyeaka H, Okereke M, Akhtar S, Mhanna M, et al. Fighting Tuberculosis in Africa: The Current Situation Amidst the COVID-19 Pandemic. *Disaster Med Public Health Prep*. 2022:1-12. <https://www.ncbi.nlm.nih.gov/pubmed/35673793>.
175. Van Aartsen D, Justine M, Mduma E, Mpagama SG, Alshaer MH, Peloquin CA, et al. Enteropathogen spectrum and effect on antimycobacterial pharmacokinetics among children with tuberculosis in rural Tanzania: a prospective cohort study. *Lancet Microbe*. 2022;3(6):e408-e16. <https://www.ncbi.nlm.nih.gov/pubmed/35659902>.
176. Vasigh M, Karoobi M, Montazeri M, Moradi G, Asefi H, Gilani A, et al. Isolated psoas abscess caused by Mycobacterium tuberculosis: A rare case report. *Clin Case Rep*. 2022;10(5):e05823. <https://www.ncbi.nlm.nih.gov/pubmed/35664522>.
177. Vlad RM, Smadeanu ER, Becheanu G, Darie R, Pacurar D. The diagnostic challenges in a child with intestinal tuberculosis. *Rom J Morphol Embryol*. 2021;62(4):1057-61. <https://www.ncbi.nlm.nih.gov/pubmed/35673826>.
178. Walker TM, Crook DW. Realising the Potential of Genomics for M. tuberculosis: A Silver Lining to the Pandemic? *China CDC Wkly*. 2022;4(20):437-9. <https://www.ncbi.nlm.nih.gov/pubmed/35685689>.
179. Walter KS, Dos Santos PCP, Goncalves TO, da Silva BO, da Silva Santos A, de Cassia Leite A, et al. The role of prisons in disseminating tuberculosis in Brazil: A genomic epidemiology study. *Lancet Reg Health Am*. 2022;9. <https://www.ncbi.nlm.nih.gov/pubmed/35647574>.
180. Wang W, Ning Y, Wang Y, Deng G, Pace S, Barth SA, et al. Mycobacterium tuberculosis-Induced Upregulation of the COX-2/mPGES-1 Pathway in Human Macrophages Is Abrogated by Sulfasalazine. *Front Immunol*. 2022;13:849583. <https://www.ncbi.nlm.nih.gov/pubmed/35663935>.

181. Wang Y, Chen M, Ni C, Tong J, Chen P, Zhang Y, et al. Case Report: Primary Mediastinal Large B-Cell Lymphoma Invasion of Extranodal Thyroid Tissue Mimicking Tuberculosis and Confounded by Similar Ultrasonic Appearance. *Front Oncol.* 2022;12:879295. <https://www.ncbi.nlm.nih.gov/pubmed/35664739>.
182. Wei Z, Zhang Y, Yang S, Ye J, Hu X, Li T, et al. Risk Factors of Bone Nonfusion After Spinal Tuberculosis Debridement Bone Graft Fusion and Internal Fixation. *Front Surg.* 2022;9:888148. <https://www.ncbi.nlm.nih.gov/pubmed/35662827>.
183. Wu LW, Wang L, Wen ZL, Ma H, Ou QF, Wu C, et al. [Screening and preliminary validation of biomarkers in sputum-negative pulmonary tuberculosis based on positron emission tomography/computed tomography and transcriptomics]. *Zhonghua Jie He He Hu Xi Za Zhi.* 2022;45(6):567-72. <https://www.ncbi.nlm.nih.gov/pubmed/35658381>.
184. Yogo N, Furukawa C, Hayano S. Paediatric progressive primary tuberculosis. *J Clin Tuberc Other Mycobact Dis.* 2022;28:100318. <https://www.ncbi.nlm.nih.gov/pubmed/35633895>.
185. Yu G, Shen Y, Zhong F, Zhou L, Chen G, Fang L, et al. Diagnostic accuracy of nanopore sequencing using respiratory specimens in the diagnosis of pulmonary tuberculosis. *Int J Infect Dis.* 2022;122:237-43. <https://www.ncbi.nlm.nih.gov/pubmed/35671950>.
186. Yun W, Huijuan C, Long L, Xiaolong L, Aihua Z. Time trend prediction and spatial-temporal analysis of multidrug-resistant tuberculosis in Guizhou Province, China, during 2014-2020. *BMC Infect Dis.* 2022;22(1):525. <https://www.ncbi.nlm.nih.gov/pubmed/35672746>.
187. Zha BS, Desvignes L, Fergus TJ, Cornelius A, Cheng TY, Moody DB, et al. Bacterial Strain-Dependent Dissociation of Cell Recruitment and Cell-to-Cell Spread in Early M. tuberculosis Infection. *mBio.* 2022:e0133222. <https://www.ncbi.nlm.nih.gov/pubmed/35695454>.
188. Zhan S, Juan X, Ren T, Wang Y, Fu L, Deng G, et al. Extensive Radiological Manifestation in Patients with Diabetes and Pulmonary Tuberculosis: A Cross-Sectional Study. *Theor Clin Risk Manag.* 2022;18:595-602. <https://www.ncbi.nlm.nih.gov/pubmed/35645562>.
189. Zhang P, Li W, Liu M, Zhan S, Zhang H, Deng G, et al. Linezolid-Associated Neuropathy in Patients with MDR/XDR Tuberculosis in Shenzhen, China. *Infect Drug Resist.* 2022;15:2617-24. <https://www.ncbi.nlm.nih.gov/pubmed/35634579>.
190. Zhang X, Chen C, Xu Y. Long Non-coding RNAs in Tuberculosis: From Immunity to Biomarkers. *Front Microbiol.* 2022;13:883513. <https://www.ncbi.nlm.nih.gov/pubmed/35633669>.
191. Zheng R, Xu F, Huang X, Wang J, Feng Y, Huang J, et al. Evaluation of Aptamer Fluorescence Microscopy in the Diagnosis of Pulmonary Tuberculosis. *Microbiol Spectr.* 2022:e0260221. <https://www.ncbi.nlm.nih.gov/pubmed/35699468>.
192. Zhou Y, Lan H, Shi H, Wu P, Zhou Y. Evaluating the diversity of circulating natural killer cells between active tuberculosis and latent tuberculosis infection. *Tuberculosis (Edinb).* 2022;135:102221. <https://www.ncbi.nlm.nih.gov/pubmed/35660362>.

193. Zulu DW, Silumbwe A, Maritim P, Zulu JM. Integration of systematic screening for tuberculosis in outpatient departments of urban primary healthcare facilities in Zambia: a case study of Kitwe district. *BMC Health Serv Res.* 2022;22(1):732.
<https://www.ncbi.nlm.nih.gov/pubmed/35655301>.



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