

TANDEM publications

1. Alisjahbana B et al Screening diabetes mellitus patients for pulmonary tuberculosis: a multi-site study in Indonesia, Peru, Romania and South Africa. *Trans Royal Soc Trop Med Hyg Trans R Soc Trop Med Hyg.* 2020 Oct 28:traa100. doi: 10.1093/trstmh/traa100. Online ahead of print. PMID: 33118039
2. Ruslami R, Koesoemadinata R et al. The RCT The effect of a structured clinical algorithm on glycemic control in patients with combined tuberculosis and diabetes in Indonesia: a randomized trial. *Diabetes Research and Clinical Practice* (in press)
3. Böhme J et al. Metformin enhances anti-mycobacterial responses by educating CD8+ T-cell immunometabolic circuits. *Nat Commun.* 2020 Oct 16;11(1):5225. doi: 10.1038/s41467-020-19095-z.
4. Eckold C, Kumar V, Weiner Rd J, Alisjahbana B, Riza AL, Ronacher K, Coronel J, Kerry-Barnard S, Malherbe ST, Kleynhans L, Stanley K, Ruslami R, Ioana M, Ugarte-Gil C, Walzl G, van Crevel R, Wijmenga C, Critchley JA, Dockrell HM, Cliff JM. Impact of intermediate hyperglycaemia as well as diabetes on immune dysfunction in tuberculosis. *Clin Infect Dis.* 2020 Jun 13:ciaa751. doi: 10.1093/cid/ciaa751. Epub ahead of print. PMID: 32533832.
5. Ruesen C, Chadir L, Ugarte-Gil C, van Ingen J, Critchley JA, Hill PC, Ruslami R, Santoso P, Huynen MA, Dockrell HM, Moore DAJ, Alisjahbana B, van Crevel R. Diabetes is associated with genotypically drug-resistant tuberculosis. *Eur Respir J.* 2020 Mar 20;55(3):1901891. doi: 10.1183/13993003.01891-2019. PMID: 31831585.
6. Ugarte-Gil C, Alisjahbana B, Ronacher K, Riza AL, Koesoemadinata RC, Malherbe ST, Cioboata R, Llontop JC, Kleynhans L, Lopez S, Santoso P, Marius C, Villaizan K, Ruslami R, Walzl G, Panduru NM, Dockrell HM, Hill PC, Mc Allister S, Pearson F, Moore DAJ, Critchley JA, van Crevel R. Diabetes Mellitus Among Pulmonary Tuberculosis Patients From 4 Tuberculosis-endemic Countries: The TANDEM Study. *Clin Infect Dis.* 2020 Feb 14;70(5):780-788. doi: 10.1093/cid/ciz284. PMID: 30958536.
7. McAllister SM, Koesoemadinata RC, Santoso P, Soetedjo NNM, Kamil A, Permana H, Ruslami R, Critchley JA, van Crevel R, Hill PC, Alisjahbana B. High tuberculosis incidence among people living with diabetes in Indonesia. *Trans R Soc Trop Med Hyg.* 2020 Feb 7;114(2):79-85. doi: 10.1093/trstmh/trz100. PMID: 31711230.

8. Vrieling F, Alisjahbana B, Sahiratmadja E, van Crevel R, Harms AC, Hankemeier T, Ottenhoff THM, Joosten SA. Plasma metabolomics in tuberculosis patients with and without concurrent type 2 diabetes at diagnosis and during antibiotic treatment. *Sci Rep.* 2019 Dec 10;9(1):18669. doi: 10.1038/s41598-019-54983-5. PMID: 31822686; PMCID: PMC6904442.
9. Lin Y, Harries AD, Kumar AMV, Critchley JA, van Crevel R, Owiti P, Dlodlo RA, Kapur A. Tackling diabetes mellitus and tuberculosis: a new Union guide on the management of diabetes-tuberculosis. *Int J Tuberc Lung Dis.* 2019 Jul 1;23(7):771-772. doi: 10.5588/ijtld.19.0119. PMID: 31439106.
10. Lachmandas E, Eckold C, Böhme J, Koeken VACM, Marzuki MB, Blok B, Arts RJW, Chen J, Teng KWW, Ratter J, Smolders EJ, Van den Heuvel C, Stienstra R, Dockrell HM, Newell E, Netea MG, Singhal A, Cliff JM, Van Crevel R. Metformin Alters Human Host Responses to *Mycobacterium tuberculosis* in Healthy Subjects. *J Infect Dis.* 2019 Jun 5;220(1):139-150. doi: 10.1093/infdis/jiz064. PMID: 30753544; PMCID: PMC6548897.
11. Vrieling F, Wilson L, Rensen PCN, Walzl G, Ottenhoff THM, Joosten SA. Oxidized low-density lipoprotein (oxLDL) supports *Mycobacterium tuberculosis* survival in macrophages by inducing lysosomal dysfunction. *PLoS Pathog.* 2019 Apr 18;15(4):e1007724. doi: 10.1371/journal.ppat.1007724. PMID: 30998773; PMCID: PMC6490946.
12. Huangfu P, Laurence YV, Alisjahbana B, Ugarte-Gil C, Riza AL, Walzl G, Ruslami R, Moore DAJ, Ioana M, McAllister S, Ronacher K, Koesoemadinata RC, Grint D, Kerry S, Coronel J, Malherbe ST, Griffiths U, Dockrell HM, Hill PC, van Crevel R, Pearson F, Critchley JA. Point of care HbA_{1c} level for diabetes mellitus management and its accuracy among tuberculosis patients: a study in four countries. *Int J Tuberc Lung Dis.* 2019 Mar 1;23(3):283-292. doi: 10.5588/ijtld.18.0359. PMID: 30871659.
13. van Crevel R, Koesoemadinata R, Hill PC, Harries AD. Clinical management of combined tuberculosis and diabetes. *Int J Tuberc Lung Dis.* 2018 Dec 1;22(12):1404-1410. doi: 10.5588/ijtld.18.0340. PMID: 30606312.
14. Te Brake LHM, Yunivita V, Livia R, Soetedjo N, van Ewijk-Beneken Kolmer E, Koenderink JB, Burger DM, Santoso P, van Crevel R, Alisjahbana B, Aarnoutse RE, Ruslami R; TANDEM Consortium. Rifampicin Alters Metformin Plasma Exposure but Not Blood Glucose Levels in Diabetic Tuberculosis Patients. *Clin Pharmacol Ther.* 2019 Mar;105(3):730-737. doi: 10.1002/cpt.1232. Epub 2018 Oct 29. PMID: 30222857; PMCID: PMC6587702.
15. Soetedjo NNM, McAllister SM, Ugarte-Gil C, Firantescu AG, Ronacher K, Alisjahbana B, Costache AL, Zubiate C, Malherbe ST, Koesoemadinata RC,

- Laurence YV, Pearson F, Kerry-Barnard S, Ruslami R, Moore DAJ, Ioana M, Kleynhans L, Permana H, Hill PC, Mota M, Walzl G, Dockrell HM, Critchley JA, van Crevel R; TANDEM Consortium. Disease characteristics and treatment of patients with diabetes mellitus attending government health services in Indonesia, Peru, Romania and South Africa. *Trop Med Int Health.* 2018 Oct;23(10):1118-1128. doi: 10.1111/tmi.13137. Epub 2018 Sep 10. PMID: 30106222.
16. Koesoemadinata RC, Kranzer K, Livia R, Susilawati N, Annisa J, Soetedjo NNM, Ruslami R, Philipsen R, van Ginneken B, Soetikno RD, van Crevel R, Alisjahbana B, Hill PC. Computer-assisted chest radiography reading for tuberculosis screening in people living with diabetes mellitus. *Int J Tuberc Lung Dis.* 2018 Sep 1;22(9):1088-1094. doi: 10.5588/ijtld.17.0827. PMID: 30092877.
17. Grint D, Alisjahbana B, Ugarte-Gil C, Riza AL, Walzl G, Pearson F, Ruslami R, Moore DAJ, Ioana M, McAllister S, Ronacher K, Koesoemadinata RC, Kerry-Barnard SR, Coronel J, Malherbe ST, Dockrell HM, Hill PC, Van Crevel R, Critchley JA; TANDEM consortium. Accuracy of diabetes screening methods used for people with tuberculosis, Indonesia, Peru, Romania, South Africa. *Bull World Health Organ.* 2018 Nov 1;96(11):738-749. doi: 10.2471/BLT.17.206227. Epub 2018 Aug 27. PMID: 30455529; PMCID: PMC6239004.
18. Restrepo BI, Kleynhans L, Salinas AB, Abdelbary B, Tshivhula H, Aguillón-Durán GP, Kunsevi-Kilola C, Salinas G, Stanley K, Malherbe ST, Maasdorp E, Garcia-Viveros M, Louw I, Garcia-Oropesa EM, Lopez-Alvarenga JC, Prins JB, Walzl G, Schlesinger LS, Ronacher K. Diabetes screen during tuberculosis contact investigations highlights opportunity for new diabetes diagnosis and reveals metabolic differences between ethnic groups. *Tuberculosis (Edinb).* 2018 Dec;113:10-18. doi: 10.1016/j.tube.2018.08.007. Epub 2018 Aug 18. PMID: 30514492; PMCID: PMC6284235.
19. Vrielink F, Ronacher K, Kleynhans L, van den Akker E, Walzl G, Ottenhoff THM, Joosten SA. Patients with Concurrent Tuberculosis and Diabetes Have a Pro-Atherogenic Plasma Lipid Profile. *EBioMedicine.* 2018 Jun;32:192-200. doi: 10.1016/j.ebiom.2018.05.011. Epub 2018 May 17. PMID: 29779698; PMCID: PMC6020709.
20. Lachmandas E, Thiem K, van den Heuvel C, Hijmans A, de Galan BE, Tack CJ, Netea MG, van Crevel R, van Diepen JA. Patients with type 1 diabetes mellitus have impaired IL-1 β production in response to Mycobacterium tuberculosis. *Eur J Clin Microbiol Infect Dis.* 2018 Feb;37(2):371-380. doi: 10.1007/s10096-017-3145-y. Epub 2017 Nov 30. PMID: 29189980; PMCID: PMC5780542.
21. Ronacher K, van Crevel R, Critchley JA, Bremer AA, Schlesinger LS, Kapur A, Basaraba R, Kornfeld H, Restrepo BI. Defining a Research Agenda to Address

- the Converging Epidemics of Tuberculosis and Diabetes: Part 2: Underlying Biologic Mechanisms. *Chest.* 2017 Jul;152(1):174-180. doi: 10.1016/j.chest.2017.02.032. Epub 2017 Apr 20. PMID: 28434937; PMCID: PMC5577357.
22. Critchley JA, Restrepo BI, Ronacher K, Kapur A, Bremer AA, Schlesinger LS, Basaraba R, Kornfeld H, van Crevel R. Defining a Research Agenda to Address the Converging Epidemics of Tuberculosis and Diabetes: Part 1: Epidemiology and Clinical Management. *Chest.* 2017 Jul;152(1):165-173. doi: 10.1016/j.chest.2017.04.155. Epub 2017 Apr 20. PMID: 28434936; PMCID: PMC5989639.
23. Koesoemadinata RC, McAllister SM, Soetedjo NNM, Febni Ratnaningsih D, Ruslami R, Kerry S, Verrall AJ, Apriani L, van Crevel R, Alisjahbana B, Hill PC. Latent TB infection and pulmonary TB disease among patients with diabetes mellitus in Bandung, Indonesia. *Trans R Soc Trop Med Hyg.* 2017 Feb 1;111(2):81-89. doi: 10.1093/trstmh/trx015. PMID: 28419376.
24. Te Brake LH, van den Heuvel JJ, Buaben AO, van Crevel R, Bilos A, Russel FG, Aarnoutse RE, Koenderink JB. Moxifloxacin Is a Potent In Vitro Inhibitor of OCT- and MATE-Mediated Transport of Metformin and Ethambutol. *Antimicrob Agents Chemother.* 2016 Nov 21;60(12):7105-7114. doi: 10.1128/AAC.01471-16. PMID: 27645247; PMCID: PMC5118989.
25. van Crevel R, van de Vijver S, Moore DAJ. The global diabetes epidemic: what does it mean for infectious diseases in tropical countries? *Lancet Diabetes Endocrinol.* 2017 Jun;5(6):457-468. doi: 10.1016/S2213-8587(16)30081-X. Epub 2016 Aug 4. PMID: 27499355; PMCID: PMC7104099.
26. Lachmandas E, van den Heuvel CN, Damen MS, Cleophas MC, Netea MG, van Crevel R. Diabetes Mellitus and Increased Tuberculosis Susceptibility: The Role of Short-Chain Fatty Acids. *J Diabetes Res.* 2016;2016:6014631. doi: 10.1155/2016/6014631. Epub 2015 Dec 29. PMID: 27057552; PMCID: PMC4709651.
27. Ronacher K, Joosten SA, van Crevel R, Dockrell HM, Walzl G, Ottenhoff TH. Acquired immunodeficiencies and tuberculosis: focus on HIV/AIDS and diabetes mellitus. *Immunol Rev.* 2015 Mar;264(1):121-37. doi: 10.1111/imr.12257. PMID: 25703556.
28. Lachmandas E, Vrieling F, Wilson LG, Joosten SA, Netea MG, Ottenhoff TH, van Crevel R. The effect of hyperglycaemia on in vitro cytokine production and macrophage infection with *Mycobacterium tuberculosis*. *PLoS One.* 2015 Feb 9;10(2):e0117941. doi: 10.1371/journal.pone.0117941. PMID: 25664765; PMCID: PMC4322041.

29. Riza AL, Pearson F, Ugarte-Gil C, Alisjahbana B, van de Vijver S, Panduru NM, Hill PC, Ruslami R, Moore D, Aarnoutse R, Critchley JA, van Crevel R. Clinical management of concurrent diabetes and tuberculosis and the implications for patient services. *Lancet Diabetes Endocrinol.* 2014 Sep;2(9):740-53. doi: 10.1016/S2213-8587(14)70110-X. PMID: 25194887; PMCID: PMC4852378.
30. van Crevel R, Dockrell HM; TANDEM Consortium. TANDEM: understanding diabetes and tuberculosis. *Lancet Diabetes Endocrinol.* 2014 Apr;2(4):270-2. doi: 10.1016/S2213-8587(14)70011-7. Epub 2014 Mar 24. PMID: 24703039.