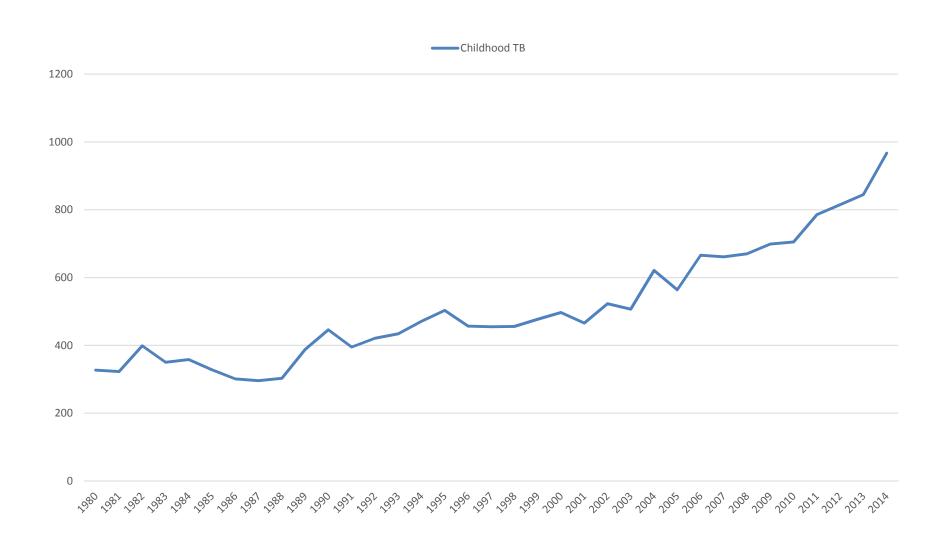
Update on significant recent research papers

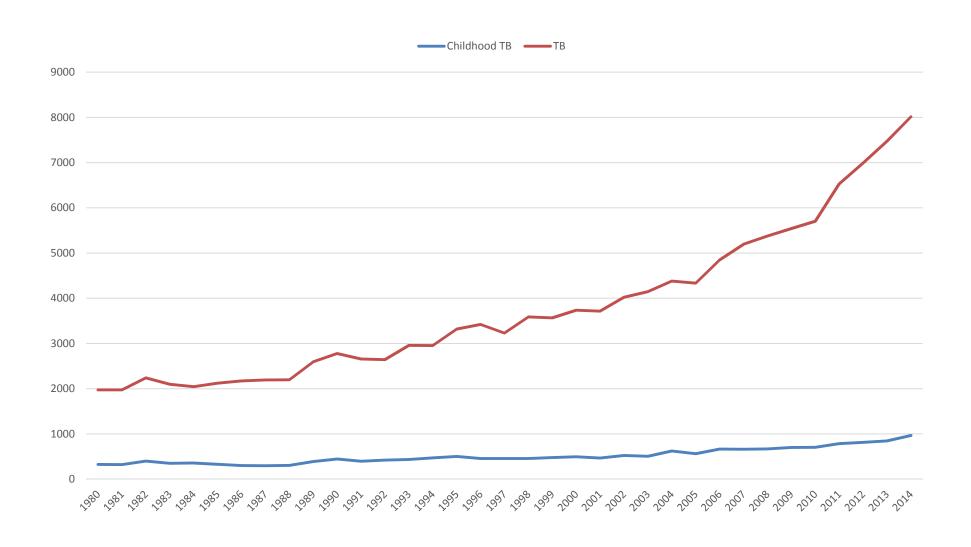
Childhood Tuberculosis Sub-Group

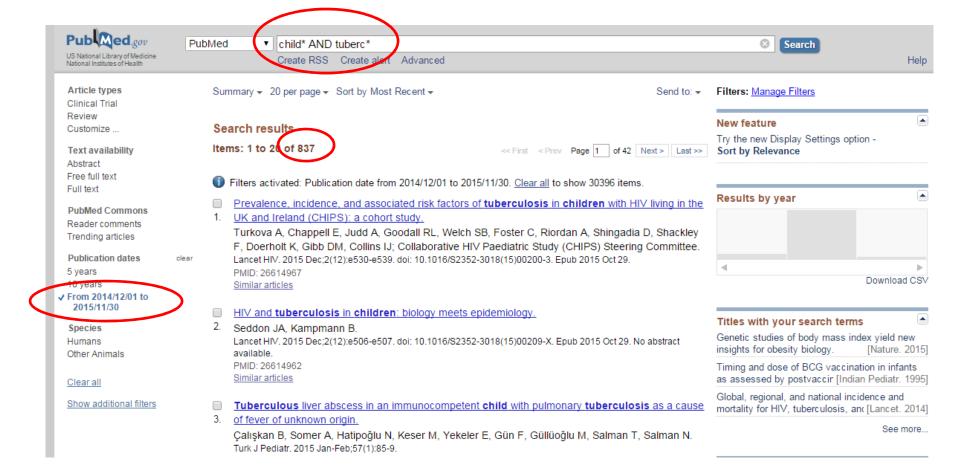
3 November 2015

Tuberculosis Publications Listed on Pubmed



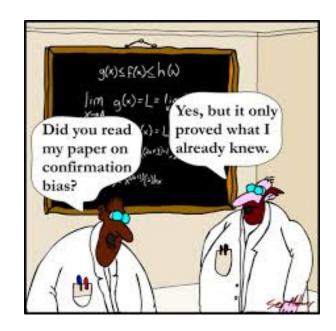
Tuberculosis Publications Listed on Pubmed





My biases

- 837 studies identified on PubMed
- On review of title I selected 28 that I thought were pretty interesting
 - Based on my own clinical and research interests
 - Slightly biased towards clinical/epi studies
 - Slightly biased towards drug resistance
- Broadly divided into five categories





- Policy statements
- Epidemiology
- Vaccines
- Diagnostics
- Treatment
- Prevention

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Towards early inclusion of children in tuberculosis drugs trials: a consensus statement

Sharon Nachman, Amina Ahmed, Farhana Amanullah, Mercedes C Becerra, Radu Botgros, Grania Brigden, Renee Browning, Elizabeth Gardiner, Richard Hafner, Anneke Hesseling, Cleotilde How, Patrick Jean-Philippe, Erica Lessem, Mamodikoe Makhene, Nontombi Mbelle, Ben Marais, Helen McIlleron, David F McNeeley, Carl Mendel, Stephen Murray, Eileen Navarro, E Gloria Anyalechi, Ariel R Porcalla, Clydette Powell, Mair Powell, Mona Rigaud, Vanessa Rouzier, Pearl Samson, H Simon Schaaf, Seema Shah, Jeff Starke, Soumya Swaminathan, Eric Wobudeya, Carol Worrell

A Blueprint to Address Research Gaps in the Development of Biomarkers for Pediatric Tuberculosis

Mark Patrick Nicol, ^{1,a} Devasena Gnanashanmugam, ^{2,a} Renee Browning, ² Eleanor S. Click, ³ Luis E. Cuevas, ⁴ Anne Detjen, ⁵ Steve M. Graham, ^{5,6,7} Michael Levin, ⁸ Mamodikoe Makhene, ² Payam Nahid, ⁹ Carlos M. Perez-Velez, ¹⁰ Klaus Reither, ¹¹ Rinn Song, ^{12,13} Hans M. L. Spiegel, ¹⁴ Carol Worrell, ² Heather J. Zar, ¹⁵ and Gerhard Walzl ¹⁶

Clinical Case Definitions for Classification of Intrathoracic Tuberculosis in Children: An Update

Stephen M. Graham, ^{1,2,3} Luis E. Cuevas, ⁴ Patrick Jean-Philippe, ⁵ Renee Browning, ⁶ Martina Casenghi, ⁷ Anne K. Detjen, ² Devasena Gnanashanmugam, ⁶ Anneke C. Hesseling, ⁸ Beate Kampmann, ^{9,10} Anna Mandalakas, ¹¹ Ben J. Marais, ¹² Marco Schito, ^{5,a} Hans M. L. Spiegel, ⁵ Jeffrey R. Starke, ¹¹ Carol Worrell, ^{13,b} and Heather J. Zar¹⁴

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Tuberculosis as a cause or comorbidity of childhood pneumonia in tuberculosis-endemic areas: a systematic review

Jacquie N Oliwa, Jamlick M Karumbi, Ben J Marais, Shabir A Madhi, Stephen M Graham

Epidemiology of drug-resistant tuberculosis among children and adolescents in South Africa, 2005–2010

B. K. Moore,* E. Anyalechi,* M. van der Walt,† S. Smith,* L. Erasmus,‡ J. Lancaster,† S. Morris,* N. Ndjeka,§ J. Ershova,* N. Ismail,‡¶ D. Burton,* H. Menzies*

Exposure to Second-Hand Smoke and the Risk of Tuberculosis in Children and Adults: A Systematic Review and Meta-Analysis of 18 Observational Studies

Jayadeep Patra^{1,2}*, Mehak Bhatia^{1,2}, Wilson Suraweera¹, Shaun K. Morris^{3,4}, Cyril Patra⁵, Prakash C. Gupta⁶, Prabhat Jha^{1,2}

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Safety and immunogenicity of candidate vaccine $M72/AS01_E$ in adolescents in a TB endemic setting

Adam Penn-Nicholson^{a,*,1}, Hennie Geldenhuys^{a,1}, Wivine Burny^b, Robbert van der Most^b, Cheryl L. Day^{a,c,d}, Erik Jongert^b, Philippe Moris^b, Mark Hatherill^a, Opokua Ofori-Anyinam^{b,2}, Willem Hanekom^{a,2}, the Vaccine Study Team,

A double-blind, randomised, placebo-controlled, dose-finding trial of the novel tuberculosis vaccine AERAS-402, an adenovirus-vectored fusion protein, in healthy, BCG-vaccinated infants

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M. Tameris <sup>a,*,5</sup>, D.A. Hokey <sup>e,5</sup>, V. Nduba <sup>b</sup>, J. Sacarlal <sup>c,h</sup>, F. Laher <sup>d</sup>, G. Kiringa <sup>b</sup>, K. Gondo <sup>c</sup>, E.M. Lazarus <sup>d</sup>, G.E. Gray <sup>d</sup>, S. Nachman <sup>g</sup>, H. Mahomed <sup>a,1</sup>, K. Downing <sup>a</sup>, B. Abel <sup>a,3</sup>, T.J. Scriba <sup>a</sup>, J.B. McClain <sup>e</sup>, M.G. Pau <sup>f</sup>, J. Hendriks <sup>f</sup>, V. Dheenadhayalan <sup>e</sup>, S. Ishmukhamedov <sup>e</sup>, A.K.K. Luabeya <sup>a</sup>, H. Geldenhuys <sup>a</sup>, B. Shepherd <sup>e</sup>, G. Blatner <sup>e</sup>, V. Cardenas <sup>e</sup>, R. Walker <sup>e</sup>, W.A. Hanekom <sup>a,2</sup>, J. Sadoff <sup>f</sup>, M. Douoguih <sup>f</sup>, L. Barker <sup>e,4</sup>, M. Hatherill <sup>a</sup>
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Uniform Research Case Definition Criteria Differentiate Tuberculous and Bacterial Meningitis in Children

Regan S. Solomons,^{1,a} Marie Wessels,^{1,a} Douwe H. Visser,² Peter R. Donald,¹ Ben J. Marais,³ Johan F. Schoeman,¹ and Anne M. van Furth²

Xpert MTB/RIF assay for the diagnosis of pulmonary tuberculosis in children: a systematic review and meta-analysis

Anne K Detjen, Andrew R DiNardo, Jacinta Leyden, Karen R Steingart, Dick Menzies, Ian Schiller, Nandini Dendukuri, Anna M Mandalakas

Prospective evaluation of GeneXpert for the diagnosis of HIV- negative pediatric TB cases

Do Chau Giang^{1,2}, Tran Ngoc Duong¹, Dang Thi Minh Ha¹, Ho Thi Nhan², Marcel Wolbers², Nguyen Thi Quynh Nhu², Dorothee Heemskerk², Nguyen Dang Quang¹, Doan Thanh Phuong¹, Pham Thu Hang¹, Tran Huu Loc¹, Nguyen Thi Ngoc Lan¹, Nguyen Huy Dung¹, Jeremy Farrar² and Maxine Caws^{2,3*}

A Controlled Study of Tuberculosis Diagnosis in HIV-Infected and Uninfected Children in Peru

Richard A. Oberhelman¹*, Giselle Soto-Castellares^{2,3}, Robert H. Gilman^{2,4,5}, Maria E. Castillo^{6,7}, Lenka Kolevic⁶, Trinidad Delpino⁶, Mayuko Saito^{2,4¤a}, Eduardo Salazar-Lindo⁸, Eduardo Negron⁸, Sonia Montenegro⁹, V. Alberto Laguna-Torres³, Paola Maurtua-Neumann^{10¤b}, Sumona Datta^{4,11,12}, Carlton A. Evans^{4,11,12}

Piloting Upfront Xpert MTB/RIF Testing on Various Specimens under Programmatic Conditions for Diagnosis of TB & DR-TB in Paediatric Population

Neeraj Raizada^{1*}, Kuldeep Singh Sachdeva², Soumya Swaminathan⁴, Shubhangi Kulsange¹, Sunil D. Khaparde², Sreenivas Achuthan Nair⁷, Ashwani Khanna³, Kamal Kishore Chopra³, Mahmud Hanif³, Gulshan Rai Sethi³, K. R. Umadevi⁴, G. Keshav Chander⁵, Brojakishore Saha⁶, Amar Shah², Malik Parmar⁷, Mayank Ghediya², Jyoti Jaju², Catharina Boehme¹, Chinnambedu Nainarappan Paramasivan¹

Barriers to the diagnosis of childhood tuberculosis: a qualitative study

S. S. Chiang, *† S. Roche, † C. Contreras, § V. Alarcón, ¶ H. del Castillo, # M. C. Becerra, †§** L. Lecca§

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Ethambutol-related Impaired Visual Function in Childrens Less than 5 Years of Age Treated for a Mycobacterial Infection

Diagnosis and Evolution

Michael Levy, MD,* Florence Rigaudière, MD, PhD,† Agathe de Lauzanne, MD,* Bérengère Koehl, MD,* Isabelle Melki, MD,* Mathie Lorrot, MD, PhD,*‡ and Albert Faye, MD, PhD*‡

Treatment outcomes for HIV and MDR-TB co-infected adults and children: systematic review and meta-analysis

P. Isaakidis,*† E. C. Casas,‡ M. Das,* X. Tseretopoulou,† E. E. Ntzani,† N. Ford§

Pharmacokinetics and Safety of Moxifloxacin in Children With Multidrug-Resistant Tuberculosis

Stephanie Thee, 1,2 Anthony J. Garcia-Prats, Heather R. Draper, Helen M. McIlleron, Lubbe Wiesner, Sandra Castel, H. Simon Schaaf, 1,a and Anneke C. Hesseling 1,a

Pediatric Tuberculous Meningitis: Model-Based Approach to Determining Optimal Doses of the Anti-Tuberculosis Drugs Rifampin and Levofloxacin for Children

RM Savic¹, R Ruslami², JE Hibma¹, A Hesseling³, G Ramachandran⁴, AR Ganiem², S Swaminathan⁴, H McIlleron⁵, A Gupta⁶, K Thakur⁶, R van Crevel⁷, R Aarnoutse⁷ and KE Dooley⁶

Successful Treatment of a Child With Extensively Drug-Resistant Tuberculous Meningitis

Neele Alsleben, ¹ Anthony J. Garcia-Prats, ¹ Anneke C. Hesseling, ¹ Marianne Willemse, ² Peter R. Donald, ¹ and H. Simon Schaaf^{1,2,3}

Extensively drug-resistant tuberculosis in a young child after travel to India

Nicole Salazar-Austin, Alvaro A Ordonez, Alice Jenh Hsu, Jane E Benson, Mahadevappa Mahesh, Elizabeth Menachery, Jafar H Razeq, Max Salfinger, Jeffrey R Starke, Aaron M Milstone, Nicole Parrish, Eric L Nuermberger, Sanjay K Jain

Interventions to improve adherence to treatment for paediatric tuberculosis in low- and middle-income countries: a systematic review and meta-analysis

Meaghann S Weaver,^a Knut Lönnroth,^b Scott C Howard,^c Debra L Roter^d & Catherine G Lam^a

Multidrug-Resistant Tuberculosis in Child Successfully Treated with 9-Month Drug Regimen

Jay Achar, Catherine Berry, Krzysztof Herboczek, Nargiza Parpieva, Mirzagaleb N. Tillyashaykhov, Zinaida N. Tigay, Atadjan Khamraev, Kalyan Velivela, James A. Seddon, Philipp du Cros

Outcomes of Category II anti-tuberculosis treatment in Indian children

A. Mukherjee, D. Khandelwal, M. Singla, R. Lodha, S. K. Kabra

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A Prospective Evaluation of the Symptom-Based Screening Approach to the Management of Children Who Are Contacts of Tuberculosis Cases

Rina Triasih, 1,2 Colin F. Robertson, 3,4 Trevor Duke, 2,4 and Stephen M. Graham 2,4,5

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REGULAR ARTICLE

Elevated transaminases are common in children on prophylactic treatment for tuberculosis

Sara Leeb (sara.leeb@karolinskase), Charlotte Buxbaum, Björn Fischler

Department of Pediatrics, Karolinska University Hospital, CLINTEC, Karolinska Institutet, Stockholm, Sweden

Optimizing the Detection of Recent Tuberculosis Infection in Children in a High Tuberculosis–HIV Burden Setting

Anna M. Mandalakas^{1,2,3}, H. Lester Kirchner⁴, Gerhard Walzl⁵, Robert P. Gie³, H. Simon Schaaf³, Mark F. Cotton⁶, Harleen M. S. Grewal^{7,8}, and Anneke C. Hesseling³

Original Investigation

Treatment for Preventing Tuberculosis in Children and Adolescents

A Randomized Clinical Trial of a 3-Month, 12-Dose Regimen of a Combination of Rifapentine and Isoniazid

M. Elsa Villarino, MD, MPH; Nigel A. Scott, MS; Stephen E. Weis, DO; Marc Weiner, MD; Marcus B. Conde, MD; Brenda Jones, MD; Sharon Nachman, MD; Ricardo Oliveira, MD; Ruth N. Moro, MD, MPH; Nong Shang, PhD; Stefan V. Goldberg, MD; Timothy R. Sterling, MD; for the International Maternal Pediatric and Adolescents AIDS Clinical Trials Group (IMPAACT) and the Tuberculosis Trials Consortium (TBTC)

Conclusions

- Exciting times for paediatric TB
- Lots of studies being published
- Lots more work to do...