

The International Journal of Tuberculosis and Lung Disease (IJTLD)

PAGES S1 - S468
ISSN 997-1098

VOLUME 26

SUPPLEMENT 2

NOVEMBER 2022

ABSTRACT BOOK

**WORLD CONFERENCE
ON LUNG HEALTH 2022 OF THE
INTERNATIONAL UNION AGAINST
TUBERCULOSIS AND LUNG DISEASE
(THE UNION)**

**VIRTUAL EVENT
8 – 11 NOVEMBER 2022**

Since its foundation in 1939, the mission of the Research Institute of Tuberculosis, Japan Anti-Tuberculosis (RIT/JATA) has been to contribute to domestic and global tuberculosis control by conducting various studies, providing technical support as well as performing activities for international cooperation and collaboration.

Our Vision

- A world where no one suffers from tuberculosis

Our Mission

- Our mission is to eliminate TB suffering through development and implementation of comprehensive TB control strategies.



🌐 Find us online at: <https://jata.or.jp/english/>



The Research Institute of Tuberculosis,
Japan Anti-Tuberculosis Association

3-1-24 Matsuyama, Kiyose,
Tokyo Japan 204-8533
Tel: 81-42-493-5711
Fax: 81-42-492-4600

The International Journal of Tuberculosis and Lung Disease

SUPPLEMENT 2

VOLUME 26 NUMBER 11

NOVEMBER 2022

The Union would like to thank the Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association (RIT/JATA) for their support in publishing the Abstract Book for The Union World Conference on Lung Health.



SYMPOSIA:

TUESDAY, 8 NOVEMBER 2022

- S1 SP-01 Clinical experience from BPAL operational research in Asia, Africa and EEC
- S2 SP-02 Towards TB-sensitive social protection programmes: understanding barriers and formulating solutions
- S2 SP-03 Advancing the TB-HIV response by addressing advanced HIV disease
- S3 SP-04 Stool-based diagnostics: a game-changer for hard-to-diagnose populations?
- S4 SP-05 What will it take to eliminate TB stigma? Engaging communities in implementation research to develop person-centred TB stigma interventions
- S5 SP-06 Evaluation of a standardised TB treatment regimen in patients with multidrug-resistant tuberculosis: STREAM Stage 2 final results
- S6 SP-07 Large-scale implementation of short-course TB preventive treatment regimens: experiences from the field
- S7 SP-08 Enabling gender equity in TB: gender-sensitive solutions in TB policy and programme
- S8 SP-09 Designing future-ready TB diagnostic systems using diagnostic network optimisation (DNO): uptake and impact of DNO recommendations from country experiences

SYMPOSIA:

WEDNESDAY, 9 NOVEMBER 2022

- S9 SP-10 Two-month Regimens Using Novel Combinations to Augment Treatment Effectiveness for Drug-sensitive Tuberculosis (TRUNCATE-TB Trial)
- S9 SP-11 Private sector engagement to end TB in Africa
- S10 SP-12 Digital health technologies for providing person-centred tuberculosis care: country experiences and suggested strategies for scale-up
- S11 SP-13 TB and forced migration: what do we know and what should we do?
- S12 SP-14 Contemplating tobacco endgame in low- and middle-income countries through sustenance of tobacco control policies

- S13 SP-15 Tackling barriers in access to rapid molecular TB testing in remote areas: the Truenat experience
- S14 SP-16 Child contact case management: promising strategies and models of care to close the policy-practice gap
- S15 SP-17 Systemic neglect of tuberculosis in indigenous peoples, the hidden pandemic
- S15 SP-18 What the pandemic taught us: TB programming during COVID-19 and beyond
- S16 SP-19 Advancing the science of TB education and counselling to improve patient-centred TB care in low- and middle-income countries

SYMPOSIA:

THURSDAY, 10 NOVEMBER 2022

- S18 SP-20 TB disease: where does the threshold lie and why does it matter?
- S19 SP-21 Innovative approaches and tools to find and treat missing people with TB
- S20 SP-22 Updated WHO guidelines on the management of TB in children and adolescents
- S21 SP-23 Tobacco industry in the pharmaceutical sector: coping with the double-headed serpent
- S21 SP-24 Practical considerations for implementing and scaling up a new DR-TB regimen: experience from early BPAL-adopting countries
- S22 SP-25 Airborne infection prevention and control: the key to preventing the next pandemic
- S22 SP-26 The effect of the COVID-19 pandemic on quality and pathways to TB care in India, Indonesia and Nigeria
- S23 SP-27 Mobilising communities against TB
- S23 SP-28 Full value assessment of novel TB vaccines: combating pandemics today and tomorrow

SYMPOSIA:

FRIDAY, 11 NOVEMBER 2022

- S25 SP-29 Use of diagnostic algorithms to improve tuberculosis diagnosis in children
- S26 SP-30 Is digital X-ray and CAD/AI a game-changer in the fight against TB?

- S27 SP-31 Joining forces for integrated, people-centred care for TB and comorbidities
- S28 SP-32 TB-PRACTECAL: final trial results and the case for programmatic roll-out
- S29 SP-33 Evidence and research gaps identified during the development of policy guidelines for tuberculosis
- S29 SP-34 Providing TB care in conflict settings: an overview of global guidance and lessons from Afghanistan, Ethiopia and Ukraine
- S30 SP-35 From domestic resource mobilisation to global policy-making: how can TB get its 'fair share' of financing?
- S31 SP-36 Laying the groundwork for the success of new TB vaccines
- S32 SP-37 Vulnerability and resilience of TB and COVID-19 care services during military and humanitarian crises: experience of USAID/PATH support for Ukraine

ABSTRACT PRESENTATIONS:

TUESDAY, 8 NOVEMBER 2022

ORAL ABSTRACT SESSIONS

- S34 OA-01 Digital innovations to improve TB control
- S38 OA-02 Strengthening national-and global policies: lessons learnt
- S43 OA-03 Management of DR-TB
- S48 OA-04 Integrated care - how it helps in improving access
- S52 OA-05 Improvements in access to care
- S57 OA-06 How could we improve contact investigation?
- S61 OA-07 Cost and cost-effectiveness of TB interventions
- S66 OA-08 Causes and effects of DR-TB
- S71 OA-09 Transmission of MTBC strains in human and animal populations
- S75 OA-10 Clinical trials and operational research for new treatment for TB (adults and Children)

E-POSTER SESSIONS

- S81 EP-01 TB and modelling: COVID-19, new vaccine and treatment outcome
- S87 EP-02 TB and infection control
- S92 EP-03 Broader approach for implementation of TB active case finding and preventive strategies
- S99 EP-04 TB active case finding: impact, performance and acceptability
- S104 EP-05 Clinical trials and operational research for new treatment of TB

- S110 EP-06 TB and MDR-TB treatment outcomes
- S116 EP-07 Access to quality care; use of new technologies
- S121 EP-08 Access to quality care; improvements in case finding and early diagnostics
- S126 EP-09 TB Access to quality care; the importance of integrated care and the involvement of the private sector
- S131 EP-10 The cost of TB treatment

ABSTRACT PRESENTATIONS:

WEDNESDAY, 9 NOVEMBER 2022

ORAL ABSTRACT SESSIONS

- S137 OA-11 Expanding active case finding in vulnerable populations
- S142 OA-12 Modelling the impact of TB control strategies
- S146 OA-13 Transmission dynamics of TB and MDR-TB
- S151 OA-14 Prevalence of, risk factors for, mortality due to TB
- S155 OA-15 Pharmacokinetic studies for better patient care
- S160 OA-16 Implementation of TPT
- S165 OA-17 Active case finding: Impact and Yield
- S169 OA-18 Identification and Management of TB Infection

E-POSTER SESSIONS

- S174 EP-11 Tuberculosis infection and control in a wider context
- S180 EP-12 TB and vulnerable population
- S187 EP-13 TB and COVID
- S193 EP-14 Epidemiology of TB and DR-TB
- S198 EP-15 Access to quality TB care and services
- S204 EP-16 Treatment selection and patient support opportunities to improve treatment outcomes
- S210 EP-17 Screening and preventive interventions finding the correct balance
- S216 EP-18 Tuberculosis laboratory services: challenges and solutions
- S221 EP-19 TB diagnostics speed and availability
- S227 EP-20 Access to rapid testing for TB

ABSTRACT PRESENTATIONS:**THURSDAY, 10 NOVEMBER 2022****ORAL ABSTRACT SESSIONS**

- S232 OA-19 Application of the GeneXpert platform new developments
- S236 OA-20 Developments in tuberculosis imaging
- S241 OA-21 Susceptibility resistance
- S244 OA-22 Tuberculosis sequencing and resistance
- S248 OA-23 Innovation in tuberculosis diagnostics
- S253 OA-24 Person-centred care: how new technologies can support
- S258 OA-25 Models and TB immunity

E-POSTER SESSIONS

- S262 EP-21 Various lessons learnt from active case finding
- S268 EP-22 Imaging tuberculosis infection
- S272 EP-23 Pathways to tuberculosis diagnosis and treatment
- S278 EP-24 Drugs, dosing and resistance
- S284 EP-25 Tuberculosis diagnostics quality and complexity
- S291 EP-26 Improved methods for TB case finding
- S296 EP-27 How tailored care can make a difference.
- S303 EP-28 Key affected populations and person-centred care
- S308 EP-29 TB prevention, diagnosis, treatment and costs
- S313 EP-30 Knowledge is power!

ABSTRACT PRESENTATIONS:**FRIDAY, 11 NOVEMBER 2022****ORAL ABSTRACT SESSIONS**

- S319 OA-26 Life after TB
- S323 OA-27 Impact of Covid-19 on TB and other health services
- S327 OA-28 Find and treat; the hurdles and how to overcome
- S333 OA-29 Innovative responses to airborne pandemics
- S337 OA-30 Tobacco Industry Interference
- S340 OA-31 Community-centred, rights-based and gender responsive TB care
- S344 OA-32 HIV and co-morbidities and interaction with TB

- S349 OA-33 Child and host and community
- S355 OA-34 Important topics in child lung health

E-POSTER SESSIONS

- S360 EP-31 Not one size fits all!
- S366 EP-32 Programmatic issues in the cascade of care
- S372 EP-33 Lung health across the life course and after TB
- S379 EP-34 Post TB lung health, case finding, DR-TB management
- S383 EP-35 TB and comorbidities
- S389 EP-36 Global Examples of Tobacco Industry Interference
- S393 EP-37 Tobacco, nicotine, cannabis products and health effects
- S398 EP-38 Tobacco legislation and compliance
- S402 EP-39 Community-based interventions to improve health for all
- S407 EP-40 TB services coping with COVID-19
- S412 EP-41 COVID-19 a challenge for chest disease services

LATE-BREAKER PRESENTATIONS**WEDNESDAY, 9 NOVEMBER 2022**

- S419 LBCOV COVID late-breaker session

THURSDAY, 10 NOVEMBER 2022

- S422 LBST RIT/JATA student late-breaker session on lung health

WEDNESDAY, 11 NOVEMBER 2022

- S424 LBTB The Union/CDC late-breaker session on TB

- S429 TBScience2022 Oral Abstracts

- S439 TBScience2022 E-Posters

- S463 AUTHOR INDEX

The International Journal of Tuberculosis and Lung Disease (IJTLD)

EDITOR-IN-CHIEF

Giovanni Battista Migliori, Director, WHO Collaborating Centre for TB and Lung Diseases, Maugeri Care and Research Institute, Tradate, Italy

DEPUTY EDITORS

Anna Cristina Carvalho (*Brazil*)

Isabella Annesi-Maesano (*France*)

Simon Tiberi (*UK*)

Catherine Ong (*Singapore*)

ASSOCIATE EDITORS

Jan W Alffenaar (*Australia*)

Brian Baker (*USA*)

Kenza Bennani (*Egypt*)

Andrea Maurizio Cabibbe (*Italy*)

Pepe Caminero (*Spain*)

Cynthia Chee (*Singapore*)

Dumitru Chesov (*Moldova*)

Chen-Yuan Chiang (*Taiwan*)

Rebecca Colman (*USA*)

Justin Denholm (*Australia*)

Keertan Dheda (*South Africa*)

Anh-Tuan Dinh Xuan (*France*)

David Dowdy (*USA*)

Irina Felker (*Russia*)

Giovanni Ferrara (*Italy*)

Alberto Garcia-Basteiro (*Mozambique*)

Media Gegia (*Georgia*)

Stephen Gillespie (*UK*)

Steve Graham (*Australia*)

Sergio Harari (*Italy*)

Anneke Hesseling (*South Africa*)

James Ho (*Hong Kong*)

Daniel Ho (*Hong Kong*)

Yi-Wen Huang (*Taiwan*)

Eun-Kyeong Jo (*South Korea*)

Ju Sang Kim (*South Korea*)

Fanny Ko (*Hong Kong*)

Christoph Lange (*Germany*)

Hsien-Ho Lin (*Taiwan*)

Robert Loddenkemper (*Germany*)

Satoshi Mitarai (*Japan*)

Kevin Mortimer (*UK*)

Andrew Nunn (*UK*)

Emanuele Pontali (*Italy*)

Romain Ragonnet (*Australia*)

Max Salfinger (*USA*)

Kevin Schwartzman (*Canada*)

Denise Silva (*Brazil*)

Giovanni Sotgiu (*Italy*)

Philip Supply (*France*)

Wan Cheng Tan (*Canada*)

James Trauer (*Australia*)

Martin van den Boom (*Denmark*)

Tim Walker (*UK*)

Jann-Yuan Wang (*Taiwan*)

Richard White (*UK*)

W C Yam (*Hong Kong*)

MANUSCRIPTS AND CORRESPONDENCE

Director of Publications: Hugh Blackburn **Editorial Coordinator:** Rasha Jerandi **Technical Editor:** Irene Roy **E-mail:** journal@theunion.org

EDITORIAL OFFICE

The International Union Against Tuberculosis and Lung Disease (The Union) 2, rue Jean Lantier, 75001 Paris, France

e-mail: journal@theunion.org **website:** www.theunion.org

AIMS AND SCOPE

The International Journal of Tuberculosis and Lung Disease is an official journal of The Union. The Journal's main aim is the continuing education of physicians and other health personnel, and the dissemination of the most up-to-date information in the field of TB and lung health. It publishes original articles and commissioned reviews not only on the clinical and biological and epidemiological aspects, but also on community aspects: fundamental research and assessment of field projects and action programmes for TB control and the promotion of lung health. The Journal welcomes articles submitted on all aspects of lung health, including cost-benefit analysis, legislation, epidemiology, intervention studies and health systems research.

DISCLAIMER

Any opinions expressed, or policies advocated, do not necessarily reflect those of The Union.

SUBSCRIPTION INFORMATION

The International Journal of Tuberculosis and Lung Disease is published monthly by The Union. For subscription information, please contact: subscription@theunion.org

INSTRUCTIONS TO AUTHORS

Instructions on manuscript submission can be obtained from the Union website www.theunion.org.

ADVERTISING SALES

Contact journal@theunion.org

EXCESS PAGE CHARGES

All articles over length will be subject to an excess page charge (see Instructions to authors and website).

FULL TEXT VERSION ONLINE

The full text of the Journal is published online as of Volume 1, 1997. Free access to back issues.

Address: www.theunion.org or www.ingentaconnect.com

INDEXING AND ABSTRACTING SERVICES

The Journal is indexed and/or abstracted in the following media: PubMed/Medline, CLOCKSS, Current Contents/Clinical Medicine, Excerpta Medica/EMBASE, the Global Health and CAB Abstracts databases, Index Medicus, Google Scholar, ISI Alerting Services, LOCKSS, the Science Citation Index, SciSearch and the SIIC databases.

ISSN 1027-3719

Copyright The Union 2022. All rights reserved. With the exception of Open Access articles (which are governed by CC-BY 4), no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of The Union.

This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)

EP-17-762 Implementation of an integrated care strategy for children household contacts of patients with pulmonary tuberculosis, Colombia, 2021-2022

D. Benjumea-Bedoya,^{1,2,3} C.P. Beltrán Arroyave,⁴ A.V. Restrepo Gouzy,⁵ D.M. Marín Pineda,⁶ L.M. Cadavid Álvarez,⁷ N. Pérez Doncel,⁸ F.N. Montes Zuluaga,⁹ H. Pulido Duarte,¹⁰ P.M. Suárez Parra,¹¹ J.C. Alzate Ángel,³ M.P. Arbeláez Montoya,³ J.A. Robledo Restrepo,^{1,8}

¹Corporación para Investigaciones Biológicas, Unidad de Bacteriología y Micobacterias, Medellín, Colombia, ²Corporación Universitaria Remington, School of Health Sciences, Grupo de Investigación en Salud Familiar y Comunitaria, Medellín, Colombia, ³Universidad de Antioquia, National School of Public Health, Grupo de Epidemiología, Medellín, Colombia, ⁴Universidad de Antioquia, Medicine School, Medellín, Colombia, ⁵Hospital Pablo Tobón Uribe, Infectious Diseases, Medellín, Colombia, ⁶Universidad Pontificia Bolivariana, Grupo de investigación en Salud Pública, Medellín, Colombia, ⁷Hospital Pablo Tobón Uribe, Radiology, Medellín, Colombia, ⁸Universidad Pontificia Bolivariana, School of Health Sciences, Medellín, Colombia, ⁹Secretariat of Health of Medellín, Tuberculosis Program, Medellín, Colombia, ¹⁰Secretariat of Health of Bello, Tuberculosis Program, Bello, Colombia, ¹¹Secretariat of Health of Itagüí, Tuberculosis Program, Itagüí, Colombia. e-mail: dionebenjumea@gmail.com

Background: This study aims to evaluate an integrated care strategy for children under five years who are household contacts of persons with tuberculosis (TB) in Colombia.

Design/Methods: Quasi-experimental study, including children under five years, household contacts of persons with smear-positive pulmonary TB from Medellín, Bello, and Itagüí, Colombia. Sample size estimated for treatment completion outcome: 85 children who require TB preventive treatment (considering 59% isoniazid treatment completion in a 2015-2018 comparison cohort, expected completion of at least 80%, 95% confidence, 80% power).

Recruitment started in July 2021; preventive TB treatment is offered under an integrated care strategy, including diagnosis with clinical assessment, Tuberculin Skin Test (TST), Interferon Gamma Release Assay (IGRA), and chest X-ray with standardized reading. Children with latent TB infection (LTBI) or recently exposed (less than 3 months) are offered rifampicin (four months), multidisciplinary care with a nurse, general practitioner, pediatrician, infectious disease specialist, social worker, psychologist, nutritionist, and the provision of incentives (transport and food assistance); person-centered care, active follow-up, education, and information materials. The study has the UPB Research Ethics Committee's approval.

Results: Until March 2022, 74 children have been recruited. Mean age 2 years (SD 1.3 years), 8 children under 1 year (10.8%); 33 female (44.6%), 21 migrants (28.4%),

11 have no health system affiliation (14.9%), 23 negative TST (<5 mm) and were recently exposed (31%), 34 children completed 4 months of rifampin (45.9%), 16 children suspended, 10 with a negative second TST (13.5%), and 6 because of guardian decision (8.1%), 4 children were lost of follow (5.4%), 21 children are still on treatment (28.4%), 7 children presented mild adverse events (9.5%).

Conclusions: A comprehensive care strategy for TB contact children, including person-centered care, with a multidisciplinary approach, a less extensive treatment, and the provision of incentives, seems to improve the completion rates, supporting the World Health Organization recommendations.

EP-17-763 Efficacy of tuberculosis preventive therapy in a national cohort of people with HIV

N. Ruswa,¹ D. Maloboka,¹ R. Shililifa,¹ G. Gunther,² M. Claassens,² ¹Ministry of Health & Social Services, National TB and Leprosy Programme, Windhoek, Namibia, ²University of Namibia, School of Medicine, Windhoek, Namibia. e-mail: ncruswa@gmail.com

Background: Tuberculosis Preventive therapy (TPT) is a recognized intervention to reduce the burden of TB in people living with HIV. Namibia has implemented TPT using isoniazid since 2005. We analysed the national cohort of people registered for HIV care to determine the risk of TB disease and the risk of death among those who received TPT compared to those who did not.

Design/Methods: This was a secondary analysis of electronic records kept by the Ministry of Health from HIV care clinics as well as electronic TB registers. Linkplus® software (CDC) was used for the probabilistic linkage of records between the HIV database and the TB database using the first names, surname, dates of birth, sex and resident district. Risk ratios, incidence ratios and Kaplan-Meier survival statistics were calculated in STATA version 17.0 (Statacorp LLC).

Results: Of the 396,791 complete records that could be found in the HIV database, 64% (253,084) were female and (143,475) were male. The mean age was 42 years and a total of 227,877 (57%) received a form of TPT. The mean follow-up time was 6.2 years with a total of 2,243,607 person-years analysed. Only a minority, 39,423 individuals could be linked to the TB registers. The risk of having TB was 6.4% in the TPT group vs 14.6% in the non-TPT group (RR=0.44; 95% CI 0.43-0.45). The risk of death was 2.4% vs 12.1% respectively (RR=0.20; 95% CI 0.19-0.21).

Conclusions: Provision of TPT in a national HIV programme was associated with an over 50% lower risk of active TB among people registered for HIV care.