

RESIST-TB

Research Excellence to Stop TB Resistance

RESIST-TB ANNUAL REPORT FOR 2018

RESIST-TB is an organization of concerned patients, physicians, research scientists and stakeholders. Its mission is to promote and conduct clinical research to cure and prevent drug-resistant tuberculosis. RESIST-TB is committed to addressing the substantial existing gaps in knowledge and to helping provide access to effective curative and preventive treatment for drug-resistant tuberculosis (DR-TB). Efforts in 2018 were sponsored by the World Health Organization, the Stop TB Partnership, the International Union Against Tuberculosis and Lung Disease, Treatment Action Group, Partners in Health, the U. S. Centers for Disease Control & Prevention, Vital Strategies and Médecins Sans Frontières.

Our 2018 activities centered on:

(1) DR-TB scientific advocacy through dissemination of information through our website, including promoting and arranging a series of webinars and an eNewsletter, publicizing weekly news articles, developing consensus guidelines on molecular TB diagnostics;

and

(2) Increasing public policy and awareness by gathering data on DR-TB treatments globally through the creation, deployment, and analysis of an online survey;

Details about these activities are provided below.

SCIENTIFIC ADVOCACY

RESIST-TB WEBSITE AND eNEWSLETTER

The RESIST-TB website (www.resisttb.org) remains active in order to accurately reflect advances in DR-TB clinical trials and disseminate news, developments and publications. Our website is updated weekly and our newsletter is received by 398 subscribers. In our monthly eNewsletter, we highlight information about new DR-TB related publications, news updates, and events. Topics covered in our news articles included DR-TB trial status updates, announcements of publications, symposia, and webinars of interest in addition to global headlines related to DR-TB.

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ADVOCACY PUBLICATIONS

In 2018, a number of RESIST-TB affiliated articles were published:

- **“Has compassionate use ever sunk a drug?”** – RESIST-TB members S. McAnaw, C. Mitnick and C.R. Horsburgh. *The International Journal of Tuberculosis and Lung Disease*, 22(2), 119-120, 2018
- **“Pan-tuberculosis regimens: an argument against”** – RESIST-TB members C.R. Horsburgh and C. Lange. *The Lancet Respiratory Medicine*, 6(4), 240-242, 2018
- **“Insights into drug-resistant tuberculosis treatment: results of The Union DR-TB Working Group Survey, 2017”** – RESIST-TB members S. McAnaw, C.R. Horsburgh. *Public Health Action*, 8(3), 141-144, 2018

Supplement in the IJTL: Pediatric MDR-TB Clinical Trials Landscape Meeting

In an effort to summarize what is known about pediatric MDR-TB, highlight current research in this area, and outline an agenda for future research in pediatric MDR-TB, RESIST-TB and IMPAACT convened the Pediatric MDR-TB Clinical Trials Landscape Meeting on 14 June 2016. This year, RESIST-TB supported the publication of a supplement that summarized the presentations from this meeting to provide a primer of current directions in the field. Robert Horsburgh of RESIST-TB and Amita Gupta of IMPAACT served as guest editors for this supplement. Contributions included:

Editorial

- **“MDR-TB in children: back to the basics”** – C.R. Horsburgh, A. Gupta

Original Articles

- **“The burden of multidrug-resistant tuberculosis in children”** – H.E. Jenkins, C.M. Yuen
- **“Preclinical tools for the evaluation of tuberculosis treatment regimens for children”** – E.W. Tucker, K.E. Dooley
- **“Current status of pharmacokinetic and safety studies of multidrug-resistant tuberculosis treatment in children”** – A.J. Garcia-Prats, E.M. Scensson, E.D. Weld, H.S. Schaaf, A.C. Hesselning
- **“Conducting efficacy trials in children with MDR-TB: what is the rationale and how should they be done?”** – J.A. Seddon, E.D. Weld, H.S. Schaaf, A.J. Garcia-Prats, S. Kim, A.C. Hesselning
- **“Statistical considerations for pediatric multidrug-resistant tuberculosis efficacy trials”** – S. Kim, J.A. Seddon, A.J. Garcia-Prats, G. Montepiedra
- **“Community engagement for paediatric MDR-TB clinical trials: principles to support ethical trial implementation”** – G. Hoddinott, S. Staples, R. Brown, M. Simwinga, C. Mubekapi-Musadaidzwa, A.C. Hesselning, G. Hendricks, P. De Koker, L. McKenna

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CLINICAL TRIALS PROGRESS REPORT

RESIST-TB continues to be a critical source for up-to-date information on clinical trials for MDR-TB. The Clinical Trials Progress Report gathers information on clinical trials that are underway and/or in development, including study names, description, status, study enrollment size, and links to more information on all MDR-TB trials planned or in progress. There are currently 21 clinical trials being regularly monitored on our website. Of the 21 trials included in the Clinical Trials Progress Report, 14% are Phase 1, 43% are Phase 2, and 43% are Phase 3; 57% are currently enrolling participants and 43% have completed enrollment and follow up, or data analysis is ongoing. This resource is updated on a monthly basis with downloadable versions available in PDF, PowerPoint, and Word Document formats.

WEBINAR AND CONFERENCE CALL SERIES

In 2015 RESIST-TB initiated a webinar series in collaboration with the CDC TBTC MDR/XDR-TB Working Group. This webinar series serves as a forum for updates on pressing issues in the field of MDR-TB through presentations on recent publications. The webinar series also helps fill a critical and otherwise unmet gap in disseminating newly identified but unpublished advances in MDR-TB care and treatment. Webinars hosted as part of this series during 2018 are listed below:

- **Nix-TB and ZeNix XDR-TB Trials**, presented by Dan Everitt - January 11, 2018
- **Preliminary Results from the endTB observational cohort study**, presented by Cathy Hewison and Lorenzo Guglielmetti – April 5, 2018
- **Results of DR-TB Working Group Surveys, 2017 and 2018**, presented by Robert Horsburgh, Chen-Yuen Chiang, and Arnaud Trebucq – June 7, 2018
- **MDR-TB Clinical Trials Capacity Building (TREAT-TB)**, presented by Jan Komrska – July 10, 2018
- **Adequate and Well-Controlled Studies in TB Regimen Development: An FDA Perspective**, presented by Carole Mitnick and Karen Higgins - September 6, 2018

A collection of previous webinars hosted and/or sponsored by RESIST-TB, including slides, can be found on our website [here](#).

STATE-OF-THE-ART SERIES ON MDR-TB

In 2018, RESIST-TB finished compiling the State-of-the-Art Series on MDR-TB for publication in the IJTLD. An editorial written by Steering Committee members, guest editors of the IJTLD, Robert Horsburgh, Carole Mitnick and Christoph Lange will accompany the series. The series consists of the following seven articles:

1. Healthcare inequalities and the global burden of drug-resistant TB (under review)
2. Reducing MDR-TB Transmission (under review)

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3. Rapid and equitable integration of innovations in DR-TB diagnosis and treatment (submitted)
4. Precision medicine for DR-TB treatment (submitted)
5. Management of DR-TB in low-resource, high burden settings (submitted)
6. Palliative care for patients with incurable DR-TB (submitted)
7. Elimination of DR-TB: what will it really take? (submitted)

PUBLIC POLICY AND AWARENESS

UNION WORLD CONFERENCE ON LUNG HEALTH

RESIST-TB continues to strive to ensure that DR-TB remains a focus at scientific meetings and conferences. RESIST-TB sponsored two symposia at the 49th Union Meeting held in The Hague in the Netherlands in October 2018. These two symposia focused on the following subjects:

- *Clinical Trials Capacity Building*
 - Multidrug-resistant tuberculosis clinical trial landscape overview – presented by Robert Horsburgh
 - Ethics and regulatory – presented by Abraham Aseffa
 - Challenges/efforts in strengthening site pharmacies and pharmacists in the STREAM Trial – presented by Jan Komrska
 - Mycobacteriology laboratory capacity building for tuberculosis clinical trials – presented by Gomathi N.S.
- *Toward Zero Hearing Loss: Access to New TB Drugs and the Human Right to Enjoy the Benefits of Scientific Progress*
 - Deaf or dead: where is the choice here? – presented by Nandita Venkatesan
 - The human right to science and new treatments for drug-resistant tuberculosis – presented by Michael Frick
 - Clinical considerations and consequences of DR-TB treatment, hearing loss and access to new drugs – presented by Jonathan Stillo
 - Strategies for changing clinical practice – presented by Jennifer Furin

DRUG-RESISTANT TUBERCULOSIS WORKING GROUP

In addition, RESIST-TB sponsors the Drug-Resistant Tuberculosis Working Group (DR-TB WG) within the IUATLD; the WG is currently co-chaired by Bob Horsburgh, Arnaud Trebucq and C-Y Chiang. The group met for their third Annual Meeting at the 49th Union World Conference on Lung Health held in The Hague, Netherlands, 24-27 October, 2018. At the Annual meeting, the WG reviewed annual progress in the diagnosis, treatment and prevention of MDR-TB; collaborated with DR-STAT to review the progress in rolling-out new drugs and regimens for MDR-TB; and identified best practices and research gaps in MDR-TB prevention, diagnosis and treatment. In order to assess MDR-TB treatment options available in WG countries

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in 2017 and 2018, an internet-based survey was designed and implemented, and the results were presented and discussed in a webinar in June 2018.

Results of 2018 SURVEY of Roll-out of the 9-month regimen, Bedaquiline and Delamanid: RESIST-TB, in collaboration with the WG, created a nine-question survey using the online survey software and questionnaire, SurveyMonkey. All members of the IUATLD registered in the Tuberculosis Section were invited to participate. A total of 158 DR-TB working group members responded to all or part of the survey. These respondents represented 45 countries across 6 continents and included health professionals from a variety of roles. Responses were received from 62 respondents from the African Region; 6 from the Eastern Mediterranean Region; 25 from the European Region; 21 from the Region of the Americas; 32 from the South-East Asian Region; and 12 from the Western Pacific Region. These results indicated that roll-out of the new drugs and regimens is variable but that most regions are making substantial progress. The complete results of the survey can be found on the RESIST-TB website [here](#).

LEADERSHIP

Susan van den Hof stepped down from her position on the Steering Committee in 2018. We would like to extend our sincere thanks to Dr. van den Hof for her valuable contributions to RESIST-TB and the organization's cause.

RESIST-TB GOALS FOR 2019 AND BEYOND

RESIST-TB continues to advance our strategic plan, updated in 2017, focused on accelerating the identification and uptake of effective, scalable regimens for MDR-TB; advocating for clinical trials of preventive therapy for MDR-TB; and optimizing communication between stakeholders in the MDR-TB community. These strategic goals are posted on the RESIST-TB website [here](#).

In the coming year, RESIST-TB will continue to provide leadership in scientific advocacy, MDR-TB clinical trials design and preparation, and public policy development. Activities for 2019 include:

- RESIST-TB has submitted a manuscript outlining the results of the WG survey to Public Health Action.
- In partnership with The IUATLD DR-TB WG, RESIST-TB plans to perform an updated survey in 2019 to assess continued progress in the roll-out of these treatments.
- RESIST-TB will analyze results from the third survey on the global roll-out of the two new drugs bedaquiline and delamanid, as well as of the shorter 9-11 month regimen for MDR-TB treatment.

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- In partnership with The IUATLD DR-TB WG, RESIST-TB will present a webinar on the results of these surveys.
- RESIST-TB will continue to host the bi-monthly webinar series. Webinar topics scheduled for the beginning of 2019 include, “An introduction to managing MDR-TB treatment side effects” as well as the results of several MDR-TB clinical trials expected to be completed in 2019.
- RESIST-TB will continue to provide up-to-date information about MDR-TB clinical trials through the RESIST-TB eNewsletter and Clinical Trials Progress Report posted to our website.
- RESIST-TB will complete and publish the State-of-the-Art series on MDR-TB in *The International Journal of Tuberculosis and Lung Disease*.

RESIST-TB continues to fill an important unmet need for innovation, information dissemination and advocacy. By addressing research and implementation gaps in the treatment and prevention of MDR-TB, we draw attention to areas still in need of research. We also undertake important research projects that are not currently being addressed by the global TB community. Moreover, focusing on the development and demonstration of efficacy of scalable regimens will facilitate rapid translation of these advances into practice. The successful continuation of these activities is recognized as critical to continued improvement in treatment and prevention of MDR-TB and XDR-TB.