

RESIST-TB

Research Excellence to Stop TB Resistance

RESIST-TB ANNUAL REPORT FOR 2020

RESIST-TB is an organization of concerned patients, physicians, research scientists and stakeholders. Its mission is to facilitate and promote 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 2020 were supported 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 2020 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, participating in the World Conference on Lung Health and publishing a series of articles on the state of the art in MDR-TB;

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 492 subscribers. In our monthly eNewsletter, we highlight information about new DR-TB related publications, news updates, and upcoming events. Topics covered in our news articles included DR-TB clinical trial status updates, developments in the use of drugs and susceptibility testing, publication announcements, symposia, and webinars of interest in addition to global headlines related to DR-TB.

ADVOCACY PUBLICATIONS

In 2020, RESIST-TB sponsored and co-authored a published article:

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- **Progress in the roll-out of multidrug-resistant tuberculosis (MDR-TB) treatments.** Heng M, Allmendinger S, Chiang C-Y, Trébuq A, Horsburgh CR. *Int J Tuberc Lung Dis* 2020;24:535-6.

CLINICAL TRIALS PROGRESS REPORT

RESIST-TB continues to be a critical source for up-to-date information on clinical trials for DR-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. There are currently 27 clinical trials being regularly monitored on our website. Of the 27 trials included in the Clinical Trials Progress Report, 11% are Phase 1, 37% are Phase 2, 37% are Phase 3, and 7% are Phase 4; 7% are not yet recruiting, 41% are currently enrolling participants, and 52% 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 format [here](#).

WEBINAR SERIES

In 2015 RESIST-TB initiated a webinar series on recent developments in MDR-TB in collaboration with the CDC TBTC MDR/XDRTB 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 2020 are listed below:

- **Approaches for improving inference from observational multi-drug resistant tuberculosis (MDR-TB) treatment cohorts**, presented by Dr. Molly Franke and Dr. Carly Rodriguez on January 27th, 2020 with 43 participants

Description: Observational data from MDR-TB cohorts is a critically valuable resource for answering urgent clinical questions in the absence of evidence from randomized trials. The speakers presented novel methodological approaches, commonly used in other disciplines, that could be used to improve inference from MDR-TB treatment cohorts and identify the data gaps and challenges that must be overcome to implement them.

- **The latest about the NiX-TB regimen for XDR-TB**, presented by Dr. Daniel Everitt on March 26th, 2020 with 96 participants

Description: Dr. Daniel Everitt discussed the recently published work on the NiX-TB trial, which focuses on treatment of extensively drug-resistant tuberculosis (XDR-TB)

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- **The Impact of COVID-19 on MDR-TB Trials**, presented by a panel of experts on May 29th, 2020 with 71 participants

Description: The webinar included investigators from several MDR-TB trials currently in the field, including STREAM (Sarah Meredith, ID Rusen) end-TB (Carole Mitnick, Lorenzo Guglielmetti), ZeniX and SimpliTB (Daniel Everitt) the Otsuka trials team (Jeff Hafkin), TB CHAMP (Anneke Hessling) and TB-PRACTECAL (Bern-Thomas Nyang'wa). These investigators shared their experiences with the effect of the pandemic on their work to develop more effective and less toxic treatments for MDR-TB.

- **INDEX study: Individualized management of MDR and XDR-TB in South Africa using Whole Genome Sequencing (CAP 020)**, presented by Dr. Navisha Dookie on July 29th, 2020 with 61 participants

Description: Dr. Dookie discussed her ongoing work on individualized management of MDR and XDR-TB in South Africa using Whole Genome Sequencing.

- **Availability of and Challenges to Resistance Testing for Second-Line Drugs, including the New and Repurposed TB Drugs**, held in conjunction with the Union Against Tuberculosis and Lung Disease on September 24th, 2020

Description: A joint conversation facilitated by Dr. Robert Horsburgh (Chair of the DRTB section of Union), Dr. Daniela Cirillo (Milan SRL), Frazer Wares (KNCV), with Dr. Alaine Umubyeyi Nyaruhirira from MSH (Chair of the Bacteriol and Immunology section) of UNION as moderator.

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

PUBLIC POLICY AND AWARENESS

DRUG-RESISTANT TUBERCULOSIS WORKING GROUP

This year at the World Conference, RESIST-TB hosted the Drug-Resistant Tuberculosis Working Group's (DR-TB WG) annual meeting. The WG is currently co-chaired by Bob Horsburgh, Arnaud Trebucq and C-Y Chiang. The group met on October 6th, 2020 to conduct a meeting with the following agenda:

- Welcome from the WG Co-Chairs
- Presentation of the results of the 2020 WG survey: "Access to susceptibility testing for the new and repurposed drugs"

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- Plans for 2021
 - Creation and dissemination of a new survey
 - The curation of initiatives for pediatric DR-TB
 - Collaborative efforts with rGLC

RESULTS OF THE 2020 WG SURVEY: “ACCESS TO SUSCEPTIBILITY TESTING FOR THE NEW AND REPURPOSED DRUGS”

In 2020, Resist-TB, in conjunction with the Global Laboratory Initiative (GLI) and the Global Drug Initiative (GDI), created a twelve-question survey to assess barriers to susceptibility testing for new and repurposed TB drugs. A total of 328 responses from 84 different countries were received. These responses represented all WHO regions and included health professionals from a variety of roles. The results showed that turnaround time and the distance samples are sent present a challenge for drug susceptibility testing—particularly for the second-line drugs. Additionally, while new and repurposed drugs are accessible in all seven WHO regions, gaps in drug susceptibility testing present a notable challenge in the face of growing drug resistance.

LEADERSHIP

Isaac Chikwanha stepped down from his position on the RESIST-TB Steering Committee in 2019. In 2020, Vivian Cox joined the steering Committee to fill his seat. Dr. Cox has clinical training and experience as an Internal Medicine and Infectious Diseases specialist with a focus on HIV and drug-resistant tuberculosis. She is currently an MDR-TB Clinical Consultant for USAID/Stop TB Partnership; the sub-Principal Investigator for the endTB clinical trial in South Africa; an Honorary Research Associate at the University of Cape Town; and one of the lead physicians for research activities of the BENEFIT Kids project at the Desmond Tutu TB Centre, Stellenbosch University. Dr. Cox is a co-author of over 33 HIV and DR-TB publications and has 9 years of experience with new and re-purposed drugs for DR-TB treatment. Most recently, Dr. Cox has joined the Global Fund Technical Review Panel as a TB Expert member. We are delighted to have Dr. Cox on the steering committee and look forward to her many contributions in the near future.

RESIST-TB GOALS FOR 2021 - 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.

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 planned for 2021 include:

- RESIST-TB will continue to host bi-monthly webinar series. The first 2021 webinar, “Update on surveillance for resistance to the new and repurposed TB drugs,” has

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already taken place. Following this, our next webinar will focus on developments in pediatric DR-TB.

- RESIST-TB will again send out a survey in 2021 to Union, GLI and GDI members, focusing on access to a broad variety of DR-TB treatment regimens, research plans for fully oral regimens, pediatric DR-TB and MDR-TB metrics and the influence of SARS-CoV-2 on MDR-TB.
- Resist-TB and the Union will jointly Co-host a webinar in September of 2021 to discuss and share the findings of the 2021 survey.
- RESIST-TB will submit the manuscript on the 2020 drug susceptibility survey for publication
- RESIST-TB is organizing an effort to develop criteria that could be used to incorporate observational MDR-TB treatment data into MDR-TB treatment guidelines. An application for funding has been submitted and is pending.
- 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 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.