



**Treatment Action Group**

*Increasing Funding for TB Research:*  
**An Advocacy Strategy Webinar**

November 16, 2016

Mike Frick, Treatment Action Group (TAG)

Richard Chaisson, Johns Hopkins Center for Tuberculosis Research

Christine Lubinski, Infectious Diseases Society of America (IDSA)

Moderator: Marcus Low, *Spotlight* Editor and former Head of Policy at  
Treatment Action Campaign (TAC)

# Webinar Instructions

- All participants are in listen-only mode
- To ask questions, please use the chat feature on the webinar interface

You may also email your questions to:  
suraj.madoori@treatmentactiongroup.org



# Agenda & Overview

- Agenda and Overview
  - Marcus Low, Spotlight Editor and Former Head of Policy at TAC
- U.S. Government funding for TB Research
  - Mike Frick, Senior TB/HIV Project Officer, TAG
- Scientific Community Perspective
  - Richard Chaisson, Director, JHU Center for TB Research
- TB Research & Development Advocacy
  - Christine Lubinski, Vice-President for Global Health, IDSA
- Q&A

## Mike Frick

Mike Frick is a senior project officer in TAG's TB/HIV Project, where he conducts advocacy to support TB vaccine research and promote community engagement in TB research more broadly. He coordinates the Community Research Advisors Group, the community advisory board to the U.S. CDC's Tuberculosis Trials Consortium and leads resource-tracking activities for TAG's annual *Report on Tuberculosis Research Funding Trends*. Mike holds a BA in international studies and Chinese from Kenyon College, and an MSc in global health and population from the Harvard School of Public Health.



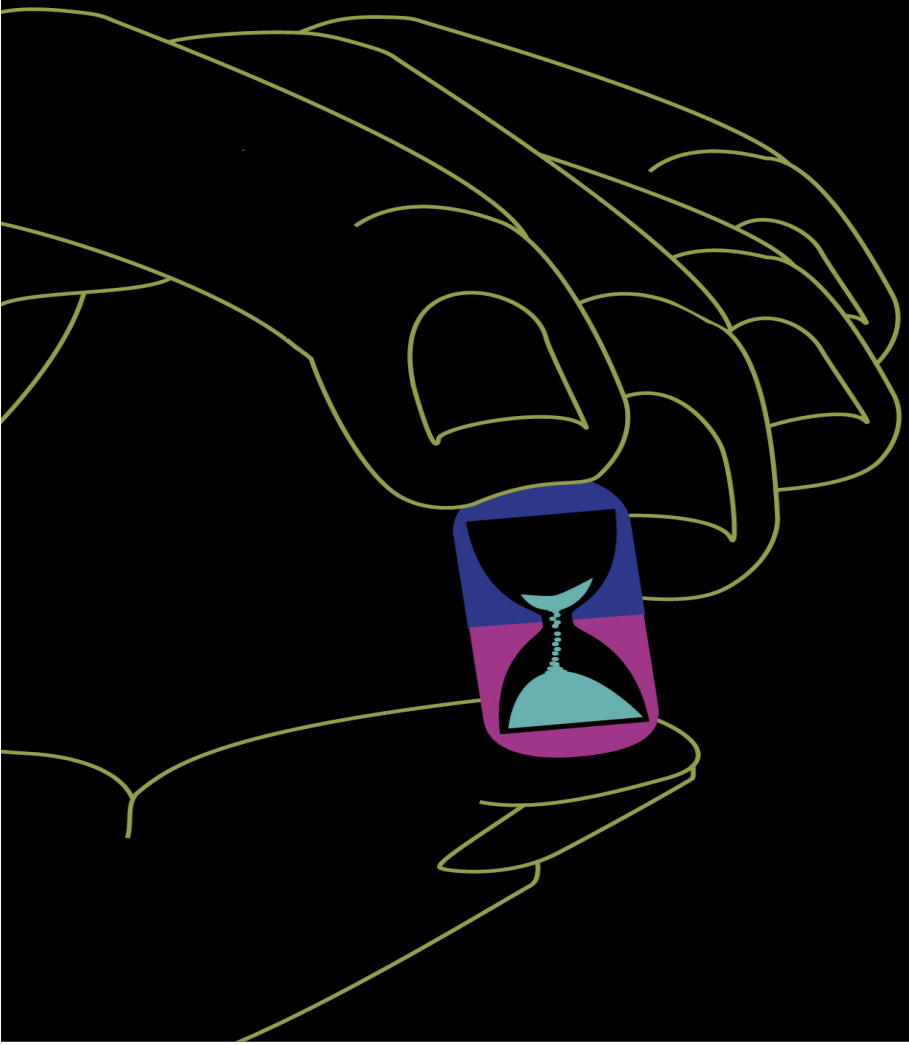
# **U.S. GOVERNMENT FUNDING FOR TB RESEARCH**

AN ADVOCACY STRATEGY WEBINAR

**MIKE FRICK**

**TB/HIV SENIOR PROJECT OFFICER**

**TREATMENT ACTION GROUP**



**TAG**  
Treatment Action Group

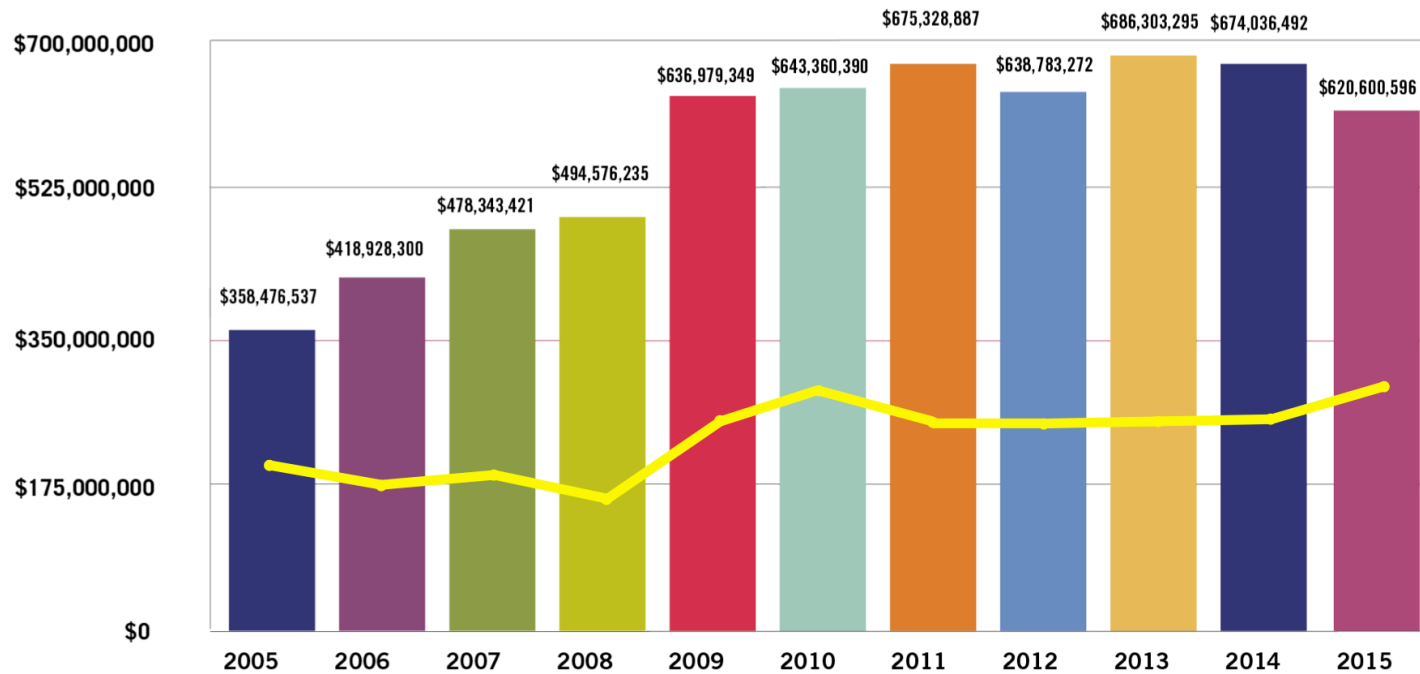
**Stop TB Partnership**

# 2016 Report on Tuberculosis Research Funding Trends, 2005-2015: No Time to Lose


October 2016  
Treatment Action Group  
By Mike Frick

*After Nov. 9, now  
more than ever!*

# GLOBAL TB R&D FUNDING, 2005-2015



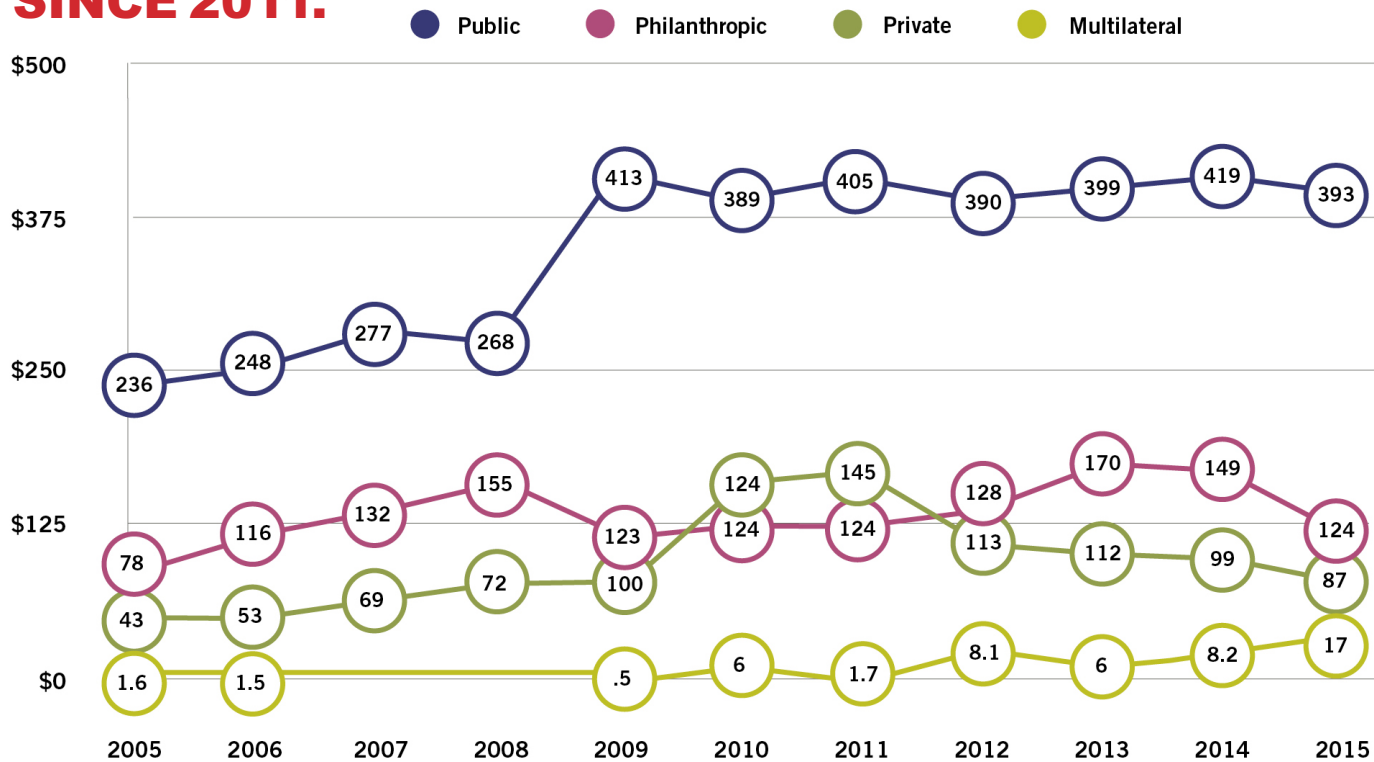
 U.S. Government Funding

 American Recovery and Reinvestment Act  
(a.k.a stimulus spending)

**THE PUBLIC SECTOR PROVIDES 63% OF TB R&D FUNDING.**

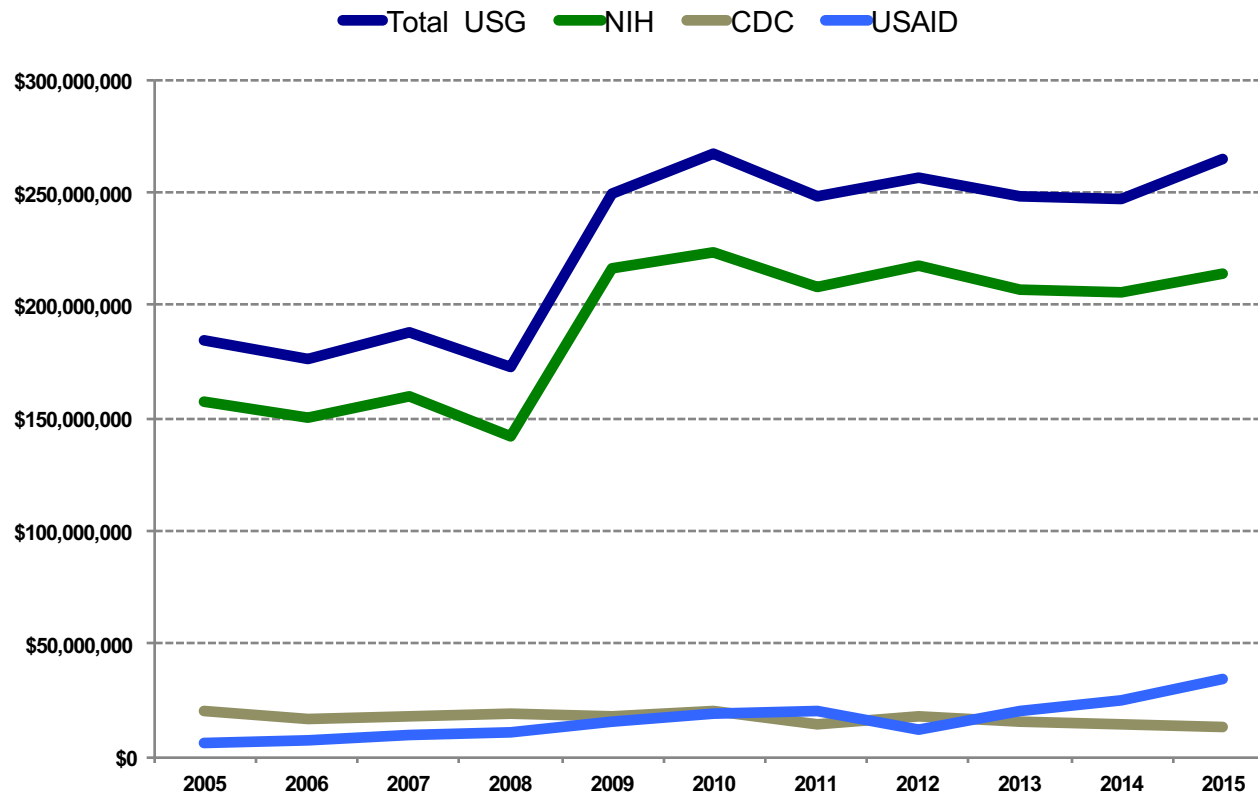
**THE USG PROVIDED 67% OF PUBLIC FUNDING IN 2015.**

**PRIVATE SECTOR FUNDING HAS DECLINED BY 40% SINCE 2011.**

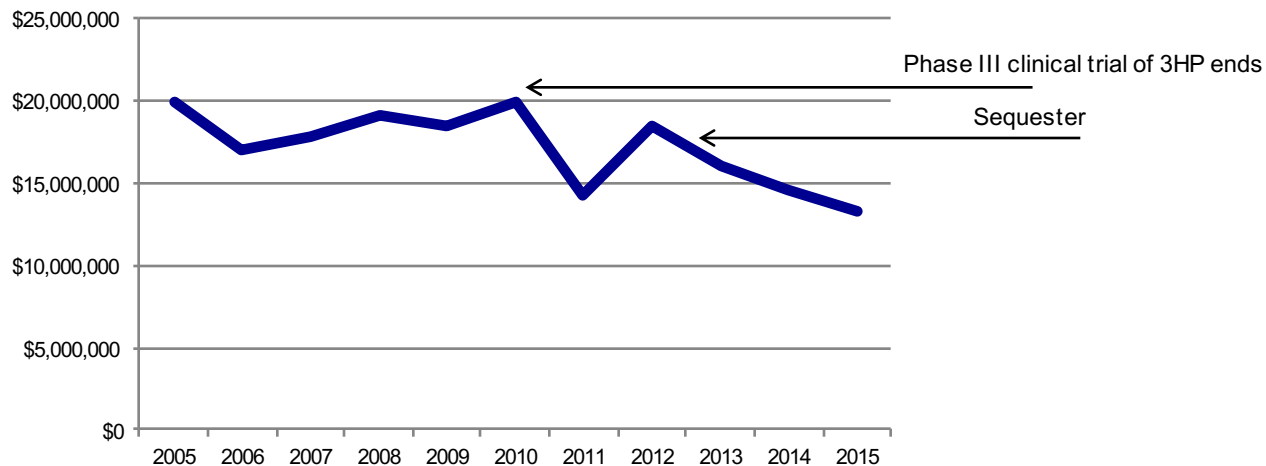


# USG TB R&D FUNDING, 2005–2015

## A LOOK AT THE BIG 3

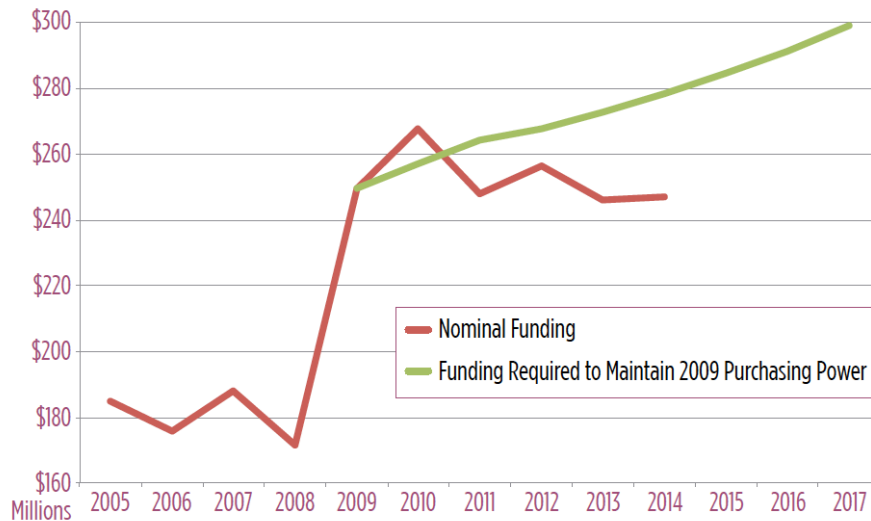


# A CLOSER LOOK AT CDC FUNDING FOR TB R&D



- CDC conducts clinical trials of TB drugs and diagnostics (TBTC) and epidemiological studies (TBESC).
- Proven track record of success (3HP, PK/PD work, studies in PLHIV and children) yet nominal funding down by 33% between 2005–2015.
- To maintain purchasing power with 2009 funding (\$18.4 million), CDC funding would have needed to increase to \$21.0M in 2015; instead, it fell to \$13.3M.
- What would more funding enable? More MDR-TB trials. Studies to optimize existing TB drugs (e.g., PZA). Quicker study timelines. Mentorship for the next generation of TB scientists.

## A CLOSER LOOK AT NIH TB R&D FUNDING



- Most funding comes from NIAID. In 2015, NIAID awards totaled \$178.7 million; all other NIH institutes and centers gave a combined \$34.9 million.
- NIH investments span from basic discovery to implementation science. The NIH gives 60% of all money spent on TB basic science worldwide.
- The activity of DAIDS clinical trials networks in TB research is of critical importance to TB drug, diagnostic, and pediatric research.
- NIH funding is critical at home—and abroad. For example, in 2015, South African TB research programs received more money from the NIH than from the SA MRC.

## **Breathing Life into Flatlined U.S. Government Funding for Tuberculosis Research: FY 2017–2020 Allocations and Recommendations**

By Suraj Madoori  
Edited by Erica Lessem and Kenyon Farrow

June 2016

Proposed first-ever targets specific to USG funding for TB R&D:

- **Increase funding levels to \$300 million by FY2017**
  - Increasing funding from \$247M in 2014 to \$300M in 2017
  - Not a true increase, just enough to keep pace with inflation*
  - Outlined how this \$53M increase could be spread across various U.S. government agencies involved in TB research:
    - **NIH:** \$17M
    - **USAID:** \$15M
    - **CDC:** \$16M
    - **FDA:** \$5M
    - Additional support to **NSF, DOD, BARDA**
- **Increase funding levels to \$400 million by FY2020**
  - Average annual increase of \$33.3M would allow funding to outpace inflation (\$72M above 2009 purchasing power)



# ILLUSTRATE RETURN ON INVESTMENT

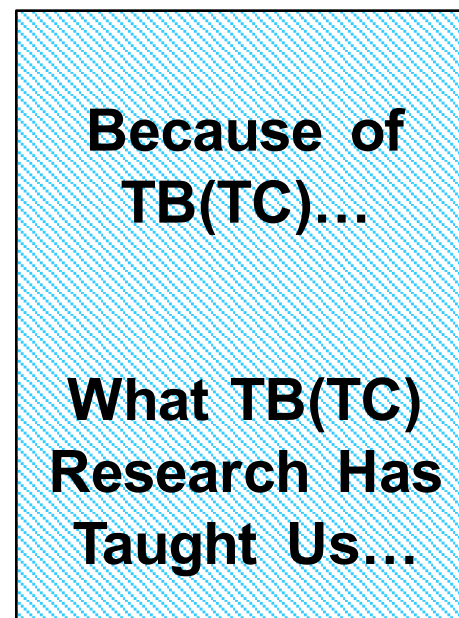
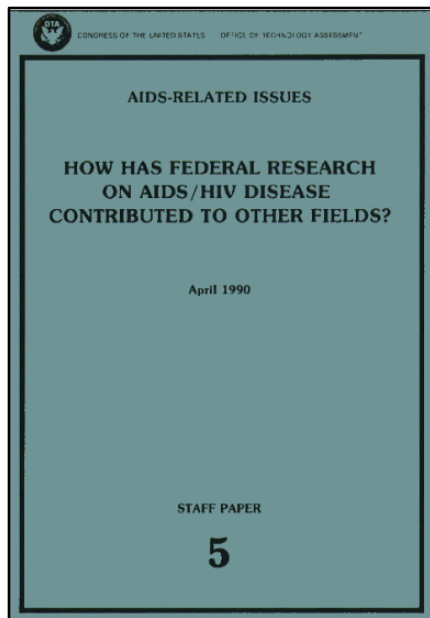
## THAT INVESTMENT IN TB R&D IS LOW DOES NOT MEAN THAT TB R&D IS A BAD INVESTMENT

| INNOVATION                                | PREVIOUS STANDARD OF CARE  | ADVANTAGE OF NEW PRODUCT OR STRATEGY  | U.S. AGENCIES INVOLVED IN DEVELOPMENT | PARTNERS           |
|---|--|---|---------------------------------------|--------------------|
| <b>TB diagnosis</b>                       |  |   |                                       |                    |
| <b>GeneXpert MTB/RIF<sup>5</sup></b>      | Sputum smear microscopy, which misses half of TB cases and cannot detect drug resistance. Doesn't work well in children or people with HIV | Rapidly and accurately detects TB, including resistance to the key drug rifampin, even in children and people with HIV    | DoD, NIH, PEPFAR                      | FIND, UMDNJ        |
| <b>TB prevention</b>                      |  |   |                                       |                    |
| <b>3HP<sup>7,8</sup></b>                  | Nine months of daily therapy with isoniazid. Long, difficult to complete, and can cause liver damage                                       | Much shorter and simpler 12 weeks of once-weekly therapy with isoniazid and rifapentine, which is less toxic to the liver | CDC (TBTC), NIH                       | Sanofi             |
| <b>TB treatment (studies in progress)</b> |  |   |                                       |                    |
| <b>STREAM trials<sup>9</sup></b>          | Treatment for MDR-TB over 18–24 months with expensive, toxic drugs including injections  | If successful, treatment shortened to 9 or 6 months total, potentially with an injection-free regimen                     | USAID                                 | The Union, Janssen |
| <b>S31<sup>10</sup></b>                   | Six months of daily treatment for standard (drug-sensitive) TB   | If successful, treatment shortened to four months total   | ACTG (NIH), CDC (TBTC)                | Sanofi             |

ACTG: AIDS Clinical Trials Group; CDC: Centers for Disease Control and Prevention; DoD: Department of Defense; FIND: Foundation for Innovative New Diagnostics; MDR-TB: multidrug-resistant tuberculosis; NIH: National Institutes of Health; PEPFAR: President's Emergency Plan For AIDS Relief; TB: tuberculosis; TBTC: Tuberculosis Trials Consortium; UMDNJ: University of Medicine and Dentistry of New Jersey; USAID: U.S. Agency for International Development.

# DEMONSTRATE THE BROAD BENEFITS OF TB RESEARCH

TO THE FIGHT AGAINST TB, AND TO MEDICAL SCIENCE AT LARGE



# TB R&D FUNDING UNDER TRUMP

## A REALITY CHECK

- Cannot assume individuals in charge of science policy will be scientists or have scientific training. (Most will not).
- Those influencing science policy may even hold animosity toward science and academic research.
- Or they may exalt science as a concept while impugning the scientific method or weakening its essential elements (e.g., academic freedom, the university tenure system, independent drug regulation).
- Space travel is the only area of science for which Trump has expressed specific support—a statement he later tempered.
- As always, many debates about science funding and policy will take place in Congress, where the above points also apply.
- In this climate, approaches to science advocacy grounded in evidence and ethics will be more important than ever.

**NEW MESSAGES. NEW MEDIA. NEW MOBILIZATIONS.**

# TB R&D FUNDING UNDER TRUMP

## SOME PARTING ENCOURAGEMENTS

- Science has both instrumental and intrinsic value.

**Instrumental:** enabling medical advances that save lives.

**Intrinsic:** “science is a form of human culture, a complex collaborative endeavor of meaning-making and creativity.”[1]

- There may be a tendency in the coming years to only speak about science in its instrumental sense and in terms of a narrow instrumentality (e.g., national security). **We can't stop speaking about the intrinsic value of science.**
- We need both halves to make a whole case.

Scientific advancement and access to its benefits is indispensable for leading a life in human dignity and is a prerequisite for realizing other rights (e.g. health, life).

At the same time, good science is animated by and depends on democratic values. Freedom of expression. The right to information. Universal education. Respect for persons.

[1] Lea Shaver "The Right to Science: Ensuring that Everyone Benefits from Scientific and Technological Advancement"

**REMEMBER  
WHAT WE'RE  
FIGHTING FOR**

**THANK YOU!**

FOR IDEAS, QUESTIONS, OFFERS TO  
HELP—GET IN TOUCH:

[mike.frick@treatmentactiongroup.org](mailto:mike.frick@treatmentactiongroup.org)



# RICHARD CHAISSON

Richard E. Chaisson, M.D., is Professor of Medicine, Epidemiology and International Health and directs the Center for AIDS Research and the Center for Tuberculosis Research at the Johns Hopkins University School of Medicine and Bloomberg School of Public Health in Baltimore, MD, USA. He received his BS and MD degrees from the University of Massachusetts and trained in internal medicine, infectious diseases, and clinical epidemiology at the University of California, San Francisco. In 1988 he was recruited to Johns Hopkins to run its AIDS Service and for 10 years led a clinical program providing care to more than 3000 people with HIV and conducted research on the natural history and treatment of the disease. He was Medical Director of the Baltimore City Health Department's Tuberculosis Control Program from 1992-1998. He is founder and director of the Center for TB Research, a multidisciplinary institute dedicated to the study of TB from bench to bedside to community. His research interests focus on tuberculosis and HIV infection, including global epidemiology, clinical trials, diagnostics and public health interventions. From 2002-2014 he led the Consortium to Respond to the AIDS-TB Epidemic (CREATE), a Gates Foundation-sponsored research consortium studying novel public health approaches to reduce the burden of HIV-related TB. Since 2011 Dr. Chaisson has served as Chair of the TB Transformative Science Group of the AIDS Clinical Trials Group and is leading the network's efforts in developing new TB therapeutic regimens. He assumed leadership of the Johns Hopkins CFAR, re-establishing and revitalizing a trans-disciplinary program to catalyze innovative HIV research at Hopkins, with a special focus on combatting the Baltimore epidemic. Dr. Chaisson has published over 490 scientific papers and book chapters.

# Scientific community perspective

Richard E. Chaisson, MD

Center for AIDS Research

Center for TB Research

Johns Hopkins University

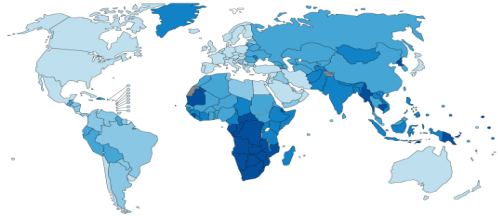


# Outline

- Why is research needed?
- A framework for research to accelerate TB control
- Diagnostics
- Treatment
- Prevention
- Implementation and delivery



# The Global Burden of TB -2015



Estimated number  
of cases

Estimated number  
of deaths

All forms of TB

10.4 million  
(8.7–12.2 million)  
(IR=142/100,000)

1.8 million\*  
(1.5-2.1)

\*1.4 million among HIV negative

HIV-associated TB

1.2 million (11%)  
(1.0–1.3 million)

390,000 (22%)  
(320,000-460,000)

MDR TB / RR TB

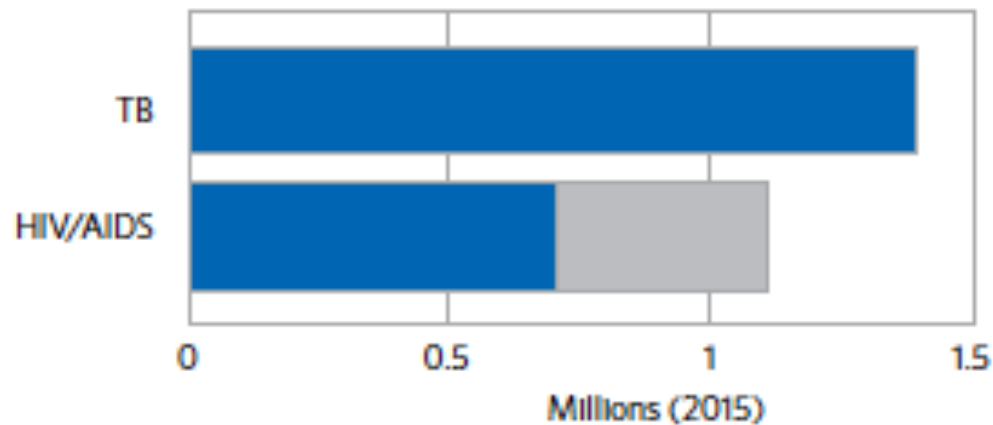
580,000  
(520,000-640,000)

250,000  
(160,000–340,000)

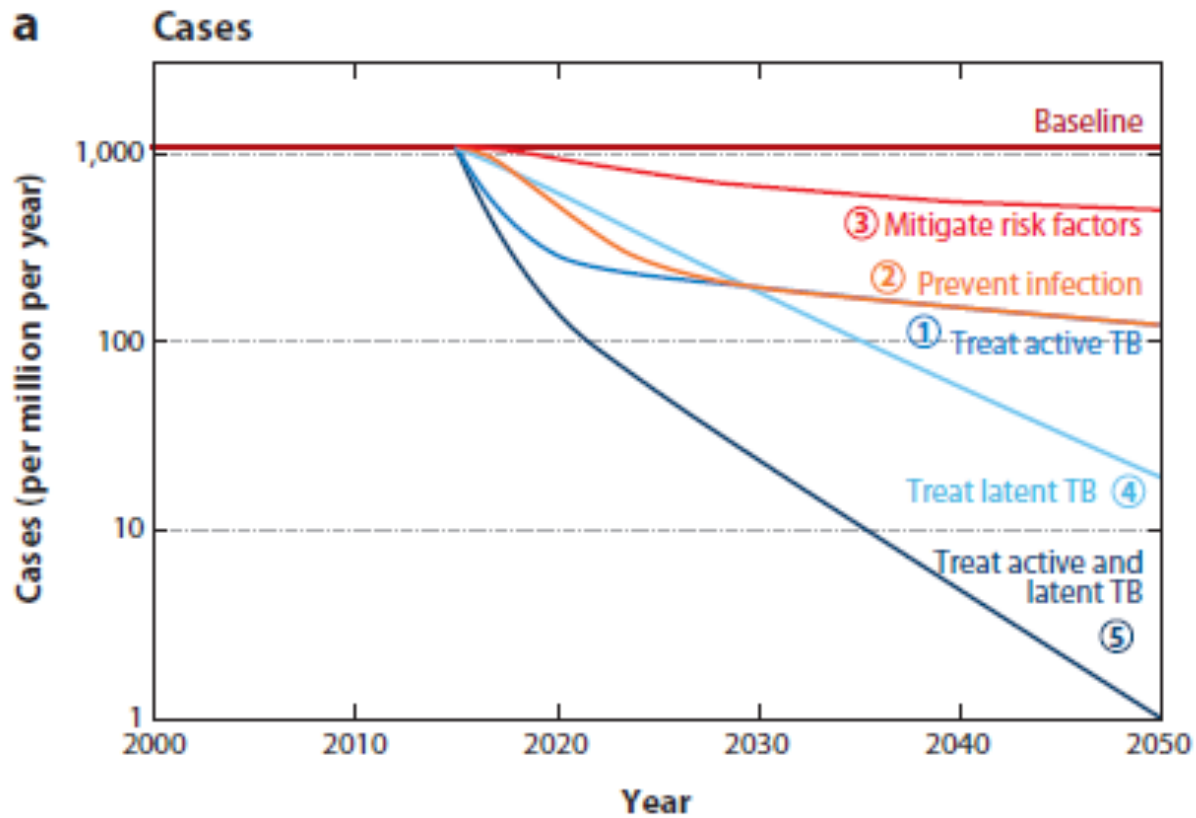
Source: WHO Global Tuberculosis Report 2016

# TB is now leading infectious cause of death globally

**Estimated number of deaths from HIV/AIDS and TB in 2015.** Deaths from TB among HIV-positive people are shown in grey.<sup>a,b</sup>



## Modeled approaches to reaching TB elimination



# A Platform for Controlling Global Tuberculosis and the Research Needs to Achieve It

- **FIND** the TB that is there
  - Improved diagnostic technologies
  - Improved diagnostic strategies
- **TREAT** the TB that is found
  - New drugs to shorten TB treatment
  - Improved treatment for M/XDR
  - Improved strategies for delivering care
- **PREVENT** the TB that hasn't occurred yet
  - Biomarkers to identify those at greatest risk
  - Better preventive therapy regimens
  - Better control of susceptibility (e.g., diabetes, HIV, smoking)
  - New **vaccines**

## Priorities and Opportunities in TB Diagnostics

- Rapid, sensitive, and specific molecular diagnostics
  - Drug susceptible TB
  - MDR/XDR TB
- Whole-genome sequencing to understand drug resistance
  - Design better diagnostic assays
  - As a clinical test?
- Biomarkers to predict risk, disease, and response to treatment

# Priorities and Opportunities in TB Diagnostics

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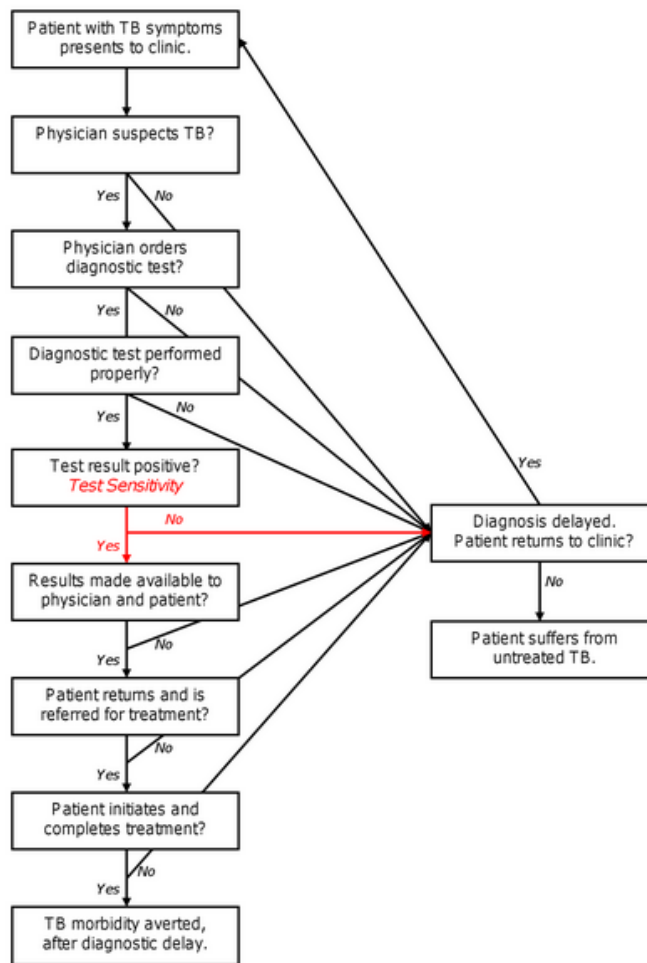
- Biomarkers to predict risk, disease, and response to treatment



## A blood RNA signature for tuberculosis disease risk: a prospective cohort study

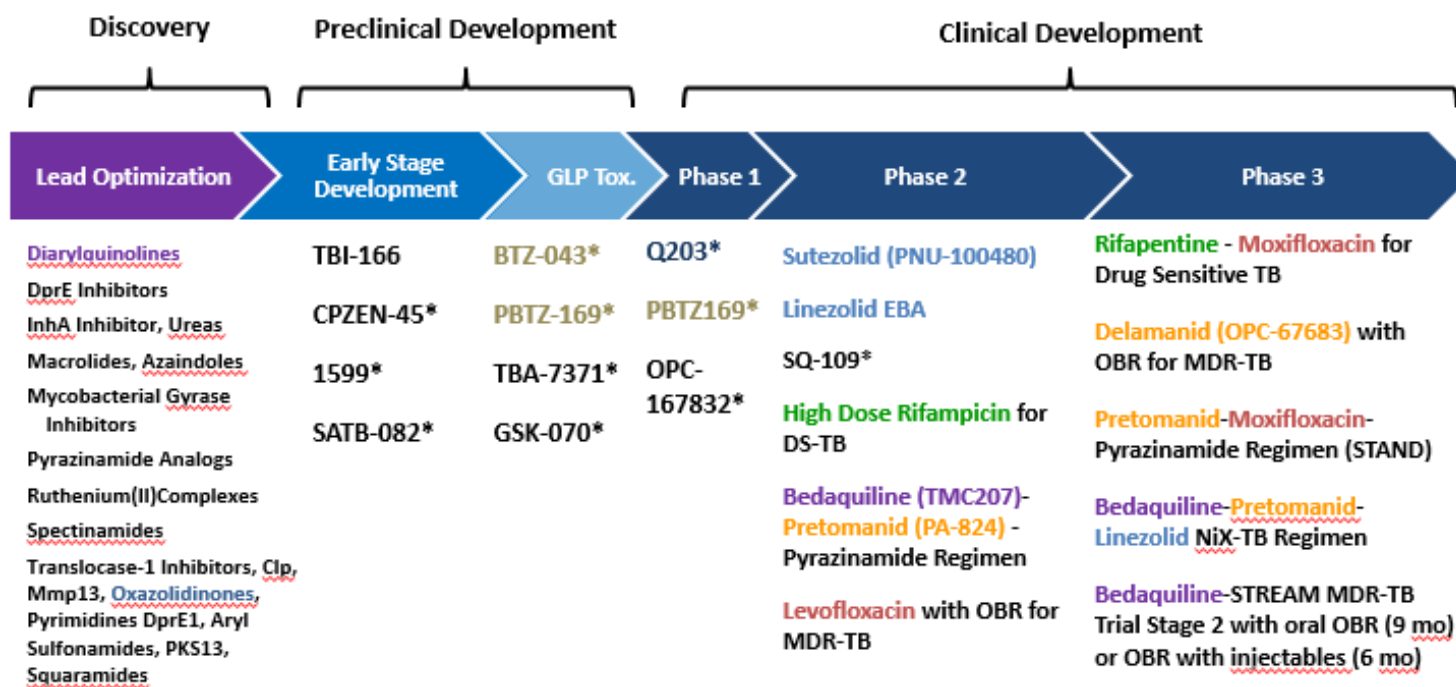
*Daniel E Zak<sup>\*</sup>, Adam Penn-Nicholson<sup>\*</sup>, Thomas J Scriba<sup>\*</sup>, Ethan Thompson<sup>†</sup>, Sara Suliman<sup>†</sup>, Lynn M Amon, Hassan Mahomed, Mzwandile Erasmus, Wendy Whatney, Gregory D Hussey, Deborah Abrahams, Fazlin Kafaar, Tony Hawkridge, Suzanne Verver, E Jane Hughes, Martin Ota, Jayne Sutherland, Rawleigh Howe, Hazel M Dockrell, W Henry Boom, Bonnie Thiel, Tom H M Ottenhoff, Harriet Mayanja-Kizza, Amelia C Crampin, Katrina Downing, Mark Hatherill, Joe Valvo, Smitha Shankar, Shreemanta K Parida, Stefan H E Kaufmann, Gerhard Walzl, Alan Aderem, Willem A Hanekom, for the ACS and GC6-74 cohort study groups<sup>‡</sup>*

### The process of TB diagnosis.





# Global TB Drug Pipeline <sup>1</sup>



Chemical classes: fluoroquinolone, rifamycin, oxazolidinone, nitroimidazole, diarylquinoline, benzothiazinone, imidazopyridine amide. New chemical class\*

<sup>1</sup> Details for projects listed can be found at <http://www.newtbdrugs.org/pipeline.php> and ongoing projects without a lead compound series identified can be viewed at <http://www.newtbdrugs.org/pipeline-discovery.php>

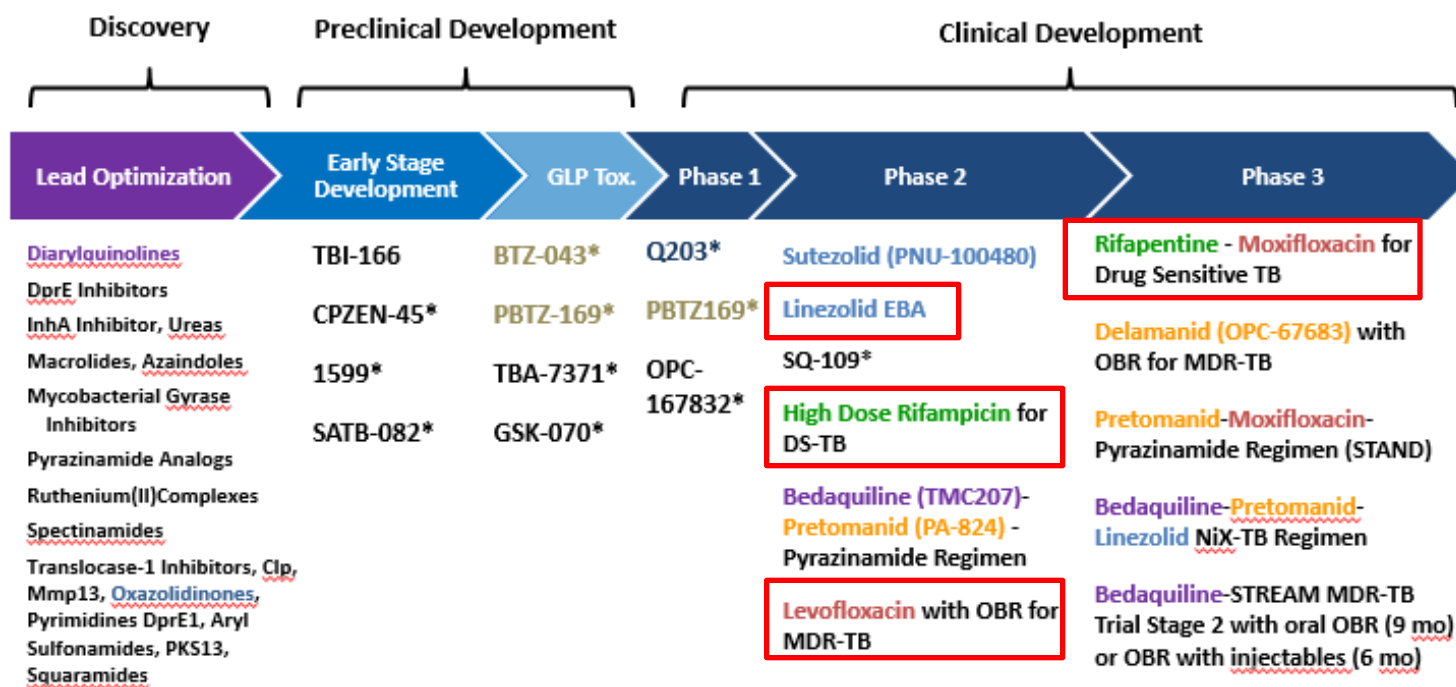
<sup>2</sup>OBR = Optimized Background Regimen



[www.newtbdrugs.org](http://www.newtbdrugs.org)

Updated: October 2016

# Global TB Drug Pipeline <sup>1</sup>



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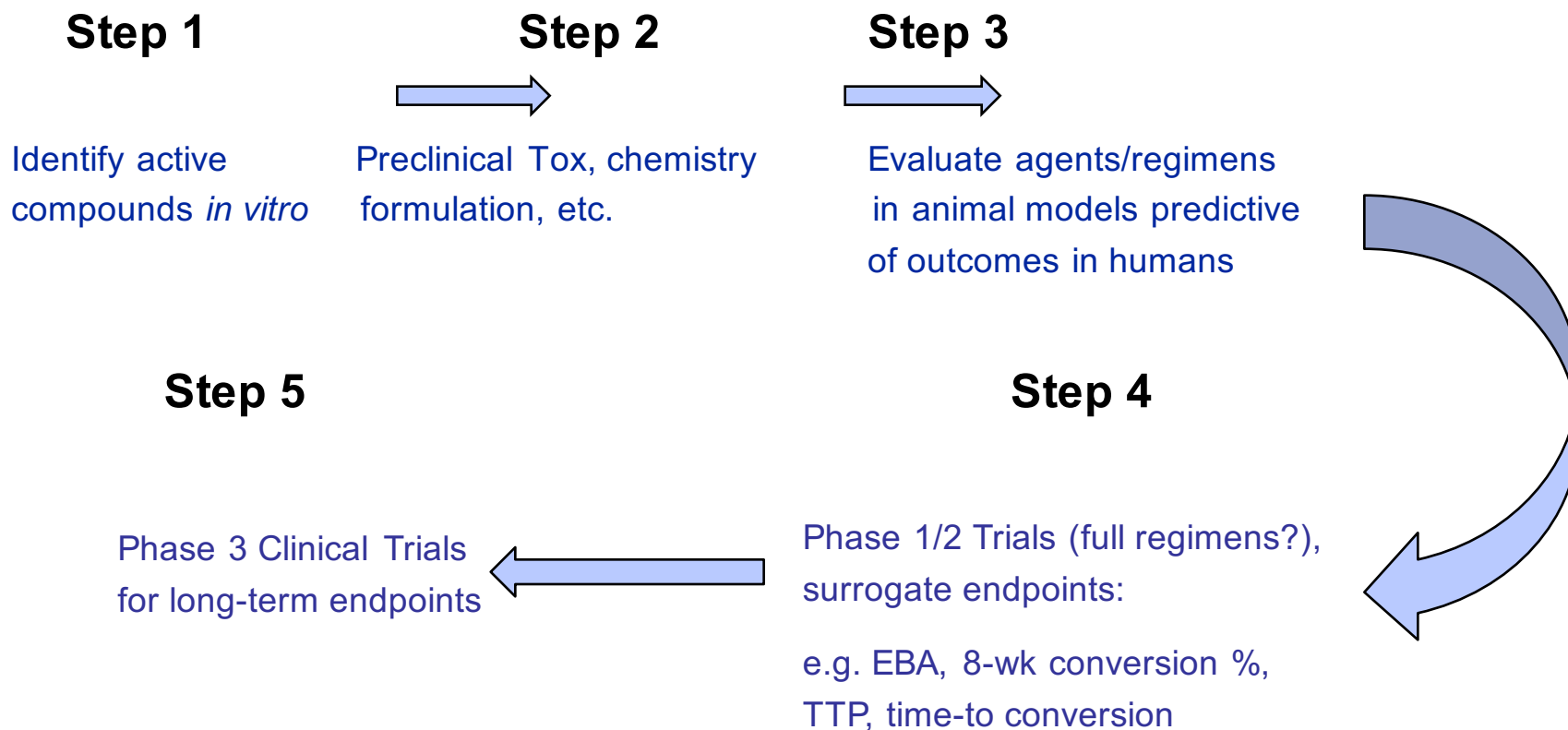


[www.newtbdrugs.org](http://www.newtbdrugs.org)

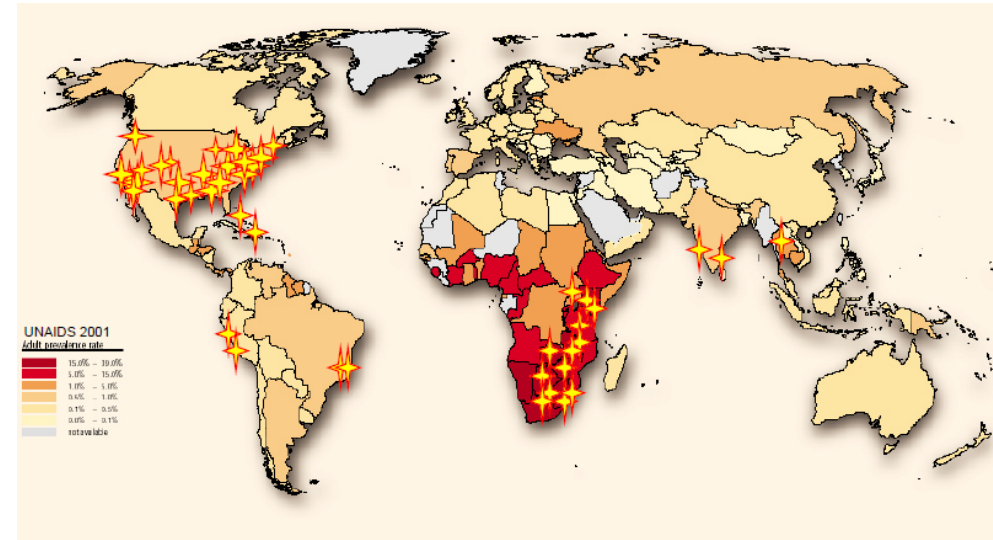
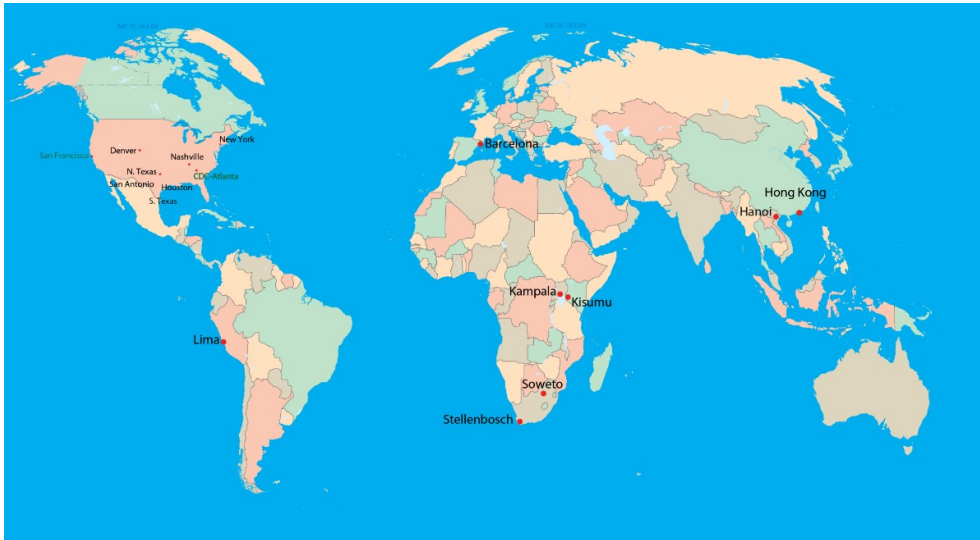
Updated: October 2016

# The Path to New TB Drugs

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# TB Clinical Trials Sites



TB Trials Consortium

AIDS Clinical Trials Group/IMPAACT

Other trials groups: PanACEA, Inter-TB, END TB  
Multiple additional trial sites for specific studies

# The ACTG TB Transformative Science Group

## Scientific Agenda

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### 1.0 TB TREATMENT SHORTENING

To identify regimens to shorten Drug-Susceptible TB treatment to  $\leq 3$  months in patients with and without HIV

### 2.0 MDR-TB TREATMENT

To identify regimens for MDR TB treatment in  $\leq 6$  months in patients with and without HIV

### 3.0 PREVENTIVE THERAPY

To identify regimens to treat latent TB in 1 month and MDR-TB infection in 6 months; to improve latent TB therapy in HIV-infected individuals

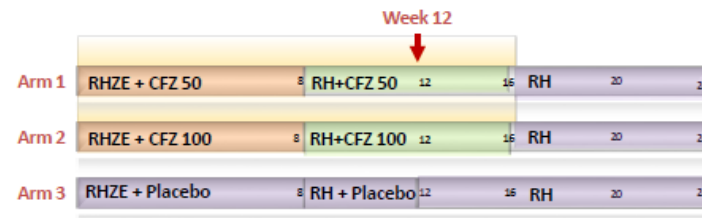
## A5356: Schema

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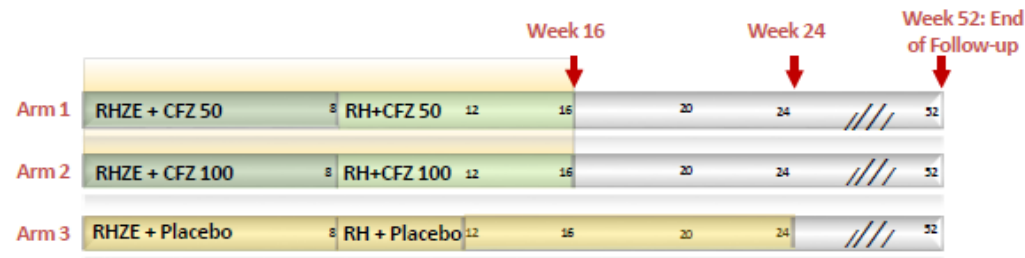
- **Study design**: Phase 2a, open-label, RCT
- **Projected duration**: 24 weeks per participant
- **Sample Size**: 320 participants (80/arm)
- **Study Regimens/Treatment Arms** (Arms A, B, and C exclude injectable second-line TB drugs):
  - Arm A: Linezolid 300 mg/d + delamanid 100 mg twice daily + OBT
  - Arm B: Linezolid 600 mg/d + delamanid 100 mg twice daily + OBT
  - Arm C: Linezolid 1200 mg every other day + delamanid 100 mg twice daily + OBT
  - Arm D: delamanid 100 mg twice daily + OBT (with injectable)

# A5362 – Clofazimine plus standard therapy to shorten TB treatment

## 2-Stage Trial



Hypothesis: CFZ-containing regimen 12-week culture conversion proportion will be sufficiently high to rule out an unacceptable lower bound

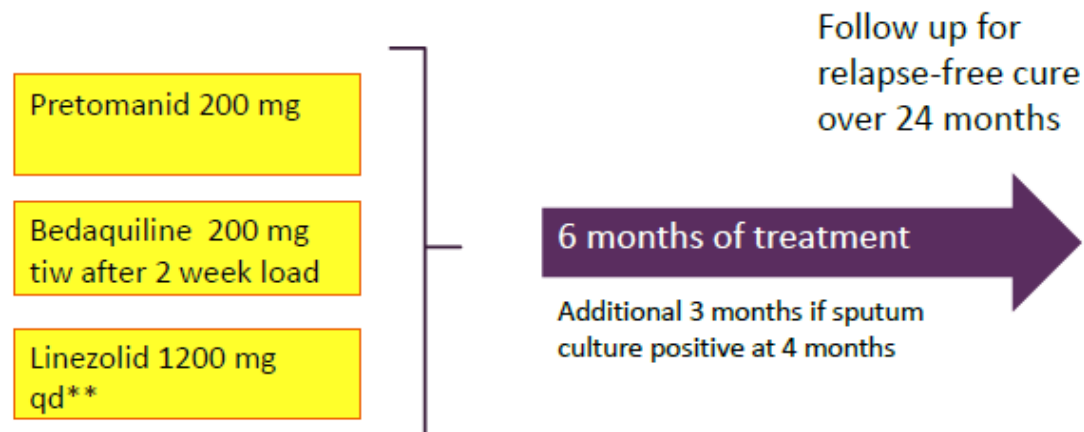


Hypothesis: Relative to SOC, CFZ-containing regimens will have non-inferior 52-week treatment outcomes

## Nix-TB Trial

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Patients who have XDR TB, who have failed MDR TB treatment or who have MDR TB treatment intolerance



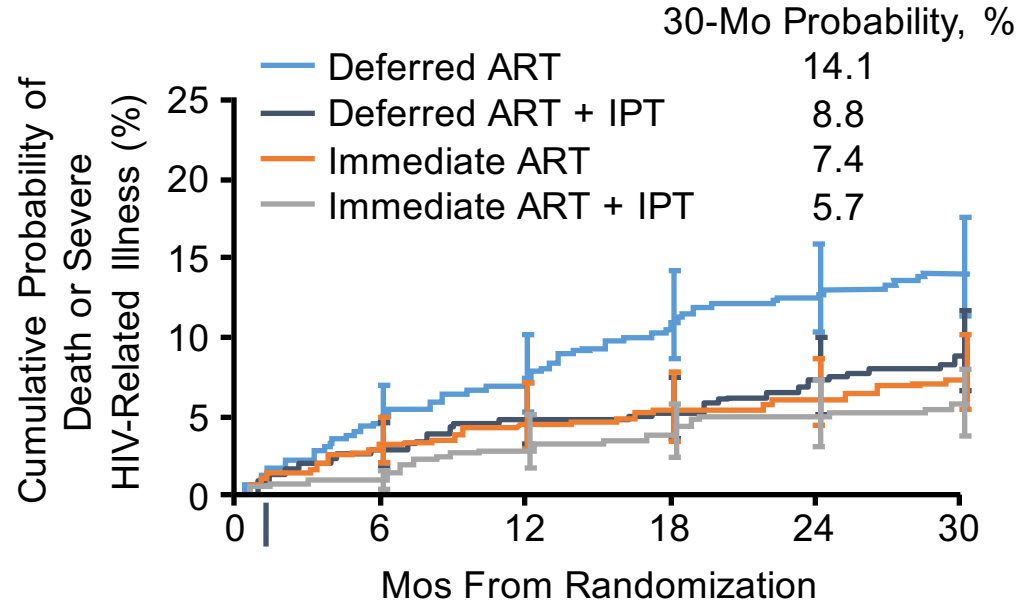
\*\*Just amended from  
600 mg bid strategy



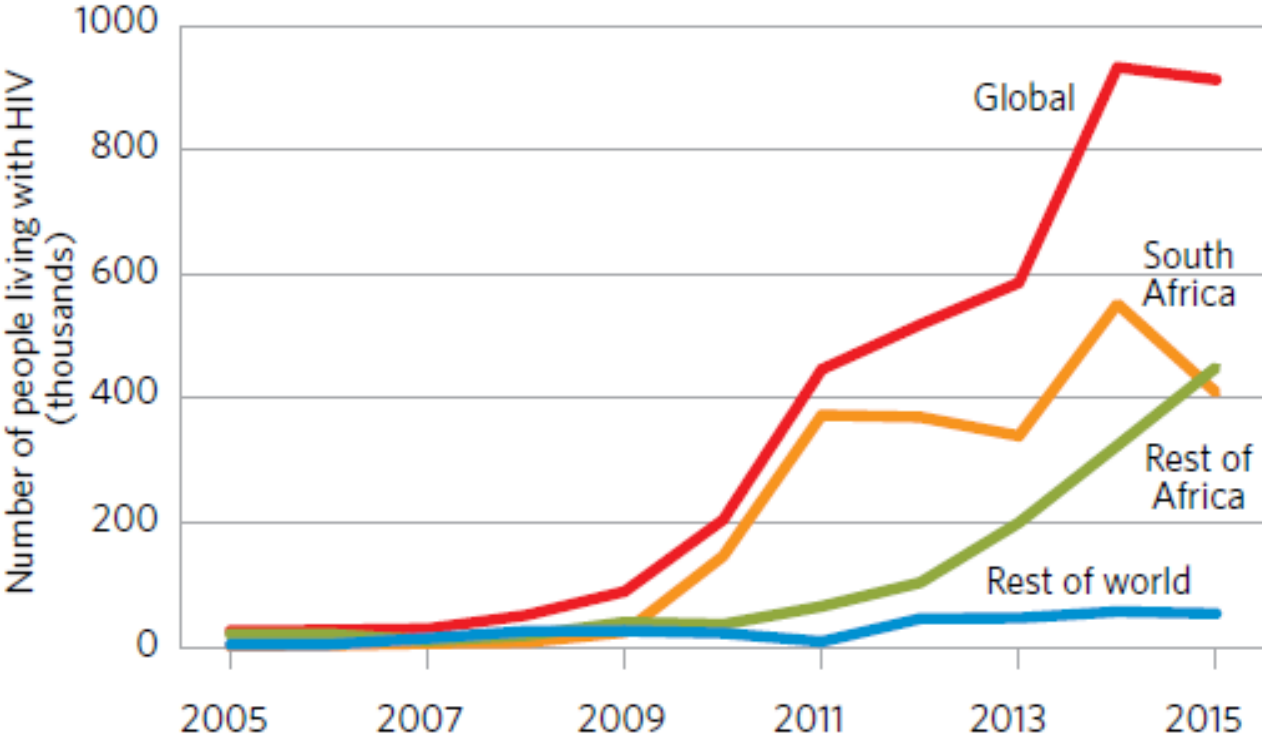
## Planned trials of treatment of latent MDR TB

|                   | TB-CHAMP  | V-QUIN  | PHOENIX  |
|-------------------|---|---|--|
| Intervention      | Levofloxacin vs. placebo daily for 6 months   | Levofloxacin vs placebo daily for 6 months  | Delamanid vs INH daily for 26 weeks  |
| Design            | Cluster randomized; superiority<br>Community-based                                      | Cluster randomized;<br>superiority<br>Community-based   | Cluster randomized;<br>superiority   |
| Target Population | <ul style="list-style-type: none"> <li>0-5 y regardless of TST or HIV status</li> </ul> | <ul style="list-style-type: none"> <li>All ages (&lt;15y currently on hold)</li> <li>TST +</li> </ul> | <ul style="list-style-type: none"> <li>HIV +</li> <li>Children 0-5 yrs</li> <li>TST/IGRA + &gt; 5 y</li> </ul> |
| Assumptions       | LVF decreases TB incidence from 7 to 3.5%;<br>80% power                                 | LVF decreases TB incidence by 70% from 3% untreated;<br>80% power                                     | DLM decreases TB incidence by 50% from 5% to 2.5%;<br>90% power  |
| Sample size       | 778 Households<br>1556 contacts   | 1326 Households<br>2785 contacts  | 1726 Households<br>3452 contacts   |
| Sites             | South Africa  | Viet Nam  | ACTG & IMPAACT sites   |

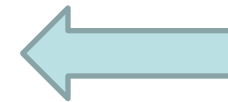
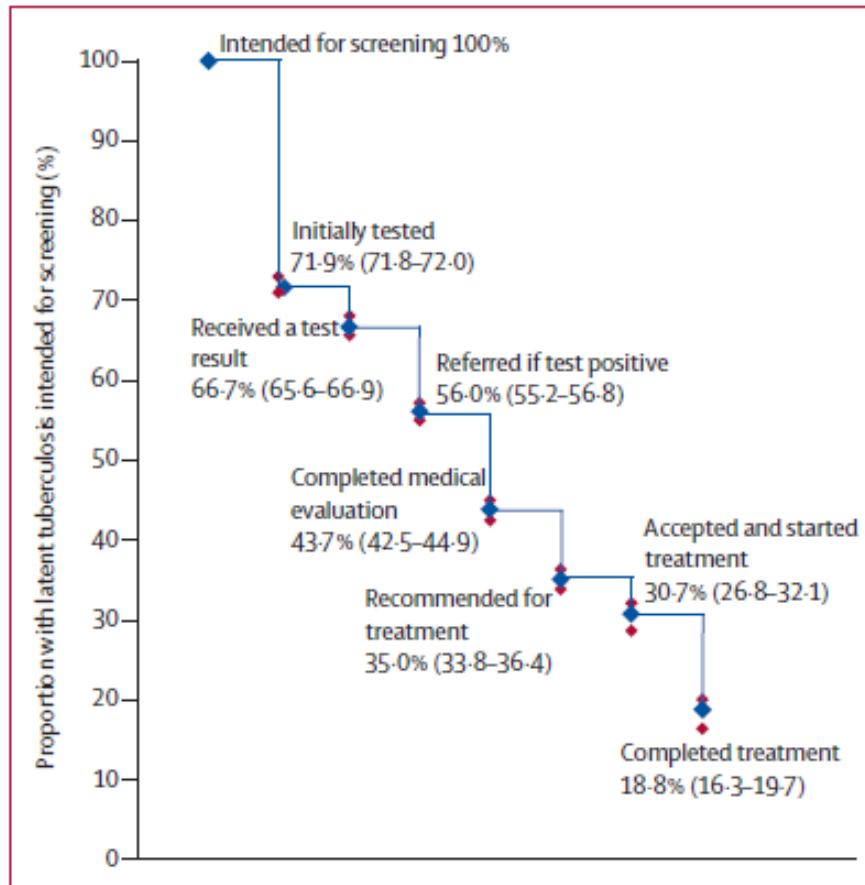
# TEMPRANO: Immediate vs Deferred ART Initiation and IPT Delivery for African Patients Not 'Eligible' for ART



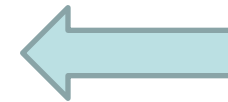
# Provision of TB preventive treatment to people living with HIV, 2005-2015<sup>a</sup>



# The Cascade of Care for Latent TB

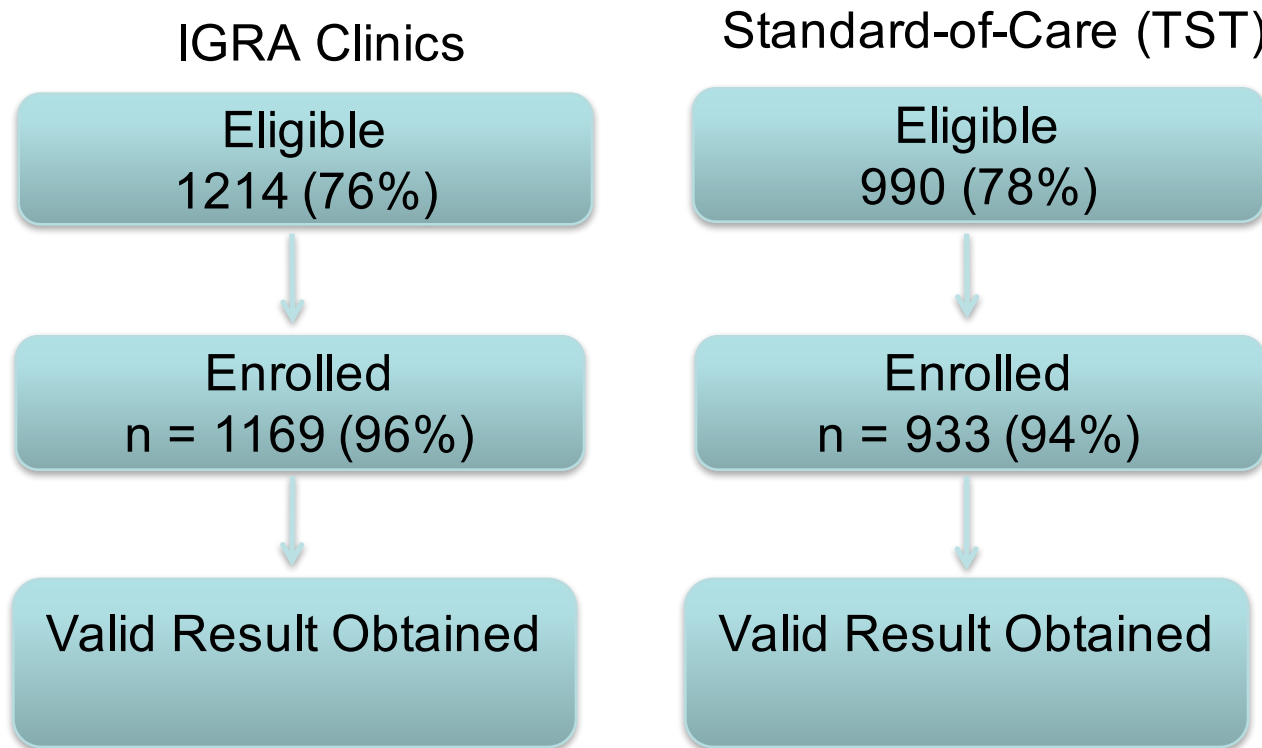


31% start PT

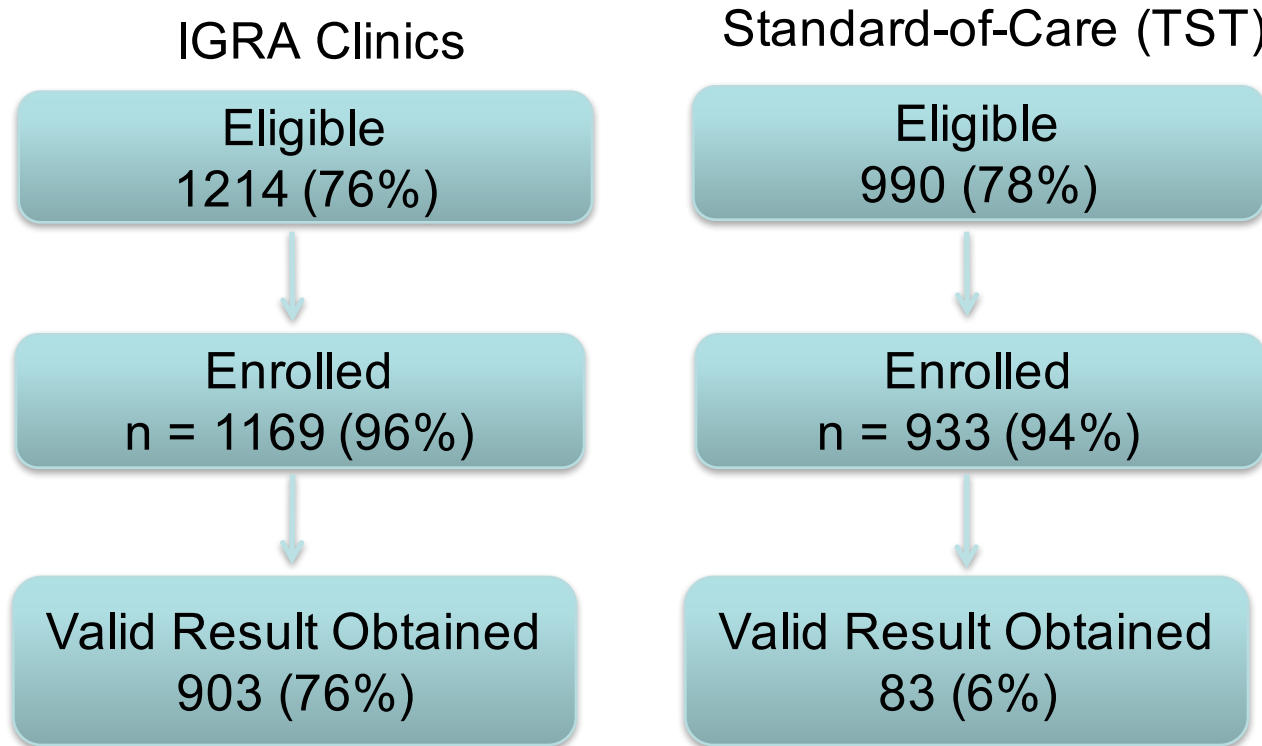


18.8% complete PT

## TEKO Study – IGRA Blood Test vs Skin Test to Screen HIV+ People for TB



## TEKO Study – IGRA Blood Test vs Skin Test to Screen HIV+ People for TB



# What could more investment achieve?

- Discovery
  - New drugs, vaccine candidates, diagnostic technologies, biomarkers
- Trials
  - Treatment shortening
  - MDR/XDR treatment (shortening)
  - ?Universal regimen
  - Preventive therapy
- Implementation and Delivery
  - Improved uptake and impact of interventions

# Christine Lubinski

Christine Lubinski is vice president of Global Health and director of global health activities at the Infectious Diseases Society of America (IDSA) – a membership organization representing physicians, scientists and other health care professionals who specialize in infectious diseases. Under the leadership of a world-renowned group of HIV and TB scientific experts, Ms. Lubinski and her staff have been focused on the U.S. government response to the global HIV and TB epidemics, including research and development and service programs, and have recently expanded the focus to include other global infectious disease threats. IDSA Global Health brings the voices of physician scientists to federal policy and funding discussions about the world's leading infectious disease killers.



# TB Research & Development Advocacy

Christine Lubinski

Vice-President for Global Health

Infectious Diseases Society of America

## 47th Union World Conference on Lung Health: Early data indicates new regimen represents reprieve for patients with XDR TB

BY ANTIGONE BARTON ON OCTOBER 28, 2016.

Like 1 Tweet 0 G+ 0



Science Speaks is in Liverpool this week covering developments and impacts in global tuberculosis research, programming and funding.

The regimen consisted of bedaquiline, which in 2012 became the first new anti-tuberculosis drug in 50 years to receive regulatory approval, pretomanid an investigational drug developed by TB Alliance, and linezolid, a repurposed drug used normally for other resistant infections. All of the medicines are delivered in pills, simplifying treatment that can involve painful injections.

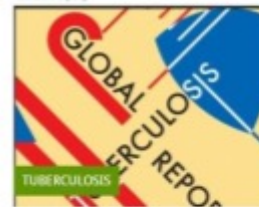
Current, non-experimental regimens for XDR-TB consist of "the kitchen sink approach," lead

**LIVERPOOL, England** – Data from an ongoing trial presented today indicates patients with extensively drug resistant tuberculosis for whom other treatments had failed showed signs of full recovery from disease following a six-month regimen of two recently developed tuberculosis drugs and one repurposed drug.

Extensively drug-resistant tuberculosis, or XDR TB, defined as tuberculosis resistant to at least two first line drugs used to treat the disease, and two drugs used to treat patients with strains of disease resistant to multiple drugs, is so difficult to cure that only about one in five XDR TB patients survive their illness beyond five

A table with multiple columns and rows, likely a data table. The columns are not clearly labeled, but the rows appear to contain numerical data. The table is partially obscured by a sidebar menu.

**Rapid Response Fund aims to maintain HIV service access for sexual minorities**  
Organizations in 20 countries are eligible for emergency funds, support for longer term measures to counter treatment barriers in the weeks after Nigeria passed its 2014 [...]



**WHO Global TB report: New data raises estimates of illness, death**  
While more than half a million fell ill with drug-resistant tuberculosis requiring second-line treatments last year, just one in five received it. Improved data collection shows [...]



## Momentum in TB R& D

- There is progress and we should highlight it in advocacy
- Progress in the pipeline with more resources needed to move products through trials and to the bedside
- TB progress is vital to ending HIV as a public health threat, reductions in maternal and child mortality and achievement of many SDGs, including universal health care.

# NATIONAL STRATEGY FOR COMBATING ANTIBIOTIC- RESISTANT BACTERIA

*Vision: The United States will work domestically and internationally to prevent, detect, and control illness and death related to infections caused by antibiotic-resistant bacteria by implementing measures to mitigate the emergence and spread of antibiotic resistance and ensuring the continued availability of therapeutics for the treatment of bacterial infections.*

September 2014



# Antimicrobial resistance is a bipartisan concern

- Congress has appropriated funds and many Republicans are on board.
- UK report says drug-resistant TB is a major AMR threat and is and will continue to be huge contributor to sickness and death.
- MDR-TB is already a reality in the US, and Ebola and Zika have demonstrated that global threats are local threats.

# NATIONAL ACTION PLAN FOR COMBATING MULTIDRUG-RESISTANT TUBERCULOSIS



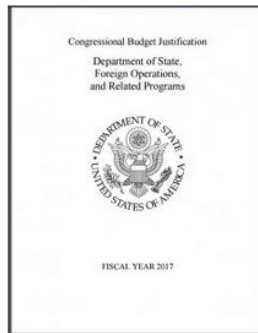
*Vision: The United States will work domestically and internationally to contribute to the prevention, detection, and control of multidrug-resistant tuberculosis in an effort to avert tuberculosis-associated morbidity and mortality and support a shared global vision of a world free of tuberculosis.*

December 2015

## White House slashes TB funding less than two months after launching National Plan to Combat MDR-TB

BY RABITA AZIZ ON FEBRUARY 9, 2016.

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The State Department's funding document released following the White House budget today shows the Administration proposed the same amount for tuberculosis programs this year as it did last year — even after releasing an ambitious plan to reach more people worldwide with treatment for drug resistant TB.

The State Department's budget justification proposes a \$45 million cut to total \$191 million for the TB program — a 19 percent cut over the fiscal year 2016 enacted level. The White House's repeated attempts to cut funding for the TB program has been met with rejection from Congress over the past several years.

The National Action Plan to Combat MDR-TB includes aims to "initiate appropriate treatment in 25 percent of patients with MDR-TB in 10 countries with the highest burdens of MDR-TB" by 2016 (with the plan released a week and a half before the new year, leaving what part of 2016 unclear), increasing that treatment target to 35 percent of patients with MDR-TB by 2018. Among the plan's aims by the end of 2020 are to initiate appropriate treatment in 50 percent of patients with MDR-TB in 10 countries with the highest burdens of MDR-TB, reduce global TB incidence by 25 percent compared to 2015 levels, successfully treat at least 16 million TB patients in high-burden countries, achieve and maintain treatment success rates of 90 percent for individuals in high-burden countries with drug-susceptible TB.

48. How would you rate the overall quality of the information provided?  
49. How useful was the information provided?  
50. How easy was it to understand the information provided?  
51. How clear was the information provided?  
52. How accurate was the information provided?  
53. How relevant was the information provided?  
54. How timely was the information provided?  
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56. How useful was the information provided?  
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58. How clear was the information provided?  
59. How accurate was the information provided?  
60. How relevant was the information provided?  
61. How timely was the information provided?  
62. How accessible was the information provided?

### HIV

Rapid Response Fund aims to maintain HIV service access for sexual minorities

Organizations in 29 countries are eligible for emergency funds, support for longer term measures to counter treatment barriers In the weeks after Nigeria passed its 2014 [...]



### WHO Global TB report: New data raises estimates of illness, death

While more than half a million fell ill with drug-resistant tuberculosis requiring second-line treatments last year, just one in five received it Improved data collection shows [...]



## A new day- White House & Congress

- Calling on TB advocates and researchers from New York and Indiana
- Educating new Senators – Todd Young
- A poll conducted by Research America found only 17 percent of Americans could name a living scientist- We need to mobilize living TB scientists
- Most Americans could not identify anywhere where research is conducted- only 15 percent named NIH.



National Institutes of Health Director  
Francis Collins

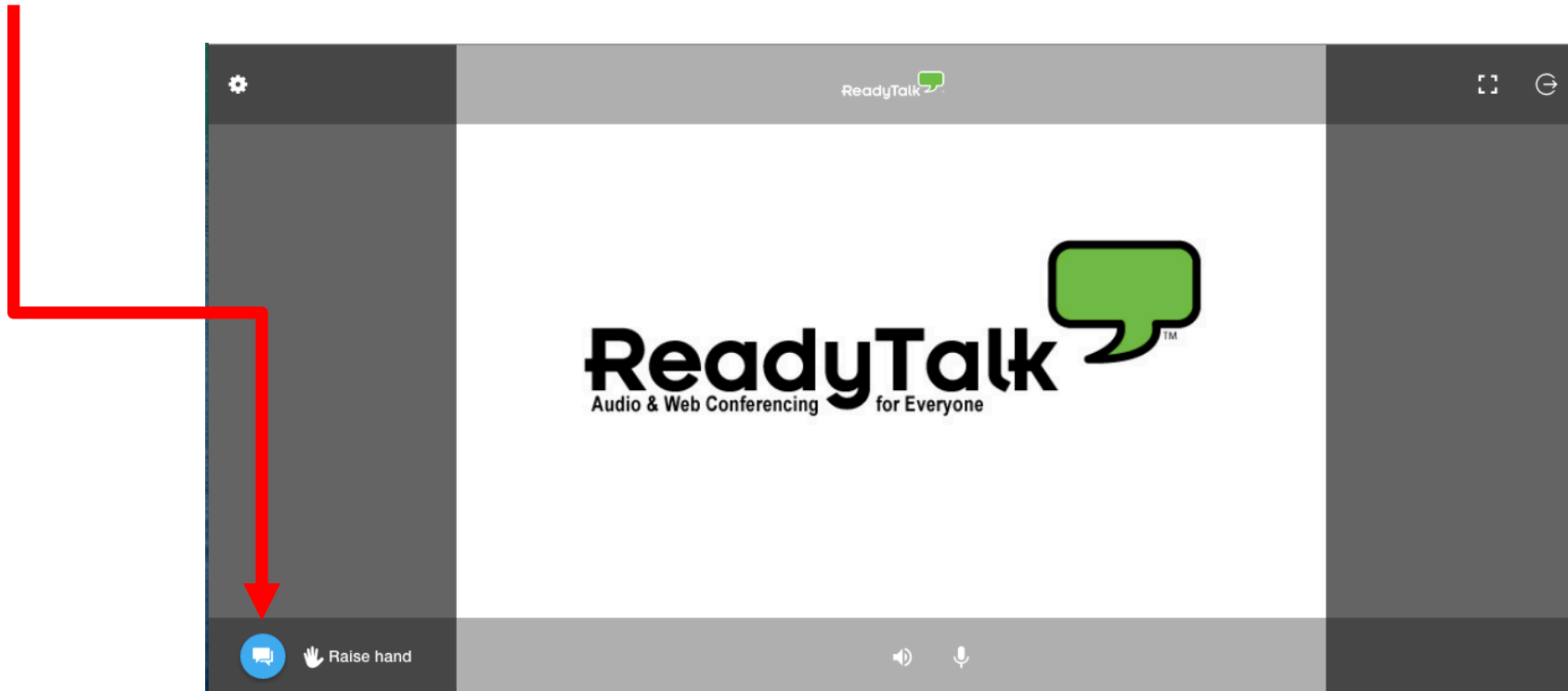


## Federal agency leaders matter to TB R & D

- NIH director plays a significant role in allocating research dollars to Institutes and diseases.
- The USAID director has a role in allocating R&D dollars to TB
- The CDC director oversees a portfolio on global and domestic TB including R& D activities.
- We must engage them

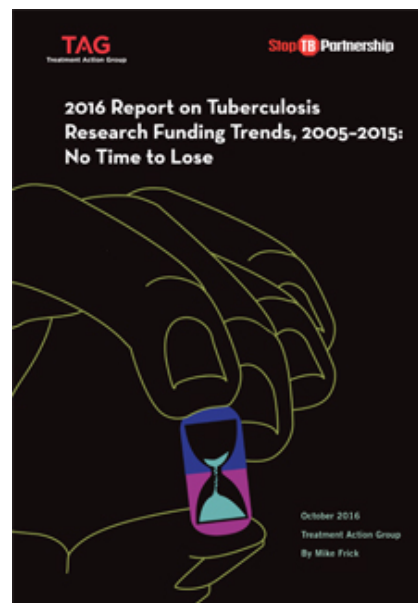
# Questions?

- To ask questions, please use the chat feature on the webinar interface

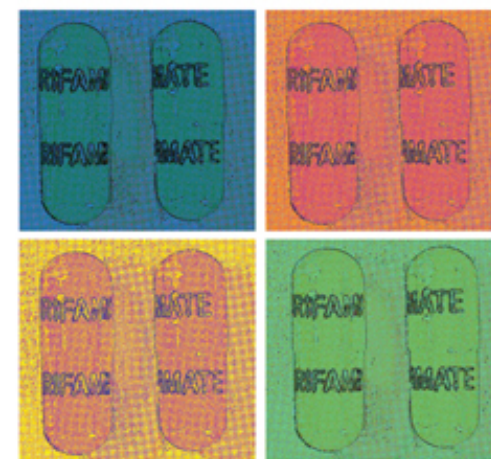


# Additional resources

- 2016 Report on Tuberculosis Research Funding Trends, 2005–2015: No Time To Lose
- An Activist’s Guide to Tuberculosis Drugs – 2016 Update
- Breakthrough: Catalyzing R&D to End TB



## AN ACTIVIST'S GUIDE TO Tuberculosis Drugs



2016 UPDATE

TAG  
Treatment Action Group

....available at: [www.treatmentactiongroup.org/tb/publications](http://www.treatmentactiongroup.org/tb/publications)

# Thank you!

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