

TB Nurse Network Meeting
01/18/2017
10:00 – 11:30 a.m. ET
Minutes
Total Attendance: 25

I. Announcements

a. MDHHS 2017 World TB Day

- Monday, March 20th, 2017
- Kellogg Hotel and Conference Center, East Lansing, Michigan
- Registration will be open soon (email announcement); \$50 registration fee
- Nursing & Physician continuing education credits will be available (about 6 hours)
- Tentative Agenda:
 - Panel: Patient Stories (Let us know if you have any patients who are willing to share their stories!)
 - Epidemiology of TB
 - TB & Diabetes: A Local Health Department's Approach
 - Lab Overview & Case Study
 - New USPSTF LTBI Testing Recommendations
 - National Tuberculosis Controllers Association (NTCA) Update
 - New TB Treatment Guidelines for Drug-Susceptible TB
 - Panel: TB Services for Refugees in Michigan

II. Upcoming Webinars

a. Curry International TB Center

- [“Exploding Head Zone – The Interface of Molecular and Growth-Base Drug Susceptibility Testing”](#)
- 1/25/17 @ 2-3:30 ET. Registration ends 1/19/17
- This 75-minute webinar will discuss how to put together results from both conventional growth-based and molecular methods of TB drug susceptibility testing (including conflicting or contradictory results) to request further testing and/or design optimal treatment regimens for TB patients

b. RTMCCs (Jointly sponsored)

- [“Practical Implementation of the 2016 ATS/CDC/IDSA Treatment of Drug-Susceptible Tuberculosis Guidelines: Caveats and Controversies”](#)
- 2/3/17 @ 2-3:30 ET. Registration ends 1/27/17
- Part 2 of 2 webinar series

III. Recently Archived Webinars

- a. Mayo Clinic Center for Tuberculosis
 - [“Case Studies in Pediatric TB and HIV Co-Infection”](#)
- b. Curry International Tuberculosis Center
 - [“2016 ATS/CDC/IDSA Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis Webinar”](#)
 - Part 1 of 2 webinar series
- c. Rutgers Global TB Institute
 - [“Tricks of the Trade: Strategies for Pediatric TB Case Management”](#)

IV. Recently Archived Trainings: Curry International TB Center

- a. [Fundamentals of Tuberculosis Case Management](#)
 - This session took place during the TB Case Management and Contact Investigation Intensive which took place in Oakland, CA. It was originally presented on November 1, 2016. A PDF handout of the PowerPoint slides is located [here](#).
- b. [Nontuberculosis Mycobacterial Infections](#)
 - This session took place during the TB Clinical Intensive which took place in Oakland, CA. It was originally presented on October 2, 2015. A PDF handout of the PowerPoint slides is located [here](#).

V. TB in the News

- a. [New TB Vaccine Shows Promise in Mice](#) (1/13/17)
 - Jason W. Lee et al. **Engineering mycobacteria for the production of self-assembling biopolyesters displaying mycobacterial antigens for use as tuberculosis vaccine.** *Applied and Environmental Microbiology*, January 2017 DOI: [10.1128/AEM.02289-16](#)
 - Polyhydroxyalkanoate (PHA) biobeads with mycobacterial antigens induced significant cell mediated immune responses in mice.
 - Biobeads are more natural, biodegradable, inexpensive, and safer compared to other TB vaccines
 - [Do we really need a new vaccine against TB?](#) YouTube Video
 - Stefan Kaufmann, director of Max Planck Institute for Infection Biology, in Berlin, and past president of IUIS explains the advantage on the new vaccine for TB his group is testing in clinical trials in Europe and Africa.
- b. [New Protein Identified that is Central to Immune Response Against *M. Tb*](#) (1/12/17)
 - Luis H. Franco, Vidhya R. Nair, Caitlyn R. Scharn, Ramnik J. Xavier, Jose R. Torrealba, Michael U. Shiloh, Beth Levine. **The Ubiquitin Ligase Smurf1 Functions in Selective Autophagy of Mycobacterium tuberculosis and Anti-tuberculous Host Defense.** *Cell Host & Microbe*, 2017; 21 (1): 59 DOI: [10.1016/j.chom.2016.11.002](#)

- Could be used to develop immune-based therapies to treat TB, eliminating the need for antibiotics and the worry of MDR TB.

VI. TB Treatment Guidelines Summary

Peter Davidson, TB Program Manager

[American Thoracic Society \(ATS\)/Centers for Disease Control and Prevention \(CDC\)/Infectious Diseases Society of America \(IDSA\) Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis](#) (PDF also attached to email)

[CDC's Highlights from the 2016 Treatment of Drug-Susceptible Tuberculosis Guidelines](#)

1. Only update for treatment since 2003
2. Reliance upon Grading and PICO scores in addition to clinical expertise
 - a. Extensive review of literature and studies, often from outside of US
 - b. Many recommendations reflect the strength of the evidence reviewed, rather than the practicality or ease of implementation
3. Drug regimens (listed in preference order)
 - a. Rank 1 = 4-drug daily throughout treatment.
 - i. No clinical trials compare 5 d/w dosing vs 7 d/w
 - ii. Substantial clinical experience that both meet definition of "daily"
 - b. Rank 2 = 4-drug daily x 8 wks; 2-drug 3x/wk x 18 wks
 - c. Rank 3 = 4-drug 3x/wk x 8 wks; 2-drug 3x/wk x 18 wks
 - d. Rank 4 = 4-drug 7 d/w x 2 wks; 4-drug 2x/wk x 6 wks; 2-drug 2x/wk x 18 wks
4. Other common PICO-based recommendations
 - a. PICO 1 = Use case management interventions during treatment. Includes patient education/counseling, field/home visits, coordination of care w/ other providers, patient reminders, incentives & enablers.
 - b. PICO 2 = DOT remains the standard of care and should be used for all forms of TB
 - c. PICO 3 & 4 = provide rationale for preference of treatment regimens and dosing. Emphasis to maximize adherence and minimize impact of missed doses; read guidelines for details
5. Special situations
 - a. PICO 5 = HIV-infected patients on ART, use standard 6-month regimen. HIV-infected patients not on ART, extend continuation phase +3 months (total treatment 9 months)
 - b. PICO 6 = HIV/TB patients CD4 <50 init ART w/in 2 wks of TB Rx. HIV/TB patients CD4 ≥50 init ART by 8-12 wks of TB Rx. * EXCEPT TB meningitis w/ HIV, start ART >8 wks of TB Rx regardless of CD4 level.

- c. PICO 9 = Adult smear & cult negative HIV-negative pulmonary TB: 4-drug daily x 8 wks; 2-drug x 2 months (if all cultures are negative and there is clinical or radiographic response after 2 months).

6. Other expanded info

- a. Dosing table for all first and second-line drugs
- b. Clarification on how to manage treatment interruptions
- c. Table listing drug-drug interactions with rifamycins
- d. Dosing recommendations for TB drugs in patients with reduced renal function (including adults receiving dialysis)

VII. Open Forum: New TB Treatment Guidelines

1. Who has read and used the new TB treatment guidelines? **A few have.**
2. What issues/problems have you experienced or foresee in using these new guidelines in your TB control program? **One barrier brought up was doing daily DOT. Rural LHDs do not have the capacity to treat TB daily and it can be a huge stress on the agency. One person did bring up the importance of vDOT and how it can be very useful and cost-effective for their county when following the new guidelines.**
3. What do you like/dislike about the new guidelines?
4. What questions do you have about the new guidelines? **Discussion was started about the TST workshop and if/when the new treatment guidelines will be added to an updated version of the TST workshop. The treatment guidelines may not be added to the TST workshop just because we do not discuss treatment that much during the workshop. However, there are new "sister" guidelines that were recently published for the diagnosis of TB. These will be integrated into the new TST workshop PowerPoint soon. These new guidelines are also attached to the email and will be discussed further in the April TBNN call. If you are a teaching a workshop before the new guidelines are to be released and would like to hear/have a conversation with us about the new diagnosis guidelines before you teach we're happy to set-up a call. Contact Helen McGuirk (mcguirkh@michigan.gov, 517-284-4957) for more information.**

If you would like to continue this conversation, remember to register and join the ["Practical Implementation of the 2016 ATS/CDC/IDSA Treatment of Drug-Susceptible Tuberculosis Guidelines: Caveats and Controversies"](#) webinar on 2/3/17 @ 2-3:30 ET