



Wisconsin Tuberculosis (TB) Program Updates

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Topics

- Effect of COVID-19 pandemic on TB
- Wisconsin TB Program (WTBP) updates
- New national TB guidelines and resources
- New WTBP materials

Effect of COVID-19 Pandemic on TB

- The COVID-19 pandemic is having a devastating impact on the fight against other deadly infectious diseases such as HIV, TB and malaria.
- Resources were diverted to combat the COVID-19 pandemic.
- Prevention, testing and treatment services for other diseases decreased.

Effect of COVID-19 Pandemic on TB

- In countries the Global Fund supports, the number of individuals tested and treated for TB fell by:
 - 18% for susceptible TB
 - 37% for extensively drug resistant TB
- Approximately one million untreated TB cases will lead to increased transmission and more deaths.

Effect of COVID-19 Pandemic on TB

- The pandemic is the most significant set-back in TB prevention and control in two decades.
- In some countries, the secondary effects on HIV, TB and malaria could exceed the direct impact of COVID-19.

Effect of COVID-19 Pandemic on TB

- Wisconsin: 30% fewer TB cases in 2020
- True decline in TB incidence?
- Under-ascertainment of cases?

Rifamycin Issues: Background

- Rifamycins are important drugs used in regimens for treatment of TB disease and latent TB infection (LTBI).
- There are two interrelated issues:
 - Drug shortage
 - Nitrosamine contamination

Nitrosamine Contamination

- The US Food and Drug Administration (FDA) recently began testing for nitrosamines.
- Nitrosamines are potential carcinogens.
- Nitrosamine impurities were found in rifampin and rifapentine.
- FDA is allowing continued distribution of these medications.

Rifamycin Shortages

- The shortage is attributed to increased global demand and nitrosamine contamination.
- Wisconsin has experienced shortages of rifapentine and rifabutin.
- Wisconsin has not experienced rifampin shortages.
 - Providers should continue prescribing rifampin for treatment of TB disease per existing guidelines.

WTBP Response to Rifamycin Issues

- WTBP will approve further use of rifapentine and rifabutin through the Wisconsin TB Dispensary on a case-by-case basis, depending on the supply of medication.
- The Wisconsin TB Dispensary pharmacy assures the supply of medication for each patient that starts a 3HP regimen.

New National TB Guidelines

Release Date	Name
09/2021	Updated Guidance on Co-Administration of COVID-19 Vaccine and Tuberculin Skin Test (TST) or Interferon Gamma Release Assay (IGRA) blood test. DHS Gov Delivery message: https://content.govdelivery.com/accounts/WIDHS/bulletins/2ef6ae3
05/28/21	NTCA TB Nurse Case Manager Core Competencies: http://www.tbcontrollers.org/resources/core-competencies/
02/2021	NTCA/NSTC's publication Testing and Treatment of Latent Tuberculosis in the United States: Clinical Recommendations: http://www.tbcontrollers.org/resources/tb-infection/clinical-recommendations/

New Study

RESEARCH SUMMARY

Four-Month Rifapentine Regimens with or without Moxifloxacin for Tuberculosis

Dorman SE et al. DOI: 10.1056/NEJMoa2033400

CLINICAL PROBLEM

The standard treatment of drug-susceptible pulmonary tuberculosis is a 6-month course of a daily rifamycin-based antimicrobial regimen. A more potent regimen with improved rifamycin exposure might shorten treatment duration, potentially improving adherence and reducing adverse effects and costs.

CLINICAL TRIAL

Design: A randomized, open-label, noninferiority trial of two 4-month rifapentine-containing regimens, as compared with a standard 6-month rifampin-containing regimen, for the treatment of drug-susceptible tuberculosis.

Intervention: 2516 participants 12 years of age or older with newly diagnosed tuberculosis were randomly assigned to a 6-month control regimen, a 4-month regimen in which rifampin was replaced with rifapentine (rifapentine group), or a 4-month regimen in which rifampin was replaced with rifapentine and ethambutol with moxifloxacin (rifapentine-moxifloxacin group). The primary efficacy outcome was survival free of tuberculosis at 12 months after randomization, and safety was assessed through day 14 after the last dose of a trial drug.

RESULTS

Efficacy: The rifapentine-moxifloxacin regimen, but not the rifapentine regimen, was shown to be noninferior to the control regimen.


Safety: The percentages of patients who had adverse events of grade 3 or higher or who discontinued the assigned regimen prematurely did not differ significantly between the rifapentine-moxifloxacin group and the control group but were lower in the rifapentine group than in the control group.

LIMITATIONS AND REMAINING QUESTIONS

Further study is required to understand the following:

- How the trial regimens perform in HIV-infected patients
- Whether the shorter treatment duration offsets the likely higher cost of the rifapentine-moxifloxacin regimen

Links: [Full article](#) | [NEJM Quick Take](#) | [Editorial](#)



Absence of tuberculosis disease-free survival at 12 months after randomization

Population	Rifapentine-Moxifloxacin	Rifapentine	Control
Microbiologically Eligible Population	15.5%	17.7%	14.6%
Assessable Population	11.6%	14.2%	9.6%

Percentage-Point Difference (95% CI)

Population	Rifapentine-Moxifloxacin vs Control	Rifapentine vs Control
Microbiologically Eligible Population	-1.3% (-2.8, 0.2)	2.1% (0.6, 3.6)
Assessable Population	-2.0% (-3.5, -0.5)	4.6% (3.1, 6.1)

Grade 3 or higher adverse events

Regimen	Percent
Rifapentine-Moxifloxacin	18.8%
Rifapentine	14.3%
Control	19.3%

CONCLUSIONS

A 4-month regimen containing rifapentine and moxifloxacin was noninferior in efficacy and similar in safety and premature discontinuation to a standard 6-month antimicrobial regimen for the treatment of tuberculosis.

- Study: shorter regimen for treatment of TB disease
- 4-month regimen containing rifapentine and moxifloxacin
- 4-month regimen containing rifapentine and moxifloxacin was non-inferior to standard 6-month regimen

New WTBP Materials

Publication Number	Description
<u>P-42027</u>	Non-tuberculous mycobacterial (NTM) infections: Information for providers and local and tribal partners
<u>P-02969</u>	Home Isolation Agreement
<u>P-02849</u>	Hospital Discharge Checklist

<https://www.dhs.wisconsin.gov/tb/index.htm>

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Questions?