

New dry powder antibiotic targets tuberculosis, reduces treatment time

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New research being presented at the 2010 International Pharmaceutical Federation (FIP) Pharmaceutical Sciences World Congress (PSWC) in association with the American Association of Pharmaceutical Scientists (AAPS) Annual Meeting and Exposition will feature an inhalable dry powder antibiotic that when used alone or with current treatments may significantly reduce treatment for tuberculosis (TB) and multi-drug resistant TB.

There are an estimated 9.4 million new cases of TB worldwide, according to the most recent statistics from the World Health Organization. While [tuberculosis](#) is curable, treatment can take from 6 -12 months and up to two years for multi-drug resistant TB.

Lead researcher J'aime Manion and her colleagues from the University of Colorado developed the inhalable dry powder, comprised of fine particles of antibiotics. These particles are targeted to the deep lung where TB enters in early stages of infection. The goal of this method is to distribute a larger fraction of antibiotic to protected TB lesions that are difficult to access by current treatments.

"Combining this novel treatment with more traditional methods may increase the targeted dose to the lung airspace and tissue, potentially reducing treatment time and systemic side effects," said Manion. "As an inhalable powder, it eliminates the storage, disposal and contamination challenges that developing countries face with a needle delivery method."

For the first time, FIP's PSWC and the AAPS Annual Meeting and Exposition will join to hold the world's largest [pharmaceutical sciences](#) meeting to improve global health through advances in pharmaceutical sciences. An estimated 10,000 scientists from more than 60 countries will participate in 100 sessions, including 40 symposia and roundtables.

Provided by American Association of Pharmaceutical Scientists

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