

TB Alliance moves two novel tuberculosis drugs into human trials

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This photomicrograph reveals Mycobacterium tuberculosis bacteria using acidfast Ziehl-Neelsen stain; Magnified 1000 X. The acid-fast stains depend on the ability of mycobacteria to retain dye when treated with mineral acid or an acidalcohol solution such as the Ziehl-Neelsen, or the Kinyoun stains that are carbolfuchsin methods specific for M. tuberculosis. Credit: public domain

TBA-7371 and sutezolid entered phase 1 clinical trials, TB Alliance announced today. Both compounds have proceeded through early preclinical development and were granted "Investigative New Drug"



status by the U.S. Food and Drug Administration. The phase 1 clinical trials are presently ongoing.

"These two drugs give us great hope," said Dr. Mel Spigelman, president and CEO of TB Alliance. "As resistance to current TB treatments continues to grow, the need for compounds with no pre-existing resistance has become stark."

TBA-7371 is an antimicrobial compound developed by TB Alliance in collaboration with AstraZeneca. It is in a novel class of drugs known as DprE1 inhibitors, of which there are two other compounds in early <u>development</u>. With no pre-existing resistance or cross-resistance with other TB drugs, TBA-7371 could have significant potential in the treatment of TB.

Sutezolid is an oxazolidinone, a class of drugs that has already shown evidence of clinical activity against TB. The oxazolidinone, linezolid, has shown promising results as part of the Nix-TB study testing a treatment for extensively <u>drug</u>-resistant TB (XDR-TB). However, the toxicity associated with long term administration of linezolid can be problematic. In March 2017, TB Alliance and the Medicines Patent Pool announced a sublicensing agreement for the development and commercialization of sutezolid for the treatment of TB.

"Several years ago, TB drug development was at a standstill," said Dr. Spigelman. "But now we have the backbone of new regimens—with bedaquiline and pretomanid—that we're testing in advanced <u>clinical</u> <u>trials</u> along with other TB drugs. And while we still have a way to go before we arrive at a universal cure for this disease, we have building blocks coming through the research pipeline that show us we can get there."



Provided by Burness

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