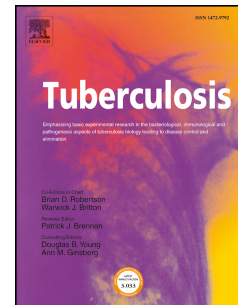


Accepted Manuscript

An unbiased attitude is vital to exploring the Beijing genotype of *Mycobacterium tuberculosis*

Qi Zheng, Jim Werngren



PII: S1472-9792(18)30166-5

DOI: [10.1016/j.tube.2018.06.014](https://doi.org/10.1016/j.tube.2018.06.014)

Reference: YTUBE 1725

To appear in: *Tuberculosis*

Received Date: 20 April 2018

Revised Date: 18 June 2018

Accepted Date: 24 June 2018

Please cite this article as: Zheng Q, Werngren J, An unbiased attitude is vital to exploring the Beijing genotype of *Mycobacterium tuberculosis*, *Tuberculosis* (2018), doi: 10.1016/j.tube.2018.06.014.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

An unbiased attitude is vital to exploring the Beijing genotype of *Mycobacterium tuberculosis*

Qi Zheng

Department of Epidemiology and Biostatistics
Texas A&M School of Public Health
College Station, Texas 77843, USA
qzheng@sph.tamhsc.edu

Jim Werngren

Unit of Laboratory Surveillance of Bacterial Pathogens
Department of Microbiology, Public Health Agency of Sweden
Nobels väg 18, SE-171 82, Solna, Sweden
jim.werngren@folkhalsomyndigheten.se

Abstract

In 2003 Werngren and Hoffner reported the earliest quantitative mutability study comparing Beijing and non-Beijing strains of *Mycobacterium tuberculosis*. Their null findings appeared to be at odds with the then-popular hypothesis favoring characterization of the Beijing genotype by mutability. Three recent attempts to reexamine the experimental data have resulted in three successively smaller p-values in the literature, each supposedly buttressing a non-null conclusion. In addition to identifying errors responsible for the three misleading p-values, we focus on salutary lessons that will facilitate future research on microbial mutability.

Keywords: biological relevance, p-value, tuberculosis, antibiotic resistance, Beijing genotype

1 Introduction

The extraordinary ability of *Mycobacterium tuberculosis* to develop resistance to a wide range of antibiotics is a major threat to global health. The discovery of the Beijing genotype of *M.*

Download English Version:

<https://daneshyari.com/en/article/8485102>

Download Persian Version:

<https://daneshyari.com/article/8485102>

[Daneshyari.com](https://daneshyari.com)