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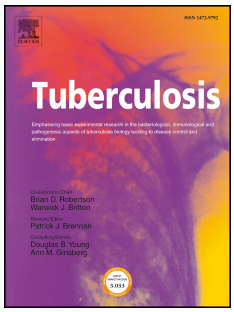

An unbiased attitude is vital to exploring the Beijing genotype of *Mycobacterium tuberculosis*

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

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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.*