

# ANALYSIS AND SURVEILLANCE OF DRUG-RESISTANT *MYCOBACTERIUM TUBERCULOSIS* IN LIANYUNGANG COUNTY, CHINA

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**Abstract.** Drug-resistant tuberculosis (TB) has raised major global health concern. A lack of relevant information on frequency of *Mycobacterium tuberculosis* drug-resistant gene mutations has been a critical issue in China. The study determined epidemiology and drug resistance profiles of *M. tuberculosis* in Lianyungang County, China from 1 January 2014 to 31 December 2016 using specimens from the Tuberculosis Prevention and Control Agency, Lianyungang County from men ( $n = 1017$ ) and women ( $n = 290$ ), majority being 21-30 years of age. Overall resistance rate to four anti-TB drugs (isoniazid, kanamycin, ofloxacin, rifampicin) was 16.1%, with multidrug-resistant tuberculosis prevalence of initially treated patients of 19% and of retreated patients of 33%. Males and subjects in the younger (21-30 years of age) and older (62-70 years of age) age groups had the highest frequency of TB. Total drug resistance of *M. tuberculosis* showed a decreasing trend from 2014 to 2016. These findings can be used as reference baselines for future research on TB drug resistance.

**Keywords:** *Mycobacterium tuberculosis*, China, drug resistance, epidemiology, tuberculosis.

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