

Fluoroquinolone Resistance in *M. tuberculosis*: The Effect of Duration and Timing of Fluoroquinolone Exposure

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Online Data Supplement

Laboratory methods

The American Type Culture Collection (ATCC) drug-susceptible *M. tuberculosis* control isolate and a resistant *M. tuberculosis* control isolate from the Centers for Disease Control and Prevention were also screened with each batch of patient isolates.

Laboratory personnel were blinded to the fluoroquinolone exposure status of the patient.

Statistical Analyses

We also performed an analysis to assess the effect of fluoroquinolone duration (≤ 10 days vs. > 10 days) and timing of last fluoroquinolone exposure (≤ 60 days vs. > 60 days prior to tuberculosis diagnosis) on fluoroquinolone resistance. Sixty days was selected because it was the median number of days between receipt of last fluoroquinolone and tuberculosis diagnosis. Ten days for duration was selected because it was the median number of days for fluoroquinolone exposure among the fluoroquinolone exposed patients. Five mutually exclusive categories based on these cutoffs were compared. Binary logistic regression assessed the joint effect of duration and timing of fluoroquinolone exposure on fluoroquinolone-resistant tuberculosis.

The medical indication for outpatient fluoroquinolone prescription was inferred from the ICD-9 diagnosis codes from the hospital admission closest to the prescription fill date. ICD-9 diagnoses for pneumonia, acute bronchitis, cough, pleural effusion, chest swelling/mass/lump, shortness of breath, and chronic obstructive pulmonary disease were all considered a pulmonary indication. Dysuria, acute/chronic renal failure, and urinary tract infection were considered a genitourinary indication. All other indications were combined into a group designated as “other.”