

RESEARCH REPORT - No. 1305 FY 2013–2014

Title of research project	Establishment of the quantitative risk assessment model of antimicrobial-resistant bacteria derived from food-producing animals
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Name of principal research Investigator (PI)	Yutaka Tamura
【Abstract】 <p>Objectives: The purpose of this study was to establish the quantitative risk assessment model of antimicrobial-resistant bacteria derived from food-producing animals.</p> <p>Methods: To establish the model, fluoroquinolones and <i>Campylobacter</i> derived from chickens were used as the target antimicrobial agents and pathogenic bacteria, respectively. To perform the quantitative risk assessment, we collected the published data, and obtained the original data by self-investigation to fill data gaps. Based on the published data and original data, we performed the quantitative risk assessment.</p> <p>Results and Consideration: We established the quantitative risk assessment model based on the published data and original data. In the release assessment, we were able to evaluate the rate of fluoroquinolone-resistant <i>Campylobacter</i> infectious chickens. In the exposure assessment, we used the previous reports (Kasuga et al.) with modifications. In the consequence assessment, we could not collect sufficient data from infectious gastroenteritis patients in hospitals.</p> <p>In conclusion, we established the quantitative risk assessment model of antimicrobial-resistant bacteria derived from food-producing animals on the basis of fluoroquinolone-resistant <i>Campylobacter</i> derived from chickens.</p>	