

UNIVERSITI TEKNOLOGI MARA

**THE CLINICAL OUTCOMES OF
AMOXICILLIN/CLAVULANATE
PLUS DOXYCYCLINE VERSUS
AMOXICILLIN/CLAVULANATE
PLUS AZITHROMYCIN FOR
COMMUNITY ACQUIRED
PNEUMONIA IN CARDIOVASCULAR
DISEASE PATIENTS**

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Dissertation submitted in partial fulfilment of the
requirements for the degree of
Master of Clinical Pharmacy

Faculty of Pharmacy

February 2016

AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This writing has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I hereby acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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for Community Acquired Pneumonia in Cardiovascular Disease
Patients

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ABSTRACT

Objective: This study was conducted to compare the clinical outcomes between amoxicillin/clavulanate plus doxycycline (AC-D) and amoxicillin/clavulanate plus azithromycin (AC-A) in cardiovascular disease patients. **Methods:** This was a retrospective medical review study of 282 patients with mild to moderate community acquired pneumonia (CAP) admitted in general medical wards, Hospital Sultanah Nora Ismail (HSNI) from January 2014 until August 2015. Patients were divided equally into two groups based on antibiotics received within the first 48 hours of ward admission. Patient demographics, initial laboratory findings, antibiotic therapy, daily vital signs and relevant clinical outcomes were extracted from medical records. Clinical outcomes were compared between two groups of antibiotics by using appropriate statistical tests. **Results:** Compared to the patients treated with AC-A, those treated with AC-D had similar in time to reach clinical stability (2.32 vs. 2.12 days, $p = 0.24$), time to switch therapy (3.04 vs. 2.80 days, $p = 0.20$), hospital LOS (3.15 vs. 2.88 days, $p = 0.23$), rate of treatment failure (1.4% vs. 2.1%, $p = 1.00$), number of patients who developed QT prolongation (0% vs. 0.7%, $p = 1.00$) and early achievement in overall clinical outcomes (64.5% vs. 67.6%, $p = 0.58$). **Conclusions:** The use of AC-D in cardiovascular disease patients is non-inferior to AC-A. Based on these findings, the clinical effectiveness of AC-D should be evaluated prospectively.

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