# UNIVERSITI TEKNOLOGI MARA

# REVIEW OF RITUXIMAB IN CHOP CHEMOTHERAPY WITH CHOP ONLY CHEMOTHERAPY IN TREATING AGGRESSIVE NON HODGKIN'S LYMPHOMA IN ELDERLY PATIENTS

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### **ABSTRACT**

Background: The diffuse large B-cell lymphoma is a type of aggressive Non-Hodgkin's lymphoma (NHL) that is commonly found in elderly patients. CHOP chemotherapy has been used to treat this aggressive lymphoma. CHOP has brought several toxicities to patients especially to the elderly aggressive NHL patients. New combination of chemo drug, rituximab was introduce lately and brings an impact to the old CHOP chemotherapy. Its efficacy is known better from CHOP only regimen.

Method: Journals containing articles that are relevant to the subject of efficacy of rituximab in CHOP chemotherapy are gathered and systematic review and analysis was done to extract the information. Results: Several articles supported the hypothesis and confirmed its efficacy compared to CHOP only chemotherapy. And its toxicity towards the elderly patients is relevant. Conclusion: Rituximab plus CHOP is proven better than CHOP only chemotherapy in the term of its efficacy.

### CHAPTER 1

### INTRODUCTION

## 1.1 Background of Study

Aggressive non-Hodgkin's lymphomas (NHL) require specific, highly cytotoxic, and intensive therapies which not suitable to be applied to the elderly patients (1). The NHL patient's survival is different. It is all depends on their stages widely or on their scales within the International Prognostic Index (IPI). There are the criteria for the survival of this NHL disease, which is depending on the lymphoma type, stage, age of the patient, and other variables. IPI can be used as the guideline for estimation of year survival of the patients. There several subgroups of active lymphoma. The identification of subgroups (lymphoma entities) has been based mainly on morphology, cell size, cell shape and its growth pattern (2). Diffuse large B-cells lymphoma (DLBCL) is common amongst the aggressive NHL. It is a type of cancer where the main effector cells are the B-cell. The cause of this disease or cancer is still not known and researches are done lately to understand them.

Based on the American Cancer Society survey, the overall relative survival rate in 5 years for patients with non-Hodgkin's lymphoma is 63%, while the 10 years of overall relative survival rate is 51% (3). The survival rates are relatively referred to elderly patients with this aggressive NHL, the DLBCL. Introduction of CHOP