

UNIVERSITI TEKNOLOGI MARA

**META-ANALYSIS OF SURGICAL INTERVENTION FOR
BASAL CELL CARCINOMA**

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ABSTRACT

Basal cell carcinoma (BCC) is a type of localized skin cancer. The BCC usually affect the area that is exposed to the sunlight. It usually happens on the head area and seldom in the area of genital. It is the most common human cancer. Although it is not metastasized to other organ and life threatening, it can destroy the structure of skin and cause a significant cosmetic disruption especially if it occurs on the face .Despite of its slow progression of development, the BCC should never be underestimated. There are several of treatments available to treat the basal cell carcinoma including the cryotherapy, radiotherapy, phototherapy and surgical intervention. There were two surgical techniques/intervention being evaluated in this meta-analysis, namely Mohs micrographic surgery and surgical excision. Mohs microscopy surgery is deemed the most effective treatment to remove basal cell carcinomas. The principle of the surgery is to remove cancerous tissue layer by layer until it is cancer-free under microscopic examination. While surgical excision is the gold standard in treating, various types skin cancer. The tissue excised will be then examined histologically. Results were compared using Chi-square goodness of fit and independence tests. In conclusion, there is no evidence that Mohs micrographic surgery has significant advantage over surgical excision.

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND OF STUDY

In the United State, approximately 1 034 460 people have melanomas in year 2013. The incidence of melanomas was 21.8 per 100 000 of population every year. Approximately 2.7 per 100 000 deaths recorded including men and women every year. These data are based on 2009-2013 cases and death in U.S. (National Cancer Institute (NCI), 2016). NCI estimates that there will be 76,380 new cases in 2016 and accounts for 4.5% of all the new cancer cases. Skin cancer is ranked 10th most common cancer in Malaysia, making it to have a percentage of 2.6% out of all cancer cases in Malaysia (Third National Cancer Registry Report, 2003). Skin cancer is not getting enough attention in Malaysia unlike other types of cancer and the public has little awareness about this cancer.

Dr. Azura Mohd Affandi, consultant dermatologist at Hospital Kuala Lumpur reported that the incidence of non-melanoma and melanoma skin cancer is increasing for the past 10 years according to the world health organisation (WHO). There are approximately 2-3 million cases of skin cancer including melanoma and non-melanoma occurring each year worldwide. Statistic from the dermatology clinic of Hospital Kuala Lumpur (2006-2014) reveals that the most common type of skin cancer in Malaysia is basal cell carcinoma which has a percentage of 34.9%. The cutaneous lymphoma accounts for 25.7 %, followed by squamous cell carcinoma 20.6%. Malignant type of skin cancer,