## **ABSTRACT**

Introduction: Breast cancer remains the most common malignancy in women worldwide and is the leading cause of cancer related mortality. Factors expected to have an influence on the occurrence of breast cancer, such as reproductive factors, hormone use, fibrocystic disease, obesity, fat consumption, radiation, family history and genetic factors. Increase in breast cancer patients are significant in the last 5 years since 2007 occurred in Surabaya Oncology Hospital. Preliminary studies conducted by researchers at random on 10 Medical Record, the risk factors which are most commonly found are reproductive risk factors (age of menarche, age at menopause, parity, age at first pregnancy).

**Purpose:** The purpose of this study to analyze the relationship of reproductive factors with breast cancer incidence in Surabaya Oncology Hospital

Methodology: This study method is the analytical case-control design. The study population was divided into case and control populations. The ratio of number of samples between cases and controls using a 1:1 ratio as many as 112 people. Data were analyzed univariate using frequency distributions, bivariate using Chi Square, and multivariate using Logistic Regression.

**Results:** Results showed that the risk factors that have a statistically significant relationship to the incidence of breast cancer is the age of menopause (OR = 4.865, C195%: 2.736 to 8.651) and parity (OR = 3.609, C195%: 1.383 to 9.418). Factors that showed no statistically significant relationship to the incidence of breast cancer is the age of menarche and age at first pregnancy. Multivariate analysis results of the four factors studied two factors that qualify, the age of menopause (OR = 5.538, 95% CI: 3.023 to 10.144) and parity (OR = 5.070, C195%: 1.790 to 14.360).

**Conclusion:** Reproductive factors that increase risk of breast cancer are age at menopause and parity

**Keywords:** Age of Menarche, Age at Menopause, Parity, Age at First Pregnancy, Breast Cancer