

# Program Against Cancer in Korea North

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## ABSTRACT

Worldwide, one in eight deaths is due to cancer. Projections based on the GLOBOCAN 2012 evaluate a substantive increase in new cancer cases per year by 2035 in developing countries if preventive measures are not widely applied. According to the World Health Organization (WHO), millions of lives could be saved each year if countries made use of existing knowledge and the best cost-effective methods to prevent and treat cancer. Therefore, the aim of this study is to estimate a provisional budget against cancer in low and middle income countries, according to the GNI-PPP, the cancer incidence and the number of population. Economically country classification is determined with the Gross national income (GNI), per capita, Purchasing power parity (PPP), according to the administrations of the International Monetary Fund (IMF), the World Bank (WB) and the Central Intelligence Agency (CIA). Cancer incidence data presented are based on the most recent data available at IARC. However, population compares estimates from the US Bureau of the Census. The provisional allocated is established among the instructions developed by WHO for regional and national cancer management programs according to national economic development. Provisional budget against cancer is estimated to 206,034.922 (thousands of U.S \$) for a population of 25,248,140 persons in Korea North.

## Introduction

Worldwide, one in eight of deaths is due to cancer. Cancer causes more deaths than AIDS, tuberculosis, and malaria combined [1]. When countries are grouped according to economic development, cancer is the leading cause of death in developed countries and the second leading cause of death in developing countries [2]. Rates of cancers common in Western countries will continue to rise in developing countries if preventive measures are not widely applied [3-5]. Projections hinged on GLOBOCAN 2012 evaluate anticipating a substantive increase to 19.3 million new cancer cases per year by 2025, due to growth and ageing of the global population. Incidence has been increasing in most of regions of the world, but there are huge inequalities in between rich and poor countries. Further, half of all cancers (56.8%) & cancer deaths (64.9%) in 2012 occurred in less succeeded regions of the worldwide, and these proportions will become high further by 2025 [6]. By 2030, the global burden is anticipated to grow to 21.4 million new cancer cases and 13.2 million cancer deaths [7]. Rates of cancers will continue to rise by 2035 with 23,980,858 new cancer cases [3-5].

In addition to the human toll of cancer, the economic cost of cancer is substantial [8-10]. Cancer has the most devastating economic impact of any cause of death in the world [10]. Data limitations do not allow for the worldwide economic costs of cancer. However, sections of the total costs of cancer have been estimated to be as high as \$895 billion (US) worldwide [9,10]. It is estimated that more than half of all cancer cases and deaths worldwide are potentially preventable [3-5,7].

In Korea North, the number of new cancer cases is estimated to 57,970 with 40,478 deaths in 2015. By 2025, incidence is expected to grow to 69,121 with 49,141 deaths. Rates of cancers will continue to rise to 83,021 new cancer cases by 2035 with 60,719 deaths if preventive measures are not widely applied [3-5]. As stated by the World Health Organization (WHO); Entitled: National

Cancer Control Programs: The Policies and Managerial Guidelines, millions of lives could be saved each year if countries made use of the existing knowledge and the finest cost-effective methods to prevent and treat cancer [11].

"An emergency need in cancer control today is to expand potent and affordable approaches to the advance detection, diagnosis, and therapy of breast cancer among women living in less developed countries," explains Dr Christopher Wild, Director of IARC. "It is analytic to bring morbidity and the mortality in line with progress made in recent years in more developed parts of the world." [6].

With the data highlighting a large variability of GNI/capita even within the similar turnover levels in the various world regions, it is expected that the additional investment in resources and costs may be more dependent on turnover level of the country than on the GNI group or the geographic region of the world [12]. Therefore, the aim of this study is to estimate a provisional budget against cancer in Korea North, according to the GNI-PPP, the cancer incidence and the number of population.

## Methods

### 2.1. Economically Country Classification

The economic states are established among the means of GNI-PPP according to the administrations of the International Monetary Fund (IMF); the World Bank (WB) and the Central Intelligence Agency (CIA) [13-15]. The disagreement concerning the same country can be considerable among the data origin. These variations are explaining by:

- GNI-PPP is estimated
- Anterior prediction of an economic crisis changes GNI-PPP data
- The estimation of the population included in the local population
- The choice elements for GNI-PPP evaluation have some subjective portion.
- These data must be taken with precaution

Economically Country is divided according to the gross national income (GNI) per capita 2016, Atlas method and PPP [15].

- Estimated to be low income (\$1,005 or less)
- Estimated to be lower middle income (\$1,006 to \$3,995)
- Estimated to be upper middle income (\$3,956 to \$12,235)
- Estimated to be high income (\$12,236 or high).

### 2.2. Gross National Income (GNI), Per Capita, Purchasing Power Parity (PPP)

Gross national product is gross domestic product (GDP) plus net income (employee compensation and investment income) from abroad. GNI, per capita is a GNI divided by the mid-year population.

PPP is a (purchasing power parity); an international dollar's has the same purchasing power over the GNI as a U.S. dollar has in the United States. PPP exchange rates are used to account for the local prices of goods and services not traded internationally. However, PPP is used to balance across national

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