## Chapter 1

## Introduction

## 1.1 Host Institution Description

Dharmais National Cancer Hospital is a specialised medical institution located in Jakarta, Indonesia. It was first conceived by H.M. Soeharto in response to the escalating cancer mortality rates during his presidency. Through the collaborative efforts of H.M. Soeharto and Prof. Dr. dr. Arry Harryanto, SpPD, KHOM as the chairman of Dharmais foundation, along with the support of the Universitas Indonesia team, the hospital was finally opened for service on October 30, 1993.

In its early stages, Dharmais National Cancer Hospital mainly emphasised on the prevention and treatment of cancer patients. However, since 2017, Dharmais National Cancer Hospital has been assigned as a national referral centre for cancer patients in Indonesia by the Ministry of Health of the Republic of Indonesia. Therefore, currently the hospital also redirects its focus on early detection screening, cancer surveillance and registration, cancer research, palliative care, and rehabilitation.

All of these efforts are done to fulfil the vision of the hospital which aims to become a caring and smart national cancer centre. This is achieved through the mission of providing comprehensive cancer services based on the latest evidence, conducting education and training in the field of cancer, carrying out research in the field of cancer that can be applied in healthcare services, and establishing hospital-based and population-based cancer registries as the National Cancer Burden Data Center.

Dharmais National Cancer Hospital is currently led by dr. R. Soeko Werdi Nindito D., MARS as the executive director. There are four big departments that report directly to the executive director which are responsible for medical services, human resources and research, finance, operationals, and strategic planning, respectively. An example of the installations that operate under these departments is the integrated laboratories, also known as Instalasi Laboratorium Terpadu (ILT).

## 1.2 Department Description

ILT is an integrated laboratory that encompasses the clinical pathology and anatomical pathology laboratories led by Dr. dr. Lyana Setiawan, Sp.PK. The clinical pathology laboratory, in particular, conducts a wide variety of blood sample analyses. It was divided into smaller laboratory units such as haematological lab, blood chemistry lab, microbiology lab, and molecular diagnostic lab, which allows the lab to not only provide basic haematological services such as complete blood count, but also on more advanced techniques such as leukaemia phenotyping, next-generation sequencing, Antibodies Against Cell Nuclei Immunofluorescence (ANA-IF), and Fluorescence In-Situ Hybridization (FISH). To accommodate the development of molecular diagnosis, the laboratory is also equipped with state-of-art technologies including flow cytometer, Illumina Mi-Seq, SeqStudio genetic analyzer, and fluorescence microscopy.