

# Clinical laboratory Division

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## **Introduction**

The Clinical Laboratory Division consists of clinical pathology, physiology and anatomical pathology laboratories.

The clinical pathology laboratory consists of hematology, biochemistry, serology, urinalysis, and bacteriology and blood banking sections. The physiological laboratory has four sections of ultrasonography (US), electrocardiography, electroencephalography and respiratory function test. Three physicians and 2 technicians manage these sections. These laboratories assist internists and surgeons by providing reliable data rapidly. The anatomical pathology laboratory, staffed by 4 consultant pathologists and 5 technicians, deals with surgical, cytological and autopsy specimens. All the data gathered by this section are computer-filed, and accessible to physicians at any time.

## **Routine Activities**

The Clinical Laboratory Division has 5 doctors, 18 technicians and 2 assistants. Data quality control and laboratory management are discussed in monthly meetings attended by doctors and the chief technicians. Several weekly conferences in each section are held to monitor data quality control.

The most important role of the clinical pathology laboratory is to provide highly reliable data rapidly

and support prompt therapeutic decision-makings. A new, downsized automatic analyzer was introduced last April, which enabled biochemistry, serology and tumor marker data to be obtained within one or two hours. Our clinical computer system was renovated to process outside laboratory test orders and results electronically.

The bacteriology section plays an important role in infection control, not only examining daily specimens but also summarizing monthly, quarterly and yearly statistical data on hospital infections.

The blood banking section types blood, screens irregular antibodies, and supplies blood at physicians' requests.

In the physiology laboratory, US is an important screening examination for malignancies in the neck and abdomen. Cardiac US provides valuable information on preoperative patients with cardiac disorders and on patients who underwent chemotherapy with cardiac toxicity.

The anatomical pathology laboratory evaluates surgical, cytological, and autopsy materials, and is responsible for making final histological and cytological diagnoses. For more accurate diagnoses, immunohistochemical approaches and/or genetic analyses are frequently employed.

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Number of Laboratory Tests Examined in 2001-2005

Section	2001	2002	2003	2004	2005
Urinalysis	160,144	144,272	157,962	145,502	182,046
Hematology	417,329	410,833	429,745	432,049	452,652
Biochemistry	1,230,971	1,242,320	1255,013	1,265,225	1,344,923
Serology	116,446	109,711	112,936	122,564	120,710
Bacteriology	17,364	16,352	16,953	15,620	15,966
Surgical Patholo	10,256	11,214	11,868	12,280	11,862
Cytology	6,938	6,015	6,082	6,304	6,164
Blood Banking	22,203	18,180	18,412	17,168	17284
Physiology	39,338	35,894	37,051	34,784	34,700
Total	2,020,989	1,994,791	2,046,022	2,051,496	2,186,307

Number of Examinations in the Anatomical Pathology in 2001-2005

Examinations	2001	2002	2003	2004	2005
Biopsy	7,813	9,151	9,930	10,266	9,888
Operation	1,806	2,063	1,938	2,014	1,977
Cytology	6,938	6,015	6,082	6,304	6,164
Autopsy	13	24	24	19	12