BLOOD PROGRAMMING DIVISION

Deputy Director & Head	…	Dr. Zin Zin Thu MBBS(UM1), MMedSc(UM1), PhD(Pathology)(UM1)
Research Officer	…	Dr. Myo Win Htun MBBS(UM1)
Research Assistant (2)	…	Daw Aye Myint Oo BA(Economic)(YU)
Research Assistant (3)	…	Daw Phyu Phyu San BA(History)(DU)
	…	U Zaw Min Latt BSc(Chemistry)(YU)
	…	U Kyaw Thu Myat
	…	Daw Hla Hla Win BA(History)(YU)
Research Assistant (4)	…	Daw Aye Thandar Oo BSc(Physics)(DU)

Blood programming division is mainly involved in research projects on transfusion medicine, concerned with the immunohaematology and appropriate transfusion of blood and blood component. Regarding the blood safety, surveillance of transfusion transmitted infections not only in blood donors, but also in transfused patients has been studied.

RESEARCH PROJECTS

1. HEALTH SYSTEMS RESEARCH

1.1. QUALITY HEALTH CARE

1.1.1. HLA Class I and Class II alleles and haplotypes frequencies in Kachin, Mon and Shan ethnic, Myanmar

This study is aimed to investigate the distribution of HLA Class I and Class II alleles and haplotype frequencies in Kachin, Mon and Shan ethnic, Myanmar. This was a cross-sectional descriptive study. Total study population was 181 healthy persons, 63 Kachins, 64 Mons and 54 Shans. This study was carried out from December 2014 to December 2015. An ethical consideration of this study was approved by the Ethics Review committee at Department of Medical Research, Ministry of Health, Myanmar. HLA typing was performed by PCR-SSOP-Luminex method. Our results included 8 alleles for HLA-A, 21 alleles for HLA-B, 14 alleles for HLA-C, and 17 alleles for HLA-DRB1 in Kachins, 17 alleles for HLA-A, 33 alleles for HLA-B, 17 alleles for HLA-C, and 21 alleles for HLA-DRB1 in Mons and 15 alleles for HLA-A, 33 alleles for HLA-B, 18 alleles for HLA-C, and alleles for HLA-DRB1 in Shans. Haplotype A*11:01B*15:02DRB1*12:02 and A*11:01 B*15:02 C*08:01 had the largest frequency in both Kachins and Shans with frequencies of 15.7%, 15.4% in Bamars, and 9.1%, 7.4% in Shan. Interestingly, Haplotype A*33:03 B*44:03 DRB1*07:01 (7.6%) and A*33:03 B*44:03 C*07:01 (7.0%) were found as most common type in Mon ethnics. The information on the frequencies of HLA alleles and haplotypes in different ethnic population will be served as an important reference for donor registries, clinical and basic studies in immunogenetics and also provide information about the diversity of human populations.

2. NON-COMMUNICABLE DISEASE

2.1. CANCER

2.1.1. The role of thrombocytosis in prognostic evaluation of epithelial ovarian tumors
(Please Refer to Annual Report of Blood Research Division)

2.1.2. Detection of serum HER-2/neu oncogene in breast cancer patients
(Please Refer to Annual Report of Blood Research Division)

SERVICES PROVIDED

1. ACADEMIC

Sr.	Name	Course	Responsibility
1.	Dr. Zin Zin Thu	MMed c Pathology)	Teaching
		BMedTech & MMedTech (Military Institute of Nursing and Paramedical)	Teaching
		Workshop on Research Methodology(2015)	Facilitator

2. Hepatitis Carrier Clinic

Sr.	Name	Designation	Responsibility
1.	Dr. Zin Zin Thu	Deputy Director/ Head	Consultant pathologist

3. Cervical cancer screening clinic

Sr.	Name	Designation	Responsibility
1.	Daw Hla Hla Win	Research Assistant 3	Laboratory Assistant
2.	Daw Aye Thandar Oo	Research Assistant 4	Laboratory Assistant