Tumour Marker Requests in 2016
Nur Ahlina Hj Abd Ghani
Clinical Chemistry Laboratory, Clinical Laboratory Services, Department of Laboratory Services, Ministry of Health, Brunei Darussalam

OBJECTIVE
Tumour markers are used for screening, diagnosis, prognosis, monitoring and detection of early disease recurrence. There has been an increasing number of tumor marker requests over the years. This study will look into the patterns of the sample requests for the year 2016.

MATERIALS AND METHODS
Data extraction from BruHIMS was performed for the period 1/1/2016 to 31/12/2016 on samples analysed in RIPAS Clinical Chemistry laboratory. We examined the following tests in serum: AFP, CEA, CA125, CA199, total PSA (TPSA), free PSA (FPSA), and hCG. Patient details are de-identified and anonymised; only gender, age, ordering location and numeric results were used for this study. Data analysis was done using Microsoft Excel and SPSS Statistics.

RESULTS
The highest tumour marker requested is AFP (18.9%). This is followed by CEA (15.1%), hCG (14.6%), CA199 (11.8%), TPSA (11.1%), FPSA (10.8%), CA125 (10.5%) and CA153 (7.3%). Most of the tumour marker requests came from wards and clinics in RIPAS hospital at 73.6%. This is followed by PMMPMHAMB Hospital (8.0%), Health Centres (6.6%), SSBH Hospital (6.5%), PIHM Hospital (4.4%) and Rimba Dialysis Centre (0.9%).

CONCLUSIONS
For the most requested tumor marker AFP, the top three requesting locations are gastroenterology & hepatology (52.1%), unspecified locations (5.8%) and gynaecology (3.3%). This is expected as AFP is used in the monitoring of hepatocellular carcinoma in hepatic conditions such as chronic hepatitis B.