EVALUATION ON THE DETERMINATION OF β-THROMBOGLOBULIN BY β-TG RIA KIT (2ND REPORTS).
Y. Yonohara, H. Asakura, and Y. Takahara. The 2nd Tokyo National Hospital, Tokyo.

Preliminary clinical investigation revealed that this assay may have potential use for the diagnosis of thrombo-embolic disorders. β-TG is released from α-granule of platelets when platelets undergo their release reaction. Therefore, an increase in β-TG is considered as a marker of activation of platelets in circulation or of hypercoagulable state. There may remain a possibility that these data do not always reflect release of β-TG within the circulation, but only exhibit release of this protein at the site of venepuncture for the collection of blood, and β-TG is liberated during the preparation of platelet poor plasma in vitro (socalled platelet dust phenomenon).

Because technical processing of the collection of samples were correctly carried out.

Mean value in healthy over 55 age is 28.4±15.6 ng/ml in 16 cases, respectively. Cerebral infarction (18 cases) is 78.4±46.9 ng/ml, another cerebral vascular disorders (21 cases) is 14.9±19.7 ng/ml, hyperlipemia (5 cases) is 78.4±33.4 ng/ml, polycythemia (7 cases) is 78.3±22.9 ng/ml, WNL (6 cases) is 63.4±32.9 ng/ml, autoimmune hemolytic anemia (1 case) is 78.7±0.75 ng/ml and aplastic anemia (9 cases) is 9.5±3.4 ng/ml. Benzycline fumarate was administered to 3 cases 300 mg/day. A statistically significant decrease in the level of β-TG in plasma observed after benzycline medication.

β-THROMBOGLOBULIN RADIOIMMUNOASSAY KIT WITH SPECIAL REFERENCE TO DIABETIC MICROANGIOPATHY
T. Naka, H. Arai, M. Baba and R. Yamada. Clinical Pathology, Dokkyo University School of Medicine, Tochigi Prefecture.

β-thromboglobulin represents a recently isolated platelet specific protein that is released during platelet aggregation. The sensitivity and precision of the β—thromboglobulin radioimmunoassay have been proved satisfactory.

Microangiopathy and vaso-occlusive disease are recognized complications of diabetes mellitus, and platelets are probably involved in the pathogenesis of these disorders. Therefore, plasma β—thromboglobulin levels were measured in blood samples from healthy control subjects and from diabetic patients with and without microangiopathic complications. The patients with retinopathy had significantly elevated β—thromboglobulin levels, as compared with both control subjects and the diabetic patients without microangiopathic complications. Thus, use of this parameter in the assessment of the risk of developing vascular change may become possible.