PHYSICOCHEMICAL AND BIOCHEMICAL PROPERTIES OF COMMERCIALY AVAILABLE UROKINASE PREPARATIONS.
M. Nishida, H. Nishimaki, S. Miyake, T. Suyama and S. Morisue. The Green Cross Corporation
Research Laboratories, Osaka, Japan.

Comparative studies were made on eleven urokinase preparations commercially available. Analysis by both gel filtration and sodium dodecyl gel electrophoresis revealed the variety of molecular forms of the activator in the preparations showing molecular weight approximately 54,000 (A), 47,000 (B) and 34,000 (C). Starch gel electrophoresis at pH 8.8 indicated that (B) and (C) moved to anode whereas (A) and the active component of fresh urine slightly moved to the cathod. Proteolytic digestion of (A) produced the same component as shown by (B) and (C) on starch gel electrophoresis. Plasminogen activating activity of (B) and (C) was found to be less than that of (A) when measured by the procedure of CTA fibrinolytic method with the physiological blood level of plasminogen. The present data suggest that variety of molecular form in the preparation may be due to the difference of purification procedure in view of proteolytic degradation of the enzyme, and (A) seems to be the naturally occurring type of urokinase in urine.