To the Editor:

I read with more than routine care the report by Brunnée et al\textsuperscript{1} in the February 1, 1993 issue of Blood. Your readers may find some of my comments to be of interest.

That Hageman factor (factor XII), once activated, is capable of activating factor XI (plasma thromboplastin antecedent [PTA]), was proposed by Hardisty and Margolis,\textsuperscript{2} Soulier et al,\textsuperscript{1} Waaler,\textsuperscript{3} and others over 30 years ago, and was demonstrated with progressively purer reagents in the ensuing years.\textsuperscript{4,5} Schiffman et al\textsuperscript{6} added...
that additional plasma agents were needed for activation to take place, the forerunner of the discovery of the clot-promoting activities of plasma prekallikrein and high molecular weight kininogen. Brunée et al also make the point that thrombin does not appear to activate PTA in a plasma environment, a conclusion that differs from that of Gailani and Broze and Naito and Fujikawa, but is in agreement with earlier studies. Whether thrombin can activate PTA in real life is not yet clear.

OSCAR D. RATNOFF
Hematology/Oncology Division
Case Western Reserve University
Cleveland, OH

REFERENCES
4. Waaler BA: Contact activation in the intrinsic blood clotting system. Studies on a plasma product found on contact with glass and similar surfaces. Scand J Clin Lab Invest 11:1, 1959 (suppl 37)
Activation of factor XI [letter; comment]

OD Ratnoff