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### Detection of carriers of haemophilia B.

[Orstavik KH](#), [Veltkamp JJ](#), [Bertina RM](#), [Hermans J](#).

Plasma levels of factor IX activity and factor IX antigen were determined in 18 definite carriers of haemophilia B-, 10 definite carriers of haemophilia B+ and 40 control subjects. Factor IX antigen was determined by the electroimmunoassay technique of Laurell using a rabbit antiserum against factor IX. In haemophilia B-, statistical tolerance regions were constructed containing 90% of the factor IX activity and factor IX antigen values for the carriers and the control subjects. Of the 18 carriers, 10 were outside the tolerance region for the control subjects, and of the 40 control subjects, 17 were outside the tolerance region for the carriers. A better separation of the probabilities of being a carrier was obtained for the B-carriers and the control subjects when factor IX antigen was determined in addition to factor IX activity. In haemophilia B+, factor IX antigen was present in excess of factor IX activity in nine of the 10 carriers. The values for factor IX activity and factor IX antigen for these nine carriers fell outside the 90% tolerance region for the control subjects. It is concluded that the quantitative determination of factor IX antigen may be of value in the detection of carriers of both haemophilia B+ and haemophilia B-.