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## **Report of a collaborative study to assess the suitability of a candidate replacement standard for the International Standard for Parvovirus B19 IgG, human serum**

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### **Summary**

A collaborative study was undertaken to assess the suitability of a replacement for the International Standard for Parvovirus B19 IgG, human serum. The proposed standard, which is a pool of sera from 16 US blood donors, was assayed along with the International Standard, a coded duplicate of the proposed standard and a plasma sample from a single blood donor. Nine laboratories from 8 countries participated in the studies and five different assay kits were used. Two kits contained VP1+VP2, one kit contained VP1 only and two kits, one of which was used by 5 participants contained VP2 only. Differences in detection of the proposed standard and the individual plasma were observed with assay kits containing different antigens, VP1, VP2 or VP1 + VP2. However, since VP-1 is a minor capsid protein and on its own does not assemble into virus like particles and the dominant response in individuals appears to be against VP2, it was considered reasonable to utilize only the data from kits containing VP2 antigen for the calibration of the proposed standard.

The results of this study demonstrated that the proposed standard coded 91/602 is suitable to serve as the Second International Standard for parvovirus B 19 serum IgG and it is proposed that it be assigned a unitage of 77IU units per ampoule.

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