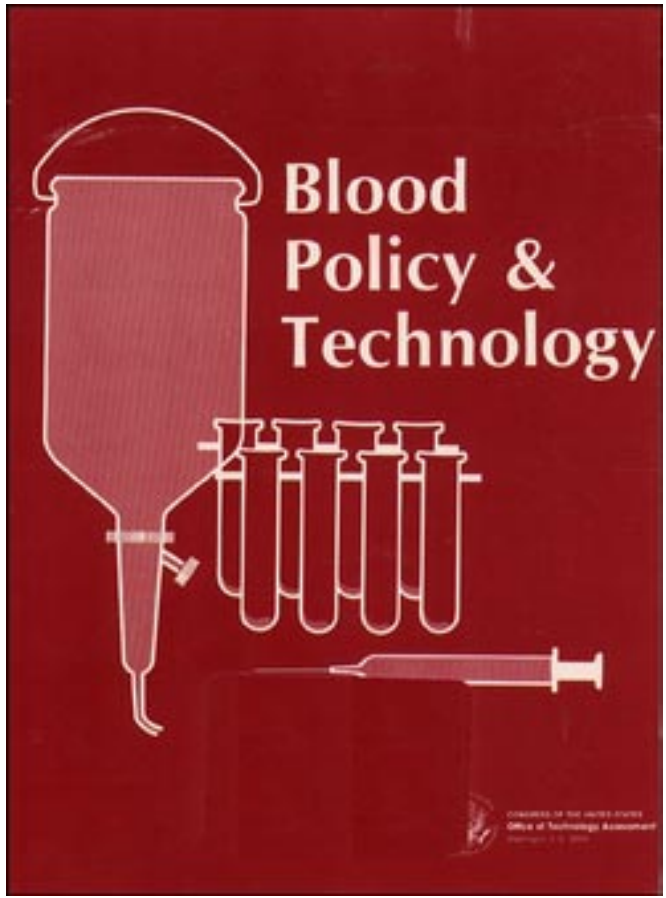
*Blood Policy and Technology*

January 1985

NTIS order #PB85-234870



Recommended Citation:
*Blood Policy and Technology* (Washington, DC: U.S. Congress, Office of Technology Assessment, OTA-H-260, January 1985).

Library of Congress Catalog Card Number 85-601151

For sale by the Superintendent of Documents
U.S. Government Printing Office, Washington, DC 20402

# Foreword

Posttransfusion hepatitis, inefficiencies in blood collection and distribution, payment for blood donations, and the cost of blood products are subjects that, from time to time, have focused attention on the Nation's blood services system. In response, tests have been developed for detecting carriers of transfusion-related hepatitis. Transfusions with the individual components of blood instead of whole blood have become accepted therapy and also resulted in more efficient use of blood donations. Improved technologies have extended the storage life of blood, and improved methods of collection have enabled large-scale processing of plasma so that its component proteins could be extracted. One result of this progress was increased availability of Factor VIII, the antihemophilic factor, which has allowed hemophiliacs to lead nearly normal lives.

In sum, improvements in blood banking and transfusion medicine in the late 1970s and early 1980s have resulted in a stable and safer blood supply. Recent developments, however, create uncertainties. Transfusion-related cases of acquired immunodeficiency syndrome (AIDS) have threatened the safety of the blood supply and the equanimity that has been the foundation of the voluntary blood donor system. Recombinant DNA technologies are being applied to the production of plasma proteins, and other technologies are under development for the production of the cellular components of blood. Legislation of prospective payment by diagnosis-related groupings for Medicare patients' hospital care has begun to exert pressure on blood center revenues as hospitals seek ways to pare costs. Organ and tissue transplants have been increasing, raising questions in the blood banking community about its role in these new types of tissue banks. These developments led the House Committee on Energy and Commerce to request that the Office of Technology Assessment (OTA) conduct an assessment of blood policy and technologies.

In preparing this report, OTA staff drew upon the expertise of members of the study advisory panel, chaired by Louanne Kennedy; members of the OTA Health Program Advisory Committee, chaired by Sidney S. Lee; representatives from industry, academia and the public; and experts in blood banking and transfusion medicine, blood research and development, and health policy. Key OTA staff involved in the preparation of the report were Lawrence Miike, Denise Dougherty, Jeffrey Stryker, and Anne Guthrie.

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