The Safety, Efficacy, and Cost Effectiveness of Therapeutic Apheresis

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HEALTH TECHNOLOGY CASE STUDY 23: The Safety, Efficacy, and Cost Effectiveness of Therapeutic Apheresis

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Preface

The Safety, Efficacy, and Cost Effectiveness of Therapeutic Apheresis is Case Study #23 in OTA's Health Technology Case Study Series. It was prepared in response to a request by the Senate Finance Committee, Subcommittee on Health, and is part of OTA's project on *Medical Technology and Costs of the Medicare Program*, requested by the House Committee on Energy and Commerce and its Subcommittee on Health and the Environment. A listing of other case studies in the series is included at the end of this preface.

OTA case studies are designed to fulfill two functions. The primary purpose is to provide OTA with specific information that can be used in forming general conclusions regarding broader policy issues. The first 19 cases in the Health Technology Case Study Series, for example, were conducted in conjunction with OTA's overall project on The Implications of Cost-Effectiveness **Analysis of Medical Technology.** By examining the 19 cases as a group and looking for common problems or strengths in the techniques of costeffectiveness or cost-benefit analysis, OTA was able to better analyze the potential contribution that those techniques might make to the management of medical technology and health care costs and quality.

The second function of the case studies is to provide useful information on the specific technologies covered. The design and the funding levels of most of the case studies are such that they should be read primarily in the context of the associated overall OTA projects. Nevertheless, in many instances, the case studies do represent extensive reviews of the literature on the efficacy, safety, and costs of the specific technologies and **as** such can stand on their own as a useful contribution to the field.

Case studies are prepared in some instances because they have been specifically requested by congressional committees and in others because they have been selected through an extensive review process involving OTA **staff and consulta**tions with the congressional staffs, advisory panel to the associated overall project, the Health Program Advisory Committee, and other experts in various fields. Selection criteria were developed to ensure that case studies provide the following:

- examples of types of technologies by function (preventive, diagnostic, therapeutic, and rehabilitative);
- examples of types of technologies by physical nature (drugs, devices, and procedures);
- examples of technologies in different stages of development and diffusion (new, emerging, and established);
- examples from different areas of medicine (e.g., general medical practice, pediatrics, radiology, and surgery);
- examples addressing medical problems that are important because of their high frequency or significant impacts (e.g., cost);
- examples of technologies with associated high costs either because of high volume (for low-cost technologies) or high individual costs;
- examples that could provide information material relating to the broader policy and methodological issues being examined in the particular overall project; and
- examples with sufficient scientific literature.

Case studies either are prepared by OTA staff, are commissioned by OTA and performed under contract by experts (generally in academia), or are written by OTA staff on the basis of contractors' papers.

OTA subjects each case study to an extensive review process. Initial drafts of cases are reviewed by OTA staff and by members of the advisory panel to the associated project. For commissioned cases, "comments are provided to authors, along with OTA's suggestions for revisions. Subsequent drafts are sent by OTA to numerous experts for review and comment. Each case is seen by at least **30**, and sometimes by 80 or more outside reviewers. These reviewers may be from relevant Government agencies, professional societies, consumer and public interest groups, medical practice, and academic medicine. Academicians such as economists, sociologists, decision analysts, biologists, and so forth, as appropriate, also review the cases.

Although cases are not statements of official OTA position, the review process is designed to satisfy OTA of each case study's scientific quality and objectivity. During the various stages of the review and revision process, therefore, OTA encourages, and to the extent possible requires, authors to present balanced information and recognize divergent points of view.

Case S series num		Seri	se Study ies Case study title; author(s); nber OTA publication number ^b	
	Formal Anal sis, Policy Formulation, and End- Stage Renalbisease;		Richard M. Scheffler and Morgan Delaney (OTA-BP-H-9(12))	
	Richard A. Rettig (OTA-BP-H-9(1)) ^c The Feasibility of Economic Evaluation of	13	Cardiac Radionuclide Imaging and Cost Effectiveness;	
	Diagnostic Procedures: The Case of CT Scanning; Judith L. Wagner (OTA-BP-H-9(2))		William B. Stason and Eric Fortess (OTA-BP-H-9(13))	
	Screening for Colon Cancer: A Technology Assessment;	14	Technologies: A Case Study of Orthopedic Joint	
	David M. Eddy (OTA-BP-H-9(3)) Cost Effectiveness of Automated Multichannel Chemistry Analyzers;		Implants; Judith D. Bentkover and Philip G. Drew (OTA-BP-H-9(14))	
	Milton C. Weinstein and Laurie A. Pearlman (OTA-BP-H-9(4))	15	Elective Hysterectomy: Costs, Risks, and Benefits; Carol Korenbrot, Ann B. Flood, Michael Higgins,	
	Periodontal Disease: Assessing the Effectiveness and Costs of the Keyes Technique;	1/	Noralou Roos, and John P. Bunker (OTA-BP-H-9(15)) The Costs and Effortiveness of Nurse Practitioners	
6 '	Richard M. Scheffler and Sheldon Rovin (OTA-BP-H-9(5)) The Cost Effectiveness of Bone Marrow Transplant	10	The Costs and Effectiveness of Nurse Practitioners; Lauren LeRoy and Sharon Solkowitz (OTA-BP-H-9(16))	
Ű,	Therapy and Its Policy Implications; Stuart O. Schweitzer and C. C. Scalzi	17	Surgery for Breast Cancer; Karen Schachter Weingrod and Duncan Neuhauser	
7	(OTA-BP-H-9(6)) Allocating Costs and Benefits in Disease Prevention Programs: An Application to Cervical Cancer	18	(OTA-BP-H-9(17)) The Efficacy and Cost Effectiveness of Psychotherapy;	
	Screening; Bryan R. Luce (Office of Technology Assessment)		Leonard Saxe (Office of Technology Assessment) (OTA-BP-H-9(18)) ^d	
8	(OTA-BP-H-9(7)) The Cost Effectiveness of Upper Gastrointestinal	19	Assessment of Four Common X-Ray Procedures; Judith L. Wagner (OTA-BP-H-9(19)) ^e	
	Endoscopy; Jonathan A. Showstack and Steven A. Schroeder (OTA-BP-H-9(8))	20	Mandatory Passive Restraint Systems in Automobiles: Issues and Evidence: Kenneth E. Warner (OTA-BP-H-15(20)) ^f	
9	The Artificial Heart: Cost, Risks, and Benefits; Deborah P. Lubeck and John P. Bunker	21	Selected Telecommunications Devices for Hearing- Impaired Persons;	
	(OTA-BP-H-9(9)) The Costs and Effectiveness of Neonatal Intensive		Virginia W. Stern and Martha Ross Redden (OTA-BP-H-16(21)) ⁸	
	Care; Peter Budetti, Peggy McManus, Nancy Barrand, and Lu Ann Heinen (OTA-BP-H-9(10))	22	The Effectiveness and Costs of Alcoholism Treatment; Leonard Saxe, Denise Dougherty, Katharine Esty,	
11	Benefit and Cost Analysis of Medical Interventions: The Case of Cimetidine and Peptic Ulcer Disease; Harvey V. Fineberg and Laurie A. Pearlman (OTA-BP-H-9(11))	23	and Michelle Fine (OTA-CS-H-22) The Safety, Efficacy, and Cost Effectiveness of Therapeutic Apheresis; John C. Langenbrunner (Office of Technology	
	Assessing Selected Respiratory Therapy Modalities: Trends and Relative Costs in the Washington, D.C. Area;		Assessment)	
^a Available for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C., 20402, and by the National Technical Information Service, 5285 Port Royal Road, Springfield, Va., 22161. Call OTA's Publishing Office (224-8996) for availability and ordering infor- mation.			^d Background Paper #3 to <i>The Implications of Cost-Effectiveness Analysis of</i> <i>Medical Technology.</i> ^{Background Paper #5 to The <i>Implications of Cost-Effectiveness Analysis of</i> ^{Madical Technology.} ^fBackground Paper #1 to OTA's May 1982 report Technology and Handi-}	
^b Original publication numbers appear in parentheses.			ned Peonle.	

Printing Office, Washington, D. C., 20402, and by the National Technical Information Service, 5285 Port Royal Road, Springfield, Va., 22161. Call OTA's Publishing Office (224-8996) for availability and ordering information. bOriginal publication numbers appear in parentheses. cThe first 17 cases in the *series* were 17 separately issued cases in *Background*

capped People. Background Paper #2 to Technology and Hand"capped People.

Paper #2: Case Studies of Medical Technologies, prepared in conjunction with OTA's August 19&1 report The Implications of Cost-Effectiveness Anal-vsis of Medical Technology.

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