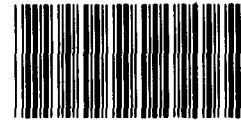


August 1992

PRESCRIPTION DRUGS

Changes in Prices for Selected Drugs



147429

**RESTRICTED--Not to be released outside the
General Accounting Office unless specifically
approved by the Office of Congressional
Relations.**

55519L

RELEASE

■

Human Resources Division

B-249510

August 24, 1992

**The Honorable Byron L. Dorgan
House of Representatives****The Honorable Fortney H. (Pete) Stark
House of Representatives**

Significant increases in prescription drug prices place a growing burden on many Americans, particularly the elderly, who often must pay for these drugs out of pocket because they lack health insurance that provides drug benefits. Due to your concern about these increases, you asked us to examine recent price increases for 29 drug products (most of which are widely used) purchased by pharmacies and the Department of Veterans Affairs (VA) and to determine the companies' reasons for the increases. This report responds to your request.

Background

During the 1980s, prescription drug prices increased at almost three times the rate of general inflation and certain drugs increased in price by over 100 percent in 5 years.¹ Congressional concerns about rapid increases in Medicaid prescription drug costs led to enactment, as part of the Omnibus Budget Reconciliation Act of 1990 (OBRA), of significant changes in how Medicaid programs pay for outpatient prescription drugs. In September 1991, we reported that VA had experienced significant increases in prices it paid for selected prescription drugs following OBRA's enactment.²

Drug Purchasing Methods

Prescription drug prices vary depending on the kind of organization that buys them and the manner in which they are purchased. For example, although most drug manufacturers sell their products only through wholesalers, some also sell products directly to pharmacies. The price that manufacturers charge pharmacies is called the direct price, while the price they charge wholesalers for their products—which in turn are resold to pharmacies—is called the wholesaler cost or list price to wholesalers. Manufacturers may suggest a list price for a wholesaler to use when selling a drug product to a pharmacy, called the average wholesale price (AWP).

¹Senate Special Committee on Aging, The Drug Manufacturing Industry: A Prescription for Profits, Staff Report, Sept. 1991.

²Medicaid: Changes in Drug Prices Paid by VA and DOD Since Enactment of Rebate Provisions (GAO/HRD-91-139, Sept. 18, 1991).

VA spends about \$700 million a year on prescription drugs dispensed by its numerous medical centers. These drugs are purchased in several ways. A major source from which VA medical centers purchase drugs that have substantial usage is the VA depot system. Under it, VA officials negotiate contracts with drug manufacturers for such products and distribute them when ordered by VA medical centers. VA medical centers also purchase drugs listed on the Federal Supply Schedule (FSS) for drugs and pharmaceuticals. The schedule is a price catalog that contains thousands of such items, whose prices VA negotiates with various drug manufacturers. Its medical centers maintain the catalogs and purchase the items directly from manufacturers at the catalog price. Finally, VA medical centers can purchase drugs directly from manufacturers at the government open market (GOM) price.

Consumer Price Indexes

Several economic indexes are used to measure the extent of changes in prescription drug prices. The Consumer Price Index (CPI), prepared by the Bureau of Labor Statistics, measures the change in average prices of goods and services purchased by urban wage earners and their families. It is widely used as an indicator of changes in the cost of living, a measure of inflation, and a means for studying trends in prices of various goods and services.

The CPI has several components that measure price changes in different sectors of the economy. One is the medical care component, which measures trends in such charges as hospital, medical, dental, and drug prices. Each CPI component, such as medical care, is composed of several subcomponents. Within the medical care price index, there is an index that tracks retail price changes for a "market basket" of prescription drugs paid for by the end consumer. While the price index for prescription drugs measures general trends in drug prices, the price of an individual drug may change substantially more or less than the price index.

Scope and Methodology

There is no publicly available source for the drug prices charged to particular classes of customers. To obtain pricing information and the reasons for increases in the prices of the 29 drug products identified in your request, we had to contact the 18 pharmaceutical companies that manufacture them.

We asked each company to provide information (by pricing category) for each of its respective products, effective December 31, 1985, 1989, 1990, and 1991, on prices charged to

- retail pharmacies through wholesalers (such as AWP);
- retail pharmacies directly; and
- the VA, through its depot system, as listed on the FSS and as available from the manufacturer at the GOM price.

In addition, we asked each company to explain why each drug product increased in price. To verify the information they gave us, we asked five companies to provide more specific explanations. However, none of them did so because they considered the information proprietary. As agreed with your offices, we made no further effort to verify the information they gave us because it appeared likely that the other 13 companies would give us similar answers.

We compared the price changes for the 29 drug products to changes in three consumer price indexes, cited by pharmaceutical companies and others as commonly used measures of pharmaceutical inflation. These indexes were the CPIs for all items, for medical care, and for prescription drugs.

Our work was conducted between November 1991 and April 1992 in accordance with generally accepted government auditing standards.

Results of GAO'S Analysis

Prices for nearly all 29 drug products increased more than the percentage changes for all three consumer price indexes for the 6-year period ending December 31, 1991. The maximum price increase for each product during this period generally exceeded 100 percent, with some prices increasing by 200 to 300 percent, as shown in table 1. During this same period, the CPI for all items increased by 26.2 percent, the CPI for medical care by 56.3 percent, and the CPI for prescription drugs by 67 percent.

Table 1: Price Increases for 29 Drug Products for the 6-Year Period Ending December 31, 1991

Drug product/dosage/form	Percentage Increase ^a	Reference in app. I
Dilantin (100 mg, 1,000 capsules)	348.7%	pp. 24-25
Dilantin (100 mg, 100 capsules)	334.0	pp. 22-23
Nitrostat (0.4 mg, 100 SL ^b tablets)	274.0	pp. 38-39
Coumadin (2.5 mg, 100 tablets)	218.2	pp. 18-19
Coumadin (5 mg, 1,000 tablets)	190.1	pp. 20-21
Azmacort (1 inhaler)	182.8	pp. 14-15
Tylenol w/codeine (#3, 100 tablets)	161.0	pp. 64-65
Premarin (0.625 mg, 100 tablets)	160.3	pp. 42-43
Premarin (1.25 mg, 100 tablets)	160.2	pp. 44-45
Prolixin (5 mg, 500 tablets)	145.4	pp. 48-49
Synthroid (.025 mg, 100 tablets)	143.0	pp. 60-61
Percocet (5/325 mg, 100 tablets)	140.7	pp. 40-41
Proventil (1 inhaler)	139.3	pp. 52-53
Restoril (15 mg, 100 tablets)	134.0	pp. 58-59
Lopressor (50 mg, 1,000 tablets)	124.8	pp. 32-33
Prolixin (25 mg/vial, 1 ml vial injection)	113.4	pp. 50-51
Questran (4 gm, 378 gm powder)	111.7	pp. 56-57
Halcion (0.25 mg, 100 tablets)	110.0	pp. 28-29
Valium (10 mg, 100 tablets)	109.6	pp. 66-67
Ativan (1 mg, 100 tablets)	98.0	pp. 12-13
Keflex (500 mg, 100 capsules)	94.3	pp. 30-31
Procan (500 mg, 500 SR ^c tablets)	93.7	pp. 46-47
Capoten (25 mg, 1,000 tablets)	89.9	pp. 16-17
Ventolin (4 mg, 100 tablets)	89.9	pp. 68-69
Tenormin (50 mg, 100 tablets)	85.7	pp. 62-63
Feldene (10 mg, 100 tablets)	71.2	pp. 26-27
Naprosyn (250 mg, 500 tablets)	43.7	pp. 36-37
Prozac (20 mg, 100 capsules)	16.6 ^d	pp. 54-55
Motrin (600 mg, 100 tablets)	7.5	pp. 34-35

^aThe maximum percentage price increase to a particular class of trade including average wholesale price, list price to wholesalers, direct price to retail pharmacies, and VA depot, federal supply schedule, and government open market prices.

^bSublingual.

^cSustained release.

^dRepresents the percentage increase for the 2-year period ending Dec. 31, 1991.

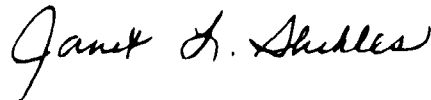
Companies' explanations for the drug price increases were general and provided few details because they consider information on pricing decisions to be confidential and proprietary. Among the factors they often cited were:

- Increased research and development (R&D) or operating costs,
- Expansion of manufacturing capabilities or changes in manufacturing specifications to improve product quality,
- Prices for comparable therapies,
- Increased product value due to new indications or uses,
- Physician and patient education programs,
- Increased exposure to product liability litigation,
- An accelerated approval process for generic drugs that shortens the period during which companies can recoup their R&D investments, and
- Inflation.

Appendix I contains the drug price information that each company provided. In it, we compare the price changes for each drug product to the changes in the three consumer price indexes for the 6-year period ending December 31, 1991, and summarize the pharmaceutical companies' explanations for drug price changes.

Unless you publicly announce the contents earlier, we plan no further distribution of this report for 30 days after its issue date. At that time, we will send copies to the congressional committees having jurisdiction over matters discussed in the report and other interested parties and will make it available to others on request.

Should you have any questions about our report, please call me at (202) 512-7119. Other major contributors are listed in appendix II.



Janet L. Shikles
Director, Health Financing
and Policy Issues

Contents

Letter	1
--------	---

Appendix I	12
Companies' Drug	12
Prices and Reasons	14
for Price Changes,	16
and GAO'S Analyses	18
of Price Changes	20
Ativan (1 Mg, 100 Tablets)	22
Azmacort (1 Inhaler)	24
Capoten (25 Mg, 1,000 Tablets)	26
Coumadin (2.5 Mg, 100 Tablets)	28
Coumadin (5 Mg, 1,000 Tablets)	30
Dilantin (100 Mg, 100 Capsules)	32
Dilantin (100 Mg, 1,000 Capsules)	34
Feldene (10 Mg, 100 Tablets)	36
Halcion (0.25 Mg, 100 Tablets)	38
Keflex (500 Mg, 100 Capsules)	40
Lopressor (50 Mg, 1,000 Tablets)	42
Motrin (600 Mg, 100 Tablets)	44
Naprosyn (250 Mg, 500 Tablets)	46
Nitrostat (0.4 Mg, 100 Sublingual [SL] Tablets)	48
Percocet (5/325 Mg, 100 Tablets)	50
Premarin (0.625 Mg, 100 Tablets)	52
Premarin (1.25 Mg, 100 Tablets)	54
Procan (500 Mg, 500 Sustained Release [SR] Tablets)	56
Prolixin (5 Mg, 500 Tablets)	58
Prolixin (25 Mg/Vial, 1 ML Vial Injection)	60
Proventil (One Inhaler)	62
Prozac (20 Mg, 100 Capsules)	64
Questran (4 Gm, 378 Gm Powder)	66
Restoril (15 Mg, 100 Tablets)	68
Synthroid (.025 Mg, 100 Tablets)	
Tenormin (50 Mg, 100 Tablets)	
Tylenol With Codeine (#3, 100 Tablets)	
Valium (10 Mg, 100 Tablets)	
Ventolin (4 Mg, 100 Tablets)	

Appendix II	70
Major Contributors to	
This Report	

Tables	Table 1: Price Increases for 29 Drug Products for the 6-Year Period Ending December 31, 1991	4
--------	---	---

Table I.1: Prices for Ativan, 1 Mg, 100 Tablets	12
Table I.2: Prices for Azmacort, One Inhaler	14
Table I.3: Prices for Capoten, 25 Mg, 1,000 Tablets	16
Table I.4: Prices for Coumadin, 2.5 Mg, 100 Tablets	18
Table I.5: Prices for Coumadin, 5 Mg, 1,000 Tablets	20
Table I.6: Prices for Dilantin, 100 Mg, 100 Capsules	22
Table I.7: Prices for Dilantin, 100 Mg, 1,000 Capsules	24
Table I.8: Prices for Feldene, 10 Mg, 100 Tablets	26
Table I.9: Prices for Halcion, 0.25 Mg, 100 Tablets	28
Table I.10: Prices for Keflex, 500 Mg, 100 Capsules	30
Table I.11: Prices for Lopressor, 50 Mg, 1,000 Tablets	32
Table I.12: Prices for Motrin, 600 Mg, 100 Tablets	34
Table I.13: Prices for Naprosyn, 250 Mg, 500 Tablets	36
Table I.14: Prices for Nitrostat, 0.4 Mg, 100 SL Tablets	38
Table I.15: Prices for Percocet, 5/325 Mg, 100 Tablets	40
Table I.16: Prices for Premarin, 0.625 Mg, 100 Tablets	42
Table I.17: Prices for Premarin, 1.25 Mg, 100 Tablets	44
Table I.18: Prices for Procan, 500 Mg, 500 SR Tablets	46
Table I.19: Prices for Prolixin, 5 Mg, 500 Tablets	48
Table I.20: Prices for Prolixin, 25 Mg/Vial, 1 MI Vial Injection	50
Table I.21: Prices for Proventil, One Inhaler	52
Table I.22: Prices for Prozac, 20 Mg, 100 Capsules	54
Table I.23: Prices for Questran, 4 Gm, 378 Gm Powder	56
Table I.24: Prices for Restoril, 15 Mg, 100 Tablets	58
Table I.25: Prices for Synthroid,.025 Mg, 100 Tablets	60
Table I.26: Prices for Tenormin 50 Mg, 100 Tablets	62
Table I.27: Prices for Tylenol With Codeine, #3, 100 Tablets	64
Table I.28: Prices for Valium 10 Mg, 100 Tablets	66
Table I.29: Prices for Ventolin, 4 Mg, 100 Tablets	68

Figures

Figure I.1: Comparison of Changes in Consumer Price Indexes With Price Changes for Ativan, 1 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	13
Figure I.2: Comparison of Changes in Consumer Price Indexes With Price Changes for Azmacort, One Inhaler, for the 6-Year Period Ending December 31, 1991	15
Figure I.3: Comparison of Changes in Consumer Price Indexes With Price Changes for Capoten, 25 Mg, 1,000 Tablets, for the 6-Year Period Ending December 31, 1991	17

Figure I.4: Comparison of Changes in Consumer Price Indexes With Price Changes for Coumadin, 2.5 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	19
Figure I.5: Comparison of Changes in Consumer Price Indexes With Price Changes for Coumadin, 5 Mg, 1,000 Tablets, for the 6-Year Period Ending December 31, 1991	21
Figure I.6: Comparison of Changes in Consumer Price Indexes With Price Changes for Dilantin, 100 Mg, 100 Capsules, for the 6-Year Period Ending December 31, 1991	23
Figure I.7: Comparison of Changes in Consumer Price Indexes With Price Changes for Dilantin, 100 Mg, 1,000 Capsules, for the 6-Year Period Ending December 31, 1991	25
Figure I.8: Comparison of Changes in Consumer Price Indexes With Price Changes for Feldene, 10 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	27
Figure I.9: Comparison of Changes in Consumer Price Indexes With Price Changes for Halcion, 0.25 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	29
Figure I.10: Comparison of Changes in Consumer Price Indexes With Price Changes for Keflex, 500 Mg, 100 Capsules, for the 6-Year Period Ending December 31, 1991	31
Figure I.11: Comparison of Changes in Consumer Price Indexes With Price Changes for Lopressor, 50 Mg, 1,000 Tablets, for the 6-Year Period Ending December 31, 1991	33
Figure I.12: Comparison of Changes in Consumer Price Indexes With Price Changes for Motrin, 600 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	35
Figure I.13: Comparison of Changes in Consumer Price Indexes With Price Changes for Naprosyn, 250 Mg, 500 Tablets, for the 6-Year Period Ending December 31, 1991	37
Figure I.14: Comparison of Changes in Consumer Price Indexes With Price Changes for Nitrostat, 0.4 Mg, 100 SL Tablets, for the 6-Year Period Ending December 31, 1991	39
Figure I.15: Comparison of Changes in Consumer Price Indexes With Price Changes for Percocet, 5/325 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	41
Figure I.16: Comparison of Changes in Consumer Price Indexes With Price Changes for Premarin, 0.625 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	43

Figure I.17: Comparison of Changes in Consumer Price Indexes With Price Changes for Premarin, 1.25 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	45
Figure I.18: Comparison of Changes in Consumer Price Indexes With Price Changes for Procan, 500 Mg, 500 SR Tablets, for the 6-Year Period Ending December 31, 1991	47
Figure I.19: Comparison of Changes in Consumer Price Indexes With Price Changes for Prolixin, 5 Mg, 500 Tablets, for the 6-Year Period Ending December 31, 1991	49
Figure I.20: Comparison of Changes in Consumer Price Indexes With Price Changes for Prolixin, 25 Mg/Vial, 1 MI Vial Injection, for the 6-Year Period Ending December 31, 1991	51
Figure I.21: Comparison of Changes in Consumer Price Indexes With Price Changes for Proventil, One Inhaler, for the 6-Year Period Ending December 31, 1991	53
Figure I.22: Comparison of Changes in Consumer Price Indexes With Price Changes for Prozac, 20 Mg, 100 Capsules, for the 2-Year Period Ending December 31, 1991	55
Figure I.23: Comparison of Changes in Consumer Price Indexes With Price Changes for Questran, 4 Gm, 378 Gm Powder, for the 6-Year Period Ending December 31, 1991	57
Figure I.24: Comparison of Changes in Consumer Price Indexes With Price Changes for Restoril, 15 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	59
Figure I.25: Comparison of Changes in Consumer Price Indexes With Price Changes for Synthroid,.025 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	61
Figure I.26: Comparison of Changes in Consumer Price Indexes With Price Changes for Tenormin, 50 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	63
Figure I.27: Comparison of Changes in Consumer Price Indexes With Price Changes for Tylenol With Codeine, #3, 100 Tablets, for the 6-Year Period Ending December 31, 1991	65
Figure I.28: Comparison of Changes in Consumer Price Indexes With Price Changes for Valium, 10 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	67
Figure I.29: Comparison of Changes in Consumer Price Indexes With Price Changes for Ventolin, 4 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991	69

Abbreviations

AWP	average wholesale price
CPI	consumer price index
FSS	federal supply schedule
GOM	government open market
OBRA	Omnibus Budget Reconciliation Act of 1990
R&D	research and development
SL	sublingual
SR	sustained release
VA	Department of Veterans Affairs

Companies' Drug Prices and Reasons for Price Changes, and GAO'S Analyses of Price Changes

In this appendix, we (1) describe each of the 29 drug products identified by the requesters; (2) present the drug price information each company provided us; (3) compare the price changes for each drug product to the changes in the three consumer price indexes, cited by pharmaceutical companies and others as commonly used measures of pharmaceutical price inflation, for the 6-year period ending December 31, 1991; and (4) summarize the pharmaceutical companies' explanations for the drug price changes. As discussed on page 3, the information provided by the pharmaceutical companies has not been verified.

Ativan (1 Mg, 100 Tablets)

Wyeth-Ayerst Laboratories manufactures Ativan, an antianxiety agent used for the management of anxiety disorders or for the short-term relief of anxiety symptoms or anxiety associated with depression.

Table I.1: Prices for Ativan, 1 Mg, 100 Tablets

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$24.96	\$41.61	\$44.94	\$49.43
Direct price	24.96	41.61	44.94	49.43
Depot price	20.16	N/A ^b	N/A	N/A
FSS price	N/A	N/A	4.99	6.74
GOM price	N/A	N/A	N/A	N/A

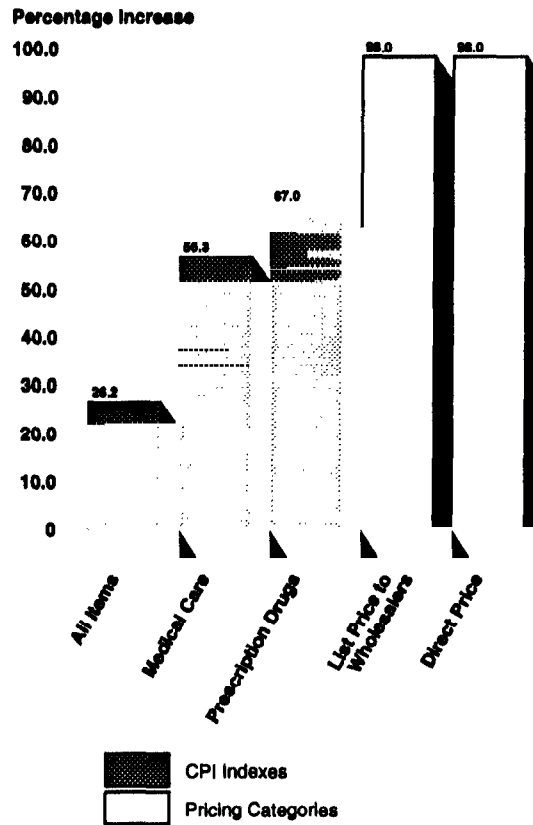
^aThe company provided its list price to wholesalers rather than the AWP.

^bThroughout app. I, N/A denotes that the drug product was not available in this pricing category on the date of inquiry.

Source: Wyeth-Ayerst Laboratories

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.1: Comparison of Changes in Consumer Price Indexes With Price Changes for Ativan, 1 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Wyeth-Ayerst Laboratories cited several factors in explaining price changes for Ativan. They included the prices of competing products and the cost of the company's research efforts aimed at finding and developing nonbenzodiazepines for such conditions as anxiety, depression, age-associated memory impairment, and schizophrenia.

**Appendix I
 Companies' Drug Prices and Reasons for
 Price Changes, and GAO'S Analyses of Price
 Changes**

Azmacort (1 Inhaler)

Rhone-Poulenc Rorer Pharmaceuticals manufactures Azmacort, an anti-inflammatory steroid in a metered-dose aerosol unit for the control of bronchial asthma symptoms.

Table I.2: Prices for Azmacort, One Inhaler

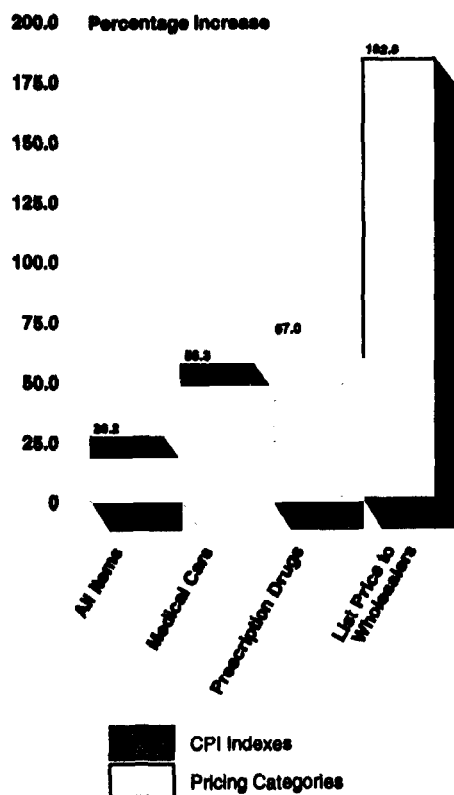
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$9.24	\$17.38	\$24.19	\$26.13
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	2.72	2.72	5.98
FSS price	N/A	3.20	3.39	9.70
GOM price	4.45	N/A	N/A	N/A

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Rhone-Poulenc Rorer Pharmaceuticals, Inc.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.2: Comparison of Changes in Consumer Price Indexes With Price Changes for Azmacort, One Inhaler, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Rhone-Poulenc Rorer Pharmaceuticals identified several factors effecting Azmacort prices. They included the need to fund increases in its R&D efforts, a decline in the average time period during which drugs produce revenue for their manufacturer, an investment in upgrading Azmacort's manufacturing facilities and processes, and the expense of asthma therapy education programs for patients and physicians.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Capoten (25 Mg, 1,000
Tablets)**

Princeton Pharmaceutical Products (a division of the Bristol-Myers Squibb Company) manufactures Capoten, an angiotensin converting enzyme inhibitor used to treat hypertension and congestive heart failure.

**Table I.3: Prices for Capoten, 25 Mg,
1,000 Tablets**

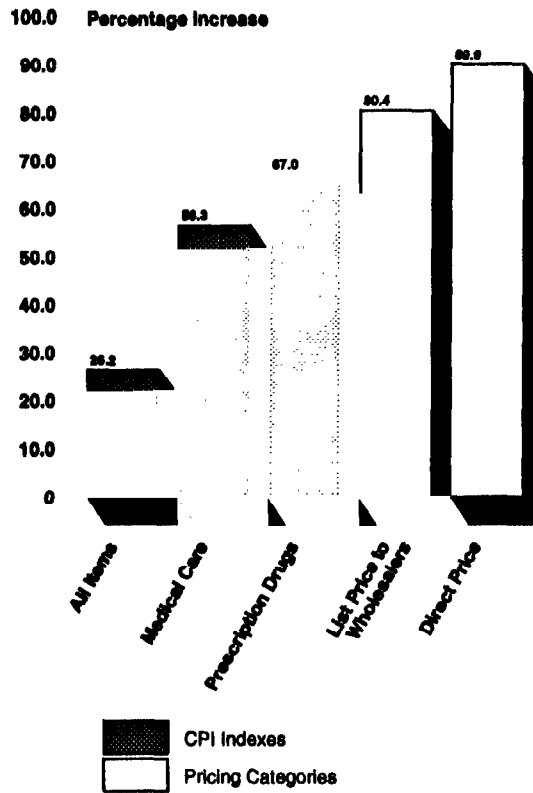
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers*	\$262.58	\$354.10	\$412.99	\$473.59
Direct price	262.58	354.10	412.99	498.52
Depot price	N/A	280.71	280.71	337.00
FSS price	N/A	315.40	315.40	353.25
GOM price	262.58	N/A	N/A	N/A

*The company provided its list price to wholesalers rather than the AWP.

Source: Bristol-Myers Squibb Company.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.3: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Capoten, 25 Mg, 1,000
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

The Bristol-Myers Squibb Company said that price changes for Capoten were needed to support the high costs of R&D, such as identifying new uses for Capoten, and to fund ordinary expenses associated with manufacturing, marketing, and distribution. The company told us they had invested over \$100 million in post-approval research on Capoten.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Coumadin (2.5 Mg,
100 Tablets)**

The Du Pont Merck Pharmaceutical Company manufactures Coumadin, an anticoagulant. It is used for the prophylaxis and/or treatment of venous thrombosis and its extension, pulmonary embolism, and atrial fibrillation with embolization, and as an adjunct in the prophylaxis of systemic embolism after myocardial infarction.

**Table I.4: Prices for Coumadin, 2.5 Mg,
100 Tablets**

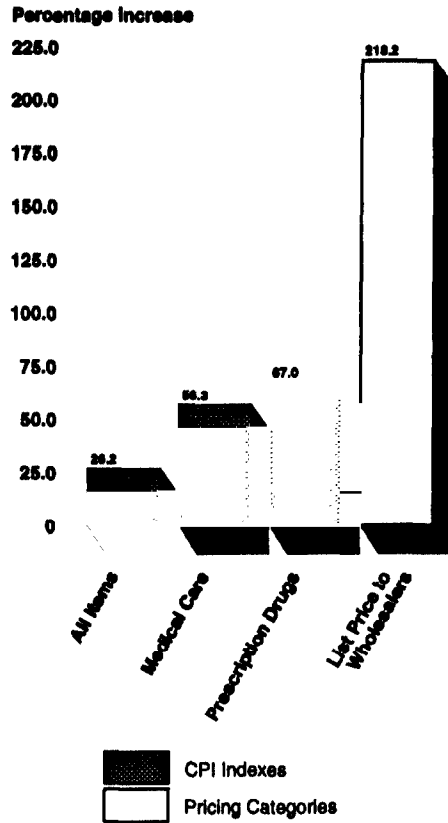
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers*	\$12.40	\$22.30	\$36.20	\$39.46
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	1.70
FSS price	6.50	7.70	7.70	N/A
GOM price	N/A	N/A	35.48	39.46

*The company provided its list price to wholesalers rather than the AWP.

Source: Du Pont Merck Pharmaceutical Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.4: Comparison of Changes in Consumer Price Indexes With Price Changes for Coumadin, 2.5 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

The Du Pont Merck Pharmaceutical Company said its strategy is to price pharmaceutical products at an adequate level to satisfy current and future revenue needs. For Coumadin, the major reasons for retail trade price increases include (1) the relative under-valuation of this product and (2) the significant investment Du Pont Pharmaceuticals makes in R&D.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Coumadin (5 Mg,
1,000 Tablets)**

The Du Pont Merck Pharmaceutical Company manufactures Coumadin, an anticoagulant. It is used for the prophylaxis and/or treatment of venous thrombosis and its extension, pulmonary embolism, and atrial fibrillation with embolization, and as an adjunct in the prophylaxis of systemic embolism after myocardial infarction.

**Table I.5: Prices for Coumadin, 5 Mg,
1,000 Tablets**

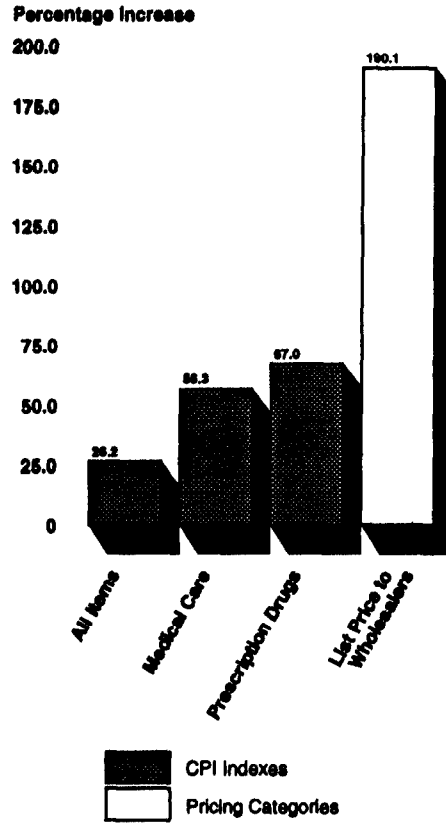
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$131.35	\$222.10	\$349.55	\$381.00
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	22.00	22.00	22.00
FSS price	N/A	80.90	80.90	N/A
GOM price	N/A	N/A	342.56	381.00

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Du Pont Merck Pharmaceutical Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.5: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Coumadin, 5 Mg, 1,000
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

See explanation on page 19.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Dilantin (100 Mg, 100
Capsules)**

Parke-Davis, a division of the Warner-Lambert Company, manufactures Dilantin, an antiepileptic drug used to control seizures or to prevent and treat seizures that occur during or following neurosurgery.

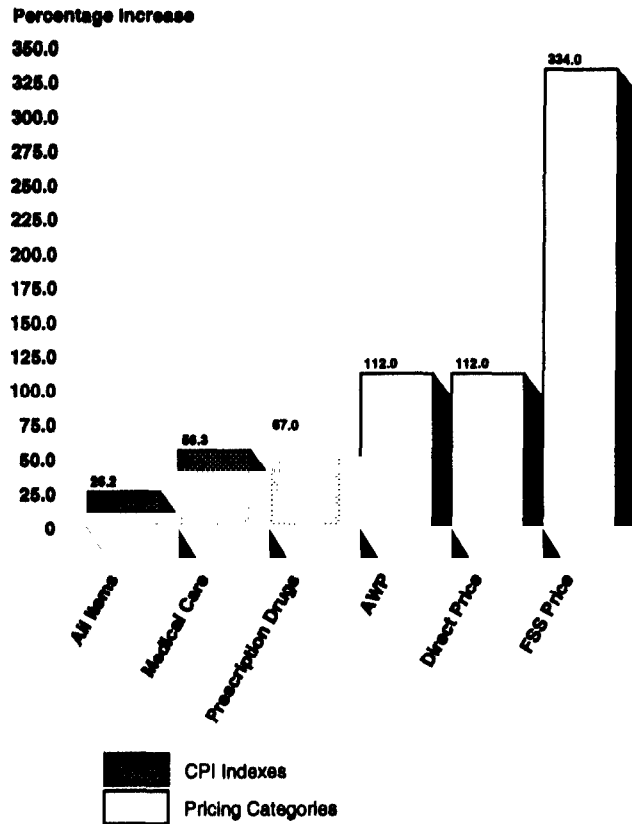
**Table I.6: Prices for Dilantin, 100 Mg,
100 Capsules**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$9.53	\$13.55	\$16.10	\$20.20
Direct price	7.94	11.29	13.42	16.83
Depot price	N/A	N/A	N/A	N/A
FSS price	3.03	4.37	4.78	13.15
GOM price	N/A	N/A	N/A	N/A

Source: Warner-Lambert Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.6: Comparison of Changes in Consumer Price Indexes With Price Changes for Dilantin, 100 Mg, 100 Capsules, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

The Warner-Lambert Company said that recent price increases for Dilantin resulted, in part, from changes in market conditions caused by the manufacture and sale of a fraudulent generic version of the drug, and the withdrawal of another version due to therapeutic problems. Further, the U.S. Pharmacopeial Convention narrowed Dilantin's assay specifications to improve the product's quality and consistency, making it more difficult and costly to manufacture. The company also said it had increased research expenditures by more than 16 percent each year over the past 5 years and recently committed \$110 million to upgrade its research facilities.

**Appendix I
 Companies' Drug Prices and Reasons for
 Price Changes, and GAO'S Analyses of Price
 Changes**

**Dilantin (100 Mg,
 1,000 Capsules)**

Parke-Davis, a division of the Warner-Lambert Company, manufactures Dilantin, an antiepileptic drug used to control seizures or to prevent and treat seizures that occur during or following neurosurgery.

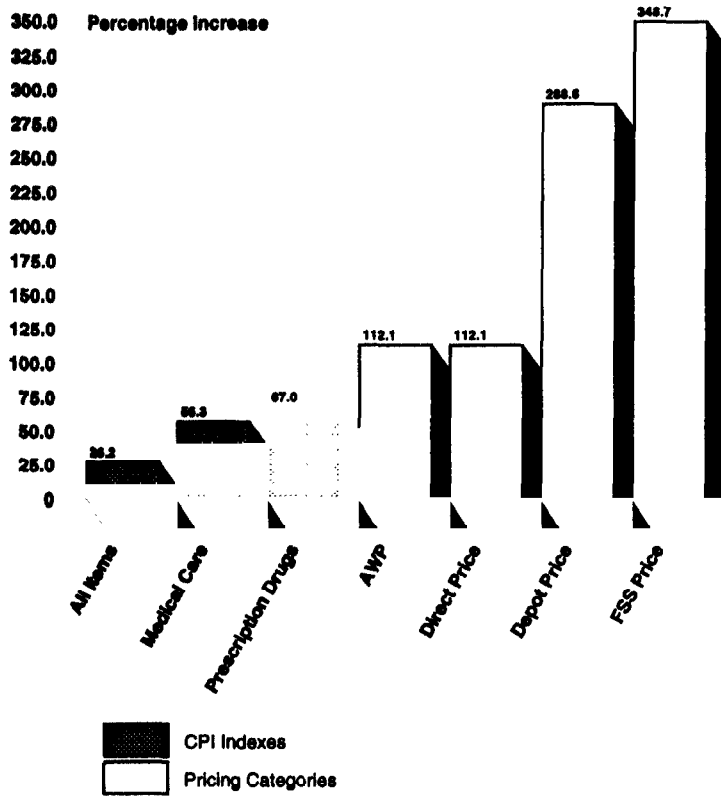
**Table I.7: Prices for Dilantin, 100 Mg,
 1,000 Capsules**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$74.09	\$105.43	\$125.27	\$157.14
Direct price	61.74	87.86	104.39	130.95
Depot price	11.58	14.00	17.71	45.00
FSS price	22.80	32.89	35.89	102.30
GOM price	N/A	N/A	N/A	N/A

Source: Warner-Lambert Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.7: Comparison of Changes in Consumer Price Indexes With Price Changes for Dilantin, 100 Mg, 1,000 Capsules, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

See explanation on page 23.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Feldene (10 Mg, 100
Tablets)**

Pfizer Labs Division (a division of Pfizer, Inc.) manufactures Feldene, a nonsteroidal anti-inflammatory agent used to treat osteoarthritis and rheumatoid arthritis.

**Table I.8: Prices for Feldene, 10 Mg,
100 Tablets**

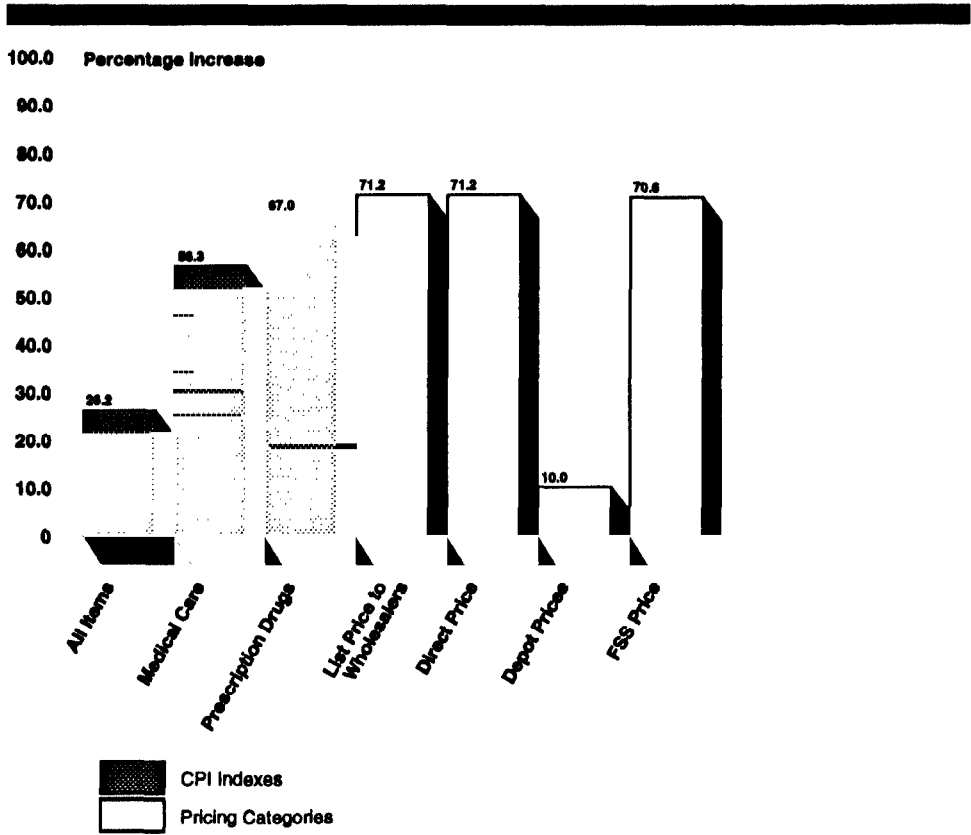
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$60.06	\$79.40	\$91.50	\$102.80
Direct price	63.22	83.58	96.32	108.21
Depot price	45.59	50.15	50.15	50.15
FSS price	53.63	65.91	72.34	91.50
GOM price	N/A	N/A	N/A	N/A

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Pfizer, Inc.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.8: Comparison of Changes in Consumer Price Indexes With Price Changes for Feldene, 10 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Pfizer cited several factors as reasons for Feldene's price changes. The factors included large increases in its R&D costs, higher salary and equipment costs, increased exposure from product liability litigation, and the shortened period during which research-based companies could recoup their R&D investments because of the accelerated approval of generic alternatives.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Halcion (0.25 Mg, 100
Tablets)**

The Upjohn Company manufactures Halcion, a hypnotic agent used in the short-term management of insomnia.

**Table I.9: Prices for Halcion, 0.25 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$22.71	\$36.49	\$43.39	\$47.69
Direct price	22.71	36.49	43.39	47.69
Depot price ^b	N/A	12.60	13.86	15.25
FSS price ^b	N/A	27.59	30.35	42.31
GOM price	N/A	N/A	N/A	N/A

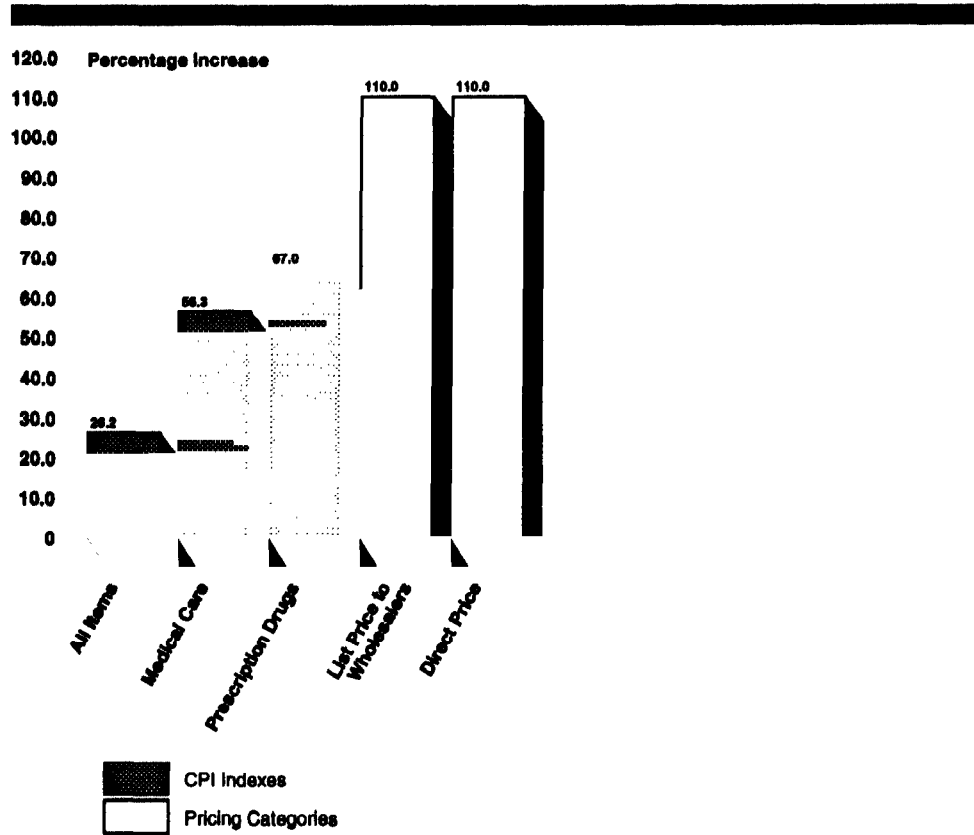
^aThe company provided its list price to wholesalers rather than the AWP.

^bThe company had no record of 1985 government prices.

Source: The Upjohn Company.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.9: Comparison of Changes in Consumer Price Indexes With Price Changes for Halcion, 0.25 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Upjohn Company prices are driven by competition within the therapeutic classes and the increased cost of R&D, the company said. Also influencing pharmaceutical pricing are the cost of therapy alternatives, the age of the product class, the existence of patent protection, the size of the patient candidate population, existing or anticipated diagnostic capabilities, and the evolving pattern of litigation and regulatory intervention involving Halcion. Increases in Halcion's price to the VA were dictated by contract, the company said, and limited to 10 percent or its catalog rate of increase, whichever is lower.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Keflex (500 Mg, 100
Capsules)**

The Dista Products Company, a division of Eli Lilly and Company, manufactures Keflex. It is a semisynthetic, cephalosporin antibiotic used to treat respiratory tract infections and other ailments, such as certain skin and skin structure infections and bone infections.

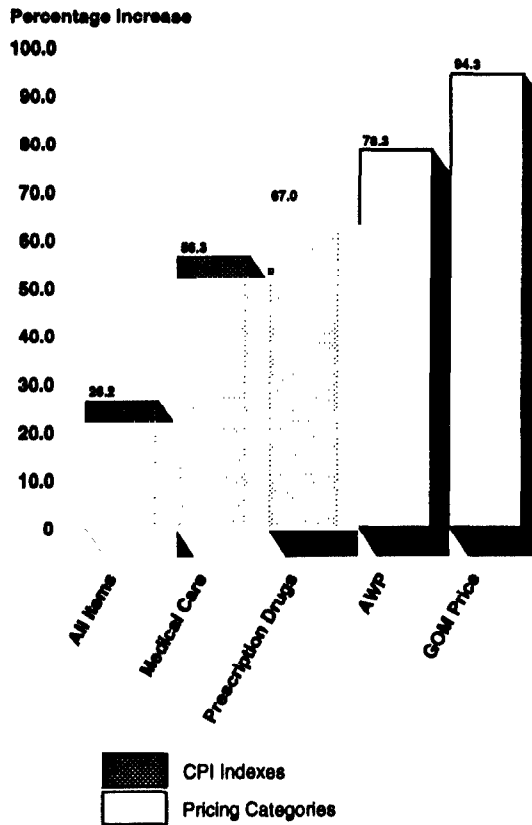
**Table I.10: Prices for Keflex, 500 Mg,
100 Capsules**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$123.83	\$187.52	\$202.52	\$220.75
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	86.85	N/A	N/A	N/A
GOM price	94.67	156.26	168.76	183.95

Source: Eli Lilly and Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.10: Comparison of Changes in Consumer Price Indexes With Price Changes for Keflex, 500 Mg, 100 Capsules, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Eli Lilly and Company views the sales of existing products as the funding source to finance compound discovery and development and to bring new therapies to market. The costs associated with discovering and screening new compounds, conducting clinical trials, and expanding manufacturing capabilities have increased dramatically, the company stated. Since 1985, Eli Lilly said, its annual increases in R&D averaged about 13 percent a year.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Lopressor (50 Mg,
1,000 Tablets)**

Geigy Pharmaceuticals (a division of CIBA-Geigy Corporation) manufactures Lopressor, a beta-adrenergic receptor blocking agent used for the treatment of hypertension, angina pectoris, and myocardial infarction.

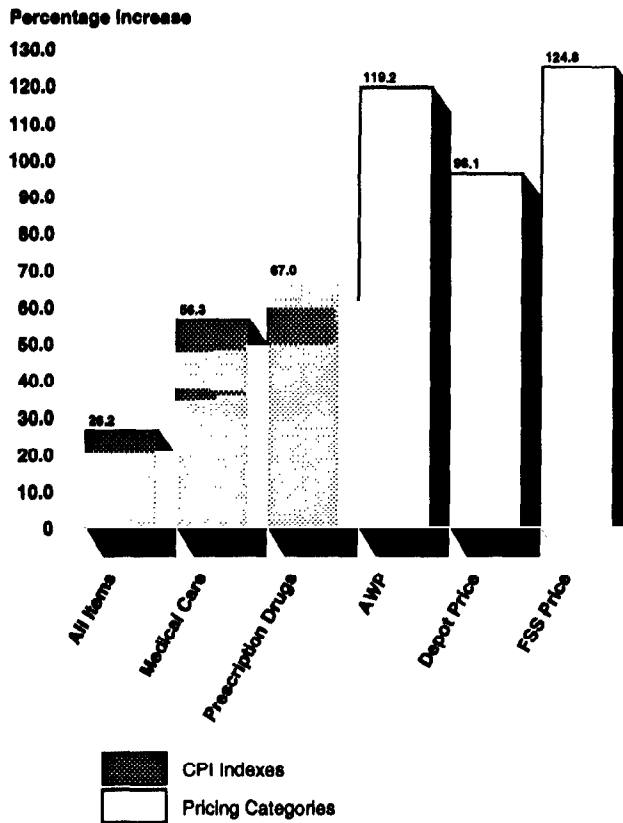
**Table I.11: Prices for Lopressor, 50 Mg,
1,000 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$204.66	\$381.03	\$415.32	\$448.55
Direct price	N/A	N/A	N/A	N/A
Depot price	90.03	126.17	126.17	176.51
FSS price	141.19	229.23	252.15	317.40
GOM price	N/A	N/A	N/A	N/A

Source: CIBA-Geigy Corporation

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.11: Comparison of Changes in Consumer Price Indexes With Price Changes for Lopressor, 50 Mg, 1,000 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

CIBA-Geigy cited several factors that influence pharmaceutical pricing, including covering operational costs, achieving a return on investment, responding to competitive pricing, and changes in product value due to new indications or uses. While the company could not reconstruct the basis for its VA depot prices, it stated that in general depot prices equal about 50 percent of those charged to private retail customers, such as hospitals. Following enactment of OBRA in 1990, the company said, it reduced some of the discounts offered for government purchases from the FSS to ensure that they did not result in a decrease in profitability of its product lines.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Motrin (600 Mg, 100
Tablets)**

The Upjohn Company manufactures Motrin, a nonsteroidal anti-inflammatory agent used for the relief of mild to moderate pain, rheumatoid arthritis and osteoarthritis, and the treatment of primary dysmenorrhea.

**Table I.12: Prices for Motrin, 600 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$19.65	\$19.65	\$19.65	\$21.12
Direct price	19.65	19.65	19.65	21.12
Depot price	N/A	N/A	N/A	N/A
FSS price	N/A	N/A	N/A	N/A
GOM price ^b	N/A	19.26	19.26	19.26

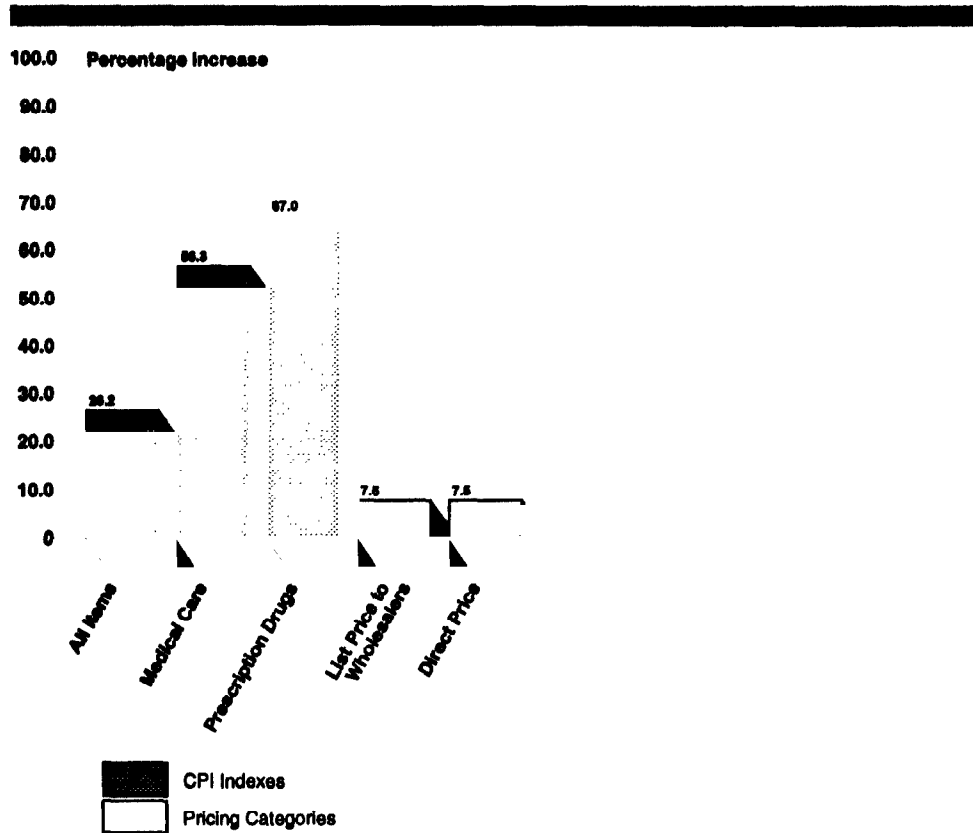
^aThe company provided its list price to wholesalers rather than the AWP.

^bThe company had no record of 1985 government prices.

Source: The Upjohn Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.12: Comparison of Changes in Consumer Price Indexes With Price Changes for Motrin, 600 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Its prices are driven by competition within the therapeutic classes, the Upjohn Company stated. The cost of therapy alternatives, the age of the product class, the existence of patent protection, and the size of the patient candidate population influence pharmaceutical pricing.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Naprosyn (250 Mg,
500 Tablets)**

Syntex Laboratories manufactures Naprosyn, a nonsteroidal anti-inflammatory drug. It is used for the relief of mild to moderate pain and the treatment of rheumatoid arthritis, osteoarthritis, and various other ailments, including gout.

Table I.13: Prices for Naprosyn, 250 Mg, 500 Tablets

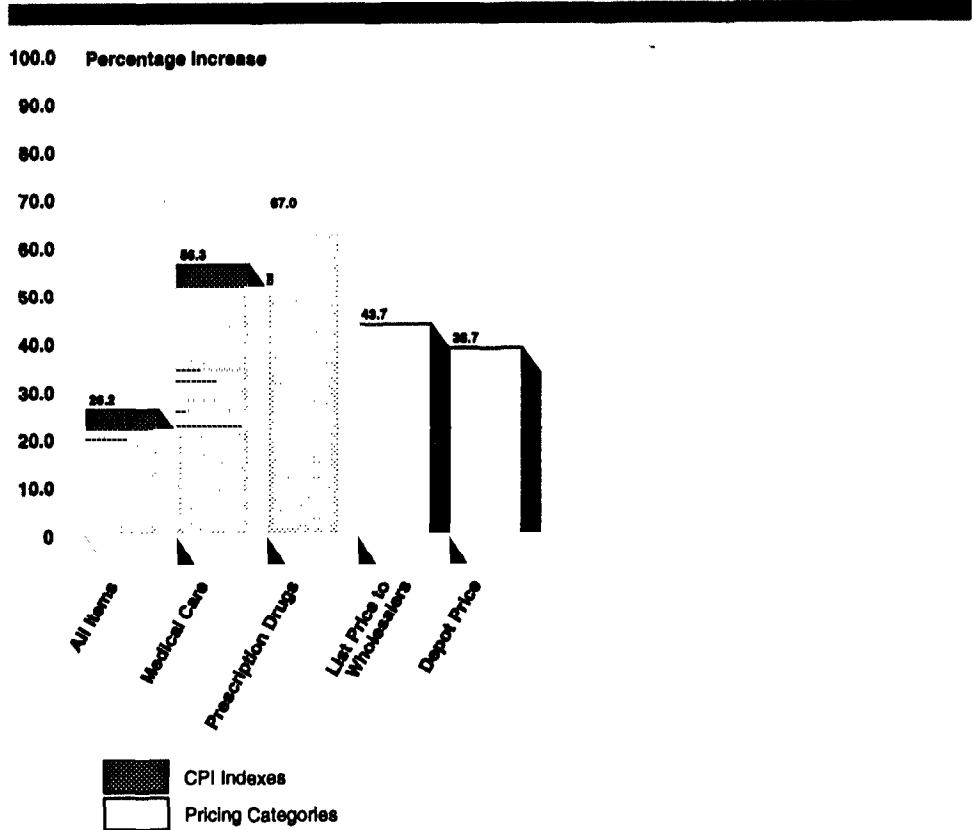
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers*	\$190.89	\$246.28	\$258.75	\$274.28
Direct price	N/A	N/A	N/A	N/A
Depot price	129.93	151.40	151.40	180.17
FSS price	N/A	N/A	N/A	N/A
GOM price	N/A	N/A	N/A	N/A

*The company provided its list price to wholesalers rather than the AWP.

Source: Syntex Laboratories, Inc.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.13: Comparison of Changes in Consumer Price Indexes With Price Changes for Naprosyn, 250 Mg, 500 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Syntex Laboratories identified several factors that contributed to Naprosyn price increases during the period covered by our inquiry. They included R&D expenditures—which in 1991 equaled 17 percent of sales—as well as the increased cost of doing business and the updating of computer systems because of regulatory mandates on the accumulation and reporting of data. Other factors considered in pricing Naprosyn included the competitive environment in which the drug is sold, the relevant rates of inflation, and the time elapsed since prior price increases.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Nitrostat (0.4 Mg, 100
Sublingual [SL]
Tablets)**

Parke-Davis (a division of Warner-Lambert Company) manufactures Nitrostat, a sublingual nitroglycerin preparation used to treat angina pectoris.

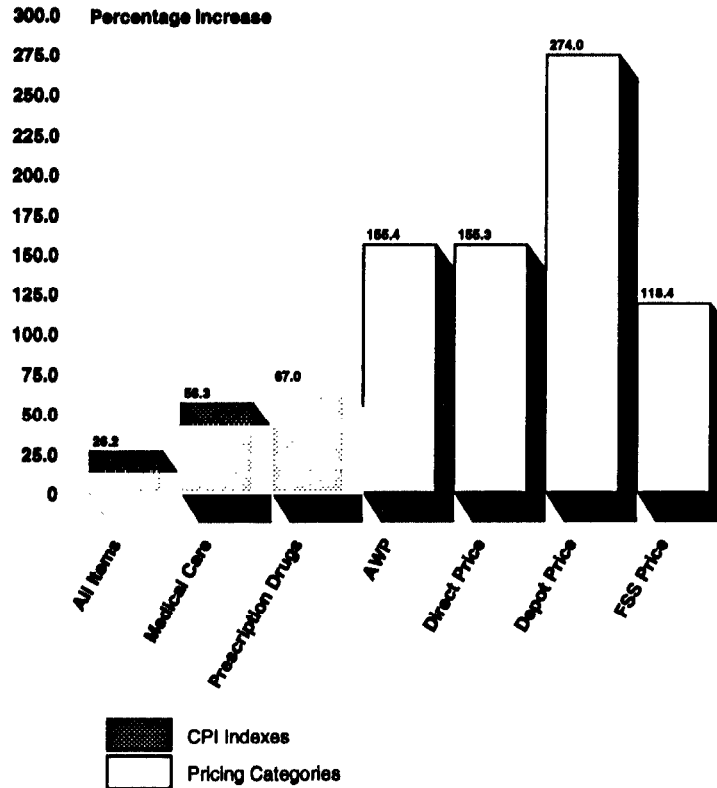
**Table I.14: Prices for Nitrostat, 0.4 Mg,
100 SL Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$2.04	\$3.46	\$3.94	\$5.21
Direct price	1.70	2.88	3.28	4.34
Depot price	.73	.67	.66	2.73
FSS price	1.47	2.02	2.22	3.21
GOM price	N/A	N/A	N/A	N/A

Source: Warner-Lambert Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.14: Comparison of Changes in Consumer Price Indexes With Price Changes for Nitrostat, 0.4 Mg, 100 SL Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Since a competing product was withdrawn, Nitrostat is now the only sublingual nitroglycerin therapy on the market, the Warner-Lambert Company said. The company attributed Nitrostat price increases to several factors. They included the need for the drug to be reformulated to comply with newly mandated tighter manufacturing specifications for the production of sublingual nitroglycerin preparations, upgrading Nitrostat's manufacturing facility, and ongoing medical and patient education programs.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Percocet (5/325 Mg,
100 Tablets)**

The Du Pont Merck Pharmaceutical Company manufactures Percocet, a narcotic used for the relief of moderate to moderately severe pain.

Table I.15: Prices for Percocet, 5/325 Mg, 100 Tablets

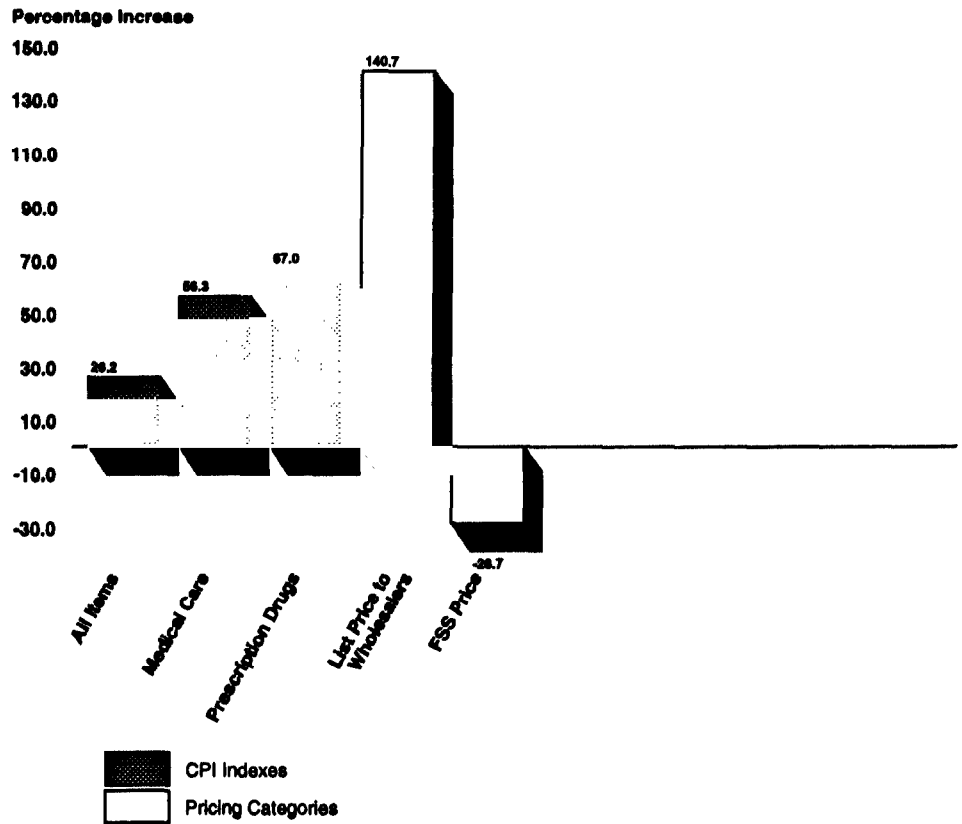
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$19.15	\$30.85	\$43.70	\$46.10
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	1.50	1.07	1.07	1.07
GOM price	N/A	N/A	38.19	N/A

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Du Pont Merck Pharmaceutical Company.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.15: Comparison of Changes in Consumer Price Indexes With Price Changes for Percocet, 5/325 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

The Du Pont Merck Pharmaceutical Company said that prices for its pharmaceutical products are affected by the need to cover current and future revenue needs, including investment in R&D. Further, Percocet's price to the retail trade was influenced by prices of competing therapies. Du Pont's adoption of a single-price policy for proprietary, oral dosage products sold in bulk affected the prices it charged to the VA. Although Du Pont decided to continue providing low prices to federal depots, it initially did not make a similar exception for fss sales. Due to congressional and VA concerns, however, the company subsequently reinstated Percocet's 1990 fss price of \$1.07 in September 1991.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Premarin (0.625 Mg,
100 Tablets)**

Wyeth-Ayerst Laboratories manufactures Premarin, conjugated estrogens used for the treatment of osteoporosis, certain symptoms associated with menopause, and various other ailments.

Table I.16: Prices for Premarin, 0.625 Mg, 100 Tablets

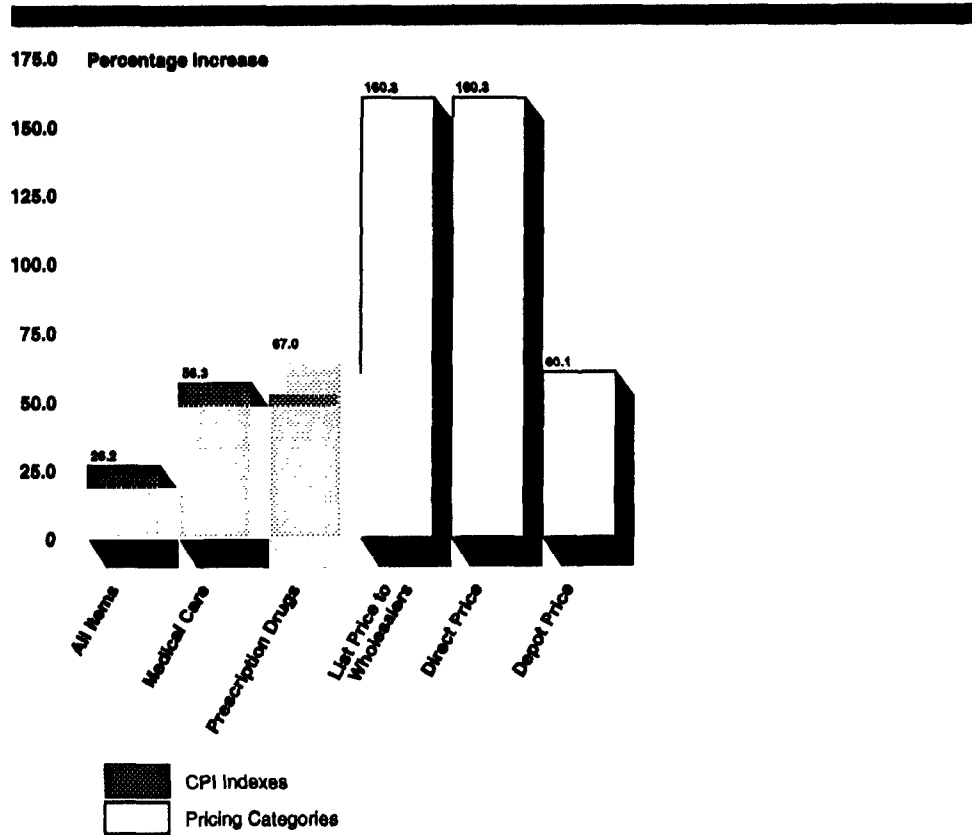
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$10.17	\$20.59	\$24.65	\$26.47
Direct price	10.17	20.59	24.65	26.47
Depot price	3.33	3.33	4.45	5.33
FSS price	N/A	N/A	6.12	19.85
GOM price	N/A	N/A	N/A	N/A

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Wyeth-Ayerst Laboratories.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.16: Comparison of Changes in Consumer Price Indexes With Price Changes for Premarin, 0.625 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Increases in Premarin's price resulted from the product's approval for additional indications that increased its medical value, and the need to fund new R&D projects to identify additional uses for Premarin, Wyeth-Ayerst Laboratories said. The product's 1991 FSS price increased because the 1990 FSS price was set close to the depot price and a new 5-year contract was to begin in 1991, according to the company. Additionally, in 1989 it began adjusting Premarin's price to all institutional customer classes to a level more representative of the product's clinical value.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Premarin (1.25 Mg,
100 Tablets)**

Wyeth-Ayerst Laboratories manufactures Premarin, conjugated estrogens used for the treatment of osteoporosis, certain symptoms associated with menopause, and various other ailments.

Table I.17: Prices for Premarin, 1.25 Mg, 100 Tablets

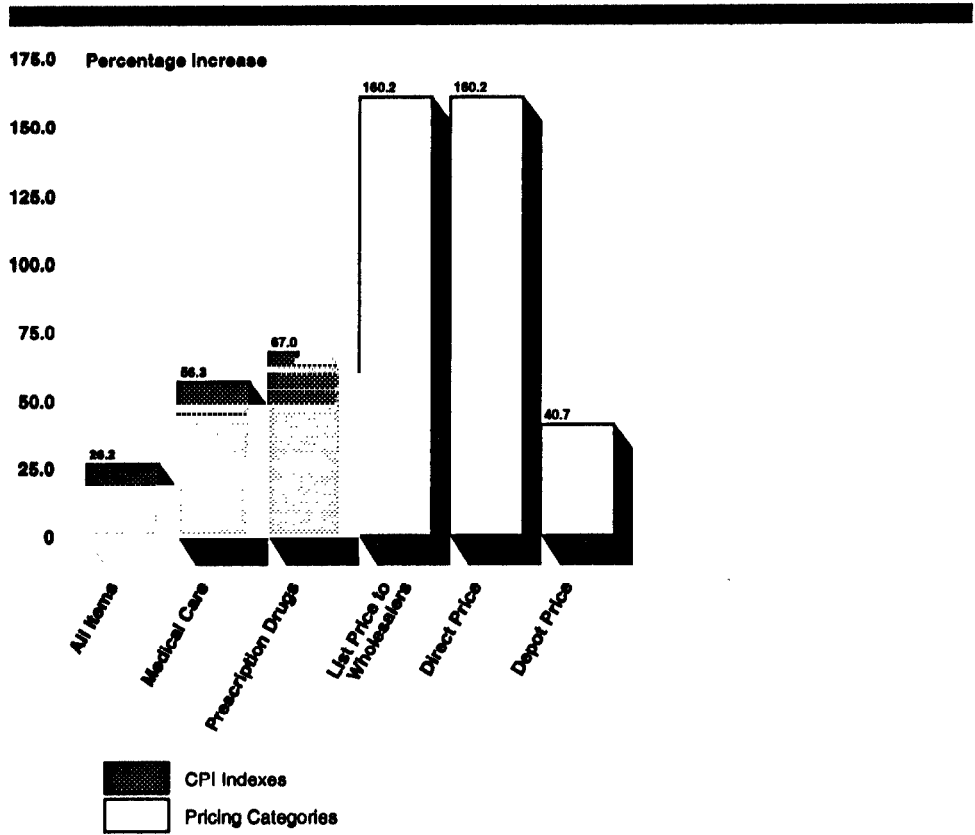
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$13.92	\$28.17	\$33.72	\$36.22
Direct price	13.92	28.17	33.72	36.22
Depot price	4.50	4.52	6.33	6.33
FSS price	N/A	N/A	8.40	27.17
GOM price	N/A	N/A	N/A	N/A

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Wyeth-Ayerst Laboratories

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.17: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Premarin, 1.25 Mg, 100
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

See explanation on page 43.

**Procan (500 Mg, 500
 Sustained Release
 [SR] Tablets)**

Parke-Davis (a division of Warner-Lambert Company) manufactures Procan. It is a cardiac antiarrhythmic drug used for the treatment of life-threatening ventricular arrhythmias and to treat some patients with less severe symptomatic ventricular arrhythmias.

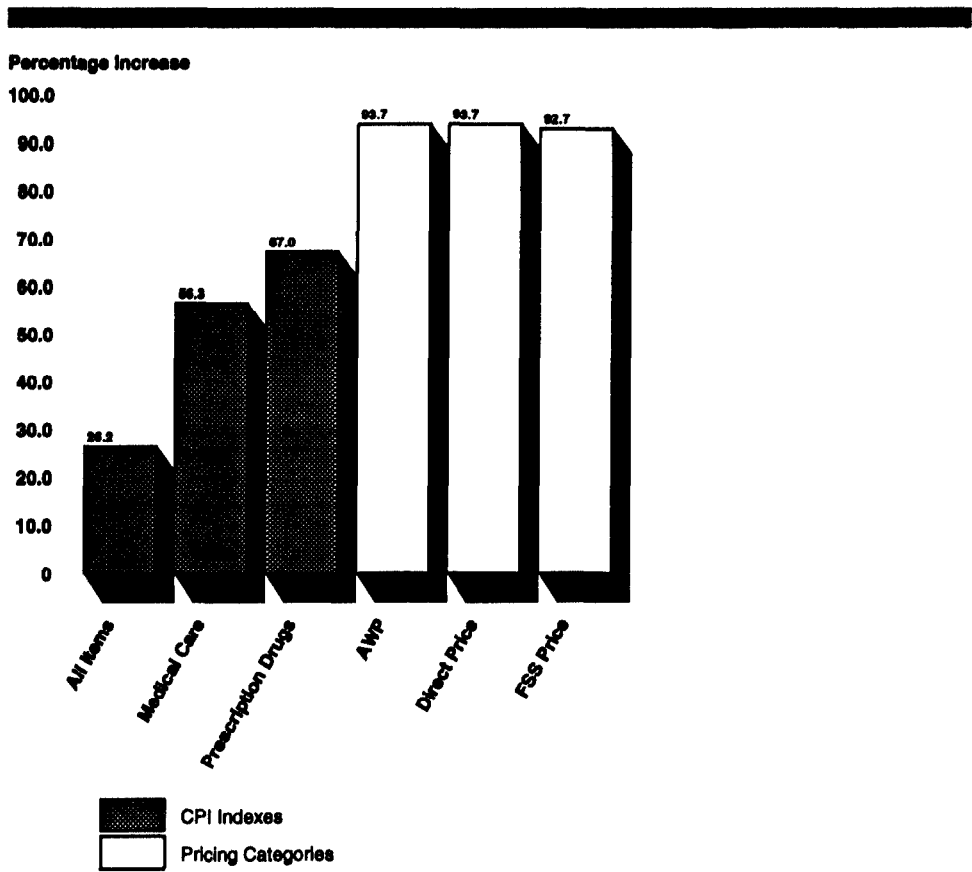
**Table I.18: Prices for Procan, 500 Mg,
 500 SR Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$128.08	\$180.76	\$204.98	\$248.03
Direct price	106.73	150.67	170.82	206.69
Depot price	N/A	N/A	13.25	N/A
FSS price	66.50	26.85	28.46	128.12
GOM price	N/A	N/A	N/A	N/A

Source: Warner-Lambert Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.18: Comparison of Changes in Consumer Price Indexes With Price Changes for Procan, 500 Mg, 500 SR Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

The Warner-Lambert Company attributed Procan price increases to its research efforts, both to improve Procan and to develop new drugs.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Prolixin (5 Mg, 500
Tablets)**

Princeton Pharmaceutical Products (a division of the Bristol-Myers Squibb Company) manufactures Prolixin, a trifluoromethyl phenothiazine derivative used in the management of schizophrenia.

**Table I.19: Prices for Prolixin, 5 Mg,
500 Tablets**

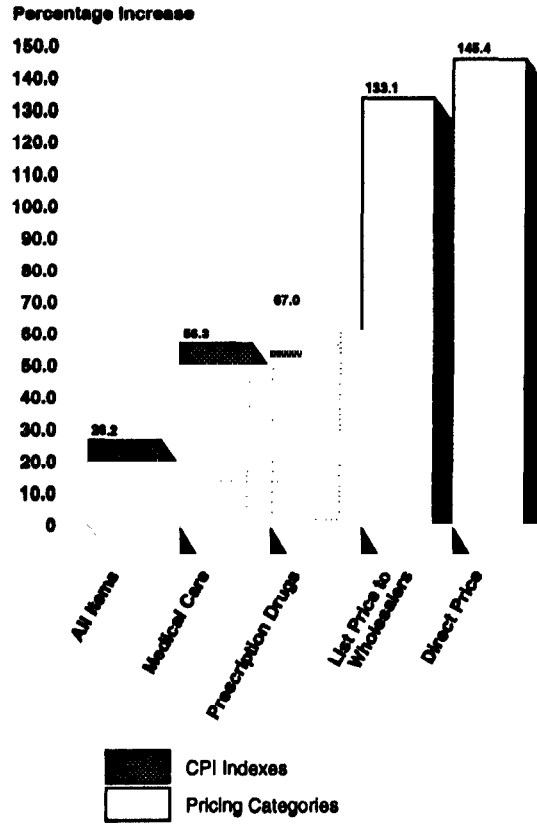
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$241.53	\$388.85	\$563.11	\$563.11
Direct price	241.53	388.85	563.11	592.75
Depot price	N/A	70.60	79.33	N/A
FSS price	N/A	255.33	183.75	N/A
GOM price	N/A	N/A	N/A	563.11

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Bristol-Myers Squibb Company.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.19: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Prolixin, 5 Mg, 500
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

The Bristol-Myers Squibb Company stated that changes in the price of Prolixin were needed to support the expenses of R&D, manufacturing, marketing, and distribution.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Prolixin (25 Mg/Vial, 1
MI Vial Injection)**

Princeton Pharmaceutical Products (a division of the Bristol-Myers Squibb Company) manufactures Prolixin, a trifluoromethyl phenothiazine derivative used in the management of schizophrenia.

**Table I.20: Prices for Prolixin, 25
Mg/Vial, 1 MI Vial Injection**

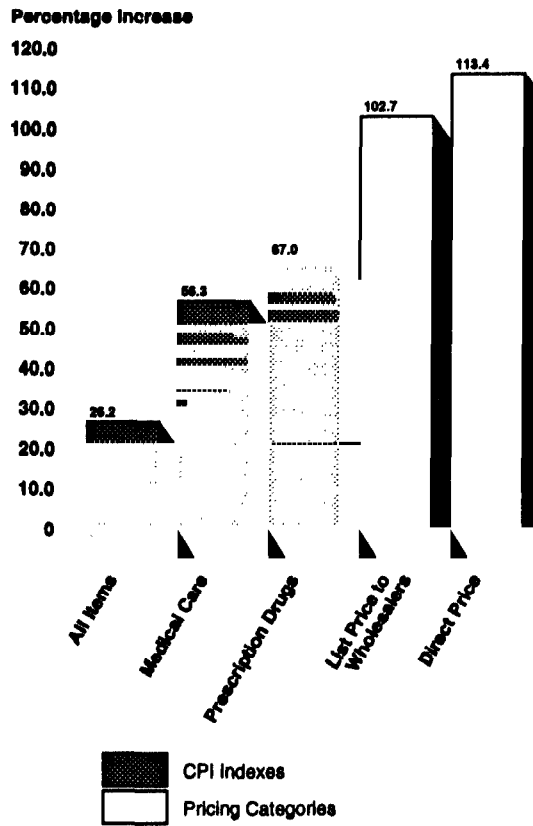
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$8.37	\$11.72	\$16.97	\$16.97
Direct price	8.37	11.72	16.97	17.86
Depot price	N/A	6.00	6.00	N/A
FSS price	N/A	9.03	9.03	N/A
GOM price	N/A	N/A	N/A	16.97

^aThe company provided its list price to wholesalers rather than the AWP.

Source: Bristol-Myers Squibb Company.

**Appendix I
 Companies' Drug Prices and Reasons for
 Price Changes, and GAO'S Analyses of Price
 Changes**

**Figure I.20: Comparison of Changes in
 Consumer Price Indexes With Price
 Changes for Prolixin, 25 Mg/Vial, 1 MI
 Vial Injection, for the 6-Year Period
 Ending December 31, 1991**



**Company's Explanation for
 Price Changes**

See explanation on page 49.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Proventil (One
Inhaler)**

The Schering Corporation (a subsidiary of Schering-Plough Corporation) manufactures Proventil. It is a bronchodilator used for the prevention and relief of bronchospasm in patients with reversible obstruction airway disease.

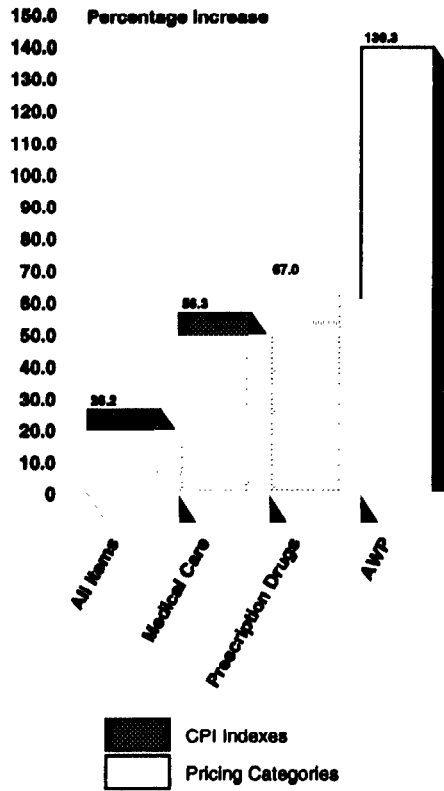
Table I.21: Prices for Proventil, One Inhaler

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$8.14	\$16.42	\$17.90	\$19.48
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	4.23	4.23	3.85
FSS price	N/A	N/A	N/A	4.31
GOM price	N/A	5.95	3.95	N/A

Source: Schering-Plough Corporation

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.21: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Proventil, One Inhaler, for
the 6-Year Period Ending December
31, 1991**



**Company's Explanation for
Price Changes**

The Schering-Plough Corporation identified several factors that contributed to its price increases to wholesalers. These included increased R&D expenses—which grew by over 125 percent since 1985—as well as the greater costs of bringing new chemical entities to market, among them higher internal costs and delays in the drug approval process, and the corresponding reduction in useful patent life.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Prozac (20 Mg, 100
Capsules)**

The Dista Products Company (a division of Eli Lilly and Company) manufactures Prozac, an antidepressant used to treat patients with a major depressive disorder that usually interferes with daily functioning.

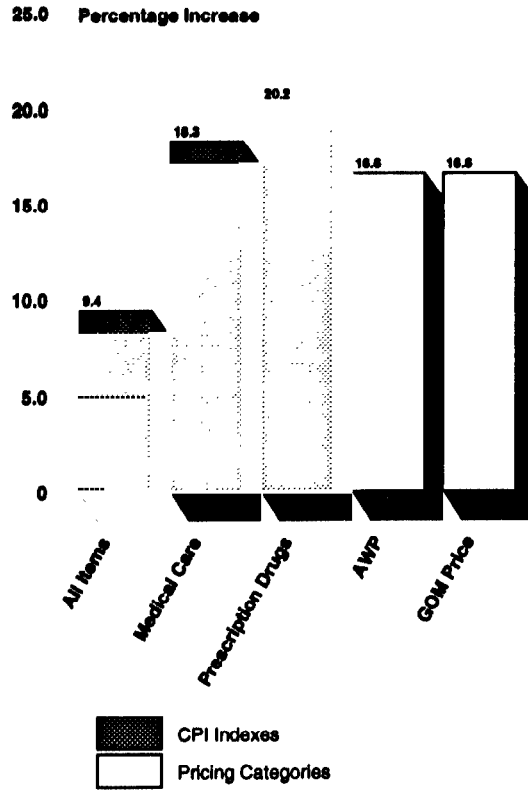
**Table I.22: Prices for Prozac, 20 Mg,
100 Capsules**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	N/A	\$156.84	\$167.82	\$182.92
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	N/A	N/A	N/A	N/A
GOM price	N/A	\$130.69	\$139.84	\$152.43

Source: Eli Lilly and Company

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.22: Comparison of Changes in Consumer Price Indexes With Price Changes for Prozac, 20 Mg, 100 Capsules, for the 2-Year Period Ending December 31, 1991



Note: Because Prozac was not marketed until January 1988, the comparison of indexes with price changes is based on the 2-year period ending December 31, 1991.

Company's Explanation for Price Changes

See explanation on page 31.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Questran (4 Gm, 378
Gm Powder)**

Bristol Laboratories (a Bristol-Myers Squibb Company) manufactures Questran, a cholesterol-lowering agent used as adjunctive therapy to diet for the reduction of elevated serum cholesterol.

**Table I.23: Prices for Questran, 4 Gm,
378 Gm Powder**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
List price to wholesalers ^a	\$11.87	\$21.35	\$23.27	\$25.13
Direct price ^b	14.30	22.47	24.49	26.45
Depot price	N/A	10.40	11.44	12.71
FSS price	11.87	11.55	12.71	22.80
GOM price	11.87	21.35	23.27	25.13

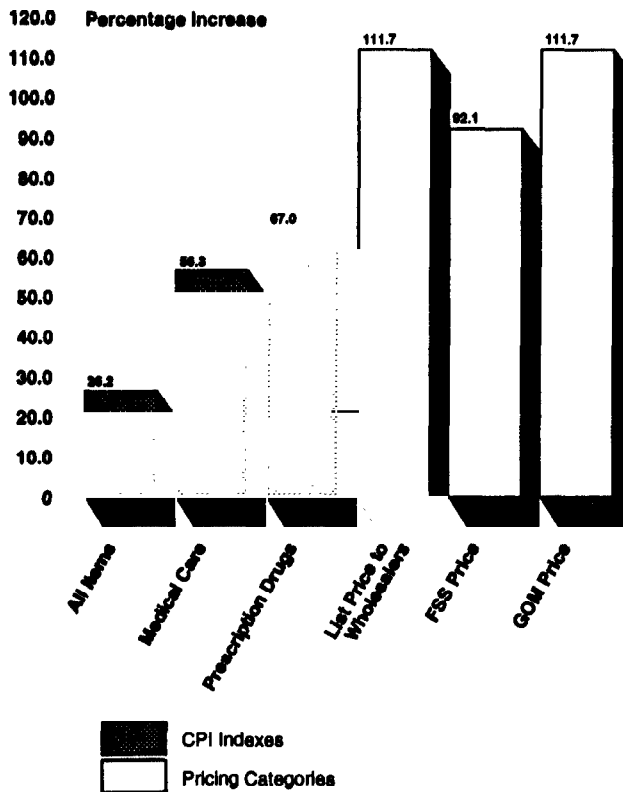
^aThe company provided its list price to wholesalers rather than the AWP.

^bAvailable only to hospitals in 1985.

Source: Bristol-Myers Squibb Company.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.23: Comparison of Changes in Consumer Price Indexes With Price Changes for Questran, 4 Gm, 378 Gm Powder, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

The Bristol-Myers Squibb Company said that the time period that we selected provides a misleading picture of changes in Questran's list price to wholesalers, because it coincides with the efforts to stimulate interest in Questran by significantly reducing its price. Questran's price in early 1985 was \$23.73—\$1.40 less than the list price to wholesalers on December 31, 1991. Price increases to VA and direct retail sales, the company said, were due to inflation, increased R&D costs, and expansion of manufacturing capacity. Also, the company's decision to bring the FSS price roughly in line with the price to other purchasers influenced VA prices.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Restoril (15 Mg, 100
Tablets)**

The Sandoz Pharmaceuticals Corporation manufactures Restoril, a benzodiazepine hypnotic agent used to treat insomnia.

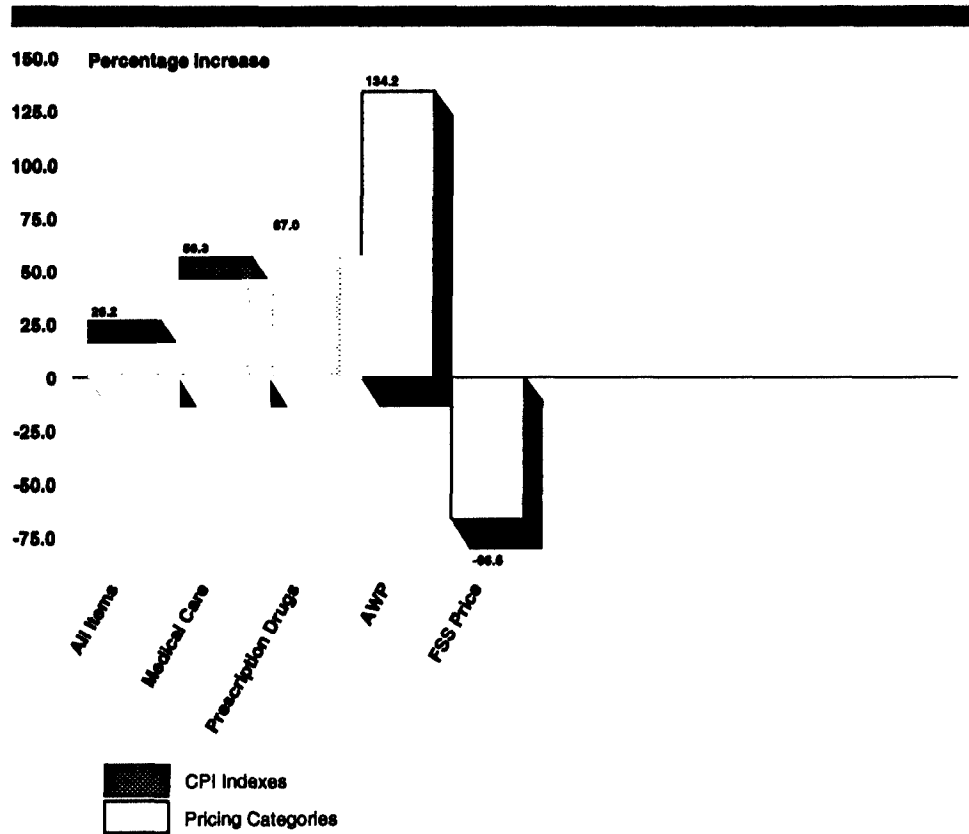
**Table I.24: Prices for Restoril, 15 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$22.62	\$40.80	\$45.00	\$52.98
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	12.65	9.97	10.97	4.22
GOM price	N/A	N/A	N/A	N/A

Source: Sandoz Pharmaceuticals Corporation

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.24: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Restoril, 15 Mg, 100
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

The Sandoz Pharmaceuticals Corporation attributed the increase in its prices to the need to meet the increased costs of R&D and other expenses. The reduction in the rss price was due to generic competition.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Synthroid (.025 Mg,
100 Tablets)**

Boots Pharmaceuticals manufactures Synthroid, a synthetic thyroid hormone. It is used as a replacement or supplemental therapy in patients with hypothyroidism, in the treatment or prevention of various types of goiters, and in the management of thyroid cancer.

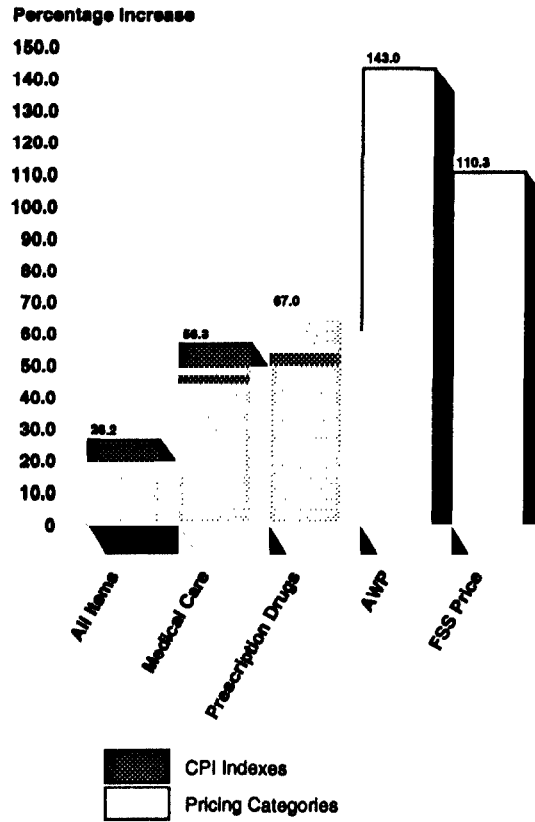
Table I.25: Prices for Synthroid, .025 Mg, 100 Tablets

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$5.58	\$10.31	\$12.60	\$13.56
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	.87	1.41	1.41	1.83
GOM price	N/A	N/A	N/A	N/A

Source: Boots Pharmaceuticals

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.25: Comparison of Changes in Consumer Price Indexes With Price Changes for Synthroid, .025 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Boots Pharmaceuticals told us it did not acquire Synthroid until September 3, 1986. Therefore, the December 31, 1985, price for Synthroid was established by the former owner which, unlike Boots Pharmaceuticals, was not a research-based pharmaceutical company. The company stated that it based its prices for Synthroid tablets from September 3, 1986, to December 31, 1991, on best business judgement as to the price that is appropriate to cost containment measures and to support the continued development by Boots of new drug therapies.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Tenormin (50 Mg, 100
Tablets)**

ICI Pharma (a division of ICI Pharmaceuticals Group) manufactures Tenormin, a beta-adrenergic receptor blocking agent used for the treatment of hypertension, angina pectoris, and myocardial infarction.

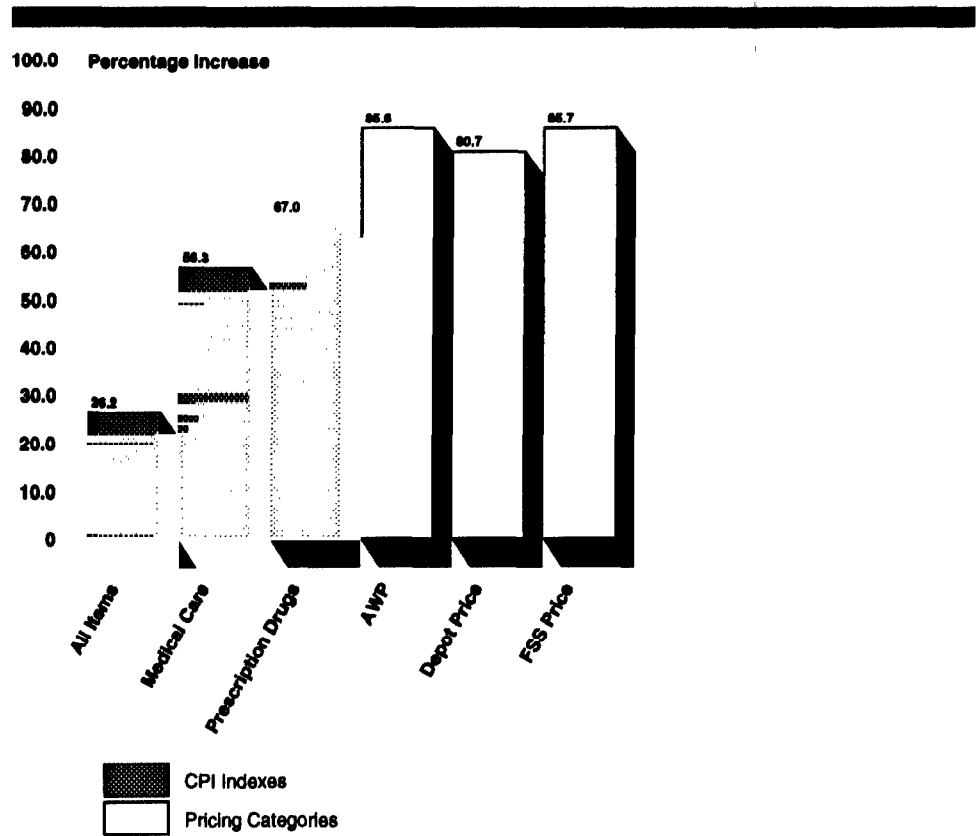
**Table I.26: Prices for Tenormin 50 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$41.86	\$63.17	\$74.02	\$77.71
Direct price	N/A	N/A	N/A	N/A
Depot price	23.30	34.46	34.46	42.11
FSS price	29.87	39.40	43.34	55.46
GOM price	N/A	N/A	N/A	N/A

Source: ICI Pharmaceuticals Group

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Figure I.26: Comparison of Changes in
Consumer Price Indexes With Price
Changes for Tenormin, 50 Mg, 100
Tablets, for the 6-Year Period Ending
December 31, 1991**



**Company's Explanation for
Price Changes**

The prices ICI Pharmaceuticals Group charges for its products reflect the competitive environment in which it operates, the company said. Tenormin's price increases over its 11-year product life have remained in line with the CPI for prescription drugs, the company told us. Regarding government contract pricing, the current depot contract price of \$42.11 represents a 45.8-percent discount from the current wholesale list price, the company said, and price increases have been in line with the price adjustment clause in the company's government contract.

**Tylenol With Codeine
(#3, 100 Tablets)**

McNeil Pharmaceutical manufactures Tylenol with codeine, a combination of acetaminophen and codeine phosphate used for the relief of mild to moderately severe pain.

Table I.27: Prices for Tylenol With Codeine, #3, 100 Tablets

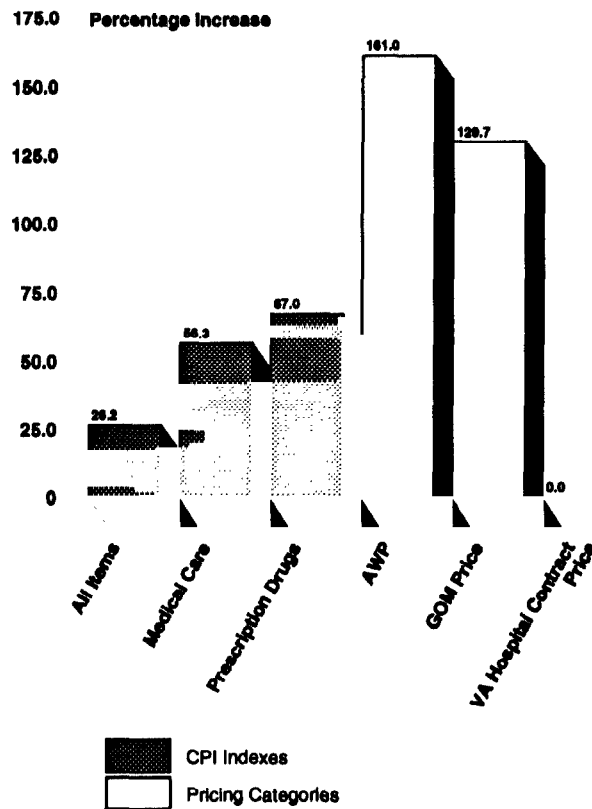
Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$10.18	\$20.76	\$23.26	\$26.57
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	N/A	N/A	N/A	N/A
GOM price	3.40	6.97	7.81	7.81
VA hospital contract price*	2.50	2.50	2.50	2.50

*Almost all units sold to VA hospitals were priced at this individual contract price.

Source: McNeil Pharmaceutical

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.27: Comparison of Changes in Consumer Price Indexes With Price Changes for Tylenol With Codeine, #3, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

McNeil Pharmaceutical cited several reasons for increasing the price of Tylenol with codeine. First, the company has continued to make significant investments in R&D. Also, Medicaid reimbursement limits favor less expensive generic competition. Finally, the company said the cumulative price increases for Tylenol with codeine over the period 1975-85 were significantly lower than the cumulative CPI increase.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Valium (10 Mg, 100
Tablets)**

Roche Products, Inc. (a division of Roche Pharmaceuticals) manufactures Valium, a benzodiazepine derivative used to treat anxiety disorders or for the short-term relief of the symptoms of anxiety.

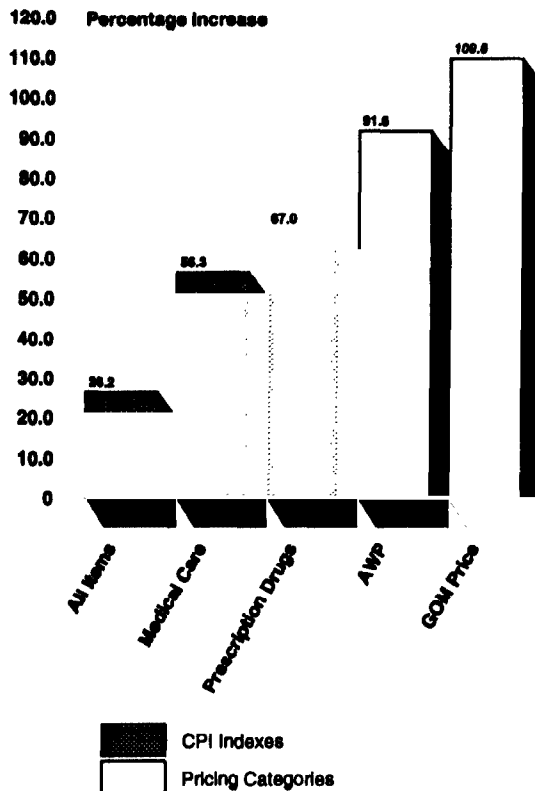
**Table I.28: Prices for Vallum 10 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$45.23	\$74.64	\$81.74	\$86.65
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	N/A	N/A	N/A	N/A
GOM price	36.27	60.12	65.48	76.02

Source: Roche Pharmaceuticals

**Appendix I
 Companies' Drug Prices and Reasons for
 Price Changes, and GAO'S Analyses of Price
 Changes**

**Figure I.28: Comparison of Changes in
 Consumer Price Indexes With Price
 Changes for Vallum, 10 Mg, 100
 Tablets, for the 6-Year Period Ending
 December 31, 1991**



**Company's Explanation for
 Price Changes**

Roche Pharmaceuticals identified several factors that it considers in product pricing. These factors include prices for comparable therapies; increases in such operational costs as expenses for maintaining plant, equipment, and wage and health care benefits; and the need to ensure that sufficient revenues are generated to help support the company's research expenditures in excess of \$1 billion annually.

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

**Ventolin (4 Mg, 100
Tablets)**

Allen & Hanburys (a division of Glaxo, Inc.) manufactures Ventolin. This is a beta-adrenergic agonist drug used for the relief of bronchospasm in patients with reversible, obstructive airway disease.

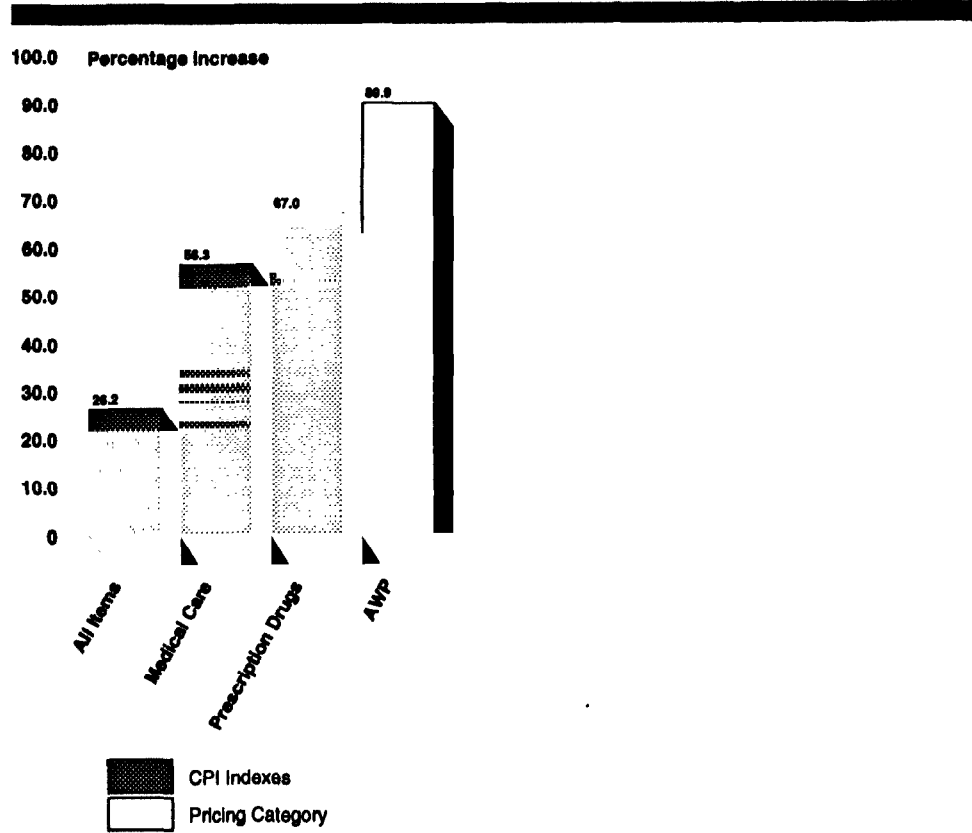
**Table I.29: Prices for Ventolin, 4 Mg,
100 Tablets**

Pricing categories	Drug prices effective			
	12/31/85	12/31/89	12/31/90	12/31/91
AWP	\$24.42	\$39.12	\$42.62	\$46.38
Direct price	N/A	N/A	N/A	N/A
Depot price	N/A	N/A	N/A	N/A
FSS price	N/A	N/A	N/A	13.44
GOM price	11.00	13.44	13.44	N/A

Source: Allen & Hanburys

**Appendix I
Companies' Drug Prices and Reasons for
Price Changes, and GAO'S Analyses of Price
Changes**

Figure I.29: Comparison of Changes in Consumer Price Indexes With Price Changes for Ventolin, 4 Mg, 100 Tablets, for the 6-Year Period Ending December 31, 1991



Company's Explanation for Price Changes

Allen & Hanburys stated that revenues generated by price increases for Ventolin tablets as well as other products enabled Glaxo to invest almost \$3 billion in R&D from 1985 through 1991, and to construct additional R&D facilities.

Major Contributors to This Report

**Human Resources
Division, Washington,
D.C.**

**Janet L. Shikles, Director, Health Financing and Policy Issues,
(202) 512-7119
John C. Hansen, Assistant Director**

**Boston Regional
Office**

**Donald Hunter, Regional Management Representative
Roland Poirier, Evaluator-in-Charge**

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

**U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20877**

Orders may also be placed by calling (202) 275-6241.

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**