

FORM 11-K
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549

ANNUAL REPORT

PURSUANT TO SECTION 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

(X) Annual report pursuant to Section 15(d) of the Securities
Exchange Act of 1934

For the fiscal year ended December 31, 2002

OR

() Transition report pursuant to Section 15(d) of the
Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number 000-16109

A. Full title of the plan and the address of the plan, if
different from that of the issuer named below:

AP PHARMA 401(k) PLAN
123 SAGINAW DRIVE
REDWOOD CITY, CA 94063

B. Name of issuer of the securities held pursuant to the plan
and the address of its principal executive office:

A.P. PHARMA, INC.
123 SAGINAW DRIVE
REDWOOD CITY, CA 94063
TELEPHONE (650) 366-2626

SIGNATURE

The Plan. Pursuant to the requirements of the Securities
Exchange Act of 1934, the administrator has duly caused this
annual report to be signed on its behalf by the undersigned
hereunto duly authorized.

AP PHARMA 401(k) PLAN

Date: June 16, 2003

By /s/Gordon Sangster

Gordon Sangster
Chief Financial Officer

AP Pharma 401(k) Plan
Financial Statements
December 31, 2002 and 2001

AP PHARMA 401(k) PLAN

Financial Statements and Supplemental Schedule
December 31, 2002 and 2001

Table of Contents

Independent Accountants' Report

Financial Statements:

Statements of Net Assets Available for Benefits
Statements of Changes in Net Assets Available for Benefits
Notes to Financial Statements

Supplemental Schedule as of December 31, 2002

Schedule of Assets Held for Investment Purposes

Consent of Independent Accountants

INDEPENDENT ACCOUNTANTS' REPORT

To the Participants and
Plan Administrator of the
AP Pharma 401(k) Plan

We have audited the financial statements of the AP Pharma 401(k) Plan (the Plan) as of December 31, 2002 and 2001, and for the years then ended, as listed in the accompanying table of contents. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Plan's management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2002 and 2001, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

By /s/ MOHLER, NIXON & WILLIAMS

MOHLER, NIXON & WILLIAMS
Accountancy Corporation

Campbell, California
April 29, 2003

AP PHARMA 401(k) PLAN

STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

	DECEMBER 31,	
	2002	2001
	----	----
ASSETS:		
Investments, at fair value	\$1,912,670	\$2,301,405
Participant loans	15,938	21,193
	-----	-----
Assets held for investment purposes	1,928,608	2,322,598
Employer's contribution receivable	17,755	17,277
Participants' contribution receivable	5,024	--
	-----	-----
Net assets available for benefits	\$1,951,387	\$2,339,875
	=====	=====

See notes to financial statements

AP PHARMA 401(k) PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	YEARS ENDED DECEMBER 31,	
	2002	2001
	-----	-----
Additions to net assets attributed to:		
Investment income:		
Dividends and interest	\$ 1,838	\$ 3,757
Net realized and unrealized depreciation in fair value of investments	(453,581)	(404,295)
	-----	-----
	(451,743)	(400,538)
	-----	-----
Contributions:		
Participants'	243,957	190,173
Employer's	80,441	63,583
	-----	-----
	324,398	253,756
	-----	-----
 Total additions	 (127,345)	 (146,782)
	-----	-----
Deductions from net assets attributed to:		
Withdrawals and distributions	261,143	671,312
	-----	-----
Total deductions	261,143	671,312
	-----	-----
 Net decrease in net assets	 (388,488)	 (818,094)
Net assets available for benefits:		
Beginning of year	2,339,875	3,157,969
 End of year	 \$1,951,387	 \$2,339,875
	=====	=====

See notes to financial statements.

AP PHARMA 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2002 AND 2001

NOTE 1 - THE PLAN AND ITS SIGNIFICANT ACCOUNTING POLICIES

General - The following description of the AP Pharma 401(k) Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

The Plan is a defined contribution plan that was established in 1986 by Advanced Polymer Systems, Inc. to provide benefits to eligible employees of the Company and its affiliates, as defined in the Plan document. Formerly known as the Advanced Polymer Systems, Inc. Salary Reduction Profit Sharing Plan, the Plan was amended in May 2001 to change the Plan name in conjunction with the change in the name of the employer and Plan sponsor from Advanced Polymer Systems, Inc. to A.P. Pharma, Inc. (the Company).

The Plan was amended and restated effective January 1, 2002. The Plan administrator believes that the Plan is currently designed and operated in compliance with the applicable requirements of the Internal Revenue Code (the Code) and the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as

amended.

Administration - The Company has appointed an Administrative Committee (the Committee) to manage the operation and administration of the Plan. The Company has contracted with a third-party administrator, CMG Consulting, Inc. (CMG), to process and maintain the records of participant data. Substantially all expenses incurred for administering the Plan are paid by the Company. Eastern Bank was the third-party trustee of the Plan through May 2002. Sterling Trust Company served as trustee from May through July 2002, and Matrix Capital Bank succeeded Sterling as trustee in August 2002.

Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Basis of accounting - The financial statements of the Plan are prepared on the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America.

Forfeited accounts - Forfeitures of terminated participants' employer profit sharing contribution accounts, if any, are allocated among participants based on eligible employee compensation.

Investments - Investment options include various mutual funds offered through D-Access, an affiliate of CMG, and a fund invested in shares of A.P. Pharma, Inc. common stock (Company Stock Fund). The Plan's investments in mutual funds and the Company Stock Fund are valued at fair value as of the last day of the Plan year, as measured by quoted market prices. Participant loans are valued at cost, which approximates fair value.

Effective January 1, 2000, the Company Stock Fund was frozen by the Committee. As a result, participants are permitted to transfer their investments from the Company Stock Fund, but no new contributions or transfers into the fund are permitted.

Income taxes - The Plan has adopted a prototype plan that has received an opinion letter from the Internal Revenue Service. The Company believes that the Plan is operated in accordance with, and qualifies under, the applicable requirements of the Code and related state statutes, and that the trust, which forms a part of the Plan, is exempt from federal income and state franchise taxes.

Risks and uncertainties - The Plan provides for various investment options in any combination of investment securities offered by the Plan. In addition, Company common stock is included in the Plan. Investment securities are exposed to various risks, such as interest rate, market fluctuations and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in market values, interest rates or other factors in the near term would materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits and the statements of changes in net assets available for benefits.

NOTE 2 - PARTICIPATION AND BENEFITS

Participant contributions - Participants may elect to have the Company contribute a percentage of their pre-tax compensation not to exceed the amount allowable under current income tax regulations. Participants who elect to have the Company contribute a portion of their compensation to the Plan agree to accept an equivalent reduction in taxable compensation. Contributions withheld are invested in accordance with the participant's direction.

Participants are also allowed to make rollover contributions of amounts received from other tax-qualified employer-sponsored retirement plans. Such contributions are deposited in the appropriate investment funds in accordance with the participant's

direction and the Plan's provisions.

Employer contributions - The Company is allowed to make matching contributions as defined in the Plan and as approved by the Board of Directors. The Company matched 50% of each eligible participant's contribution up to a maximum amount equal to the lesser of 3% of each participant's annual compensation or \$5,500 and \$5,250 in 2002 and 2001, respectively. The Plan also allows for a discretionary profit sharing contribution. No discretionary contribution has been made since inception of the Plan.

Vesting - Participants are immediately vested in their contributions and employer matching contribution. Participants are fully vested in the employer's profit sharing contributions allocated to their account after six years of credited service.

Participant accounts - Each participant's account is credited with the participant's contribution, Plan earnings or losses and an allocation of the Company's contribution. Allocation of the Company's contribution is based on participant contributions or eligible employee compensation, as defined in the Plan.

Payment of benefits - Upon termination, the participants or beneficiaries may elect to leave their account balance in the Plan, or receive their total benefits in a lump sum amount or installments equal to the value of the participant's vested interest in their account. The Plan allows for automatic lump sum distribution of participant vested account balances that do not exceed \$5,000. Distribution of accounts invested in the Company Stock Fund must be in a lump sum and may be made in cash or shares of stock.

Loans to participants - The Plan allows participants to borrow not less than \$1,000 and up to the lesser of \$50,000 or 50% of their vested account balance. The loans are secured by the participant's vested balance. Such loans bear interest at the available market financing rates and must be repaid to the Plan within a five-year period, unless the loan is used for the purchase of a principal residence in which case the maximum repayment period may exceed five years. The specific terms and conditions of such loans are established by the Committee. Outstanding loans at December 31, 2002 carry interest rates ranging from 9.75% to 10%.

NOTE 3 - INVESTMENTS

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The following table includes the fair values of investments and investment funds that represent 5% or more of the Plan's net assets at December 31:

	2002	2001
	----	----
Federated Capital Preservation Fund	\$ 304,040	\$ 330,224
Bond Fund of America	--	146,026
American Balanced Fund	187,357	238,683
Federated Max-cap Fund	228,338	255,232
Fidelity Advisor Equity Growth Fund	287,043	406,610
MFS Mass Investors Growth Fund	--	728,958
Van Kampen Emerging Growth Fund	--	117,313
Pimco Total Return Fund	135,380	--
Growth Fund of America	558,020	--
Fidelity Advisor Mid Cap Fund	132,968	--
Other Funds individually less than 5% of net assets	95,462	99,552
	-----	-----
Assets held for investment purposes	\$1,928,608	\$2,322,598
	=====	=====

The Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value as follows for the years ended December 31:

	2002 ----	2001 ----
Common stock	\$ (23,382)	\$ 4,824
Mutual funds	(430,199)	(409,119)
	-----	-----
	\$(453,581)	\$(404,295)
	=====	=====

NOTE 4 - PARTY-IN-INTEREST TRANSACTIONS

As summarized in Note 1, prior to January 1, 2000, participants could elect to invest a portion of their accounts in the common stock of the Company. Aggregate investment in A.P. Pharma, Inc. common stock was as follows at December 31:

Date	Number of shares	Fair value
-----	-----	-----
2002	12,990	\$12,990
2001	12,990	36,372

NOTE 5 - PLAN TERMINATION

The Company intends to continue the Plan indefinitely for the benefit of its participants; however, it reserves the right to terminate or modify the Plan at any time by resolution of its Board of Directors and subject to the provisions of ERISA. In the event the Plan is terminated in the future, participants would become fully vested in their accounts.

SUPPLEMENTAL SCHEDULE

AP PHARMA 401(K) PLAN EIN: 94-2875566
PLAN #001

Schedule of Assets Held For Investment Purposes
December 31, 2002

Identity of issue, borrower, lessor or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Current value
-----	-----	-----
Federated Capital Preservation Fund	Mutual Fund	\$ 304,040
American Balanced Fund	Mutual Fund	187,357
Federated Max-cap Fund	Mutual Fund	228,338
Fidelity Advisor Equity Growth Fund	Mutual Fund	287,043
Templeton Foreign Fund	Mutual Fund	50,463
Pimco Total Return Fund	Mutual Fund	135,380
Washington Mutual Growth Fund of America	Mutual Fund	9,725
Fidelity Advisor Mid Cap Fund	Mutual Fund	558,020
Oppenheimer Global Fund	Mutual Fund	132,968
* A.P. Pharma, Inc. Common Stock	Common Stock	6,320
* Participant loans	Interest rates ranging from 9.75% to 10%	12,990
Cash	Cash	15,938
		26

	Total	\$1,928,608
		=====

* Party-in-interest

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 33-29084) of AP Pharma, Inc. of our report dated April 29, 2003, relating to the financial statements and schedule of the AP Pharma 401(k) Plan included in this Annual Report on Form 11-K.

By /s/ Mohler, Nixon & Williams

MOHLER, NIXON & WILLIAMS
Accountancy Corporation

Campbell, California
June 16, 2003