PROSPECTUS SUPPLEMENT NO. 2 DATED MAY 25, 2001 TO THE PROSPECTUS DATED MARCH 9, 2001 OF VERTEX PHARMACEUTICALS INCORPORATED

This Prospectus Supplement No. 2 amends the information in the table under the caption "Selling Holders" in the Prospectus dated March 9, 2001, as previously amended, by deleting the information contained in the table regarding the Selling Security Holders with respect to the principal amount of notes and common stock of Vertex Pharmaceuticals Incorporated and substituting therefor the following table:

	PRINCIPAL AMOUNT OF NOTES OWNED AND OFFERED (1)	NUMBER OF SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF BENEFICIALLY THE NOTES THAT MAY BE OFFERED
NAME OF SECURITY HOLDER		
AAM/Zazone Institutional Income Fund L.P.	\$ 850,000	9,213
AFTRA Health Fund	\$300,000	3,251
AIG/National Union Fire Insurance	\$ 975,000	10,567
Alexandra Global Investment Fund 1 Ltd	\$ 3,000,000	32,516
AllState Insurance Company	\$ 2,000,000	21,677
Alpine Associates	\$ 4,600,000	49,859
Alpine Partners, L.P	\$ 700,000	7,587
American Motorist Insurance Company	\$ 763,000	8,270
Arapahoe County Colorado	\$ 75,000	812
Arkansas Teachers Retirement	\$ 5,850,000	63,407
Argent Classic Arbitrage fund (Bermuda) L.P.	\$ 4,400,000	47,691
Argent Classic Convertible Arbitrage Fund (Bermuda) L.P	\$ 5,400,000	58,530
Argent Classic Convertible Arbitrage Fund L.P	\$ 1,600,000	17,342

Associated Electric & Gas Insurance Services Limited	\$ 400,000	4,335
Attorney's Title Insurance Fund, Inc	\$ 500,000	5,419
Bank Austria Cayman Island, L	\$ 5,800,000	62,865
Baptist Health Southern Florida	\$ 367,000	3,977
Bear Stearns	\$ 5,000,000	54,195
BNP Cooper Neff Convertible Strategies Fund, L.P.	\$ 188,000	2,037
Boilermakers Blacksmith Pension Trust	\$ 1,650,000	17,884
Boston Museum of Fine Arts	\$ 151,000	1,636
Boulder II Limited	\$ 2,850,000	30,891
BP Amoco PLC Master Trust	\$ 1,758,000	19,054
California Public Employees Retirement System Nominee Name Surfboard & Co.	\$ 3,000,000	32,516
CALAMOS Market Neutral Fund-CALAMOS Investment Trust	\$ 1,670,000	18,101
Canyon Value Realization (Cayman) Ltd.	\$ 11,000,000	119,228
CFFX, LLC	\$ 2,000,000	21,677
CIBC World Markets	\$ 6,000,000	65,033
City of New Orleans	\$ 315,000	3,414
City University of New York	\$ 185,000	2,005
Clinton Riverside Convertible Portfolio Limited	\$ 4,500,000	48,775
Conseco Fund Group - Convertible Securities Fund	\$ 3,250,000	35,226
Conseco Health Insurance Company - Convertible	\$ 1,500,000	16,258
Conseco Senior Health Insurance Company Convertible	\$ 1,500,000	16,258

Conseco Variable Insurance Company - Convertible	\$ 750,000	8,129
Consulting Group Capital Markets Funds	\$ 450,000	4,877
Cova Bond Debenture Fund	\$ 500,000	5,419
Credit Suisse First Boston Corporation	\$ 5,000,000	54,196
CSFB Convertible & Quantitative Strategies	\$ 1,000,000	10,838
D.E. Shaw Investments, L.P.	\$ 1,500,000	16,258
D.E. Shaw Valence, L.P	\$ 5,500,000	59,614
Deephaven Domestic Convertible Trading Co	\$ 1,000,000	10,838
Delphi Financial Group, Inc.	\$500,000	5,419
Delaware PERS	\$ 1,840,000	19,943
Deutsche Bank Securities	\$ 48,500,000	525,688
Elf Aquitaine	\$ 200,000	2,167
Engineers Joint Pension Fund	\$ 621,000	6,730
Employee Benefit Convertible Securities Fund	\$ 200,000	2,167
Enterprise Convertible Securities Fund	\$108,000	1,170
Franklin and Marshall College	\$ 245,000	2,665
First Republic Bank	\$ 225,000	2,438
Fuji U. S. Income Open	\$ 500,000	5,419
Gaia Offshore Master Fund Ltd.	\$ 2,500,000	27,097
Goldman Sachs and Company	\$ 52,000	564
Grady Hospital Foundation	\$ 161,000	1,745
Granville Capital Corporation	\$ 6,000,000	65,033
Hamilton Partners Limited	\$ 4,000,000	43,355
HFR Master Fund, Ltd	\$ 130,000	1,409
Highbridge International LLC	\$ 18,000,000	195,100

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Local Initiatives Union \$ 72,000	.29
	25
Lord Abbett Bond Debenture Fund \$ 2,000,000 21,	80
	77
Lord Abbett Bond Debenture Fund \$ 500,000 5,	19
Lumberman's Mutual Casualty \$ 643,000 6,	169
Mainstay Convertible Fund \$ 5,000,000 54,	94
Mainstay VP Convertible Portfolio \$ 1,000,000 10,	38
McMahan Securities \$2,150,000 23,	03
Morgan Stanley & Co. \$ 5,000,000 54,	94
Nabisco Corporation \$45,000	87

Nalco Chemical Company	\$ 335,000	3,631
Nations Convertible Securities Fund	\$ 3,300,000	35,768
New Orleans Firefighters Pension/Relief Fund	\$ 166,000	1,799
New York Life Separate Account #7	\$600,000	6,503
New York Life Insurance and Annuity Corporation	\$ 17,000,000	184,262
New York Life Insurance Company	\$ 19,500,000	211,359
Nicholas Applegate Convertible Fund	\$ 2,107,000	22,837
Occidental Petroleum Corporation	\$ 305,000	3,305
Onex Industrial Partners	\$ 1,850,000	20,052
Onyx Capital Management, LLC	\$ 5,000,000	54,195
Oxford, Lord Abbett & Co,	\$ 800,000	8,671
Pacific Life Insurance Company	\$ 500,000	5,419
Pebble Capital Inc.	\$ 700,000	7,587
Penn Treaty Network America Insurance Company	\$ 295,000	3,197
Peoples Benefit Life Insurance Company Teamsters	\$ 3,725,000	40,375
PGEP IV, LLC	\$ 113,000	1,224
Physicians Life	\$ 487,000	5,278
PIMCO Convertible Bond	\$ 3,000,000	32,516
Police & Fireman Retirement System of the City Of Detroit	\$850,000	9,213
Pro Mutual	\$ 1,171,000	12,692
Putnam Investment Management Inc. on behalf of: Putnam Asset Allocation Funds-Balanced Portfolio	\$ 190,000	2,059

Putnam Investment Management, Inc. on behalf of: Putnam Asset Allocation Funds - Conservative Portfolio	\$ 130,000	1,409
Putnam Investment Management, Inc. on behalf of: Putnam Convertible Income-Growth Trust	\$ 1,000,000	10,838
Putnam Investment Management, Inc. on behalf of: Putnam Convertible Opportunities and Income Trust	\$ 70,000	758
Quattro Global Capital, LLC	\$ 1,500,000	16,258
Quattro Global Capital, LLC	\$ 1,500,000	16,258
Ramius Capital Group Holdings, Ltd.	\$ 900,000	9,755
Raytheon Master Pension Trust	\$ 829,000	8,985
RCG Latitude Master Fund, Ltd.	\$ 300,00	3,251
RJ Reynolds (RJR)	\$ 143,000	1,549
Robertson Stephens	\$30,000,000	325,168
San Diego City Retirement	\$ 1,247,000	13,516
San Diego County Convertible	\$ 2,674,000	28,983
San Diego Employees Retirement Association	\$ 1,900,000	20,593
Salomon Brothers Asset Management Inc.	\$31,750,000	344,136
Screen Actors Guild Convertible	\$ 662,000	7,175
SG Cowen Securities	\$9,000,000	97,550
Shell Pension Trust	\$ 642,000	6,958
Silvercreek Limited Partnership	\$ 1,100,000	11,923
Southern Farm Bureau Life Insurance	\$ 770,000	8,345
State of Maryland Retirement Agency	\$ 3,880,000	42,055
State of Oregon Equity	\$ 5,975,000	64,762
State Street Bank custodian For GE Pension Trust	\$ 1,805,000	19,564

Starvest Combined Portfolio	\$ 1,185,000	12,844
Teachers Insurance and Annuity Association	\$ 4,000,000	43,355
The Estate of James Campbell	\$ 509,000	5,517
The Putnam Advisory Company, Inc. on behalf of: University of Rochester	\$ 30,000	325
The Putnam Advisory Company, Inc. on behalf of: Parker-Hammifin Corporation	\$ 50,000	541
The Putnam Advisory Company, Inc. on behalf of: Museum of Fine Arts, Boston	\$ 30,000	325
The Putnam Advisory Company, Inc. on behalf of: ProMutual	\$ 100,000	1,083
TQA Master Fund	\$ 950,000	10,296
TQA Master Plus Fund, Ltd.	\$ 1,000,000	10,838
Tracor, Inc. Employees Retirement Plan	\$ 172,000	1,846
Transamerica Life Insurance and Annuity Company	\$ 8,000,000	86,711
Transamerica Premier Balanced Fund	\$ 1,000,000	10,838
UBS O'Connor LLC, $F/B/O$ UBS Global Equity Arbitrage Master Limited	\$ 500,000	5,419
Value Realization Fund B, LP	\$450,000	4,877
Value Realization Fund, LP	\$ 8,000,000	86,711
Viacom Inc. Pension Plan Master Trust	\$ 68,000	737
Wake Forest University	\$ 1,163,000	12,605
Writers Guild Convertible	\$ 385,000	4,172
Wyoming State Treasurer	\$ 1,329,000	14,404
Zeneca Holdings Trust	\$765,000	8,291
Zurich HFR Master Hedge Fund Index Ltd	\$ 100,000	1,083
Zurich HFR Calamos Holding Limited	\$ 80,000	867
Zurich HFR Master Hedge Fund Index Ltd	\$ 200,000	2,167

1976 Distribution Trust FBO Jane A. Lauder

\$ 21,000

(1) The number of securities beneficially owned is determined under the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Under those rules, beneficial ownership includes any securities as to which the individual has sole or shared voting power or investment power and also any securities which the individual has the right to acquire within 60 days after the date the selling holder provided this information, through the exercise of any stock option or other right. The inclusion in the table of securities, however, does not constitute an admission that the selling holders are direct or indirect beneficial owners of those securities. The selling holders have sole voting power and investment power with respect to all securities of capital stock listed as owned by the selling holders.

This Prospectus Supplement No. 2 should be read in conjunction with the Prospectus dated March 9, 2001.