

BlackRock Health Sciences Trust
Form N-Q
September 29, 2006

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number: 811-21702

BlackRock Health Sciences Trust
(Exact name of registrant as specified in charter)

100 Bellevue Parkway, Wilmington, DE
(Address of principal executive offices)

19809
(Zip code)

Robert S. Kapito, President
BlackRock Health Sciences Trust

40 East 52nd Street, New York, NY 10022
(Name and address of agent for service)

Registrant's telephone number, including area code: 888-825-2257

Date of fiscal year end: October 31, 2006

Date of reporting period: July 31, 2006

Item 1. Schedule of Investments.

The Registrant's unaudited schedule of investments as of the close of the reporting period pursuant to Rule 30b1-5 under the Investment Company Act of 1940 is as follows:

PORTFOLIO OF INVESTMENTS (unaudited)
JULY 31, 2006

BlackRock Health Sciences Trust (BME)

Shares	Description	Value
LONG-TERM INVESTMENTS 96.5%		
Common Stocks 96.5%		
Biotechnology 15.5%		
246,300 ^{1,2}	Alexion Pharmaceuticals, Inc.	\$ 8,462,868
37,800 ^{1,2}	Amgen, Inc.	2,636,172
92,400 ¹	Applera Corp. - Celera Genomics Group	1,247,400
54,000 ¹	Digene Corp.	2,279,340
33,242 ¹	Exelixis, Inc.	295,854
62,900 ¹	Genentech, Inc.	5,083,578
67,700 ¹	ICOS Corp.	1,546,268
39,167 ¹	InterMune, Inc.	625,497
217,764 ¹	Keryx Biopharmaceuticals, Inc.	2,504,286
83,200 ¹	Kosan Biosciences, Inc.	290,368
51,589 ¹	Medimmune, Inc.	1,309,329
72,000	Myogen, Inc.	2,221,920
156,600 ¹	Regeneron Pharmaceuticals	2,139,156
26,700 ¹	Vertex Pharmaceuticals, Inc.	894,984
Total Biotechnology		31,537,020
Electronics 2.8%		
141,900 ¹	Waters Corp.	5,772,492
Health Care 25.1%		
47,000	Alcon, Inc.	5,189,740
20,200	Becton Dickinson & Co.	1,331,584
98,000 ^{1,2}	Community Health Systems, Inc.	3,553,480
33,800	Cooper Cos., Inc. (The)	1,493,960
76,200 ¹	DaVita, Inc.	3,811,524
119,600	Dentsply Intl., Inc.	3,743,480
87,600	Edwards Lifesciences Corp.	3,875,424
148,800	Manor Care, Inc.	7,447,440
6,829	Mentor Corp.	303,617
21,700 ¹	Northstar Neuroscience, Inc.	288,610
82,600	Quest Diagnostics, Inc.	4,965,912
146,200 ¹	Respironics, Inc.	5,201,796
98,432 ¹	Varian Medical Systems, Inc.	4,460,938
195,500 ¹	Wright Medical Group, Inc.	4,306,865

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18,500 ¹	Zimmer Holdings, Inc.	1,169,940
Total Health Care		51,144,310
Pharmaceuticals 51.1%		
106,500 ²	Abbott Laboratories	5,087,505
40,900	Allergan, Inc.	4,411,065
56,000	AstraZeneca PLC	3,417,680
337,238 ¹	BioMarin Pharmaceuticals, Inc.	4,927,047
209,900	Bristol-Myers Squibb Co.	5,031,303
295,100 ¹	Cardiome Pharma Corp.	3,597,269
112,300 ²	Caremark Rx, Inc.	5,929,440
81,900 ¹	Cortex Pharmaceuticals, Inc.	221,130
56,900 ¹	Cubist Pharmaceuticals, Inc.	1,304,148
91,400 ¹	Gilead Sciences, Inc.	5,619,272
92,000	GlaxoSmithKline PLC (ADR)	5,090,360
83,600 ¹	Medco Health Solutions, Inc.	4,959,988
266,600	Merck & Co., Inc.	10,735,982
172,000	Novartis AG (ADR)	9,669,840
178,400	Pfizer, Inc.	4,636,616
85,000	Roche Holding AG	9,740,317
482,000	Schering-Plough Corp.	9,852,080
21,800	Shire PLC	1,057,518
179,800	Wyeth	8,714,906
Total Pharmaceuticals		104,003,466
Retail 2.0%		
125,900	CVS Corp.	4,119,448
Total Common Stocks (cost \$184,461,660)		196,576,736

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BlackRock Health Sciences Trust (BME) (continued)

Shares	Description	Value
SHORT-TERM INVESTMENTS 5.3%		
Money Market Fund 3.0%		
6,137,631	Fidelity Institutional Money Market Prime Portfolio	\$ 6,137,631
Principal Amount		
U.S. Government and Agency Discount Notes 2.3%		
\$4,800,000 ³	Federal Home Loan Bank Disc. Notes, 4.95%, 8/1/06	4,800,000
Total Short-Term Investments (cost \$10,937,631)		10,937,631

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Contracts		
OUTSTANDING PUT OPTION PURCHASED 0.0%		
929	Waters Corp., strike price \$40, expires 08/19/06 (cost \$73,662)	55,740
Total investments before outstanding options written (cost \$195,472,953⁴)		207,570,107
OUTSTANDING OPTIONS WRITTEN (0.9)%		
OUTSTANDING CALL OPTIONS WRITTEN (0.9)%		
(100)	Abbott Laboratories, strike price \$45, expires 08/19/06	(30,000)
(100)	Abbott Laboratories, strike price \$47.50, expires 11/18/06	(23,000)
(561)	Alexion Pharmaceuticals, Inc., strike price \$35, expires 08/19/06	(56,100)
(72)	Alexion Pharmaceuticals, Inc., strike price \$45, expires 11/18/06	(4,320)
(10,000)	Allergan, Inc., strike price \$106, expires 09/15/06	(51,969)
(50)	Amgen, Inc., strike price \$70, expires 08/19/06	(5,750)
(150)	Applera Corp. - Celera Genomics Group, strike price \$15, expires 12/16/06	(11,250)
(135)	AstraZeneca PLC, strike price \$65, expires 09/16/06	(8,775)
(50)	Becton Dickinson & Co., strike price \$65, expires 08/19/06	(8,750)
(250)	BioMarin Pharmaceuticals, Inc., strike price \$15, expires 09/16/06	(16,250)
(250)	BioMarin Pharmaceuticals, Inc., strike price \$16, expires 11/10/06	(18,125)
(30,000)	Bristol-Myers Squibb Co., strike price \$26, expires 09/15/06	(7,371)
(20,000)	Bristol-Myers Squibb Co., strike price \$27.60, expires 11/17/06	(5,420)
(750)	Cardiome Pharma Corp., strike price \$12.50, expires 09/16/06	(93,750)
(20,000)	Caremark Rx, Inc., strike price \$52.50, expires 09/15/06	(50,680)
(15,000)	Community Health Systems, Inc., strike price \$38, expires 09/15/06	(9,030)
(20)	Cooper Cos., Inc. (The), strike price \$50, expires 11/18/06	(2,700)
(300)	CVS Corp., strike price \$30, expires 08/19/06	(84,000)
(12,000)	CVS Corp., strike price \$34, expires 11/10/06	(17,085)
(120)	DaVita, Inc., strike price \$55, expires 09/16/06	(6,000)
(30,000)	Dentsply Intl., Inc., strike price \$30.50, expires 09/15/06	(42,210)
(10,000)	Digene Corp., strike price \$41, expires 09/15/06	(35,500)
(100)	Edwards Lifesciences Corp., strike price \$45, expires 08/19/06	(6,250)
(100)	Edwards Lifesciences Corp., strike price \$50, expires 11/18/06	(5,000)
(100)	Genentech, Inc., strike price \$85, expires 09/16/06	(14,000)
(170)	Gilead Sciences, Inc., strike price \$60, expires 08/19/06	(40,800)
(50)	Gilead Sciences, Inc., strike price \$70, expires 11/18/06	(7,500)
(200)	GlaxoSmithKline PLC (ADR), strike price \$55, expires 08/19/06	(18,000)
(100)	ICOS Corp., strike price \$22.50, expires 08/19/06	(10,750)
(100)	InterMune, Inc., strike price \$15, expires 08/19/06	(13,000)
(101)	Keryx Biopharmaceuticals, Inc., strike price \$17.50, expires 09/16/06	(1,010)
(250)	Manor Care, Inc., strike price \$45, expires 08/22/06	(132,500)
(250)	Manor Care, Inc., strike price \$50, expires 11/18/06	(85,000)
(130)	Medco Health Solutions, Inc., strike price \$55, expires 08/19/06	(62,400)
(40,000)	Merck & Co., Inc., strike price \$35, expires 08/21/06	(215,231)
(100)	Merck & Co., Inc., strike price \$37.50, expires 08/19/06	(30,000)
(250)	Merck & Co., Inc., strike price \$39, expires 11/10/06	(73,750)
(50)	Myogen, Inc., strike price \$30, expires 08/19/06	(10,750)
(50)	Myogen, Inc., strike price \$30, expires 09/16/06	(14,250)
(25,000)	Novartis AG (ADR), strike price \$56.50, expires 09/15/06	(39,412)
(18,000)	Pfizer, Inc., strike price \$24, expires 09/28/06	(40,752)
(90)	Pfizer, Inc., strike price \$25, expires 09/16/06	(12,150)

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(100)	Quest Diagnostics, Inc., strike price \$60, expires 08/19/06	(12,750)
(100)	Quest Diagnostics, Inc., strike price \$65, expires 11/18/06	(13,750)
(230)	Regeneron Pharmaceuticals, strike price \$12.50, expires 08/19/06	(35,075)
(32,000)	Respironics, Inc., strike price \$36, expires 09/15/06	(40,941)
(130)	Roche Holding AG, strike price 230 CHF, expires 09/15/06	(22,925)
(550)	Schering-Plough Corp., strike price \$20, expires 08/19/06	(35,750)
(45,000)	Schering-Plough Corp., strike price \$21, expires 11/17/06	(38,240)

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BlackRock Health Sciences Trust (BME) (continued)

Shares	Description	Value
OUTSTANDING CALL OPTIONS WRITTEN (cont d)		
(100)	Shire PLC, strike price \$47.50, expires 10/21/06	\$ (44,000)
(15,000)	Varian Medical Systems, Inc., strike price \$46.50, expires 09/15/06	(23,040)
(350)	Waters Corp., strike price \$45, expires 08/19/06	(1,750)
(100)	Waters Corp., strike price \$50, expires 11/18/06	(3,000)
(100)	Wright Medical Group, Inc., strike price \$22.50, expires 08/19/06	(5,750)
(100)	Wright Medical Group, Inc., strike price \$22.50, expires 09/16/06	(10,250)
(100)	Wright Medical Group, Inc., strike price \$25, expires 11/18/06	(8,500)
(675)	Wyeth, strike price \$47.50, expires 10/21/06	(189,000)
Total Outstanding Call Options Written (premium received (\$1,246,309))		(1,905,261)
OUTSTANDING PUT OPTIONS WRITTEN 0.0%		
(100)	Allergan, Inc., strike price \$100, expires 08/19/06	(5,500)
(220)	Amylin Pharmaceuticals, Inc., strike price \$40, expires 08/19/06	(4,400)
(210)	Amylin Pharmaceuticals, Inc., strike price \$45, expires 08/19/06	(16,275)
(150)	AstraZeneca PLC, strike price \$55, expires 08/19/06	(1,125)
(200)	Caremark Rx, Inc., strike price \$45, expires 08/19/06	(4,000)
(280)	Vertex Pharmaceuticals, Inc., strike price \$30, expires 08/19/06	(16,800)
(170)	Vertex Pharmaceuticals, Inc., strike price \$33.50, expires 08/23/06	(31,620)
Total Outstanding Put Options Written (premium received (\$126,268))		(79,720)
Total Outstanding Options Written (premium received (\$1,372,577))		(1,984,981)
Total investments net of outstanding options written 100.9%		\$205,585,126
Liabilities in excess of other assets (0.9)%		(1,818,128)
Net Assets 100.0%		\$203,766,998

¹ Non-income producing security.

² Security, or a portion thereof, pledged as collateral for outstanding options written.

³ Rate shown is the yield to maturity as of July 31, 2006.

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⁴ Cost for Federal income tax purposes is \$198,792,423. The net unrealized appreciation on a tax basis is \$8,777,684, consisting of \$12,492,701 gross unrealized appreciation and \$3,715,017 gross unrealized depreciation.

A category may contain multiple industries as defined by the SEC's Standard Industry Codes.

KEY TO ABBREVIATIONS

ADR American Depository Receipt
CHF Swiss Franc

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Item 2. Controls and Procedures.

(a) The Registrant's principal executive and principal financial officers have evaluated the Registrant's disclosure controls and procedures within 90 days of this filing and have concluded, as of that date, that the Registrant's disclosure controls and procedures were reasonably designed to ensure that information required to be disclosed by the Registrant in this Form N-Q was recorded, processed, summarized, and reported within the required time periods and that information to be disclosed by the Registrant in this Form N-Q was accumulated and communicated to the Registrant's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

(b) There were no changes in the Registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a -3(d)) that occurred during the Registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Registrant's internal control over financial reporting.

Item 3. Exhibits.

Separate certifications of the Registrant's Principal Executive and Financial Officers pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 are attached as EX-99.CERT.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) BlackRock Health Sciences Trust

By: /s/ Henry Gabbay

Name: Henry Gabbay

Title: Treasurer and Principal Financial Officer

Date: September 27, 2006

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

By: /s/ Robert S. Kapito

Name: Robert S. Kapito

Title: President and Principal Executive Officer

Date: September 27, 2006

By: /s/ Henry Gabbay

Name: Henry Gabbay

Title: Treasurer and Principal Financial Officer

Date: September 27, 2006
