H&Q LIFE SCIENCES INVESTORS Form N-Q March 02, 2009

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

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FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number

811-06565

H&Q Life Sciences Investors (Exact name of registrant as specified in charter)

2 Liberty Square, 9th Floor, Boston, MA (Address of principal executive offices)

02109 (Zip code)

(Name and address of agent for service)

Registrant s telephone number, including area code: 617-772-8500

Date of fiscal year end: September 30

Date of reporting period: 12/31/08

Item 1. Schedule of Investments.

H&O LIFE SCIENCES INVESTORS

SCHEDULE OF INVESTMENTS

DECEMBER 31, 2008

(Unaudited)

SHARES		VALUE	E
	CONVERTIBLE SECURITIES AND WARRANTS 11.3% of Net Assets		
	Convertible Preferred (Restricted)(a) 11.3%		
	Drug Discovery Technologies 1.4%		
1,587,302	Agilix Corporation Series B (b) (c)	\$	94,540
250,000	Ceres, Inc. Series C (b)		1,625,000
21,462	Ceres, Inc. Series C-1 (b)		139,503
175,540	Ceres, Inc. Series D (b)		1,141,010
28,385	Ceres, Inc. Series F (b)		184,502
5,677	Ceres, Inc. warrants (expiration 9/05/15) (b)		0
200,000	Zyomyx, Inc. Series A New (b)		20,000
200	Zyomyx, Inc. Series B New (b)		20
	Emerging Biopharmaceuticals 0.7%		
204,275	MacroGenics, Inc. Series D (b)		133,208
50,145	MacroGenics, Inc. Series D (b)		21,798
1,415,385	TargeGen, Inc. Series C (b)		1,226,672
407,825	TargeGen, Inc. Series D (b)		353,450
	Healthcare Services 1.5%		
3,589,744	PHT Corporation Series D (b) (c)		2,800,000
802,996	PHT Corporation Series E (b) (c)		626,337
99,455	PHT Corporation Series F (b) (c)		77,575
	Medical Devices and Diagnostics 7.7%		
2,379,916	CardioKinetix, Inc. Series C (b) (c)		1,640,000
3,235,293	Concentric Medical, Inc. Series B (b) (c)		3,235,293
1,162,790	Concentric Medical, Inc. Series C (b) (c)		1,162,790
455,333	Concentric Medical, Inc. Series D (b) (c)		455,333
453,094	Concentric Medical, Inc. Series E (b) (c)		453,094
1,198,193	Elemé Medical, Inc. Series C (b)		1,803,999
177,778	EPR, Inc. Series A (b)		1,778
1,592,852	FlowCardia, Inc. Series C (b)		1,708,334
2,446,016	Labcyte Inc. Series C (b)		1,280,000
2,050,000	Magellan Biosciences, Inc. Series A (b)		2,050,000
1,031,992	OmniSonics Medical Technologies, Inc. Series A-1 (b)		237,358
877,747	OmniSonics Medical Technologies, Inc. Series B-1 (b)		201,882
43,478	TherOx, Inc. Series H (b)		277,390
99,646	TherOx, Inc. Series I (b)		635,741
2,813	TherOx, Inc. warrants (expiration 1/26/10) (b)		0
5,427	TherOx, Inc. warrants (expiration 6/09/09) (b)		0
640,625	Xoft, Inc. Series D (b)		2,139,688
122,754	Xoft, Inc. Series E (b)	Φ.	409,998
		\$	26,136,293

10UNT			VALUE	
		Convertible Notes 0.0%		
		Drug Discovery Technologies 0.0%		
	700,000	deCODE Genetics, Inc., 3.50% due 2011	\$	73,5
		TOTAL CONVERTIBLE SECURITIES AND WARRANTS		
		(Cost \$32,240,552)	\$	26,209,7
IARES				
		COMMON STOCKS AND WARRANTS 75.5%		
		Biopharmaceuticals 37.0%		
	135,182	Affymax, Inc. (b)		1,350,4
	624,321	Akorn, Inc. (b)		1,435,9
	108,889	Akorn, Inc. warrants (expiration 3/08/11) (a) (b)		15,2
	114,554	Alexion Pharmaceuticals, Inc. (b)		4,145,7
	52,700	Alnylam Pharmaceuticals, Inc. (b)		1,303,
	187,207	Amgen Inc. (b)		10,811,2
	55,000	Amylin Pharmaceuticals, Inc. (b)		596,
	525,965	Antisoma Plc (b) (d)		177,
	3,062,745	Antisoma Plc 12 Month Lock-up (Restricted) (a) (b) (d)		879,
	340,305	Antisoma Plc 18 Month Lock-up (Restricted) (a) (b) (d)		91,
	161,180	Biogen Idec Inc. (b)		7,677,
	75,627	Cornerstone Therapeutics, Inc. (b)		200,
	15,967	Cornerstone Therapeutics, Inc. warrants (expiration 6/06/10) (a) (b)		
	88,550	Forest Laboratories, Inc. (b)		2,255,
	89,270	Genentech, Inc. (b)		7,401,
	146,357	Genzyme Corporation (b)		9,713,
	329,960	Gilead Sciences, Inc. (b)		16,874,
	182,994	Hologic, Inc. (b)		2,391,
	8,815	Intuitive Surgical, Inc. (b)		1,119,
	172,247	-		5,220,
	175,880	MiddleBrook Pharmaceuticals, Inc. warrants (expiration 4/29/10) (a) (b)		91,
	64,295			4,260,
	157,500	Vertex Pharmaceuticals Inc. (b) (f)		4,784,
	102,371	XenoPort, Inc. (b)		2,567,
				85,365,
		Biotechnology 1.3%		
	328,000	Athersys, Inc. (b)		147,
	82,000	Athersys, Inc. warrants (expiration 6/08/12) (a) (b)		
	125,392	Life Technologies Corporation (b)		2,922,
				3,070,
		Drug Delivery 1.0%		
	227,550	Alkermes, Inc. (b)		2,423,
		Drug Discovery Technologies 9.6%		
	162,288	Avalon Pharmaceuticals, Inc. (b)		47,
	212,720	Celgene Corporation (b)		11,759,

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SHARES		VALUE	
	Drug Discovery Technologies continued		
26,931	Cephalon, Inc. (b)	\$	2,074,764
45,174	Cougar Biotechnology, Inc. (b)		1,174,524
1,601,039	MZT Holdings, Inc. (b) (c)		43,228
1,846,154	MZT Holdings, Inc. warrants (expiration 1/17/11) (a) (b) (c)		0
952,381	MZT Holdings, Inc. warrants (expiration 1/22/12) (a) (b) (c)		0
78,600	OSI Pharmaceuticals, Inc. (b)		3,069,330
399,028	Penwest Pharmaceuticals Co. (b)		626,474
199,514	Penwest Pharmaceuticals Co. warrants (expiration 3/11/13) (a) (b)		111,728
50,500	United Therapeutics Corporation (b)		3,158,775
200,000	Zyomyx, Inc. (Restricted) (a) (b)		2,000
			22,067,210
	Emerging Biopharmaceuticals 1.7%		
430,995	ACADIA Pharmaceuticals Inc. (b)		387,895
90,552	DOV Pharmaceutical, Inc. warrants (expiration 12/31/09) (a) (b)		0
448,680	Exelixis, Inc. (b)		2,252,374
774,191	Lexicon Pharmaceuticals, Inc. (b)		1,083,867
242,522	NitroMed, Inc. (b)		87,308
			3,811,444
	Generic Pharmaceuticals 7.1%		
100,381	Illumina, Inc. (b)		2,614,925
245,150	Mylan Inc. (b)		2,424,533
82,719	Perrigo Company		2,672,651
200,768	Teva Pharmaceutical Industries, Ltd. (e)		8,546,694
			16,258,803
	Healthcare Services 9.6%		
47,300	Aetna Inc.		1,348,050
148,148	Aveta, Inc. (Restricted) (a) (b)		1,481,480
347,628	CardioNet, Inc. (b)		8,569,030
93,740	Catalyst Health Solutions, Inc. (b)		2,282,569
96,048	ICON Plc (b) (e)		1,891,185
77,815	Medco Health Solutions, Inc. (b)		3,261,227
204,139	Syntiro Healthcare Services (Restricted) (a) (b)		204
40,350	WellPoint, Inc. (b)		1,699,946
1,285,000	Zix Corporation (b)		1,529,150
	15 N 15 A 15 A 15 A 16 A 16 A 16 A 16 A 16 A		22,062,841
277 700	Medical Devices and Diagnostics 8.2%		
257,790	Align Technology, Inc. (b)		2,255,663
440,141	Electro-Optical Sciences, Inc. (b)		1,474,472
105,892	IDEXX Laboratories, Inc. (b)		3,820,583
155,693	Inverness Medical Innovations, Inc. (b)		2,944,155
37,750	Laboratory Corporation of America Holdings (b)		2,431,477
62,080	Masimo Corporation (b)		1,851,846
130,000	Masimo Laboratories, Inc. (Restricted) (a) (b)		45,874

SHARES		VALUE	
	Medical Devices and Diagnostics continued		
447,080	Medwave, Inc. (b)	\$	224
111,770	Medwave, Inc. warrants (expiration 8/21/11) (a) (b)		0
62,005	OmniSonics Medical Technologies, Inc. (Restricted) (a) (b)		620
87,200	,		1,212,952
139	Songbird Hearing, Inc. (Restricted) (a) (b)		93
73,925	Stryker Corporation		2,953,304
			18,991,263
	TOTAL COMMON STOCKS AND WARRANTS		
	(Cost \$205,999,676)	\$	174,051,300
PRINCIPAL AMOUNT			
	SHORT-TERM INVESTMENTS 11.6%		
\$ 5,264,000	American Express Corporation; 0.01% due 01/02/09		5,263,999
21,425,000	Repurchase Agreement, State Street Bank and Trust Co., repurchase value \$21,425,012 (collateralized by U.S. Treasury Bill 0.26% discount, 07/02/09, market value \$21,856,550);		
	0.01% due 01/02/09		21,425,000
	TOTAL SHORT-TERM INVESTMENTS		
	(Cost \$26,688,999)	\$	26,688,999
	TOTAL INVESTMENTS 98.4%		
	(Cost \$264,929,227)	\$	226,950,092
	OTHER ASSETS IN EXCESS OF LIABILITIES 1.6%		3,583,842
	NET ASSETS - 100%	\$	230,533,934

⁽a) Security fair valued.

SCHEDULE OF WRITTEN OPTIONS

NUMBER OF CONTRACTS (100 SHARES EACH)		EXPIRATION DATE	CURRENT VALUE	
	CALL OPTIONS WRITTEN			
61	Myriad Genetics, Inc., strike @ 70	Feb - 2009	\$	(20,557)
205	Vertex Pharmaceuticals, Inc., strike @ 35	Feb - 2009		(27,060)
	TOTAL CALL OPTIONS WRITTEN			
	(Premiums received \$47,617)		\$	(47,617)
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⁽b) Non-income producing security.

⁽c) Affiliated issuers in which the Fund holds 5% or more of the voting securities (total market value of \$10,588,190).

⁽d) Foreign security.

⁽e) American Depository Receipt.

⁽f) A portion of security is pledged as collateral for call options written.

H&O LIFE SCIENCES INVESTORS

SCHEDULE OF INVESTMENTS

DECEMBER 31, 2008

(Unaudited)

(Continued)

The Fund adopted Financial Accounting Standards Board Statement of Financial Accounting Standards No. 157, Fair Value Measurements (FAS 157), effective October 1, 2008. In accordance with FAS 157, fair value is defined as the price that the Fund would receive upon selling an investment in a timely transaction to an independent buyer in the principal or most advantageous market for the investment. FAS 157 established a three-tier hierarchy that prioritizes the inputs to valuation techniques giving the highest priority to readily available unadjusted quoted prices in active markets (Level I inputs) and the lowest priority to unobservable inputs (Level 3 inputs) when market prices are not readily available or reliable. Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability and may be observable or unobservable. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity s own assumptions about the factors market participants would use in pricing the asset or liability, and would be based on the best information available.

The three-tier hierarchy of inputs is summarized in the three broad levels listed below.

- Level 1 quoted prices in active markets for identical investments
- Level 2 prices determined using other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)
- Level 3 prices determined using significant unobservable inputs (including the Fund s own assumptions in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

The following is a summary of the inputs used as of December 31, 2008 in valuing the Fund s investments carried at value:

Valuation Inputs	Iı	Investments in Securities			
Level 1 - Quoted Prices in Active Markets	\$	198,020,023			
Level 2 - Other Significant Observable Inputs		73,500			
Level 3 - Significant Unobservable Inputs		28,856,569			
Balance as of December 31, 2008	\$	226,950,092			

Securities valuation policies and other investment related disclosures are hereby incorporated by reference to the Fund $\,$ s most recent annual report previously filed with the Securities and Exchange Commission on Form N-CSR.

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Following is a reconciliation of investments in which significant unobservable inputs (Level 3) were used in determining value:

	Investments in			
Valuation Inputs		Securities		
Balance as of 09/30/08	\$	39,920,954		
Accrued discounts/premiums				
Realized gain/loss and change in unrealized				
appreciation/depreciation		(3,236,618)		
Net purchases/sales		(18,654)		
Net transfers in and/or out of Level 3		(7,809,113)		
Balance, as of 12/31/08	\$	28,856,569		
Net change in unrealized appreciation/depreciation				
from investments still held as of 12/31/08	\$	(3,177,271)		

Investment Valuation - Investments traded on national securities exchanges or in the over-the-counter market that are National Market System securities are valued at the last sale price or, lacking any sales, at the mean between the last bid and asked prices. Other over-the-counter securities are valued at the most recent bid prices as obtained from one or more dealers that make markets in the securities. Publicly traded investments for which market quotations are not readily available or whose quoted price may otherwise not reflect fair value and the fair value of venture capital and other restricted securities are valued in good faith by the Adviser pursuant to valuation policies and procedures approved by the Trustees. Such values are subject to oversight and ratification by the Trustees. However, because of the uncertainty of fair valuations, these estimated values may differ significantly from the values that would have been used had a ready market for these securities existed, and the differences could be material. Each such fair value determination is based on a consideration of relevant factors. Factors the Adviser considers may include (i) the existence of any contractual restrictions on the disposition of securities; (ii) information obtained from the issuer which may include an analysis of the company s financial statements, the company s products or intended markets or the company s technologies; and (iii) the price of a security negotiated at arm s length in an issuer s completed subsequent round of financing. Short-term investments with maturity of 60 days or less are valued at amortized cost.

Venture Capital and Other Restricted Securities - The Fund may invest in venture capital and other restricted securities if these securities would currently comprise 40% or less of net assets. The value of these securities represents 12% of the Fund s net assets at December 31, 2008. The following table details the acquisition date, cost, carrying value per unit, and value of the Fund s venture capital and other restricted securities at December 31, 2008. The Fund on its own does not have the right to demand that such securities be registered.

	Acquisition		Carrying Value	
Security (g)	Date	Cost	per Unit	Value
Agilix Corporation				
Series B Cvt. Pfd.	11/8/01	\$ 1,663,667	\$ 0.06	\$ 94,540
Antisoma Plc. (h)				
12 Month Lock-up Restricted Common	12/5/03 - 6/11/08	3,197,176	0.29	879,592
18 Month Lock-up Restricted Common	12/5/03 - 6/11/08	355,242	0.27	91,983
Aveta, Inc.				
Restricted Common	12/21/05	2,003,155	10.00	1,481,480
CardioKinetix, Inc.				
Series C Cvt. Pfd.	5/22/08	1,645,087	0.69	1,640,000
Ceres, Inc.				
Series C Cvt. Pfd.	12/23/98	1,000,950	6.50	1,625,000
Series C-1 Cvt. Pfd.	3/31/01	74,339	6.50	139,503
Series D Cvt. Pfd.	3/14/01	1,046,887	6.50	1,141,010
Series F Cvt. Pfd.	9/5/07	186,335	6.50	184,502
Warrants (expiration 9/05/15)	9/5/07	0	0.00	0
Concentric Medical, Inc.	5/5/02 1/04/02	2 220 (50	1.00	2 225 202
Series B Cvt. Pfd.	5/7/02, 1/24/03	2,220,659	1.00	3,235,293
Series C Cvt. Pfd.	12/19/03	1,000,545	1.00	1,162,790
Series D Cvt. Pfd.	9/30/05	638,671	1.00	455,333
Series E Cvt. Pfd.	12/18/08	454,477	1.00	453,094
Elemé Medical, Inc.	5 /15/00	2.260.220	1.51	1 002 000
Series C Cvt. Pfd.	7/15/08	2,260,330	1.51	1,803,999
EPR, Inc.	2/0/04	000 221	0.01	1.550
Series A Cvt. Pfd.	3/9/94	800,331	0.01	1,778
FlowCardia, Inc.	0.100.105	1.510.551	1.05	1 500 224
Series C Cvt. Pfd.	8/29/07	1,719,754	1.07	1,708,334
Labeyte Inc.	7/10/05	1 202 262	0.50	1 200 000
Series C Cvt. Pfd.	7/18/05	1,283,262	0.52	1,280,000
MacroGenics, Inc.	0/4/09	669.264	0.65	122 200
Series D Cvt. Pfd.	9/4/08	668,364	0.65	133,208
Series D Cvt. Pfd.	9/4/08	210,499	0.43	21,798
Magellan Biosciences, Inc. Series A Cvt. Pfd.	11/28/06	2.052.004	1.00	2.050.000
Masimo Laboratories, Inc.	11/26/00	2,052,904	1.00	2,050,000
Restricted Common	3/31/98	0	0.35	45,874
OmniSonics Medical Technologies, Inc.	3/31/90	U	0.55	45,074
Series A-1 Cvt. Pfd.	10/1/03	1,200,343	0.23	237,358
Series B-1 Cvt. Pfd.	6/4/07, 11/15/07	667,477	0.23	201,882
Restricted Common	5/24/01, 7/2/07	1,606,319	0.23	620
PHT Corporation	3124101, 112101	1,000,319	0.01	020
Series D Cvt. Pfd.	7/23/01	2,803,841	0.78	2,800,000
Series E Cvt. Pfd.	9/12/03-12/17/03	627,472	0.78	626,337
Series F Cvt. Pfd.	7/21/08	81,720	0.78	77,575
Songbird Hearing, Inc.	7721700	01,720	0.70	11,515
Restricted Common	12/14/00	2,003,239	0.67	93
Syntiro Healthcare Services	12/11/00	2,003,237	0.07	73
Restricted Common	2/5/97	800,325	0.001	204
TargeGen, Inc.	2/3/7/	000,525	0.001	201
Series C Cvt. Pfd.	8/30/05	1,842,330	0.87	1,226,672
Series D Cvt. Pfd.	5/8/07	531,198	0.87	353,450
TherOx, Inc.	3/0/07	331,170	0.07	333,130
Series H Cvt. Pfd.	9/11/00	2,001,787	6.38	277,390
Series I Cvt. Pfd.	7/8/05	386,640	6.38	635,741
Warrants (expiration 1/26/10)	1/26/05	0	0.00	0
Warrants (expiration 6/09/09)	6/9/04	0	0.00	0
	0,7,01	V	0.00	· ·

	Acquisition				Carrying Value		
Security (g)	Date		Cost	Cost per Unit			Value
Xoft, Inc.							
Series D Cvt. Pfd.	3/23/07	\$	2,055,919	\$	3.34	\$	2,139,688
Series E Cvt. Pfd.	6/20/08		411,757		3.34		409,998
Zyomyx, Inc.							
Series A New Cvt. Pfd.	2/19/99, 1/12/04		199,800		0.10		20,000
Series B New Cvt. Pfd.	3/31/04		112		0.10		20
Restricted Common	2/19/99 - 7/22/02		2,401,101		0.01		2,000
		\$	44,104,014			\$	28,638,139

⁽g) See Schedule of Investments and corresponding footnotes for more information on each issuer.

Federal Income Tax Cost At December 31, 2008, the total cost of securities for Federal income tax purposes was \$264,929,227. The net unrealized loss on securities held by the Fund was \$37,979,135, including gross unrealized gain of \$25,151,369 and gross unrealized loss of \$63,130,504.

Affiliate Transactions An affiliate issuer is a company in which the Fund holds 5% or more of the voting securities. Transactions with such companies during the three months ended December 31, 2008 were as follows:

Issuer	Value on Ober 1, 2008	Purchases	Sales	Income	D	Value on December 31, 2008
Agilix Corporation	\$ 94,540	\$	\$	\$	\$	94,540
CardioKinetix, Inc.	1,640,000					1,640,000
Concentric Medical, Inc.	6,794,782	453,094				5,306,510
CytoLogix Corporation (a)	534,706		475,359			
MZT Holdings, Inc.	40,026					43,228
PHT Corporation	3,503,912					3,503,912
•	\$ 12,607,966	\$ 453,094	\$ 475,359	\$	\$	10,588,190

⁽a) As of December 31, 2008 Cytologix Corporation is no longer an affiliate.

⁽h) The carrying value per unit of unrestricted common units of Antisoma Plc was \$0.46 on June 11, 2008, the date of the purchase agreement and date an enforceable right to acquire the restricted units was obtained.

Item 2. Controls and Procedures.

(a.)	The registrant s principal executive officer and principal financial officer have concluded, based on their evaluation of the registrant
disclosur	e controls and procedures as conducted within 90 days of the filing date of this report, that these disclosure controls and procedures are
adequate!	ly designed and are operating effectively to ensure that information required to be disclosed by the registrant on Form N-Q is
(i) accum	nulated and communicated to the investment company s management, including its certifying officers, to allow timely decisions
regarding	g required disclosure; and (ii) recorded, processed, summarized and reported within the time periods specified in the Securities and
Exchange	e Commission s rules and forms.

(b.)	There were no chang	es in the registrant	s internal control of	over financia	al reporting (as	defined in F	Rule 30a-3(d)	under the 1940	Act that
occurred	during the registrant	s last fiscal quarter	that has materially	affected, or	is reasonably	likely to mat	erially affect,	the registrant	s internal
control o	ver financial reporting	ς.							

Item 3. Exhibits.

Separate certifications for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Act (17 CFR 270.30a-2(a)). Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities and 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) H&Q Life Sciences Investors

By (Signature and Title) /s/ Daniel Omstead

Daniel Omstead, President

Date 3/2/09

Pursuant to the requirements of the Securities and 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 (Signature and Title) /s/ Carolyn Haley

Carolyn Haley, Treasurer

Date 3/2/09