ATHEROGENICS INC Form 424B3 December 06, 2005

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PROSPECTUS SUPPLEMENT No. 5

(To Prospectus dated July 25, 2005, as supplemented by Prospectus Supplement No. 1 dated August 18, 2005, Prospectus Supplement No. 2 dated September 20, 2005, Prospectus Supplement No. 3 dated October 7, 2005 and Prospectus Supplement No. 4 dated November 1, 2005)

ATHEROGENICS, INC. \$200,000,000 1.50% CONVERTIBLE NOTES DUE 2012 AND

10,416,660 SHARES OF COMMON STOCK, NO PAR VALUE PER SHARE, ISSUABLE UPON CONVERSION OF THE NOTES

This prospectus supplement supplements the prospectus dated July 25, 2005 of AtheroGenics, Inc., relating to the resale from time to time by selling securityholders of our 1.50% convertible notes due 2012 and shares of AtheroGenics, Inc. common stock issuable upon conversion of the notes. This prospectus supplement should be read in conjunction with the prospectus, which is required to be delivered with this prospectus supplement.

Investing in the notes or our common stock involves a high degree of risk. See Risk Factors beginning on page 6 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 6, 2005

The section of the prospectus entitled Selling Securityholders is amended and restated in its entirety to read as follows:

SELLING SECURITYHOLDERS

We originally sold the notes to initial purchasers on January 12, 2005. The initial purchasers of the notes have advised us that the notes were resold in transactions exempt from the registration requirements of the Securities Act to qualified institutional buyers, as defined in Rule 144A of the Securities Act. These subsequent purchasers, or their transferees, pledgees, donees, assignees or successors, may from time to time offer and sell any or all of the notes and/or shares of the common stock issuable upon conversion of the notes pursuant to this prospectus.

The following table sets forth information with respect to the selling securityholders and the principal amount of notes and common stock beneficially owned by each selling securityholder that may be offered pursuant to this prospectus. The information is based on information provided by or on behalf of the selling securityholders. The selling securityholders may offer all, some or none of the notes or the common stock issuable upon conversion of the notes. Because the selling securityholders may offer all or some portion of the notes or the common stock, we cannot estimate the amount or percentage of the notes or the common stock that will be held by the selling securityholders upon termination of sales pursuant to this prospectus. In addition, the selling securityholders identified below may have sold, transferred or otherwise disposed of all or a portion of their notes since the date on which they provided the information regarding their holdings in transactions exempt from the registration requirements of the Securities Act.

To our knowledge, no selling securityholder nor any of its affiliates has held any position or office with, been employed by or otherwise has had any material relationship with us or our affiliates within the past three years.

The percentage of notes outstanding beneficially owned by each selling securityholder is based on \$200,000,000 aggregate principal amount of notes outstanding. The number of shares of common stock issuable upon conversion of the notes shown in the table below assumes conversion of the full amount of notes held by each selling securityholder at the initial conversion rate of 38.5802 shares of common stock per \$1,000 principal amount of notes.

	Principal			
	Amount of			
	Notes		Common Stock	Common
	Beneficially		Owned	Stock Owned
	Owned and	Percentage		After
	Offered	of Notes	Prior to the	Completion of
				the Offering
Name (1)	Hereby (\$) (2)	Outstanding	Offering $(2)(3)$	(3)
Alexandra Global Master Fund, Ltd.	3,500,000	1.75%	135,031	
Aristeia International Limited (4)	9,190,000	4.60%	354,552	
Aristeia Trading LLC (5)(6)	1,810,000	*	69,830	
BNP Paribas Equity Strategies, SNC				
(7)(8)	5,090,000	2.55%	202,226	5,583
Brooks Capital Group LLC (9)	100,000	*	3,858	
CIBC World Markets (5)	500,000	*	19,290	
Citigroup Global Markets Ltd. (5)	8,000,000	4.00%	308,642	

Name (1)	Principal Amount of Notes Beneficially Owned and Offered Hereby (\$) (2)	Percentage of Notes Outstanding	Common Stock Owned Prior to the Offering (2)(3)	Common Stock Owned After Completion of the Offering (3)
CNH CA Master Account, L.P.				
(10)	250,000	*	368,185	358,540
CooperNeff Convertible				
Strategies (Cayman) Master				
Fund, LP (8)	1,866,000	*	71,991	
Deutsche Bank Securities Inc. (5)	7,126,000	3.56%	274,923	
DKR Saturn Event Driven				
Holding Fund Ltd. (11)	6,365,000	3.18%	245,563	
DKR Saturn Multi-Strategy				
Holding Fund Ltd. (12)	22,815,000	11.41%	885,407(13)	5,200(13)
DKR SoundShore Strategic				
Holding Fund Ltd. (14)	2,500,000	1.25%	96,451	
Drawbridge Convertible I Ltd.				
(15)	64,000	*	83,955	81,486
Drawbridge Convertible II Ltd.				
(15)	20,000	*	26,847	26,076
Drawbridge Global Macro Master			-00	
Fund Ltd. (15)	1,666,000	*	282,658	218,383
Fore Convertible Master Fund,		• • • • • •		
Ltd. (16)	4,000,000	2.00%	154,321	
Fore ERISA Fund, Ltd. (16)	2,000,000	1.00%	77,160	
Froley Revy Convertible	2 7 0 0 0 0		40.700	
Arbitrage Offshore (17)	350,000	*	13,503	
FrontPoint Convertible Arbitrage	6 000 000	2 000	221 401	
Fund, L.P. (18)	6,000,000	3.00%	231,481	
GLG Market Neutral Fund (19)	3,000,000	1.50%	115,741	
Guggenheim Portfolio Company	2 000 000	1.000	55 160	
VIII (Cayman), Ltd. (7)(20)	2,000,000	1.00%	77,160	
Highbridge International LLC	21 500 000	10.75%	020 474	
(21)	21,500,000	10.75%	829,474	
ING Investors Trust ING T. Rowe				
Price Capital Appreciation Fund	020.000	*	22.022	
(7)(22)	830,000	*	32,022	
Jeffries & Company (5)(23)	250,000		9,645	(122
JP Morgan Securities Inc. (5)(24)	4,850,000	2.43%	193,246	6,132
Kamunting Street Master Fund,	7 100 000	2.550	272.010	
Ltd. (25)	7,100,000	3.55%	273,919	
KBC Financial Products USA	0 600 000	4.200	221 700	
Inc. (5)(26)	8,600,000	4.30%	331,790	
LDG Limited (27)	229,000		8,835	
Lehman Brothers Inc. (5)	5,100,000	2.55%	196,759	

Lyxor/Convertible Arbitrage				
Fund Limited (8)	848,000	*	32,716	
Man Convertible Bond Master				
Fund, Ltd. (28)	2,936,000	1.47%	113,271	
Man Mac I Limited	3,000,000	1.50%	115,741	
MSS Convertible Arbitrage I (27)	48,000	*	2,830	978
Penn Series Funds, Inc. Flexibly				
Managed Fund (7)(22)	375,000	*	14,468	
Putnam Convertible				
Income-Growth Trust (7)	3,720,000	1.86%	143,518	
Saranac Capital Management L.P.				
(29)	15,000,000	7.50%	2,012,861	1,434,158
Satellite Convertible Arbitrage				
Master Fund, LLC (30)	7,000,000	3.50%	270,061	
Silverback Master, Ltd. (31)	13,500,000	6.75%	520,833	
Singlehedge US Convertible				
Arbitrage Fund (8)	745,000	*	28,742	
Sphinx Fund c/o TQA (27)	311,000	*	24,841	12,842
St. Thomas Trading, Ltd. (32)	1,064,000	*	41,049	
Sturgeon Limited (8)	876,000	*	33,796	
UBS O Connor LLC F/B/O				
O Connor Global Convertible				
Arbitrage Master Limited	3,000,000	1.50%	115,741	
T. Rowe Price Capital				
Appreciation Fund, Inc. (7)(22)	2,045,000	1.02%	78,897	
TQA Master Fund, Ltd. (27)	1,810,000	*	143,689	73,859
TQA Master Plus Fund, Ltd. (27)	3,201,000	1.60%	255,894	132,399
TQA Special Opportunities				
Master Fund Ltd. (33)	2,000,000	1.00%	77,160	
Tugar Capital, L.P. (34)	2,500,000	1.25%	96,451	
Vicis Capital Master Fund (35)	4,000,000	2.00%	154,321	
Wachovia Capital Markets LLC				
(5)(36)	3,000,000	1.50%	115,741	
Waterstone Market Neutral				
MAC51, Ltd. (37)	59,000	*	2,276	
Waterstone Market Neutral				
Master Fund, Ltd. (38)	941,000	*	36,304	
Xavex Convertible Arbitrage I				
(27)	26,000	*	16,714	15,711
Zurich Institutional Benchmark				
Master c/o TQA (27)	375,000	*	14,468	
Total**	200,000,000	100.00%	10,087,656	2,371,616

^{*} Less than one percent

^{**} The sum of the listed principal amount of notes beneficially

owned by holders actually exceeds \$200,000,000 because certain of the holders have transferred notes pursuant to Rule 144A or otherwise reduced their position prior to selling pursuant to this prospectus. As a result, we have received beneficial ownership information from additional holders without corresponding updates from the holders that sold notes to such additional holders. The maximum principal amount of notes that may be sold under this prospectus will not exceed \$200,000,000.

(1) Information about other selling securityholders, except for any future transferee, pledgee, donee, assignee or successor of securityholders named in the table above, will be set forth in a prospectus supplement or amendment to this registration statement if required. For purposes of this table, we have assumed that any other holders of notes, or any future transferees, pledgees, donees or successors of or from any such other holders of notes, do not beneficially own any common stock other than the common stock issuable upon conversion of the notes at the initial conversion rate.

(2) Selling securityholders may have sold, transferred or otherwise disposed of all

or a portion of their notes, or acquired additional notes, since the date on which we were provided with the information regarding their notes in transactions exempt from the registration requirements of the Securities Act. Accordingly, the information provided here for any particular securityholder may understate or overstate, as the case may be, such securityholder s current ownership. The aggregate principal amount of notes outstanding as of the date of this registration statement is \$200,000,000, and the selling securityholders will not sell under this registration statement more than that amount.

(3) Includes common stock issuable upon conversion of the notes at the

initial

conversion rate

of 38.5802

shares of

common stock

per \$1,000

principal

amount of notes.

However, this

conversion rate

will be subject

to adjustment as

described under

Description of

Notes

Conversion of

Notes

Conversion Rate

Adjustments

and Description

of Notes Make

Whole Payment

Upon the

Occurrence of a

Designated

Event that is

also a

Fundamental

Change. As a

result, the

amount of

common stock

issuable upon

conversion of

the notes may

increase or

decrease in the

future. Assumes

conversion of

the full amount

of $4^{1}/2\%$ notes

held by the

selling

securityholder at

the initial

conversion rate

of 65.1890

shares of

common stock

per \$1,000

principal

amount of notes.

- (4) Aristeia Capital LLC is the investment manager for Aristeia International Limited. Aristeia Capital LLC is jointly owned by Robert H. Lynch Jr., Anthony Frascella and Kevin Toner, who have voting or investment control over these securities.
- (5) The selling securityholder has informed us that it is a registered broker-dealer. See Plan of Distribution below.
- (6) Aristeia Advisors LLC is the investment manager for Aristeia Trading LLC. Aristeia Advisors LLC is jointly owned by Robert H. Lynch Jr., Anthony Frascella and Kevin Toner, who have voting or investment control over these securities.

The selling securityholder has informed us that it is an affiliate of a registered broker-dealer. See Plan of Distribution below.

- (8) Christian
 Menestrier,
 Chief Executive
 Officer of
 CooperNeff
 Advisors, Inc.,
 has voting or
 investment
 control over
 these securities.
- (9) Brook Lenfest and William Luterman have voting or investment control over these securities.
- (10) CNH Partners, LLC is the investment advisor of the CNH CA Master Account, L.P. and has sole voting and dispositive power over these securities. Robert Krail, Mark Mitchell and Todd Pulvino exercise voting and investment control on behalf of CNH Partners, LLC.

(11) DKR Saturn

Management

Company L.P.

is a registered

investment

adviser with the

Securities and

Exchange

Commission

and, as such, is

the investment

manager to

DKR Saturn

Event Driven

Holding Fund

Ltd. (the Saturn

Fund). Ron

Phillips,

portfolio

manager of the

Saturn Fund,

has voting or

investment

control over

these securities.

(12) DKR Saturn

Management

L.P. (DKR

Saturn) is a

registered

investment

adviser with the

Securities and

Exchange

Commission

and, as such, is

the investment

manager to

DKR Saturn

Multi-Strategy

Fund Ltd. (the

Multi-Strategy

Fund). As such,

DKR Saturn and

certain portfolio

managers have shared

dispositive and

voting power

over securities

held by the fund. Ron Phillips has voting or investment control over these securities. Mr. Phillips disclaims beneficial ownership of the securities.

- (13) Includes 5,200 shares of common stock subject to a call option.
- (14) DKR Capital Partners L.P. (DKR LP) is a registered investment adviser with the Securities and Exchange Commission and, as such, is the investment manager to **DKR** SoundShore Strategic Holding Fund Ltd. (the

Ltd. (the SoundShore Fund). DKR LP has retained certain portfolio managers to act as the portfolio manager to the SoundShore Fund managed by DKR LP. As such, DKR LP and certain portfolio managers have shared

and voting power over securities held by the fund. Doug Teresko has voting or investment control over these securities.

- (15) Kevin Treacy
 has voting or
 investment
 control over
 these securities.
- (16) David
 Egglishaw has voting or investment control over these securities.
- (17) Ann Houlihan
 has voting or
 investment
 control over
 these securities.
- (18) FrontPoint Convertible Arbitrage Fund GP LLC is the general partner of FrontPoint Convertible Arbitrage Fund, L.P. FrontPoint Partners LLC is the managing member of **FrontPoint** Convertible Arbitrage Fund GP, LLC and as such has voting and dispositive power over the securities held

by the fund. Philip Duff, W. Gillespie Caffray and Paul Ghaffari are members of the board of managers of **FrontPoint** Partners LLC and are the sole members of its management committee. Messrs. Duff, Caffray and Ghaffari and **FrontPoint** Partners LLC and FrontPoint Convertible Arbitrage Fund GP, LLC each disclaim beneficial ownership of the securities held by the fund except for their

(19) GLG Market

pecuniary interest therein.

Neutral Fund (the Fund) is a publicly owned company listed on the Irish Stock Exchange. GLG Partners LP, an English limited partnership, acts as the investment manager of the fund and has voting and dispositive power of the securities held

by the Fund.

The general

partner of GLG

Partners LP is

GLG Partners

Limited, an

English limited

company. The

shareholders of

GLG Partners

Limited are

Noam

Gottesman,

Pierre Lagrange,

Jonathan Green,

Philippe Jabre

and Lehman

(Cayman)

Limited, a

subsidiary of

Lehman

Brothers, Inc., a

publicly-held

entity. GLG

Partners LP,

GLG Partners

Limited, Noam

Gottesman,

Pierre Lagrange,

Jonathan Green,

Philippe Jabre

and Lehman

(Cayman)

Limited

disclaim

beneficial

ownership of

the securities

held by the

Fund, except for

their pecuniary

interest therein.

(20) Matthew Li has voting or investment control over

these securities.

(21) Highbridge Capital

Management,

LLC

(Highbridge) is

the trading

manager of

Highbridge

International

LLC (HIC) and

consequently

has voting

control and

investment

discretion over

securities held

by HIC. Glenn

Dubin and

Henry Swieca

control

Highbridge.

Each of

Highbridge,

Glenn Dubin

and Henry

Swieca

disclaims

beneficial

ownership of

the securities

held by HIC.

(22) T. Rowe Price

Associates, Inc.

(T. Rowe Price

Associates)

serves as

investment

adviser with

power to direct

investments

and/or sole

power to vote

these securities.

T. Rowe Price

Associates

disclaims

beneficial

ownership of

these securities.

T. Rowe Price

Associates is a

wholly-owned

subsidiary of T. Rowe Price Group, Inc., which is a publicly-traded financial services holding company.

- (23) Jonathan
 Cunningham
 has voting or
 investment
 control over
 these securities.
- (24) Charlotte Chui has voting or investment control over these securities.
- (25) Allan Teh, managing member of Kamunting Street Management, LLC, the general partner of the investment manager of Kamunting Street Master Fund, Ltd., has voting or investment control over these securities.
- (26) KBC Financial
 Products USA
 Inc. exercises
 voting and
 investment
 control over any
 shares of
 common stock
 issuable upon
 conversion of

the notes held by the selling securityholder. Mr. Luke Edwards, Managing Director, exercises voting and investment control on behalf of KBC Financial Products USA Inc.

(27) Robert Butman, George Esser, John Idone, Paul Bucci and Bartholomew Tesoriero have voting or investment control over these securities.

- (28) John Null and J.T. Hansen, principals of Marin Capital Partners, LP, investment advisor to Man Convertible Bond Master Fund, Ltd. have voting or investment control over these securities.
- (29) Ross Margolies has voting or investment control over these securities. Saranac Capital Management L.P. acts as discretionary investment

advisor with respect to the following accounts that hold the indicated principal amounts of these securities: Citigroup Alternative Investments Diversified Arbitrage Strategies Fund Ltd., 1,822,000; Citigroup Alternative Investments Enhanced Arbitrage Strategies Fund, 539,000; Citigroup Alternative Investments QIP Multi Strategy Arbitrage Portfolio, 8,868,000; Saranac Erisa Arbitrage LTD, 3,355,000; Saranac Erisa Arbitrage LP, 224,000; and Saranac Arbitrage LTD, 192,000.

- (30) Leif Rosenblatt, Mark Sonnino, Gabriel Nechamkin. Christopher Tuzzo, Brian Kriftcher, Stephen Shapiro and David Ford have voting or investment control over these securities. Each of these individuals disclaims beneficial ownership of the securities.
- (31) Elliot Bossen
 has voting or
 investment
 control over
 these securities.
- (32) John Null and J.T. Hansen, principals of Marin Capital Partners, LP, investment advisor to St. Thomas Trading, Ltd., have voting or investment control over these securities.
- (33) Robert Butman, George Esser, John Idone, Paul Bucci and Bartholomew Tesoriero have voting or investment control over

these securities.

- (34) Ken Tananbaum has voting or investment control over these securities.
- (35) Sky Lucas, John
 Succo and Shad
 Stastney have
 voting or
 investment
 control over
 these securities.
- (36) Eric Grant has voting or investment control over these securities.
- (37) Shawn
 Bergerson,
 Chief Executive
 Officer of
 Waterstone
 Market Neutral
 MAC51, Ltd.,
 has voting or
 investment
 control over
 these securities.
- (38) Shawn
 Bergerson,
 Chief Executive
 Officer of
 Waterstone
 Market Neutral
 Master Fund,
 Ltd., has voting
 or investment
 control over
 these securities.