SENORX INC Form SC 13D May 27, 2010

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

SenoRx, Inc.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

______81724W104_____
(CUSIP Number)

Peter D. Goldstein
GAMCO Investors, Inc.
One Corporate Center
Rye, New York 10580-1435
(914) 921-5000
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

______ May 17, 2010______
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

CUSIP No. 81724W104

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Gabelli Funds, LLC I.D. No. 13-4044523

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e) X
- 6 Citizenship or place of organization

New York

Number Of : 7 Sole voting power

.

Shares : 1,106,900 (Item 5)

.

Beneficially : 8 Shared voting power

.

Owned: None

:

By Each : 9 Sole dispositive power

:

Reporting : 1,106,900 (Item 5)

٠.

Person :10 Shared dispositive power

.

With : None

.

Aggregate amount beneficially owned by each reporting person

1,106,900 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

6.31%

14 Type of reporting person (SEE INSTRUCTIONS)

IA

CUSIP No. 81724W104

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

GAMCO Asset Management Inc.

I.D. No. 13-4044521

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

New York

Number Of : 7 Sole voting power

:

Shares : 295,785 (Item 5)

.

Beneficially : 8 Shared voting power

:

Owned: None

:

By Each : 9 Sole dispositive power

:

Reporting : 295,785 (Item 5)

.

Person :10 Shared dispositive power

:

With : None

.

Aggregate amount beneficially owned by each reporting person

295,785 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

1.69%

CUSIP No. 81724W104

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Gabelli Securities, Inc. I.D. No. 13-3379374

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS)

00 – Client funds

- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

Delaware

Number Of : 7 Sole voting power

.

Shares : 318,865 (Item 5)

C: : 11

Beneficially : 8 Shared voting power

.

Owned: None

:

By Each : 9 Sole dispositive power

:

Reporting : 318,865 (Item 5)

:

Person :10 Shared dispositive power

•

With : None

.

Aggregate amount beneficially owned by each reporting person

318,865 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

1.82%

14 Type of reporting person (SEE INSTRUCTIONS)

HC, CO, IA

,

CUSIP No. 1	. 81724W104 Names of reporting pe I.R.S. identification no	rsons os. of above persons (entitio	es only)		
	GGCP, Inc.			I.D.	
2	No. 13-3056041 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)				
	(b)				
3	Sec use only				
4	Source of funds (SEE INSTRUCTIONS) None				
5	Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)				
6	Citizenship or place of New York	organization			
	Number Of	: 7	Sole voting power		
	Shares	:	None (Item 5)		
	Beneficially	: 8	Shared voting power		
	Owned	:	None		
	By Each	: 9	Sole dispositive power		
	Reporting	:	None (Item 5)		
	Person	:10	Shared dispositive power		
	With	:	None		
11	: Aggregate amount beneficially owned by each reporting person				
	None (Item 5)				
12	Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS) $ X $				
13	Percent of class represented by amount in row (11)				
	0.00%				

Type of reporting person (SEE INSTRUCTIONS)

HC, CO

		Lagar i iiiig. (0214017/1140 10111100 102				
CUSIP N	Io. 81724W104						
1	Names of reporting persons I.R.S. identification nos. of above persons (entities only) GAMCO Investors, Inc. No. 13-4007862 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)						
	(b)						
3	Sec use only						
4	Source of funds (SEE INSTRUCTIONS) WC						
5	Check box if disclo	osure of legal procee	edings is required pursuant to items 2 (d) or 2 (e)				
6	Citizenship or place of organization New York						
	Number Of	: 7	Sole voting power				
	Shares	:	None (Item 5)				
	Beneficially	: 8	Shared voting power				
	Owned	: :	None				
	By Each	: : 9	Sole dispositive power				
	Reporting	: :	None (Item 5)				
	Person	: :10	Shared dispositive power				
	With	; ;	None				
11	Aggregate amount	: Aggregate amount beneficially owned by each reporting person					
	None (Item 5)						
12	Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS) $ X $						
13	Percent of class represented by amount in row (11)						

0.00%

14

Type of reporting person (SEE INSTRUCTIONS)

HC, CO

CUSIP No. 81724W104

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Mario J. Gabelli

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS)

00 – Funds of a Private Entity

- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

USA

Number Of : 7 Sole voting power

.

Shares : None (Item 5)

.

Beneficially : 8 Shared voting power

:

Owned: None

:

By Each : 9

:

Reporting

Person

With