FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

hours per response:

OMB Number: 3235-0287 Estimated average burden

0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Common Stock	1. Name and Address of Reporting Person MIDDLETON FRED A					ereotaxis, Inc				(Ch	eck all applicable) X Director		10% Owner				
Common Stock																	
Table 1 - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned	(Street) SAN MATEO CA 94402-1708			4. If Amendment, Date of Original Filed (Month/Day/Year)								Line) X Form filed by One Reporting Person Form filed by More than One Reporting					
1. Title of Security (Instr. 3)	(City)	-			,												
Determining	1 Title of Congrity		Table I - N				_	ed, D	1			cial	-	6 Ownership	7 Nature of		
Common Stock O6/08/2005 P O5.328 A S7.295 142,447 D	I. The or security (msu. 3)		Date		Execution Date, r) if any	Transaction Code (Instr.		Disposed Of (D) (Instr. 3, 4			d	Securities Beneficially Owned Following	Form: Direct (D) or Indirect	Indirect Beneficial Ownership			
Common Stock							Code	v	Amount	(A) or (D)	Price		Transaction(s)		, ,		
Common Stock 8,172 I Sanderling Mgmt. LLC AUK Pension Profit Sharing Plan Sanderling Venture Parties II, L.P. Common Stock 301,745 I FBO Sanderling Venture Limited, L.P. Sanderling Ventures Limited, L.P. Sande	Common Stock			06/08/200)5		P		500	A	\$7.09	96	142,447	D			
Common Stock 8,172 I Agmit LLC 401K Pension Profit Sharing Plant Pension Profit Pensio	Common Stock			06/08/200	05		P		5,328	A	\$7.2	2	147,775	D			
Common Stock 78,351 I Venture Partners II, L.P.	Common Stock												8,172	I	Mgmt. LLC 401K Pension Profit		
Common Stock Co	Common Stock												78,351	I	Venture Partners II,		
Common Stock Sanderling V Common Stock Common Stock Sanderling V Common Stock Sanderling V Construction of the state of the stat	Common Stock												301,745	I	Management Limited, FBO Sanderling Ventures		
Common Stock Common Stock Sanderling V Biomedical Co- Investment Fund, L.P. Common Stock Commo	Common Stock												532,758	I	IV Biomedical Co- Investment		
Common Stock Common Stock Sommon Stock Sommon Stock Sommon Stock Sommon Stock V Biomedical Co- Investment Fund, L.P. Sanderling V Limited	Common Stock												89,834	I	V Beteiligungs GmbH &		
Common Stock 100,970 I V Limited	Common Stock												374,313	I	V Biomedical Co- Investment		
	Common Stock												100,970	I	V Limited		

1. Title of Security (Instr. 3)			2. Transact Date (Month/Day		2A. Deem Execution if any (Month/Da	ion Date	9,	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a 5)			5. Amount Securities Beneficial Owned Fo	y	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Direct ndirect r. 4)	7. Nature of Indirect Beneficial Ownership	
									v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)				(Instr. 4)	
Common Stock													224,	515	1	I	Sanderling Venture Partners IV Co- Investment Fund, L.P.	
Common Stock												617,	411	1	I	Sanderling Ventures Partners V Co- Investment Fund, L.P.		
Common Stock													25,4	187	1	I	Sanderling Ventures Managemer V	
		Та	ble II - Deriva (e.g., p							posed of, convertib			y Owned		,	,		
1. Title of Derivative Security (Instr. 3)	of 2. 3. Transaction 3A. Deemed 4. Execution Date, try or Exercise (Month/Day/Year) if any Co		Transa Code (action (Instr. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		ive ies ed ed	6. Date Exel Expiration I (Month/Day		Date	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	derivati Securiti Benefic Owned Followi Reporte Transac	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		ip of Indirect Beneficial Ownershi (Instr. 4)		
				Code	v	(A) (I	(D)	Date Exerc	isable	Expiration Date	Title	Amount or Number of Shares						

Explanation of Responses:

/s/ Fred A. Middleton

06/10/2005

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

^{*} If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

^{**} Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).