FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Washington, D.C. 20549

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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

1. Name and Address of Reporting Person* MIDDLETON FRED A					ssuer Name and Tic ereotaxis, Inc.			g Symbol		 Relationship of Rep Check all applicable) X Director 	1	0% Owner	
(Last) (First) (Middle) 400 SOUTH EL CAMINO RD					ate of Earliest Tran 15/2004	saction	(Mont	th/Day/Year)		Officer (give below)		Other (specify pelow)	
SUITE 1200 (Street) SAN MATEO CA 99402			4. If	Amendment, Date	of Origi	nal Fil	ed (Month/Da		6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City) (S	itate)	(Zip)											
		able I - N			Securities Ac	_	d, D				_		
1. Title of Security (Instr. 3)			2. Transaction Date (Month/Day/Y		Execution Date,	3. Transaction Code (Instr. 8)		5)		I (A) or : 3, 4 and	Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
						Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		
Common Stock			12/15/200	04		J ⁽¹⁾	V	75,436	D	(2)	0	I	Sanderling Management Limited, Custodian FBO Middleton- McNeil, L.P.
Common Stock			12/15/200	04		J ⁽¹⁾	V	37,718	A	(2)	140,947	D	
Common Stock											8,172	I	Sanderling Mgmt. LLC 401k Pension Profit Sharing Plan
Common Stock											781,351	I	Sanderling Venture Partners II, L.P.
Common Stock											301,745	I	Sanderling Management Limited, Cust. FBO Sanderling Ventures Limited, L.P.
Common Stock											532,758	I	Sanderling IV Biomedical Co- Investment Fund, L.P.
Common Stock											89,834	I	Sanderling V Beteiligungs GmbH & Co. KG
Common Stock											374,313	I	Sanderling V Biomedical Co- Investment Fund, L.P.

1. Title of Security (Instr. 3)			2. Trans	2. Transaction		2A. Deemed Execution Date,	te,	3. Transaction Code (Instr. 8)					5. Amount of Securities Beneficially Owned Following Reported		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)
								Code V Amou		Amount	(A) or (D) Price		Transaction(s) (Instr. 3 and 4)				(msu. 4)
Common Stock													100,9	970	:	I	Sanderling V Limited Partnership
Common Stock													224,5	515			Sanderling Venture Partners IV Co- Investment Fund, L.P.
Common Stock													617,4	411			Sanderling Ventures Partners V Co- Investment Fund, L.P.
Common Stock													25,4	87		I	Sanderling Ventures Managemer V
		Та	ıble II - Deri (e.g.							oosed of, convertib			y Owned				
Derivative Conversion Date Execu Security or Exercise (Month/Day/Year) if any		3A. Deemed Execution Date if any (Month/Day/Yea	Code (Instr.		5. Num of Derivat Securit Acquire (A) or Dispos of (D) (Instr. 3 and 5)	tive ties ed	6. Date Expira (Monti	tion D		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Num derivati Securit Benefic Owned Followi Reporte Transac (Instr. 4	ive ies cially ng ed ction(s)	10. Ownersi Form: Direct (I or Indire (I) (Instr.	Beneficial Ownership ect (Instr. 4)	
				Code	v	(A)	(D)	Date Exerci	isable	Expiration Date		Amount or Number of Shares					

Explanation of Responses:

- 1. Distribution of issuer securities from Sanderling Management Limited, Custodian FBO Middleton-McNeil, L.P. to the Reporting Person. The Reporting Person is a general partner of Sanderling Management Limited, Custodian FBO Middleton-McNeil, L.P. This transaction does not result in any change to the Reporting Person's pecuniary interest in the securities transferred.
- 2. Price is not applicable to a distribution of securities from a partnership to its partners.

12/20/2004 /s/ Fred A. Middleton

** Signature of Reporting Person

Date

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

- * 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).

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.