VARIAN MEDICAL SYSTEMS INC

Form SC 13G/A

January 10, 2005

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934
(Amendment 1)

VARIAN MEDICAL SYSTEMS INC
(Name of Issuer)

comm
(Title of Class of Securities)

92220P105
(CUSIP Number)

December 31, 2004

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

(Date of Event Which Requires Filing of this Statement)

[X] Rule 13d-1(b)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 92220P105

(1) Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

BARCLAYS GLOBAL INVESTORS, NA., 943112180

- (2) Check the appropriate box if a member of a Group*
- (a) / /
- (b) /X/

(3) SEC Use Only

(4) Citizenship or Place of Organization U.S.A.

Number of Shares

(5) Sole Voting Power

by Each Reporting Person With	4,347,614	
	(6) Shared Voting Power	
	(7) Sole Dispositive Power 5,052,480	
	(8) Shared Dispositive Power	
(9) Aggregate Amount Beneficially Owned by 5,052,480	Each Reporting Person	
(10) Check Box if the Aggregate Amount in	Row (9) Excludes Certain Shares*	
(11) Percent of Class Represented by Amoun 3.77%	t in Row (9)	
(12) Type of Reporting Person* BK		
CUSIP No. 92220P105		
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above BARCLAYS GLOBAL FUND ADVISORS (2) Check the appropriate box if a member		
(a) / /		
(b) /X/		
(b) /x/ 		
(b) /X/ (3) SEC Use Only		
(3) SEC Use Only (4) Citizenship or Place of Organization U.S.A. Number of Shares Beneficially Owned	(5) Sole Voting Power 908,710	
(3) SEC Use Only (4) Citizenship or Place of Organization U.S.A. Number of Shares Beneficially Owned by Each Reporting	908,710 (6) Shared Voting Power	
(b) /X/ (3) SEC Use Only (4) Citizenship or Place of Organization	908,710	
(b) /X/ (3) SEC Use Only (4) Citizenship or Place of Organization U.S.A. Number of Shares Beneficially Owned by Each Reporting	908,710 	

(11) Percent of Class Represented by Amount 0.69%	in Row (9)
(12) Type of Reporting Person*	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above	persons (entities only).
BARCLAYS GLOBAL INVESTORS, LTD	
(2) Check the appropriate box if a member of (a) $//$ (b) $/X/$	f a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization England	
Number of Shares Beneficially Owned	(5) Sole Voting Power 1,453,200
by Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power 1,453,200
	(8) Shared Dispositive Power
(9) Aggregate 1,453,200	
(10) Check Box if the Aggregate Amount in Ro	ow (9) Excludes Certain Shares*
(11) Percent of Class Represented by Amount 1.08%	in Row (9)
(12) Type of Reporting Person* BK	
CUSIP No. 92220P105	
(1) Names of Reporting Persons.	
I.R.S. Identification Nos. of above	persons (entities only).

BARCLAYS GLOBAL INVESTORS JAPAN TRUST AND BANKING COMPANY LIMITED (2) Check the appropriate box if a member of a Group* (a) / / (b) /X/ ______ (3) SEC Use Only (4) Citizenship or Place of Organization Japan Number of Shares (5) Sole Voting Power Beneficially Owned 114,153 by Each Reporting Person With (6) Shared Voting Power (7) Sole Dispositive Power 114,153 (8) Shared Dispositive Power ______ (9) Aggregate 114,153 ______ (10) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares* ______ (11) Percent of Class Represented by Amount in Row (9) (12) Type of Reporting Person* BK _____ CUSIP No. 92220P105 (1) Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only). BARCLAYS LIFE ASSURANCE COMPANY LIMITED (2) Check the appropriate box if a member of a Group* (a) / / (b) /X/ ______ (3) SEC Use Only ______ (4) Citizenship or Place of Organization England ______ Number of Shares (5) Sole Voting Power Beneficially Owned by Each Reporting Person With (6) Shared Voting Power

	(/)	Sole Dispositive Power
	(8)	Shared Dispositive Power
(9) Aggregate		
(10) Check Box if the Aggregat	te Amount in Row (9) E	Excludes Certain Shares*
(11) Percent of Class Represer	nted by Amount in Row	(9)
(12) Type of Reporting Person	*	
CUSIP No. 92220P105		
(1) Names of Reporting Person I.R.S. Identification BARCLAYS BANK PLC		(entities only).
(2) Check the appropriate box (a) // (b) /X/	if a member of a Grou	p*
(3) SEC Use Only		
(4) Citizenship or Place of O:	rganization	
Number of Shares Beneficially Owned	(5)	Sole Voting Power
by Each Reporting Person With	(6)	Shared Voting Power
	(7)	Sole Dispositive Power
	(8)	Shared Dispositive Power
(9) Aggregate		
(10) Check Box if the Aggregat	te Amount in Row (9) E	Excludes Certain Shares*
(11) Percent of Class Represer	nted by Amount in Row	(9)
(12) Type of Reporting Person BK	*	
CUSIP No. 92220P105		

(1) Names of Reporting Persons. I.R.S. Identification Nos. of above	ve persons (entities only).
BARCLAYS CAPITAL SECURITIES LIMITE	ED
(2) Check the appropriate box if a member (a) // (b) /X/	of a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization England.	
Number of Shares Beneficially Owned by Each Reporting	(5) Sole Voting Power
Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power
(9) Aggregate	
(10) Check Box if the Aggregate Amount in	Row (9) Excludes Certain Shares*
(11) Percent of Class Represented by Amour 0.00%	nt in Row (9)
(12) Type of Reporting Person* BK	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above	ve persons (entities only).
BARCLAYS CAPITAL INC	
(2) Check the appropriate box if a member (a) $\ /\ /$ (b) $\ /X/$	of a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization U.S.A.	
Number of Shares Beneficially Owned by Each Reporting	(5) Sole Voting Power
Person With	(6) Shared Voting Power

	-
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power -
(9) Aggregate	
(10) Check Box if the Aggregate Amount in 1	Row (9) Excludes Certain Shares*
(11) Percent of Class Represented by Amount 0.00%	t in Row (9)
(12) Type of Reporting Person* BD	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above	e persons (entities only).
BARCLAYS PRIVATE BANK & TRUST (ISLI	E OF MAN) LIMITED
(2) Check the appropriate box if a member (a) $//$ (b) $/X/$	of a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization England.	
Number of Shares Beneficially Owned by Each Reporting	(5) Sole Voting Power
Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power
(9) Aggregate	
(10) Check Box if the Aggregate Amount in 1	
(11) Percent of Class Represented by Amount 0.00%	t in Row (9)
(12) Type of Reporting Person*	

CUSIP No.	92220P105 	
	f Reporting Persons. S. Identification Nos. o	f above persons (entities only).
BARC	LAYS PRIVATE BANK AND TRO	JST (JERSEY) LIMITED
(2) Check th (a) / / (b) /X/	e appropriate box if a me	ember of a Group*
(3) SEC Use	Only	
(4) Citizens Engl	hip or Place of Organizat and	ion
Number of Sh Beneficially	Owned	(5) Sole Voting Power
by Each Repo Person With	rting	(6) Shared Voting Power
		(7) Sole Dispositive Power
		(8) Shared Dispositive Power
(9) Aggregat	e	
(10) Check B	ox if the Aggregate Amoun	nt in Row (9) Excludes Certain Shares*
(11) Percent 0.00	of Class Represented by	Amount in Row (9)
(12) Type of	Reporting Person*	
CUSIP No.	92220P105 	
	f Reporting Persons. S. Identification Nos. o	f above persons (entities only).
BARC	LAYS BANK TRUST COMPANY	LIMITED
(2) Check th (a) / / (b) /X/	e appropriate box if a me	ember of a Group*
(3) SEC Use	Only	
(4) Citizens Engl	hip or Place of Organizat	ion

Number of Shares Beneficially Owned	(5) Sole Voting Power
by Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power
(9) Aggregate	
(10) Check Box if the Aggregate Amount in Rov	w (9) Excludes Certain Shares*
(11) Percent of Class Represented by Amount : 0.00%	in Row (9)
(12) Type of Reporting Person* BK	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above parcular BARCLAYS BANK (Suisse) SA	persons (entities only).
(2) Check the appropriate box if a member of (a) // (b) /X/	a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization Switzerland	
Number of Shares Beneficially Owned	(5) Sole Voting Power
by Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power
(9) Aggregate	
(10) Check Box if the Aggregate Amount in Rov	w (9) Excludes Certain Shares*
(11) Percent of Class Represented by Amount : 0.00%	

(12) Type of Reporting Person* BK	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above persons. BARCLAYS PRIVATE BANK LIMITED	ersons (entities only).
(2) Check the appropriate box if a member of a (a) // (b) /X/	a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organization England	
Number of Shares Beneficially Owned	(5) Sole Voting Power
by Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power
(9) Aggregate	
(10) Check Box if the Aggregate Amount in Row	(9) Excludes Certain Shares*
(11) Percent of Class Represented by Amount in 0.00%	n Row (9)
(12) Type of Reporting Person* BK	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of above persons.	ersons (entities only).
BRONCO (BARCLAYS CAYMAN) LIMITED	
(2) Check the appropriate box if a member of a (a) $//$ (b) $/X/$	a Group*

(3) SEC Use Only	
(4) Citizenship or Place of Organizatio Cayman Islands	n
Number of Shares Beneficially Owned	(5) Sole Voting Power
oy Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power
	(8) Shared Dispositive Power -
(9) Aggregate	
(10) Check Box if the Aggregate Amount	in Row (9) Excludes Certain Shares*
(11) Percent of Class Represented by Am	ount in Row (9)
(12) Type of Reporting Person* OH	
CUSIP No. 92220P105	
(1) Names of Reporting Persons. I.R.S. Identification Nos. of a	bove persons (entities only).
PALOMINO LIMITED	
(2) Check the appropriate box if a memb (a) $\ /\ /$ (b) $\ /X/$	er of a Group*
(3) SEC Use Only	
(4) Citizenship or Place of Organizatio Cayman Islands	n
Jumber of Shares Seneficially Owned	(5) Sole Voting Power 412,200
by Each Reporting Person With	(6) Shared Voting Power
	(7) Sole Dispositive Power 412,200
	(8) Shared Dispositive Power
(9) Aggregate 412,200	

(10) Check Box	x if the Aggregate Amount in F	ow (9) Excludes Certain Shares*
(11) Percent (of Class Represented by Amount	in Row (9)
(12) Type of F	Reporting Person*	
CUSIP No.	92220P105 	
	Reporting Persons. Identification Nos. of above	persons (entities only).
HYMF I	LIMITED	
(2) Check the (a) // (b) /X/	appropriate box if a member of	-
(3) SEC Use Or		
	ip or Place of Organization n Islands	
Number of Shar Beneficially (by Each Report	Dwned	(5) Sole Voting Power
Person With	Ling	(6) Shared Voting Power
		(7) Sole Dispositive Power
		(8) Shared Dispositive Power
(9) Aggregate		
(10) Check Box	x if the Aggregate Amount in F	ow (9) Excludes Certain Shares*
0.00%	of Class Represented by Amount	
ОН	Reporting Person*	
ITEM 1(A).	NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC	
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIP 3050 HANSEN WAY, MAIL STOP PALO ALTO CA 94304-1000	E 224
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS GLOBAL INV	ESTORS, NA

ITEM 2(B).	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 45 Fremont Street San Francisco, CA 94105
ITEM 2(C).	CITIZENSHIP U.S.A
	TITLE OF CLASS OF SECURITIES
ITEM 2(E).	
	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A
(15 U.S. (b) /X/ Bank as (c) // Insurar (15 U.S. (d) // Investm	or Dealer registered under Section 15 of the Act (3.C. 780). Section 3(a) (6) of the Act (15 U.S.C. 78c). Ace Company as defined in section 3(a) (19) of the Act (3.C. 78c). Ace Company registered under section 8 of the Investment (7 Act of 1940 (15 U.S.C. 80a-8). Acent Adviser in accordance with section 240.13d(b)(1)(ii)(E). Ace Benefit Plan or endowment fund in accordance with section (3-1(b)(1)(ii)(F). Holding Company or control person in accordance with section (3-1(b)(1)(ii)(G). Act of 1940 (15 U.S.C. 1813). Act of 1940 (15 U.S.C. 1813). Act of 1940 (15 U.S.C. 1813). Act of 1940 (16 U.S.C. 1813). Act of 1940 (17 U.S.C. 1813). Act of 1940 (18 U.S.C. 1813). Act of 1940 (19 U.S.C. 1813).
` '	NAME OF ISSUER MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS GLOBAL FUND ADVISORS
	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 45 Fremont Street San Francisco, CA 94105
ITEM 2(C).	
	TITLE OF CLASS OF SECURITIES comm
ITEM 2(E).	92220P105
	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A

- (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b) // Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c). (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c). (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8). (e) /X/ Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E). (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F). (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G). (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813). (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3). (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J) ITEM 1(A). NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES TTEM 1(B). 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000 ______ ITEM 2(A). NAME OF PERSON(S) FILING BARCLAYS GLOBAL INVESTORS, LTD _____ ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Murray House 1 Royal Mint Court LONDON, EC3N 4HH ITEM 2(C). CITIZENSHIP England _____ ITEM 2(D). TITLE OF CLASS OF SECURITIES comm ITEM 2(E). CUSIP NUMBER 92220P105 ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o).
- (b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).
- (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c).
- (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E).
- (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F).
- (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G).
- (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940

(15U.S.C. 8	0a-3).
	ccordance with section 240.13d-1(b)(1)(ii)(J)
ITEM 1(A). NAM VAR	E OF ISSUER IAN MEDICAL SYSTEMS INC
305	RESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 0 HANSEN WAY, MAIL STOP E 224 0 ALTO CA 94304-1000
	E OF PERSON(S) FILING OBAL INVESTORS JAPAN TRUST AND BANKING COMPANY LIMITED
ITEM 2(B). ADD	RESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Ebisu Prime Square Tower 8th Floor 1-1-39 Hiroo Shibuya-Ku Tokyo 150-0012 Japan
ITEM 2(C). CIT	IZENSHIP Japan
ITEM 2(D). TIT	LE OF CLASS OF SECURITIES COMM
ITEM 2(E). CUS	IP NUMBER 92220P105
	THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR THER THE PERSON FILING IS A
(a) // Broker or D (15 U.S.C.	ealer registered under Section 15 of the Act 78o).
(b) /X/ Bank as def	ined in section 3(a) (6) of the Act (15 U.S.C. 78c). ompany as defined in section 3(a) (19) of the Act
(d) // Investment	Company registered under section 8 of the Investment of 1940 (15 U.S.C. 80a-8).
	Adviser in accordance with section 240.13d(b)(1)(ii)(E).
	nefit Plan or endowment fund in accordance with section
(g) // Parent Hold)(1)(ii)(F). ing Company or control person in accordance with section)(1)(ii)(G).
(h) // A savings a	ssociation as defined in section 3(b) of the Federal Deposit
(i) // A church pl	ct (12 U.S.C. 1813). an that is excluded from the definition of an investment er section 3(c)(14) of the Investment Company Act of 1940
(15U.S.C. 8	0a-3).
(j) // Group, in a	ccordance with section 240.13d-1(b)(1)(ii)(J)
	E OF ISSUER IAN MEDICAL SYSTEMS INC
305 PAL	RESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES O HANSEN WAY, MAIL STOP E 224 O ALTO CA 94304-1000
	E OF PERSON(S) FILING BARCLAYS LIFE ASSURANCE COMPANY LIMITED
	RESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Unicorn House 5th floor 252 Romford Road, Forest Gate

London 37 9JB England

	London 3/ 9JB England
ITEM 2(C).	CITIZENSHIP England
ITEM 2(D).	TITLE OF CLASS OF SECURITIES comm
ITEM 2(E).	CUSIP NUMBER 92220P105
ITEM 3. 13D-2(B), CHECK	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A
(15 U.S (b) /X/ Bank as (c) // Insuran	or Dealer registered under Section 15 of the Act .C. 780). defined in section 3(a) (6) of the Act (15 U.S.C. 78c). ce Company as defined in section 3(a) (19) of the Act .C. 78c). ent Company registered under section 8 of the Investment Act of 1940 (15 U.S.C. 80a-8). ent Adviser in accordance with section 240.13d(b)(1)(ii)(E). e Benefit Plan or endowment fund in accordance with section1(b)(1)(ii)(F). Holding Company or control person in accordance with section1(b)(1)(ii)(G). gs association as defined in section 3(b) of the Federal Deposit ce Act (12 U.S.C. 1813). h plan that is excluded from the definition of an investment under section 3(c)(14) of the Investment Company Act of 1940 C. 80a-3). in accordance with section 240.13d-1(b)(1)(ii)(J)
ITEM 1(A).	NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS BANK PLC
ITEM 2(B).	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 54 Lombard Street London, England EC3P 3AH
ITEM 2(C).	CITIZENSHIP England
	TITLE OF CLASS OF SECURITIES COMM
ITEM 2(E).	92220P105
ITEM 3. 13D-2(B), CHECK	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A or Dealer registered under Section 15 of the Act

(b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).

16

- (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c). (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8). (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E). (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F). (q) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G). (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813). (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3). (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J) NAME OF ISSUER ITEM 1(A). VARIAN MEDICAL SYSTEMS INC ._____ ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000 NAME OF PERSON(S) FILING ITEM 2(A). BARCLAYS CAPITAL SECURITIES LIMITED ______ ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 5 The North Colonmade Canary Wharf, London, England E14 4BB ______ ITEM 2(C). CITIZENSHIP England ______ ITEM 2(D). TITLE OF CLASS OF SECURITIES comm _____ ITEM 2(E). CUSIP NUMBER 92220P105 ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c). (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c).
- (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E).
- (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1 (b) (1) (ii) (F).
- (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G).
- (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3).
- (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J)

ITEM 1(A). NAME OF ISSUER

	VARIAN MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS CAPITAL INC
ITEM 2(B).	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 200 Park Ave NY, NY 10166
ITEM 2(C).	CITIZENSHIP U.S.A.
ITEM 2(D).	TITLE OF CLASS OF SECURITIES
ITEM 2(E).	CUSIP NUMBER 92220P105
ITEM 3. 13D-2(B), CHECK	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A
(15 U.S. (b) // Bank as (c) // Insurar	or Dealer registered under Section 15 of the Act (3.C. 780). defined in section 3(a) (6) of the Act (15 U.S.C. 78c). dec Company as defined in section 3(a) (19) of the Act (3.C. 78c). ment Company registered under section 8 of the Investment (7 Act of 1940 (15 U.S.C. 80a-8). ment Adviser in accordance with section 240.13d(b)(1)(ii)(E). Dec Benefit Plan or endowment fund in accordance with section (3-1(b)(1)(ii)(F). Holding Company or control person in accordance with section (3-1(b)(1)(ii)(G). Dec Benefit Plan as defined in section 3(b) of the Federal Deposit (12 U.S.C. 1813). Dec Act (12 U.S.C. 1813
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS PRIVATE BANK & TRUST (ISLE OF MAN) LIMITED
	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 4th Floor, Queen Victoria House Isle of Man, IM99 IDF
ITEM 2(C).	England
ITEM 2(D).	TITLE OF CLASS OF SECURITIES

comm ______ ITEM 2(E). CUSIP NUMBER 92220P105 ______ ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c). (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c). (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8). (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E). (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F). (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G). (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813). (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3). (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J) ITEM 1(A). NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC ______ TTEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000 _____ ITEM 2(A). NAME OF PERSON(S) FILING BARCLAYS PRIVATE BANK AND TRUST (JERSEY) LIMITED ______ ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 39/41 Broad Street, St. Helier Jersey, Channel Islands JE4 8PU ITEM 2(C). CITIZENSHIP England ITEM 2(D). TITLE OF CLASS OF SECURITIES comm _____ ITEM 2(E). CUSIP NUMBER 92220P105 IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c). (c) // Insurance Company as defined in section 3(a) (19) of the Act

(d) // Investment Company registered under section 8 of the Investment

(e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E). (f) // Employee Benefit Plan or endowment fund in accordance with section

Company Act of 1940 (15 U.S.C. 80a-8).

(15 U.S.C. 78c).

19

(g) // Pa	0.13d-1(b)(1)(ii)(F). rent Holding Company or control person in accordance with section 0.13d-1(b)(1)(ii)(G).
(h) // A	savings association as defined in section 3(b) of the Federal Deposit surance Act (12 U.S.C. 1813).
(i) // A con	church plan that is excluded from the definition of an investment mpany under section 3(c)(14) of the Investment Company Act of 1940 5U.S.C. 80a-3).
	oup, in accordance with section 240.13d-1(b)(1)(ii)(J)
ITEM 1(A).	NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS BANK TRUST COMPANY LIMITED
ITEM 2(B).	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE 54 Lombard Street London, EC3P 3AH, England
ITEM 2(C).	CITIZENSHIP England
ITEM 2(D).	TITLE OF CLASS OF SECURITIES
ITEM 2(E).	CUSIP NUMBER 92220P105
ITEM 3. 13D-2(B),	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR CHECK WHETHER THE PERSON FILING IS A
	oker or Dealer registered under Section 15 of the Act 5 U.S.C. 78o).
	nk as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).
	surance Company as defined in section 3(a) (19) of the Act 5 U.S.C. 78c).
(d) // In	vestment Company registered under section 8 of the Investment mpany Act of 1940 (15 U.S.C. 80a-8).
(e) // In	vestment Adviser in accordance with section 240.13d(b)(1)(ii)(E).
	ployee Benefit Plan or endowment fund in accordance with section 0.13d-1(b)(1)(ii)(F).
	rent Holding Company or control person in accordance with section 0.13d-1(b)(1)(ii)(G).
(h) // A	savings association as defined in section 3(b) of the Federal Deposit
(i) // A con	surance Act (12 U.S.C. 1813). church plan that is excluded from the definition of an investment mpany under section 3(c)(14) of the Investment Company Act of 1940 5U.S.C. 80a-3).
	oup, in accordance with section 240.13d-1(b)(1)(ii)(J)
ITEM 1(A).	NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000

ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS BANK (Suisse) SA
ITEM 2(B). 10 rue d'Italie CH-1204 Geneva Switzerland	ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE
ITEM 2(C).	CITIZENSHIP Switzerland
ITEM 2(D).	TITLE OF CLASS OF SECURITIES COMM
ITEM 2(E).	CUSIP NUMBER 92220P105
ITEM 3. 13D-2(B), CHECK	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR WHETHER THE PERSON FILING IS A
(a) // Broker	or Dealer registered under Section 15 of the Act
· ·	.C. 780).
(c) // Insuran	defined in section 3(a) (6) of the Act (15 U.S.C. 78c). ce Company as defined in section 3(a) (19) of the Act .C. 78c).
	ent Company registered under section 8 of the Investment
	Act of 1940 (15 U.S.C. 80a-8). ent Adviser in accordance with section 240.13d(b)(1)(ii)(E).
	e Benefit Plan or endowment fund in accordance with section -1 (b) (1) (ii) (F).
(g) // Parent 1	Holding Company or control person in accordance with section
	-1 (b) (1) (ii) (G). gs association as defined in section 3(b) of the Federal Deposit
(i) // A church company	ce Act (12 U.S.C. 1813). h plan that is excluded from the definition of an investment under section 3(c)(14) of the Investment Company Act of 1940
·	C. 80a-3). in accordance with section 240.13d-1(b)(1)(ii)(J)
ITEM 1(A).	NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC
ITEM 1(B).	ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000
ITEM 2(A).	NAME OF PERSON(S) FILING BARCLAYS PRIVATE BANK LIMITED
ITEM 2(B). 59/60 Grosvenor London, WIX 9DA	
ITEM 2(C).	CITIZENSHIP England
ITEM 2(D).	TITLE OF CLASS OF SECURITIES
ITEM 2(E).	CUSIP NUMBER 92220P105
ITEM 3.	IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR

13D-2(B), CHECK WHETHER THE PERSON FILING IS A

- (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 780).
- (b) /X/ Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).
- (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c).
- (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E).
- (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F).
- (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G).
- (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3).
- (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J)
- ITEM 1(A). NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000

ITEM 2(A). NAME OF PERSON(S) FILING

BRONCO (BARCLAYS CAYMAN) LIMITED

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Walker House Mary Street PO Box 908 GT George Town, Grand Cayman (Cayman Islands)

ITEM 2(C). CITIZENSHIP

Cayman Islands

ITEM 2(D). TITLE OF CLASS OF SECURITIES COMM

ITEM 2(E). CUSIP NUMBER 92220P105

- ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A
- (a) // Broker or Dealer registered under Section 15 of the Act $(15\ U.S.C.\ 78o)$.
- (b) // Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).
- (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c).
- (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E).
- (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1 (b) (1) (ii) (F).
- (g) // Parent Holding Company or control person in accordance with section 240.13d-1 (b) (1) (ii) (G).
- (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) // A church plan that is excluded from the definition of an investment

company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3).(j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J) ITEM 1(A). NAME OF ISSUER VARIAN MEDICAL SYSTEMS INC ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000 _____ ITEM 2(A). NAME OF PERSON(S) FILING PALOMINO LIMITED ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Walker House Mary Street PO Box 908 GT George Town, Grand Cayman (Cayman Islands) _____ ITEM 2(C). CITIZENSHIP Cayman Islands ITEM 2(D). TITLE OF CLASS OF SECURITIES comm ______ ITEM 2(E). CUSIP NUMBER 92220P105 ______ ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A (a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b) // Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c). (c) // Insurance Company as defined in section 3(a) (19) of the Act (15 U.S.C. 78c). (d) // Investment Company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8). (e) // Investment Adviser in accordance with section 240.13d(b)(1)(ii)(E). (f) // Employee Benefit Plan or endowment fund in accordance with section 240.13d-1(b)(1)(ii)(F). (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G). (h) // A savings association as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813). (i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15U.S.C. 80a-3).(j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J) NAME OF ISSUER ITEM 1(A). VARIAN MEDICAL SYSTEMS INC ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES 3050 HANSEN WAY, MAIL STOP E 224 PALO ALTO CA 94304-1000 ______ ITEM 2(A). NAME OF PERSON(S) FILING HYMF LIMITED ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE Walker House Mary Street PO Box 908 GT George Town, Grand Cayman (Cayman Islands)

ITEM 2(C). CITIZENSHIP			
Cayman Islands			
ITEM 2(D). TITLE OF CLASS OF SECURITIES comm			
ITEM 2(E). CUSIP NUMBER 92220P105			
ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A			
(a) // Broker or Dealer registered under Section 15 of the Act (15 U.S.C. 780).			
(b) // Bank as defined in section 3(a) (6) of the Act (15 U.S.C. 78c).(c) // Insurance Company as defined in section 3(a) (19) of the Act			
<pre>(15 U.S.C. 78c). (d) // Investment Company registered under section 8 of the Investment</pre>			
(e) // Investment Adviser in accordance with section $240.13d(b)(1)(ii)(E)$. (f) // Employee Benefit Plan or endowment fund in accordance with section			
240.13d-1(b)(1)(ii)(F). (g) // Parent Holding Company or control person in accordance with section 240.13d-1(b)(1)(ii)(G).			
(h) // A savings association as defined in section 3(b) of the Federal Deposi Insurance Act (12 U.S.C. 1813).			
(i) // A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940			
(15U.S.C. 80a-3). (j) // Group, in accordance with section 240.13d-1(b)(1)(ii)(J)			
ITEM 4. OWNERSHIP			
Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.			
(a) Amount Beneficially Owned: 7,960,746			
(b) Percent of Class: 5.94%			
(c) Number of shares as to which such person has:(i) sole power to vote or to direct the vote7,235,877			
(ii) shared power to vote or to direct the vote			
(iii) sole power to dispose or to direct the disposition of 7,960,746			
(iv) shared power to dispose or to direct the disposition of			
ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following. //			

- ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON
 The shares reported are held by the company in trust accounts for the
 economic benefit of the beneficiaries of those accounts. See also
 Items 2(a) above.
- ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY Not applicable
- ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP Not applicable
- ITEM 9. NOTICE OF DISSOLUTION OF GROUP Not applicable

ITEM 10. CERTIFICATION

(a) The following certification shall be included if the statement is filed pursuant to section 240.13d-1 (b):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

(b) The following certification shall be included if the statement is filed pursuant to section 240.13d-1(c):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

 January 10, 2005
Date
 Signature
Nancy Yeung Manager of Global Accounting
 Name/Title