

Item 1.01.

Entry into a Material Definitive Agreement.

On September 30, 2011, Varian Medical Systems International AG (“Varian International”), a wholly owned subsidiary of Varian Medical Systems, Inc. (the “Company”), entered into two agreements in respect of the Scripps Proton Therapy Center (the “Center”) that will be operated by Scripps Clinic Medical Group, Inc. (“Scripps”) in San Diego, California, that represent material definitive agreements of the Company for purposes of Item 1.01. (As described in more detail below, at the time Varian International entered into these agreements, the Company had previously contracted to equip and service the Center.)

The first such agreement is a Loan and Security Agreement dated September 30, 2011 between California Proton Treatment Center LLC (“CPTC”), as Borrower, ORIX Capital Markets, LLC (“ORIX”), as Agent, and ORIX and Varian International as Lenders (the “Loan Agreement”). The Loan Agreement provides for a maximum aggregate loan to CPTC in the principal amount of \$165,300,000 for a four-year term, subject to two-one year extensions by CPTC. Varian International’s maximum loan commitment is \$115,300,000 of the total, reflecting its current pro rata share of 69.75% of the obligation to fund the initial distribution and all advances.

The outstanding principal will bear interest at the London Interbank Offered Rate (“LIBOR”), plus 6.25% (which increases to 7.0% if the term is extended), and adjusts monthly, subject to a minimum interest rate of 8.25% (which increases to 9.0% if the term is extended). Interest only payments are due monthly in arrears until July 1, 2014, at which time monthly payments based on amortization of the principal balance over a 15-year period at an interest rate of 8.25% become due and payable. If all or a portion of the principal is repaid on or before July 1, 2014, interest that would have been payable had the principal not been repaid early is due and payable. The initial distribution, which also occurred on September 30, 2011, amounted to \$27,533,641 and included payment of an aggregate commitment fee of \$2,479,500 to the Lenders. \$19,205,257 of the initial distribution was funded by Varian International and \$1,589,966 of the commitment fee was paid to Varian International, which payment to Varian International was calculated after deduction of certain fees from the aggregate commitment fee. The Lenders are also entitled to certain other fees, the most significant of which is an exit fee of 1.00% of the amount of principal paid, whether as a result of prepayment or maturity. Varian International is entitled to its then pro rata share of any of such payments and fees.

The Loan Agreement provides for a number of holdbacks, including an interest holdback in an amount equal to the interest payable by CPTC between the initial distribution and July 1, 2014. The interest holdback is intended to be used to make up any shortfall in monthly interest payments due to the Lenders as well as shortfalls in the commitment and exit fees, and will constitute an advance under the loan. CPTC will not be able to borrow any portion of the interest holdback not used by July 1, 2014. The Loan Agreement also provides for a number of deposit and reserve accounts. The Loan Agreement generally requires the satisfaction of customary conditions before advances (as well as certain holdback account advances and releases of amounts from certain reserve accounts) are made.

Under the Loan Agreement, all revenues obtained by CPTC from the operation of the Center that exceed the clinical operating expenses of Scripps, are to be transferred by CPTC to an account controlled by ORIX, as Agent. Amounts in that account will be used generally to make payments in the following order of priority: (1) charges associated with the loan; (2) monthly tax deposits and monthly insurance deposit; (3) deposit in a reserve account of operating and maintenance fees due the Company (to be paid quarterly); (4) interest and minimum amortization of the principal amount of the loan; (5) replenishment of three escrow accounts required under the lease of the facility between CPTC and Scripps (the "Facility Lease"); (6) amounts owed as rent under a ground sublease between ORIX Proton San Diego, LLC ("ORIX San Diego"), an affiliate of ORIX, of the property upon which the Center is to be located (the "Ground Sublease"), and amounts payable to Scripps under the Facility Lease as their share of the Center's revenue (such payments to be made pro-rata if revenues are not sufficient to pay both in full); (7) other ordinary operating expenses of the property, and (8) remaining funds to a collateral reserve, to repay principal, or to CPTC, depending on certain economic conditions set forth in the Loan Agreement.

The Loan Agreement also provides for affirmative and negative covenants on behalf of CPTC that are customary in connection with such a loan. The loan may be accelerated and additional remedies effected in connection with an "event of default," which events include breaches (or uncured breaches) of certain of such covenants, CPTC's failure to pay or other default under another obligation representing more than \$150,000 and CPTC's failure to complete the project and related items in accordance with an agreed upon schedule. For this purpose, "event of default" includes the failure by the Company or Scripps to comply with applicable laws or regulations, court orders which preclude them from performing obligations under the agreements to which each is a party or the loss by either of necessary licenses.

The loan is secured by all funds on deposit from time to time with ORIX, as Agent, or in an account controlled by ORIX, as Agent, and all CPTC's personal property, including the proton therapy system (such that the Company's rights as equipment vendor in respect of the purchase price are subordinated). In addition, ORIX, as Agent for the Lenders, will hold (1) a deed of trust on CPTC's fee title to the property and facility (subject to the prior encumbrance of a ground lease granted by CPTC in favor of ORIX San Diego) comprising the Center and (2) a leasehold deed of trust on CPTC's rights as ground subtenant under the Ground Sublease (the ground lease and the Ground Sublease, "Ground Leases").

Either Lender, provided it is not delinquent under the Loan Agreement, may, with the prior written consent of the Agent and subject to certain conditions, transfer its pro rata share of its loan commitment or a partial interest therein, and be relieved of its obligations in respect of the amount assigned, provided that at least \$5 million is transferred and the retained commitment is not less than \$5 million. Furthermore, ORIX, as Lender, not as Agent, may cause Varian International to transfer all or a portion of its loan commitment (whether funded or unfunded) to ORIX or its designee (an "ORIX Loan Transfer"). The purchase price to be paid to Varian International in connection with any ORIX Loan Transfer shall be no less than the then outstanding principal amount of Varian International's loan commitment, plus accrued interest, but shall not extend to additional interest and fees payable after the date of the ORIX Loan Transfer.

The second such agreement is a Revenue Sharing Agreement between ORIX San Diego and Varian International dated as of September 30, 2011 (the "Revenue Sharing Agreement"). Pursuant to the Revenue Sharing Agreement, ORIX San Diego agrees to pay Varian International 40% ("Varian's Share") of all amounts it actually receives as rent under the Ground Sublease. Rent primarily consists of 10% of the gross revenues generated by the Center, plus 10% of funds generated by CPTC from certain transactions. If on or prior to December 31, 2012, one or more ORIX Loan Transfers is effected, Varian's Share shall be reduced in accordance with the following reductions of principal:

Principal Amounts	Varian's Share
At least \$17,750,000, but less than \$35,500,000	30%
At least \$35,500,000, but less than \$53,250,000	20%
At least \$53,250,000, but less than \$71,000,000	10%
\$71,000,000 or greater	0%

If after December 31, 2012, one or more ORIX Loan Transfers is effected, such that the principal reduction is 50% or more of the difference between \$71,000,000 and the amount of principal reduction before December 31, 2012, Varian's Share shall be reduced by 50%, but not below 10%. If ORIX San Diego effects a sale of the Ground Leases or any interest in the Ground Leases or any right to receive rent under the Ground Leases to a third party, Varian International is entitled to Varian's Share of the net sale proceeds (after ORIX San Diego's reasonable expenses). Such third-party sales (i.e., other than a transfer involving ORIX San Diego affiliates or as part of a merger, acquisition or similar transaction) are generally subject to a Varian International right of first offer. Varian International's rights under the Revenue Sharing Agreement are generally not transferable, other than a transfer involving Varian International affiliates or as part of a merger, acquisition or similar transaction. The Revenue Sharing Agreement terminates when (1) Varian's Share has been reduced to 0% or ORIX San Diego no longer has any right to receive rent from CPTC or (2) the Ground Lease terminates.

Prior to entry into the Loan Agreement and the Revenue Sharing Agreement and certain other agreements related thereto, the only relationships between the Company and its affiliates (including Varian International) and the other parties and their affiliates consisted of a Proton System Purchase Agreement between the Company and CPTC dated April 29, 2010 to equip the proton therapy center (in the approximate amount of \$88 million), a Proton Systems Operations and Maintenance Agreement between the Company and CPTC dated as of June 29, 2011 to service the system for the center (in the approximate amount of \$60 million) and an earlier \$8 million bridge loan by the Company to CPTC. The \$8 million bridge loan was repaid to the Company by CPTC with amounts received in the initial distribution.

Item 8.01.

Other Events.

The Company has issued a press release dated October 3, 2011 regarding the entry by Varian International into the Loan Agreement and the Company's booking of an \$88 million order from CPTC. A copy of the press release is attached as Exhibit 99.1 and incorporated herein by reference.

Item 9.01.

Financial Statements and Exhibits.

(c) Exhibits.

99.1

Press Release dated October 3, 2011 entitled "Varian Medical Systems Books \$88 Million Order to Equip Proton Treatment Center."

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Varian Medical Systems, Inc.

By: /s/ JOHN W. KUO

Name:

John W. Kuo

Title:

Corporate Vice President, General
Counsel and Secretary

Dated: October 3, 2011

EXHIBIT INDEX

Number	Exhibit
99.1	Press Release dated October 3, 2011 entitled "Varian Medical Systems Books \$88 Million Order to Equip Proton Treatment Center."
