UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

October 27, 2011

Date of Report (Date of earliest event reported)

INTUITIVE SURGICAL, INC.

(exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-30713 (Commission File Number) 77-0416458 (I.R.S. Employer Identification No.)

1266 Kifer Road Sunnyvale, California 94086 (Address of Principal executive offices) (zip code)

(408) 523-2100

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:	
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01. Regulation FD Disclosure.

On October 27, 2011, the Board of Directors of Intuitive Surgical, Inc. (the "Company") authorized the Company to repurchase an additional \$500 million of the Company's outstanding common stock. With this authorization, the total amount available for share repurchases by the Company is \$568.2 million, which includes \$68.2 million remaining from the previous authorization in February 2011. A copy of the Company's press release announcing the increase in the share repurchase program is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

The information in this Item 7.01, including information incorporated herein by reference, is intended to be furnished and shall not be deemed "Filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

d) Exhibits.

99.1 Press Release, dated October 28, 2011

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.

INTUITIVE SURGICAL, INC.

Date: October 28, 2011

By /S/ MARSHALL L. MOHR

Name: Marshall L. Mohr
Title: Senior Vice President and

Chief Financial Officer

EXHIBIT INDEX

Exhibit No.

Description

99.1 Press Release, dated October 28, 2011

Exhibit 99.1

Contact:

Investor Relations

408-523-2161

INTUITIVE SURGICAL ANNOUNCES INCREASE IN SHARE REPURCHASE AUTHORIZATION

SUNNYVALE, CALIF. October 28, 2011 – Intuitive Surgical, Inc. (NASDAQ: ISRG), the industry leader in surgical robotics, today announced that its board of directors has authorized the Company to repurchase an additional \$500 million of the Company's outstanding common stock. With this authorization, the total amount available for share repurchases by the Company is \$568.2 million, which includes \$68.2 million remaining from the previous authorization in February 2011.

The timing and total amount of share repurchases will depend upon market conditions and may be made from time to time in open market purchases, privately negotiated transactions, accelerated stock repurchase programs, issuer self-tender offers or otherwise, as determined by the Company's management. The repurchases will be made in compliance with, and at such times as permitted by, federal securities law and may be suspended or discontinued at any time. The Company expects to fund the repurchase program through cash and investments. As of September 30, 2011, the Company had approximately \$1,887 million of cash, cash equivalents and investments.

About Intuitive's Products

FOR IMMEDIATE RELEASE

Intuitive Surgical, Inc. (NASDAQ: ISRG), headquartered in Sunnyvale, California, is the global technology leader in robotic-assisted, minimally invasive surgery. Intuitive Surgical develops, manufactures, and markets robotic technologies designed to improve clinical outcomes and help patients return more quickly to active and productive lives. The Company's mission is to extend the benefits of minimally invasive surgery to the broadest possible base of patients. Intuitive Surgical — Taking surgery beyond the limits of the human handTM.

About the da Vinci® Surgical System

The *da Vinci*[®] Surgical System is a breakthrough surgical platform designed to enable complex surgery using a minimally invasive approach. The *da Vinci*[®] Surgical System consists of an

ergonomic surgeon console or consoles, a patient-side cart with three or four interactive robotic arms, a high-performance vision system and proprietary $EndoWrist^{\circledast}$ instruments. Powered by state-of-the-art robotic and computer technology, the $da~Vinci^{\circledast}$ Surgical System is designed to scale, filter and seamlessly translate the surgeon's hand movements into more precise movements of the $EndoWrist^{\circledast}$ instruments. The net result is an intuitive interface with breakthrough surgical capabilities. By providing surgeons with superior visualization, enhanced dexterity, greater precision and ergonomic comfort, the $da~Vinci^{\circledast}$ Surgical System makes it possible for more surgeons to perform minimally invasive procedures involving complex dissection or reconstruction. This ultimately has the potential to raise the standard of care for complex surgeries, translating into numerous potential patient benefits, including less pain, a shorter recovery and quicker return to normal daily activities.

Intuitive \$, Intuitive Surgical \$, da Vinci \$, da Vinci \$ da Vinci

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This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are necessarily estimates reflecting the best judgment of our management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. These forward-looking statements should, therefore, be considered in light of various important factors, including the following: the impact of global and regional economic conditions and related credit markets and related impact on health care spending; health care reform legislation in the United States and its implications on hospital spending, reimbursement and fees which will be levied on certain medical device revenues; timing and success of product development and market acceptance of developed products; procedure counts; regulatory approvals, clearances and restrictions; guidelines and recommendations in the health care and patient communities; intellectual property positions and litigation; competition in the medical device industry and in the specific markets of surgery in which Intuitive Surgical operates; unanticipated manufacturing disruptions; delays in regulatory approvals of new manufacturing facilities or the inability to meet demand for products; and the results of the year-end audit and other risk factors under the heading `Risk Factors' in our report on Form 10-K for the year ended December 31, 2010, as updated from time to time by our quarterly reports on Form 10-Q and our

other filings with the Securities and Exchange Commission. Statements using words such as ``estimate," ``project," ``plan," ``intend," ``expect," ``anticipate," ``believe," "targeted" and similar expressions are intended to identify forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. We undertake no obligation to publicly update or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this press release or to reflect the occurrence of unanticipated events.