UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER

PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

May 15, 2014

Commission File Number: 000-29374

EDAP TMS S.A. Parc Activite La Poudrette Lamartine 4/6 Rue du Dauphine 69120 Vaulx-en-Velin - France

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F [x] Form 40-F []

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

SIGNATURES

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

Date: May 15, 2014 EDAP TMS S.A.

<u>/s/ ERIC SOYER</u> ERIC SOYER CHIEF FINANCIAL OFFICER

EDAP Reports First Quarter 2014 Results

- All Time Record High First Quarter Revenue and Positive Operating Income -

<u>Highlights</u>

- Record revenue of EUR 7.8 million for the first quarter 2014, a 31% year-over-year increase
- First quarter 2014 gross margin up nine points to 46%
- Second sequential quarter with positive operating income
- Ablatherm HIFU PMA moves to panel preparation phase with FDA
- Reimbursement of HIFU for prostate cancer granted in France
- HIFU officially recommended for prostate cancer by European Association of Urology

LYON, France, May 15, 2014 (GLOBE NEWSWIRE) -- EDAP TMS SA (Nasdaq:EDAP), the global leader in therapeutic ultrasound, announced today financial results for the first quarter ended March 31, 2014, and provided an update on recent strategic developments.

Marc Oczachowski, EDAP's Chief Executive Officer, stated, "We are very enthusiastic about the Company's all time record results for the first quarter driven by a growing demand for our HIFU devices. This reflects the strong market momentum for our new Focal One HIFU technology that was introduced in Europe last summer. It is very exciting to see the growing adoption of our products among the urology community as we now have a complete and unique HIFU offering including Focal One and Ablatherm to cover most market needs. As we advance through the second quarter, we have a strong sales backlog featuring ten lithotripters and two HIFU devices and remain focused on driving product sales."

Mr. Oczachowski continued, "Our HIFU technology has now gained a new status among the international urology community and health authorities. Just last month, France's Ministry of Health granted national reimbursement for prostate cancer treatment procedures using HIFU and the European Association of Urology updated its guidelines to recommend HIFU as primary and salvage prostate cancer therapy. In the US, we have now moved to the next phase with our PMA application which is panel preparation, the team is currently in the interactive review process with FDA."

First Quarter 2014 Results

Total revenue for the first quarter 2014 was EUR 7.8 million (USD 10.6 million), a 31% year-over-year increase compared to EUR 5.9 million (USD 7.8 million) for the first quarter 2013.

Total revenue for the HIFU division was EUR 3.3 million (USD 4.5 million) for the first quarter 2014, compared to EUR 1.4 million (USD 1.8 million) for the same period last year. Results for the first quarter 2014 included the sale of three Ablatherm and two Focal One devices.

For the three months ended March 31, 2014, total revenue for the lithotripsy division was EUR 4.5 million (USD 6.1 million), in line with EUR 4.5 million (USD 6.0 million), during the year ago period. During the first quarter 2014, the Company recorded sales of nine lithotripsy machines, comprised of seven Sonolith i-move devices, one Sonolith i-sys device, and one Sonolith Praktis, compared to a total of ten devices sold in the first quarter of 2013.

Gross profit for the first quarter 2014 was EUR 3.6 million (USD 4.9 million), compared to EUR 2.2 million (USD 2.9 million) for the year ago period. Gross profit margin was 45.9% in the first quarter 2014, compared to 37.1% in the year ago period. The change in the gross profit margin was mostly attributable to the increase in HIFU equipment sales.

Operating expenses were EUR 3.0 million (USD 4.1 million) for the first quarter 2014, compared to EUR 3.4 million (USD 4.5 million) for the same period of 2013. As a result of our increased device sales during the quarter, operating profit was EUR 558,000 (USD 765,000) for the first quarter of 2014, compared to an operating loss of EUR 1.2 million (USD 1.6 million) in the first quarter of 2013. Most noticeably, this is the first time the Company reported two sequential quarters with positive operating income.

Net income for the first quarter of 2014 was EUR 840,000 (USD 1.2 million), or EUR 0.04 per diluted share, as compared to net loss for the first quarter of 2013 of EUR 3.9 million (USD 5.1 million), or EUR 0.21 per diluted share.

At March 31, 2014, cash and cash equivalents, including short-term treasury investments, were EUR 6.4 million (USD 8.9 million). The EUR 1.2 million cash utilization in the first quarter was attributed to increased receivables related to increased sales in the first quarter to be collected over the second and third quarters.

Conference Call

EDAP will hold a conference call on Thursday, May 15, 2014 at 8:30 a.m. EDT to discuss the results. The dial-in numbers are 1-877-300-8521 for domestic callers and 1-412-317-6026 for international callers. The conference ID number for both is 10045526. A live webcast of the conference call will be available online from the investor relations page of the Company's corporate website at www.edap-tms.com.

After the live event, the webcast will remain available on EDAP's website, www.edap-tms.com, through June 15, 2014. In addition, a telephonic replay of the call will be available until May 22, 2014. The replay dial-in numbers are 1-877-870-5176 for domestic callers and 1-858-384-5517 for international callers. Please use event passcode 10045526.

About EDAP TMS SA

EDAP TMS SA markets today Ablatherm[®] for high-intensity focused ultrasound (HIFU) treatment of localized prostate cancer. HIFU treatment is shown to be a minimally invasive and effective treatment option with a low occurrence of side effects. Ablatherm-HIFU is generally recommended for patients with localized prostate cancer (stages T1-T2) who are not candidates for surgery or who prefer an alternative option, or for patients who failed radiotherapy treatment, Ablatherm-HIFU is approved and commercialized in Europe as a treatment for prostate cancer and is currently under regulatory review in the U.S. following submission of the Pre-Market Approval Application in February 2014 after the completion of a multi-center U.S. Phase II/III clinical trial under an Investigational Device Exemption (IDE) granted by the FDA. In February 2014, the Company introduced a new innovative HIFU device, the Focal One[®] dedicated to focal therapy of prostate cancer. Focal One[®] is CE marked but is not FDA approved. The Company also develops its HIFU technology for the potential treatment of certain other types of tumors. EDAP TMS SA also produces and commercializes medical equipment (the Sonolith[®] range) for treatment of urinary tract stones using extra-corporeal shockwave lithotripsy (ESWL). For more information on the Company, please visit http://www.edaptms.com, and http://www.hifu-planet.com.

Forward-Looking Statements

In addition to historical information, this press release may contain forward-looking statements.. Such statements00 are based on management's current expectations and are subject to a number of risks and uncertainties, including matters not yet known to us or not currently considered material by us, and there can be no assurance that anticipated events will occur or that the objectives set out will actually be achieved. Important factors that could cause actual results to differ materially from the results anticipated in the forward-looking statements include, among others the uncertainties of the U.S. FDA approval process, the clinical status and market acceptance of our HIFU devices and the continued market potential for our lithotripsy device.,. Factors that may cause such a difference also may include, but are not limited to, those described in the Company's filings with the Securities and Exchange Commission and in particular, in the sections "Cautionary Statement on Forward-Looking Information" and "Risk Factors" in the Company's Annual Report on Form 20-F. Ablatherm-HIFU treatment is in clinical trials, but not FDA-approved or marketed in the United States.

EDAP TMS S.A.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

(Amounts in thousands of Euros and U.S. Dollars, except per share data)

	Three Mont	Three Months Ended :		Three Months Ended :	
	March 31,	March 31,	March 31,	March 31,	
	2014	2013	2014	2013	
	Euros	Euros	\$US	\$US	
Sales of goods	5,414	3,693	7,415	4,860	
Net Sales of RPP and Leases	998	933	1,367	1,228	
Sales of spare parts and Services	1,349	1,301	1,848	1,712	
TOTAL NET SALES	7,762	5,927	10,630	7,800	
Other revenues	3	(0)	4	(0)	
TOTAL REVENUES	7,765	5,927	10,634	7,800	
Cost of goods	(2,815)	(2,243)	(3,855)	(2,951)	
Cost of RPP and Leases	(505)	(523)	(692)	(688)	
Cost of spare parts & services	(881)	(964)	(1,206)	(1,268)	
Cost of sales	(4,201)	(3,729)	(5,753)	(4,908)	
GROSS PROFIT	3,564	2,198	4,881	2,892	
Research & development expenses	(686)	(932)	(939)	(1,227)	
Marketing & Sales expenses	(1,441)	(1,534)	(1,973)	(2,019)	
G & A expenses	(879)	(922)	(1,204)	(1,213)	
Total operating expenses	(3,006)	(3,389)	(4,116)	(4,459)	
OPERATING PROFIT (LOSS)	558	(1,191)	765	(1,567)	
Interest (expense) income, net	259	(2,429)	355	(3,197)	
Currency exchange gains (loss), net	55	(212)	76	(279)	
Other income (loss), net	(3)	(2)	(4)	(2)	
INCOME (LOSS) BEFORE TAXES AND MINORITY INTEREST	870	(3,833)	1,192	(5,045)	
Income tax (expense) credit	(30)	(50)	(41)	(65)	
NET INCOME (LOSS)	840	(3,883)	1,151	(5,110)	

Earning per share – Basic	0.04	(0.21)	0.05	(0.27)
Average number of shares used in computation of EPS	21,789,670	18,716,013	21,789,670	18,716,013
Earning per share – Diluted	0.04	(0.21)	0.05	(0.27)
Average number of shares used in computation of EPS for positive net income	23,951,832	21,155,488	23,951,832	21,155,488

NOTE: Translated for convenience of the reader to U.S. dollars at the 2014 average three months noon buying rate of 1 Euro = 1.3695 USD, and 2013 average three months noon buying rate of 1 Euro = 1.3160 USD.

EDAP TMS S.A. CONSOLIDATED BALANCE SHEETS HIGHLIGHTS (UNAUDITED) (Amounts in thousands of Euros and U.S. Dollars)

	Mar. 31,	Dec. 31,	Mar. 31,	Dec. 31,	
	2014	2013	2014	2013	
	Euros	Euros	\$US	\$US	
Cash, cash equivalents and short term investments	6,443	7,681	8,877	10,584	
Total current assets	22,951	22,171	31,622	30,551	
Total current liabilities	12,117	11,589	16,695	15,969	
Shareholders' Equity	10,160	9,284	13,999	12,794	

NOTE: Translated for convenience of the reader to U.S. dollars at the noon buying rate of 1 Euro = 1.3778 USD, on March 31, 2014 and at the noon buying rate of 1 Euro = 1.3780 USD, on December 31, 2013.

EDAP TMS S.A.

CONDENSED STATEMENTS OF OPERATIONS BY DIVISION

THREE MONTHS ENDED MARCH 31, 2014

(Amounts in thousands of Euros)

	HIFU Division	UDS Division		FDA Trials	Corporate	Total After Consolidation	
Sales of goods	2,491	2,923				5,414	
Sales of RPPs & Leases	550	448				998	
Sales of spare parts & services	245	1,104				1,349	
TOTAL NET SALES	3,287	4,475				7,762	
Other revenues	3					3	
TOTAL REVENUES	3,290	4,475				7,765	
GROSS PROFIT	1,948 59%	6 1,617	36%			3,564	46%
Research & Development	(307)	(222)		(157)		(686)	
Total SG&A plus depreciation	(582)	(1,392)			(346)	(2,320)	
OPERATING PROFIT (LOSS)	1,058	3		(157)	(346)	558	

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