

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 14, 2018

Commission File Number: 0-29374

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 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 14, 2018
EDAP TMS S.A.

/s/ FRANCOIS DIETSCH
FRANCOIS DIETSCH
CHIEF FINANCIAL OFFICER

EDAP Reports 2018 First Quarter Results

- 2018 Q1 total revenue records a 6% increase year-over-year
- Focal One Final Additional Information submitted to FDA early May
- EDAP to attend American Urological Association congress in San Francisco, May 18-21, 2018

LYON, France, May 14, 2018 -- EDAP TMS SA (Nasdaq: EDAP) ("the Company"), the global leader in therapeutic ultrasound, announced today financial results for the first quarter of 2018, and provided an update on strategic and operational developments.

Marc Oczachowski, EDAP's Chief Executive Officer, said: "We are pleased with the return to growth in the first quarter, a trend we expect to sustain, and we look forward to feedback from the FDA following our submission for Focal One to the Agency. We also look forward to engaging with our customers and key opinion leaders at the upcoming annual meeting of the American Urological Association later this month where we will showcase the important benefits of Focal One for soft tissue ablation of the prostate."

First Quarter 2018 Results

Total revenue for the first quarter 2018 was EUR 9.2 million (USD 11.3 million), a 6% increase compared to EUR 8.7 million (USD 9.3 million) for the first quarter of 2017.

Total revenue in the HIFU business for the first quarter 2018 was EUR 2.4 million (USD 3.0 million), a 5% increase compared to EUR 2.3 million (USD 2.5 million) for the first quarter of 2017.

For the three months ended March 31, 2018, total revenue for the Lithotripsy division was EUR 6.7 (USD 8.3 million), a 6% increase compared to EUR 6.4 million (USD 6.8 million) during the year-ago period.

Gross profit for the first quarter 2018 was EUR 4.0 million (USD 4.9 million), compared to EUR 3.6 million (USD 3.8 million) for the year-ago period. Gross profit margin on net sales was 43.8% in the first quarter of 2018, compared to 41.1% in the year-ago period.

Operating expenses were EUR 4.4 million (USD 5.4 million) for the first quarter of 2018, compared to EUR 4.0 million (USD 4.3 million) for the same period in 2017.

Operating loss for the first quarter 2018 was EUR 0.4 million (USD 0.5 million), compared to an operating loss of EUR 0.4 million (USD 0.4 million) in the first quarter of 2017.

Net income for the first quarter 2018 was EUR 89 thousand (USD 109 thousand), or earnings of EUR 0.00 per diluted share, as compared to a net income of EUR 1.7 million (USD 1.8 million), or earnings of EUR 0.06 per diluted share in the year-ago period. Net income in the first quarter of 2018 included non-cash interest expense of EUR 647 thousand (USD 797 thousand) to adjust the accounting fair value of the outstanding warrants.

Conference Call

An accompanying conference call will be conducted by Philippe Chauveau, Chairman of the Board; Marc Oczachowski, Chief Executive Officer; and François Dietsch, Chief Financial Officer, to review the results. The call will be held at 8:30 AM ET, on Tuesday May 15, 2018. Please refer to the information below for conference call dial-in information and webcast registration.

Conference Call & Webcast

Tuesday, May 15, 2018 @ 8:30am Eastern Time

Domestic: 866-548-4713

International: 323-794-2093

Passcode: 9225280

Webcast: <http://public.viavid.com/index.php?id=129164>

Replays, Available through May 29, 2018:

Domestic: 844-512-2921

International: 412-317-6671

Replay PIN: 9225280

Following the live call, a replay will be available on the Company's website, www.edap-tms.com under "Investors Information."

About EDAP TMS SA

A recognized leader in the global therapeutic ultrasound market for almost 40 years, EDAP TMS develops, manufactures, promotes and distributes worldwide minimally invasive medical devices for urology using ultrasound technology. By combining the latest technologies in imaging and treatment modalities in its complete range of Robotic HIFU devices, EDAP TMS introduced the Focal One® (currently pending FDA clearance) in 2013 as the answer to all requirements for ideal prostate tissue ablation as a complement to the existing FDA cleared Ablatherm® Robotic HIFU and Ablatherm® Fusion. As a pioneer and key player in the field of extracorporeal shock wave lithotripsy (ESWL), EDAP TMS exclusively utilizes the latest generation of shock wave source in its Sonolith® range of ESWL systems. For more information on the Company, please visit <http://www.edap-tms.com>, and us.hifu-prostate.com.

Forward-Looking Statements

In addition to historical information, this press release may contain forward-looking statements. Such statements 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 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.

Company Contact

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Investor Contact

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EDAP TMS S.A.
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands of Euros and U.S. Dollars, except per share data)

	Three Months Ended:		Three Months Ended:	
	March 31, 2018 Euros	March 31, 2017 Euros	March 31, 2018 \$US	March 31, 2017 \$US
Sales of medical equipment	5,751	5,512	7,085	5,899
Net Sales of RPP and Leases	1,210	1,295	1,491	1,386
Sales of spare parts, supplies and Services	2,197	1,842	2,707	1,972
TOTAL NET SALES	9,158	8,648	11,283	9,257
Other revenues	-	26	-	28
TOTAL REVENUES	9,158	8,675	11,283	9,285
Cost of sales	(5,147)	(5,123)	(6,341)	(5,483)
GROSS PROFIT	4,011	3,551	4,942	3,801
Research & development expenses	(1,000)	(896)	(1,232)	(959)
S, G & A expenses	(3,413)	(3,075)	(4,205)	(3,291)
Total operating expenses	(4,413)	(3,971)	(5,437)	(4,250)
OPERATING PROFIT (LOSS)	(402)	(419)	(495)	(449)
Interest (expense) income, net	639	1,983	787	2,123
Currency exchange gains (loss), net	(15)	175	(18)	188
INCOME (LOSS) BEFORE TAXES AND MINORITY INTEREST	223	1,739	274	1,861
Income tax (expense) credit	(134)	(58)	(165)	(62)
NET INCOME (LOSS)	89	1,681	109	1,799
Earning per share – Basic	0.00	0.06	0.00	0.06
Average number of shares used in computation of EPS	28,997,866	28,839,099	28,997,866	28,839,099
Earning per share – Diluted	0.00	0.06	0.00	0.06
Average number of shares used in computation of EPS for positive net income	29,345,366	30,213,544	29,345,366	30,213,544

NOTE: Translated for convenience of the reader to U.S. dollars at the 2018 average three months' noon buying rate of 1 Euro = 1.2320 USD, and 2017 average three months noon buying rate of 1 Euro = 1.0703 USD.

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

	Mar. 31, 2018 Euros	Dec. 31, 2017 Euros	Mar. 31, 2018 \$US	Dec. 31, 2017 \$US
Cash, cash equivalents and short term investments	18,142	20,004	22,351	24,049
Total current assets	37,734	39,558	46,487	47,557
Total current liabilities	13,843	16,134	17,054	19,397
Shareholders' Equity	25,439	25,143	31,340	30,227

NOTE: Translated for convenience of the reader to U.S. dollars at the noon buying rate of 1 Euro = 1.2320 USD, on March 31, 2018 and at the noon buying rate of 1 Euro = 1.2022 USD, on December 31, 2017.

EDAP TMS S.A.
UNAUDITED CONDENSED STATEMENTS OF OPERATIONS BY DIVISION
THREE MONTHS ENDED MARCH 31, 2018
(Amounts in thousands of Euros)

	HIFU Division	UDS Division	Corporate	Total After Consolidation
Sales of goods	1,109	4,642		5,751
Sales of RPPs & Leases	861	349		1,210
Sales of spare parts & services	467	1,730		2,197
TOTAL NET SALES	2,437	6,721		9,158
Other revenues	-	-		-
TOTAL REVENUES	2,437	6,721		9,158
GROSS PROFIT	1,310	2,702		4,011
(% of Total Revenues)	53.7%	40.2%		43.8%
Research & Development	(611)	(389)		(1,000)
Total SG&A plus depreciation	(1,381)	(1,696)	(336)	(3,413)
OPERATING PROFIT (LOSS)	(682)	616	(336)	(402)