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

March 27, 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 [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: March 27, 2018 EDAP TMS S.A.

/s/ FRANCOIS DIETSCH FRANCOIS DIETSCH CHIEF FINANCIAL OFFICER

EDAP Reports 2017 Annual Results

2017 Highlights

- · 2017 revenue on par with 2016; lower HIFU capital equipment sales offset by double-digit HIFU treatment revenue growth
- · CMS issued C-Code allocation for reimbursement of HIFU for prostate tissue ablation in July
- · CIGNA to reimburse HIFU as salvage therapy for prostate cancer patients, at the start of 2018
- · Meeting scheduled for April 4 with FDA to advance on Focal One clearance final steps
- · 20% growth in our USD division, including lithotripsy keeps EDAP among world urology leaders
- · Solid liquidity position with cash balance of EUR 20.0 million as of December 31, 2017

LYON, France, March 27, 2018 -- EDAP TMS SA (Nasdaq:EDAP) ("the Company"), the global leader in therapeutic ultrasound, announced today financial results for the fourth quarter and twelve months ended December 31, 2017, and provided an update on strategic and operational developments.

Marc Oczachowski, EDAP's Chief Executive Officer, commented: "While 2017 revenue did not meet our expectations due to weak HIFU device sales, we achieved several notable milestones and are encouraged by our commercial and clinical progress as we begin 2018. The decline in our HIFU sales was driven primarily by the decision by U.S. hospital customers to delay purchases of a HIFU system while waiting for Focal One clearance. However, adoption of HIFU continues to grow as more physicians gain comfort and experience with this minimally invasive treatment option. CMS's issuance of a C-Code to reimburse HIFU for prostate tissue ablation and Cigna's decision to reimburse HIFU as a salvage therapy also provide important validation for our technology."

Mr. Oczachowkski continued, "We were also pleased to secure FDA clearance of our Ablatherm Fusion device and look forward to further discussion with the FDA regarding our 510(k) submission for Focal One. A meeting is scheduled with the FDA on April 4th, 2018 to clarify and reach a common understanding on the new clinical data submitted in our last application".

Fourth Quarter 2017 Results

Total revenue for the fourth quarter 2017 was EUR 10.6 million (USD 12.6 million), stable as compared to EUR 10.7 million (USD 11.4 million) for the fourth quarter of 2016.

Total revenue in the HIFU business for the fourth quarter was EUR 2.5 million (USD 2.9 million), a 46.5% decrease compared to EUR 4.6 million (USD 4.9 million) for the fourth quarter of 2016. This decrease was caused in part by the decision of some hospital customers to delay purchasing a HIFU device until the FDA issues a verdict on the Company's 510(k) submission for its Focal One device.

For the three months ended December 31, 2017, total revenue for the Lithotripsy division was EUR 8.2 (USD 9.7 million), a 33.9% increase compared to EUR 6.1 million (USD 6.5 million) during the year-ago period.

Gross profit for the fourth quarter 2017 was EUR 4.4 million (USD 5.3 million), compared to EUR 5.2 million (USD 5.6 million) for the year-ago period. Gross profit margin on net sales was 42.2% in the fourth quarter of 2017, compared to 41.8% in the year-ago period.

Operating expenses were EUR 4.6 million (USD 5.5 million) for the fourth quarter of 2017, compared to EUR 4.9 million (USD 5.2 million) for the same period in 2016.

Operating loss for the fourth quarter 2017 was EUR 0.2 million (USD 0.2 million), compared to an operating profit of EUR 0.3 million (USD 0.4 million) in the fourth quarter of 2016.

Net loss for the fourth quarter 2017 was EUR 91 thousand (USD 108 thousand), or a loss of EUR 0.00 per diluted share, as compared to a net loss of EUR 1.3 million (USD 1.4 million), or a loss of EUR 0.04 per diluted share in the year-ago period. Net income in the fourth quarter of 2017 included non-cash interest expense of EUR 0.4 million (USD 0.5 million) to adjust the accounting fair value of the outstanding warrants.

Year Ended 2017 Results

Total revenue for 2017 was EUR 35.7 million (USD 40.7 million), stable compared to EUR 35.6 million (USD 39.3 million) for the year ended December 31, 2016.

Total revenue in the HIFU business for 2017 was EUR 9.5 million (USD 10.8 million), a decrease of 31.2% compared to EUR 13.8 million (USD 15.2 million) for the year ended December 31, 2016.

Total revenue in the Lithotripsy business for 2017 was EUR 26.2 million (USD 29.9 million), an increase of 20.4% compared to EUR 21.8 million (USD 24.0 million) for the year ended December 31, 2016.

Gross profit for 2017 was EUR 14.8 million (USD 16.9 million), with gross profit margin on net sales of 41.6%, compared to 46.1% during the prior year period.

The Company recorded an operating loss for 2017 of EUR 2.0 million (USD 2.3 million), compared to an operating profit of EUR 0.4 million (USD 0.4 million) during the prior year period.

Full-year net loss was EUR 0.7 million (USD 0.8 million), or a loss of EUR 0.02 per diluted share, as compared to a net profit of EUR 3.8 million (USD 4.2 million), or a profit of EUR 0.13 per diluted share in 2016. Full-year net income included non-cash interest income of EUR 2.7 million (USD 3.0 million) to adjust the accounting fair value of the outstanding warrants.

At December 31, 2017, cash and cash equivalents were EUR 20.0 million (USD 24.0 million).

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 Wednesday, March 28, 2018. Please refer to the information below for conference call dial-in information and webcast registration.

Conference Call & Webcast

Wednesday, March 28, 2018 @ 8:30am Eastern Time

Domestic: 800-263-0877 International: 323-794-2094

Passcode: 8625502

Webcast: http://public.viavid.com/index.php?id=128794

Or on Company's web site: http://investor.edap-tms.com/events-and-presentations

Replays, Available through April 11, 2018:

Domestic: 844-512-2921 International: 412-317-6671 Replay PIN: 8625502 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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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:	
	December 31, 2017 Euros	December 31, 2016 Euros	December 31, 2017 \$US	December 31, 2016 \$US
Sales of medical equipment	7,213	7,566	8,552	8,093
Net Sales of RPP and Leases	1,219	1,231	1,446	1,317
Sales of spare parts, supplies and				
Services	2,177	1,875	2,581	2,006
TOTAL NET SALES	10,610	10,672	12,578	11,417
Other revenues	16	22	20	24
TOTAL REVENUES	10,626	10,695	12,598	11,441
Cost of sales	(6,193)	(5,492)	(7,342)	(5,875)
GROSS PROFIT	4,433	5,203	5,256	5,566
Research & development expenses	(1,099)	(1,135)	(1,302)	(1,214)
S, G & A expenses	(3,513)	(3,733)	(4,164)	(3,994)
Total operating expenses	(4,611)	(4,868)	(5,467)	(5,208)
OPERATING PROFIT (LOSS)	(178)	335	(211)	358
Interest (expense) income, net	414	(444)	490	(475)
Currency exchange gains (loss), net	(134)	(698)	(159)	(746)
INCOME (LOSS) BEFORE TAXES AND MINORITY INTEREST	100	(807)	119	(863)
Income tax (expense) credit	(192)	(471)	(227)	(504)
NET INCOME (LOSS)	(91)	(1,278)	(108)	(1,367)
Earning per share – Basic	(0.00)	(0.04)	(0.00)	(0.05)
Average number of shares used in computation of EPS	28,997,866	28,727,616	28,997,866	28,727,616
Earning per share – Diluted	(0.00)	(0.04)	(0.00)	(0.05)
Average number of shares used in computation of EPS for positive net				
income	28,997,866	28,727,616	28,997,866	28,727,616

NOTE: Translated for convenience of the reader to U.S. dollars at the 2017 average three months' noon buying rate of 1 Euro = 1.1855 USD, and 2016 average three months noon buying rate of 1 Euro = 1.0697 USD.

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

Twelve Months Ended:		Twelve Months Ended:	
December 31,	December 31,	December 31,	December 31,
			2016
		*	\$US
·	*	,	26,520
5,095	4,906	5,806	5,411
8,011	6,628	9,130	7,310
35,686	35,579	40,668	39,240
60	32	68	35
35,746	35,611	40,736	39,276
(20,938)	(19,200)	(23,861)	(21,176)
14,808	16,411	16,875	18,100
(3,881)	(3,868)	(4,423)	(4,266)
(12,954)	(12,152)	(14,762)	(13,402)
(16,835)	(16,019)	(19,185)	(17,668)
(2,027)	392	(2,310)	432
2,643	3,949	3,011	4,355
(909)	103	(1,036)	114
(294)	4,444	(335)	4,901
(388)	(602)	(442)	(663)
(681)	3,842	(776)	4,238
(0.02)	0.14	(0.02)	0.15
28,961,928	27,823,313	28,961,928	27,823,313
(0.02)	0.13	(0.02)	0.14
28,961,928	29,365,583	28,961,928	29,365,583
	December 31, 2017 Euros 22,580 5,095 8,011 35,686 60 35,746 (20,938) 14,808 (3,881) (12,954) (16,835) (2,027) 2,643 (909) (294) (388) (681) (0.02) 28,961,928 (0.02)	December 31, 2017 December 31, 2016 Euros Euros 22,580 24,045 5,095 4,906 8,011 6,628 35,686 35,579 60 32 35,746 35,611 (20,938) (19,200) 14,808 16,411 (3,881) (3,868) (12,954) (12,152) (16,835) (16,019) (2,027) 392 2,643 3,949 (909) 103 (294) 4,444 (388) (602) (681) 3,842 (0.02) 0.14 28,961,928 27,823,313 (0.02) 0.13	December 31, 2017 December 31, 2016 December 31, 2017 Euros \$US 22,580 24,045 25,732 5,095 4,906 5,806 8,011 6,628 9,130 35,686 35,579 40,668 60 32 68 35,746 35,611 40,736 (20,938) (19,200) (23,861) 14,808 16,411 16,875 (3,881) (3,868) (4,423) (12,954) (12,152) (14,762) (16,835) (16,019) (19,185) (2,027) 392 (2,310) 2,643 3,949 3,011 (909) 103 (1,036) (294) 4,444 (335) (388) (602) (442) (681) 3,842 (776) (0.02) 0.14 (0.02) 28,961,928 27,823,313 28,961,928 (0.02) 0.13 (0.02)

NOTE: Translated for convenience of the reader to U.S. dollars at the 2017 average twelve months noon buying rate of 1 Euro = 1.1396 USD, and 2016 average twelve months noon buying rate of 1 Euro = 1.1029 USD.

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

	Dec. 31, 2017 Euros	Sept. 30, 2017 Euros	Dec. 31, 2017 \$US	Sept. 30, 2017 \$US
Cash, cash equivalents and short term investments	20,004	18,036	24,049	21,306
Total current assets	39,738	37,172	47,774	43,912
Total current liabilities	16,134	12,676	19,397	14,975
Shareholders' Equity	25,158	24,947	30,246	29,471

NOTE: Translated for convenience of the reader to U.S. dollars at the noon buying rate of 1 Euro = 1.2022 USD, on December 31, 2017 and at the noon buying rate of 1 Euro = 1.1813 USD, on September 30, 2017.

EDAP TMS S.A. UNAUDITED CONDENSED STATEMENTS OF OPERATIONS BY DIVISION TWELVE MONTHS ENDED DECEMBER 31, 2017 (Amounts in thousands of Euros)

	HIFU Division	UDS Division	Corporate	Total After Consolidation	
Sales of goods	4,232	18,348		22,580	
Sales of RPPs & Leases	3,800	1,295		5,095	
Sales of spare parts & services	1,445	6,566		8,011	
TOTAL NET SALES					
	9,477	26,210		35,686	
Other revenues	36	23		60	
TOTAL REVENUES	9,513	26,233		35,746	
GROSS PROFIT					
(% of Total Revenues)	4,782 50.3%	10,026 38.29	%	14,808	41.4%
Research & Development	(2,469)	(1,413)		(3,881)	
Total SG&A plus depreciation	(5,014)	(6,578)	(1,362)	(12,954)	
OPERATING PROFIT (LOSS)	(2,701)	2,035	(1,362)	(2,027)	