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

EDAP TMS S.A. Files on

February 16, 2010

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 whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes [ ] No [x]

This report on Form 6-K is hereby incorporated by reference in the registration statement of EDAP TMS S.A. on Forms F-3, file number 333-136811, 333-147762 and 333-152738.

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: February 16, 2010
EDAP TMS S.A.

/s/ MARC OCZACHOWSKI
MARC OCZACHOWSKI
CHIEF EXECUTIVE OFFICER

EDAP Reports Record Full Year 2009 Preliminary Unaudited Results

2009 Highlights:

- **Record revenue of EUR 24.9 million (USD 34.7 million), up 7.9% year-over-year**
- **Ablatherm-HIFU RPP treatments increased 24.0% year-over-year**
- **Strong EUR 12.7 million (USD 18.2 million) cash position**

LYON, France, Feb. 16, 2010 (GLOBE NEWSWIRE) -- EDAP TMS SA (Nasdaq:EDAP), the global leader in therapeutic ultrasound, announced today preliminary top-line financial revenues for the full year ended December 31, 2009. Revenue for the full year 2009 was approximately EUR 24.9 million, an increase of 7.9% from the full year 2008.

The Company reported record revenue growth for the third consecutive year.

Marc Oczachowski, EDAP's Chief Executive Officer, commented, "We are pleased with our continued growth in 2009. Our top line revenue reflected the strong sales trend achieved in our lithotripsy business driven by our new and innovative Sonolith-Isys device. Full year 2009 revenue also reflected ongoing market penetration and geographic expansion of HIFU RPP activity as a preferred and validated business model."

Mr. Oczachowski, concluded, "Delivering innovation through our technology and business models has been our growth driver for the past three years, and we are continuing to focus efforts on providing non-invasive, user-friendly treatment solutions to patients and practitioners. We are also prudently managing our financial resources to preserve our strong cash position, as we aggressively move forward with our long-term growth strategy."

About EDAP TMS SA

EDAP TMS SA develops and markets Ablatherm, the most advanced and clinically proven choice 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. Approved in Europe as a treatment for prostate cancer, Ablatherm-HIFU (High Intensity Focused Ultrasound) is currently undergoing evaluation in a multicenter U.S. Phase II/III clinical trial under an Investigational Device Exemption granted by the FDA. The Company also is developing this technology for the potential treatment of certain other types of tumors. EDAP TMS SA also produces and commercializes medical equipment for treatment of urinary tract stones using extra-corporeal shockwave lithotri psy (ESWL). For more information on the company, please visit *http://www.edap-tms.com*, *http://www.hifu-planet.com* and *http://www.pcaresearch.com*.

Forward-Looking Statements

In addition to historical information, this press release contains forward-looking statements that involve risks and uncertainties. These include statements regarding the company's growth and expansion plans. Such statements are based on management's current expectations and are subject to a number of uncertainties and risks that could cause actual results to differ materially from those described in these forward-looking statements. Factors that may cause such a difference include, but are not limited to, those described in the company's filings with the Securities and Exchange Commission. Ablatherm-HIFU treatment is in clinical trials, but not FDA-approved or marketed in the United States.

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