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 of the Securities Exchange Act of 1934

For the month of February 2009

Commission File Number 000-28508

Flamel Technologies S.A.

(Translation of registrant's name into English)

Parc Club du Moulin à Vent 33 avenue du Dr. Georges Levy 69693 Vénissieux Cedex France (Address of principal executive offices)

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

Indicate by check mark whether 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 o

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-_

No 🗹

Form 40-F o

INFORMATION FILED WITH THIS REPORT

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99.1 Press release regarding exercise of option with respect to Medusa technology license, dated February 17, 2008.

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, thereunto duly authorized.

Dated: February 18, 2009

Flamel Technologies S.A.

By: /s/ Stephen H. Willard

Name:Stephen H. WillardTitle:Chief Executive Officer

EXHIBIT INDEX

Exhibit Number 99.1 **Description** Press release regarding exercise of option with respect to Medusa technology license, dated February 17, 2009.



Flamel Technologies Announces Merck Serono's Exercise of Option to License Medusa Technology for Development of an Extended-Release Formulation of a Therapeutic Protein

Lyon, France - February 17, 2009 — Flamel Technologies (NASD: FLML) announced today that it has entered into a full license agreement with Merck Serono, a division of Merck KGaA, Darmstadt, Germany, to apply Flamel's Medusa technology for the extended release of an already-marketed therapeutic protein from Merck Serono's portfolio. Following the promising results generated in the frame of the initial collaboration established between Flamel and Merck Serono in 2007, Merck Serono has made the decision to exercise its option to pursue its partnership with Flamel. Under the terms of the agreement, Merck Serono will make a payment of EUR 5 million to Flamel for the exercise of this option. Flamel will be eligible to receive further payments based on the achievement of certain research and development milestones. Merck Serono will fund all research and development efforts to be performed at Flamel. Other terms of the license agreement were not disclosed.

Stephen H. Willard, Flamel's Chief Executive Officer, stated, "The progress we have achieved with Merck Serono thus far has met and exceeded our expectations. Merck Serono has been an excellent partner and we look forward to expanding our work on this program. We believe that our formulations can offer important advantages to patients' quality of life and demonstrate one of the key strengths of the Medusa platform, its applicability to a wide range of molecules."

"We have been extremely pleased with the data we have seen thus far for this program," said Bernhard Kirschbaum, Executive Vice President Research and Development at Merck Serono. "As Flamel's Medusa[®] technology allows, among other significant advantages, for long sustained release of injectable proteins compared to standard formulations, we hope to offer an improved convenience for patients requiring treatment by injection. As a consequence, we anticipate that exploiting this technology will lead to better treatment outcomes for patients."

About Medusa®

Medusa[®], a self-assembled poly-aminoacid nanoparticle system, is a versatile carrier for the development of novel long-acting formulations of proteins, peptides, and other large molecules. The Medusa[®] platform has many advantages in that it enables the controlled delivery of fully-human, non-denatured proteins with full bioactivity. Flamel believes that this will lead to a third-generation of protein-based drugs offering greater effectiveness and reduced toxicity and side effects to patients. A new microparticulate adaptation of Medusa[®] has been developed that potentially can extend pharmacokinetics to two weeks or more, offering an infusion-like release profile, also without loss of bioactivity.

About Flamel Technologies

Flamel Technologies, S.A. is a biopharmaceutical company principally engaged in the development of two unique polymer-based delivery technologies for medical applications. Flamel's Medusa technology is designed to deliver controlled-release formulations of therapeutic proteins and peptides and other molecules, without reduction in bioactivity. Micropump[®] is a controlled release and taste-masking technology for the oral administration of small molecule drugs; it is the intellectual platform licensed by GlaxoSmithKline for COREG CR[®].

Contact:

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This document contains a number of matters, particularly as related to the status of various research projects and technology platforms, that constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The document reflects the current view of management with respect to future events and is subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward-looking statements. These risks include risks that products in the development stage may not achieve scientific objectives or milestones or meet stringent regulatory requirements, uncertainties regarding market acceptance of products in development, the impact of competitive products and pricing, and the risks associated with Flamel's reliance on outside parties and key strategic alliances. These and other risks are described more fully in Flamel's Annual Report on the Securities and Exchange Commission Form 20-F for the year ended December 31, 2007.