

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 March 2010

Commission File Number 000-28508

Flamel Technologies
(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

Form 40-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

No

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

INFORMATION FILED WITH THIS REPORT

Document Index

99.1 Press Release regarding 2009 fourth quarter results, dated March 8, 2010, issued by Flamel Technologies S.A.

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: 8 March, 2010

Flamel Technologies, S.A.

By: /s/ Stephen H. Willard

Name: Stephen H. Willard

Title: Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press Release regarding 2009 fourth quarter results, dated March 8, 2010, issued by Flamel Technologies S.A.



Flamel Technologies Announces Fourth Quarter and Year-End 2009 Results

Fourth quarter highlights include exercise of license option by Pfizer; initiation of Phase IIa trial of Interferon-alpha XL; and increased number of new projects in development.

Lyon, France – March 8, 2010 - Flamel Technologies (NASDAQ: FLML) today announced its financial results for the fourth quarter and year ended December 31, 2009.

Fourth Quarter Highlights:

- Pfizer exercised the option to license the Medusa platform for development of an improved intravenous formulation of an already-marketed molecule acquired in its merger with Wyeth;
- The Company signed new feasibility studies applying the Medusa platform to three new molecules with two top-ten pharmaceutical companies;
- The Company announced that the Agence Nationale de Recherche sur le SIDA et les Hépatites Virales (ANRS) initiated a twelve week study comparing two dosage forms of IFN-alpha XL plus ribavirin versus Peg-Intron® plus ribavirin in genotype 1 Hepatitis C patients.

Stephen H. Willard, Flamel's chief executive officer, stated, "Flamel continued to expand its portfolio of projects with leading pharmaceutical companies during the fourth quarter. We are now working with eight of the top twenty-five pharmaceutical companies in the world. We have progressed in the projects undertaken over the past two years, and expect that these projects will be the subject of increased communication during the coming year."

Mr. Willard continued, "In 2009, Flamel continued to strengthen its balance sheet and to diversify its revenue stream while increasing its cash position. The work conducted by our scientists has resulted in the advancement of many of our development programs during the year, as reflected by the higher license and research revenues detailed in today's announcement. The portfolio of projects that we are currently developing is robust and reflects the progress that we have made in expanding our intellectual property platforms and leveraging these in partnership with leading companies such as Pfizer, Merck Serono, Baxter, and GlaxoSmithKline, as well as others."

Flamel's Fourth Quarter Results

Flamel reported total revenues for the fourth quarter 2009 increased to \$10.6 million versus total revenues of \$9.5 million in the year-ago period. The increase was led by higher license and research revenue as well as product sales and services, offset by lower Coreg CR royalties. License and research revenue increased 37% to \$4.7 million during the fourth quarter of 2009, versus \$3.4 million in the fourth quarter of 2008. Product sales and services during the period, related primarily to production of Coreg CR microparticles, were \$4.3 million versus \$2.6 million during the year-ago period. Other revenues, consisting primarily of royalty income from GSK on the sales of Coreg CR, declined year-over-year to \$1.7 million in the fourth quarter versus \$3.4 million during the year-ago quarter.



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Total costs and expenses during the quarter were \$16.5 million and included non-cash compensation-related expense of \$1.2 million; total costs and expenses in the fourth quarter of 2008 were \$12.4 million. Costs of goods and services sold were \$3.6 million in the fourth quarter of 2009 versus \$2.4 million in the year-ago period. Research and development costs in the fourth quarter totaled \$9.0 million versus \$7.8 million in the year-ago period. Selling, general, and administrative costs were \$4.0 million in the fourth quarter versus \$2.3 million in the fourth quarter of 2008, which period included the reversal of an accrual for SG&A related expenses of \$2.0 million.

Net loss for the fourth quarter of 2009 was (\$5.7 million) versus a net loss of (\$2.7 million) in the year-ago period. Net loss per share (basic) was (\$0.23) versus (\$0.11) in the fourth quarter of 2008.

Flamel's 2009 Annual Results

For the calendar year 2009, Flamel reported total revenue of \$42.1 million, compared to \$38.6 million in 2008. License and research revenue during 2009 increased 57% to \$20.8 million in 2009, as compared to \$13.2 million in 2008. Product sales and services for the year 2009 were \$11.9 million, compared to \$13.5 million in the year-ago period. Other revenues, consisting primarily of royalty income from sales of Coreg CR by GSK, totaled \$9.4 million in 2009 versus \$11.8 million in 2008.

Total costs and expenses in 2009 were \$53.9 million and included non-cash compensation expense of \$5.6 million. Total costs and expenses in 2008 totaled \$51.8 million. Costs of goods and services sold were \$10.1 million in 2009 versus \$9.6 million in 2008. SG&A in 2009 totaled \$13.3 million versus \$12.9 million in 2008. Research & development expenses were \$30.4 million versus \$29.3 million in 2008.

The Company reported a net loss for the year 2009 of (\$11.4 million) or (\$0.47) per share versus a net loss in 2008 of (\$12.1 million), or (\$0.50) per share. Flamel finished 2009 with \$44.1 million in cash and marketable securities as compared to \$37.1 million at the end of 2008.

About Flamel Technologies

Flamel Technologies is a drug delivery company with two intellectual property platforms: Micropump, for the controlled release of drugs best absorbed in the small intestine; and Medusa, for the controlled release of proteins, peptides, and other molecules injected subcutaneously or administered intravenously. Both of these platforms offer potential advantages with respect to efficacy and the reduction of side-effects, in addition to the obvious benefits associated with more convenient dosing regimens. For detailed company information, including copies of this and other press releases, see Flamel's web site: www.flamel.com.



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A conference call to discuss these results is scheduled for 8:30 AM Eastern Standard Time March 9, 2010. The dial-in number is (1) 877-857-6173 (Conference ID number: 2453008). International callers are invited to dial-in +1 719-325-4888.

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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. We undertake no obligation to update these forward-looking statements as a result of new information, future events or otherwise. You should not place undue reliance on these forward-looking statements. For further information on the Company, please review Flamel's Annual Report on the Securities and Exchange Commission Form 20-F for the year ended December 31, 2008.



Condensed Consolidated Statements of Operations
(amounts in thousands, except per share data)

	Three months ended December 31,		Twelve months ended December 31,	
	2008	2009	2008	2009
Revenue:				
License and research revenue	\$ 3,406	\$ 4,659	\$ 13,247	\$ 20,815
Product sales and services	2,631	4,269	13,549	11,871
Other revenues	3,429	1,663	11,823	9,432
Total revenue	<u>9,466</u>	<u>10,591</u>	<u>38,619</u>	<u>42,118</u>
Costs and expenses:				
Cost of goods and services sold	(2,358)	(3,610)	(9,621)	(10,118)
Research and development	(7,835)	(8,952)	(29,269)	(30,416)
Selling, general and administrative	(2,252)	(3,966)	(12,911)	(13,337)
Total	<u>(12,445)</u>	<u>(16,528)</u>	<u>(51,801)</u>	<u>(53,871)</u>
Profit (loss) from operations	(2,979)	(5,937)	(13,182)	(11,753)
Interest income net	287	76	1,414	425
Foreign exchange gain (loss)	(73)	205	3	(83)
Other income (loss)	22	(41)	181	(28)
Income (loss) before income taxes	<u>(2,743)</u>	<u>(5,697)</u>	<u>(11,584)</u>	<u>(11,439)</u>
Income tax benefit (expense)	17	-	(500)	-
Net income (loss)	<u>\$ (2,726)</u>	<u>\$ (5,697)</u>	<u>\$ (12,084)</u>	<u>\$ (11,439)</u>
Earnings (loss) per share				
Basic earnings (loss) per ordinary share	<u>\$ (0.11)</u>	<u>\$ (0.23)</u>	<u>\$ (0.50)</u>	<u>\$ (0.47)</u>
Diluted earnings (loss) per share	<u>\$ (0.11)</u>	<u>\$ (0.23)</u>	<u>\$ (0.50)</u>	<u>\$ (0.47)</u>
Weighted average number of shares outstanding (in thousands) :				
Basic	24,127	24,250	24,082	24,225
Diluted	24,127	24,250	24,082	24,225