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 2011

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 x 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 x

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 2010 fourth quarter and annual results, dated March 3, 2011.

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.

Flamel Technologies, S.A.

Dated: March 4, 2011

By: /s/ Stephen H. Willard
Name: Stephen H. Willard
Title: Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press release regarding 2010 fourth quarter and annual results, dated March 3, 2011

FLAMEL TECHNOLOGIES

Flamel Technologies Announces Fourth Quarter and Year-End 2010 Results

Fourth quarter highlights include achievement of key milestones with Merck Serono for development of long-acting formulation of interferon beta 1-a

Lyon, France – March 3, 2011 - Flamel Technologies (NASDAQ: FLML) today announced its financial results for the fourth quarter and year ended December 31, 2010.

Fourth Quarter and Recent Highlights:

- Flamel received €3 million after achieving its first clinical milestone with Merck Serono for the development of an extended-release formulation of interferon beta 1-a.
- The Company announced receipt of a further €1 million payment following certain technical achievements requested by Merck Serono.
- Flamel and GSK are in negotiations for a new supply agreement for Coreg CR following the expiration of the old supply agreement on December 31, 2010; Flamel expects that these will be successful.

Stephen H. Willard, Flamel's chief executive officer, stated, "Our profitability in the fourth quarter resulted from the progress we made in the development of an extended-release formulation of interferon beta1-a with Merck Serono. For the year 2010, we reduced our level of loss as we strengthened our relationships with many of the world's largest pharmaceutical companies."

Mr. Willard continued, "Other licensing agreement discussions, including those that we were negotiating in 2010, are still ongoing. The number of licensing negotiations is greater now than at any point in the history of the Company."

Flamel's Fourth Quarter Results

Flamel reported total revenues for the fourth quarter 2010 increased to $13.5 million versus total revenues of $10.6 million in the year-ago period. The increase was led by higher license and research revenue as well as higher Coreg CR royalties. License and research revenues were $8.8 million during the fourth quarter of 2010, versus $4.7 million in the fourth quarter of 2009. Product sales and services during the period, related primarily to production of Coreg CR microparticles, were $2.2 million versus $4.3 million during the year-ago period. Other revenues, consisting primarily of royalty income from GSK on the sales of Coreg CR, increased year-over-year to $2.4 million in the fourth quarter versus $1.7 million during the year-ago quarter.

FLAMEL TECHNOLOGIES

Total costs and expenses during the fourth quarter declined to $11.4 million versus $16.5 million in the year-ago period. Costs of goods and services sold were $1.9 million in the fourth quarter of 2010 versus $3.6 million in the year-ago period. Research and

development costs in the fourth quarter of 2010 totaled $6.9 million versus $9.0 million in the year-ago period. Selling, general, and administrative costs were $2.7 million in the fourth quarter 2010 versus $4.0 million in the fourth quarter of 2009.

Net income for the fourth quarter of 2010 was $2.7 million versus a net loss of ($5.7 million) in the year-ago period. Net income per share (basic and diluted) was $0.11 versus a net loss per share (basic) of ($0.23) in the fourth quarter of 2009.

Flamel's 2010 Annual Results

For the calendar year 2010, Flamel reported total revenues of $37.1 million, compared to $42.1 million in 2009. License and research revenue during 2010 was $19.7 million versus $20.8 million in 2009. Product sales and services for the year 2010 were $8.2 million, compared to $11.9 million in the year-ago period. Other revenues, consisting primarily of royalty income from sales of Coreg CR by GSK, totaled $9.2 million in 2010 versus $9.4 million in 2009.

Total costs and expenses declined in 2010 to $47.0 million from $53.9 million in 2009. Costs of goods and services sold were $6.9 million in 2010 versus $10.1 million in 2009. Research & development expenses were $28.7 million versus $30.4 million in 2009. SG&A in 2010 totaled $11.3 million versus $13.3 million in 2009.

The Company reported a net loss for the year 2010 of ($9.0 million) or ($0.37) per share versus a net loss in 2009 of ($11.4 million), or ($0.47) per share. Flamel finished 2010 with $31.3 million in cash and marketable securities.

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.

A conference call to discuss these results is scheduled for 8:30 AM Eastern Standard Time March 4, 2011. The dial-in number is: 1-800-581-5838 (Conference ID number: 8906309). International callers are invited to dial-in + 1 719-325-2159.

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FLAMEL TECHNOLOGIES

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, 2009.

FLAMEL TECHNOLOGIES

Condensed Consolidated Statements of Operations

(amounts in thousands, except per share data)

	Three months ended December 31,		Twelve months ended December 31,	
	2009	2010	2009	2010
Revenue:				
License and research revenue	$ 4,659	$ 8,839	$ 20,815	$ 19,704
Product sales and services	4,269	2,210	11,871	8,180
Other revenues	1,663	2,402	9,432	9,210
Total revenue	10,591	13,451	42,118	37,094
Costs and expenses:				
Cost of goods and services sold	(3,610)	(1,869)	(10,118)	(6,914)
Research and development	(8,952)	(6,863)	(30,416)	(28,687)
Selling, general and administrative	(3,966)	(2,674)	(13,337)	(11,333)
Total	(16,528)	(11,406)	(53,871)	(46,934)
Profit (loss) from operations	(5,937)	2,045	(11,753)	(9,840)
Interest income net	76	114	425	440
Foreign exchange gain (loss)	205	196	(83)	109
Other income (loss)	(41)	432	(28)	525
Income (loss) before income taxes	(5,697)	2,787	(11,439)	(8,766)
Income tax expense	-	(109)	-	(209)
Net Income (loss)	$ (5,697)	$ 2,678	$ (11,439)	$ (8,975)
Earnings (loss) per share				
Basic earnings (loss) per ordinary share	$ (0.23)	$ 0.11	$ (0.47)	$ (0.37)
Diluted earnings (loss) per share	$ (0.23)	$ 0.11	$ (0.47)	$ (0.37)
Weighted average number of shares outstanding (in thousands) :				
Basic	24,250	24,472	24,225	24,411
Diluted	24,250	24,941	24,225	24,411