MYREXIS, INC.

FORM 10-Q
(Quarterly Report)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended December 31, 2011

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-34275

MYREXIS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**26-3996918**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
305 Chipeta Way Salt Lake City, Utah	**84108**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (801) 214-7800

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of February 6, 2012, the registrant had 26,378,731 shares of common stock outstanding.

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PART I – FINANCIAL INFORMATION
MYREXIS, INC.
Balance Sheets (Unaudited)
(In thousands, except per share amounts)

	December 31, 2011	June 30, 2011
Assets		
Current assets:		
Cash and cash equivalents	$ 16,199	$ 19,189
Marketable investment securities	64,500	86,446
Prepaid expenses and other assets	428	1,861
Total current assets	81,127	107,496
Equipment and leasehold improvements:		
Equipment	4,332	4,320
Leasehold improvements	1,194	1,192
	5,526	5,512
Less accumulated depreciation	2,863	2,197
Net equipment and leasehold improvements	2,663	3,315
Long-term marketable investment securities	22,294	10,243
Other assets	206	206
Total assets	$ 106,290	$ 121,260
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 933	$ 1,210
Accrued liabilities	2,056	2,100
Total current liabilities	2,989	3,310
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value, authorized 5,000 shares; no shares issued and outstanding	—	—
Common stock, $0.01 par value, authorized 60,000 shares; 26,374 shares issued and outstanding at December 31, 2011; 26,053 shares issued and outstanding at June 30, 2011	264	261
Additional paid-in capital	204,779	203,301
Accumulated other comprehensive income	13	47
Accumulated deficit	(101,755)	(85,659)
Total stockholders' equity	103,301	117,950
Total liabilities and stockholders' equity	$ 106,290	$ 121,260

See accompanying notes to financial statements (unaudited).

MYREXIS, INC.
Statements of Operations (Unaudited)
(In thousands, except per share amounts)

	Three Months Ended December 31,		Six Months Ended December 31,	
	2011	2010	2011	2010
Research revenue	$ —	$ 23	$ —	$ 130
Costs and expenses:				
Research and development expense	3,769	4,995	8,069	10,710
General and administrative expense	3,841	4,240	8,226	8,802
Total costs and expenses	7,610	9,235	16,295	19,512
Operating loss	(7,610)	(9,212)	(16,295)	(19,382)
Other income, net	100	1,349	199	1,509
Net loss	$ (7,510)	$ (7,863)	$ (16,096)	$ (17,873)
Loss per basic and diluted share	$ (0.29)	$ (0.31)	$ (0.62)	$ (0.71)
Weighted-average shares used to compute net loss per basic and diluted share	26,251	25,339	26,164	25,288

See accompanying notes to financial statements (unaudited).

MYREXIS, INC.
Statements of Cash Flows (Unaudited)
(In thousands)

	Six Months Ended December 31, 2011	2010
Cash flows from operating activities:		
Net loss	$(16,096)	$(17,873)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	673	842
Share-based compensation expense	1,003	2,761
Gain on sale of marketable investment securities	(1)	—
Gain on sale of assets	(3)	—
Changes in operating assets and liabilities:		
Prepaid expenses	1,044	(385)
Accounts receivable	—	(3)
Other current assets	389	(232)
Accounts payable	(277)	(579)
Accrued liabilities	(44)	83
Net cash used in operating activities	(13,312)	(15,386)
Cash flows from investing activities:		
Capital expenditures for equipment	(32)	(50)
Proceeds from sale of assets	14	—
Purchase of marketable investment securities	(69,691)	(94,396)
Proceeds from maturity of marketable investment securities	79,553	87,453
Net cash provided by (used in) investing activities	9,844	(6,993)
Cash flows from financing activities:		
Net proceeds from common stock issued under share-based compensation plans	478	763
Net cash provided by financing activities	478	763
Net decrease in cash and cash equivalents	(2,990)	(21,616)
Cash and cash equivalents at beginning of period	19,189	35,911
Cash and cash equivalents at end of period	$ 16,199	$ 14,295

See accompanying notes to financial statements (unaudited).

MYREXIS, INC.

Notes to Financial Statements (Unaudited)

(1) Organization and Basis of Presentation

(a) Organization and Business Description

Myrexis, Inc. ("Myrexis" or the "Company") is a biotechnology company focused on the development of small-molecule therapeutics with novel chemical structures and distinct mechanisms of action. The Company has generated a strong pipeline of differentiated product candidates in oncology and autoimmune diseases. The Company is focused on maximizing the therapeutic and commercial value of these molecules by developing potential first-in-class and/or best-in-class treatment options for patients with unmet needs.

The Company's operations are located in Salt Lake City, Utah.

In September 2011, the Company announced that it had completed an in-depth review of its drug development pipeline, incorporating extensive inputs from both internal and independent external analyses. As a result, the Company made a strategic business decision to suspend any further development of its lead drug candidate Azixa, which was in Phase 2 development for the treatment of advanced primary and metastatic tumors with brain involvement. This decision was not based on any single factor. The review took into consideration the accumulated data from clinical trials to date, the evolving competitive environment in Glioblastoma multiforme, or GBM, including ongoing studies of competitive drug candidates that are in more advanced stages of development, input from key opinion leaders, updated cost and timing estimates, and other factors affecting the risks and opportunities relating to the development of Azixa. On the basis of these inputs, the Company concluded that completing its ongoing Phase 2b clinical trial of Azixa to determine its efficacy in GBM would require a disproportionate investment of time and resources relative to its likelihood of technical and regulatory success, when compared to the Company's other programs.

In November 2011, the Company announced a corporate reorganization to realign the Company's resources with its development strategy and clinical initiatives following the suspension of further development of Azixa. The reorganization included an immediate reduction in the Company's workforce by 15 employees or approximately 20%. In connection with the reorganization, the Company recorded one-time severance costs of approximately $0.6 million in the three months ended December 31, 2011. After taking into account the November 18, 2011 reduction in force, the Company has reduced its headcount by over 55% in the last twelve months and by over 67% since its emergence as a public company in July 2009.

(b) Basis of Accounting and Combination

The accompanying financial statements have been prepared by Myrexis in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and pursuant to the applicable rules and regulations of the Securities and Exchange Commission (the "SEC"). In the opinion of management, the accompanying financial statements contain all adjustments necessary to present fairly all financial statements in accordance with GAAP, which consists of only normal recurring adjustments. The financial statements herein should be read in conjunction with the Company's audited financial statements and notes thereto for the fiscal year ended June 30, 2011, included in the Company's Annual Report on Form 10-K for the year ended June 30, 2011. Operating results for the three and six months ended December 31, 2011 may not necessarily be indicative of results to be expected for any other interim period or for the full year.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(2) Marketable Investment Securities

The amortized cost, gross unrealized holding gains and losses, and fair value for available-for-sale securities by major security type and class of security at December 31, 2011 and June 30, 2011 were as follows:

(In thousands)	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Estimated fair value
December 31, 2011:				
Available-for-sale:				
Money market funds	$ 15,652	$ —	$ —	$ 15,652
Corporate bonds and notes	1,000	—	—	1,000
Federal agency issues	85,534	12	—	85,546
Total	$102,186	$ 12	$ —	$102,198

(In thousands)	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Estimated fair value
June 30, 2011:				
Available-for-sale:				
Money market funds	$ 18,071	$ —	$ —	$ 18,071
Corporate bonds and notes	13,963	12	—	13,975
Federal agency issues	82,431	40	(6)	82,465
Total	$114,465	$ 52	$ (6)	$114,511

In addition, the Company holds $200,000 restricted cash in an 18-month certificate of deposit as collateral for a corporate purchasing card program and $48,000 in a restricted cash account as collateral for office equipment. These amounts are included in long-term marketable securities on the balance sheet as of December 31, 2011.

Maturities of debt securities classified as available-for-sale are as follows at December 31, 2011:

(In thousands)	Amortized cost	Estimated fair value
December 31, 2011:		
Available-for-sale:		
Due within one year	$ 64,486	$64,500
Due after one year through three years	22,048	22,046
	$ 86,534	$86,546

(3) Fair Value Measurements

The fair value of the Company's financial instruments reflects the amounts that the Company estimates to receive in connection with the sale of an asset or be paid in connection with the transfer of a liability in an orderly transaction between market participants at the measurement date (exit price). The fair value hierarchy prioritizes the use of inputs used in valuation techniques into the following three levels:

Level 1—quoted prices in active markets for identical assets and liabilities.

Level 2—observable inputs other than quoted prices in active markets for identical assets and liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Some of the Company's marketable securities primarily utilize broker quotes in a non-active market for valuation of these securities.

Level 3—unobservable inputs.

The substantial majority of the Company's financial instruments are valued using quoted prices in active markets or based on other observable inputs. The following table sets forth the fair value of the Company's financial assets that the Company re-measured at December 31, 2011 and June 30, 2011:

(In thousands)	Level 1	Level 2	Level 3	Total
December 31, 2011				
Money market funds	$15,652	$ —	$ —	$ 15,652
Corporate bonds and notes	—	1,000		1,000
Federal agency issues	—	85,546	—	85,546
Total	$15,652	$86,546	$ —	$102,198

(In thousands)	Level 1	Level 2	Level 3	Total
June 30, 2011				
Money market funds	$18,071	$ —	$ —	$ 18,071
Corporate bonds and notes	—	13,975	—	13,975
Federal agency issues	—	82,465	—	82,465
Total	$18,071	$96,440	$ —	$114,511

(4) Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income. Specifically, the Company includes in other comprehensive income the changes in unrealized gains and losses on its holdings of available-for-sale securities, which are excluded from its net loss. The following table sets forth the calculation of the Company's comprehensive net loss:

	Three Months Ended December 31,		Six Months Ended December 31,	
(In thousands)	2011	2010	2011	2010
Net loss	$(7,510)	$(7,863)	$(16,096)	$(17,873)
Other comprehensive loss:				
Change in unrealized gain and on marketable securities	8	(39)	34	(15)
Total comprehensive loss	$(7,502)	$(7,902)	$(16,062)	$(17,888)

(5) Earnings Per Share

The loss per basic and diluted share is calculated by dividing net loss by the weighted-average number of shares outstanding during the reporting period. For the three and six months ended December 31, 2011, there were outstanding potential common equivalent shares of 2,879,978 and 2,553,457, respectively, compared to 2,909,861 and 2,574,713, respectively, in the same periods in 2010 which were excluded from the computation of diluted earnings per share because the effect would have been anti-dilutive. These potential dilutive common equivalent shares may be dilutive to basic earnings per share in future periods.

The calculation of diluted loss per share is the same as the basic loss per share since the inclusion of any potentially dilutive securities would be anti-dilutive.

(6) Share-Based Compensation

The Company recognizes compensation expense using a fair-value based method for costs related to stock options and other equity-based compensation. The expense is measured based on the grant date fair value of the awards that are expected to vest, and the expense is recorded over the applicable requisite service period. In the absence of an observable market price for a share-based award, the fair value is based upon a valuation methodology that takes into consideration various factors, including the exercise price of the award, the expected term of the award, the current price of the underlying shares, the expected volatility of the underlying share price based on peer companies, the expected dividends on the underlying shares and the risk-free interest rate.

The Company has adopted two equity incentive plans, the Myrexis, Inc. 2009 Employee, Director and Consultant Equity Incentive Plan (the "Equity Incentive Plan") and the Myrexis, Inc. 2009 Employee Stock Purchase Plan (the "ESPP"). The Company is authorized to issue a total of 10,063,259 shares under the plans.

The Company's Equity Incentive Plan provides for the issuance of common stock based awards, including restricted stock, restricted stock units, stock options, stock appreciation rights and other equity based awards to its directors, officers, employees and consultants.

The Company's ESPP is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code of 1986, as amended. Full-time employees of Myrexis who will own less than five percent of Myrexis's outstanding shares of common stock are eligible to contribute a percentage of their base salary, subject to certain limitations, over the course of six-month offering periods for the purchase of shares of common stock. The purchase price for shares of common stock purchased under the ESPP will equal 85 percent of the fair market value of a share of common stock at the beginning or end of the relevant six-month offering period, whichever is lower.

Share-based compensation expense recognized for Myrexis employees included in the statements of operations for the three and six months ended December 31, 2011 and 2010 was as follows:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2011	2010	2011	2010
Research and development	$ 204	$ 585	$ 539	$ 1,264
General and administrative	314	738	464	1,497
Total employee stock-based compensation expense	$ 518	$ 1,323	$ 1,003	$ 2,761

During the three months ended December 31, 2011, the Company granted 637,400 options and 53,400 restricted stock units under the Equity Incentive Plan. The weighted-average exercise price was $2.82 per share for options and the weighted average grant price was $2.82 per share for restricted stock units. During the six months ended December 31, 2011, the Company granted 1,097,400 options and 53,400 restricted stock units under the Equity Incentive Plan. The weighted-average exercise price was $2.79 per share for options and the weighted average grant price was $2.82 per share for restricted stock units.

During the three months ended December 31, 2011, 166,154 stock options were exercised at a weighted average price of $1.44 per share. During the six months ended December 31, 2011, 173,339 stock options were exercised at a weighted average price of $1.44. As of December 31, 2011, unrecognized compensation expense related to the unvested portion of stock options granted to Myrexis employees was approximately $2.8 million, which will be recognized over a weighted-average period of 2.74 years.

The fair value of each option grant is estimated on the grant date using the Black-Scholes option pricing model. Expected option lives were based on historical option lives under the Myrexis equity compensation plan and volatilities used in fair value calculations are based on a benchmark of peer companies with similar expected option lives. The related expense is recognized on a straight-line basis over the vesting period.

Currently eligible Myrexis employees are participating in the ESPP offering period that began December 1, 2011 and will close May 31, 2012. Expense associated with Myrexis employees participating in the ESPP for the three and six month periods ended December 31, 2011 was approximately $60,000 and $120,000, respectively.

(7) Income Taxes

In accordance with the interim reporting requirements, the Company uses an estimated annual effective rate for computing its provision for income taxes. The effective rate was zero for each of the three and six month periods ended December 31, 2011 and 2010.

The Company reduces deferred tax assets by a valuation allowance if, based on the weight of evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. At December 31, 2011, the Company has certain deferred tax assets, primarily from NOL's and research and development tax credits generated since June 30, 2009, which have been offset in total by a valuation allowance.

The Company has adopted Accounting for Uncertainty in Income Taxes . For the three months and six months ended December 31, 2011, the Company recorded approximately $43,000 and $89,000, respectively, of additional liability for unrecognized tax benefits related to research tax credits. The Company includes any interest and penalties associated with any unrecognized tax benefits within the provision for income taxes on the statement of operations. The Company does not anticipate any material changes in the liability for unrecognized benefits in the next 12 months.

(8) Commitments and Contingencies

Myrexis has assumed all rights and obligations under a license agreement for exclusive rights to utilize certain intellectual property rights related to the drug candidate Azixa. Under this agreement Myrexis may pay milestone payments totaling up to $23 million. Payment of milestones is based on the occurrence of potential future events, including the initiation of certain human clinical trials, filing of a New Drug Application with the U.S. Food and Drug Administration, receipt of regulatory approval, and the achievement of specific revenue targets.

Various legal claims have been filed against Myrexis that relate to the ordinary course of business and are currently pending resolution. In the opinion of management and upon consultation with legal counsel, the ultimate resolution of these matters is not expected to have a material adverse effect on the financial position or future results of operations of Myrexis.

(9) Reorganization

On November 18, 2011, Myrexis announced a corporate reorganization to realign the Company's resources with its development strategy and clinical initiatives following the suspension of further development of Azixa. The reorganization included an immediate reduction in workforce by 15 employees or approximately 20%. In connection with the restructuring, the Company recorded one-time severance costs of approximately $0.6 million in the three months ended December 31, 2011. Of this amount, $247,000 was paid during the three months ended December 31, 2011, and $365,000 was accrued and is expected to be paid during the third fiscal quarter. These one-time expenses, which are reflected in the statement of operations, include $50,000 in general and administrative and $550,000 in research and development for the three and six months ended December 31, 2011.

Also, in conjunction with the reorganization, the Company has assessed whether there are indicators of impairment of certain fixed assets and has evaluated whether the carrying value of assets with impairment indicators is recoverable. Management has concluded that no impairment loss should be recognized in the quarter ended December 31, 2011.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read this discussion together with the financial statements, related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q. The following discussion may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed under "Risk Factors" in our Annual Report on Form 10-K for the year ended June 30, 2011 filed with the Securities and Exchange Commission. These risks could cause our actual results to differ materially from any future performance suggested below.

Overview

We are a biotechnology company focused on the development of small-molecule therapeutics with novel chemical structures and distinct mechanisms of action. We have generated a strong pipeline of differentiated product candidates in oncology and autoimmune diseases. We are focused on maximizing the therapeutic and commercial value of these molecules by developing potential first-in-class and/or best-in-class treatment options for patients with unmet needs.

We operate in one reportable operating segment, drug development.

In September 2011, we announced we had completed an in-depth review of our drug development pipeline, incorporating extensive inputs from both internal and independent external analyses. As a result, we made a strategic business decision to suspend any further development of our lead drug candidate Azixa, which was in Phase 2 development for the treatment of advanced primary and metastatic tumors with brain involvement. This decision was not based on any single factor. Our review took into consideration the accumulated data from our clinical trials to date, the evolving competitive environment in Glioblastoma multiforme, or GBM, including ongoing studies of competitive drug candidates that are in more advanced stages of development, input from key opinion leaders, updated cost and timing estimates, and other factors affecting the risks and opportunities relating to the development of Azixa. On the basis of these inputs, we concluded that completing the ongoing Phase 2b clinical trial of Azixa to determine its efficacy in GBM would require a disproportionate investment of time and resources relative to its likelihood of technical and regulatory success, when compared to our other programs.

In November 2011, we announced a corporate reorganization to realign our resources with our development strategy and clinical initiatives following the suspension of further development of Azixa. The reorganization included an immediate reduction in our workforce by 15 employees or approximately 20%. We estimate that the reorganization will generate annual expense reductions of approximately $1.8 million, primarily from savings in employee salaries and benefits and reductions in software maintenance costs. In connection with the reorganization, we recorded one-time severance costs of approximately $0.6 million in the three months ended December 31, 2011. After taking into account the November 18, 2011 reduction in force, we have reduced our headcount by over 55% in the last twelve months and by over 67% since our emergence as a public company in July 2009.

Our drug research and development expenses include costs incurred for our drug candidates. Currently, the only costs we track by each drug candidate are external costs such as services provided to us by clinical research organizations, manufacturing of drug supply, and other outsourced research. We do not assign or allocate internal costs such as salaries and benefits, facilities costs, lab supplies and the costs of preclinical research and studies to individual development programs. In the past, we have also incurred costs related to external research collaborations. We track all underlying principal costs associated with our research collaborations. All development costs for our drug candidates and external research collaborations are expensed as incurred.

We do not know if we will be successful in developing any of our drug candidates. While expenses associated with the completion of our current clinical programs are expected to be substantial and increase, we believe that accurately projecting total program-specific expenses through commercialization is not possible at this time. The timing and amount of these expenses will depend upon the costs associated with potential future clinical trials of our drug candidates, regulatory requirements, advancement of our preclinical programs and product manufacturing costs, many of which cannot be determined with accuracy at this time. We are also unable to predict when, if ever, material net cash inflows will commence from our drug candidates. This is due to the numerous risks and uncertainties associated with the duration and cost of clinical trials, which vary significantly over the life of a project as a result of unanticipated events arising during clinical development, including:

- the scope, rate of progress, and expense of our clinical trials and other research and development activities;
- the length of time required to enroll suitable subjects;
- the number of subjects that ultimately participate in the trials;
- the efficacy and safety results of our clinical trials and the number of additional required clinical trials;
- the terms and timing of regulatory approvals;

- our ability to market, commercialize, manufacture and supply, and achieve market acceptance for our drug candidates that we are developing or may develop in the future; and
- the filing, prosecuting, defending or enforcing of patent claims or other intellectual property rights.

A change in the outcome of any of the foregoing variables in the development of a drug candidate could mean a significant change in the costs and timing associated with the development of that drug candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate to complete clinical development of a drug candidate, or if we experience significant delays in the enrollment of patients in any of our clinical trials, we would be required to expend significant additional financial resources and time on the completion of clinical development.

Our Oncology Programs

We currently have two active programs in oncology:

- **Hsp90 Inhibitor Program** . MPC-3100 is an Hsp90 inhibitor we are developing for the treatment of cancer. In November 2011, we presented the results of an open-label, dose-escalating, multiple-dose, Phase 1 study of MPC-3100 in 26 patients with recurrent cancer or cancer refractory to available systemic therapy. MPC-0767 is a novel L-alanine ester pro-drug of MPC-3100 that was designed to have improved aqueous solubility compared to MPC-3100.
- **Cancer Metabolism Inhibitor Program** . MPC-8640 is our lead preclinical compound for the Cancer Metabolism Inhibitor, or CMI, program. It is currently in IND enabling studies.

Our Hsp90 Inhibitor Program for the Treatment of Cancer

Heat shock protein 90, or Hsp90, is involved in the folding and stabilization of many proteins, including mutant oncogenes that become reliant on Hsp90 to maintain their activity, making them particularly sensitive to Hsp90 inhibition. Targeted therapies against such mutant oncogenes, such as ALK, HER2, FLT3 and B-RAF, have proven to be efficacious in the clinic and we believe that by inhibiting these targets through a different mechanism, we can improve clinical efficacy and the duration of response, either as monotherapy or in combination with these targeted therapies.

The potential for Hsp90 inhibitors to improve therapeutic outcomes across a number of oncogene “addicted” cancers, coupled with the oral bioavailability, long half-life and the relative safety profile of our compounds under development makes our Hsp90 inhibitor program an exciting therapeutic and commercial opportunity.

MPC-3100 and MPC-0767: Preclinical Development

MPC-3100 and MPC-0767, a pro-drug of MPC-3100, are fully synthetic, orally bio-available, non-geldanamycin Hsp90 inhibitors that have shown significant and broad preclinical anti-tumor activity in mouse models of human cancers. These unique molecules are structurally distinct from the geldanamycin family of early Hsp90 inhibitors, which are associated with certain toxicities. MPC-3100 inhibits Hsp90 by binding to the same site as geldanamycin and has displayed potent anti-cancer activity in multiple *in vitro* and *in vivo* models. MPC-3100 significantly and dose-dependently reduced tumor growth in studies conducted in mice implanted with a variety of human cancer cell lines, including colon, prostate, myeloid leukemia, small-cell lung, gastric, breast, and ovarian cancers. In April 2011, we reported additional preclinical data on our Hsp90 inhibitor program at the annual meeting of the American Association for Cancer Research in Orlando, Florida. The data presented included a demonstration that the combination of MPC-3100 with other targeted therapies, including erlotinib and sorafenib, showed greater *in vivo* anti-tumor activity compared to either agent alone, suggesting the potential of combining MPC-3100 with these targeted cancer therapies in the clinic. We also presented a preliminary assessment of the novel L-alanine ester pro-drug of MPC-3100, MPC-0767, which was designed to have improved aqueous solubility compared to MPC-3100. Animal studies showed that the pro-drug displayed pharmacokinetics comparable to MPC-3100 and equivalent efficacy, inducing significant tumor regressions.

MPC-3100: Clinical Development

We submitted an IND application for MPC-3100 in the first quarter of 2009 and initiated patient enrollment of a Phase 1 clinical trial in the second quarter of 2009 to investigate the safety and tolerability of MPC-3100, pharmacokinetics, and the potential for anti-tumor activity. The Phase 1 study was an open-label, dose-escalating, multiple-dose study in which 26

patients aged 45-85 years with recurrent cancer or cancer refractory to available systemic therapy were treated with MPC-3100. Patients received oral MPC-3100 either once daily for 21 days followed by seven days off (cohorts 1-5, at doses of 50, 100, 165, 245, and 340mg/m ^{2}, respectively) or continuously for a 28-day cycle at doses spaced 12 hours apart (cohorts 6-7, at total daily doses of 480mg and 640mg, respectively). The primary objective of the Phase 1 study was to determine the safety and tolerability of MPC-3100 in cancer patients. The study also included secondary objectives such as characterization of the pharmacokinetic parameters, determining anti-tumor activity of MPC-3100, and evaluating certain pharmacodynamic biomarkers. In November 2011, we presented the results of this study at the AACR-NCI-EORTC Molecular Targets and Cancer Therapeutics meeting in San Francisco. The study demonstrated that MPC-3100 was generally safe and well tolerated at doses below 600mg per day. The most common adverse events were gastrointestinal, including diarrhea, nausea, and vomiting. Pharmacokinetic analysis indicated that the maximum plasma concentration, or Cmax, and the area under the curve, or AUC (0-12h), increased proportionally to the dose of MPC-3100. The terminal plasma half-life of MPC-3100 ranged from 4.8 to 21.4 hours with a mean half-life of 11.2 hours. The best clinical response was stable disease (12/26; 46%), with a median duration of 11.1 weeks (range 3.0-52.3 weeks). On target activity of MPC-3100 was confirmed by biomarker analysis, which suggested effective and persistent *in vivo* inhibition of Hsp90.

MPC-3100 and MPC-0767: Future Clinical Development

We are conducting non-clinical studies as well as other technical, regulatory and market assessments with the objective of identifying optimal cancer indications and drug combination regimens to potentially advance one or both of our Hsp90 inhibitor compounds into Phase 2 clinical development.

Our Cancer Metabolism Inhibitor Program

Our CMI program is focused on the inhibition of Nicotinamide phosphoribosyltransferase, or Nampt, an enzyme involved in the production of Nicotinamide Adenine Dinucleotide, or NAD, which is an essential cofactor for the production of cellular energy that is critical for cell survival, growth, and DNA repair.

Cancer cells, in addition to spending energy on rapid, unregulated growth, must also invest significant energy on DNA synthesis and repair mechanisms to cope with the DNA damage. As a result, cancer cells are more susceptible to metabolic downshifts than healthy cells, and the NAD depletion caused by Nampt inhibitors has a greater effect on tumors versus normal tissue.

MPC-8640 is our lead preclinical compound for our CMI program. MPC-8640 is an orally bio-available pro-drug of a follow-on molecule to our prior CMI drug candidate, MPC-9528, that has enhanced solubility and distinct pharmacokinetic advantages and is being developed for the treatment of cancer. Both the active moiety of MPC-8640 (MPI-0487316) as well as MPC-9528 inhibit Nampt *in vitro* and in cells at picomolar drug concentrations and are tumoricidal in every cancer line tested to date representing 17 different tumor tissue types. Both compounds display on-target activity by potently reducing NAD levels, which leads to inhibition of glycolysis, energy deprivation and cell death in tumor cells, while NAD levels in normal tissues are less affected. In preclinical efficacy studies, MPC-8640 and MPC-9528 causes dramatic tumor regressions in multiple tumor types when administered orally with either a low daily dosing or a higher intermittent dose regimen and are well tolerated. This anti-tumor activity is dose-dependent and tightly correlated to the level of NAD depletion, confirming the on-target mechanism of action. The sensitivity of tumor cells to our Nampt inhibitors *in vitro* appears to parallel their anti-tumor potency in xenograft models and is linked to basal Nampt expression levels. Nampt expression levels may therefore have utility for predicting tumor response to Nampt inhibitors. Nicotinic acid is converted to NAD through an alternative pathway that is dependent upon the enzyme Nicotinic acid phosphoribosyltransferase (Naprt1) which does not involve Nampt. In tumor cell types with sufficient Naprt expression to support this NAD biosynthetic pathway, nicotinic acid (niacin, Vitamin B3) can completely block the NAD-reducing and tumoricidal activity of MPC-9528. Our studies have found that approximately 40% of tumor cell lines are deficient in Naprt1 and in these cells, nicotinic acid has little to no effect on MPC-9528 tumoricidal activity. Furthermore, in animal model studies, a combination of nicotinic acid with MPC-9528 increases the tolerated dose of MPC-9528, while still causing growth inhibition of tumors deficient in Naprt1. This demonstrates the potential to increase the therapeutic index and efficacy of a Nampt inhibitor by combining it with nicotinic acid to treat patients with tumors that are deficient in Naprt1. A diagnostic method designed to measure Naprt1 expression could be used to identify those patients with Naprt1 deficient tumors that are most likely to benefit from this combination therapy.

Additional preclinical studies of MPC-9528 support the potential of Nampt inhibitors for broad spectrum tumoricidal activity as monotherapy and in a variety of combinations with other agents. Inhibition of Nampt by MPC-9528 was shown to exhibit synergistic anti-tumor activity when coupled with DNA damaging agents, such as alkylating agents and thymidylate synthase inhibitors. These common classes of chemotherapy drugs also reduce NAD cellular levels as a result of their mechanism of action, specifically by activating the NAD-consuming enzyme poly (ADP-ribose) polymerase (PARP). The mechanism of action of our Nampt inhibitors is distinct from these other agents, leading to a combined effect on cellular NAD levels and synergistic anti-tumor activity.

In June 2011, preclinical studies on MPC-9528 and MPI-0487316, a structurally distinct Nampt inhibitor, were presented at the annual meeting of the American Society of Clinical Oncology (ASCO) in Chicago. Oral administration of either MPC-9528 or MPI-0487316 resulted in tumor regressions in animal model studies across multiple dosing schedules. MPC-8640 is a pro-drug of MPI-0487316 with enhanced solubility and distinct pharmacokinetic advantages. In November 2011, we presented data from preclinical studies of MPC-8640 at the AACR-NCI-EORTC Molecular Targets and Cancer Therapeutics meeting in San Francisco. In these studies, mice with HT1080 human fibrosarcoma xenograft tumors were treated orally with MPC-8640 on either a once-daily or twice-daily dosing schedule. After one week of treatment, the mice demonstrated complete tumor growth inhibition at lower doses and substantial tumor regression at higher doses. Significantly, tumor regression could be achieved well below the maximum tolerated dose of MPC-8640 and the anti-tumor response observed after one week of dosing was maintained for at least one week without further treatment. The results also demonstrated that MPC-8640 is effectively converted into active Nampt inhibitor, either in the gut or immediately upon absorption, as evidenced by the lack of significant plasma concentrations of intact MPC-8640. Taken together, these results demonstrate that oral treatment with MPC-8640 is an effective mode of delivery of active Nampt inhibitor and that administration of this drug results in significant anti-tumor activity in animal models of cancer. We are currently conducting IND enabling studies on MPC-8640.

Our Small-Molecule Autoimmune Disease Program

MPI-0485520 is our lead preclinical compound in our small-molecule anti-interferon program for autoimmune diseases. It has demonstrated proof of concept activity in an animal model of the autoimmune disease rheumatoid arthritis, or RA. A medicinal chemistry program of lead optimization is ongoing to select a candidate compound for IND-enabling studies.

Oral Anti-interferon Program for the Treatment of Autoimmune Diseases

IKK ε and TBK1 are kinases that serve as key regulators of the pathway that activates alpha and beta interferon expression. Inhibition of these kinases thereby inhibits a major pro-inflammatory pathway involved in a number of autoimmune diseases, including RA, Lupus and psoriasis. We have demonstrated in preclinical studies that treatment with our oral anti-interferons, or OAI's, inhibits the interferon response in several animal models, including significant inhibition of this response and reduction in the severity of clinical symptoms in a mouse model of RA.

MPI-0485520 is an orally-available small molecule that potently and selectively inhibits IKK ε and TBK1 and is our lead preclinical compound in our small molecule anti-interferon program for autoimmune diseases. MPI-0485520 exhibits high oral bio-availability, favorable absorption, distribution, metabolism, and excretion pharmacokinetic properties and efficacy in an *in vivo* mouse model of RA. In cellular models of type I interferon production, MPI-0485520 potently inhibits induction of type I interferons (IFN α / β) following stimulation of a variety of receptors that mediate the type-I interferon to pathogens, such as TLR3, TLR4, RIG-I, and MDA-5. Inhibition of type I interferon production by IKK ε /TBK1 inhibitors may benefit patients with autoimmune disorders such as RA, systemic lupus erythematosus (SLE), scleroderma, Sjögren's syndrome, and polymyositis. In April 2011, results from preclinical studies of MPI-0485520 were presented at the European League Against Rheumatism (EULAR) Annual European Congress of Rheumatology in London. In a proof of concept study, in the well characterized collagen-induced mouse model of arthritis, mice treated with MPI-0485520 show a dose-dependent and statistically significant reduction in the severity of clinical symptoms and paw and joint histopathology, as well as lower weight loss compared to control mice. MPI-0485520 is one compound out of an extensive portfolio of potent and selective IKK epsilon/TBK1 inhibitors identified by our oral anti-interferon program. A medicinal chemistry program of lead optimization is ongoing to select a candidate compound for IND-enabling studies.

Critical Accounting Policies and Use of Estimates

Critical accounting policies are those policies which are both important to the portrayal of a company's financial condition and results and require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our critical accounting policies are as follows:

- income taxes;

- clinical trial expenses; and
- share-based payment expense.

Income Taxes

Our income tax provision is based on income before taxes and is computed using the liability method in accordance with Accounting Standards Codification, or ASC, 740— *Income Taxes* . Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using tax rates projected to be in effect for the year in which the differences are expected to reverse. Significant estimates are required in determining our provision for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations, or the expected results from any future tax examinations. Various internal and external factors may have favorable or unfavorable effects on our future provision for income taxes. Those factors include, but are not limited to, changes in tax laws, regulations and/or rates, the results of any future tax examinations, changing interpretations of existing tax laws or regulations, changes in estimates of prior years' items, past levels of R&D spending, acquisitions, changes in our corporate structure, and changes in overall levels of income before taxes all of which may result in periodic revisions to our provision for income taxes.

Developing our provision for income taxes, including our effective tax rate and analysis of potential uncertain tax positions, if any, requires significant judgment and expertise in federal and state income tax laws, regulations and strategies, including the determination of deferred tax assets and liabilities and any estimated valuation allowance we deem necessary to offset deferred tax assets. We have determined that a valuation allowance is necessary to fully offset our deferred tax assets. Our judgment and tax strategies are subject to audit by various taxing authorities. While we believe we have provided adequately for our uncertain income tax positions in our consolidated financial statements, adverse determination by these taxing authorities could have a material adverse effect on our consolidated financial condition, results of operations or cash flows. Interest and penalties on income tax items are included as a component of overall income tax expense.

Clinical Trial Expenses

The cost of our clinical trials is based, in part, on estimates of the services received and efforts expended pursuant to contracts with numerous clinical trial centers and clinical research organizations, or CROs. In the normal course of business, we contract with third parties to perform various clinical trial activities in the ongoing development of our drug candidates. The financial terms of these agreements vary from contract to contract, are subject to negotiation and may result in uneven payment flows. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients or the completion of portions of the clinical trial or similar conditions. The objective of our accrual policy is to match the recording of expenses in our financial statements to the actual services received and efforts expended. As such, we recognize direct expenses related to each patient enrolled in a clinical trial on an estimated cost-per-patient basis as services are performed. In addition to considering information from our clinical operations group regarding the status of our clinical trials, we rely on information from CROs, such as estimated costs per patient, to calculate our accrual for direct clinical expenses at the end of each reporting period. For indirect expenses, which relate to site and other administrative costs to manage our clinical trials, we rely on information provided by the CRO, including costs incurred by the CRO as of a particular reporting date, to calculate our indirect clinical expenses. In the event of early termination of a clinical trial, we would recognize expenses in an amount based on our estimate of the remaining non-cancelable obligations associated with the winding down of the clinical trial, which we would confirm directly with the CRO.

If our CROs were to either under or over report the costs that they have incurred or if there is a change in the estimated per patient costs, it could have an impact on our clinical trial expenses during the period in which they report a change in estimated costs to us. Adjustments to our clinical trial accruals primarily relate to indirect costs, for which we place significant reliance on our CROs for accurate information at the end of each reporting period.

Share-Based Payment Expense

Share-based compensation expense standards set accounting requirements for "share-based" compensation to employees, including employee stock purchase plans, and require us to recognize, as expense, in our statements of operations, the grant date fair value of our stock options and other equity-based compensation. The determination of grant date fair value is estimated using an option-pricing model, which includes variables such as the terms of each grant, the expected volatility of our share price, the exercise behavior of our employees, interest rates, and dividend yields. These variables are projected based on our historical data, experience, and other factors. Changes in any of these variables could result in material adjustments to the expense recognized for share-based payments.

Results of Operations for the Three and Six Months Ended December 31, 2011 and 2010

Revenue

Research revenue is comprised of research services related to short-term research agreements. In connection with our March 2011 corporate reorganization, we stopped all contract research services activity. As a result, research revenue for each of the three and six months ended December 31, 2011 was $0 compared to $23,000 and $130,000 in the same periods in 2010. Research revenue for the three and six months ended December 31, 2010 reflects revenues earned utilizing our expertise to identify and characterize protein-protein interactions.

Research and Development

Research and development expenses are comprised primarily of salaries and related personnel costs, laboratory supplies, equipments costs, facilities expense, and costs associated with our clinical trials. Research and development expenses for the three and six months ended December 31, 2011 were $3.8 million and $8.1 million compared to $5.0 million and $10.7 million in the same periods last year. The respective 24% decrease in each period was primarily due to:

- decreased preclinical development costs of approximately $1.8 million and $3.7 million, respectively, resulting from reductions in headcount; partially offset by
- increased external drug candidate costs of approximately $0.5 million and $1.2 million, respectively.

Research and development costs for the three and six months ended December 31, 2011 and 2010 were as follows:

(In thousands)	Three Months Ended December 31, 2011	2010	Six Months Ended December 31, 2011	2010
External costs, drug candidates:				
Azixa	$ 288	$ 272	$ 1,428	$ 654
MPC-4326	11	(214)	24	(144)
MPC-3100	59	258	175	788
MPC-0767	228	—	546	—
MPC-8640	336	—	485	—
MPC-9528	—	91	—	223
MPI-0485520	12	—	15	—
Sub-total direct costs	934	407	2,673	1,521
Internal costs, drug candidates	1,543	1,294	2,741	2,541
Preclinical development costs	1,292	3,140	2,655	6,317
External research collaborations	—	154	—	331
Total research and development	$ 3,769	$ 4,995	$ 8,069	$ 10,710

The timing and amount of any future expenses, completion dates, and revenues for our drug candidates is not readily determinable due to the early stage of these development programs.

We expect our research and development expenses will fluctuate over the next several years as we conduct additional clinical trials to support the clinical development of our Hsp90 inhibitor program, and advance other drug candidates into clinical development. In the near term, we expect to see reduced external drug development costs as a result of the decision to suspend further development of Azixa which will be partially offset by increased costs associated with our preclinical-stage drug candidates.

General and Administrative

General and administrative expenses consist primarily of salaries and related personnel costs for business development, executive, legal, finance and accounting, information technology, human resources, and facilities expenses. General and administrative expenses for the three and six months ended December 31, 2011 were $3.8 million and $8.2 million compared to $4.2 million and $8.8 million for the three and six months ended December 31, 2010. These 10% and 7% decreases in general and administrative expenses during the three and six months ended December 31, 2011, respectively, were due primarily to reductions in headcount.

Other Income

Other income of $100,000 and $199,000 for the three and six months ended December 31, 2011, compared to $1.3 million and $1.5 million for the same periods in 2010, respectively, reflects a one-time $1.2 million grant received in November 2010 as a part of the qualifying therapeutic discovery project under section 48D of the Internal Revenue Code in addition to interest income earned on our marketable investment securities. The decrease in other income of 92% and 87%, respectively, is a result of the one-time grant recognized in 2010 and a reduction in our invested balance in marketable securities for the three and six months ended December 31, 2011 as compared to 2010.

Liquidity and Capital Resources

Net cash used in operating activities was $13.3 million during the six months ended December 31, 2011 compared to $15.4 million used in operating activities for the same six months in 2010. The change in cash flow from operating activity can be attributed primarily to the timing and payment of liabilities and reduced share-based compensation expense, which were offset, in part, by a lower net loss in 2011.

Our investing activities provided $9.8 million in cash during the six months ended December 31, 2011 compared to $7.0 million used for the same six months in 2010. The change is primarily due to maturity of our marketable securities and timing of new purchases to manage our overall cash position.

Approximately $478,000 in cash was provided by financing activities during the six months ended December 31, 2011 as a result of proceeds from stock options exercised during the period compared to $763,000 for the same six months in 2010. The change is primarily due to a lower stock price during the six months ended December 31, 2011 resulting in fewer option exercises.

As of December 31, 2011, we had $103.0 million in cash, cash equivalents and marketable securities. We believe that with our existing capital resources, we will have adequate funds to maintain our current and planned operations through at least June 30, 2014, although no assurance can be given that changes will not occur that would consume available capital resources before such time and we may need or want to raise additional financing within this period of time. Our future capital requirements, cash flows, and results of operations could be affected by and will depend on many factors that are currently unknown to us, including:

- failure or delays in advancing our preclinical drug candidates, or other drug candidates we may develop in the future, into clinical trials;
- changes in our business strategy;
- results of clinical trials conducted by others on drugs that would compete with our drug candidates;
- issues in manufacturing our drug candidates or approved products;
- regulatory developments or enforcement in the United States and foreign countries;
- developments or disputes concerning patents or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- changes in estimates or recommendations by securities analysts, if any cover our common stock;
- failure to secure adequate capital to fund our operations if and when needed, or the issuance of equity securities at prices below the current market price;
- public concern over our drug candidates or any approved products;
- litigation;
- future sales of our common stock;
- general market conditions;
- changes in the structure of healthcare payment systems;
- failure of any of our drug candidates, if approved, to achieve commercial success;
- economic and other external factors or other disasters or crises;

- period-to-period fluctuations in our financial results; and
- overall fluctuations in U.S. equity markets.

We may require significant additional funds earlier than we currently expect in order to conduct additional clinical trials and conduct additional preclinical activities. Because of the numerous risks and uncertainties associated with the development and commercialization of our drug candidates, we are unable to estimate the timing or the amount of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials.

To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our future cash needs through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements. However, the credit markets and the financial services industry have recently been experiencing a period of unprecedented turmoil and upheaval that have made equity and debt financing more difficult to obtain. Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. For example, if we raise additional funds by issuing equity securities or by selling convertible debt securities, further dilution to our existing stockholders may result. If we raise funds through collaboration agreements or licensing arrangements, we may be required to relinquish rights to our technologies or drug candidates, or grant licenses on terms that are not favorable to us.

If adequate funds are not available, we may be required to terminate, significantly modify or delay our research and development programs, reduce planned commercialization efforts, or obtain funds through collaborators that may require us to relinquish rights to our technologies or drug candidates that we might otherwise seek to develop or commercialize independently. We may elect to raise additional funds even before we need them if the conditions for raising capital are favorable. We have an effective universal shelf registration statement on Form S-3 pursuant to which we have up to $80 million of securities available for issuance.

Certain Factors That May Affect Future Results of Operations

The Securities and Exchange Commission, or SEC, encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Quarterly Report on Form 10-Q contains such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Words such as "may," "anticipate," "estimate," "expects," "projects," "intends," "plans," "believes" and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. All forward-looking statements are management's present expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those described in the forward-looking statements. These risks include, but are not limited to those set forth under the heading "Risk Factors" contained in Item 1A of our Annual Report on Form 10-K for the year ended June 30, 2011 that we have filed with the SEC.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this Quarterly Report on Form 10-Q might not occur. Stockholders are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Quarterly Report on Form 10-Q. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to Myrexis, Inc. or to any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We maintain a portfolio of cash, cash equivalents and short term and long term marketable securities which are subject to interest rate risk. Our investments consist primarily of highly liquid securities of various types and maturities of two years or less, with a maximum average maturity of one year. Changes in interest rates affect the fair market value of these marketable investment securities. There have been no material changes in our exposure to market risk as compared to our disclosures under Item 7A in our Annual Report on Form 10-K for the year ended June 30, 2011.

Item 4. Controls and Procedures.

(a) *Evaluation of Disclosure Controls and Procedures* . Our principal executive officer and principal financial officer evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in Internal Controls* . There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

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PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

There are no material changes to the risk factors described in our Annual Report on Form 10-K for the year ended June 30, 2011.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

(a)	*Exhibits*
10.1	Separation Agreement by and between Myrexis, Inc. and Wayne Laslie, dated December 13, 2011. Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed December 14, 2011 (File No. 001-34275).
31.1	Certification of principal executive officer under Section 302(a) of the Sarbanes-Oxley Act of 2002.
31.2	Certification of principal financial officer under Section 302(a) of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of the principal executive officer and the principal financial officer under Section 906 of the Sarbanes-Oxley Act of 2002.
101*	The following materials from Myrexis, Inc.'s Quarterly Report on Form 10-Q for the quarter ended December 31, 2011, formatted in XBRL (eXtensible Business Reporting Language): (i) the Unaudited Balance Sheets as of December 31, 2011 and June 30, 2011, (ii) the Unaudited Statements of Operations for the three and six months ended December 31, 2011 and 2010, (iii) the Unaudited Statements of Cash Flows for the six months ended December 31, 2011 and 2010, and (iv) Notes to Unaudited Financial Statements, tagged as blocks of text.
*	Users of the XBRL data are advised pursuant to Rule 406T of Regulation S-T that this interactive data file is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

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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.

MYREXIS, INC.

Date: February 9, 2012

By: /s/ ROBERT J. LOLLINI
Robert J. Lollini.
President and Chief Executive Officer
(principal executive officer)

Date: February 9, 2012

By: /s/ ANDREA KENDELL
Andrea Kendell
Chief Financial Officer
(principal accounting and financial officer)

Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, Robert J. Lollini, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Myrexis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 9, 2012

/s/ ROBERT J. LOLLINI

Robert J. Lollini
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, Andrea Kendell, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Myrexis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 9, 2012

/s/ A NDREA K ENDELL

Andrea Kendell
Chief Financial Officer
(principal accounting and financial officer)

Exhibit 32.1

CERTIFICATIONS UNDER SECTION 906

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Myrexis, Inc., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the period ended December 31, 2011 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 9, 2012

/s/ R OBERT J. L OLLINI
Robert J. Lollini
President and Chief Executive Officer
(principal executive officer)

Dated: February 9, 2012

/s/ A NDREA K ENDELL
Andrea Kendell
Chief Financial Officer
(principal accounting and financial officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.