# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

			<u></u>	
		FORM 10-Q		
X	QUARTERLY REPORT PURSUA	NT TO SECTION 13 OR 15(d) OF TH	E SECURITIES EXCHANGE ACT OF 1934	
		For the quarterly period ended Marc	h 31, 2013	
		or		
	TRANSITION REPORT PURSUA	NT TO SECTION 13 OR 15(d) OF TH	E SECURITIES EXCHANGE ACT OF 1934	
_		For the transition period from		
		Commission File Number: 0-5		
		Commission The Number, 0-3	1071	
	INTERNAT	(Exact name of Registrant as specified	LL CORPORATION n its charter)	
	Delaware (State or other jurisdict incorporation or organiz		20-4494098 (I.R.S. Employer Identification No.)	
	5950 Priestly Dri	ve		
	Carlsbad, CA (Address of Principal Executi	ve Offices)	92008 (Zip Code)	
		(760) 940-6383 (Registrant's telephone number	)	
			r 15(d) of the Securities Exchange Act of 1934 during the preceding 12 subject to such filing requirements for the past 90 days. YES ⊠ NO	
purs			b site, if any, every Interactive Data File required to be submitted and post such shorter period that the registrant was required to submit and post su	
		e accelerated filer, an accelerated filer, a non-accelering company" in Rule 12b-2 of the Exchange Act.	rated filer, or a smaller reporting company. See the definitions of "large	
Larg	ge accelerated filer		Accelerated filer	
Non-	-accelerated filer □ (Do not check if a s	maller reporting company)	Smaller reporting company	X

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES  $\square$  NO  $\boxtimes$ 

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

As of May 3, 2013 the Registrant had 112,363,815 shares of Common Stock outstanding.

# International Stem Cell Corporation and Subsidiaries (A Development Stage Company) INDEX TO FORM 10-Q

Page Numbers

PART I—FINANCIA	AL INFORMATION	
Item 1.	Financial Statements.	3
Condense	ed Consolidated Balance Sheets	3
Condense	ed Consolidated Statements of Operations	4
Condense	ed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit)	5
Condense	ed Consolidated Statements of Cash Flows	10
Notes to	Unaudited Condensed Consolidated Financial Statements	11
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	30
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	33
Item 4.	Controls and Procedures	33
PART II—OTHER I	INFORMATION	
Item 1.	Legal Proceedings	34
Item 1A.	Risk Factors	34
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	46
Item 3.	Defaults Upon Senior Securities	46
Item 4.	Mine Safety Disclosures	46
Item 5.	Other Information	46
Item 6.	Exhibits	47
Exhibit 3	1.1	
Exhibit 3	1.2	
Exhibit 3	2.1	
Exhibit 3	2.2	
Exhibit 1	01 INSTANCE DOCUMENT	
Exhibit 1	01 SCHEMA DOCUMENT	
Exhibit 1	01 CALCULATION LINKBASE DOCUMENT	
Exhibit 1	01 DEFINITION LINKBASE DOCUMENT	

Exhibit 101 LABELS LINKBASE DOCUMENT

Exhibit 101 PRESENTATION LINKBASE DOCUMENT

# PART I—FINANCIAL INFORMATION

**Item 1. Financial Statements** 

# International Stem Cell Corporation and Subsidiaries (A Development Stage Company) Condensed Consolidated Balance Sheets (in thousands, except share data) (Unaudited)

(Unauditeu)		
	March 31, 2013	December 31, 2012
Assets		
Cash and cash equivalents	\$ 1,912	\$ 654
Accounts receivable, net of allowance for doubtful accounts of \$18 and \$4 at March 31, 2013 and December 31, 2012, respectively	384	273
Inventory, net	1,206	1,199
Prepaid expenses and other current assets	492	456
Total current assets	3,994	2,582
Property and equipment, net	1,033	1,134
Intangible assets, net	1,768	1,634
Deposits and other assets	20	20
Total assets	\$ 6,815	\$ 5,370
.iabilities, Redeemable Preferred Stock and Stockholders' Equity (Deficit)	<u> </u>	\$ 3,570
Accounts payable	\$ 430	\$ 969
Accrued liabilities	746	730
Deferred revenue	163	233
Related party payable	5	5
Advances	250	250
Total current liabilities	1,594	2,187
onvertible Redeemable Series G Preferred stock, \$0.001 par value, 5,000,000 shares were authorized, issued and outstanding at March 31,		2,107
2013 and December 31, 2012, liquidation preferences of \$5,000 at March 31, 2013 and December 31, 2012	4,941	4,941
Commitments and contingencies		
tockholders' Equity (Deficit)		
eries D Preferred stock, \$0.001 par value, 50 shares authorized, 43 issued and outstanding at March 31, 2013 and December 31, 2012, liquidation preferences of \$4,320 at March 31, 2013 and December 31, 2012	_	_
deries B Preferred stock, \$0.001 par value, 5,000,000 shares authorized, 300,000 issued and outstanding at March 31, 2013 and December 31, 2012, liquidation preferences of \$389 and \$385 at March 31, 2013 and December 31, 2012, respectively	_	_
deries C Preferred stock, \$0.001 par value, 3,000,000 shares authorized, 0 and 2,000,000 issued and outstanding at March 31, 2013 and December 31, 2012, respectively, liquidation preferences of \$0 and \$2,507 at March 31, 2013 and December 31, 2012, respectively	_	2
Common stock, \$0.001 par value, 300,000,000 shares authorized, 112,363,815 and 87,388,815 issued and outstanding at March 31, 2013 and		

Additional paid-in capital	73,672	69,945
Deficit accumulated during the development stage	(73,504)	(71,792)
Total stockholders' equity (deficit)	280	(1,758)
Total liabilities, redeemable preferred stock and stockholders' equity (deficit)	\$ 6,815	\$ 5,370

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiaries (A Development Stage Company) Condensed Consolidated Statements of Operations (in thousands, except per share data) (Unaudited)

	Three Mon Marc		Inception (August 17, 2001) through March 31,
Revenues		2012	2013
Product sales	\$ 1,285	¢ 1.077	¢ 12.492
Royalties and license	\$ 1,263	\$ 1,077	\$ 13,483 135
Total revenue			
Development expenses		1,077	13,618
Cost of sales			
Research and development	334	324	4,940
Selling and marketing	721	937	22,614
General and administrative	511	496	6,450
	1,419	2,039	40,547
Total development expenses	2,985	3,796	74,551
Loss from development activities	(1,700)	(2,719)	(60,933)
Other income (expense)			
Settlement with related company	_	_	(93)
Miscellaneous income (expense)	(15)	1	(260)
Dividend income	_	_	94
Interest expense	_	_	(2,225)
Sublease income	3	3	319
Change in market value of warrants		38	(1,357)
Total other income (expense), net			
Loss before income taxes	(12)	42	(3,522)
Provision for income taxes	(1,712)	(2,677)	(64,455)
	<u> </u>		7
Net loss	<u>\$ (1,712)</u>	\$(2,677)	\$ (64,462)
Deemed dividend on preferred stock	_	(1,375)	(1,375)

Dividend on preferred stock		(82)	(8,097)
Net loss applicable to common stockholders	\$ (1,712)	\$(4,134)	\$ (73,934)
Net loss per common share-basic and diluted	\$ (0.02)	\$ (0.05)	\$ n/a
Weighted average shares-basic and diluted	103,566	82.485	n/a

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiaries

(A Development Stage Company)

Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit) From Inception to March 31, 2013

(in thousands) (Unaudited)

	Rede	emable ies G	Comm	on Stock							rtible Pr ued	eferred Sto	ck				Note Subscription	Subcorintia-		Deficit accumulated	Total	
	Prefer	red Stock				ies A		ies B		ies C		ries D		ies E		ries F	on Perpetual	on Common	Additional Paid-in	during the Development	Total Stockholders' Equity	Members'
Balance at August 17,	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Preferred	Stock	Capital	Stage	(Deficit)	Deficit
2001	_	s —	_	\$ —	_	\$ —	_	\$ —	_	\$ —	_	\$ —	_	\$ —	_	\$ —	s —	s –	\$ —	s —	\$ —	s —
Members contribution																						100
Net loss for the period frominception																						(141
Balance at December 31, 2001																						(41
Menbers contributions																						250
Net loss for the year ended																						(391
Balance at December 31, 2002																						(182
Menbers contributions																						195
Net loss for the year ended																						(519
Balance at December 31, 2003	_		_	_	_		_		_		_		_		_							
Members contribution																						(506
Net loss for the year ended																						1,110
Activity through December 31, 2004																						(854
Members contributions																						(250 780
Net loss for the year ended December 31, 2005																						
Balance at December 31, 2005	—		_		—		—						_									(1,386
Members contribution																						(856
Effect of the Reorganization																						250
Transactions BIHC transactions			20,000	20															2,665	(3,291)	(606)	606
Offering costs			2,210	2															(2)		_	
Warrants issued for equity placement																			(2,778)		(2,778)	
Warrants issued for																			1,231		1,231	
Warrants issued with																			222		222	
Common stock issued																			638		638	
for services			1,350	1															1,349		1,350	
stock Stock-based			10,437	11															10,371		10,382	
compensation																			842		842	
Net loss for the year ended December 31, 2006																				(6,584)	(6,584)	
Balance at																				(=,= 31)	(3,231)	

# International Stem Cell Corporation and Subsidiaries

(A Development Stage Company)

Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit) From Inception to March 31, 2013
(in thous ands)
(Unaudited)

	Redeemable						Conve	rtible Preferred St	ock							
	Series G Preferred Stock	Common Stock	Se	ries A	Series B		Series C	ued Series D	Series E	Series F		Subscription		Deficit accumulated	Total	
										t Shares Amount	on Perpetual Preferred	Receivable on Common Stock		during the Development Stage	Stockholders' Equity (Deficit)	Members Deficit
Offering costs	Olareo I moune	- CARTES THIOLE	<u> Simito</u>	·	CARLES THE	<u> </u>	into intour	Santo Intomi	Saures Tanoun	<u> </u>	1144444	Stock	\$ (382)		\$ (382)	
Warrants issued for equity placement services													169		169	
Issuance of common stock		1,370 \$	1										1,369		1,370	
Warrants exercised		3 –	_										3		3	
Stock-based conpensation													427		427	
Net loss for the year ended December 31, 2007														(6,072)	(6,072)	)
Balance at December 31, 2007		35,370 3	5 —										16,124	(15,947)	212	
Issuance of Preferred Stock		35,570	1,000	1	550	1 :	2,000 2						4,546	(15,517)	4,550	
Warrants issued and beneficial conversion feature			-,				_						911		911	
Issuance of Common Stock for services		3,041	3										593		596	
Stock-based conpensation		5,041	5										735		735	
Deemed Dividend													1,582	(1,582)		
Net loss for the year ended December 31, 2008													.,	(6,571)	(6,571)	
Balance at December 31, 2008	<del></del>	38,411 3	8 1,000	1	550	1 :	2.000 2						24,491	(24,100)		
Issuance of Preferred Stock		30,411 3	6 1,000	1	330	1.	2,000 2					_	3,682	(24,100)	3,682	
Preferred Stock Subscription													3,062		5,002	
Issuance of Conmon Stock															_	
For services		1,208	1										941		942	
Fromconversion of preferred stock			4 (400	) —	(150)	(1)							(3)		_	
Fromconversion of debt			2	,	( )								498		500	
From exercise of warrants			4								(2,700)	)	3,659		963	
Fromcashless exercise of warrants			4								(3,100)		279		283	
For cash			3										1,397		1,400	
Stock-based compensation		2,707	5										410		410	
Warrants issued for services													281		281	
Options issued for services													106		106	
Deemed Dividend													3,163	(4,032)		
Cumulative effect adjustment- warrant liabilities													(1,704)		(1,274)	
Equity placement shares													(250)		(250)	
Dividend on preferred stock													(200)	(364)		
Net loss for the year ended December 31, 2009											(9)	)		(8,504)		
Balance at December 31, 2009		56,035 \$ 5	6 600	\$ 1	400 \$	_ :	2,000 \$ 2	_ \$ _	_ \$ _				\$ 36,950			

# International Stem Cell Corporation and Subsidiaries

(A Development Stage Company)

Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit) From Inception to March 31, 2013

(in thousands) (Unaudited)

	Redeemable Series G								vertible l ssued	referred St	ock					Note			Deficit		
	Preferred Stock	Commo		Series A		Series B		Series C		Series D	Sc	ries E		Series 1	F	on	Subscription Receivable	Additiona		Stockholders'	
	Shares Amount	Shares An	nount	Shares An	ount	Shares Amoun	t Sha	res Amour	nt Shar	es Amount	Shares	Amou	nt Sh	ares Aı	nount	Perpetual Preferred	on Common Stock	Paid-in Capital	Development Stage	Equity (Deficit)	Member Deficit
referred Stock Subscription											_	_	-	1	0					0	
ssuance of Conmon Stock																				_	
or services		749 \$	1															\$ 1,084	1	\$ 1,085	
romconversion of preferred stock and options						400															
romconversion of debt		800	1	(100)		(100) —	-				_	_	_	(1)	_			(1	1)	_	
romexercise of warrants		5,063	5													(3,254)	(5)	4,747	7	1,493	
romcashless exercise of warrants and options		1,531	2													(3,234)	(3)	1,536		1,538	
or cash		10,593	10															10,181		10,190	
tock-based conpensation		,																2,068		2,068	
/arrants issued for services																		ĺ		_	
ptions issued for services																				_	
/arrants reclassified to equity																		805	5	805	
eened dividend on preferred stock																			(1,037)		
ccrued and paid dividend on preferred stock																			(524)		
wap notes Receivable and Perpetual																			(021)		,
referred Stock																5,963		(1,200	))	4,763	
et loss for the year ended																				_	
ecember 31, 2010																			(12,723)	(12,723	)
alance at December 31, 2010		74,771	75	500	1	300 —	- 2,0	000	2 –		_		_	_	0		(5)	56,170	) (50,854)	5,389	
suance of common stock																					
or services		150	_															303	3	303	
romcashless exercise of warrants		55	_															26	5	26	
romexercise of options and warrants		1,060	1															526	5	527	
or cash		4,000	4															3,354	1	3,358	
tock-based conpensation																		3,541		3,541	
/arrants issued for services																		75		75	
ock subscription																	5	,,		5	
ccrued dividend on preferred stock																			(430)	(430	)
et loss for the year ended December 31, 2011																			(9,171)		
alance at December 31, 2011		80,036 \$	80	500 \$	1	300 \$ —	- 2,0	000 \$	2	- \$		\$ _		_ \$	0	<u>s</u>	<u>s — </u>	\$ 63,995			

# International Stem Cell Corporation and Subsidiaries

(A Development Stage Company)

Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit) From Inception to March 31, 2013

(in thousands) (Unaudited)

			_							Conver	tible Preferr	ed Stoc	k									
				nmon ock							Issued					_	Note	Subscription		Deficit		
		emable ies G														Si	ubscription	Receivable		accumulated	Total	
	Preferr	ed Stock				ies A		ies B		ies C	Series 1		Serie		Series F		on Perpetual	Common	Additional Paid-in	during the Development	Stockholders' Equity	Members'
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares An	nount	Shares A	Amount	Shares Amo	unt	Preferred	Stock	Capital	Stage	(Deficit)	Deficit
Issuance of convertible redeemble Series G preferred stock, net of issuance costs of \$59		4,941																				
Beneficial conversion feature for Series G preferred stock	.,	(1,375)																	1,375		1,375	
Issuance of common stock		(-,)																			3,512	
Fromconversion of Series A preferred stock			2,000	2	(500)	(1)													(1)		_	
For cash			5,000	5	,	,													2,079		2,084	
For services			335	_															59		59	
From exercise of options			18	_															4		4	
Stock-based compensation																			2,361		2,361	
Warrants issued for services																			73		73	
Accrued dividend on preferred stock		93																		(222)	(222)	)
Reversal of dividend accreted		(93)																		93	93	
Deemed dividend on preferred stock		1,375																		(1,375)	(1,375)	)
Net loss for the quarter ended December 31, 2012		-,0																		(9,833)		
Balance at December 31, 2012	5,000	\$ 4,941	87,389	\$ 87	_	<u>s</u> _	300	<u>s</u> —	2,000	\$ 2	s	<u> </u>	\$	<u> </u>	\$	\$		<u> </u>	\$ 69,945	\$ (71,792)		

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiaries

(A Development Stage Company)

Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock, Members' Deficit and Stockholders' Equity (Deficit) From Inception to March 31, 2013
(in thous ands)
(Unaudited)

		-							Con	vertible Pr	referred Stock						
			mon ock					Issued					Subscription		Deficit		
	Redeemable Series G Preferred Stock Shares Amount	Shares	Amount	Series A Shares Amount	Series B Shares Amount		ies C Amount	Series D Shares Amo		ries E Amount	Series F Shares Amount	Note Subscription on Perpetual Preferred	Receivable on	Additional	accumulated	Total Stockholders' Equity (Deficit)	Members' Deficit
Issuance of common stock from conversion of Series C preferred stock		8,000	8			(2,000)	(2)							(6)		_	
Issuance of conmon stock																	
For cash		16,325	16											3,257		3,273	
For services		650	1											67		68	
Stock-based conpensation														409		409	
Net loss for the quarter ended March 31, 2013															(1,712)	(1,712)	
Balance at March 31, 2013	5,000 \$ 4,941	112,364	\$ 112	<u> </u>	300 \$ —		<u>s                                    </u>	<u> </u>		<u>s                                    </u>	\$	<u> </u>	<u> </u>	\$ 73,672	\$ (73,504)	\$ 280	<u> </u>

See accompanying notes to the unaudited condensed consolidated financial statements.

Purchases of property and equipment

# International Stem Cell Corporation and Subsidiaries (A Development Stage Company) Condensed Consolidated Statements of Cash Flows (in thous ands) (Unaudited)

	Thr Months Ende		Inception (August 17, 2001) through March 31, 2013
Cash flows from operating activities			
Net loss	\$ (1,712)	\$ (2,677)	\$ (64,462)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	116	125	2,032
Accretion of discount on notes payable	_	_	103
Accretion of discount on bridge loans	_	_	638
Warrants issued for services	_	36	370
Non-cash compensation expense	409	685	11,180
Common stock issued for services	68	_	4,424
Change in market value of warrants	_	(38)	1,357
Amortization of discount on convertible debt	_	_	1,081
Allowance for inventory obsolescence	4	(15)	39
Interest on perpetual preferred stock notes receivable	_	_	(35)
Loss on disposal of fixed assets	_	_	80
Impairment of intangible assets	19	18	212
Changes in operating assets and liabilities:			
(Increase) decrease in accounts receivable	(111)	(117)	(384)
(Increase) decrease in inventory	(11)	55	(1,246)
(Increase) decrease in prepaid assets and other assets	(36)	(23)	(492)
(Increase) decrease in deposits			(20)
Increase (decrease) in accounts payable	(539)	(58)	538
Increase (decrease) in accrued expenses	16	61	1,032
Increase (decrease) in deferred revenue	(70)	(77)	163
Increase (decrease) in related party payable	_	_	(160)
Net cash used in operating activities	(1,847)	(2,025)	(43,550)
Investing activities			

	_	(44)	(2,686)
Proceeds from sale of fixed assets	_	_	7
Payments for patent licenses and trademarks	(168)	(172)	(2,445)
Net cash used in investing activities	(168)	(216)	(5,124)
Financing activities			
Proceeds from Members' contributions	_	_	2,685
Proceeds from issuance of common stock	3,289	2,084	32,171
Proceeds from issuance of preferred stock	_	4,941	17,202
Proceeds from issuance of convertible promissory notes	_	_	2,100
Proceeds from exercise of warrants and options	_	_	992
Payment of preferred stock dividends	_	(108)	(1,320)
Payment of promissory notes	_	_	(2,203)
Payment of offering costs	(16)	_	(1,776)
Proceeds from convertible debt, advances and loan payable	_	_	1,360
Payment of loan payable			(625)
Net cash provided by financing activities	3,273	6,917	50,586
Net increase in cash and cash equivalents	1,258	4,676	1,912
Cash and cash equivalents, beginning of period	654	1,337	_
Cash and cash equivalents, end of period	\$ 1,912	\$ 6,013	\$ 1,912
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ <u> </u>	\$ <u> </u>	\$ 372
Cash paid for income taxes	<u> </u>	<u> </u>	\$ 11
Non-cash financing activities:			
Discount on convertible debt from beneficial conversion feature	\$ <u> </u>	\$ <u> </u>	\$ 641
Discount on convertible debt from warrants	s —	\$ —	\$ 270
Accretion of preferred stock dividends	<u> </u>	\$ 18	\$ 93
Deemed dividend on preferred stock	<u> </u>	\$ 1,375	\$ 8,058
Reversal of preferred dividends accreted	\$ —	\$ —	\$ (93)
Conversion of debt to common stock	* —	\$ —	\$ 500
Warrants issued for placement agent services	<u> </u>	\$ —	\$ 1,231
Warrants issued with promissory notes	\$ <u> </u>	\$ <u> </u>	\$ 638

Non-cash sale of preferred stock	<u> </u>	<u> </u>	\$ 382
Dividend on preferred stock exchanged for note receivable	<u> </u>	<u> </u>	\$ 95
Conversion of preferred stock	<u> </u>	<u> </u>	<u>\$</u> 2
Cashless exercise of warrants	\$ <u> </u>	\$ <u> </u>	\$ 1,847

See accompanying notes to the unaudited condensed consolidated financial statements.

# International Stem Cell Corporation and Subsidiaries (A Development Stage Company) NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENIS

## 1. Organization and Significant Accounting Policies

Business Combination and Corporate Restructure

BTHC III, Inc. ("BTHC III" or the "Company") was organized in Delaware in June 2005 as a shell company to effect the reincorporation of BTHC III, LLC, a Texas limited liability company. On December 28, 2006, the Company effected a Share Exchange pursuant to which it acquired all of the stock of International Stem Cell Corporation, a California corporation ("ISC California"). After giving effect to the Share Exchange, the stockholders of ISC California owned 93.7% of issued and outstanding shares of common stock. As a result of the Share Exchange, ISC California is now the wholly-owned subsidiary, though for accounting purposes it was deemed to have been the acquirer in a "reverse merger." In the reverse merger, BTHC III is considered the legal acquirer and ISC California is considered the accounting acquirer. On January 29, 2007, the Company changed its name from BTHC III, Inc. to International Stem Cell Corporation.

Lifeline Cell Technology, LLC ("LCT") was formed in the State of California on August 17, 2001. LCT is in the business of developing and manufacturing purified primary human cells and optimized reagents for cell culture. LCT's scientists have used a technology, called basal medium optimization, to systematically produce products designed to culture specific human cell types and to elicit specific cellular behaviors. These techniques also produce products that do not contain non-human animal proteins, a feature desirable to the research and therapeutic markets. LCT distinguishes itself in the industry by having in place scientific and manufacturing staff with the experience and knowledge to set up systems and facilities to produce a source of consistent, standardized, non-human animal protein free cell products, some of which are suitable for FDA approval.

On July 1, 2006, LCT entered into an agreement among LCT, ISC California and the holders of membership units and warrants. Pursuant to the terms of the agreement, all the membership units in LCT were exchanged for 20,000,000 shares of ISC California Common Stock and for ISC California's assumption of LCT's obligations under the warrants. LCT became a wholly-owned subsidiary of ISC California.

Lifeline Skin Care, Inc. ("LSC") was formed in the State of California on June 5, 2009 and is a wholly-owned subsidiary of ISC California. LSC develops, manufactures and markets cosmeceutical products, utilizing an extract derived from our human parthenogenetic stem cell technologies.

## Going Concern

The Company continues in the development stage and as such has accumulated losses from inception and expects to incur additional losses in the near future. The Company needs to raise additional working capital. The timing and degree of any future capital requirements will depend on many factors. Currently, the Company's burn rate is approximately \$620,000 per month, excluding capital expenditures and patent costs averaging \$60,000 per month. There can be no assurance that the Company will be successful in maintaining its normal operating cash flow, and that such cash flows will be sufficient to sustain the Company's operations through 2013. Based on the above, there is substantial doubt about the Company's ability to continue as a going concern. The condensed consolidated financial statements were prepared assuming that the Company is a going concern. The condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. Management's plans in regard to these matters are focused on managing its cash flow, the proper timing of its capital expenditures, and raising additional capital or financing in the future. In the first quarter of 2013, to obtain funding for working capital purposes, the Company sold a total of 16,325,000 shares of common stock raising \$3,289,000. For further discussion, see Note 6, Capital Stock.

In May 2013, we filed an amendment to our pending registration statement with the Securities and Exchange Commission that, following effectiveness, would allow us to raise up to \$5 million from the sale of common stock and warrants. However, this is a "best efforts" offering and we cannot predict the timing or amount of any funds that we may actually receive, if any.

# Basis of Presentation

International Stem Cell Corporation was formed in June 2006. BTHC III, Inc. was a shell company that had no operations and no net assets. For accounting purposes the acquisition has been treated as a recapitalization of BTHC III with ISC California as the accounting acquirer (reverse acquisition). The historical statements prior to June 2006 are those of Lifeline Cell Technology, LLC, the wholly-owned subsidiary of ISC California.

The Company is a development-stage company with no revenue generated from its operations in therapeutic and biomedical products development through research and development efforts. To date, the Company has generated limited and unpredictable revenue to support its core therapeutic research and development efforts.

The accompanying unaudited condensed consolidated financial statements included herein have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and with the instructions to Form 10-Q.

These financial statements do not include all information and notes required by generally accepted accounting principles for complete financial statements. However, except as disclosed herein, there has been no material change in the information disclosed in the notes to consolidated financial statements included in the annual report on Form 10-K of International Stem Cell Corporation and Subsidiaries for the year ended December 31, 2012. When used in these notes, the terms "Company," "we," "us," or "our" mean International Stem Cell Corporation and all entities included in our unaudited condensed consolidated financial statements.

In the opinion of management, the unaudited condensed consolidated financial information for the interim periods presented reflects all adjustments, consisting of only normal and recurring adjustments, necessary for a fair presentation of the Company's consolidated results of operations, financial position and cash flows. The unaudited condensed consolidated financial statements and the related notes should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2012 included in the Company's annual report on Form 10-K. Operating results for interim periods are not necessarily indicative of the operating results for any other interim period or an entire year.

## Principles of Consolidation

The Company's consolidated financial statements include the accounts of International Stem Cell Corporation and its subsidiaries after intercompany balances and transactions have been eliminated.

The preparation of financial statements requires that management make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses, and related disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

## Cash Fauivalents

The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash equivalents.

### Inventories

Inventories are accounted for using the first-in, first-out (FIFO) method for LSC products, and specific identification method for LCT products. Inventory balances are stated at the lower of cost or market. Laboratory supplies used in the research and development process are expensed as consumed. Inventory is reviewed periodically for product expiration and obsolescence and is adjusted accordingly.

# Accounts Receivable

Trade accounts receivable are recorded at the net invoice value and are not interest bearing. Accounts receivable primarily consist of trade accounts receivable from the sales of LCT's products, timing of cash receipts by the Company related to LSC credit card sales to customers, as well as LSC trade receivable amounts related to spa and distributor sales. The Company considers receivables past due based on the contractual payment terms. The Company reviews its exposure to accounts receivable and reserves specific amounts if collectability is no longer reasonably assured. As of March 31, 2013 and December 31, 2012, the Company had an allowance for bad debt totaling \$18,000 and \$4,000, respectively.

# Property and Equipment

Property and equipment are stated at cost. The provision for depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, generally over five years. The costs of major remodeling and leasehold improvements are capitalized and amortized over the shorter of the remaining term of the lease or the life of the asset.

# Intangible Assets

Intangible assets consist of acquired research and development rights used in research and development, and capitalized legal fees related to the acquisition, filing, maintenance, and defense of patents. Patent or patent license amortization only begins once a patent license is acquired or a patent is issued by the appropriate authoritative bodies. In the period in which a patent application is rejected or efforts to pursue the patent are abandoned, all the related accumulated costs are expensed. Patents and patent licenses are recorded at cost of \$2,232,000 and \$2,083,000 at March 31, 2013 and December 31, 2012, respectively, and are amortized on a straight-line basis over the shorter of the lives of the underlying patents or the useful life of the license. Amortization expense for the three months ended March 31, 2013 and 2012 amounted to \$15,000 and \$17,000, respectively, and is included in research and development expense. Accumulated amortization as of March 31, 2013 and December 31, 2012 was \$464,000 and \$449,000, respectively. Additional information regarding patents and patent licenses is included in Note 4.

# Long-lived Asset Impairment

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their carrying value may not be recovered, and at least annually. The Company considers assets to be impaired and writes them down to fair value if expected associated undiscounted cash flows are less than the carrying amounts. Fair value is the present value of the associated cash flows. The Company did not recognize material impairments on its long-lived assets during the three months ended March 31, 2013 and 2012.

### Product Sales

The Company recognizes revenue from product sales at the time of shipment to the customer, provided no significant obligations remain and collection of the receivable is reasonably assured. If the customer has a right of return, the Company recognizes product revenues upon shipment, provided that future returns can be reasonably estimated. In the case where returns cannot be reasonably estimated, revenue will be deferred until such estimates can be made or the right of return has expired. LSC's revenue accounted for 51% of total revenue during the three months ended March 31, 2013 and 2012. LCT contributed 49% of total revenue during the three months ended March 31, 2013 and 2012.

## Deferred Revenue

The Company recognizes revenue from LSC products when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price to the buyer is fixed or determinable, and collectability is reasonably assured. However, the LSC products have a 30-day right of return guarantee and therefore, the Company defers all revenue associated with these product sales until the 30-day guarantee has expired. In addition, all costs associated with these product sales are reclassified against the deferred revenue account so that the net deferred revenue balance is presented. At March 31, 2013 and December 31, 2012, net deferred revenue totaled \$163,000 and \$233,000, respectively.

## Cost of Sales

Cost of sales consists primarily of salaries and benefits associated with employee efforts expended directly on the production of the Company's products and include related direct materials, general laboratory supplies and allocation of overhead. Certain of the agreements under which the Company has licensed technology will require the payment of royalties based on the sale of its future products. Such royalties will be recorded as a component of cost of sales. Additionally, the amortization of license fees or milestone payments related to developed technologies used in the Company's products will be classified as a component of cost of sales to the extent such payments become due in the future.

## Research and Development Costs

Research and development costs, which are expensed as incurred, are primarily comprised of costs and expenses for salaries and benefits associated with research and development personnel, overhead and occupancy, contract services, and amortization of license costs for technology used in research and development with alternative future uses.

# Registration Payment Arrangements

In accordance with applicable authoritative guidance, the Company is required to separately recognize and measure registration payment arrangements, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement. Such payments include penalties for failure to effect a registration of securities.

The ta

# Fair Value Measurements

On January 1, 2008, the Company adopted authoritative guidance for fair value measurements and fair value disclosures. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. Assets and liabilities that are measured at fair value are reported using a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2 Quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability;
- Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The table below sets forth a summary of the fair values of the Company's assets and liabilities as of March 31, 2013 (in thousands).

ASSETS:	_			
Cash equivalents	<u>\$1,505</u>	\$1,505	<u>\$ —</u>	<u>\$ —</u>
able below sets forth a summary of the fair values of the Company's assets and liabilities as of December 3	31, 2012 (in thousands).  Total	Level 1	Level 2	Level 3
ASSETS:				
Cash equivalents	\$ <u>5</u>	\$ 5	\$ —	\$ <u> </u>

Total

Level 1

Level 2

Level 3

The following table displays the rollforward activity of liabilities with inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity):

	Warrants to purchase common stock	
Beginning balance at December 31, 2011	\$	38
Issuances		_
Adjustments to estimated fair value		(38)
Ending balance at December 31, 2012		_
Issuances		
Adjustments to estimated fair value due to expiry		
Ending balance at March 31, 2013	\$	_

# Income Taxes

The Company accounts for income taxes in accordance with applicable authoritative guidance, which requires the Company to provide a net deferred tax asset/liability equal to the expected future tax benefit/expense of temporary reporting differences between book and tax accounting methods and any available operating loss or tax credit carryforwards.

# Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements. Significant estimates include patent life (remaining legal life versus remaining useful life), inventory carrying values and transactions using the Black-Scholes option pricing model, e.g., warrants and stock options. Actual results could differ from those estimates.

# Fair Value of Financial Instruments

The Company believes that the carrying value of its cash and cash equivalents, receivables, accounts payable and accrued liabilities as of March 31, 2013 and December 31, 2012 approximate their fair values because of the short-term nature of those instruments.

# Income (Loss) Per Common Share

The computation of net loss per common share is based on the weighted average number of shares outstanding during each period. The computation of diluted earnings per common share is based on the weighted average number of shares outstanding during the period plus the common stock equivalents, which would arise from the exercise of stock options and warrants outstanding using the treasury stock method and the average market price per share during the period. At March 31, 2013, there were 822,500 non-vested restricted shares, 9,462,500 warrants, and 15,864,448 vested and 6,811,745 non-vested stock options outstanding; and at December 31, 2012, there were 335,000 non-vested restricted shares, 3,500,000 warrants, and 15,407,902 vested and 7,969,230 non-vested stock options outstanding. These restricted shares, options and warrants were not included in the diluted loss per share calculation because the effect would have been anti-dilutive.

# Comprehensive Income

Comprehensive income or loss includes all changes in equity except those resulting from investments by owners and distributions to owners. The Company did not have any items of comprehensive income or loss other than net loss from operations for the three months ended March 31, 2013 and 2012 or the period from inception through March 31, 2013.

## Recent Accounting Pronouncements

There were no new accounting pronouncements during the three months ended March 31, 2013, as compared to the recent accounting pronouncements described in the Annual Report on Form 10-K for the fiscal year ended December 31, 2012, that are of significance, or potential significance, to the Company.

## 2. Inventory

Inventories are accounted for using the first-in, first-out (FIFO) method for Lifeline Skin Care products, and specific identification method for Lifeline Cell Technology products. Lab supplies used in the research and development process are expensed as consumed. Inventory is reviewed periodically for product expiration and obsolete inventory and adjusted accordingly. The components of inventories are as follows (in thousands):

inpolicies of inventores are as follows (in thousands).	March 31, 	December 31, 2012
Raw materials	\$ 280	\$ 276
Work in process	237	211
Finished goods	231	211
	728	748
Total	1,245	1,235
Less: allowance for inventory obsolescence	(39)	(36)
Inventory, net	\$ 1,206	\$ 1,199
	<del></del>	* 1,111

# 3. Property and Equipment

Property and equipment consists of the following (in thousands):

	March 31, 2013	December 31, 2012
Machinery and equipment	\$ 1072	\$ 1,072
Computer equipment		
Office equipment	347	347
Leasehold improvements	225	225
Leasenoid improvements	830 2,474	2,474
Less: accumulated depreciation and amortization	,	ĺ
	(1,441)	(1,340)
Property and equipment, net	\$ 1,033	\$ 1,134

Depreciation expenses for the three months ended March 31, 2013 and 2012 were \$101,000 and \$108,000, respectively.

### 4. Patent Licenses

On December 31, 2003, LCT entered into an *Option to License Intellectual Property* agreement with Advanced Cell Technology, Inc. ("ACT") for patent rights and paid ACT \$340,000 in option and license fees. On February 13, 2004, LCT and ACT amended the Option agreement and LCT paid ACT additional option fees of \$22,500 for fees related to registering ACT's patents in selected international countries.

On May 14, 2004, LCT amended the licensing agreement with ACT for the exclusive worldwide patent rights for the following ACT technologies: UMass IP, ACT IP and Infigen IP, which terms are summarized below. The additional license fees aggregate a total of \$400,000 and were secured by separate convertible promissory notes. The notes bore no interest unless they were not repaid at maturity, in which event they shall thereafter bear interest at an annual rate equal the lesser of 10% or the maximum non-usurious rate legally allowed.

The notes could be converted at the option of ACT into the first equity financing of LCT with cash proceeds in excess of \$5,000,000 under the following conditions: i) Upon the consummation of the First Equity Financing; or ii) Immediately prior to the closing of any merger, sale or other consolidation of the Company or of any sale of all or substantially all assets of the Company which occurs prior to the First Equity Financing (an "Acquisition Event"). Notwithstanding the above, and only in the event that a conversion resulting from such Acquisition Event would result in a security not traded on a national stock exchange (including NASDAQ and NASDAQ small cap), upon written notice to the Company not later than five days after the consummation of the Acquisition Event and notice of the Acquisition Event to the holder of the note, the holder may elect to receive payment in cash of the entire outstanding principal of this Note. On February 7, 2013, the Company and ACT entered into Amended and Restated License Agreements for the purpose of completely amending and restating the terms of the license agreements. Under the terms of the Amendment the Company acquired exclusive world-wide rights to all human therapeutic uses and cosmetic uses from ATC and Infigen's early work on parthenogenic-derived embryonic stem cells, as well as certain rights to patents covering Single Blastomere technology. Pursuant to the Amendment all minimum R&D requirements and all milestone payments due to ACT under the Exclusive License Agreement have been eliminated. The Company will no longer pay any royalties under the ACT IP Agreement and Infigen IP Agreement, and its obligation to pay royalties that ranged from 6%-12% under the UMass IP Agreement has been reduced to 0.25% of the net sales of products using technology covered by the UMass IP Agreement.

As of March 31, 2013, the total amount capitalized related to the acquired ACT licenses was \$747,000, and \$1,485,000 related to the other patent acquisition costs.

At March 31, 2013, future amortization expense related to our intangible assets subject to amortization is expected to be as follows (in thousands):

	<u>Amount</u>
2013 (remaining nine months)	
	45
2014	
	60
2015	
	60
2016	
2010	60
2017	
2017	61
Thereafter	
Thereafter	1,272
Total	
Total	\$ 1,558

# 5. Advances

## Advance

On June 18, 2008, the Company entered into an agreement with BioTime, Inc. ("Bio Time"), where Bio Time will pay an advance of \$250,000 to Lifeline Cell Technology, a whollyowned subsidiary of International Stem Cell Corporation, to produce, make, and distribute Joint Products. The \$250,000 advance will be paid down with the first \$250,000 of net revenues that otherwise would be allocated to LCT under the agreement. As of March 31, 2013 no revenues were realized from this agreement.

	March 31, 2013	December 31, 2012	
BioTime, Inc. (in thousands)	\$ 250	\$ 250	

# 6. Capital Stock

As of December 31, 2006, the Company was authorized to issue 200,000,000 shares of common stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. In May 2012, the Company amended its Certificate of Incorporation to increase the authorized number of shares of common stock to 300,000,000.

In October 2006, the board of directors of BTHC III approved a stock split of 4.42 shares to 1. As a result of the split, the outstanding common stock of BTHC III increased from 500,000 to 2,209,993 shares. Pursuant to the Share Exchange Agreement, each share of International Stem Cell Corporation common stock was exchanged for one share of BTHC III common stock. All numbers in the financial statements and notes to the financial statements have been adjusted to reflect the stock split for all periods presented.

On December 27, 2006, the Company's Board of Directors and holders of a majority of the outstanding shares approved an increase in the authorized capital stock of the Company to 200,000,000 shares of Common Stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share.

In December 2006, the Company issued 1,350,000 shares of common stock, 350,000 of such shares in consideration for legal consulting services relating to the reverse merger and 1,000,000 shares in consideration for a contract to provide investor relations services which commenced September 1, 2006 for a period of one year.

In January and February 2007, ISC California completed the Brookstreet financing and issued 1,370,000 shares of common stock that was part of a private placement of securities by ISC California during the second half of 2006. The net proceeds from sale finalized in 2007 were \$1,157,000 net of cash fees and expenses. In connection with the final settlement in 2007, the selling agent for the private placement received 274,000 additional warrants, which entitled the holder thereof to purchase through February, 2012 that number of shares of common stock for \$1.00 each.

# Series A Preferred Stock

On January 15, 2008, to raise funds, the Company entered into a subscription agreement with accredited investors for the sale of between 1,000,000 and 5,000,000 of Series A Preferred Stock ("Series A Preferred"). Series A Units consist of one share of Series A Preferred and two Warrants ("Series A Warrants") to purchase common stock for each \$1.00 invested. The Series A Preferred was convertible into shares of common stock at market price on the date of the first finance closing, but not to exceed \$1 per share and the Series A Warrants are exercisable at \$0.50 per share. The Series A Preferred has an anti-dilution clause whereby, if the Company issues \$1 million or more of equity securities convertible into equity at a price below the respective exercise prices of the Series A Preferred or the Series A Warrant shall be adjusted downward to equal the price of the new securities. The Series A Preferred has priority on any sale or liquidation of the Company equal to the purchase price of the Series A Units, plus a liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series A Preferred a dividend of the dividend the Series A Preferred holder would receive if the shares were converted just prior to the dividend declaration.

Each share of Series A Preferred has the same voting rights as the number of shares of common stock into which it would be convertible on the record date. On March 30, 2012, the holder of the remaining 500,000 shares of Series A Preferred Stock, converted his shares to a total of 2,000,000 shares of common stock. In May 2012, the Company filed a Certificate of Elimination for the Series A Preferred Stock to remove the powers, designations, preferences, privileges and other rights of the Series A Preferred Stock.

## Series B Preferred Stock

On May 12, 2008, to obtain funding for working capital, the Company entered into a series of subscription agreements with five accredited investors for the sale of a total of 400,000 Series B Units, each Series B Unit consisting of one share of Series B Preferred Stock ("Series B Preferred") and two Series B Warrants ("Series B Warrants") to purchase common stock for each \$1.00 invested.

The total purchase price received by the Company was \$400,000. The Series B Preferred is convertible into shares of common stock at the initial conversion ratio of two shares of common stock for each share of Series B Preferred converted (which was established based on an initial conversion price of \$0.50 per share), and the Series B Warrants were exercisable at \$0.50 per share until five years from the issuance of the Series B Warrants. The Series B Preferred and Series B Warrants contained anti-dilution clauses whereby, (subject to the exceptions contained in those instruments) if the Company issues equity securities or securities convertible into equity at a price below the respective conversion price of the Series B Preferred or the exercise price of the Series B Warrant, such conversion and exercise prices shall be adjusted downward to equal the price of the new securities, which has been triggered and the new price of the warrants was set at \$0.25. During the first quarter of 2013, the Company issued additional shares of common stock at \$0.20 per share, triggering an adjustment in the current conversion price of the Series B Preferred Stock to \$0.20. The Series B Preferred has a priority (senior to the shares of common stock, but junior to the shares of Series A Preferred Stock) on any sale or liquidation of the Company equal to the purchase price of the Series B Units, plus a liquidation premium of 6% per year. If the Company elects to declare a dividend in any year, it must first pay to the Series B Preferred holder a dividend equal to the amount of the dividend the Series B Preferred holder would receive if the Series B Preferred were converted just prior to the dividend declaration. Each share of Series B Preferred has the same voting rights as the number of shares of common stock into which it would be convertible on the record date. As of March 31, 2013 and December 31, 2012, the Company had 300,000 shares of the Series B Preferred Stock issued and outstanding.

# Fair Value of Warrants Issued with Series A and B Preferred Stock

In accordance with the applicable authoritative guidance, the Company allocated the proceeds of the Series A and B preferred stock according to the value of the convertible preferred stock and the warrants based on their relative fair values. Fair value of the warrants issued with the Series A and Series B were determined using the Black-Scholes valuation model using risk-free interest rates of 3% and 3.37%, volatility rate of 65.0% and 57.9%, term of five years, and exercise price of \$0.50.

In connection with the Series A and B rounds of financing, each investor received a warrant to purchase up to a number of shares of common stock for \$1.00 per share. Subsequently, the exercise price for those warrants was adjusted down to \$0.25 per share.

In August 2008, in accordance with the anti-dilution provisions of the securities, the conversion rates and exercise price were reduced to \$0.25. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rate of 3%, volatility rate of 57.9%, term of five years, and exercise price of \$0.25. For Series A and Series B, the beneficial conversion feature and warrants were adjusted to \$553,000 and \$193,000, and \$308,000 and \$110,000, respectively.

During the second quarter of 2010, the holders of the warrants issued to the purchasers of Series A and B Preferred Stock signed a waiver to give up their rights to the anti-dilution provisions related to the warrants and the exercise price is now fixed at \$0.25. The modification to the warrants resulted in the change in classification from a liability to equity and the warrants were re-valued at the date of modification. The revaluation of the warrants resulted in a reduction in the warrant value of \$5,276,000 which was recorded as a credit to income. The adjusted value of the warrants of \$804,971 was reclassified to Additional Paid-in Capital, thus eliminating any fair value of outstanding warrant liability as of June 30, 2010.

# Series C Preferred Stock

On August 20, 2008, to obtain funding for working capital, the Company entered into a subscription agreement with an accredited investor (the "Series C Investor") to sell for \$3,000,000 up to 3,000,000 shares of Series C Preferred Stock ("Series C Preferred") at a price of \$1.00 per Series C Preferred share. The Series C Preferred will be convertible into shares of common stock at \$0.25 per share. The Series C Preferred had an anti-dilution clause whereby, if the Company issues 250,000 shares or more of equity securities convertible into equity at a price below the conversion price of the Series C Preferred, the conversion price of the Series C Preferred shall be adjusted downward to equal the price of the new securities. The Series C Preferred shall have priority over the common stock on any sale or liquidation of the Company equal to the purchase price of the Series C Preferred Stock, plus a liquidation premium of 6% per year, but such payment may be made only after payment in full of the liquidation preferences of the Series A and Series B Preferred Stock then outstanding. If the Company elects to declare a dividend in any year, it must first pay to the Series C Preferred a dividend in the amount of the dividend the Series C Preferred holder would receive if converted just prior to

the dividend declaration. Each share of Series C Preferred shall have the same voting rights as the number of shares of common stock into which it would be convertible on the record date. 700,000 shares of Series C Preferred Stock were sold on August 20, 2008, and 1,300,000 shares of Series C Preferred Stock were sold on September 23, 2008. The beneficial conversion feature for the Series C preferred stock is \$720,000. All the Series C Preferred Stock was issued to X-Master Inc., which is a related party and affiliated with our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director. As of December 31, 2012, the Company had 2,000,000 shares of the Series C Preferred Stock issued and outstanding. On January 22, 2013, the holders of Series C Preferred Stock into common stock at \$0.25 per share, or a total of 8,000,000 shares of common stock. On April 10, 2013, the Company filed a Certificate of Elimination for the Series C Preferred Stock. The Certificate of Elimination amended the provisions of the Certificate of Incorporation of the Company to eliminate the powers, designations, preferences, privileges and other rights of the Series C Preferred Stock.

# Series D Preferred Stock

On December 30, 2008, to obtain funding for both working capital and the eventual repayment of the outstanding obligation under the OID Senior Secured Convertible Note with a principal amount of \$1,000,000 issued in May 2008, the Company entered into a Series D Preferred Stock Purchase Agreement (the "Series D Agreement") with accredited investors (the "Investors") to sell for up to \$5,000,000 up to 50 shares of Series D Preferred Stock ("Series D Preferred") at a price of \$100,000 per Series D Preferred share. The sale of the Series D Preferred closed on the following schedule: (1) 10 shares were sold on December 30, 2008; (2) 10 shares were sold on February 5, 2009; and (3) 10 shares were sold on each of March 20, 2009, and June 30, 2009 and 3 shares on September 30, 2009. The Company raised a total of \$4,700,000 in the Series D Preferred Stock round. The beneficial conversion feature from the Series D Preferred Stock is recognized as deemed dividend totaling \$2,480,000. Of the Series D Preferred Stock issued, 10 shares of the Series D Preferred Stock was issued to X-Master Inc., which is a related party and affiliated with our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director and 33 shares of the Series D Preferred Stock was issued to our Chief Executive Officer and Co-Chairman of the Board of Directors Dr. Andrey Semechkin. As of March 31, 2013 and December 31, 2012, we had 43 shares of the Series D Preferred Stock issued and outstanding. Historically, the Series D Preferred Stock earned cumulative dividends at a rate of 10% per annum through December 31, 2011 and 6% per annum effective January 1, 2012, payable 15 days after each quarter end. On October 12, 2012, the Company and the holders of all of the outstanding shares of Series D and Series G Preferred Stock entered into a Waiver Agreement (the "Waiver Agreement") pursuant to which such holders irrevocably waived their right to receiv

On December 4, 2012, the holders of all of the outstanding shares of Series D Preferred Stock executed a Waiver of Anti-Dilution Rights (the "Anti-Dilution Waiver") pursuant to which such holders waived all anti-dilution adjustment rights under the Certificate of Designation for the Series D Preferred Stock in connection with the offering of securities pursuant to the registration statement originally filed with the Securities and Exchange Commission on October 18, 2012, including the shares issuable on exercise of all warrants registered hereunder. The Anti-Dilution Waiver does not apply to any future issuances of securities which would otherwise trigger anti-dilution adjustments under the Certificate of Designation for the Series D Preferred Stock. During the first quarter of 2013, the Company issued additional shares of common stock at \$0.20 per share, triggering an adjustment in the current conversion price of the Series D Preferred Stock to \$0.20.

During the three months ended March 31, 2013 and 2012, dividends of \$0 and \$108,000 were paid to the holders, respectively. As of March 31, 2013 and December 31, 2012, Series D Preferred Stock dividends of \$0 and \$0 were accrued, respectively.

# Series E Preferred Stock

On June 30, 2009, the Company entered into a definitive agreement with Optimus Capital Partners, LLC ("Investor") for a \$5 million investment commitment. The transaction was structured whereby the Company could draw down funds as needed, but had no obligations to make draws or use these funds if not needed. As funds were drawn down, the Company issued Series E Preferred Stock (the "Preferred Stock"). The Preferred Stock was not convertible into common stock and could be redeemed by the Company after one year. Each issue of Preferred Stock was accompanied by the issuance of five-year warrants to purchase common stock at 100% of the closing price of the company's common stock on the day prior to the date the company gave notice of its election to draw funds. The total exercise value of warrants issued equaled 135% of the drawdown amount. Dividends on the Preferred Stock were payable in additional shares of non-convertible Preferred Stock at the rate of 10% per annum. A commitment fee of \$250,000, payable in shares of common stock, was made to the Investor. As part of the agreement, the Company filed a registration statement on July 31, 2009, which was declared effective on September 30, 2009. The investment was used to fund operations and working capital needs of the Company and expand its scientific research.

On July 31, 2009, the Company filed a registration statement with the Securities and Exchange Commission as part of the Preferred Stock Purchase Agreement the Company signed on June 30, 2009, between International Stem Cell Corporation and Optimus Capital Partners. Per the agreement, the Company was required to use its best efforts to promptly file (but in no event later than 30 days after the Effective Date) and cause to become effective as soon as possible a Registration Statement for the sale of all Common Shares. Each Registration Statement was required to comply when it became effective, and, as amended or supplemented, at the time of any Tranche Notice Date, Tranche Closing Date, or issuance of any Common Shares, and at all times during which a prospectus was required by the Act to be delivered in connection with any sale of Common Shares, to comply, in all material respects, with the requirements of the Act. The Company is and has been in compliance with all applicable requirements of that agreement.

To create the Series E Preferred sold to the Investor under the Agreement, on June 30, 2009, the Company amended its Certificate of Incorporation by filing a Certificate of Designation of Preferences, Rights and Limitations of the Series E Preferred. The Series E Preferred has priority over the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and common stock on the proceeds from any sale or liquidation of the Company in an amount equal to the purchase price of the Series E Preferred, plus any accrued but unpaid dividends. From the date of issuance of the Series E Preferred, dividends at the rate per annum of ten percent (10%) of the Purchase Price per share accrued on such shares of Series E Preferred. Following the first anniversary of the issuance date, the Company had the right at its option to redeem the Series E Preferred at an amount equal to the purchase price of the Series E Preferred, plus any accrued but unpaid dividends and plus a redemption premium that declines from 26% (for redemptions between the first and second anniversary of issuance) to zero (for redemptions after the fourth anniversary of issuance).

During 2010, the Company drew \$2.4 million of the private equity financing and issued 24 shares of the Series E Preferred Stock, as well as issued 3.7 million warrants which were immediately exercised to purchase 3.7 million shares of the Company's common stock.

# Exchange Agreement Series E Preferred Stock

On June 11, 2010, the Company entered into an Exchange Agreement (the "Optimus Exchange Agreement") with Optimus Capital Partners, LLC ("Optimus") under which the Company and Optimus agreed to exchange all of the Series E Preferred Stock previously issued to Optimus pursuant to the Preferred Stock Purchase Agreement dated June 30, 2009 (the "Optimus Preferred Stock Agreement") for all of the promissory notes of Optimus (the "Optimus Notes") issued to the Company in that transaction as payment for shares of the Company's common stock. As part of the exchange transaction, the Company agreed to waive all accrued interest on the Optimus Notes and Optimus agreed to waive all accrued dividends and redemption premiums on the Series E Preferred Stock. The exchange was completed in June 2010 and is discussed in more detail below. Following the return of all shares of Series E Preferred Stock, the Company filed a Certificate of Elimination for the Series E Preferred Stock to remove the powers, preferences, privileges and other rights of the Series E Preferred Stock.

## Series F Preferred Stock

On May 4, 2010, International Stem Cell Corporation entered into a Preferred Stock Purchase Agreement with Socius CG II, Ltd., a Bermuda exempted company (the "Investor"), to sell for up to \$10,000,000 up to one thousand (1,000) shares of Series F Preferred Stock ("Series F Preferred") at a price of \$10,000 per Series F Preferred share. The Company was entitled to determine the time and amount of Series F Preferred to be purchased by the Investor and the Company intended to sell all 1,000 shares of Series F Preferred at a single time. The Series F Preferred could not be converted into common stock and was redeemable by the Company. Under the terms of the Agreement, the Company provided the Investor with a non-refundable fee of 250,000 shares of Company common stock (the "Fee Shares") and issued the Investor a warrant to purchase up to 7,000,000 shares of the Company's common stock, with the exercise price of \$1.93 per share, subject to adjustment. The closing of the Series F Preferred took place in early June 2010.

# Exchange Agreement Series F Preferred Stock

On June 11, 2010, the Company, entered into an Exchange Agreement (the "Socius Exchange Agreement") with Socius CG II, Ltd. ("Socius") under which the Company and Socius agreed to exchange all of the Series F Preferred Stock previously issued to Socius pursuant to the Preferred Stock Purchase Agreement dated May 4, 2010 (the "Socius Preferred Stock Agreement") for all of the promissory notes of Socius (the "Socius Notes") issued to the Company in that transaction as payment for shares of the Company's common stock and a \$2.5 million note issued in partial payment for the Socius Series F Preferred Stock. As part of the exchange transaction, the Company agreed to waive all accrued interest on the Socius Notes and Socius agreed to waive all accrued dividends and redemption premiums on the Socius Series F Preferred Stock. The exchange was completed in June 2010 and is discussed in more detail below. Following the return of all shares of Series F Preferred Stock, the Company filed a Certificate of Elimination for the Series F Preferred Stock to remove the powers, preferences, privileges and other rights of the Series F Preferred Stock.

# Perpetual Preferred Stock

As part of the Series E financing agreement, the Company recorded a Perpetual Preferred Stock equal to the amount of financing received during the year, plus accrued dividends, and Note Receivable equal to 135% of financing received, which represents the amount of warrant coverage per the agreement, plus accrued interest. In accordance with applicable authoritative guidance on Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity, the Company classified the Note Receivable as contra Equity ("Note subscription on Perpetual Preferred Stock") and the Perpetual Preferred Stock as a liability ("Long Term Perpetual Preferred Stock"). The Note Receivable accrued interest at a rate of 2% per year and the Perpetual Preferred Stock according to the value of the preferred stock and the fair value of the warrants. Estimated adjusted fair value of the warrants was determined using the Black-Scholes valuation model using risk-free interest rates ranging from 2.40% to 2.65%, volatility rate ranging from 64.46% to 65.33%, term of five years, and exercise price ranging from \$0.56 to \$0.74.

As a result of the exchange transactions for the Series E and Series F Preferred stock, all of the Company's obligations under the previously outstanding Series E Preferred Stock and Series F Preferred Stock, which collectively had liquidation preferences of \$15 million senior to the shares of the Company's common stock and redemption premiums that started at 26% of the liquidation preference were retired and the Company no longer held any promissory notes of either Socius or Optimus. Because the parties to these exchange transactions determined that the instruments and rights being exchanged were of equivalent value, neither party paid any cash to the other party to the exchange transaction. Therefore, as of June 30, 2010, the Company reversed out all of the Perpetual Preferred Stock and the Notes Receivable related to the Perpetual Preferred Stock.

# Series G Preferred Stock

On March 9, 2012, the Company entered into a Series G Preferred Stock Purchase Agreement (the "Series G Agreement") with AR Partners, LLC (the "Purchaser") to sell five million (5,000,000) shares of Series G Preferred Stock ("Series G Preferred") at a price of \$1.00 per Series G Preferred share, for a total purchase price of \$5,000,000. The Purchaser is an affiliate of Dr. Andrey Semechkin, the Company's Co-Chairman and Chief Executive Officer, and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director.

The Series G Preferred is convertible into shares of common stock at \$0.40 per share, resulting in an initial conversion ratio of 2.5 shares of common stock for every share of Series G Preferred. The conversion price may be adjusted for stock splits and other combinations, dividends and distributions, recapitalizations and reclassifications, exchanges or substitutions and is subject to a weighted-average adjustment in the event of the issuance of additional shares of common stock below the conversion price. The Series G Preferred shares have priority over the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Common Stock on the proceeds from any sale or liquidation of the Company in an amount equal to the purchase price of the Series G Preferred, plus any accrued but unpaid dividends, but such payment may be made only after payment in full of the liquidation preferences payable to holders of any shares of Series D Preferred Stock then outstanding. Historically, from the date of issuance of the Series G Preferred, dividends at the rate per annum of six percent (6%) of the Purchase Price per share accrued quarterly on such shares of Series G Preferred. Each share of Series G Preferred has the same voting rights as the number of shares of Common Stock into which it would be convertible on the record date. As long as there are at least 1,000,000 shares of Series G Preferred outstanding, the holders of Series G Preferred have (i) the initial right to propose the nomination of two members of the Board, at least one of which nominees shall be subject to the approval of the Company's independent directors, for election by the stockholder's at the Company next annual meeting of stockholders, or, elected by the full board of directors to fill a vacancy, as the case may be, and (ii) the right to approve any amendment to the certificate of incorporation, certificates of designation or bylaws, in manner adverse to the Series G Preferred, alter the percentage of board seats held by the Series G directors or increase the authorized number of shares of Series G Preferred. At least one of the two directors nominated by holders of the Series G Preferred shares shall be independent based on the NASDAQ listing requirements. On October 12, 2012, the Company and the holders of all of the outstanding shares of Series D and Series G Preferred Stock entered into the Waiver Agreement pursuant to which such holders irrevocably waived their right to receive any and all accrued but unpaid dividends and interest thereon on or after September 30, 2012 on the Series D and Series G Preferred Stock. Accordingly, dividends from inception in the amount of \$93,000 accreted to the carrying value of Series G preferred stock have been reversed. Under the Waiver Agreement, the holders of Series D and Series G Preferred Stock are restricted from transferring any shares of Series D Preferred Stock or Series G Preferred Stock unless the transferee agrees to be bound by the Waiver Agreement.

The Company determined that the Series G convertible preferred shares have a contingent redemption feature allowing redemption by the holder under only some very limited circumstances ("deemed liquidation events"). As the event that may trigger the redemption of the convertible preferred stock is not solely within the Company's control, the convertible preferred stock has been classified as mezzanine equity (outside of permanent equity) on the Company's condensed consolidated balance sheet. Additionally, legal costs related to the Series G financing in the amount of \$59,000 were recorded in the mezzanine equity as well.

The Company determined that as the initial conversion price at the date of close of the Series G transaction was lower than the closing market price on that day (March 9, 2012) that a beneficial conversion feature existed in the amount of \$1,375,000. Such amount was recorded as a discount on the Series G convertible preferred stock with a corresponding increase in additional paid-in capital. Based on the appropriate accounting guidance, the Company is required to recognize the discount over the period of time from the issuance of preferred shares until the convertible preferred shares can be first converted. As the Series G convertible shares are convertible immediately following their issuance, the discount amount of \$1,375,000 was recognized in March 2012 as deemed dividend with a corresponding increase in accumulated deficit. During the first quarter of 2013, the Company issued additional shares of common stock at \$0.20 per share, triggering an adjustment in the current conversion price of the Series G Preferred Stock at \$0.37, and the conversion ratio to 2.67 shares of common stock for every share of Series G Preferred.

No dividend was paid to the holders during the three months ended March 31, 2013 and 2012.

# Common Stock Purchase Agreement

On December 9, 2010, International Stem Cell Corporation ("ISCO" or the "Company") entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$25.0 million of shares of ISCO common stock (the "Purchase Shares") over the term of the Purchase Agreement. In connection with the execution of the Purchase Agreement, ISCO sold Aspire 333,333 shares of common stock for a total of \$500,000. Under the Purchase Agreement, the Company also agreed to pay Aspire Capital a commitment fee of 500,000 shares of its common stock. The Company is not obligated to pay any additional expense reimbursement or any placement agent fees in connection with the transaction.

The Purchase Agreement is intended to provide the Company with a source of capital of up to \$25 million over a term of up to three years. The sales price of any shares the Company elects to sell will be known by the Company at the time it makes the decision to sell and will be determined by a formula (described below) based on the price of the Company's stock over the preceding 12 days. As a result, the Company will be able to sell shares on whatever schedule it believes best suits its needs and is not required to sell any shares unless it deems such sales to be beneficial to the Company.

Once the Registration Statement (referred to below) is effective, on any day on which the principal market for shares of ISCO common stock is open for trading, over the three-year term of the Purchase Agreement, the Company has the right, in its sole discretion, to provide Aspire Capital with a purchase notice (each, a "Purchase Notice") directing Aspire Capital to purchase the number of shares of ISCO common stock specified in the Purchase Notice. The number of shares the Company may designate in the Purchase Notice varies based on the closing price of the ISCO common stock on the date of the Purchase Notice. The Company may direct Aspire Capital to purchase up to: (1) 100,000 shares of common stock so long as the closing price is above \$0.25; (2) 150,000 shares of common stock so long as the closing price is above \$1.25; (3) 200,000 shares of common stock so long as the closing price is above \$1.75 and (4) 300,000 shares of common stock so long as the closing price is above \$2.25. The purchase price per share (the "Purchase Price") for each Purchase Notice is the lower of (i) the lowest sale price for the common stock on the date of sale or (ii) the arithmetic average of the three lowest closing sale prices for the common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of those securities.

The timing and the number of shares covered by each Purchase Notice are determined in the Company's sole discretion, and the applicable Purchase Price will be determined prior to delivery of any Purchase Notice. The Company may deliver multiple Purchase Notices to Aspire Capital from time to time during the term of the Purchase Agreement, so long as the most recent purchase has been completed. There are no trading volume requirements or restrictions under the Purchase Agreement. Aspire Capital has no right to require any sales by the Company, but is obligated to make purchases as directed in accordance with the Purchase Agreement.

The Purchase Agreement contains customary representations, warranties, covenants, closing conditions and indemnification and termination provisions. The Purchase Agreement may be terminated by the Company at any time, at its discretion, without any cost or penalty. Aspire Capital has agreed not to cause, or engage in any manner whatsoever, any direct or indirect short selling or hedging of ISCO common stock. The Company did not pay any additional amounts to reimburse or otherwise compensate Aspire Capital in connection with the transaction. There are no limitations on use of proceeds, financial or business covenants, restrictions on future funding, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement.

The Company's net proceeds will depend on the Purchase Price and volume and frequency of the Company's sales of shares to Aspire Capital; provided, however, that the maximum aggregate proceeds from sales of shares to Aspire Capital under the Purchase Agreement is \$25 million. The Company anticipates that delivery of Purchase Notices will be made subject to market conditions, in light of the Company's capital needs from time to time and under the limitations contained in the Purchase Agreement. The Company expects to use proceeds from sales of shares to Aspire Capital for funding its research and development activities and for general corporate purposes and working capital requirements.

## Registration Rights

In connection with the Purchase Agreement, the Company also entered into a Registration Rights Agreement (the "Registration Rights Agreement") with Aspire Capital, dated December 9, 2010. The Registration Rights Agreement provides, among other things, that the Company will register the resale of the commitment fee shares and the shares that have been or may be sold to Aspire Capital (collectively, the "Securities") by Aspire Capital. The Company further agreed to keep the Registration Statement effective and to indemnify Aspire Capital for certain liabilities in connection with the sale of the Securities under the terms of the Registration Rights Agreement.

During the three months ended March 31, 2013 and 2012, the Company has issued 1,200,000 and 5,000,000 shares of common stock, respectively, to Aspire Capital, raising \$264,000 and \$2.1 million, respectively, which was used to fund its operational activities.

# Reserved Shares

At March 31, 2013, the Company had shares of common stock reserved for future issuance as follows:

Options outstanding	22,676,193
	22,070,175
Options available for future grant	17,050,980
Convertible preferred stock	
·	36,403,812
Warrants	
	9,462,500
	85,593,485

# 7. Related Party Transactions

Other than with respect to the purchases of Series C, Series D and Series G Preferred Stock discussed above, the Company's related party transactions were for related party dividends and for a facility lease.

Dividend amounts related to Series D and Series G financing, of \$82,000 were accrued at March 31, 2012 to be payable to X-Master, Inc. and AR Partners LLC, entities affiliated with our Chief Executive Officer and Co-Chairman of the Board of Directors, Dr. Andrey Semechkin and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director. The Series D dividends were payable to both X-Master, Inc. and our Chief Executive Officer and Co-Chairman of the Board of Directors, Dr. Andrey Semechkin, while Series G Preferred Stock dividends were initially cumulative and payable upon conversion of the Series G shares or upon certain Series G deemed liquidation events to AR Partners, LLC. These amounts were paid during 2012. On October 12, 2012, the Company and the holders of all of the outstanding shares of Series D and Series G Preferred Stock entered into the Waiver Agreement pursuant to which such holders irrevocably waived their right to receive any and all accrued but unpaid dividends and interest thereon on or after September 30, 2012 on the Series D and Series G Preferred Stock. Accordingly, the Company reversed all previously-accrued and unpaid dividends related to Series G Preferred Stock totaling \$93,000. Under the Waiver Agreement, the holders of Series D and Series G Preferred Stock are restricted from transferring any shares of Series D Preferred Stock unless the transferee agrees to be bound by the Waiver Agreement. No dividends were accrued or paid during the three months ended March 31, 2013 pursuant to the Waiver Agreement.

During the first quarter of 2011, the Company executed an operating lease for our corporate offices with S Real Estate Holdings LLC. S Real Estate Holdings LLC which is owned by Dr. Ruslan Semechkin, the Company's Vice President of Research and Development and was previously owned by Dr. Andrey Semechkin, the Company's Chief Executive Officer and Co-Chairman of the Board of Directors. The lease agreement was negotiated at arm's length and was reviewed by the Company's outside legal counsel. The terms of the lease were reviewed by a committee of independent directors, and the Company believes that, in total, those terms are at least as favorable to the Company as could be obtained for comparable facilities from an unaffiliated party. For the three months ended March 31, 2013 and 2012, the Company recorded \$28,000 and \$27,000, respectively, in rent expense that was related to the facility lease arrangement with related parties.

# 8. Income Taxes

The Company estimated Federal and state tax losses for the current year and recorded a full valuation allowance against all net deferred tax assets. As such, no income tax provision has been recorded for the current period. The Company may be subject to IRC code section 382 which could limit the amount of the net operating loss and tax credit carryovers that can be used in future years. There can be no assurances that the Company will ever be able to realize the benefit of some or all of the loss and credit carryforwards either due to ongoing operating losses or due to ownership change limitations.

# 9. Stock Options and Warrants

Stock Options

The Company has adopted the 2006 Equity Participation Plan (the "2006 Plan"). The options granted under the 2006 Plan may be either qualified or non-qualified options. Up to 15,000,000 options may be granted to employees, directors and consultants under this Plan. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant.

In April 2010, the Company adopted the 2010 Equity Participation Plan (the "2010 Plan"). The options granted under the 2010 Plan may be either qualified or non-qualified options. Up to 18,000,000 options may be granted to employees, directors and consultants under the 2010 Plan. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant.

In November and December of 2009, the Company issued outside the 2006 and 2010 option plans non-qualified stock options to purchase 10,257,593 shares of common stock to certain employees and consultants. These options vest over 50 months and expire no later than 10 years from the date of grant.

In accordance applicable authoritative guidance, the Company is required to establish assumptions and estimates of the weighted-average fair value of stock options granted, as well as using a valuation model to calculate the fair value of stock-based awards. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards. All options are amortized

over the requisite service periods. During the three months ended March 31, 2013 and 2012, the Company recognized \$409,000 and \$685,000, as stock-based compensation expense, respectively. Unrecognized compensation expense related to stock options as of March 31, 2013 and 2012 was \$2.96 million and \$6.1 million, respectively, which is expected to be recognized over a weighted average period of approximately 2.0 years and 2.7 years, respectively.

Stock-based compensation for stock options granted to non-employees has been determined using the estimated fair value of the stock options issued, based on the Black-Scholes Option Pricing Model. These options are revalued at each reporting period until fully vested, with any change in fair value recognized in the consolidated statements of operations.

The fair value of options granted is estimated at the date of grant using a Black-Scholes option-pricing model with the following weighted-average assumptions for the three months ended March 31, 2013 and 2012:

	Three Months Ended March 31, 2013	Three Months Ended March 31, 2012
Significant assumptions (weighted-average):		
Risk-free interest rate at grant date	0.94%	1.11%
Expected stock price volatility	121%	127%
Expected dividend payout	0%	0%
Expected option life-years based on management's estimate	5.7 years	6.2 years

Options Outstanding						Options Exercisable and vest	ted	
	-	Weighted Average Remaining				Weighted Average Remaining		
Exercise Prices	Number Outstanding	Contractual Life (Years)		ted Average cise Price	Number Exercisable	Contractual Life (Years)		ted Average cise Price
\$0.22-\$0.50	4,050,400	7.15	\$	0.41	2,387,880	5.80	\$	0.43
\$0.51-\$0.75	9,365,293	6.70	\$	0.62	7,325,268	6.66	\$	0.62
\$0.76-\$1.00	1,895,000	4.27	\$	0.98	1,767,000	3.96	\$	0.99
\$1.01-\$1.25	343,400	8.09	\$	1.10	239,800	8.09	\$	1.10
\$1.26-\$1.50	1,192,100	6.88	\$	1.31	834,900	6.68	\$	1.32
\$1.51-\$3.20	5,830,000	7.59	\$	1.94	3,309,600	7.47	\$	1.96
	22,676,193	6.84	\$	0.99	15,864,448	6.42	\$	0.95

Transactions involving stock options issued to employees, directors and consultants under the 2006 Plan, the 2010 Plan and outside the plans are summarized below. Options issued have a maximum life of 10 years. The following table summarizes the changes in options outstanding and the related exercise prices for the Company's common stock options issued:

	Number of Shares issued under 2006 Plan and 2010 Plan	Weighted Average Exercise Price Per Share	
Outstanding at December 31, 2011	14,730,207	\$	1.26
Granted	2,398,000	\$	0.38
Exercised	(17,500)	\$	0.22
Canceled or expired	(1,987,807)	\$	0.78
Outstanding at December 31, 2012	15,122,900	\$	1.18
Granted	_	\$	0
Exercised	_	\$	0
Canceled or expired	(56,000)	\$	0.76
Outstanding at March 31, 2013	15,066,900	\$	1.19

	Number of Shares issued outside the Plan	Averag Pri	ighted e Exercise ce Per hare
Outstanding at December 31, 2011	9.254.222	\$	0.65
Granted	8,254,232	Ф	0.63
Graned	_	\$	_
Exercised	_	\$	_
Canceled or expired	_	\$	_
0.44   15   45   41 2012		<u>~</u>	
Outstanding at December 31, 2012	8,254,232	\$	0.65
Granted	_	\$	_
Exercised		Φ.	
	_	\$	_
Canceled or expired	(644,939)	\$	1.00
Outstanding at March 31, 2013			
	7,609,293	\$	0.62

## Warrants

# Brookstreet Securities Corporation

As of December 31, 2006, Brookstreet Securities Corporation ("Brookstreet") had earned 1,976,190 warrants as partial compensation for its services as placement agent for the raising of equity capital. An additional 274,000 warrants were earned by Brookstreet in the first quarter of 2007, for a total of 2,250,190 warrants related to the Company's private placement. In addition, 426,767 warrants were granted to a number of individuals as compensation for services rendered to the Company. Each Warrant entitles the holder thereof to purchase the number of shares of common stock that could be purchased by the dollar amount of the Warrant being exercised at \$1.00 in the case of the Brookstreet warrants and \$0.80 in the case of the individuals' warrants. The Company recognized the value attributable to the individuals' warrants in the amount of \$222,000 and applied it to general and administrative expense. The Company recognized the value attributable to the Brookstreet warrants in the amount of \$1.2 million. The Company recognized the Brookstreet warrants as a component of additional paid-in capital with a corresponding reduction in additional paid-in capital to reflect this as a non-cash cost of the offering. Proceeds from the private equity placement totaled \$9.9 million and are offset by cash offering costs of \$1.5 million as well as the non-cash offering cost of \$1.2 million related to the fair value of the Brookstreet warrants. The Company valued the Brookstreet warrants and the warrants issued to the individuals using the Black-Scholes pricing model and the following assumptions: contractual terms of 5 years and 3 years, an average risk free interest rate of 4.58% and 5.13%, a dividend yield of 0% and 0%, and volatility of 71% and 63%, respectively.

The number of warrants converted into common stock by Brookstreet was 484,675 for the completion of the Brookstreet financing and issued 1,370,000 shares of common stock that was part of a private placement of securities by ISC California during the second half of 2006. The net proceeds from the shares whose sale was finalized in 2007 was \$1.2 million net of cash fees and expenses. In connection with the final settlement in 2007, the selling agent for the private placement received 274,000 additional warrants, which entitle the holder thereof to purchase that number of shares of common stock for \$1.00 each.

During 2008, the Company raised additional capital by issuing Preferred Series A, B, C and D stock. This issuance of the Preferred Series C triggered an anti-dilutive clause in the Brookstreet warrant agreement, where Brookstreet would receive an adjustment downward in the price it pays for converting its warrants and resulted in a deemed dividend of \$337,000. Brookstreet earned a total of 2,250,190 warrants in 2006 and 2007 in connection with the Company's private placement. Each Warrant entitles the holder thereof to purchase one share of common stock for \$1.00, revalued to \$0.56 per warrant. The Company recognized the value attributable to the warrants in the amount of \$1.2 million in 2006 and \$169,000 in 2007 as a component of additional paid-in capital with a corresponding reduction in additional paid-in capital to reflect the issuance as a non-cash cost of the offering. Prior to 2009, the Company valued the Brookstreet warrants using the Black-Scholes pricing model and the following assumptions: contractual terms of 5 years, an average risk free interest rate of 4.58%, a dividend yield of 0%, and volatility of 70.57%. During 2009, the Company issued a total of 3,510,206 shares of common stock which related to warrants originally issued to Brookstreet. Brookstreet converted a total of 612,267 warrants into 484,675 shares of common stock at an average cashless conversion price of \$0.56 per share.

Implementation of Accounting Standards Code (ASC) 815-40-15, (formerly known as EITF 07-5 "Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock Price")

The Accounting Standards Code (ASC) 815-40-15, with an effective date of December 15, 2008, should have been implemented as of January 1, 2009, and in future periods. This Issue applies to any freestanding financial instrument or embedded feature that has all the characteristics of a derivative as described in ASC 815-10-15-83, (previously paragraphs 6–9 of Statement 133) for purposes of determining whether that instrument or embedded feature qualifies for the first part of the scope exception in ASC 815-10-74 (previously paragraph 11(a) of Statement 133). This Issue also applies to any freestanding financial instrument that is potentially settled in an entity's own stock, regardless of whether the instrument has all the characteristics of a derivative for purposes of determining whether the instrument is within the scope of ASC 875-40.

During 2008, the Company issued a Series C Preferred round of financing which triggered the anti-dilution clause in the Brookstreet warrant agreement ("Brookstreet Warrants"). From issuing the Series C Preferred Stock, the exercise prices of the Brookstreet Warrants were revalued down to \$0.56 per warrant. Based on the anti-dilution clause being triggered and the exercise price of the Brookstreet Warrants being revalued downward to \$0.56, ASC 815-40-15 should have caused the Brookstreet Warrants to be treated and accounted for as a liability.

The anti-dilution provisions of the Brookstreet Warrants failed the criteria set by this ASC and therefore required reclassification from equity to liability. The reclassification resulted in the requirement to revaluate the Brookstreet Warrants at each reporting period with a corresponding charge or credit to the statement of operations. Valuation of the warrants was estimated using the Monte-Carlo simulation method using the following assumptions: stock price and warrant price as of the valuation date, the Company's historical stock price, interest rate on U.S. treasury notes, dividend rate derived from the Series D Preferred Stock, warrant expiration; simulated as a daily interval and anti-dilution impact if the Company had to raise capital below \$0.25 per share. The reclassification and valuation of the warrants resulted in warrant liabilities of zero and \$38,000 as of March 31, 2012 and December 31, 2011, respectively. In addition, in the three months ended March 31, 2013 and 2012, we recorded income of \$0 and \$38,000, respectively, in our consolidated condensed statements of operations related to the change in the fair value of warrants.

The 1,721,629 Brookstreet Warrants outstanding as of December 31, 2011 expired on February 14, 2012, and the Company recorded \$38,000 in the first quarter ending March 31, 2012 to reduce the fair market value of the warrants to zero.

# Warrants issued with other financings

During 2007 and 2008, the Company entered into various agreements to borrow working capital and as part of these agreements, the Company issued warrants to the holders to purchase common stock. The Company issued 1,400,000 warrants to YKA Partners, an affiliated company of our former Co-Chairman of the Board with an exercise price of \$0.25 per share, all of which remain outstanding at March 31, 2013 and December 31, 2012.

## Warrants issued with Preferred Stock

During 2008, in connection with the Company's fund raising efforts, two warrants to purchase shares of common stock were issued with the purchase of one share of Series A Preferred Stock, resulting in the issuance of an additional 2,000,000 common stock warrants. In addition, two warrants to purchase shares of common stock were issued with the purchase of one share of Series B Preferred Stock, resulting in the issuance of an additional 1,100,000 common stock warrants. As of December 31, 2010, 400,000 warrants related to the Series A Preferred Stock were converted into 800,000 common shares.

1,600,000 warrants related to the Series A Preferred Stock expired in January, 2013. As of March 31, 2013 and December 31, 2012, there were 300,000 warrants related to the Series B Preferred Stock outstanding with an exercise price of \$0.25 per share. The warrants related to the Series B Preferred Stock expire in July, 2014.

# Warrants issued with Common Stock

In conjunction with the Company's sale of 10,125,000 shares of common stock on January 22, 2013, the Company issued warrants convertible into 5,062,500 shares of common stock at an exercise price of 20 cents. The warrants have a five year term. On March 12, 2013 the Company issued warrants convertible into 2,500,000 shares of common stock in conjunction with the sale of 5,000,000 shares of common stock. These warrants have a five year term and an exercise price of 20 cents.

# Warrants issued to BioTime

During June 2008, the Company entered into an agreement with BioTime, Inc. ("Bio Time"). Based on the agreement, Bio Time agreed to pay the Company an advance of \$250,000 to produce, make, and distribute joint products (as defined in that agreement). As part of the agreement, the Company issued warrants for Bio Time to purchase 30,000 shares of the Company's common stock at \$0.25 per share. These warrants expired in December 2012.

Warrants issued in connection with SkinCare Marketing Agreement

In September 2011, the Company signed a Marketing Agreement ("agreement") with an effective date of June 30, 2011, with a third party marketing organization. According to the terms of the agreement as described in Note 10 below, Commitments and Contingencies, under Marketing Arrangement and Agreement, the third party marketing organization would provide assistance to LSC to sell its skin care products through various specific proprietary mailings. The agreement provides for two tranches of common stock warrants to be issued by the Company for the benefit of the third party marketing organization for 100,000 shares each, with strike prices of \$1.50 and \$2.00, respectively, vesting over four quarters, and a warrant term of five years.

Accordingly, there were warrants for 100,000 shares of common stock at a strike price of \$1.50 vested as of December 31, 2011 in connection with the agreement. In addition, as of September 30, 2012, there were 100,000 warrants vested with a strike price of \$2.00. The Company valued the warrants issued in connection with the SkinCare Marketing Agreement using the Black-Scholes pricing model and the following assumptions: contractual terms of 5 years, an average risk free interest rate of 0.94%, a dividend yield of 0%, and volatility of 134%.

Share data related to warrant transactions through March 31, 2013 were as follows:

	Series A	Series B	YKA Loan	BioTime	Bridge Loan & non-cash Grants	Brookstreet	Skin Care Marketing	Jan 2013 Financing	Mar 2013 Financing	Shares	Price po	er Share Weighted average exercise price
Outstanding, December 31, 2009	2,000,000	1,100,000	1,400,000	30,000	1,629,623	3,405,929					\$0.25-0.80	
2010	2,000,000	1,100,000	1,100,000		1,023,022	3,100,727				3,000,002	<del>\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\exittit{\$\text{\$\}\$}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}</del>	<del>φ 0110</del>
Issued										_		
Exercised	(400,000)	(600,000)			(248,902)	(1,645,772)				(2,894,674)	0.25-0.80	0.47
Forfeited/Cancelled												
Outstanding, December 31, 2010	1,600,000	500,000	1,400,000	30,000	1,380,721	1,760,157				6,670,878	\$0.25-0.80	\$ 0.45
2011												
Issued							200,000			200,000	1.50-2.00	1.75
Exercised		(200,000)			(62,800)	(38,528)				(301,328)	0.25-0.80	0.40
Forfeited/Cancelled												
Outstanding, December 31, 2011	1,600,000	300,000	1,400,000	30,000	1,317,921	1,721,629	200,000	_	_	6,569,550	\$0.25-2.00	\$ 0.49
2012												
Issued										_		
Exercised										_		
Forfeited/Cancelled				(30,000)	(1,317,921)	(1,721,629)				(3,069,550)	\$0.56-0.80	\$ 0.66
Outstanding, December 31, 2012	1,600,000	300,000	1,400,000	_	_	_	200,000	_	_	3,500,000	\$0.25-2.00	\$ 0.34
2013												
Issued								5.062 500	2,500 000	7,562,500	\$ 0.20	\$ 0.20
Exercised								-,- 0 <b>-,</b> 000	_,_ 00,000	.,502,500	, 0.20	. 0.20

Forfeited/Cancelled	(1,600,000)									(1,600,000)	\$ 0.2	5 \$	0.25
	(1,000,000)									(1,000,000)	Φ 0.2	<u>σ</u>	0.23
Outstanding, March 31, 2013													
	_	300,000	1,400,000	_	_	_	200,000	5,062,500	2,500,000	9,462,500	\$0.20-2.0	0 \$	0.24

# 10. Commitments and Contingencies

## Leases

We have established our primary research facility in 8,215 square feet of leased office and laboratory space in Oceanside, California. Our lease for this facility expires in August 2016. Our current base rent is \$8,338 per month. The facility has leasehold improvements which include cGMP (current Good Manufacturing Practices) level clean rooms designed for the derivation of clinical-grade stem cells and their differentiated derivatives, research laboratories for our stem cell differentiation studies and segregated rooms for biohazard control and containment of human donor tissue. The monthly base rent will increase by 3% annually on the anniversary date of the agreement.

During 2010 we utilized a 3,240 square foot laboratory in Walkersville, Maryland. Our lease for this facility expired in March 2011, and we moved into a new manufacturing facility in Frederick, Maryland which we use for laboratory and administrative purposes. Our current base rent in the new facilities is \$11,306 per month. The initial lease term expires December 31, 2015 and there is an option for an additional five years.

On February 25, 2011, the Company entered into a lease agreement (the "Lease Agreement") with S Real Estate Holdings LLC to allow the Company to expand into new corporate offices located at 5950 Priestly Drive, Carlsbad, California. The new building is used for administrative purposes, but could also be used for research and development purposes if such space is needed in the future. The lease covers approximately 4,653 square feet, which was occupied on or about March 1, 2011. The lease expires on February 29, 2016, subject to the Company's right to extend the term for up to five additional years. The Company began rent payments in March 2011 once it occupied the facilities, at an initial rate of \$5,118 per month. The lease was amended effective July 2011 to account for additional square footage occupied by Company personnel. As such, the initial monthly rate has increased to \$9,018 per month. In addition, the monthly base rent will increase by 3% annually on the anniversary date of the agreement. The Company is also obligated to pay a portion of the utilities for the building, CC&R fees and increases in property tax and insurance.

S Real Estate Holdings LLC is owned by Dr. Ruslan Semechkin, the Company's Vice President of Research and Development and was previously owned by Dr. Andrey Semechkin, the Company's Chief Executive Officer and Co-Chairman of the Board of Directors. The Lease Agreement was negotiated at arm's length and was reviewed by the Company's outside legal counsel. The terms of the lease were reviewed by a committee of independent directors, and the Company believes that, in total, those terms are consistent with the terms that could be obtained for comparable facilities from an unaffiliated party.

Future minimum lease payments required under operating leases that have initial or remaining non-cancelable lease terms in excess of one year as of March 31, 2013, are as follows (in thousands):

	Amount
2013 (remaining nine months)	\$ 273
2014	363
2015	372
2016	97
Total	\$ 1,105

# Marketing Arrangement and Agreement

The Company signed a Term Sheet ("arrangement") in late 2010 with a third party marketing organization that would serve as a consultant and assist in marketing for Lifeline Skin Care, Inc., ("LSC") a wholly-owned subsidiary of International Stem Cell, to sell its skin care products through various proprietary mailings. As part of the arrangement, there were various phases and objectives to accomplish, one of which was the potential formation of a joint venture in the future between the parties. Based on the arrangement, LSC paid to the marketing organization 40% of net profits (as defined in the arrangement) generated from the proprietary mailings.

In September 2011, the Company signed a Marketing Agreement ("agreement") with an effective date of June 30, 2011, superseding the terms of the arrangement with the third party marketing organization. According to the agreement, the third party marketing organization will continue to provide assistance to LSC to sell skin care products through various specific proprietary mailings. In exchange for such services, the Company will pay 20% of net revenues for Direct Sales (as defined in the agreement) generated from the proprietary mailings. In addition, the Company agreed to pay 10% of net revenues for Referral Sales. The agreement specifies that the parties do not intend to create a joint venture, and that either party may terminate the agreement upon 30-day written notice. In addition, the agreement provides for two tranches of common stock warrants to be issued by the Company for the benefit of the third party marketing organization for 100,000 shares each, with strike prices of \$1.50 and \$2.00, respectively, with vesting over four quarters, and warrant term of five years. Subsequently in July 2012, we renegotiated the commission structure to reflect slightly lower

rates, 18% on net revenues derived from direct sales and 9% on net revenues derived from referral sales. The Company recognized \$0 and \$36,000 in stock-based compensation from warrants issued for services during the three months ended March 31, 2013 and 2012, LSC incurred \$24,000 and \$38,000, respectively, under the terms of this arrangement and agreement.

# Customer Concentration

During the three months ended March 31, 2013, one major customer, accounted for 16% of our consolidated revenues. No single customer accounted for more than 10% of our revenues during the three months ended March 31, 2012.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes and other financial information included elsewhere herein. This information should also be read in conjunction with our audited historical consolidated financial statements which are included in our Form 10-K for the fiscal year ended December 31, 2012. The discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, expectations and intentions. Our actual results may differ significantly from management's expectations. This discussion should not be construed to imply that the results discussed herein will necessarily continue into the future, or that any conclusion reached herein will necessarily be indicative of actual operating results in the future. Such discussion represents only the best assessment by our management.

## **Business Overview**

We are a development-stage biotechnology company focused on therapeutic, biomedical and cosmeceutical product development with multiple long-term therapeutic opportunities and two revenue-generating businesses offering potential for increased future revenue.

We have not generated any revenues from our principal operations in therapeutic research and development. To date, we have generated limited and unpredictable incidental revenues to support our core therapeutic research and development efforts.

Our products are based on multi-decade experience with human cell culture and a proprietary type of pluripotent stem cells, "human parthenogenetic stem cells" ("hpSCs"). Our hpSCs are comparable to human embryonic stem cells ("hESCs") in that they have the potential to be differentiated into many different cells in the human body. However, the derivation of hpSCs does not require the use of fertilized eggs or the destruction of viable human embryos and also offers the potential for the creation of immune-matched cells and tissues that are less likely to be rejected following transplantation. ISCO scientists have created the first parthenogenetic, homozygous stem cell line that can be a source of therapeutic cells for hundreds of millions of individuals of differing genders, ages and racial background with minimal immune rejection after transplantation. ISCO's collection of hpSCs, known as UniStemCell<sup>TM</sup>, currently consists of fifteen stem cell lines. We have facilities and manufacturing protocols that comply with the requirements of Good Manufacturing Practice (GMP) standards as promulgated by the US Code of Federal Regulations and enforced by the Food and Drug Administration ("FDA").

We are developing different cell types from our stem cells that may result in therapeutic products. We focus on applications where cell and tissue therapy is already proven but where there is an insufficient supply of functional cells or tissue. We believe that the most promising potential clinical applications of our technology are:

- Neuronal cells for treatment of Parkinson's disease and potentially other central nervous system disorders, such as traumatic brain injury, stroke and Alzheimer's disease.
- Liver cells ("hepatocytes") that may be used to treat a variety of congenital and acquired liver diseases. Using the same precursor cell that leads to liver cells, it is
  also possible to create islet cells for potential treatment of diabetes.
- · Three-dimensional eye structures to treat degenerative retinal diseases, corneal blindness, and to accelerate corneal healing.

Each of these product candidates will require extensive preclinical and clinical development and may require specific unforeseen licensing rights obtained at substantial cost before regulatory approval may be achieved and the products sold for therapeutic use.

ISCO's wholly-owned subsidiary Lifeline Skin Care, Inc. ("LSC") develops, manufactures and markets cosmetic skin care products using an extract derived from our human stem cell technologies. These products are regulated as cosmetics. Furthermore, marketing and sales are conducted direct to the consumer via the internet as well as channels such as dermatology clinics and spas, thus providing important revenue to help support our internal development of therapeutic products. LSC currently sells its products nationally and internationally through a branded website and select distributors.

ISCO's wholly-owned subsidiary Lifeline Cell Technology, LLC ("LCT") develops, manufactures and commercializes human cells and the reagents needed to culture and study human cells. LCT's scientists have used a technology called basal medium optimization to systematically produce optimized products designed to culture specific human cell types and to elicit specific cellular behaviors. These techniques also produce products that do not contain non-human animal proteins, a feature desirable to the research and therapeutic markets. LCT is unique in the industry in that it has in place scientific and manufacturing staff with the experience and knowledge to set up systems and facilities to produce a source of consistent, standardized, non-human animal protein free cell products, some of which are suitable for FDA approval. LCT also provides important funds to help support our internal development of therapeutic products. LCT's products are marketed and sold by its internal sales force, OEM partners and LCT brand distributors in Europe and Asia.

While we continued to expand our sales and marketing efforts to optimize revenue, to date we have generated limited revenue to support our core therapeutic research and development efforts.

We were originally incorporated in Delaware on June 7, 2005 as BTHC III, Inc. to effect the reincorporation of BTHC III, LLC, a Texas limited liability company, mandated by a plan of reorganization. Pursuant to the plan of reorganization, an aggregate of 500,000 shares of our common stock were issued to holders of administrative and tax claims and unsecured debt, of which 350,000 shares were issued to Halter Financial Group. The plan of reorganization required BTHC III, Inc. to consummate a merger or acquisition prior to June 20, 2007. Until the Share Exchange Agreement described below, BTHC III, Inc. conducted no operations. In October 2006, BTHC III, Inc. affected a 4.42-for-one stock split with respect to the outstanding shares of common stock.

On December 28, 2006, pursuant to a Share Exchange Agreement, BTHC III, Inc. issued 33,156,502 shares of common stock, representing approximately 93.7% of the common stock outstanding immediately after the transaction, to the shareholders of International Stem Cell Corporation, a California corporation ("ISC California"), in exchange for all outstanding stock of ISC California. This transaction is being accounted for as a "reverse merger" for accounting purposes. Consequently, the assets and liabilities and the historical operations that are reflected in our financial statements are those of ISC California.

ISC California was incorporated in California in June 2006 for the purpose of restructuring the business of Lifeline Cell Technology, LLC, which was organized in California in August 2001. As a result of the restructuring, Lifeline became wholly-owned by ISC California, which in turn is wholly-owned by us. Lifeline Cell Technology is responsible for developing, manufacturing and distributing all of its products.

Lifeline Skin Care, Inc. was formed in the State of California on June 5, 2009 and is a wholly-owned subsidiary of ISC California. SkinCare creates cosmetic skin care products using an ingredient derived from our human cell technologies. SkinCare currently sells its products nationally and internationally through a branded website and select distributors.

#### Results of Operations

#### Revenues

We are considered a development stage entity with no revenue generated from our principal operations in therapeutic research and development efforts. To date, we have generated limited and unpredictable incidental revenues to support our core therapeutic research and development efforts. Revenue for the three months ended March 31, 2013 totaled \$1.29 million, compared to \$1.08 million for the three months ended March 31, 2012. LSC contributed \$650,000 or 51% of total revenue in the three months ended March 31, 2013, compared to \$547,000 or 51% of total revenue for the three months ended March 31, 2012. The increase of \$103,000 or 19% in LSC's revenue was as a result of our strategic efforts to expand and diversify our sources of revenue. LCT's revenue of \$635,000 for the three months ended March 31, 2013, accounted for 49% of total revenue, compared to \$530,000, or 49% of total revenue for the three months ended March 31, 2012. LCT's revenue increased by \$105,000 or 20% primarily due to by higher sales to OEM customers and international distributors.

#### Cost of sales

Cost of sales for the three months ended March 31, 2013 was \$334,000 or 26% of revenue, compared to \$324,000 or 30% of revenue for the three months ended March 31, 2012. The favorable reduction in cost of sales as a percentage of revenue for the three months ended March 31, 2013, compared to the corresponding period in 2012, is primarily due to lower costs of production for LSC, and a shift in sales mix from lower margin products to higher margin products for LCT.

Cost of sales reflects direct costs including salaries and benefits related to manufacturing, third party manufacturing costs, materials, general laboratory supplies and an allocation of overhead. We aim to continue refining our manufacturing processes, and as sales volume continues to increase for these products, we anticipate further improvements in the cost of sales as a percentage of revenue for both LSC and LCT.

#### Research and Development ("R&D")

Research and development expenses were \$721,000 for the three months ended March 31, 2013, compared to \$937,000 for the same period in 2012. The decrease of \$216,000 or 23% is primarily due to lower laboratory supplies of \$78,000, personnel-related spending of \$64,000, stem cell line research and testing expenses of \$40,000, and stock-based compensation expense of \$27,000.

R&D is focused on the development of treatments for Parkinson's disease (PD), metabolic liver diseases, such as Crigler-Najjar syndrome, (CNS) and Alpha 1-antitrypsin deficiency (A1AD), diseases of the eye and the creation of new cGMP grade human parthenogenetic stem cell lines. These projects are long-term investments that involve developing both new stem cell lines and new differentiation techniques that can provide higher purity populations of functional cells. We do not expect these projects to provide near-term revenue, although we have published milestones including the initiation of a non-human primate (NHP) PD study in the fourth quarter of 2012, the release of pre-clinical rodent and NHP PD study data in the first quarter of 2013 and the initiation of a Gunn rat rodent study to look at CNS, a rare but sometimes fatal inherited liver disease.

Research and development expenses are expensed as they are incurred, and are accounted for on a project by project basis. However much of our research has potential applicability to each of our projects.

#### Selling and Marketing Expense

Marketing expenses for the three months ended March 31, 2013 were \$511,000, reflecting an increase of \$15,000 or 3%, as compared to \$496,000 for the three months ended March 31, 2012. The increase was primarily driven by enhanced efforts in advertising and promotion and e-commerce infrastructure, of \$84,000, to market our skin care products. There was also an increase in shipping and logistical costs of \$22,000 largely due to the increase in sales. The increase was partially offset by a reduction in consulting expense of \$58,000, and in stock-based compensation expense of \$46,000.

We continued to intensify our marketing efforts by refining our sales and marketing strategies, and expanding our sales channels and strengthening our operations to achieve target sales goals.

#### General and Administrative Expenses

General and administrative expenses for the three months ended March 31, 2013 were \$1.42 million, reflecting a decrease of \$620,000 or 30%, compared to \$2.04 million for the same period in 2012. The decrease is largely attributable to a more streamlined operating cost structure including reductions in personnel-related spending resulting from lower headcount of \$236,000, stock-based compensation expense of \$171,000, professional accounting fees and corporate governance of \$99,000, corporate support expenses of \$54,000, legal fees of \$36,000, and consulting expense of \$25,000.

#### Other Income/Expense

Other expense was \$12,000 for the three months ended March 31, 2013. For the three months ended March 31, 2012 we recorded other income of \$42,000, mostly related to a decrease in the fair value of our warrant liabilities which expired on February 14, 2012.

#### Liquidity and Capital Resources

As of March 31, 2013, our cash and cash equivalents totaled \$1.91 million, compared to \$654,000 as of December 31, 2012. At March 31, 2013, we had working capital of \$2.40 million, compared to \$395,000 as of December 31, 2012.

#### Operating Cash Flows

Net cash used in operating activities was \$1.85 million for the three months ended March 31, 2013, compared to \$2.03 million for the corresponding period in 2012. The primary factors contributing to the variability in the report cash flow amounts relate to the net loss after non-cash adjustments totaling \$1.10 million in the three months ended March 31, 2013, compared to \$1.87 million in the same period in 2012. Offsetting this improvement was a reduction in the accounts payable of \$539,000 due to the timing of payments to vendors in the quarter ended March 31, 2013.

#### Investing Cash Flows

Net cash used in investing activities was \$168,000 for the three months ended March 31, 2013, compared to \$216,000 in the same period in 2012. The decrease resulted from lower payments for patent licenses and trademarks of \$4,000 along with lower capital expenditure spending of \$44,000.

#### Financing Cash Flows

Net cash provided by financing activities was \$3.27 million for the three months ended March 31, 2013, compared to \$6.92 million in the same period in 2012. The net proceeds of \$6.92 million received in 2012 were primarily attributable to the issuance of 5 million shares of Series G Preferred Stock for approximately \$4.94 million, net of stock issuance costs while the net proceeds of \$3.27 received in 2013 were from the issuance of common stock. For further discussion of the common stock issuance, see item 2. Unregistered Sales of Equity Security and Use of Proceeds. For further discussion of the prior period proceeds, see Note 6, Capital Stock, Series G Preferred Stock. In addition, during the three months ended March 31, 2012, we raised \$2.09 million from the issuance of 5,000,000 shares of common stock to Aspire Capital Group. In the first quarter of 2012, we paid dividends of \$108,000 to our preferred stockholders. No dividend was paid during the three months ended March 31, 2013.

Management is currently reviewing different financing sources to raise working capital to help fund our current operations. We will need to obtain significant additional capital from sources including equity and/or debt financings, license arrangements, grants and/or collaborative research arrangements in order to develop products. Thereafter, we will need to raise additional working capital. Unless we obtain additional financing, we do not have sufficient cash on hand to operate for the next 12 months. The timing and degree of any future capital requirements will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for capital needs in 2013 and beyond;
- the extent that revenues from sales of LSC and LCT products cover the related costs and provide capital;
- · scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs and our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- · our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;

- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

Additional financing through strategic collaborations, public or private equity financings or other financing sources may not be available on acceptable terms, or at all. Additional equity financing could result in significant dilution to our stockholders. Additional debt financing may be expensive and require us to pledge all or a substantial portion of our assets. Further, if additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize on our own. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our product lines.

We continue to operate as a development stage entity and as such have accumulated losses from inception and expect to incur additional losses in the near future. We need to raise additional working capital. The timing and degree of any future capital requirements will depend on many factors. Currently our average burn rate is approximately \$620,000 per month, excluding capital expenditures and patent costs averaging \$60,000. There can be no assurance that we will be successful in maintaining our normal operating cash flow and that the timing of our capital expenditures will result in cash flow sufficient to sustain our operations through 2013. Based on the above, there is substantial doubt about our ability to continue as a going concern. The consolidated financial statements were prepared assuming that we will continue to operate as a going concern. The consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. Management's plans in regard to these matters are focused on managing our cash flow, the proper timing of our capital expenditures, and raising additional capital or financing in the future. In January and March 2013, to obtain funding for working capital purpose, the Company sold 16,325,000 shares of common stock raising \$3,289,000.

We do not currently have any obligations for milestone payments under any of our licensed patents other than the minimum royalty payment of \$75,000 due in two installments per year to Advanced Cell Technology, pursuant to the amended UMass IP license agreement. No licenses are terminable at will by the licensor. For further discussion of our patents, see Note 4 to our condensed consolidated financial statements.

Under our Common Stock Purchase Agreement with Aspire Capital Fund, LLC ("Aspire Capital"), we may sell from time to time up to an aggregate of \$25.0 million of shares of common stock through approximately January 2014, subject to specific registration requirements. From commencement through March 31, 2013, we sold a total of 10,533,333 shares of common stock to Aspire Capital for an aggregate of \$6,206,000.

Off-Balance Sheet Arrangements

As of March 31, 2013, we did not have any off-balance sheet arrangements.

#### Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not required.

#### **Item 4. Controls and Procedures**

Evaluation of disclosure controls and procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of the design and operation 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. Based on that evaluation, our chief executive officer and our chief financial officer have concluded that, at March 31, 2013, our disclosure controls and procedures were effective.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in internal control over financial reporting

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of any potential changes in our internal control over financial reporting during the fiscal quarter covered by this quarterly report on Form 10-Q.

There were no changes in our internal control over financial reporting during the quarter ended March 31, 2013 that our certifying officers concluded materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### PART II—OTHER INFORMATION

### Item 1. Legal Proceedings

None.

#### Item 1A. Risk Factors

The risk factors set forth below with an asterisk (\*) next to the title are new risk factors or risk factors containing material changes from the risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2012, as filed with the SEC. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected, and the value of our common stock could decline.

#### Risks Related to Our Business

#### Our business is at an early stage of development and we may not develop therapeutic products that can be commercialized.

Our business is at an early stage of development. We do not have any products in late stage clinical trials. We are still in the early stages of identifying and conducting research on potential therapeutic products. Our potential therapeutic products will require significant research and development and preclinical and clinical testing prior to regulatory approval in the United States and other countries. We may not be able to obtain regulatory approvals, enter clinical trials for any of our product candidates, or commercialize any products. Our product candidates may prove to have undesirable and unintended side effects or other characteristics adversely affecting their safety, efficacy or cost effectiveness that could prevent or limit their use. Any product using any of our technology may fail to provide the intended therapeutic benefits, or achieve therapeutic benefits equal to or better than the standard of treatment at the time of testing or production.

We have a history of operating losses, do not expect to be profitable in the near future and our independent registered public accounting firm has expressed doubt as to our ability to continue as a going concern.

We have not generated any profits since our entry into the biotechnology business and have incurred significant operating losses. We expect to incur additional operating losses for the foreseeable future and, as we increase our research and development activities, we expect our operating losses to increase significantly. We do not have any sources of significant or sustained revenues and may not have any in the foreseeable future.

We have expended substantial funds to develop our technologies, products and product candidates. Based on our financial condition, recurring losses and projected spending, which raise substantial doubts about our ability to continue as a going concern, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2012 regarding this uncertainty. The inclusion of the going concern statement by our auditors may adversely affect our stock price and our ability to raise needed capital or enter into advantageous contractual relationships with third parties. If we were unable to continue as a going concern, the values we receive for our assets on liquidation or dissolution could be significantly lower than the values reflected in our financial statements.

# We will need additional capital to conduct our operations and develop our products and our ability to obtain the necessary funding is uncertain.

During 2012, we used a significant amount of cash to finance the continued development and testing of our product candidates, and we need to obtain significant additional capital resources in order to develop products going forward. Our burn rate as of the first quarter ended March 31, 2013 was approximately \$620,000 per month excluding capital expenditures and patent costs averaging \$60,000 per month. We may not be successful in maintaining our normal operating cash flow and the timing of our capital expenditures may not result in cash flows sufficient to sustain our operations through 2013. If financing is not sufficient and additional financing is not available only on terms that are detrimental to our long-term survival, it could have a major adverse effect on our ability to continue to function. The timing and degree of any future capital requirements will depend on many factors, including:

the accuracy of the assumptions underlying our estimates for capital needs in 2013 and beyond;

- scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs and our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

Additional financing through strategic collaborations, public or private equity or debt financings or other financing sources may not be available on acceptable terms, or at all. Additional equity financing could result in significant dilution to our stockholders, and any debt financings will likely involve covenants restricting our business activities. Additional financing may not be available on acceptable terms, or at all. Further, if we obtain additional funds through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize on our own. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or product development initiatives, any of which could have a material adverse effect on our financial condition or business prospects.

We have limited clinical testing and regulatory capabilities, and human clinical trials are subject to extensive regulatory requirements, very expensive, time-consuming and difficult to design and implement. Our products may fail to achieve necessary safety and efficacy endpoints during clinical trials, which may limit our ability to generate revenues from therapeutic products.

Due to the relatively early stage of our therapeutic products and stem cell therapy-based systems, we have not yet invested significantly in clinical testing and regulatory capabilities, including for human clinical trials. We cannot assure you that we will be able to invest or develop resources for these capabilities successfully or as expediently as necessary. In particular, human clinical trials can be very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is time consuming. We estimate that clinical trials of our product candidates will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be affected by several factors, including:

- unforeseen safety issues;
- determination of dosing issues;
- inability to demonstrate effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of medical investigators to follow our clinical protocols.

In addition, we or the FDA may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in our IND submissions or the conduct of these trials.

Patents held by other persons may result in infringement claims against us that are costly to defend and which may limit our ability to use the disputed technologies and prevent us from pursuing research and development or commercialization of potential products.

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy, stem cells, and other technologies potentially relevant to or required by our expected products. We cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed. We are aware that a number of companies have filed applications relating to stem cells. We are also aware of a number of patent applications and patents claiming use of stem cells and other modified cells to treat disease, disorder or injury.

If third party patents or patent applications contain claims infringed by either our licensed technology or other technology required to make and use our potential products and such claims are ultimately determined to be valid, we might not be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. If we are unable to obtain such licenses at a reasonable cost, we may not be able to develop some products commercially. We may be required to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us to cease using such technology.

#### Our competition includes fully integrated biotechnology, pharmaceutical and cosmetic companies that have significant advantages over us.

The market for therapeutic stem cell products is highly competitive. We expect that our most significant competitors will be fully integrated and more established pharmaceutical, biotechnology and cosmetic companies. These companies are developing stem cell-based products and they have significantly greater capital resources and research and development, manufacturing, testing, regulatory compliance, and marketing capabilities. Many of these potential competitors are further along in the process of product development and also operate large, company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or product commercialization than we are able to achieve. Competitive products may render any products or product candidates that we develop obsolete.

# If competitors develop and market products that are more effective, safer, or less expensive than our product candidates or offer other advantages, our commercial prospects will be limited.\*

Our cell therapy development programs face, and will continue to face, intense competition from pharmaceutical, biopharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies engaged in drug discovery activities or funding, both in the United States and abroad. Some of these competitors are pursuing the development of drugs and other therapies that target the same diseases and conditions that we are targeting with our product candidates.

As a general matter, we also face competition from many companies that are researching and developing cell therapies. Many of these companies have financial and other resources substantially greater than ours. In addition, many of these competitors have significantly greater experience in testing pharmaceutical and other therapeutic products, obtaining FDA and other regulatory approvals, and marketing and selling. If we ultimately obtain regulatory approval for any of our product candidates, we also will be competing with respect to manufacturing efficiency and marketing capabilities, areas in which we have limited or no commercial-scale experience. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated by our competitors. Competition may increase further as a result of advances made in the commercial applicability of our technologies and greater availability of capital for investment in these fields.

#### If we fail to meet our obligations under our license agreements, we may lose our rights to key technologies on which our business depends.

Our business depends in part on licenses from third parties. These third party license agreements impose obligations on us, such as payment obligations and obligations to diligently pursue development of commercial products under the licensed patents. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation, our ability to carry out the development and commercialization of potential products could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology platform could be severely affected adversely.

#### Significant delays or reductions in U.S. Government funding may negatively affect our results of operations.

We estimate that governmental funding, either directly or indirectly (through sponsorship of academic research), comprises approximately 40% of the market for basic and applied research in biological sciences, which is the target market for our primary human cell research products. The U.S. Government is considering significant changes in government spending and other governmental programs, with several automatic spending cuts being implemented. There are many variables in how these laws could be implemented that make it difficult to determine specific impacts on our customers, and we are unable to predict the impact that these automatic spending cuts would have on funding our customers receive. Additionally, U.S. Governmental programs are subject to annual congressional budget authorization and appropriation processes. However, whether through the automatic cuts or other decisions, long-term funding for certain programs in which our research product customers participate may be reduced, delayed or cancelled. In the event that governmental funding for any of our research product customers is reduced or delayed, our sales to those customers would likely suffer, which could have a material adverse effect on our results of operations.

## Restrictive and extensive government regulation could slow or hinder our production of a cellular product.

The research and development of stem cell therapies is subject to and restricted by extensive regulation by governmental authorities in the United States and other countries. The process of obtaining FDA and other necessary regulatory approvals is lengthy, expensive and uncertain. We may fail to obtain the necessary approvals to continue our research and development, which would hinder our ability to manufacture or market any future product.

The development and commercialization of our product candidates is subject to extensive regulation by the FDA and other regulatory agencies in the United States and abroad, and the failure to receive regulatory approvals for our other product candidates would likely have a material and adverse effect on our business and prospects.\*

The process of obtaining FDA and other regulatory approvals is expensive, generally takes many years and is subject to numerous risks and uncertainties, particularly with complex and/or novel product candidates such as our product candidates. Changes in regulatory approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application or may make it easier for our competitors to gain regulatory approval to enter the marketplace. Ultimately, the FDA and other regulatory agencies have substantial discretion in the approval process and may refuse to accept any application or may decide that our product candidate data are insufficient for approval without the submission of additional preclinical, clinical or other studies. In addition, varying agency interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

Any of the following factors, among others, could cause regulatory approval for our product candidates to be delayed, limited or denied:

- the product candidates require significant clinical testing to demonstrate safety and effectiveness before applications for marketing approval can be filed with the FDA and other regulatory authorities;
- data obtained from preclinical and nonclinical animal testing and clinical trials can be interpreted in different ways, and regulatory authorities may not agree with our respective interpretations or may require us to conduct additional testing;
- negative or inconclusive results or the occurrence of serious or unexpected adverse events during a clinical trial could cause us to delay or terminate development efforts for a product candidate; and/or
- FDA and other regulatory authorities may require expansion of the size and scope of the clinical trials.

Any difficulties or failures that we encounter in securing regulatory approval for our product candidates would likely have a substantial adverse impact on our ability to generate product sales, and could make any search for a collaborative partner more difficult.

Research in the field of embryonic stem cells is currently subject to strict government regulations, and our operations could be restricted or outlawed by any legislative or administrative efforts impacting the use of nuclear transfer technology or human embryonic material.

Significant portions of our business are focused on human cell therapy, which includes the production of human differentiated cells from stem cells and involves human oocytes. Although our focus is on parthenogenetic stem cells derived from unfertilized oocytes, certain aspects of that work may involve the use of embryonic stem cells. Research utilizing embryonic stem cells is controversial, and currently subject to intense scrutiny, particularly in the area of the use of human embryonic material.

Federal law is not as restrictive regarding the use of federal funds for human embryonic cell research, commonly referred to as hES cell research as it once was. However, federal law does prohibit federal funding for creation of parthenogenetic stem cells. Our operations may also be restricted by future legislative or administrative efforts by politicians or groups opposed to the development of hES cell technology, parthenogenetic cell technology or nuclear transfer technology. Further, future legislative or administrative restrictions could, directly or indirectly, delay, limit or prevent the use of hES technology, parthenogenetic technology, or nuclear transfer technology, the use of human embryonic material, or the sale, manufacture or use of products or services derived from nuclear transfer technology or hES or parthenogenetic technology.

We may be unsuccessful in our efforts to comply with applicable federal, state and international laws and regulations, which could result in loss of licensure, certification or accreditation or other government enforcement actions or impact our ability to secure regulatory approval of our product candidates.\*

Although we seek to conduct our business in compliance with applicable governmental healthcare laws and regulations, these laws and regulations are exceedingly complex and often subject to varying interpretations. The cell therapy industry is the topic of significant government interest, and thus the laws and regulations applicable to our business are subject to frequent change and/or reinterpretation. As such, there can be no assurance that we will be able, or will have the resources, to maintain compliance with all such healthcare laws and regulations. Failure to comply with such healthcare laws and regulations, as well as the costs associated with such compliance or with enforcement of such healthcare laws and regulations, may have a material adverse effect on our operations or may require restructuring of our operations or impair our ability to operate profitably.

Our manufacture of certain cellular therapy products triggers additional FDA requirements applicable to hESCs which are regulated as a drug, biological product, or medical device. FDA's GMP regulations govern the manufacture, processing, packaging and holding of cell therapy products regulated as drugs. FDA's Quality System Regulation, or QSR, similarly governs the manufacture, processing.

packaging and holding of cell therapy products regulated as medical devices. We must comply with GMP or QSR requirements including quality control, quality assurance and the maintenance of records and documentation for certain products. We may be unable to comply with these GMP or QSR requirements and with other FDA, state and foreign regulatory requirements. These requirements may change over time and we or third-party manufacturers may be unable to comply with the revised requirements.

We will continue to be subject to extensive FDA regulation following any product approvals, and if we fail to comply with these regulations, we may suffer a significant setback in our business.\*

Even if we are successful in obtaining regulatory approval of our product candidates, we will continue to be subject to the requirements of and review by, the FDA and comparable regulatory authorities in the areas of manufacturing processes, post-approval clinical data, adverse event reporting, labeling, advertising and promotional activities, among other things. In addition, any marketing approval we receive may be limited in terms of the approved product indication or require costly post-marketing testing and surveillance. Discovery after approval of previously unknown problems with a product, manufacturer or manufacturing process, or a failure to comply with regulatory requirements, may result in actions such as:

- warning letters or other actions requiring changes in product manufacturing processes or restrictions on product marketing or distribution;
- product recalls or seizures or the temporary or permanent withdrawal of a product from the market; and
- fines, restitution or disgorgement of profits or revenue, the imposition of civil penalties or criminal prosecution.

The occurrence of any of these actions would likely cause a material adverse effect on our business, financial condition and results of operations.

#### Health care companies have been the subjects of federal and state investigations, and we could become subject to investigations in the future.\*

Both federal and state government agencies have heightened civil and criminal enforcement efforts. There are numerous ongoing investigations of health care companies, as well as their executives and managers. In addition, amendments to the Federal False Claims Act, have made it easier for private parties to bring "qui tam" (whistleblower) lawsuits against companies under which the whistleblower may be entitled to receive a percentage of any money paid to the government. The Federal False Claims Act provides, in part, that an action can be brought against any person or entity that has knowingly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim approved. The government has taken the position that claims presented in violation of the federal anti-kickback law, Stark Law or other healthcare-related laws, including laws enforced by the FDA, may be considered a violation of the Federal False Claims Act. Penalties include substantial fines for each false claim, plus three times the amount of damages that the federal government sustained because of the act of that person or entity and/or exclusion from the Medicare program. In addition, a majority of states have adopted similar state whistleblower and false claims provision. Any future investigations of our business or executives could cause us to incur substantial costs, and result in significant liabilities or penalties, as well as damage to our reputation.

# Restrictions on the use of human stem cells, and the ethical, legal and social implications of that research, could prevent us from developing or gaining acceptance for commercially viable products in these areas.

Although our stem cells are derived from unfertilized human eggs through a process called "parthenogenesis" that can produce cells suitable for therapy, but are believed to be incapable of producing a human being, such cells are nevertheless often incorrectly referred to as "embryonic" stem cells. Because the use of human embryonic stem cells gives rise to ethical, legal and social issues regarding the appropriate use of these cells, our research related to human parthenogenic stem cells could become the subject of adverse commentary or publicity and some political and religious groups may still raise opposition to our technology and practices. In addition, many research institutions, including some of our scientific collaborators, have adopted policies regarding the ethical use of human embryonic tissue, which, if applied to our procedures, may have the effect of limiting the scope of research conducted using our stem cells, thereby impairing our ability to conduct research in this field. In some states, use of embryos as a source of stem cells is prohibited.

To the extent we utilize governmental grants in the future, the governmental entities involved may retain certain rights in technology that we develop using such grant money and we may lose the revenues from such technology if we do not commercialize and utilize the technology pursuant to established government guidelines.

Certain of our licensors' research has been or is being funded in part by government grants. Our research may also be government-funded in the future. In connection with certain grants, the governmental entity involved retains various rights in the technology developed with the grant. These rights could restrict our ability to fully capitalize upon the value of this research by reducing total revenues that might otherwise be available since such governmental rights may give the government the right to practice the invention without payment of royalties if we do not comply with applicable requirements.

We rely on parthenogenesis, cell differentiation and other stem cell technologies that we may not be able to successfully develop, which may prevent us from generating revenues, operating profitably or providing investors any return on their investment.

We have concentrated our research on our parthenogenesis, cell differentiation and stem cell technologies, and our ability to operate profitably will depend on being able to successfully implement or develop these technologies for human applications. These are emerging technologies with, as yet, limited human applications. We cannot guarantee that we will be able to successfully implement or develop our nuclear transfer, parthenogenesis, cell differentiation and other stem cell technologies or that these technologies will result in products or services with any significant commercial utility. We anticipate that the commercial sale of such products or services, and royalty/licensing fees related to our technology, would be an additional source of revenues.

The outcome of pre-clinical, clinical and product testing of our products is uncertain, and if we are unable to satisfactorily complete such testing, or if such testing yields unsatisfactory results, we may be unable to commercially produce our proposed products.

Before obtaining regulatory approvals for the commercial sale of any potential human products, our products will be subjected to extensive pre-clinical and clinical testing to demonstrate their safety and efficacy in humans. The clinical trials of our prospective products, or those of our licensees or collaborators, may not demonstrate the safety and efficacy of such products at all, or to the extent necessary to obtain appropriate regulatory approvals. Similarly, the testing of such prospective products may not be completed in a timely manner, if at all, or only after significant increases in costs, program delays or both, all of which could harm our ability to generate revenues. In addition, our prospective products may not prove to be more effective for treating disease or injury than current therapies. Accordingly, we may have to delay or abandon efforts to research, develop or obtain regulatory approval to market our prospective products. The failure to adequately demonstrate the safety and efficacy of a therapeutic product under development could delay or prevent regulatory approval of the product and could harm our ability to generate revenues, operate profitably or produce any return on an investment in us.

Even if we are successful in developing a therapeutic application using our cell technologies, it is unclear whether cell therapy can serve as the foundation for a commercially viable and profitable business.\*

Stem cell technology is rapidly developing and could undergo significant change in the future. Such rapid technological development could result in our technologies becoming obsolete. While our product candidates appear promising, they may fail to be successfully commercialized for numerous reasons, including, but not limited to, competing technologies for the same indications. There can be no assurance that we will be able to develop a commercially successful therapeutic application for our stem cell technologies.

Moreover, advances in other treatment methods or in disease prevention techniques could significantly reduce or entirely eliminate the need for our cell therapy services, planned products and therapeutic efforts. There is no assurance that cell therapies will achieve the degree of success envisioned by us in the treatment of disease. Additionally, technological or medical developments may materially alter the commercial viability of our technology or services, and require us to incur significant costs to replace or modify equipment in which we have a substantial investment. We are focused on cell therapy, and if this field is substantially unsuccessful, this could jeopardize our success or future results. The occurrence of any of these factors may have a material adverse effect on our business, operating results and financial condition.

If we are unable to keep up with rapid technological changes in our field or compete effectively, we will be unable to operate profitably.

We are engaged in activities in the biotechnology field, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. Research and discoveries by other biotechnology, agricultural, pharmaceutical or other companies may render our technologies or potential products or services uneconomical or result in products superior to those we develop. Similarly, any technologies, products or services we develop may not be preferred to any existing or newly developed technologies, products or services.

We may not be able to protect our proprietary technology, which could harm our ability to operate profitably.

The biotechnology, cosmeceutical, and pharmaceutical industries place considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend, to a substantial degree, on our ability to obtain and enforce patent protection for our products, preserve any trade secrets and operate without infringing the proprietary rights of others. We cannot assure you that:

- we will succeed in obtaining any patents, obtain them in a timely manner, or that the breadth or degree of protection that any such patents will protect our interests;
- the use of our technology will not infringe on the proprietary rights of others;
- patent applications relating to our potential products or technologies will result in the issuance of any patents or that, if issued, such patents will afford adequate protection to us or will not be challenged, invalidated or infringed; or
- patents will not be issued to other parties, which may be infringed by our potential products or technologies.

We are aware of certain patents that have been granted to others and certain patent applications that have been filed by others with respect to nuclear transfer and other stem cell technologies. The fields in which we operate have been characterized by significant efforts by competitors to establish dominant or blocking patent rights to gain a competitive advantage, and by considerable differences of opinion as to the value and legal legitimacy of competitors' purported patent rights and the technologies they actually utilize in their businesses.

Considerable research in the areas of stem cells, cell therapeutics and regenerative medicine is being performed in countries outside of the United States, and a number of our competitors are located in those countries. The laws protecting intellectual property in some of those countries may not provide adequate protection to prevent our competitors from misappropriating our intellectual property.

#### Our business is highly dependent upon maintaining licenses with respect to key technology.

Although our primary focus relates to intellectual property we have developed internally, some of the patents we utilize are licensed to us by Advanced Cell Technology, which has licensed some of these from other parties, including the University of Massachusetts.

These licenses are subject to termination under certain circumstances (including for example, our failure to make minimum royalty payments.) The loss of any of such licenses, or the conversion of such licenses to non-exclusive licenses, could harm our operations and/or enhance the prospects of our competitors.

Although our licenses with Advanced Cell Technology allow us to cure any defaults under the underlying licenses to them and to take over the patents and patents pending in the event of default by Advanced Cell Technology, the cost of such remedies could be significant and we might be unable to adequately maintain these patent positions. If so, such inability could have a material adverse effect on our business. Some of these licenses also contain restrictions (e.g., limitations on our ability to grant sublicenses) that could materially interfere with our ability to generate revenue through the licensing or sale to third parties of important and valuable technologies that we have, for strategic reasons, elected not to pursue directly. In the future we may require further licenses to complete and/or commercialize our proposed products. We may not be able to acquire any such licenses on a commercially-viable basis.

#### Cybersecurity breaches could expose us to liability, damage our reputation, compromise our confidential information or otherwise adversely affect our business.

We maintain sensitive company data on our computer networks, including our intellectual property and proprietary business information, as well as certain personal information regarding customers who purchase our skin care products online. We face a number of threats to our networks from unauthorized access, security breaches and other system disruptions. Despite our security measures, our infrastructure may be vulnerable to attacks by hackers or other disruptive problems. Any such security breach may compromise information stored on our networks and may result in significant data losses or theft of our intellectual property, proprietary business information or our customers' personally identifiable information. A cybersecurity breach could hurt our reputation by adversely affecting the perception of customers and potential customers of the security of their orders and personal information. In addition, a cybersecurity attack could result in other negative consequences, including disruption of our internal operations, increased cyber security protection costs, lost revenues or litigation.

#### Certain of our technology may not be subject to protection through patents, which leaves us vulnerable to theft of our technology.

Certain parts of our know-how and technology are not patentable or are trade secrets. To protect our proprietary position in such know-how and technology, we intend to require all employees, consultants, advisors and collaborators to enter into confidentiality and invention ownership agreements with us. These agreements may not provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure. Further, in the absence of patent protection, competitors who independently develop substantially equivalent technology may harm our business.

We depend on our collaborators to help us develop and test our proposed products, and our ability to develop and commercialize products may be impaired or delayed if collaborations are unsuccessful.

Our strategy for the development, clinical testing and commercialization of our proposed products requires that we enter into collaborations with corporate partners, licensors, licensees and others. We are dependent upon the subsequent success of these other parties in performing their respective responsibilities and the continued cooperation of our partners. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators' resources that will be devoted to our research and development activities related to our collaborative agreements with them. Our collaborators may choose to pursue existing or alternative technologies in preference to those being developed in collaboration with us.

Under agreements with collaborators, we may rely significantly on such collaborators to, among other things:

- design and conduct advanced clinical trials in the event that we reach clinical trials;
- fund research and development activities with us;
- pay us fees upon the achievement of milestones; and
- market with us any commercial products that result from our collaborations.

The development and commercialization of potential products will be delayed if collaborators fail to conduct these activities in a timely manner, or at all. In addition, our collaborators could terminate their agreements with us and we may not receive any development or milestone payments. If we do not achieve milestones set forth in the agreements, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed.

Contractual arrangements with licensors or collaborators may require us to pay royalties or make other payments related to the development of a product candidate, which would adversely affect the level of our future revenues and profits.\*

Even if we obtain all applicable regulatory approvals and successfully commercialize one or more of our cell therapy candidates, contractual arrangements between us and a licensor, collaborator or other third party in connection with the respective product may require that we make royalty or other payments to the respective third party, and as a result we would not receive all of the revenue derived from commercial sales of such product.

Our reliance on the activities of our non-employee consultants, research institutions, and scientific contractors, whose activities are not wholly within our control, may lead to delays in development of our proposed products.

We rely extensively upon and have relationships with scientific consultants at academic and other institutions, some of whom conduct research at our request, and other consultants with expertise in clinical development strategy or other matters. These consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We have limited control over the activities of these consultants and, except as otherwise required by our collaboration and consulting agreements to the extent they exist, can expect only limited amounts of their time to be dedicated to our activities. These research facilities may have commitments to other commercial and non-commercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of time to be dedicated to our research goals.

#### We may be subject to litigation that will be costly to defend or pursue and uncertain in its outcome.

Our business may bring us into conflict with our licensees, licensors or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of our business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities, or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

# We may not be able to obtain third party patient reimbursement or favorable product pricing, which would reduce our ability to operate profitably.

Our ability to successfully commercialize certain of our proposed products in the human therapeutic field may depend to a significant degree on patient reimbursement of the costs of such products and related treatments at acceptable levels from government authorities, private health insurers and other organizations, such as health maintenance organizations. Reimbursement in the United States or foreign countries may not be available for any products we may develop, and, if available, may be decreased in the future. Also, reimbursement amounts may reduce the demand for, or the price of, our products with a consequent harm to our business. We cannot predict what additional regulation or legislation relating to the health care industry or third party coverage and reimbursement may be enacted in the future or what effect such regulation or legislation may have on our business. If additional regulations are overly onerous or expensive, or if health care related legislation makes our business more expensive or burdensome than originally anticipated, we may be forced to significantly downsize our business plans or completely abandon our business model.

#### Our products may be expensive to manufacture, and they may not be profitable if we are unable to control the costs to manufacture them.

Our products may be significantly more expensive to manufacture than other therapeutic products currently on the market today. We hope to substantially reduce manufacturing costs through process improvements, development of new science, increases in manufacturing scale and outsourcing to experienced manufacturers. If we are not able to make these, or other improvements, and depending on the pricing of the product, our profit margins may be significantly less than that of other therapeutic products on the market today. In addition, we may not be able to charge a high enough price for any cell therapy product we develop, even if they are safe and effective, to make a profit. If we are unable to realize significant profits from our potential product candidates, our business would be materially harmed.

We presently lack sufficient manufacturing capabilities to produce our therapeutic product candidates at commercial scale quantities and do not have an alternate manufacturing supply, which could negatively impact our ability to meet any future demand for the product.\*

We expect that we would need to significantly expand our manufacturing capabilities to meet potential demand for our therapeutic product candidates, if approved,. Such expansion would require additional regulatory approvals. Even if we increase our manufacturing capabilities, it is possible that we may still lack sufficient capacity to meet demand.

We do not presently have any alternate supply for our products. If our facilities where our products are currently being manufactured or equipment were significantly damaged or destroyed, or if there were other disruptions, delays or difficulties affecting manufacturing capacity, including if such facilities are deemed not in compliance with current Good Manufacturing Practice ("cGMP") requirements, future clinical studies and commercial production for our products would likely be significantly disrupted and delayed. It would be both time consuming and expensive to replace this capacity with third parties, particularly since any new facility would need to comply with the regulatory requirements.

Ultimately, if we are unable to supply our products to meet commercial demand, whether because of processing constraints or other disruptions, delays or difficulties that we experience, our production costs could dramatically increase and sales of the product and its long-term commercial prospects could be significantly damaged.

#### To be successful, our proposed products must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products.

Our proposed products and those developed by our collaborative partners, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide not to accept and utilize these products. The products that we are attempting to develop represent substantial departures from established treatment methods and will compete with a number of more conventional therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of our developed products will depend on a number of factors, including:

- our establishment and demonstration to the medical community of the clinical efficacy and safety of our proposed products;
- our ability to create products that are superior to alternatives currently on the market:
- our ability to establish in the medical community the potential advantage of our treatments over alternative treatment methods; and
- reimbursement policies of government and third party payers.

If the healthcare community does not accept our products for any of the foregoing reasons, or for any other reason, our business would be materially harmed.

# Our business is based on novel technologies that are inherently expensive, risky and may not be understood by or accepted in the marketplace, which could adversely affect our future value.\*

The clinical development, commercialization and marketing of cell and tissue-based therapies are at an early-stage, substantially research-oriented, and financially speculative. To date, very few companies have been successful in their efforts to develop and commercialize a stem cell product. In general, stem cell products may be susceptible to various risks, including undesirable and unintended side effects, unintended immune system responses, inadequate therapeutic efficacy, or other characteristics that may prevent or limit their approval or commercial use. Furthermore, the number of people who may use cell or tissue-based therapies is difficult to forecast with accuracy. Our future success is dependent on the establishment of a significant market for cell- and tissue-based therapies and our ability to capture a share of this market with our product candidates.

Our development efforts with our therapeutic product candidates are susceptible to the same risks of failure inherent in the development and commercialization of therapeutic products based on new technologies. The novel nature of cellular therapeutics creates significant challenges in the areas of product development and optimization, manufacturing, government regulation, third-party reimbursement and market acceptance. For example, the United States FDA has relatively limited experience regulating therapies based on cells, and there are few approved treatments utilizing cell therapy.

We depend on key personnel for our continued operations and future success, and a loss of certain key personnel could significantly hinder our ability to move forward with our business plan.

Because of the specialized nature of our business, we are highly dependent on our ability to identify, hire, train and retain highly qualified scientific and technical personnel for the research and development activities we conduct or sponsor. The loss of one or more

key executive officers, or scientific officers, would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personnel to perform research and development work is critical to our success. Our anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, regulatory compliance, manufacturing and marketing, will require the addition of new management personnel and the development of additional expertise by existing management personnel. In the past year we have had significant turnover in our management personnel, and there is intense competition for qualified personnel in the areas of our present and planned activities. Accordingly, we may not be able to continue to attract and retain the qualified personnel, which would adversely affect the development of our business.

#### We may not have sufficient product liability insurance, which may leave us vulnerable to future claims we will be unable to satisfy.

The testing, manufacturing, marketing and sale of human therapeutic products entail an inherent risk of product liability claims. We currently have a limited amount of product liability insurance, which may not be adequate to meet potential product liability claims. In the event we are forced to expend significant funds on defending product liability actions, and in the event those funds come from operating capital, we will be required to reduce our business activities, which could lead to significant losses. Adequate insurance coverage may not be available in the future on acceptable terms, if at all. If available, we may not be able to maintain any such insurance at sufficient levels of coverage and any such insurance may not provide adequate protection against potential liabilities. Whether or not a product liability insurance policy is obtained or maintained in the future, any product liability claim could harm our business or financial condition.

#### Risks Related to the Securities Markets and Our Capital Structure

Stock prices for biotechnology companies have historically tended to be very volatile

unrelat

prices for violectriology companies have instorted by terrain to be very volume.	
prices and trading volumes for many biotechnology companies fluctuate widely for a number of reasons, including but not limited to the following factors, some of which red to their businesses or results of operations:	nay
clinical trial results;	
• the amount of cash resources and such company's ability to obtain additional funding;	
<ul> <li>announcements of research activities, business developments, technological innovations or new products by competitors;</li> </ul>	
• entering into or terminating strategic relationships;	
• changes in government regulation;	
disputes concerning patents or proprietary rights;	
• changes in our revenues or expense levels;	
• public concern regarding the safety, efficacy or other aspects of the products or methodologies we are developing;	
• reports by securities analysts;	
activities of various interest groups or organizations;	
• media coverage; and	
• status of the investment markets.	
This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of our common stock.	
f our executive officers and directors can significantly influence our direction and policies, and their interests may be adverse to the interests of our other stockholders.	

As of May 3, 2013, Dr. Andrey Semechkin, Chief Executive Officer and Co-Chairman of the Board of Directors, and Dr. Ruslan Semechkin, Vice President of International Stem Cell and a director, beneficially own approximately 41% of our outstanding shares of common stock, including shares issuable upon conversion of all the outstanding shares of our Series D and Series G Preferred Stock and shares issuable upon exercise of options and warrants. As a result of their holdings and the rights, preferences and privileges of those series of preferred stock, Dr. Andrey Semechkin and Dr. Ruslan Semechkin may appoint and remove two of our six directors, and propose candidates for nomination of up to two additional directors, and therefore will be able to significantly influence the election of our Board of Directors. They may also prevent corporate transactions (such as a merger, consolidation, a sale of all or substantially all of our assets or a financing transaction) that may be favorable from the standpoint of our other stockholders or they may cause a transaction that our other stockholders may view as unfavorable.

The application of the "penny stock" rules to our common stock could limit the trading and liquidity of our common stock, adversely affect the market price of our common stock and increase stockholder transaction costs to sell those shares.

As long as the trading price of our common stock is below \$5.00 per share, the open market trading of our common stock will be subject to the "penny stock" rules, unless we otherwise qualify for an exemption from the "penny stock" definition. The "penny stock" rules impose additional sales practice requirements on certain broker-dealers who sell securities to persons other than established customers and accredited investors (generally those with assets in excess of \$1,000,000 or annual income exceeding \$200,000 or \$300,000 together with their spouse). These regulations, if they apply, require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the associated risks. Under these regulations, certain brokers who recommend such securities to persons other than established customers or certain accredited investors must make a special written suitability determination regarding such a purchaser and receive such purchaser's written agreement to a transaction prior to sale. These regulations may have the effect of limiting the trading activity of our common stock, reducing the liquidity of an investment in our common stock and increasing the transaction costs for sales and purchases of our common stock as compared to other securities.

The rights of holders of our common stock are subordinate to significant rights, preferences and privileges of our existing three series of preferred stock, and to any additional series of preferred stock created in the future.

Under the authority granted by our Certificate of Incorporation, our Board of Directors has established three separate series of outstanding preferred stock, including Series B, Series D and Series G Preferred Stock, which have various rights and preferences senior to the shares of common stock. Shares of our existing preferred stock are also entitled to enhanced voting rights and liquidation preferences. As a result of the various voting rights, the holders of our existing preferred stock may be able to block the proposed approval of various corporate actions, which could prevent us from achieving strategic or other goals dependent on such actions. As a result of the liquidation preferences, in the event that we voluntarily or involuntary liquidate, dissolve or windup our affairs (including as a result of a merger), the holders of our preferred stock would be entitled to receive stated amounts per share, including any accrued and unpaid dividends, before any distribution of assets or merger consideration is made to holders of our common stock. Additionally, these shares of preferred stock may be converted, at the option of the holders, into common stock at rates that may be adjusted, for the benefit of holders of preferred stock, if we sell equity securities below the then existing conversion prices. Any such adjustments would compound the potential dilution suffered by holders of common stock if we issue additional securities at prices below the current conversion prices (ranging from \$0.20 to \$0.38 per share). Additionally, subject to the consent of the holders of our existing preferred stock, our Board of Directors has the power to issue additional series of preferred stock and to designate, as it deems appropriate (subject to the rights of the holders of the current series of preferred stock), the special dividend, liquidation or voting rights of the shares of those additional series. The creation and designation of any new series of preferred stock could adversely affect the voting power, dividend, liquid

The market price for our common stock has been and may continue to be particularly volatile given our status as a relatively unknown company with a limited operating history and lack of profits, which could lead to wide fluctuations in our share price. The price at which stockholders purchase shares of our common stock may not be indicative of the price of our common stock that will prevail in the trading market.

The market for our common stock may be characterized by significant price volatility when compared to seasoned issuers, and we expect that our stock price could continue to be more volatile than a seasoned issuer for the indefinite future. The potential volatility in our share price is attributable to a number of factors. First, there has been limited trading in our common stock. As a consequence of this lack of liquidity, any future trading of shares by our stockholders may disproportionately influence the price of those shares in either direction. Second, we are a speculative or "risky" investment due to our limited operating history and lack of profits to date, and uncertainty of future market acceptance for our potential products. As a consequence of this enhanced risk, more risk averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a seasoned issuer. Many of these factors will be beyond our control and may decrease the market price of our common stock, regardless of our operating performance. We cannot make any predictions or projections as to what the prevailing market price for our common stock will be at any time or as to what effect that the sale of shares or the availability of shares for sale at any time will have on the prevailing market price.

In addition, the market price of our common stock could be subject to wide fluctuations in response to:

qı	ıarterly	variations	in	our	revenues	and	operating	expenses	;;

- announcements of new products or services by us;
- fluctuations in interest rates:
- significant sales of our common stock;
- the operating and stock price performance of other companies that investors may deem comparable to us; and
- news reports relating to trends in our markets or general economic conditions.

#### Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act of 1933, as amended, subject to certain limitations. In general, pursuant to Rule 144, a stockholder (or stockholders whose shares are aggregated) who is not an affiliate of our company and who has satisfied a six month holding period may, as long as we are current in our required filings with the SEC, sell securities without further limitation. Rule 144 also permits, under certain circumstances, the sale of securities, without any limitations, by a non-affiliate of our company who has satisfied a one year holding period. Affiliates of our company who have satisfied a six month holding period may sell securities subject to limitations. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus may have an adverse effect on the market price of our securities. Currently, a substantial amount of our securities are either free trading or subject to the release of trading restrictions under the six month or one year holding periods of Rule 144.

#### Certain provisions of our Certificate of Incorporation and Delaware law may make it more difficult for a third party to affect a change-in-control.

Our Certificate of Incorporation authorizes the Board of Directors to issue up to 20,000,000 shares of preferred stock and our Board of Directors has created and issued shares of three series of preferred stock that remain outstanding, including Series B, Series D and Series G Preferred Stock. The terms of the Series B, Series D and Series G Preferred Stock include, among other things, voting rights on particular matters (for example, with respect to the Series D Preferred Stock, restricting our ability to undergo a change in control or merge with, or sell assets to, a third party), preferences as to dividends and liquidation, and conversion rights. These preferred stock rights diminish the rights of holders of our common stock, and therefore could reduce the value of such common stock. In addition, as long as shares of our Series B, Series D and Series G Preferred Stock remain outstanding, or if our Board creates and issues additional shares of preferred stock in the future with rights that restrict our ability to merge with, or sell assets to, a third party, it could make it more difficult, delay, discourage, prevent or make it more costly to acquire the Company or affect a change-in-control.

#### The sale or issuance of a substantial number of shares may adversely affect the market price for our common stock.

The future sale of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could significantly and negatively affect the market price for our common stock. We expect that we will likely issue a substantial number of shares of our capital stock in financing transactions in order to fund our operations and the growth of our business. Under these arrangements, we may agree to register the shares for resale soon after their issuance. We may also continue to pay for certain goods and services with equity, which would dilute our current stockholders. Also, sales of the shares issued in this manner could negatively affect the market price of our stock.

# The sale of our common stock to Aspire Capital may cause substantial dilution to our existing stockholders and the sale of the shares of common stock acquired by Aspire Capital could cause the price of our common stock to decline.

On December 9, 2010, the Company entered into a purchase agreement with Aspire Capital which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$25.0 million of our common stock. As of May 3, 2013, we have sold Aspire Capital 10,533,333 shares of common stock for aggregate proceeds of \$6,206,000, and we may sell Aspire Capital up to an additional \$18,794,000 of our common stock in the future. Pursuant to the purchase agreement, the number of shares of common stock that we may designate Aspire Capital to purchase is dependent on the closing price of our common stock on the date that we provide Aspire Capital with a purchase notice directing it to purchase shares, and the purchase price per share is the lower of (i) the lowest sale price for the common stock on the date of sale or (ii) the arithmetic average of the three lowest closing sale prices of our common stock during the 12 consecutive business days preceding the date of sale. If we elect to sell additional shares to Aspire Capital under the Common Stock Purchase Agreement, depending upon market liquidity at the time, it may cause the trading price of our common stock to decline

After Aspire Capital has acquired additional shares of our common stock under the purchase agreement, it may sell all, some or none of such shares. In connection with the purchase agreement, the Company also entered into a registration rights agreement with Aspire Capital, dated December 9, 2010 that provides, among other things, that the Company will register the resale of all shares acquired by Aspire Capital under the purchase agreement. Therefore, sales to Aspire Capital by us pursuant to the purchase agreement may result in substantial dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock to Aspire Capital pursuant to the purchase agreement, or anticipation of such sales, as well as the resale of such shares by Aspire Capital, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital, and we may terminate the purchase agreement at any time at our discretion without any cost to us.

The exercise of outstanding options and warrants to acquire shares of our common stock would cause additional dilution which could cause the price of our common stock to decline.

In the past, we have issued options and warrants to acquire shares of our common stock. At May 3, 2013, there were 9,462,500 warrants, and 16,228,143 vested and 7,798,750 non-vested stock options outstanding, and we may issue additional options, warrants and other types of equity in the future as part of stock-based compensation, capital raising transactions, technology licenses, financings, strategic licenses or other strategic transactions. To the extent these options and warrants are ultimately exercised, existing common stockholders would experience additional dilution which may cause the price of our common stock to decline.

Limitations on director and officer liability and indemnification of our officers and directors by us may discourage stockholders from bringing suit against a director.

Our certificate of incorporation and bylaws provide, with certain exceptions as permitted by governing state law, that a director or officer shall not be personally liable to us or our stockholders for breach of fiduciary duty as a director, except for acts or omissions which involve intentional misconduct, fraud or knowing violation of law, or unlawful payments of dividends. These provisions may discourage stockholders from bringing suit against a director for breach of fiduciary duty and may reduce the likelihood of derivative litigation brought by stockholders on our behalf against a director. In addition, our certificate of incorporation and bylaws may provide for mandatory indemnification of directors and officers to the fullest extent permitted by governing state law.

Compliance with the rules established by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 is complex. Failure to comply in a timely manner could adversely affect investor confidence and our stock price.

Rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 require us to perform an annual assessment of our internal controls over financial reporting and certify the effectiveness of those controls. The standards that must be met for management to assess the internal controls over financial reporting now in effect are complex, costly and require significant documentation, testing and possible remediation to meet the detailed standards. We may encounter problems or delays in completing activities necessary to make an assessment of our internal controls over financial reporting. If we cannot perform the assessment or certify that our internal controls over financial reporting are effective investor confidence and share value may be negatively impacted.

We do not expect to pay cash dividends in the foreseeable future on our common stock.

We have not historically paid cash dividends on our common stock, and we do not plan to pay cash dividends on our common stock in the foreseeable future.

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

During the three months ended March 31, 2013, the Company has issued an additional 16,325,000 shares of common stock in transactions that were not registered under the Securities Act of 1933. The Company issued (i) a total of 8,000,000 shares of common stock on January 22, 2013 upon conversion of all previously issued shares of Series C Preferred Stock, (ii) a total of 1,200,000 shares of common stock on various dates from January 1, 2013 through March 15, 2013 for a total consideration of \$2,64,000 from stock purchases by Aspire Capital, (iii) a total of 10,125,000 shares of common stock on January 22, 2013 for a total consideration of \$2,025,000 to Dr. Andrey Semechkin, the Company's Co-Chairman and Chief Executive Officer and Dr. Simon Craw, Company's Executive Vice President Business Development, and (iv) 5,000,000 shares of common stock on March 12, 2013 for total consideration of \$1,000,000 from a stock purchase by Dr. Andrey Semechkin, the Company's Co-Chairman and Chief Executive Officer and by other investors with long-standing relationship with and who closely follow the Company. The proceeds from these issuances will be used to fund the general operations of the Company.

The shares of common stock referenced in clause (i) were sold in exchange for previously issued securities in transactions exempt from registration pursuant to Section 3(a)(9) of the Securities Act of 1933, or the Securities Act. The shares of common stock referenced in clause (ii) were offered and sold in private placement transactions made in reliance upon exemptions from registration pursuant to Section 4(2) of the Securities Act. The shares of common stock referenced in clauses (iii and iv) were offered and sold in a private placement transaction made in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act and Rule 506 promulgated thereunder.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

# Item 6. Exhibits

<u>Exhibit</u>	<u>Description</u>
3.1	Certificate of Incorporation (incorporated by reference to Exhibit 3.4 of the Registrant's Form 10-SB filed on April 4, 2006, File No. 000-51891).
3.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Preliminary Information Statement on Form 14C filed on December 29, 2006, File No. 000-51891).
3.3	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 6, 2011, File No. 000-51891).
4.1	Form of Specimen Common Stock Certificate. (incorporated by reference to Exhibit 4.1 of the Registrant's Form 10-KSB filed on April 9, 2007, File No. 000-51891).
4.2	Certification of Designation of Series A Preferred Stock (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on January 17, 2008, File No. 000-51891).
4.3	Certification of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on May 12, 2008, File No. 000-51891).
4.4	Certification of Designation of Series C Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on August 21, 2008, File No. 000-51891).
4.5	Certification of Designation of Series D Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on January 5, 2009, File No. 000-51891).
4.6	Warrant Certificate for warrants in connection with Series A Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on January 17, 2008, File No. 000-51891).
4.7	Warrant Certificate for warrants in connection with Series B Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on May 12, 2008, File No. 000-51891).
4.8	Certificate of Designation of Series G Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on March 14, 2012, File No. 000-51891).
10.1	Series G Preferred Stock Purchase Agreement dated March 9, 2012 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
10.2	Amended and Restated Investors' Rights Agreement dated March 9, 2012 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
10.3	Management Rights Letter dated March 9, 2012 (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
10.4*	Consulting Contract dated March 9, 2012 with Kenneth C. Aldrich (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
10.5*	Agreement to Provide Consulting Services dated March 9, 2012, with Kenneth C. Aldrich (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
10.6*	Agreement to Provide Consulting Services dated March 9, 2012, with Jeffrey D. Janus (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on March 15, 2012).
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1	Section 1350 Certification of Chief Executive Officer.
32.2	Section 1350 Certification of Chief Financial Officer.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

 $<sup>{\</sup>color{red}*} \quad \text{Indicates management contract or compensatory plan}.$ 

# **SIGNATURES**

Pursuant to the requirements of the Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# INTERNATIONAL STEM CELL CORPORATION

Dated: May 13, 2013

By:	/s/ Andrey Semechkin						
Name:	Andrey Semechkin						
Title:	Chief Executive Officer						
By:	/s/ Jay Novak						
Name:	Jay Novak						
Title:	Interim Chief Financial Officer						
	(Principal Financial and Accounting Officer)						

#### CERTIFICATION OF CHIEF EXECUTIVE OFFICER

- I, Andrey Semechkin, Chief Executive Officer of International Stem Cell Corporation, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of International Stem Cell Corporation;
- 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: May 13, 2013

By: /s/ Andrey Semechkin
Andrey Semechkin
Chief Executive Officer

#### CERTIFICATION OF CHIEF FINANCIAL OFFICER

- I, Jay Novak, Interim Chief Financial Officer of International Stem Cell Corporation, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of International Stem Cell Corporation;
- 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: May 13, 2013

By: /s/ Jay Novak

Jay Novak Interim Chief Financial Officer (Principal Financial and Accounting Officer)

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of International Stem Cell Corporation (the "Company") for the quarter ended March 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Andrey Semechkin, Chief Executive Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 13, 2013

y: /s/ Andrey Semechkin

Andrey Semechkin Chief Executive Officer

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of International Stem Cell Corporation (the "Company") for the quarter ended March 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jay Novak, Interim Chief Financial Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 13, 2013

By: /s/ Jay Novak

Jay Novak Interim Chief Financial Officer (Principal Financial and Accounting Officer)