

# Stem Cell Therapeutics

Pharma & biotech

13 August 2013

## Investment summary: Cancer stem cell target

Following the reverse merger with Trillium Therapeutics, Stem Cell Therapeutics (SCT) is focused on developing SIRPαFc, an anti-CD47 fusion protein with potential to target cancer stem cells (CSCs) in acute myeloid leukaemia (AML). SIRPαFc appears to be a promising asset, with few competing anti-CD47 agents in development, although fresh funds are required to advance into the clinic. A Phase I trial is planned for mid-2015.

### SIRPαFc targets “do-not-eat” CD47 signal

SIRPαFc is an antibody-like biologic that binds to CD47, a protein expressed on many cells but prominent in certain CSCs, including those in acute myeloid leukaemia (AML). Research suggests that CD47 produces a “do not eat” signal through SIRPα to suppress phagocytosis by macrophages, and CD47 expression is associated with poor clinical outcomes in AML. By binding to CD47 on tumour cells, SIRPαFc blocks this survival mechanism and promotes macrophage-mediated tumour cell destruction (shown in vivo with human AML cell-transplanted mice). IND-enabling studies could start in Q413, with a Phase I in AML patients by 2015.

### Repositioning tigecycline for AML

Another key SCT asset is IP covering a potential new use of tigecycline, an approved glycylicycline antibiotic (Tygacil). Studies indicate that tigecycline selectively targets bulk AML cells and AML CSCs by inhibiting mitochondrial protein synthesis. A four-site Phase I dose-escalation study (n=28) is ongoing, with data expected in Q313. SCT is developing new formulations of tigecycline, potentially increasing IP strength, and plans Phase I/II AML trials in mid-2014.

### CSC hypothesis: Promising but seeking clinical proof

CSC-targeting agents could overcome the shortcomings of traditional cancer drugs, which are often ineffective against CSCs. Although unproven in clinics, when combined with traditional cancer drugs, CSC-targeting agents could potentially offer a cure for cancer. SCT recently expanded its CSC development pipeline by acquiring an exclusive option to prostate CSC assets from the University of York.

### Valuation: C\$12.2m EV indicative of early stage

SCT had pro forma C\$3.6m net cash in March 2013 and, given its c C\$3.5m/year burn rate, will require additional capital in Q214. Management expects up to C\$20m could be needed to bring SIRPαFc through Phase I trials. Out-licensing TTI-1612 (in Phase I for interstitial cystitis) could generate cash. The advancement of CSC programmes is key to re-rating the shares in the long term.

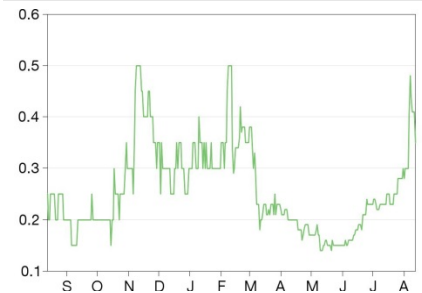
#### Historic financials

Year end	Revenue (C\$m)	PBT (C\$m)	EPS (C\$)	DPS (C\$)	P/E (x)	Yield (%)
12/10	0.0	(4.31)	(0.30)	0.0	N/A	N/A
12/11	0.0	(3.17)	(0.20)	0.0	N/A	N/A
12/12	0.0	(1.06)	(0.60)	0.0	N/A	N/A

Source: Bloomberg. Note: Historical financials refer to SCT before Trillium merger.

Price **C\$0.35**  
Market cap **C\$15m**

#### Share price graph



#### Share details

Code SSS  
Listing TSX-Venture  
Shares in issue 42.5m

#### Business description

Stem Cell Therapeutics (SCT) develops therapeutics for oncology that target cancer stem cells (CSCs). SIRPαFc, a pre-IND stage immunotherapy programme that promotes macrophages to kill CSCs, and tigecycline are both being studied for acute myeloid leukaemia (AML).

#### Bull

- SIRPαFc novel mechanism of action targeting CD47 pathway could provide therapeutic potential in other hematological cancers as well as solid tumours.
- Out-licensing of non-core clinical-stage TTI-1612 asset could provide source of non-dilutive capital.
- Collaborations with established oncology research institutes in Toronto and the UK.

#### Bear

- Early-stage oncology assets are associated with high development risk.
- Up to C\$20m in additional capital required to bring SIRPαFc through Phase I studies.
- Strength of intellectual property (IP) for tigecycline programme unclear given drug's expected genericisation in 2016.

#### Analysts

Pooya Hemami +1 646 653 7026  
Christian Glennie +44 (0)20 3077 5727  
[healthcare@edisongroup.com](mailto:healthcare@edisongroup.com)

EDISON QUICKVIEW NOTES USE  
CONSENSUS EARNINGS ESTIMATES.

Edison, the investment intelligence firm, is the future of investor interaction with corporates. Our team of over 100 analysts and investment professionals work with leading companies, fund managers and investment banks worldwide to support their capital markets activity. We provide services to more than 400 retained corporate and investor clients from our offices in London, New York, Berlin, Sydney and Wellington. Edison is authorised and regulated by the Financial Services Authority ([www.fsa.gov.uk/register/firmBasicDetails.do?sid=181584](http://www.fsa.gov.uk/register/firmBasicDetails.do?sid=181584)). Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is not regulated by the Securities and Exchange Commission. Edison Investment Research Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison and is not regulated by the Australian Securities and Investment Commission. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. [www.edisongroup.com](http://www.edisongroup.com)

#### DISCLAIMER

Copyright 2013 Edison Investment Research Limited. All rights reserved. This report has been commissioned by Stem Cell Therapeutics and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Aus and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is/is not registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information reflects our sincere opinions. The information that we provide or that is derived from our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. Edison or its affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") (c) FTSE [2013]. "FTSE(r)" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.