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Survival, Success, Surrender

Review of the Canadian Healthcare Sector in 2009

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Review of the Canadian Healthcare Sector in 2009

Public Canadian healthcare companies operate in a complex, challenging and constantly changing global environment. In 2009, some companies celebrated success, most focused on survival and a few did not make it. In this review, we will look at some of the environmental changes and company-specific events of 2009 which characterize this challenging year and will impact the future of this sector.

The sector raised a total of about \$1.28 billion from equity and convertible debt financings in 2009. Excluding the US\$350 million convertible debt financing by Biovail and the US\$215 million equity financing by SXC Health Solutions, the rest of the sector raised \$654 million, which is substantially better than the 2008 total but is still far below the annual average of almost \$1.05 billion for 2005 through 2007.

The average share price return in 2009 for a group of 32 larger Canadian healthcare companies was +100%. Advancers outnumbered decliners by 26 to 6, with the best performances from the Services companies, led by SXC Health Solutions. Five of the six decliners were in the Therapeutics group.

Investors' perception of the sector may not match this performance. Product failures make headlines whereas good data can get ignored. Small cap Canadian healthcare companies are challenged to get the attention of potential investors and, if they do get their attention, their investment strategies can also be challenging.

The sector needs to catch the attention of investors in 2010. Companies with revenues and earnings need to show continued growth in their quarterly results. Ongoing partnership discussions need to be turned into a couple partnerships with major pharmaceutical companies and large upfront payments, or turned into acquisitions. The sector could also use a little luck in 2010 – a few positive clinical and regulatory events early in the year would help attract the attention of risk-tolerant investors.

Canadian Sector Overview

There are approximately 130 public healthcare companies in Canada with a total market capitalization of about \$13 billion. Four companies – Biovail, SXC Health Solutions, CML Healthcare and MDS – account for almost 50% of the total capitalization. About half the companies have market caps below \$20 million. With a few exceptions, Canadian healthcare is a small cap sector.

It is also a very diverse sector, with companies developing or selling a wide variety of products or services. The largest group is developing therapeutics, which includes biologics, small molecules and drug delivery products. Biologics is one of the hot therapeutic areas and the products under development by Canadian companies include monoclonal antibodies, biosimilars, biodefense products, viruses, and novel manufacturing technologies. The next largest group is devices and diagnostics, with products ranging from several million dollar MRI units to disposable diagnostics sold for a few dollars. The healthcare service companies provide services both to the industry and to patients. The remaining companies develop, manufacture and sell products including non-prescription drugs, nutraceuticals, research instruments, and other retail healthcare products.

Trends in the Canadian sector are driven by U.S. and global trends. Some of the Canadian companies are focused solely on the Canadian market but this is only about 2% of the global healthcare market. The U.S. is the largest single healthcare market representing 40% or more of the global market for most products. The U.S. is also the largest single source of capital market funding for healthcare.

The Financial Environment

Money is the asset which is, and always has been, in greatest demand and shortest supply in this sector. The demand has constantly grown as new companies were formed and existing companies moved on to more expensive later stage clinical trials. The supply was constrained even more by the 2008/2009 financial crisis.

Only a few Canadian companies can fund their growth from cash flow. Most companies burn cash because they are still developing products or approved products are not generating sufficient cash flow. They can obtain additional funding from two potential sources – the public markets and partnerships. The first choice has historically been the public markets.

Public Canadian healthcare companies raised a total of about \$1.28 billion from equity and convertible debt financings in 2009 (see Appendix 1). The two largest financings were the US\$350 million convertible debt financing by Biovail in June and the US\$215 million equity financing by SXC Health Solutions in September. Excluding these two financings, the rest of the sector raised \$654 million, which is substantially better than the 2008 total but is still far below the annual average of almost \$1.05 billion for 2005 through 2007.

Financing by Canadian Healthcare Companies in 2009

Industry Group	Amount (\$million)		
	Equity	Convertible Debt	Total
Therapeutics	251.2	6.3	257.5
Services	180.9	22.0	202.9
Devices & Diagnostics	80.4	10.4	90.8
Others	77.7	25.1	102.8
Total	590.2	63.8	654.0
<i>*Excludes Biovail and SXC Health Solutions</i>			

The sector will grow if Canadian companies can access sufficient capital to execute their product development and growth strategies. Excluding Biovail and SXC, 18 companies each raised more than \$10 million, which would be sufficient to fund small clinical programs. Although some companies can execute their current growth strategies with smaller financings, many of the 2009 financings were only large enough to allow companies to survive. Companies that have only been able to survive will likely seek additional funding soon. They can try the capital markets again, perhaps with a more compelling story after reaching a development milestone and also hoping for a more open financing environment. They can also look at partnering and merger options.

The financings in Appendix 1 include some rights offerings in addition to the normal follow-on offerings. Rights offerings provide each shareholder with rights to purchase new shares based on their current number of shares. Rights offerings have been used occasionally in this sector, usually when there is a single large shareholder willing to 'backstop' the offering and purchase more than their proportionate share of the offering. The MIGENIX \$2.3 million financing in March was a rights offering.

Standby equity distribution agreements (SEDAs) are essentially options to issue shares. A good example is the recently signed agreement by Labopharm for up to \$25 million with a fund managed by Yorkville Advisors, LLC. The key terms to any SEDA include the amount available at each draw-down notice, any minimum price or other limitations, the discount to market, whether shorting is allowed, and whether any additional shares, warrants or payments are made to obtain the SEDA.

Warrants were a component of many financings in 2009 to induce investors to take the risks associated with small cap healthcare stocks. There are two potential or perceived negatives to the use of warrants. First, some investors will sell their shares as soon as possible, use their cash for other investments and just hold the warrants. This can potentially lead to short-term share price weakness. Second, warrants can be perceived to be a cap on the share price, based on the expectation that warrant holders will be exercising warrants and selling shares, or vice versa, as the warrants rise above the exercise price. We believe that most shareholders actually hold their warrants until a few weeks prior to the expiry date or until early exercise conditions are triggered.

Warrants are also a potential source of cash from investors who are or have been shareholders. Warrants are typically exercised in three different situations. First, they can be exercised as the warrants approach the expiry date. Second, the company can trigger an early expiry date if certain conditions are met. Oncolytics Biotech triggered the early expiry of two sets of warrants in 2009 based on weighted-average share prices exceeding pre-specified price levels. The two sets of warrants were exercised for proceeds of about \$14.9 million. Third, the company can seek regulatory approval for a warrant incentive program, in which warrants are exercisable at a lower price for a short period of time, after which they revert to the original exercise price. Nuvo Research raised \$3.8 million in 2009 from a warrant incentive program for three sets of warrants.

There has not been a completed healthcare IPO on the TSX since the IMRIS IPO for \$40 million in November 2007. In the U.S., there was only one healthcare IPO in 2008 (Bioheart; US\$5.8 million). While four were completed in 2009, three were profitable companies (Cumberland Pharmaceuticals, Talecris Biotherapeutics and China Nuokang Bio-Pharmaceutical) and Omeros' lead product was in Phase 3 clinical trials. There have been some IPOs in Europe, one of the most recent being Movetis N.V., which raised €97.8 million (approximately US\$140 million) based on the EU approval of Resolor (prucalopride).

Private Canadian healthcare companies have also been negatively impacted by the challenging public markets. IPOs were the preferred exit strategy for VC-funded private companies. The closure of this exit strategy has forced Canadian healthcare VCs to support their portfolio companies longer than planned. The VCs who depended upon Ontario and federal tax credits to increase the size of their labour-sponsored investment funds saw Ontario tax changes trigger large fund withdrawals. The result has been 'For Sale' signs on several private companies and the closure of others.

Some private companies have chosen to become public companies through the Capital Pool Company or CPC route, including ImmunoVaccine, Hamilton Thorne, Sirona Biochem and Changyu Medtech. The CPC process involves creation and seed funding of a private company, a prospectus-based financing and TSX Venture Exchange listing, finding and negotiating a transaction with an acquisition target, filing of an information circular providing prospectus-level disclosure on the business that is to be acquired and finally closing of the transaction usually in conjunction with a private placement to fund the business.

Convertible debt financings can be more like debt or equity depending upon the terms under which conversion is triggered. Biovail's US\$350 million convertible note financing in June can be settled by cash, shares or both and conversion can be triggered by several events (see notes to their Q2 financial statements). For its convertible debt, Novadaq has the option to pay its interest in cash or additional notes, and to settle the notes with cash or shares.

Debt financings are not available to the smaller healthcare companies which do not have cash flow or physical assets. Biovail's US\$410-million revolving credit facility announced on June 9th was secured by essentially all of the company's assets. Instead of debt secured by assets, some companies are selling assets that are not deemed to be critical for their future. MDS is selling its scientific instruments business to Danaher Corp., subject to a recent legal complaint by its partner PerkinElmer. QLT sold its QLT USA subsidiary, whose principal operating asset is the Eligard line of products for the treatment of prostate cancer.

Some companies have obtained additional non-dilutive funding from corporate reorganizations completed under a court supervised plan of arrangement. A public company will transfer its assets and liabilities to a newly incorporated subsidiary company, after which all the shares of the original company will be purchased by another party. With the assets, liabilities and the proceeds of the transaction, the new company will carry on the normal business operations and be owned by the shareholders of the original company. Thallion, ConjuChem and SemBioSys all completed transactions for gross proceeds of \$8.85 million, \$5 million and \$3.7 million, respectively.

Money flows from public companies back into the capital markets as a reward to investors in the form of dividends and share repurchase programs (also called NCIB or normal course issuer bids). The large pharmaceutical companies used to spend as much or more on these two programs than they did on research and development. Share repurchase programs are generally for lower amounts now but can still be substantial, such as the recent Amgen announcement of a US\$5 billion increase in its program.

Only a handful of Canadian companies issue dividends, or distributions in the case of the income trusts and REITs. Some of these profitable companies also have active share repurchase programs, including Biovail, QLT and Cangene. On occasion, some companies which are not profitable have also done share repurchases.

Cardiome Pharma completed a modified “Dutch auction” on October 16th in which it repurchased for cancellation 6,470,588 of its common shares at a purchase price of US\$4.25 per share, representing just under 10% of the outstanding shares. At June 30, 2009, Cardiome had cash and cash equivalents of \$82.0 million and a low cash burn rate due to partnering of its drug development programs. The closing price for Cardiome on the day that the auction was announced was \$4.59; the closing price on December 31st was \$4.64. Its most recent financing was in July 2008 when it issued Series A convertible preferred shares at a price of US\$11.00, which are convertible into common shares of Cardiome on a 1-to-1 basis.

The Healthcare Environment

Healthcare policy is being debated worldwide. Some of the questions being asked include:

- How much is being spent on healthcare;
- How much should be spent on healthcare;
- Should we pay for this product or service;
- How much should we pay for this product or service; and
- Is this new product any better than existing products?

These same questions have been asked for decades and will probably be asked for many more decades.

Some of the questions have more impact on specific sectors. Pharmaceutical companies and the U.S. FDA (Food & Drug Administration) are popular targets for many U.S. legislators, with questions frequently being asked about safety, marketing practices and pricing. The safety hurdle for drugs for many chronic conditions has been raised, the industry has paid billions of dollars to settle government lawsuits on marketing and pricing practices but the industry has to date largely avoided price controls.

From the investor’s perspective, a critical question is ‘what impact will new legislation and regulations have on product approval, reimbursement and market potential for each new or existing product and service?’

The pharmaceutical industry is facing an additional pressure – the loss of patent protection on major products. When a small molecule-based drug product loses patent protection, the U.S. generic price can drop to about 10% or less of the brand price within weeks depending on the number of generic competitors. When generic competition emerges for some members of a class of drugs, such as the statins, sales of the remaining branded products may be impacted. Despite increasing internal R&D expenditures, the industry has not been able to increase its success rate and bring enough new products to market to replace these lost sales.

The industry has taken numerous steps to maintain sales and earnings in the face of these and other pressures.

- Mergers of large pharmaceutical companies: this industry is highly fragmented and the largest pharmaceutical company, Pfizer, still represents less than 10% of the world market. Three major acquisitions have been completed in 2009 – Wyeth by Pfizer, Schering-Plough by Merck and Genentech by Roche. Pfizer has historically grown by acquisitions, with other targets in the last decade having been Pharmacia and Warner-Lambert. Further M&A activity is expected amongst the larger pharmaceutical companies.

- Operational rationalization: the major reason for the acquisitions mentioned above is operational rationalization and the accompanying expense reductions. Most large pharmaceutical companies were already rationalizing sales forces and manufacturing. When two large pharmaceutical companies combine, the rationalization expands to include even R&D. One consequence of acquisitions is usually the termination of some partnerships with smaller companies.
- Increased emphasis on developing markets: GSK is one of the pharmaceutical companies which have announced that they will target the new middle classes of Asia, South America and the Middle East. The critical products for GSK in these markets will be generic drugs and vaccines, which is one of the reasons for GSK's partnership with Indian company Dr. Reddy's.
- Establishing generic drug divisions (again): nearly every major pharmaceutical company had a generic drug division until the late 1970s – early 1980s, when the original wave of blockbuster products was being approved. Growth and margins for the generic products were holding down share prices and they were sold or closed. Many pharmaceutical companies are again acquiring generic drug portfolios for their growing and stable revenue stream. The market cap of the largest generic drug company, Teva, is almost equal to that of Bristol-Myers Squibb.
- Diversification into consumer products: stable revenue streams are valuable. Johnson & Johnson bought Pfizer's consumer products in 2006 for US\$16.6 billion. Sanofi-aventis just announced an agreement to purchase U.S. consumer products company Chatterm for about US\$1.9 billion in cash.
- Buying expanded pipelines: one use of the industry's substantial cash flow is the purchase of smaller companies, products and technologies. The pharmaceutical company can either purchase the company or purchase an exclusive option on the product through a licensing agreement. Their preference is to do licensing agreements – less cash up front and future payments are based on success. Shareholders of some companies, especially the VCs financing private companies, would prefer acquisitions. The VCs are being more flexible on some deals – accepting less cash up front plus success fees. Both options are on the table whenever a licensing agreement is being discussed.

Partnerships are the second major source of financing for smaller healthcare companies. The following major licensing agreements were signed in 2009 by public Canadian healthcare companies.

Licensor/Licensee	Product	Upfront / Other Milestones (US\$ M)	Market
OncoGenex → Teva	OGX-011	\$60 / \$370	Global
Cardiome → Merck	Vernakalant (oral and iv)	\$60 / \$640	Oral (global) and iv (ex-North America)
Acadia → Biovail	Pimavanserin	\$30 / \$365	U.S., Canada
Aeterna Zentaris → sanofi-aventis	Cetrotorelix	\$30 / \$135	U.S.
Bioniche → Endo	Urocidin	\$20 / \$110	U.S., option on global
Nuvo Research → Covidien	Pennsaid	\$10 / \$115	U.S.
Thallion → LFB	Shigamabs	C\$2 / C\$148	EU, S. America
Tekmira → Roche	SNALP Technology	– / \$40	Two products, global
TSO3 → 3M	STERIZONE	No disclosure of financial terms	Global
Toray → Spectral	Toraymyxin	No disclosure of financial terms	U.S.

Source: Company releases

As we stated earlier, partnerships are exclusive option agreements. The two partners negotiate a total package starting from the day the deal is signed to the date when the last payment is made, and outline every responsibility, expense and payment in between. The agreements are available for viewing (www.sedar.com for Canadian companies) but key commercially sensitive and confidential terms are removed. The numbers which are usually revealed in the press release are the upfront payment and the total potential value of milestone payments (the milestones are usually not identified). The most important number is the royalty rate, which now is often linked to sales levels, and it is only vaguely described. Other terms which are usually revealed include the territory, any sharing of marketing rights and who pays various costs.

Small healthcare companies sign partnering deals to access cash and expertise. When financial markets were more open, small companies usually preferred to do equity financings, build infrastructure and run their own Phase 2 and 3 clinical trials. In these difficult financial markets, some small companies are unable to find enough funding and, even if they can, the dilution might make partnering the preferable option.

- Cash – the upfront cash payment is critical to the small company. It is usually non-dilutive, non-repayable funding although in the OncoGenex-Teva deal, it is US\$20 million cash, US\$10 million equity and US\$30 million that OncoGenex must contribute to the development costs. Partnering deals both reduce the cash needs and also make it easier for the company to obtain additional funding from the capital markets. Even if the next event for that product is negative, the company has sufficient funds and time to assess its options. When a technology is being licensed, as in the Tekmira – Roche agreement, the structure is often expense reimbursement, milestones and royalties but no upfront payment.
- Expertise – small companies cannot access the clinical and regulatory expertise that exists within big pharma, no matter how many staff or contract research organizations (CROs) they hire.

Sector Performance

The share price performance of 32 larger Canadian healthcare companies (Appendix 2) shows that this sector delivered good returns in 2009. Advancers outnumbered decliners by 26 to 6. The best performances were from the Services companies, led by SXC Health Solutions (+481%). Five of the six decliners were in the Therapeutics group.

• Therapeutics (15 companies)	+ 53%
• Devices & Diagnostics (5 companies)	+149%
• Services (7 companies)	+140%
• Others (5 companies)	+139%
• Sector (32 companies)	+100%
• TSX Composite Index	+ 31%
• TSX Venture Composite Index	+ 93%
• NASDAQ Biotech Index	+ 16%

Investors' perception of the sector may not match this performance. When a Phase 3 clinical trial fails, the market cap of the company can drop below its cash value – BioMS experienced that in 2009. The impact of other negative clinical results are also dramatic, such as the 55% drop in Transition Therapeutic's share price from \$8.39 to \$3.79 when it had to modify a Phase 2 trial of ELND005 due to safety concerns. These events often become headlines whereas good clinical results, some regulatory approvals and good quarterly results sometimes get little attention.

Small cap Canadian healthcare companies are challenged to get the attention of potential investors and, if they do get their attention, their investment strategies can also be challenging. Most Canadian healthcare companies developing therapeutics, devices and diagnostics must have institutional investors in order to raise sufficient capital to develop their products. Canadian institutional investors in healthcare are generally small cap funds who typically do not allocate a specific portion of their portfolio to healthcare stocks and often prefer to look at natural resource companies. There is insufficient institutional capital available in Canada for the healthcare sector and Canadian companies must look to the U.S., Europe and Asia for additional funding. U.S. institutional investors include small cap funds, specialized healthcare funds and also VCs who are finding cheaper, liquid investments in public markets. When a small cap Canadian healthcare company goes to New York, they are competing for meeting time not only with their Canadian peers but with more than 1,000 other public and private healthcare companies.

Retail investors are equally challenging and important to small cap Canadian healthcare companies. Many retail investors have less investment experience and less access to sector information than their institutional counterparts. Their response to both bad and good news may lead to increased share price volatility. However, they are the only source of liquidity for some stocks whose institutional and VC ownership is too high and they are also the shareholders who have stepped up and provided the survival funding to some of the companies during 2009.

Shareholders do not all have the same investment strategies. There are still value investors who focus on dividends, distributions and moderate business growth and capital gains. These are also the investors who are more likely to buy and hold for several years. There are opportunities for these investors in all areas of the sector but mostly among the Service companies.

There is another group of investors with substantially higher risk tolerance who are focused on extraordinary capital gains. Like many investors in junior natural resource companies, they focus on data, be it clinical or drilling results, which can dramatically impact share prices. Many of these investors will have shorter investment horizons and may actually own a stock several times during the longer product development cycles in this sector.

What are some of the triggers to buy?

- Acquisitions for growth – companies acquire products, new service contracts and revenue-generating assets in order to grow revenue and earnings.
- Financings – for many Canadian companies, there is insufficient liquidity for institutional funds to accumulate a position in the market. When there is a financing, it is usually priced at a small discount to the market and often includes warrants as an additional incentive. In many cases, these financings are not offered to retail investors.
- Low valuations – many Canadian healthcare companies were trading at historic low share prices between October 2008 and March 2009, creating an opportunity for “bottom-fishing”. There were a number of companies whose share prices doubled or more from these lows, such as Angiotech rising from below \$0.20 in December 2008 to a 2009 high of \$3.10.
- Impending events – critical events in this sector include the release of quarterly financial results for companies with approved products and revenues, and the release of new clinical data by companies developing products. Companies inform the market about the approximate timing of the data release, giving investors an opportunity to invest prior to the events.
- Positive events – some investors are unwilling to risk investing prior to an event but are willing to accept the reduced risk after a positive event.
- Hot technology or target – biological products are hot, partially because generic competition will likely be more difficult. The hottest type of biologic is monoclonal antibodies, which has led to the acquisition of many companies, including Arius Research by Roche in 2008. Vaccines were hot in 2009 as a result of the H1N1 flu pandemic but the interest has diminished since the pandemic severity did not meet public expectations.

What are some of the triggers to sell?

- Events – investors can take several different approaches to selling around events. Some investors do not want to own shares through an event and will sell prior to the event. Other investors make the decision to sell after the event, regardless of the outcome.
- Lack of events – investors may sell if there are no predictable events in a given time period which are likely to significantly impact the share price.
- Low cash levels – if a company does not have enough cash to reach its next important milestone, investors may prefer to wait until a financing is completed which would allow them to reach that milestone.

The recurring word in the buy and sell triggers is 'events'. For profitable companies, the critical events are the release of quarterly results and acquisitions of products, revenue-generating assets or new service contracts. For companies still developing products, share price movement is triggered most often by three types of events – release of clinical data, regulatory decisions and partnerships. In the following list of significant 2009 events, the clinical failures and regulatory delays were outnumbered by positive events from numerous companies.

As we mentioned before, investors' perception of the sector may not match this performance. Two things are not on this 2009 list which might change the perception of the Canadian sector:

- A major acquisition, such as the 2008 acquisitions of Arius Research by Roche and CryoCath by Medtronic; and
- Phase 3 clinical data or regulatory approval of a blockbuster drug.

These things are not on the Canadian list every year. In fact, Canadian healthcare companies have only produced one drug for which sales exceeded US\$1 billion annually – BioChem Pharma's 3TC. High profile acquisitions of Canadian healthcare companies include BioChem Pharma (2001), ALI Technologies (2002), ID Biomedical (2005) and AnorMED (2006). The only major acquisition in Canada in 2009 was the private company ViroChem Pharma by Vertex Pharmaceuticals for US\$100 million cash and about 10.7 million Vertex common shares (US\$42.34 closing share price on December 18). The absence of these 'home runs' from the Canadian list is exacerbated by the seeming continuous flow of these major events from U.S. companies.

Selected Clinical, Regulatory and Partnering Events in 2009

The Good	The Bad
Therapeutics	
Biovail: licensed pimavanserin and acquired worldwide rights to tetrabenazine	Biovail: first pimavanserin Phase 3 not successful; development continuing
BioMS & Spectral: partner for development of Toraymyxin (Spectral licensed U.S. rights from Toray)	BioMS: Phase 3 trial of dirucotide not successful; development terminated
Cardiome Pharma: more positive Phase 3 data on vernakalant (iv) and partnership with Merck	Cardiome Pharma: FDA requests another Phase 3 trial for vernakalant (iv)
Labopharm: FDA approval of RYZOLT (actually 31/12/2008)	Labopharm: FDA approval of trazodone product delayed (API problems now resolved)
Aeterna Zentaris: licensing agreement with sanofi-aventis for cetorelix in BPH	Aeterna Zentaris: sanofi-aventis terminates agreement after two failed Phase 3 trials
Thallion: partners Shigamabs	Thallion: halts Phase 2 trials of TLN-4601 and TLN-232
Nuvo Research: U.S. partnership with Covidien and FDA approval for Pennsaid	Transition Therapeutics: drops top two doses in Phase 2 ELND005 trial – safety problems
Cangene: acquires commercialization rights to certain biotech drugs from Apotex and positive EMA opinion on HepaGam B	MIGENIX: Phase 3 trial of Omigard by partner not successful
Oncolytics Biotech: reaches SPA with FDA for Phase 3 trial of REOLYSIN	Ambrilia: filed for protection under CCAA
YM BioSciences: U.S. Treasury clearance to conduct nimotuzumab trials; proposal to acquire Cytopia	
Tekmira: agreement with Roche to advance two RNAi products to the clinic	
Paladin Labs & Isotechnika: partnership for voclosporin	
Theratechnologies: NDA for tesamorelin filed and accepted for review by FDA	
Bioniche: partnership with Endo for Urocidin; enrolment complete in first Phase 3 trial	
Allon: some positive data from Phase 2 trial in schizophrenia-related cognitive impairment	
Devices & Diagnostics	
SQI Diagnostics: FDA cleared their SQiDworks™ Diagnostics Platform and its IgXPLEX RA assay	NUCRYST: distributed cash to shareholders, selling Acticoat business to Smith & Nephew, will merge with Westaim
Novadaq: FDA clearance of SPY endoscopic imaging system	MDS: continuing problems at Nordion (isotope supply) and Pharma Services
TSO3: STERIZONE supply and distribution agreement with 3M	Adaltis: filed for bankruptcy
Services	
Centric Health: acquisition of Active Health and alliance with INTERxVENT Canada	Patheon: public battle with major shareholder (now resolved)
SXC: several significant new U.S. PBM (pharmacy benefit management) contracts	
CML Healthcare: announces acquisitions of U.S. medical imaging centers	
Extencare: 3 U.S. class action lawsuits thrown out by courts	
Chartwell: acquisition of additional retirement home interests	
Others	
Atrium: acquires additional U.S. nutritional brand products	
GLG Life Tech: expands stevia leaf harvest and manufacturing capacity	
Noveko: signs new distribution and marketing agreements, including Microban	
Afexa: new product launches to complement ColdFX franchise	

Outlook for 2010

Public Canadian healthcare companies are impacted by many factors in the financial and healthcare environments which are beyond their control. They do not know if the impact of the recent financial crisis on capital availability is over. They do not know where the prices of natural resources will go and whether this will impact the investment preferences of many risk-tolerant Canadian investors. They do not know the impact of U.S. healthcare reform on the largest single healthcare market. However, they must monitor these factors and adjust their strategies as needed.

What can these small companies control? Management can control their cash burn rates and be ready to acquire additional funding capital whenever the markets allow. The mantra has to be survival first, then success.

Public Canadian healthcare companies do have control over their technology and product development strategies. Each clinical program should be planned and executed to deliver data that, if positive, will allow companies to do several things. First, the clinical information will allow the company to properly plan the next stage of clinical development. Second, the positive information may allow the company to obtain additional funding. Third, positive information will allow the company to start or progress discussions with potential partners.

Product failures will continue to occur, although we hope the success rate will increase. There will be situations where excellent science cannot be successfully transformed into a product. There will be other situations where a market dramatically changes and continued development of a product can no longer be justified. These are the cases where management needs to terminate programs and not waste shareholders' funds.

The sector could use a little luck. A number of companies have indicated that they are in partnering discussions but it is impossible to predict when or even if partnerships will be signed. A couple partnerships with major pharmaceutical companies and large upfront payments, or partnering discussions that turn into acquisitions, might help change perceptions. In addition to quarterly results from the companies with growing revenues and earnings, there are some clinical and regulatory events in 2010 with predictable timing that could also provide some positive momentum for the sector.

- Theratechnologies – NDA for tesamorelin tentatively scheduled for an FDA advisory committee review in Q1; PDUFA date is March 29
- Labopharm – PDUFA date is February 11 for once-daily trazadone
- Cardiome Pharma – completion of European Medicines Agency review of Kynapid (vernakalant iv) in second half of 2010
- Cipher – final FDA approval of CIP-TRAMADOL ER
- Bioniche – top-line data in H2 from open-label Phase 3 trial of Urocidin in bladder cancer
- Wex Pharmaceuticals – interim analysis in Q1 of Phase 3 trial of tetrodotoxin in cancer – related pain
- Oncolytics Biotech – start Phase 3 trial of REOLYSIN in combination with paclitaxel/carboplatin for patients with platinum-failed head and neck cancers
- Protox Therapeutics – results in Q1 from the Phase 2b trial of PRX-302 in the treatment of moderate to severe BPH
- Stem Cell Therapeutics – top-line data in Q2 or Q3 from Phase 2b trial of NTx-265 in stroke patients
- Transition Therapeutics – clinical data from Phase 2 trial of ELND005 in Alzheimer's disease (18 month dosing completes in Q2) and two diabetes trials of TT-223

Appendix 1. Financings by Canadian Healthcare Companies in 2009

COMPANY	TICKER	EQUITY	CONVERTIBLE DEBT	WARRANTS (%)	NOTES
Therapeutics (Amount \$M)					
January					
iCo Therapeutics	ICO	1.29		100	
InNexus Biotechnology	IXS		0.91		
Pacgen Biopharma.	PGA		0.61		
February					
Advitech	AVI	1.00		100	
Cannasat Therapeutics	CTH	0.39		50	
March					
Resverlogix	RVX	24.25		40	
MIGENIX	MGI	2.30		100	
April					
Protox Therapeutics	PRX	2.31			
Sirona Biochem	SBM	0.75		100	
May					
Paladin Labs	PLB	58.70			
Oncothyreon	ONTY	12.17		75	2,6
Oncolytics Biotech	ONC	6.90		100	
June					
AEterna Zentaris	AEZ	11.00		35	2
ImmunoVaccine	IMV	8.27			
Sernova	SVA	0.42			
Biovail	BVF		385.00		2
July					
OncoGenex Pharma.	OGXI	10.45			5
IntelGenx Technologies	IGXT	4.20		100	
SemBioSys Genetics	SBS	4.15		100	
Welichem Biotech	WBI	3.75		50	
Pharmagap	GAP	0.98		100	
iCo Therapeutics	ICO	0.48			
IntelGenx Technologies	IGXT	0.14			
Orbus Pharma	ORB		0.25	yes	
August					
Oncothyreon	ONTY	16.50		30	2,6
Microbix Biosystems	MBX	0.75		100	
Biosyntech	BSY		1.40	yes	
September					
Helix Biopharma	HBP	13.58		100	
IntelGenx Technologies	IGXT	0.10		100	

(Cont'd)

COMPANY	TICKER	EQUITY	CONVERTIBLE DEBT	WARRANTS (%)	NOTES
Therapeutics (Amount \$M)					
October					
AEterna Zentaris	AEZ	6.05		40	2
iCo Therapeutics	ICO	4.00			
Advitech	AVI	2.52		100	
Stem Cell Therapeutics	SSS	2.19		100	
MethylGene	MYG	1.57			
Biosyntech	BSY		3.10	yes	
November					
Medicago	MDG	11.59		50	
Lorus Therapeutics	LOR	2.46		50	
Sernova	SVA	0.37		100	
December					
Oncolytics Biotech	ONC	16.13		40	2
Spectral Diagnostics	SDI	14.00		50	
Resverlogix	RVX	5.00		25	
Pharmagap	GAP	0.33		100	
Sernova	SVA	0.13		100	
TOTAL		251.16	391.27		1

COMPANY	TICKER	EQUITY	CONVERTIBLE DEBT	WARRANTS (%)	NOTES
Devices & Diagnostics (Amount \$M)					
January					
SQI Diagnostics	SQD	1.66			
Ondine Biopharma	OBP	0.52			
Medical Intelligence	MIZ	0.22	0.70		
GeneNews	GEN		0.72	yes	
February					
Novadaq Technologies	NDQ		5.67		2
GeneNews	GEN		1.48	yes	
March					
Neovasc	NVC	2.00		50	
April					
DiagnoCure	CUR	5.00			
Amorfix Life Sciences	AMF	3.35		100	
CRH Medical	CRM	2.13		100	
Med BioGene	MBI	1.96		50	
biOasis Technologies	BTI	0.50		100	
Miraculins	MOM	0.40		100	
VentriPoint Diagnostics	VPT		1.05	yes	
May					
Response Biomedical	RBM	12.65		50	
June					
Ondine Biopharma	OBP	1.78			
Ondine Biopharma	OBP	0.92		100	3
July					
Prism Medical	PM	2.10			
August					
Zecotek Photonics	ZMS	3.73		100	
GeneNews	GEN	2.00			
Pyng Medical	PYT		0.55	yes	
VentriPoint Diagnostics	VPT		0.18	yes	
September					
Urodynamix	URO	1.50			
Theralase	TLT	1.27		50	
October					
IMRIS	IM	20.70			
MedMira	MIR	2.00		100	
Jenex	JEN	0.19		50	
November					
SQI Diagnostics	SQD	6.59		50	
December					
Titan Medical	TMD	2.33		50	
GeneNews	GEN	2.31			
T-Ray Science	THZ	1.50			
Med BioGene	MBI	0.70		50	
Ondine Biopharma	OBP	0.40		100	
TOTAL		80.41	10.35		1

COMPANY	TICKER	EQUITY	CONVERTIBLE DEBT	WARRANTS (%)	NOTES
Services (Amount \$M)					
April					
LAB Research	LRI		7.50	yes	
June					
Centric Health	CHH	6.77		100	
Centric Health	CHH		11.00		
September					
SXC Health Solutions	SXC	236.24			2
LAB Research	LRI	14.20			
Chemaphor	CFR	1.26		100	
October					
Chartwell Seniors Housing	CSH.UN	86.25			
November					
OPMEDIC Group	OMG	2.10			
Chemaphor	CFR	0.23		100	
AIM Health Group	AHG		3.50		
December					
Chartwell Seniors Housing	CSH.UN	70.06			
TOTAL		417.11	22.00		

COMPANY	TICKER	EQUITY	CONVERTIBLE DEBT	WARRANTS (%)	NOTES
Others (Amount \$M)					
March					
Kane Biotech	KNE	0.25		50	
BELLUS Health	BLU		20.50		
Changyu Medtech	CYQ		0.07		
April					
ALERT B&C	ZCB	0.15		100	
May					
Burcon Nutrascience	BU	16.90			
EnWave	ENW	2.24		50	
Hamilton Thorne	HTL	2.20		100	
Toxin Alert	TOX	0.03			
June					
Ceapro	CZO	0.47			
July					
ALDA Pharmaceuticals	APH	1.50		100	
ALERT B&C	ZCB	0.27		100	
Toxin Alert	TOX	0.03			
ALERT B&C	ZCB		0.03		
August					
Sonomax Hearing	SHH	1.00		100	
Ranaz	RNZ	0.66		50	
ProMetic Life Sciences	PLI		4.50	Yes	4
September					
Noveko International	EKO	15.70		50	
Sonomax Hearing	SHH	0.60		100	
October					
Changyu Medtech	CYQ	0.22			
Ranaz	RNZ	0.11		100	
November					
GLG Life Tech	GLG	34.85			2
Kane Biotech	KNE	0.56		50	
TOTAL		77.74	25.10		1

Source: Company releases and regulatory filings

Notes:

1. Financings which have been announced but not closed include Orbus Pharma (ORB), EnWave (ENW) and Med BioGene (MBI).
2. Financings were in US\$; converted to C\$ using 1.10 exchange rate.
3. Received Ordinary Shares of Grafton Fund, which have subsequently been sold.
4. Received \$4.5M in secured loans in tranches in 2009, for which it has also issued shares and warrants.
5. Listed only on NASDAQ.
6. Formerly Biomira; voluntarily delisted from TSX; listed on NASDAQ.

Appendix 2. Share Price Performance in 2009

SECTOR/COMPANY*	Closing Price (C\$)		Change (%)
	Dec. 31/08	Dec. 31/09	
Therapeutics			
Nuvo Research	\$0.10	\$0.32	220%
YM BioSciences	\$0.46	\$1.45	215%
Theratechnologies	\$2.00	\$4.43	122%
Oncolytics Biotech	\$1.49	\$2.75	85%
QLT	\$2.92	\$5.23	79%
Helix BioPharma	\$1.90	\$3.21	69%
Paladin Labs	\$11.92	\$19.75	66%
Aeterna Zentaris	\$0.58	\$0.85	47%
Biovail	\$11.54	\$14.68	27%
Resverlogix	\$2.04	\$2.42	11%
Labopharm	\$2.26	\$2.18	-4%
Cangene	\$5.90	\$5.10	-14%
Cardiome Pharma	\$5.59	\$4.64	-17%
Transition Therapeutics	\$4.74	\$3.72	-22%
BioMS Medical	\$3.50	\$0.33	-91%
		Average	53%
Devices/Diagnostics			
Angiotech Pharmaceuticals	\$0.36	\$1.31	264%
IMRIS	\$1.50	\$5.30	253%
Novadaq	\$1.12	\$2.80	150%
SQI Diagnostics	\$1.30	\$2.60	100%
MDS	\$10.49	\$8.19	-22%
		Average	149%
Services			
SXC Health Solutions	\$9.87	\$57.30	481%
Centric Health	\$0.25	\$0.84	236%
Chartwell	\$3.02	\$7.03	133%
Extencare	\$5.85	\$9.52	63%
K-Bro	\$9.72	\$13.48	39%
Patheon	\$2.21	\$2.58	17%
CML Healthcare	\$12.85	\$13.84	8%
		Average	140%
Others			
Neptune	\$0.62	\$2.16	248%
Noveko	\$0.60	\$1.85	208%
Afexa	\$0.25	\$0.77	208%
Atrium Innovations	\$12.92	\$15.76	22%
GLG Life Tech	\$7.40	\$8.15	10%
		Average	139%
Sector Average			100%

* These are the companies with larger market caps in each industry group which are more likely to be owned by institutional investors.

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