

FINAL

GlaxoSmithKline Inc.

**“Ontario at a Crossroads –
Is the Life Sciences Sector Sustainable?”**

**Speaking Notes for
Paul Lucas, President & CEO**

**Economic Club of Toronto
Tuesday, Oct. 24, 2006**

Check against delivery

Thank you Len, for your kind introduction.

Good afternoon, ladies and gentlemen. It is a pleasure to be with you today and address the Economic Club of Toronto. Today I am wearing three hats, speaking on behalf of GlaxoSmithKline, Canada's Research based pharmaceutical companies and the Life Sciences Biotech industry.

As I look about the room, I see many familiar faces from the health-care community – from our local hospitals to patient groups, researchers and physicians, to other business partners. We are a diverse group of people who share a common interest – exploring the great untapped potential of health-care research and life sciences innovation. I thank you all for coming out today.

I would like to recognize Nicholas Armour, Consul General, United Kingdom who is here with us today. The UK is the site of GlaxoSmithKline's global headquarters. From the UK this company has grown around the world and is continually supporting investments and opening up new commercial trading opportunities. The support of the Consul General and the UK government has been indispensable.

I think this audience would agree that innovation and prosperity go hand in hand. We seek innovation in the life sciences sector because we know the benefits:

- Better health care and patient outcomes
- High-value knowledge-based jobs, and
- Greater international investment and its economic benefits.

As such the life sciences sector is a significant part of the Ontario economy. In fact our government, as with previous governments, espouses the value of

research and development as an area of clear competitive advantage and is itself investing significant tax- payer dollars in research.

The impact of investments made by pharmaceutical companies in this province is significant. To develop and discover new medicines and vaccines, we have built a large and vital industry over the past 20 years. I have had a front-row view of that growth. The innovative biopharmaceutical industry in Canada invested over 1.23 billion dollars in R&D in 2005 – more than 3 million dollars every day – creating high-value jobs both inside and outside of the industry. That's a one-thousand percent increase since 1986 when our patent laws for pharmaceuticals started to be improved to world standards. That makes the biopharmaceutical industry the second largest industrial investor in R&D in Canada, after telecommunications. And Ontario receives over half of those investments.

Today, the research-based pharmaceutical industry employs 22,000 Canadians directly, including almost 9,000 in Ontario. The industry also creates more than 35,000 jobs indirectly. At a time when Ontario is losing a significant portion of its traditional manufacturing base these knowledge based jobs are vital to Ontario's future. Many of our universities in Ontario have focused their programs on developing graduates for this industry.

But the benefits are not simply economic; pharmaceutical investment provides important benefits for our health-care system, scientific institutions and patients. Through participation in clinical studies, for example, 40,000 Ontarians get earlier access to innovative medicines, while 3,500 clinical researchers are able to have satisfying careers in world-class research programs, right here in Ontario.

The fact that research and innovation is an economic driver that brings real value to patients in this province should not be a matter for debate. The question for debate is **how** to build a prosperous life sciences sector where all partners are

able to work together to create global competitive advantage for the province and the country.

I addressed this very issue in a speech delivered to the Mississauga Board of Trade in April. At that time, I expressed concern about the impact of proposed legislation on patient care, future research and innovation, and the economy.

I wish I could tell you that this legislation will have a positive impact on the future health of Ontario's life sciences sector. Unfortunately, I cannot.

The legislation I am referring to is Bill 102, which has now become law and is being implemented. We believe that this bill will create a fundamental restructuring of the biopharmaceutical market in Ontario, and consequently Canada, through reforms to the Ontario drug plan.

This new market dynamic does not create an environment where all partners including the Ministry of Health, Ministry of Research and Innovation and Ministry of Economic Development and Trade can work together to manage health-care costs, improve access for patients and sustain a vibrant life sciences sector. Instead, it has created a transactional relationship between the Ministry of Health and our industry.

Let me be clear. I understand the government has a duty to protect taxpayer dollars. I have no issue with a government wanting to make prudent cost-saving decisions and expecting value for money. We do the same ourselves in industry.

However, I do believe the relationship between the life sciences sector and the Ministry of Health is different because we deal with medicines, patient outcomes, and the introduction of new life saving technologies. This is different than purchasing bandages, paper clips, pencils or other commodities.

There is a direct link between market viability and R&D investment. This has been proven through numerous studies by government, the private sector and others, including well-known academic Michael Porter of Harvard. Bill 102 ignores this link by reducing our market viability through cost containment and market access restrictions which ultimately will undermine Ontario's attractiveness as a place for investment.

Let me provide you with a few examples of other jurisdictions that have pursued a similar path.

First, New Zealand. That country has been aggressive in keeping drug spending low by drastically limiting what medicines are available, including those to prevent cardiovascular disorders. Some have advocated for Canada to follow the New Zealand model, and Ontario's Bill 102 draws many parallels.

A study presented by Dr. Alex Sundakov showed that New Zealand, despite being poorer than its neighbour Australia, now has a higher rate of expensive coronary bypass interventions. His study also showed that in recent years New Zealand has seen an increase in the death rate from cardiovascular diseases relative to Australia, to which, Dr. Sundakov said, "the restrictive pharmaceutical policy appears to be directly contributing."

At the same time, New Zealand has become devoid of pharmaceutical investment. We should aspire, as a province to a better future than this.

Another example is Europe. In 1990, half of worldwide R&D spending occurred in the EU, and one-third in the US. By 2000, those numbers had effectively reversed. The focus on cost containment linked to pricing and reimbursement procedures had disastrous consequences for pharmaceutical innovation in Europe. In Germany specifically, higher mandatory rebates and price restriction reforms have persuaded major companies to shift investment elsewhere. The

annual benefit of \$19 billion of lower drug spending was offset by \$22 billion in hidden costs; representing a net loss of \$3 billion including R&D, wages, income and corporate tax, and spin-off jobs.

These long-term economic consequences have been recognized by other countries. There are signs that the French government wants to prevent further decline of its R&D environment. It has noticed the negative impact in neighbouring Germany and is keen to avoid a similar fate.

There have been policies introduced in Canada that **have** recognized the importance of the life sciences sector. One such policy was the re-instatement of patent protection in 1987. It guaranteed some of the lowest prices for brand name pharmaceuticals in the developed world yet also recognized the value of R&D investment. And just in the last month the Federal government passed new regulations ensuring globally competitive data protection terms for new pharmaceuticals. It is unfortunate that we cannot get our governments moving in the same direction on policy impacting this industry.

Bill 102 does not recognize the importance of the sector, despite the fact that the Ontario government itself invests heavily in health research at our universities and research centres, and also invests in efforts to commercialize this research.

Instead, it treats the life sciences industry as a supplier of commodities. You get what you pay for. What you don't get is a strong life sciences sector and future innovation and the spin-off benefits I noted earlier: better health care and patient outcomes, high value knowledge-based jobs and further R&D investment.

This leads me to why our industry is concerned about being the target of this legislation. I can speak to GlaxoSmithKline's investments in the province as example. In the past year alone, we've invested more than \$56 million to expand our manufacturing facility bringing new jobs to the province; contributed almost

\$21 million to Ontario universities and hospitals to discover innovative therapies and lead pioneering clinical trials; shipped more than \$2 billion worth of medications from Ontario to countries worldwide. Through our direct spending, taxes, and exports we are far and away a net economic contributor in Ontario.

Let me speak about a few GSK initiatives:

- Our investment of 3.75 million dollars in the Structural Genomics Consortium, a three-year project at the University of Toronto, will contribute to the discovery of new products for unmet medical needs.
- We have a 4-million dollar partnership with the Ottawa Heart Institute for research in genetics and the underlying physiology of metabolic diseases, such as obesity, one of the growing medical challenges of our society.
- We have invested 5 million dollars with the Firestone Institute of Respiratory Health at McMaster University to fund basic and clinical research projects.
- We contributed over 3-million dollars toward the purchase and operation of a new PET scanner at the Centre for Addiction and Mental Health. This scanner provides sophisticated images of brain function, and is an invaluable tool in the discovery and development of new medicines in the field of neurology and psychiatry.

One of the important aspects of investments in research by companies such as ours is the multiplier effect those commitments can have. Our seed money is often leveraged by organizations to obtain matching and other funds from a variety of public and private agencies. So we are actually partners with the government in research projects around the province. Without the start-up money from companies such as GSK, however, these projects may never get off the ground.

Along with helping discover new treatments, the research we sponsor can have important global implications for clinical practice. Just last month, a major international study sponsored by the Canadian Institutes for Health Research, GSK and others reported exciting findings about the ability to use new treatments to delay the onset of type 2 diabetes in patients at risk. This global initiative was led over the past several years by researchers at McMaster University. The study results were published in the world's leading medical journals and received global media coverage because the findings hold great promise for managing the epidemic of type 2 diabetes.

These kinds of investments do not happen by chance. My executive team and I compete for and attract these investments because it's the right thing to do for Ontario and our business. Unfortunately, we no longer have the incentive to do this. Instead there is every incentive to re-align our cost structure because we are now in a low-cost commodity supplier relationship with the government. And my colleagues in the Life Sciences, including vital start-up companies, which are already struggling badly, are in the same situation. There is a high degree of frustration amongst the members of the community, many of whom have committed their careers to building a viable life sciences sector in the province.

By any measure, the biopharmaceutical industry is a valuable one to our health-care system and to our economy. There is a very real likelihood that research, manufacturing and other investments will decline. Our company will not be able to maintain or attract the same level of investments in Ontario. This is not a threat – it is a commercial reality. Our ability to invest is directly linked to our ability to sell.

Health-care decisions based solely on costs have resulted in hospital closures, lengthy wait times, doctor shortages, nursing cutbacks, and an unacceptable quality of care. The evidence is overwhelming. Policy decisions based on cost containment alone don't serve the best interest of patients. Cost containment

was the goal in reducing physician and specialist training, and closing hospitals. Now we have critical access and wait list issues because of past mistakes. Cost containment was the goal in limiting nursing spaces and introduction of new technologies. Now we have a nursing shortage, and those left in the profession face increasing workloads. All in all, cost containment alone is a losing strategy for Ontario.

The evidence is clear, investing in medicines and vaccines is not a problem to be contained, but an investment to be encouraged. A study by Columbia University found that for every dollar invested in newer medicines, seven dollars is saved elsewhere in the health-care system by reducing the need for expensive surgery, hospitalization and freeing up doctors to treat other patients. New medicines make our health system stronger and more cost effective.

So, why would Ontario, home to a significant number of pharmaceutical companies and their investment, put this at risk through Bill 102? I can surmise a few reasons:

1. The government doesn't care if the life sciences sector is part of this province. I don't believe this is what the premier intends as Minister of Research and Innovation.
2. It could be that we have a fundamental disagreement over Bill 102's consequences and the government doesn't believe investment is at risk.
Or
3. Most likely, the government did not do a full economic assessment of the bill outside of health. Rather the Ministry of Health took a narrow view of cost savings and how the drug budget in isolation could be cut and managed over time. The broad economic and health impact was not considered, and therein lies the problem.

As for the merits of Bill 102, they have not been judged in the context of an overall economic assessment beyond health.

Last year, Premier McGuinty joined me at GlaxoSmithKline to celebrate a \$23 million manufacturing expansion. He said the following, and I quote: “Research and innovation is vital to Ontario’s prosperity – jurisdictions that tap the creativity of their people will be home to the most rewarding jobs, the strongest economies and the best quality of life. That’s why we’ve created the new Ministry of Research and Innovation. Our government is committed to doing its part and we need more companies like GlaxoSmithKline making this kind of commitment to innovation”. End quote. He urged us to seek similar investments for Ontario, and we did. We increased our Ontario spending in R&D, doubled the capacity in our plant, added new jobs and delivered a \$1 million investment in the MaRS discovery centre.

As such, I was surprised by Bill 102 which runs counter to the valid goals of continued investment in the life sciences sector, and further does not recognize those who do invest. And unfortunately this is damaging Ontario’s global reputation as a potential life sciences centre. The government mistakenly believes that we can continue to invest in Ontario despite anti-innovation health policies and the resulting financial setbacks. When the financial impact to the industry is in the range of \$500 million to \$1.5 billion over the next three years, how can we?

Ontario says it’s open for business to the global community. In a two page ad just last month in The Economist, it said, and I quote “There’s no better place in the world to do business”. This simply does not square with the policies presented and implemented by the Ministry of Health and Long-Term Care. We need a strategy for Life Sciences that is supported by the government as a whole and is globally credible.

Today, I need to say that the policies being pursued by the Ontario Ministry of Health make it very difficult for us as an industry to recommend to our companies

globally, with credibility, that we consider future substantial investments in Ontario until we absorb and adjust to the substantial financial impact of Bill 102 over the next few years. By then, I fear it may be too late to re-position Ontario in the global Life Sciences sector. Global competition for investment is fierce. We need everyone on the same team to make Ontario successful.

All of my colleagues and I call on the government to do three things. 1. Step back from Bill 102 and conduct a full economic and health care outcome impact analysis. 2. The Life Sciences sector has developed and submitted to the Minister of Research and Innovation a proposed Life sciences strategy. We need to discuss this and move forward to create an integrated, robust strategy for Ontario. And 3. The Ministry of Health needs to recognize the biopharmaceutical industry as partners and an ally in seeking better patient care rather than a contractual supplier. Innovative medicines and vaccines have been the primary drivers of better health care over the past 25 years.

The government needs to embrace rather than reject the value our industry brings to the economy and patient health.

If we do these three things, I am confident we can continue to have a robust and growing life-sciences sector that is a source of jobs, research, investment and quality patient care.

As the president and CEO of a leading investor in life sciences, we supported the government's stated goal of encouraging innovation by the biopharmaceutical sector, and we still do. But we need to work together to build a strategy that's sustainable. This strategy would send the right signals globally so that Ontario can continue to be a centre of excellence in biopharmaceutical research and innovation.

Thank you.