



## Ontario Bioscience Innovation Organization's (OBIO)

Submission to the Standing Committee on Science and Research study on

### The Commercialization of Intellectual Property

The COVID-19 pandemic has highlighted the need for Canada to have domestic access to innovations rather than relying on imports in healthcare crises. An important step in ensuring this access is to **provide the incentives and supports to grow the domestic life sciences industry.**

**Recommendation: That the Government of Canada adopt a patent box regime to incentivize domestic, small- and medium-sized enterprises (SMEs) in the life sciences industry to conduct research and development (R&D) and commercialize their Intellectual Property (IP) in Canada.**

#### **Background:**

Venture capital funding is down globally but life science companies with strong balance sheets, strong teams and a solid base of IP will survive. IP is one of the cornerstones for starting and building a successful company and something founding scientists need to get right from the beginning. Early-stage companies' most valuable asset is their IP portfolio and for most companies this IP has its roots in academic research.

Canada should be well positioned to succeed in this increasingly global economy given our world-class research institutions and a thriving start-up ecosystem. Yet despite these assets, in late 2021, the Organization for Economic Cooperation and Development (OECD) predicted that Canada would be dead last by 2030 for Gross Domestic Product (GDP) growth out of the 38 member countries who are all considered high-income economies.

The solution to this issue is a more strategic and far more well-funded approach to the creation and commercialization of IP. Of the S&P 500 companies, 91 per cent of the US\$22-trillion total value is attributed to intangible assets such as IP, whereas in Canada less than 10 per cent of the economic drivers come from intangible assets. Despite lots of talk about the importance of IP, our innovators and researchers are not protecting their IP due to a lack of resources.

The result is that too often our domestically created IP ends up in foreign companies, leading to growth in corporate headquarters elsewhere, therefore losing the downstream benefits that come from developing IP into full-fledged products within Canada. This IP was often developed with public funding or incentives and is now generating income for foreign companies. We cannot continue down this path where the outcomes of our research funding land in the hands of others.

Canada can and should lead the world in new tech in fields such as automotive, medtech, life sciences and the AI and quantum technologies that will enable it. Yet we can not be content to be knowledge creators. We need to strive to be the commercial owners of these innovations. Our prosperity in Canada, is tied to whether we can stop maintaining status quo and be competitive and strategic when it comes to IP. This will directly increase the prosperity of current and future generations in our country and chart a better course that does not land us dead last for GDP growth among OECD countries as predicted.

A **patent box**—also referred to as IP regime— is a tax incentive aimed at encouraging domestic R&D by taxing business income earned from IP at a rate below the statutory corporate income tax rate. This is accomplished by reducing the taxes on *profits* resulting from R&D, in contrast to R&D credits which allow for tax breaks based on *upfront R&D spending*.

By implementing a patent box regime, life sciences companies across the country, such as those involved in creating and manufacturing vaccines, will have a greater ability to grow their business and commercialize and market their products. As identified in the Government's Biomanufacturing and Life Sciences Strategy, the growth of Canada's life sciences sector will help create jobs for highly skilled and highly educated professionals. These jobs can attract top-tier foreign talent, which is essential to Canada's growth as a leading nation and a prominent policy goal of the Government of Canada.

Investing in knowledge-based industries such as technology and the life sciences can lead to exponential economic and job growth, unlike services industries which have geometric economic and job growth. Many countries are being very aggressive in attracting and rewarding investment in life sciences and Canada needs to keep pace in order to compete.

This idea is not new – and has seen success in other jurisdictions. Many member states of the OECD possess patent box regimes to incentivize commercialization of IP in their jurisdictions. The pharmaceutical industry, for example, has traditionally placed its IP in Ireland and other low tax jurisdictions or jurisdictions with patent box regimes. More recently, many other countries, including United Kingdom (UK), Spain and France have established patent box regimes that offer lower tax rates for IP related activities.

Canada's provinces are looking at this as well, with Quebec's patent box regime being the first of its kind in North America, and which was overhauled in 2020 after first being introduced in 2016.

### **OECD Nexus Approach:**

As discussed above, many member states of the OECD possess patent box regimes, including many across Europe. The OECD has expressed worry over corporations, seeking to maximize their profits, shifting their IP-derived assets and profits to jurisdictions with the most advantageous tax rate.

To counter this phenomenon, the OECD adopted the Base Erosion and Profit Shifting (BEPS) Project. Action 5 of the Project requires OECD members to follow a 'nexus approach' towards patent boxes and how they grant tax benefits. The nexus approach requires corporations who seek the benefits of a patent box regime to undertake 'substantial activity' in the jurisdiction where they are benefiting. "As a proxy for measuring substantial activity, the nexus approach identifies corporate expenditures, analyzing the ratio between the expenditures in the given jurisdiction and the overall expenditure. Only income derived from this substantial activity will benefit from the patent box tax rate."<sup>1</sup>

The nexus approach outlined by the OECD ensures that taxpayers in a given jurisdiction receive the benefits on the condition that a corporation's R&D activities are sufficiently tied to the jurisdiction in which they claim the regime deduction.

### **Quebec's Patent Box Regime:**

The Government of Quebec introduced the Deduction for Innovative Manufacturing Corporations (DIMC), the province's first patent box regime, in 2016. The DIMC lowered the tax rate on applicable Quebec-based corporations from 11.8% to 4% for revenue from an eligible patent. Under the DIMC, a corporation may claim up to a 50% deduction of the net income attributable to a patent. To be eligible, the patent must meet the following criteria:

- It must be help by a corporation established in Quebec;
- It must be derived in whole or in part from R&D conducted in Quebec; and
- It must be issued under the *Patent Act* or an equivalent Act from another jurisdiction.

The DIMC was only applicable to the following corporations:

- That engaged in manufacturing and processing activities accounting for at least 50% of all activities;
- Had \$15 million in paid-up capital for the last taxation year; and
- Incurred at least \$500,000 of R&D expenses.

The Government of Quebec then introduced the Incentive Deduction for the Commercialization of Innovations (IDCI) in 2020. "The IDCI provides that eligible revenue from the commercialization of IP includes the sale or rental of goods, service delivery, royalties from concession, and revenue from litigation of the IP."<sup>2</sup> The IDCI lowered the applicable tax rate on

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<sup>1</sup> [https://tax.osgoode.yorku.ca/2021/01/quebec-evolving-patent-box-regime/#\\_ftn9](https://tax.osgoode.yorku.ca/2021/01/quebec-evolving-patent-box-regime/#_ftn9)

<sup>2</sup> Ibid

these revenue streams from 11.5% to 2%. The IDCI is only applicable to the following corporations:

- That are established in Quebec;
- That commercialize their eligible IP in the province; and
- That have incurred R&D expenses in Quebec.

The IDCI fits within the model of the OECD's nexus approach. "Eligible IP refers exclusively to 'software protected by copyright, patents, certificates of supplementary protection for drugs and plant breeders' rights.' Like with the DIMC, under the IDCI regime, the government reserves the right to levy a special tax to reclaim a deduction that was falsely given, such as when a patent or eligible R&D work becomes invalidated within the year."<sup>3</sup>

Compared to the DIMC, the IDCI does not require the corporation seeking the deduction to require any paid-up capital or any minimum R&D expenditure to qualify.

### **Canada's Opportunity:**

The implementation of a national patent box regime for SMEs in the life sciences industry presents many opportunities for Canada.

Compared to many other jurisdictions with such regimes in place, Canada leads with exceptionally large talent-pools<sup>4</sup> than can take advantage of such tax incentives to spur innovation and economic growth. Additionally, our proximity to the United States (US) opens a significant door for Canadian life sciences SMEs to attract talent from the US, which possesses the largest life sciences talent pool in the world.

There is a current talent shortage across the US's leading life sciences jurisdictions, including Boston and San Diego, with local companies and investors looking for additional locations to recruit from. Given Toronto and Montreal's proximity to the US, these cities represent a clear opportunity for recruiting companies.

**A patent box, implemented to incentivize Canadian life sciences SMEs to conduct R&D and commercialize their products in Canada, can meet two important goals.** It can:

1) Offer Canadian-based life sciences companies the supports necessary to conduct and grow their business in Canada, allowing them to anchor provincially; and

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<sup>3</sup> [https://tax.osgoode.yorku.ca/2021/01/quebec-evolving-patent-box-regime/#\\_ftn9](https://tax.osgoode.yorku.ca/2021/01/quebec-evolving-patent-box-regime/#_ftn9)

<sup>4</sup> "Canada has one of the world's best-educated talent pools. With 62% of Canadians aged 25–64 having graduated from tertiary education institutions, Canada ranks as the most highly educated country in the world. In 2019 alone there were 206,082 graduates in STEM and in health care. This represents a 15% increase compared to 5 years prior (2015)." <https://data.oecd.org/eduatt/adult-education-level.htm#indicator-chart>  
<https://www.investcanada.ca/industries/life-sciences>. 62% of Canadians aged 25-64 having graduated from post-secondary institutions – one of the world's best-educated talent pools <https://avison-young.foleon.com/ca-marketing/life-sciences-canada/canadas-life-sciences-sector/#block-77207865>

2) Incentivize both Canada's and the US' significant talent pools to pursue careers in Canada and meet the job shortages felt across the life sciences industry.

Quite simply, with the implementation of a patent box regime, Canada would stand as a favourable jurisdiction for both Canadian SMEs looking to remain in Canada and for US SMEs looking to solve their talent shortages.

A major concern among the life sciences professionals is that if a company is not successful or sold within Canada, the industry and ecosystem is not large enough for professionals to secure another position without having to relocate, largely outside of Canada. As the industry and ecosystem grow, in part on the reliance of a patent box regime, it will in turn attract more talent and companies which will exponentially grow the industry and raise the prospects for future employment, leading to greater levels of job growth and economic development across Canada.

With a patent box regime implemented nationally, Canada has the possibility to both compete in the global life sciences industry and to lead in the research, development, and commercialization of innovative technologies that will improve patient care and spur economic growth and skilled, high-paying jobs.

**Recommendation: That the Government of Canada adopt a patent box regime to incentivize domestic, small- and medium-sized enterprises (SMEs) in the life sciences industry to conduct research and development (R&D) and commercialize their Intellectual Property (IP) in Canada.**

**[About Ontario Bioscience Innovation Organization \(OBIO\):](#)**

Ontario Bioscience Innovation Organization (OBIO), founded in 2009, is a not-for-profit, membership-based organization engaged in strategy, programming, policy development and advocacy to further the commercialization of Ontario's human health science companies positioning Ontario as a leader in the international marketplace. OBIO advances this goal through collaborative partnerships with industry, the investment community, academia, patients and government.