AusBiotech's submission to the Federal Government's Tax Discussion Paper

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Introduction

As the Australian representative body of one of the world's most innovative and globally-mobile industries, AusBiotech is acutely aware of the difference that can be made to innovation stimulation with the right policy settings and conversely the damage to the growth of an industry from poor public policy. Since 2008, when the Cutler Review of innovation identified the research and development (R&D) tax refund as critical to the growth of innovation in Australia, the importance of tax settings has been elevated. The subsequent introduction of the R&D Tax Incentive has been hailed as a game-changer for Australian innovation, especially in biotechnology. While the preservation of the much-loved incentive is top-of-mind in R&D-intensive industries, it does not in and of itself complete the tax reform story.

This submission makes the case for tax settings to support Australia's innovation ecosystem in order for innovative industries, including biotechnology, to underpin the economy as the mining boom fades. Preserving the R&D Tax Incentive in-tact is key and ought to be complemented with preferential tax treatment of profit from locally-developed and worked intellectual property (IP), via the Australian Innovation & Manufacturing (AIM) Incentive, to incentivise the retention on-shore of economic benefits from innovation. This submission also argues for the introduction of fiscal incentives for investors, in pre-revenue and start-up companies, to encourage 'patient' venture capital and further tweaks to Employee Share Schemes (ESS) to meet the policy intent of recent repairs.

AusBiotech works to grow Australia's strength in biotechnology and is a well-connected network of over 3,000 members in the life sciences industry, which includes bio-therapeutics, medical technology (devices and diagnostics), food technology, industrial and agricultural biotechnology sectors. The industry consists of more than 900 biotechnology companies (400 therapeutics and diagnostics and 500 – 900 medical technology companies) and employs in excess of 45,000 Australians. Australia, recently ranked fourth in the world for its biotechnology achievement, has the opportunity to exploit its strength by supporting innovation with its tax system – or to waste the momentum it has built.

Along with the trend elsewhere around the globe, technological innovation, knowledge and networking are the drivers of our productivity. The Reserve Bank of Australia said some time ago that the structure of the Australia economy is moving from its historical agriculture, mining and industrial base to more of a services base ('Structural Change in the Australian Economy', 2010), however policy changes and tax settings in Australia have failed to keep pace.

The structural macroeconomic shift from the industrial revolution to the knowledge revolution is providing new challenges and will bring different opportunities in the future and if we can plan appropriately for these, all Australians will benefit. Australia has for some years realised the positioning of innovation as central to jobs, productivity and a thriving economy.

Following are responses to selected questions from the Discussion paper:

Question 3: How important is it to reform taxes to boost economic growth?

Many Australian companies, and all biotechnology companies, need to function with a global view – regardless of their age and size. A biotechnology company typically requires access to patient cohorts for clinical trials, highly-specialised staff, access to markets and access to large amounts of capital over long periods for technology development. As other countries can offer comparable business environments with better tax regimes, it's critical that Australia takes steps to remain competitive. Australia must consider its positioning and ability to compete as R&D incentives, patent boxes and other innovation-targeted incentives become commonplace around the world.

Biotech's capacity to support the economy

The Australian economy needs to diversify from mining, car manufacturing and agriculture. While they are or have been essential parts of our economy, we need to understand and build on the key industries of the future; the industries that will employ our educated young people, create wealth and jobs and deliver products and services to a waiting community. Biotechnology not only performs all these functions, but it also assists the mining and agricultural sectors. Biotechnology-based products epitomise advanced manufacturing, an area where we have a comparative global advantage.

Australia's ASX-listed biotechnology companies have a combined market capitalisation of just over $50 billion for 86 companies (*BioForum*, October 2014), and the sector raised $458 million in capital investment last year. Australian biotechnology innovation ranks fourth on the world stage (Scientific American Worldview 2014). Significantly, the Report's authors noted that if the ranking was based purely on productivity, Australia would jump to second place. Australia joined the top positions across several areas, including:

- Greatest public company revenues (US, UK, Australia);
- Most public companies (US, Australia, Canada);
- Greatest public company market cap (US, Australia, UK);
- Most public company employees (US, Australia, France);
- Best brain gain - share of global graduate students (US, UK, Australia);
- Largest public markets for biotechnology (US, Australia, UK);
- Best growth in biotechnology public markets (US, Australia).

(http://www.scientificamerican.com/wv/assets/2014_SAWorldView.pdf)

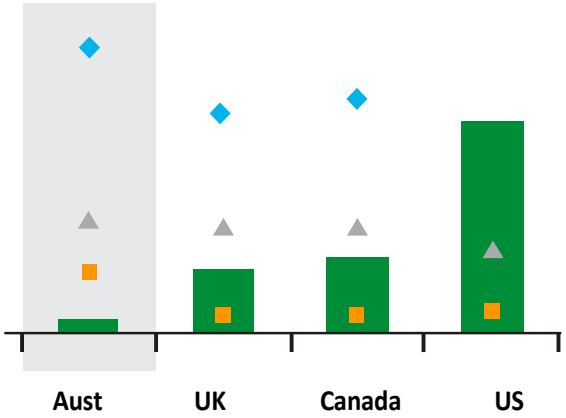
Australian is home to global biotechnology companies, such as CSL, Cochlear and ResMed, which have been responsible for world-leading technologies that have improved the quality of life for millions of people across the world.

With our proximity to Asia, Australia's biotechnology industry is poised for growth and well positioned in the global context to contribute to the economy and the lives of Australians, *but* the work on tax policy settings is critical.

Why tax settings are so important to innovation

SMEs and mature companies face different issues, but both need sympathetic tax settings. Small and medium biotechnology companies seeking to commercialise technologies are vulnerable to public policy settings, partly due to their typically small size and lack of retained earnings that usually buffers companies from tough times, the youth of the Australian innovation ecosystem and the hostile business environment in which they are seeking to grow.

Only a small fraction of the opportunities afforded by Australia's substantial pipeline of research and innovation are being supported with venture capital. This indicates a market failure and has substantial scope for improved outcomes from investment and returns from a supportive tax regime.



Sources: AVCAL Venture Capital Fact Sheet, April 2015.

Figure 1: VC fundraising vs research and innovation metrics

VC fundraising as a % of GDP

Gross Dosmetic Expenditure on R&D, compound growth rate (%) 2000-2010

Publications in top-quartile journals per 10,000 inhabitants

Science & technology occupations as a % of total employment

At the mature end of the spectrum tax policies can positively impact Australia's ability to keep its home-grown technologies in the country and to reap the full benefit they have to offer. Australia does an outstanding job of innovating, especially in the early research phase, only to leave a public policy gap that allows our technologies to leave our shores just as we are able to reap the greatest spillover benefits from them.

Unlike tangible goods, the portability of IP makes it especially easy to move its management to another jurisdiction and the decision about where to locate the management, manufacture, registration and sale of technology-based products is dictated more so by the business and public policy environment and what it offers.

Question 2: How well does Australia's utilisation of it available taxes align with the evolving structure of Australia's economy and changes in the international economy.

As noted above, Australia has begun the process of recognising the importance of innovation in underpinning Australia's economy via the R&D Tax Incentive, however, has not completed the picture with tax settings that provide incentives across the innovation ecosystem. In summary, Australia would benefit from tax settings that incentivise the retention of IP (and the associated spillover benefits) to stay in Australia, to help young capital-starved companies to retain investors and employees.

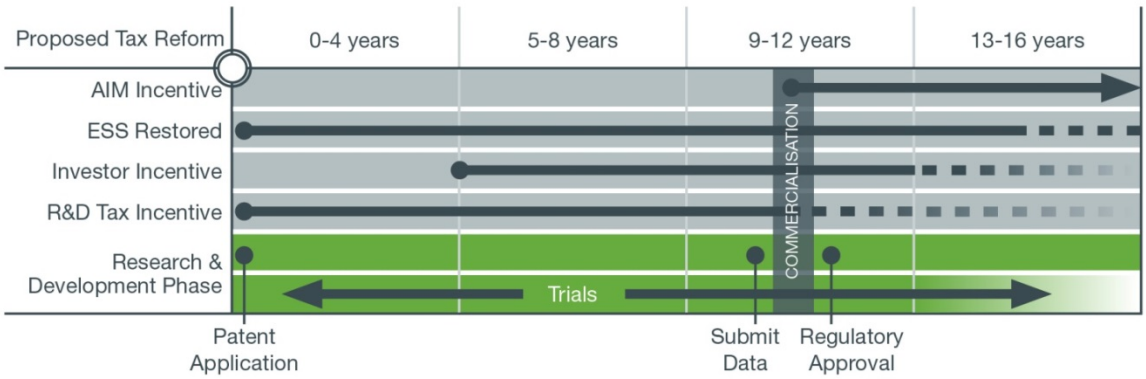
The gaps in the ecosystem that are allowing our assets to depart our shores are created by a lack of venture capital funds in Australia to support commercialisation and the global competition in tax incentives. These items, separately or combined, act as magnets from other countries that draw our assets and their potential benefits away from Australia.

Australia's current reality is that our country spends billions of dollars of public money on world-class research and technology development, only to bid it farewell to our international competitor economies when the benefits start to really flow.

AusBiotech is leading the industry's call for further tax reform in Australia to provide incentives for innovative companies and high-tech manufacturing to support Australia's future and keep us internationally competitive by attracting and retaining business, and the resulting jobs and exports.

AusBiotech advocates making tax incentives an asset for innovation and business, with four pillars:

- Retain the R&D Tax Incentive in-tact, lift the $20 million cap for the refundable component to $50 million in-line with the Cutler recommendations of 2008, and introduce quarterly payments;
- Introduce the Australian Innovation & Manufacturing (AIM) Incentive, to incentivise the monetisation of IP, and in turn innovation, and retain the associated benefits once it reaches commercialisation (see response to Question 37);
- Introduce fiscal incentives for investors in pre-revenue and start-up companies, to encourage 'patient' venture capital (see response to Question 40); and
- Make further adjustments to Employee Share Scheme (ESS) eligibility conditions that are too restrictive to be especially helpful to ASX-listed biotechnology companies operating in loss (see response to Question 40).



It is imperative that Australia takes action to remain competitive and relevant on the world stage, especially, when other economies, including the UK and Singapore, are already reaping the benefits of their tax regimes and some Australian companies are moving operations to these nations to develop IP that originated in Australia. Maximising Australian innovation and reinvigorating the manufacturing sector in Australia largely depends on the existing R&D Tax Incentive being complemented with a tax regime that can secure Australia's competitiveness for the future.

As R&D and patent box incentives become more commonplace around the world, a number of governments have demonstrated that, to stay competitive, it is necessary to offer a competing tax and business environment. Ten percent of something will be better for Australia than 30% (corporate tax rate) of nothing, which is what we have when companies take their IP elsewhere.

Question 14: Under what circumstances is it appropriate for assistance to be delivered through tax offsets?

In the current climate of structural shifts in the economy and the recognition that innovation is a key driver of productivity and, therefore, the economy, the use of the tax system to promote growth in innovation is sensible and enables Australia to address the market failures that currently stifle innovation.

AusBiotech agrees with comments in a report from the Information Technology and Innovation Foundation (IT&IF), a non-partisan US-based think tank. Its report on patent boxes (2011) said: *"From a market failure perspective, the types of innovation that ought to be supported by government are those whose benefits are larger for society than for the source firms."*

Australia's innovation industries are in need of a more competitive tax regime to 'match' major trading blocks in Europe, the US and Asia, to offset the lack of venture capital available for translation of research – a market failure – as well as for the reasons noted by the IT&IF in excerpts below.

> Many conventional neoclassical economists look with suspicion on proposals to use the tax code to favor particular kinds of activities… Notwithstanding this predilection for a "neutral" tax code, a not insignificant number of economists are willing to support tax incentives for corporate R&D. This is in large part because there is a well-developed body of economic theory and empirical research demonstrating that companies do not capture anywhere near all the benefits... Companies often have difficulty reaping the full commercial benefits of innovation (even given the presence of patent protection) because some of the value flows to other firms and to society as a whole through spillovers (what economists call positive externalities). While spillovers are good for society (they raise the societal, as opposed to private, rate of return from innovation) they mean that there is less incentive for firms to invest in innovation than is socially optimal. For example, Tewksbury et al. examined the rate of return from twenty prominent innovations and found a median private rate of return of 27 percent but a median social rate of return of 99 percent, almost four times higher. Yale economist William Nordhaus estimates that inventors capture just 4 percent of the total social gains from their innovations; the rest spill over to other companies and to society as a whole.

> Many economists recognize a second market failure associated with innovation. Unlike many other elements of a firm's value chain, innovation requires substantial risk, in part because the time lag between R&D investments and a successful commercial product introduction is often considerable. For example, the average time between initial R&D and when a new drug reaches the market is twenty-five years. Indeed, there is some evidence that there is an inverse relationship between the risk the private sector must assume and the benefits from spillovers to society from an innovation. The reason is that many "game-changer" innovations that hold the most potential for spillovers require significant basic research. Moreover, as pressures from U.S. equity markets for short-term returns increase and venture capitalists look to invest in larger and later stage deals, justifying investment in high-risk research activities has become more difficult.

Question 37: Are there other important issues in the business tax system, not covered in this section that should be considered as part of the Tax White Paper process?

AusBiotech recommends that the Australian Innovation and Manufacturing (AIM) Incentive be developed and implemented. The AIM Incentive is a patent-box-style incentive providing tax relief on profit from qualifying patents. It is suggested that eligible profits are taxed at a rate of 10% (instead of 30%).

Australia already supports the R&D phase of innovation in company settings via the R&D Tax Incentive, but support phases out at the commercialisation point of innovation, at which time Australian IP is vulnerable to being sold, managed or manufactured overseas and the resulting community and economic benefits going with it.

In August 2013, Industry welcomed 'The Coalition's Policy to Boost the Competitiveness of Australian Manufacturing' and its pledge to consider a 'patent box' tax incentive and its recognition that manufacturing is a platform for development of skills and knowledge.

The AIM Incentive would reward innovative Australian businesses that make profits from qualifying patents and make Australian innovation more internationally competitive. Its purpose is to encourage the commercialisation phase of innovation by providing an incentive to locate high-value jobs associated with the development, manufacture and exploitation patents in the country with the incentive. While R&D incentives are designed to encourage activities that will result in innovation, the AIM Incentive is aimed at retaining the associated commercial activities.

The IT&IF said in its report on patent boxes (2011) that nations have adopted these regimes for two key reasons. "First, they recognise that the process of innovation is subject to multiple market failures—including spillovers of the benefits to firms not making the investments in innovation—and that tax incentives can help correct these failures. Second, they recognise that the process of innovation is now much more global and footloose. As such, many nations have realised that they need a more competitive tax code when it comes to innovation-based companies in traded sectors (e.g., life sciences, electronics, chemicals, energy, aviation, etc.)."

The AIM Incentive ought to be developed based on world-best practice, such as the UK Patent Box, and then adapted to Australia's unique environment.

For a suggested model, please see http://www.aimincentive.com.au/. A separate joint submission has also been made by AusBiotech, Cook Medical, the Export Council of Australia and the Medical Technology Association of Australia.

Question 39: Does the R&D Tax Incentive encourage companies to conduct R&D activities that would otherwise not be conducted in the absence of government support? Would alternative approaches better achieve this objective and, if so, how?

The R&D Tax Incentive was very well received by the industry and the annual AusBiotech *Biotechnology Industry Position Survey* shows its in-tact preservation remains the number one public policy issue within the industry year after year. Many companies report undertaking R&D that they otherwise would be unable to fund and many report that the Incentive enables the fast-tracking of their R&D program, often cutting the time to initiate clinical trials by years. In reality, this translates to patients being able to access innovative treatments sooner.

The R&D Tax Incentive has also had the effect of attracting international businesses to base operations here and in some cases move their operations to Australia. Several US companies have stated that the decision to conduct clinical trials here and/or to list on the local stock exchange was assisted by the Incentive, bringing a positive benefit in both economic and social terms.

A clear example of a company that would not otherwise be conducting economic activity in Australia is Innate Immunotherapeutics, which moved from New Zealand to Sydney and has since listed on the ASX, as a result of the R&D Tax Incentive.

The Company has designed and manufactured a unique immunomodulator microparticle technology, which can be used to induce the human immune system to fight certain cancers and infections, or modulate certain immune mechanisms implicated in autoimmune diseases such as multiple sclerosis. The same technology can be used in the design of better vaccines to potentially treat or prevent diseases such as influenza, cancer, malaria, or tuberculosis. The company said in a media statement that it made the move to initiate a clinical trial on the efficacy and safety of MIS416 in the treatment of subjects with Secondary Progressive Multiple Sclerosis, which is currently recruiting up to 90 patients, because of the R&D Tax Incentive.

It is therefore with disappointment that AusBiotech notes the re-appearance in recent weeks of legislation to cut the R&D Tax Incentive by 1.5%, which has previously failed to pass the Senate.

In addition to abandoning this move undermine the Incentive, two further improvements are recommended: The cap for the refundable component be placed at $50 million turnover and the almost-legislated quarterly payments be provided.

When the Cutler Innovation Review of 2008 outlined a vision for the R&D Tax Incentive, it recommended the cap for the refundable component be placed at $50 million turnover. The current cap for refunds of $20 million is achieving its policy intent for very small and pre-revenue companies,

but cognisant of the large money values required in technology development, this refinement would assist in the targeting of the support toward small and medium sized companies in the $30 - $50 million turnover category that are currently excised from the refunds scheme despite their comparative small size.

AusBiotech fully supports quarterly payments for small and medium size businesses eligible for a R&D Tax Incentive refund.

AusBiotech has been a tireless advocate for quarterly payments, since the first announcement on the tax incentive in 2009. A survey conducted by AusBiotech indicated the timing of the receipt of payments (ie, quarterly or annually) is a critical factor in its value as an incentive for additional R&D activities and smooth cash flow.

The quarterly payments were a condition of the legislation's original passage, negotiated by the Greens and supported by AusBiotech, when it was passed in 2011. Subsequently the quarterly payments were heavily consulted upon, fully designed and were progressing through the Parliament ready for their planned 1 January 2014 implementation when Parliament dissolved for the last election. The Coalition Government then stalled the reform and later scrapped it, much to the disappointment of the industry, which had waited patiently for the ability to smooth out cash flow over the year and increase predictability. We can see no legitimate reason why the measure did not progress and would like to see quarterly payments delivered.

Question 40: What other tax incentives, including changes to existing measures, are appropriate to encourage investment in innovation and entrepreneurship?

Incentive for investors in pre-revenue and start-up companies

AusBiotech is advocating for greater incentives to encourage investors to provide capital to the life sciences sector's young innovative companies. In particular, there is a gap in the various incentives that exist to encourage investors to 'park' their capital in pre-revenue, pre-dividend companies for more than 12 months.

These so-called 'patient investors' are desirable as they provide more stability and certainty to young start-up companies. There are a number of models that may be considered: a Flow Through Share (FTS) scheme, like the mining industry has recently been provided, a preferential capital gains tax scheme or a model like the UK's Enterprise Investment Scheme (EIS).

The EIS is designed to help smaller higher-risk trading companies to raise finance by offering a range of tax reliefs to investors who purchase new shares in those companies.

Employee Share Schemes

The Government is to be commended for its Industry, Innovation & Competiveness Agenda. In particular, the biotechnology industry warmly welcomed improvement to ESS to: reverse some of the changes made in 2009 to the point at which rights issued as part of an employee share scheme are taxed for employees of all corporate tax entities; and to introduce a further tax concession for

employees of certain small start-up companies. However, the definition of a start-up company does not fit well for the biotech sector and the eligibility is therefore notably narrow.

The importance of ESS is especially poignant and amplified in the biotechnology sector, where the pre-revenue phase is typically extended by the need to clear regulatory hurdles before revenue can be earned – often by more than a decade – and the cash required to reach regulatory approval.

Start-up companies in this sector are rarely funded by sales revenue, even after listing, and rely on venture capital or share issues to conduct research and development and prepare a product for registration and to earn revenue. In this 'cash pressed' state they often rely on the support of ESS to attract quality employees, and this is an important support in enabling innovative start-up companies to establish.

A start-up company is defined as an Australian unlisted company with an aggregated turnover not exceeding AU $50 million, which has been incorporated for less than 10 years. This definition of a start-up in the ESS legislation is unhelpful for a number of biotechnology companies.

The requirement for all three conditions to be met to be an eligible start-up, excludes many biotechnology companies, notably those who list on the Australian Securities Exchange early in their life cycle to raise capital for their research programs, despite having no or negligible turnover and are yet to make profits. It is often assumed that listed companies are liquid and have ready access to capital. That is not the case in the biotechnology sector and these companies can remain start-ups in every other sense. Therefore, the exclusion of listed companies in this category actively works against the policy intent.

Further, the condition that the company be less than 10 years old is very restrictive for the biotechnology sector, as many start-up companies would not have reached the point of sales revenue by this time. For example, the development of a new therapy can take 15 years before it is approved for the market. Extending this time to 15 years would be more appropriate.

AusBiotech recommends: Use the existing definition (with an extension from 10 to 15 years) and also allow for listed companies that meet the eligibility criteria for the refundable R&D Tax Incentive (aggregated turnover under $20 million) to be included.

The exemption for start-up companies is critical as it recognises the difficulty innovative start-up companies face in developing their technologies while retaining highly-skilled workers. It is also critical that it be appropriately targeted. The current definition will inadvertently exclude the type of company it seeks to assist.

A significant practical effect of the tight definition is the disqualification of highly innovative sources of future growth for our economy and the inability to compete globally for talent.

Summary

The modern world is beset with issues of grave significance – from climate change, cleansing waste streams, food production and quality, alternative fuel developments, through to the ills experienced by ageing populations and increasing incidence of serious infections resistant to antibiotics and increasing prevalence of tragic diseases like Alzheimer's. Australia is not quarantined from these

challenges and innovation is the tool by which we can seek redress, solutions and build ourselves a knowledge-based economy.

Australia has excellent potential to be a nation driven by bio-innovation and our tax policy settings provide us with an opportunity to encourage growth where we want it to happen. We have a strong education system, stable government, good regulatory, IP and legal environment and a proven track record in innovation. However, we need a business tax regime to support the innovation ecosystem, both at start-up phase and throughout the lifetime of a company to retain international competitiveness. Our competitors and major trading markets have acted and many have more attractive arrangements for innovative companies seeking to add value to intellectual property.