

# Interview: Darren Cunningham – Co-founder & CEO, Inflection Biosciences, Ireland

---



“The Irish biotech and pharma sector has long had a strong and positive relationship with the pharma sector in the US, and I think we can continue to study the success of the indigenous US sector in mapping out our future for indigenous biotech”

---

15.11.2016

Tags:

[Ireland](#), [Inflection Biosciences](#), [SME](#), [Biotech](#), [Start-up](#), [Oncology](#), [Research](#), [R&D](#)

---

*Darren Cunningham tells us the story behind Inflection Biosciences (and its name), the rationale of focusing on small molecule cancer treatments, his thoughts on the Irish biotech start-up scene, and his hopes for the company’s future development.*

## **Can you first provide an introduction to Inflection Biosciences to our international audience?**

We are an early-stage Irish biotech company founded to develop innovative, small-molecule targeted treatments for significant unmet needs within the oncology space. Through our partnership with the Spanish National Cancer Research Centre (CNIO), we have a number of molecules in the preclinical stage that we hope to take into clinical trials in the coming years, subject to positive preliminary data and required regulatory approvals.

As a small biotech, we have sought to extend our impact and capacity by collaborating with clinical research organizations (CROs) as well as research investigators at universities and research centers both within Ireland and globally. For instance, we have partnered with Trinity College Dublin (TCD), which has a recognized expertise in treatment-resistant lung cancer, as well as with National University of Ireland, Galway (NUIG). Internationally, our research partners include Thomas Jefferson University, Kolling Institute Sydney, Klinikum Munich University and North Carolina Central University. It is a productive partnership model whereby we supply our innovative treatments to the investigators to explore the potential utility of our molecules in their area of expertise, be it

---

pancreatic, colon or breast cancer. So while our head office may be in Ireland, our aspect is global.

We have had very promising preliminary data across a number of cancer areas so we have decided to focus initially on those where the unmet need is greatest. For instance, the mechanism of our potential treatments is very compatible with a certain form of lung cancer, which sees huge unmet medical need.

The current priority for us is to take the best of these programs into initial clinical studies. That would be a huge milestone for a small biotech company like ours and provide us with great options.

### **What have been some key milestones for Inflection Biosciences in the past few years?**

[Featured\_in]

The first was undoubtedly obtaining our first pipeline of assets from CNIO, in line with our business model to in-license and develop drugs successfully. Following an intensive year and a half of searching, during which, co-founder Dr. Michael O'Neill and I, reached out to over 200 cancer institutes and universities across the US and Europe, we selected CNIO to be our first partners.

Naturally, the next step was fundraising, which is critical for a small biotech. In 2011 and 2012, especially, we found the funding climate was difficult for biotech in Ireland. We are very grateful to have attracted a number of private investors who shared our vision to tackle cancer. Enterprise Ireland has also been a great partner, not just from a funding perspective but also in terms of the networking support and access they provided. This initial support from the private investment community in Ireland was critical in positioning us for venture capital investment subsequently.

Drug development is an intrinsically risky endeavor so fundraising is always a critical aspect of biotech start-up operations. Our business model, the in-licensing model, is tried and tested internationally, and has the advantage that we are not bound to any particular technology platform. Having that initial screening process to identify a drug program already de-risks the entire drug development process across a number of aspects like intellectual property (IP) and competitive landscape positioning. We had to be personally convinced that the program offered something new and compelling before entering into the license agreement.

### **Why was CNIO a good fit for Inflection Biosciences?**

There are a number of factors here. We had already devised a multilayered screening process to identify promising cancer development programs and by the time we engaged with the CNIO, we knew what a "good" looked like. The CNIO had generated a considerable reputation for excellence in cancer research, and this was obvious in the robustness of their internal drug discovery process.

As a small biotech, we wanted to find a cancer development program that was focused on a "molecular target" that was a fit for us: one that was not so competitive that it would be difficult for us to differentiate ourselves from existing players, and not so novel and original that the amount of work required for validation would be prohibitive for a small player. We believed that the CNIO had programs with a certain level of pre-existing validation but not extensively explored, and so was a great fit for us.

We knew that to secure the assets we were likely competing with more established and bigger biotech companies with more financial resources, so we sought to differentiate ourselves by proposing a very inclusive, collaborative and transparent approach, which I believe was a factor in convincing them to select us as their partner. We share all data and advancements generated, and

---

we keep them involved throughout the drug development process. We are very pleased with this collaborative approach, and grateful for the support and input we still get from the team at the CNIO.

**Oncology is such a competitive area and in recent news, immuno-oncology has been touted as the game-changer for that specialty area. As a small molecule cancer biotech company, how do you position Inflection Biosciences to stand out in that landscape?**

It is a very competitive area but we chose to focus on the oncology therapeutic area for a number of clear commercial reasons. A small biotech is usually dependent on VC investment in the early years, and there was and still is far more VC funding in oncology than other therapeutic areas. Similarly, far more deals are done between biotech start-ups and Big Pharma in the oncology space. From a strategic perspective, oncology made business sense.

[related\_story]

Even more intriguing, on the clinical side, the oncology sector offered up a window into clinical efficacy earlier in the development process than most other therapeutic areas. While Phase I testing is aimed at establishing the safety profile of the potential treatment, due to the nature of the cancer treatments, cancer patients rather than healthy volunteers are recruited to this initial phase. So while establishing the safety parameters, you can also search for an effect on the cancer in the patients. While this is only a very preliminary signal of efficacy, it nonetheless creates considerable interest in the industry and we were seeing Phase I stage oncology companies attracting significant partnerships, valuations or exits that you would not associate with Phase I in other therapeutic areas. This potential inflection point in valuation became a key consideration in our business model, and also helped us in naming our company.

The flipside, as you mentioned, is that oncology is a very competitive space and that immuno-oncology has really been touted as the new cancer treatment in the past couple of years. It has become this juggernaut that Big Pharma is pushing a lot of resources into. As clinical results emerge, it is becoming clearer that immuno-oncology, while very promising for particular areas like melanoma, is not a magic bullet treatment of all patients and all cancers just yet. For the specific type of resistant lung cancer we are focused on, results are more mixed. I believe that we are still looking at the drug cocktail approach here for now.

It is undeniable that immuno-oncology treatments are now being established among oncologists as essential treatment options, and in the product portfolios of pharma companies. It is therefore important for us to be cognizant of how our therapies will work in conjunction with immune-oncology therapies and adapt accordingly, but I firmly believe that there is still room for targeted small molecule treatments.

**Ireland has traditionally had a strong reputation as a global manufacturing hub and is now positioning itself as a hub of innovation but we hear less about it as a biotech hub. How would you rate the biotech start-up environment within Ireland?**

It is true that the perception of Ireland is more focused on it being an excellent base for manufacturing, having a talented workforce and boasting an excellent business-friendly environment. That has certainly served the country very well in attracting investment from the large pharma companies.

In terms of indigenous Irish pharma start-ups, one of the well-known success stories would be Ælan Corporation. Apart from being a very successful homegrown pharma company, it was also instrumental in seeding a lot of the existing indigenous pharma ecosystem. I was lucky to work at Elan for a few years and to work with excellent people, and subsequently, I spent eight years at

---

Amarin, in which Elan had a small stake at the time. The experience I gained in business planning and development, deal-making, fundraising and networking, came from my time with these companies. The influence of Elan in fostering Irish start-ups and cultivating a global mentality and outlook is indisputable. It follows that the more of these success stories we have, the better the growth of the indigenous sector.

The Irish biotech and pharma sector has long since had a strong and positive relationship with the pharma sector in the US, and I think we can continue to study the success of the indigenous US sector in mapping out our future for indigenous biotech. I value my time spent in the US and encourage other biotech CEOs who have not had the opportunity yet to get there and experience it. I always return re-energized from my visits to the US.

### **What more should be done to promote more indigenous biotech start-ups within Ireland?**

Given the demands on their resources, the government can only do so much in terms of fostering start-ups. Entities like Enterprise Ireland are doing very well and we have received great support from them, as I mentioned. We have also benefitted from the favorable R&D tax credits here in Ireland. It would be helpful if schemes like the BES/EII could be made more available to biotech start-ups, especially as biotech start-ups generally do not generate revenue at the outset and so are very much reliant on private investors at the very beginning.

While the various state supports can certainly help, ultimately, it is about having that drive to go out and raise money from investors yourself, whether in Ireland or internationally. Risk-taking and entrepreneurship are not skillsets per se but rather attitudes or mentalities that can be trained and fostered, but it all boils down to the individual's priorities and efforts. The onus is really on you as an entrepreneur to pitch your story and convince others to invest in you.

### **Where would you like to see Inflection Biosciences in the next few years?**

Our main priority is to progress our most promising therapies into clinical trials. This will come down to the data generated. If we can generate positive clinical data then we have a number of options we could pursue, from additional fundraising to grants to strategic partnerships with Big Pharma companies. As a CEO, my responsibility is to pursue all these options.

Looking back on the past few years, I would have hoped that we were further along in the business model than we currently are, but I believe we have made good decisions throughout the journey based on the best available information and we are striving to make better decisions each day. What I have come to realize in my fourteen years of experience in business development and transactions is that everything takes longer than you expect – even when you factor in delays!

When it comes to pitching to different types of investors and partners as well, you need to take a very sophisticated approach to tailor your presentation to their needs and understandings instead of simply assuming that they understand where you are coming from. You have to respect the audience. Most will tell you that money is not easy to make and so it is not easy for investors to part with – hence it should not be easy to raise finance!

I give a talk annually to the students in the MSc program in Biotech and Business at University College Dublin (UCD) and – having explained the risk involved – a question I am asked often is, why take the risk of running a biotech start-up? Ultimately, for me, it is the privilege it affords, the prospect of potentially making a positive impact on society, and in our case, providing treatment options for people suffering with cancer.

[See more interviews](#)

---