



By Paul Cullen

Back in Ireland after almost a decade in the US, oncologist Maeve Lowery says current treatments for difficult cancers “just aren’t good enough.”

It used to be known as the Big C, but it is fair to say cancer has lost some of its reputation for villainy in recent years.

It’s scary still, of course, but no longer necessarily a death sentence, as groundbreaking new therapies have boosted survival rates and improved patients’ quality of life for many forms of the disease.

This progress, unfortunately, has been uneven. Improvements seen in areas such as childhood leukaemia and melanomas, where scientists can validly talk of having cured some forms of the disease, have not been replicated in other areas. Many forms of internal cancers, for example, remain stubbornly difficult to treat, with

low survival rates and highly intrusive and debilitating treatments the norm for far too many patients.

It’s a challenge Maeve Lowery, Professor of Translational Cancer Medicine at Trinity College Dublin and Consultant Medical Oncologist at St. James’s Hospital, is only too well aware of.

Lowery works with recalcitrant, hard to treat, cancers – of the pancreas, oesophagus, stomach and liver. What she has to offer her patients with these cancers at present “really isn’t good enough”, she freely admits. “There has been progress, but I’m still prescribing chemo for most of my patients, sometimes with radiotherapy and life-altering surgeries.”

Take her specialty of pancreatic cancer, for example, which over time has claimed the lives of Steve Jobs, Aretha Franklin,

Luciano Pavarotti and, in Ireland, Brian Lenihan. While not the most common of cancers, it is fast becoming the variant that claims the most victims, not surprising given the survival rate in Ireland is just 8 per cent after five years.

“We haven’t made the same progress as in other areas. Immunotherapies don’t have the same effect on most cancers of the gut,” she tells me. “The symptoms are often vague, they tend to present late and usually have spread by the time they are found.”

In any case, the treatment of cancer isn’t just about survival curves, Lowery firmly believes. “We’re curing a lot of patients with the most common cancers, but what are we doing to them in the process? It’s not good enough. We need to set the bar higher than cure. Are women fertile after their treatment? Are patients going to get secondary cancers? Or blood diseases? What’s their quality of life afterwards?”

Addressing these challenges – by raising survival rates and improving cancer

“To close the translational arc, you have to bring that information back to the clinic by, for example, designing a clinical trial and selecting patients based on those biomarkers.”

None of this is as easy as it might sound, she emphasises. “Biopsies have to be obtained, and informed ethical consent given by the patient, and then the person in the lab needs to know what the question is and research has to be directed at answering that question.

“Engagement with industry is a very important part of this work, but true innovation happens in academia, where you have freedom of process and disparate groups of researchers working together. You have the freedom to test hypotheses that may or may not work and you have a proper spark between people from different disciplines.”

This is where the Trinity St. James’s Cancer Institute, where Lowery is a clinical trials lead, plans to play a significant role. The first of its kind in Ireland, the Institute

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patients’ quality of life during treatment – is at the heart of Lowery’s work in Trinity and St. James’s Hospital.

But what is the “translational” part of her job title about? Is it a form of applied research?

Translational medicine is about “connecting laboratory findings to the clinic,” she explains, but it also works in the opposite direction, linking the clinical experience to further work in the lab.

In the clinic, the core clinical question is often a variant on a single theme – why does a therapy that works for one patient not work for all of them? By taking biopsies and blood samples back to the lab, Lowery and her fellow researchers aid the search for the crucial biomarkers that can signpost the potential success of a treatment.

aims to consolidate cancer care into one centre providing treatment, research and education under the one roof.

There are plans for a dedicated centre at St. James’s but the Institute is “wider than just a building,” she explains. “It’s about the ability to innovate and interact with the right variety of people in the right environment for innovation.”

The Institute is one of the core projects in the *Inspiring Generations* fundraising campaign, launched in May 2019, but already the process of being audited by the Organisation of European Cancer Institutes (OECI), which sets standards for top-flight cancer centres across the continent, is well underway. The OECI auditors were in Ireland recently to inspect facilities here: “The immediate feedback



Maeve Lowery, Professor of Translational Cancer Medicine, Trinity College Dublin and Consultant Medical Oncologist, St. James’s Hospital

was very positive; they said they were really impressed, particularly with our nurses.”

One of the principal goals Lowery has set herself is to increase the proportion of Irish patients taking part in clinical trials. At present, a lowly 2 per cent of patients get the opportunity to access the latest therapies in a trial, well below the international average of 6-8 per cent.

“The aim is to have something to offer most patients. Then, when you have enough trials, you can be more choosy. You’ll always want the most innovative and the best for your patients.”

The reasons for the low availability of clinical trials are many – geography, the relative under-representation of research and development within Ireland’s pharma sector, and a lack of resources.



Photo: Anthony Edwards

More engagement is needed with the pharmaceutical sector to secure earlier access to new drugs, she says. “We have the research talent and the industry presence, but it will take the academic partnership to make it worthwhile for them.”

Modern, cutting-edge therapies can work wonders, but they come at a high price. Lowery says she doesn’t have any easy answers to the ethical issues posed by high drug costs. “It’s not unique to Ireland, it’s a problem worldwide. The only way to tackle it may be to engage with industry and other stakeholders. Trials are certainly one way to access drugs without these cost issues.

“If you explain to a patient what the actual benefit of a drug is, sometimes they also agree it’s not worthwhile; for example, where it extends life by an average of a

number of weeks. In a system with limited resources, you cannot give every drug to every person. We have to identify the correct biomarkers to be able to say which patient will benefit.”

Maeve Lowery grew up in a non-medical family in the north Dublin suburb of Clontarf, where she attended Holy Faith school, which can also claim credit for educating the current Coombe hospital master Sharon Sheehan and former National Maternity Hospital master Rhona Mahony. She went on to study medicine in University College Dublin and after graduating, was halfway through medical training when she was awarded a scholarship to Memorial Sloan Kettering Cancer Center in New York, the largest and oldest private cancer care centre in the

world. There, she specialised in pancreatic cancer and was made a consultant at 31.

“My husband moved over too and worked as a surgeon in New York Presbyterian, Cornell. We were there eight or nine years and I was very happy in the job. They have endless resources. They pioneered translational research, and it was a great place to work.” You sense a “but” coming, and it does. “I was in a comfortable position, it would have been a lovely life, but there’s always a draw towards Ireland.”

When the academic consultant position she now occupies was advertised, it was the deciding factor. “The job description was right up my alleyway. It was a great opportunity to be involved in something new here at Trinity. And by then, we had our first son (of two) so that was another element in the decision to come back to Ireland.

“I’ve felt very welcome at Trinity from the beginning and I am seriously impressed by the students.” And a good work/life balance is probably easier to achieve in Ireland than the US, she reckons: “Of course, if you love your job, it becomes easier.”

Now firmly ensconced back in Ireland, the core health issues she sees are the same on both sides of the Atlantic. “I see the problems in the health service here, as they struggle to get resources. I’m ashamed my patients have to wait to see me, when there aren’t enough chairs in the waiting room, but I also see the equity of care we provide in Ireland, which compares so well with the United States, where the fact that so many people just couldn’t access healthcare really bothered me.”

The development of the Trinity St. James’s Cancer Institute into Ireland’s first comprehensive cancer centre will, says Professor Lowery, be a major advance for the country. “Already, the Institute is bringing cutting-edge scientific expertise together with highly specialised patient care and innovative education programmes. This is the way forward, to improve patient outcomes now and transform cancer care in Ireland for generations to come.”

ABOUT THE AUTHOR

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