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## Lung Cancer Treatment: From Nihilism to Enthusiasm

An interview with **Frances Shepherd**, Medical Oncologist, Princess Margaret Cancer Centre  
2018 Canada Gairdner Wightman Award Laureate

Being a medical oncologist means that I treat cancer patients with drug therapy. When I started treating lung cancer patients, there was enormous nihilism. Our drugs were very toxic, not very active, and there was a general perception that it almost wasn't worth treating lung cancer patients. But that has changed dramatically over the course of my career. And enthusiastically now we treat lung cancer patients, not just in the first line, but in the second line, and third line, and we have many, many different options to treat them.

### What is new in lung cancer treatment techniques?

The most exciting changes that have taken place in the last 5-10 years almost are changes in technology. There are gene changes that we are now able to target directly. So instead of one size fits all, and everyone getting the same chemotherapy that maybe worked in 25 or 30 percent of the population, when we have specific genetic drivers, and we can use a specific targeted therapy, we expect that response to be in the range of 60, 70, 80 percent. This is now rooting.

It is wonderful when we find one of these cancers with gene drivers, to be able to tell them, "You're going to get treatment with one pill a day, you're not going to lose your hair, you're not going to be vomiting. We expect that when we see you in four weeks, you will be feeling better, your breathing will

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