



## Mapping the Future Oncology Landscape: How We Can Build Upon Immuno-Oncology

By Chris Boshoff

The potential for immunotherapy to transform the lives of people with cancer is vast – and the mountain of data continues to grow. But no matter how effective it may be in fighting certain cancers, it is not – and should not be – the only weapon in our arsenal. In 2018, there will be an estimated 18 million people diagnosed with cancer and 9.5 million cancer deaths, worldwide<sup>1</sup>. And immunotherapy alone will likely not be the best treatment option for many of them. To date, it has not been shown to improve outcomes for the vast majority of patients with three of the most common types of cancer: prostate, colon and hormone-receptor positive breast cancer.

I believe the key to unlocking the full potential of immuno-oncology lies in combination strategies – using immunotherapies as a powerful tool to enhance other types of cancer medicines. By 2025, we expect that most cancer patients will be treated with some kind of immunotherapy, but their care regimen will also include other life-changing medicines.

Indeed, over the next 10 years, I believe oncology treatments will fall into three key categories: immunotherapies; targeted, small molecule medicines and established cancer treatments. Briefly, here is how I expect the oncology landscape to evolve:

1. Targeted medicines:

Targeted treatments, for metastatic breast cancer, non-small cell lung cancer and prostate cancer, have already transformed care for so many patients. This trend will accelerate as cancer continues to be even more sub-divided by molecular characteristics. At Pfizer, we will build on our long-standing leadership in this space by taking advantage of opportunities for more targeted, precise approaches with new small molecules, and to develop the next generation of targeted medicines for tumors resistant to current therapies.

2. Immuno-oncology:

We will also see the ongoing evolution of immunotherapies, both with immune checkpoint blockers and new modalities. The first wave of CAR-T therapies, which use the bodies' own cells to fight cancer, was approved in the U.S. last year, and we're excited to see the benefit these therapies may yield in years to come. However, there are many more modalities and mechanisms to test in the clinic. Pfizer is currently investigating a vaccine-based immunotherapy regimen (VBIR), of which immune checkpoint blockers CTLA-4 and PD-1 are components; bispecific antibodies linking cancer-killing T-cells to tumors; and immune activating molecules. Trials are moving ahead for these agents across many tumor types and any one of them has the potential to have a meaningful impact on future cancer care.

3. Established medicines:

Finally, long-established medicines and approaches will continue to play an important role in treatment plans. These include chemotherapy and radiation, as well as other time-tested targeted

therapies and antibodies. Biosimilars will also emerge as pivotal to the future of cancer care, providing global access to key medicines. Pfizer has one of the deepest biosimilars pipelines globally, with assets in development for breast cancer, hematologic malignancies and NSCLC.

Together in various combinations across settings and lines of therapy, as well as on their own, we believe these different types of therapies will make significant advancements in changing the trajectory of this disease. Our goal is for patients to have longer and deeper remissions, so that they can ultimately live longer and experience an enhanced quality of life.

From experience, we know that collaboration will be key to making this happen. Going forward, we expect to see more partnerships that cross scientific, academic, advocacy and industry spheres, with the purpose of advancing research, education, support and awareness. Cancer is one of the greatest challenges faced by the medical community today, and it's far too complex to tackle alone.

Sources:

1. CA: A Cancer Journal for Clinicians 2018;0:1-31. © 2018 American Cancer Society