



## Biopharmaceutical research and development is

uncovering new insights into how we view, understand and treat cancer, helping to transform a terrifying diagnosis into a healthier and longer life for patients.

## INNOVATIVE CANCER MEDICINES EXTEND LIVES



Cancer patients lived a combined **23 million years longer** between 1988 and 2000, thanks to investments in cancer research.<sup>1</sup>  
**80%** of the life expectancy increases for cancer patients is attributed to new treatments.



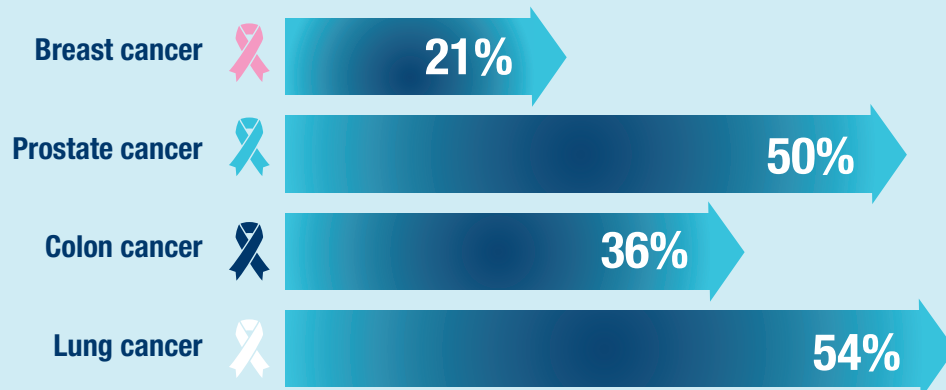
Today, **83% of children with cancer survive**, compared to **58% in 1970**.



Today, **80%** of people with Chronic Myeloid Leukemia (CML) experience **10 year survival rates**, compared to **20% a decade ago**.<sup>2</sup>

## 5-year survival rates increases

**Survival is increasing dramatically for many forms of cancer:** since 1975, 5-year survival rates went up **21%** for breast cancer; **50%** for prostate cancer; **36%** for colon cancer; **54%** for lung cancer.<sup>3</sup>



The number of **CANCER SURVIVORS** is steadily rising

## CANCER DEATH RATES HAVE DECREASED

22%

SINCE 1991

The **research and development of new cancer medicines** not only helps patients lead longer, healthier lives, but also positively impacts society as a whole.



### The path to creating life-saving treatments

is an extremely long, labor-intensive effort that involves major investment. Each new cancer treatment, whether it extends a life by six months or cures the disease, reflects how innovation leads to improved patient outcomes.

Revenues from cancer medicines are invested back into R&D, helping to continually create new treatments.



Currently, **80%** of the **5,000** cancer therapies being developed are **potentially first-in-class**, meaning they represent entirely new approaches to treating cancer.



### Gains in cancer survival

are worth nearly **\$2 trillion**, with a majority of that going to patients, families and our economy as a whole.<sup>4</sup>



### Reducing cancer death rates by 10%

would save current and future generations approximately **\$4.4 trillion dollars**.<sup>5</sup>

A study on the development of Yervoy, a skin cancer medication, found that the treatment involved the work of **7,000 scientists at 5,700 institutions over 100 years**.<sup>6</sup>



<sup>1</sup> Lakdawala DN, et al. An economic evaluation of the war on cancer. Journal of Health Economics. May 2010. 29(3):333-346

<sup>2</sup> Journal of Managed Care, Nov 2012

<sup>3</sup> <http://www.phrma.org/sites/default/files/pdf/infographic-value-of-cancer-medicines-2014.pdf>

<sup>4</sup> Journal of Health Economics, An economic evaluation of the war on cancer

<sup>5</sup> K.M. Murphy and R.H. Topel, eds., Measuring the Gains for medical Research: An Economic Approach, (Chicago: University of Chicago Press, 2003), p. 42

<sup>6</sup> <https://www.washingtonpost.com/news/to-your-health/wp/2015/09/24/the-long-winding-path-toward-discovery-7000-scientists-100-years-one-game-changing-treatment/>