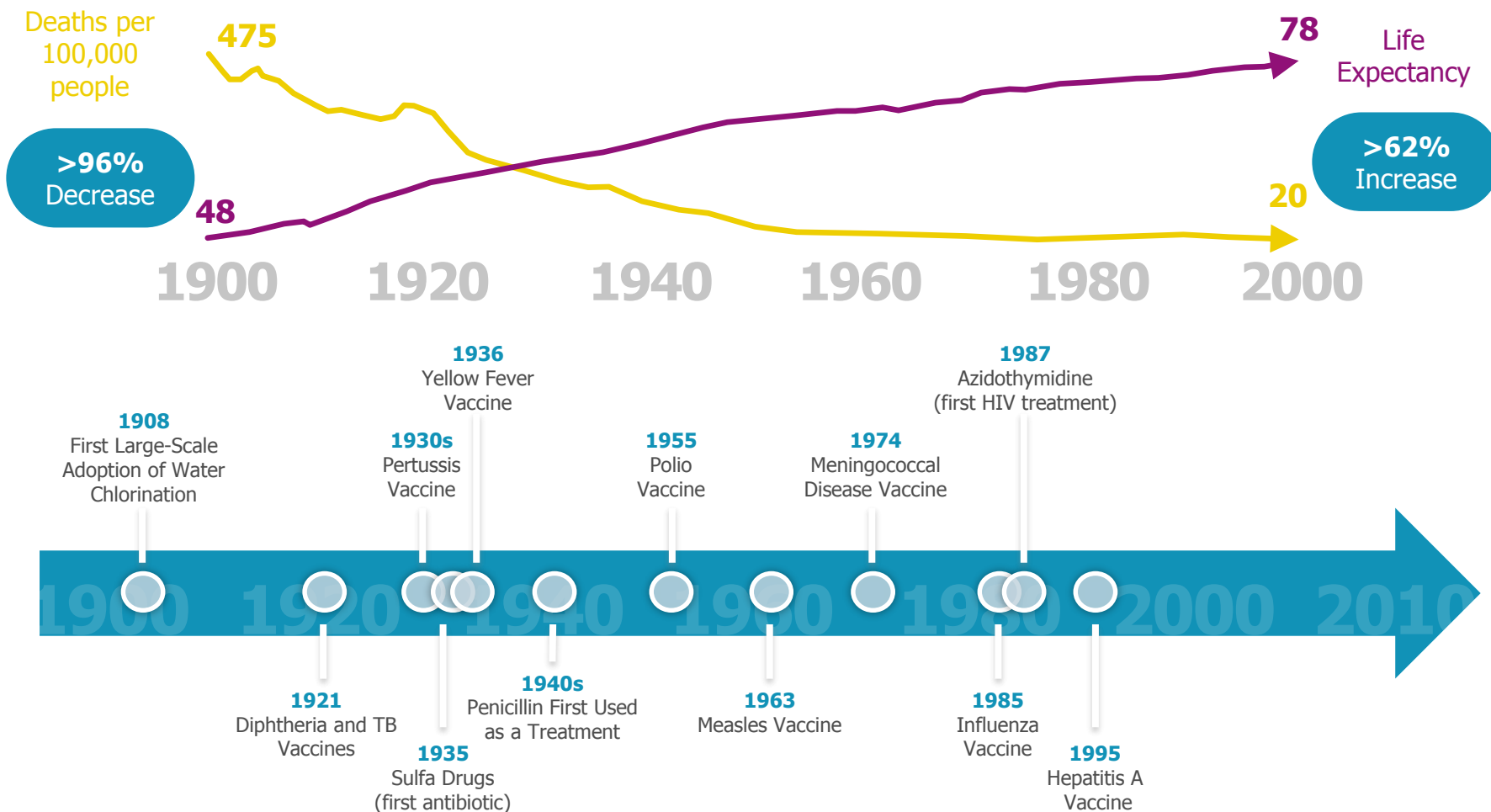


The background of the slide is a deep blue with a microscopic, cellular texture. Numerous elongated, rod-like structures are visible, some in sharp focus and others blurred. A bright, multi-colored starburst of light is positioned in the center-right area, creating a focal point and a sense of energy or discovery.

The Value of Medical Innovation: A New Paradigm of Pharma R&D for Efficiency and Success

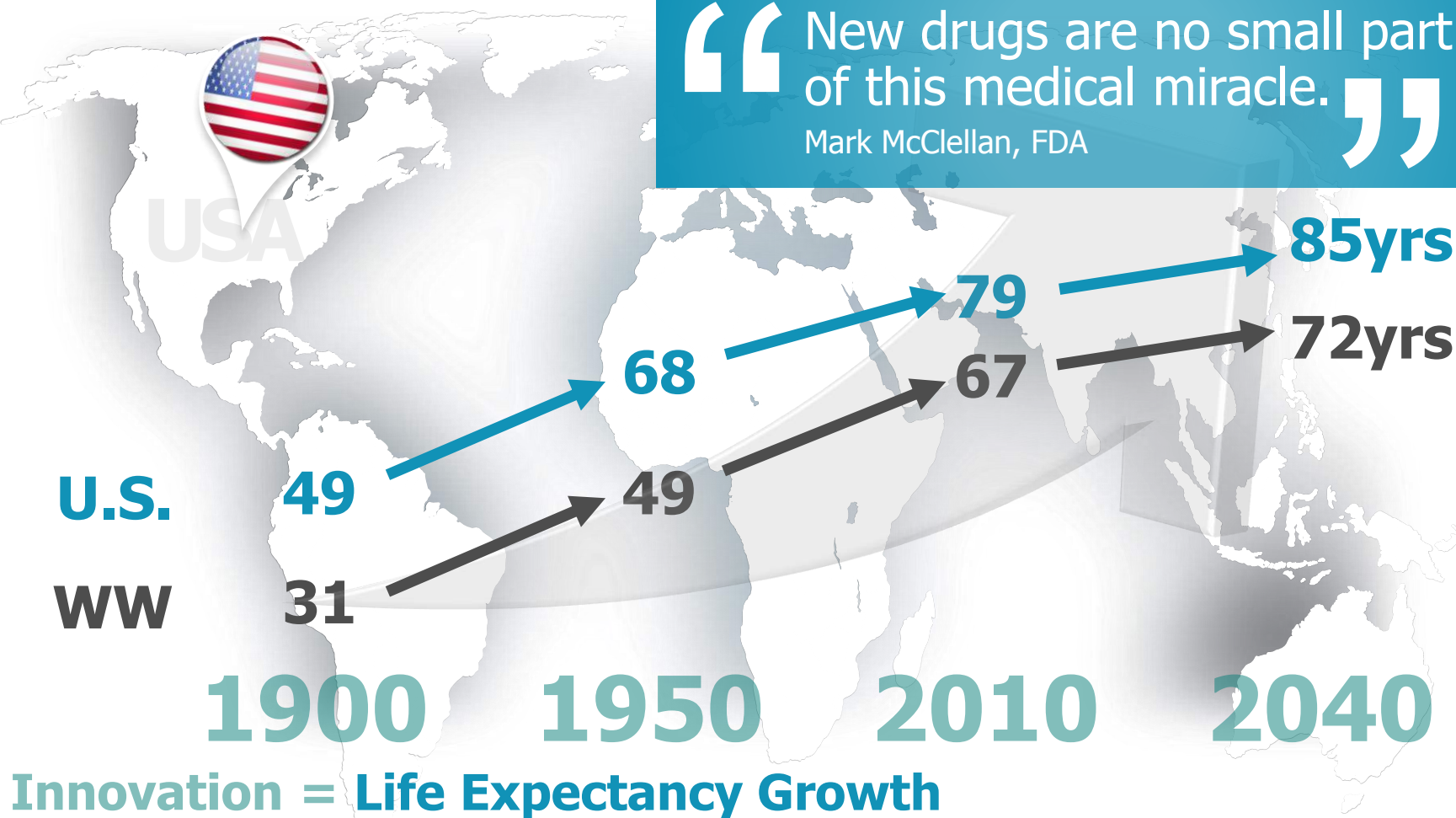
Robert J. Hariri, MD, PhD
Founder & Chairman
Celgene Cellular Therapeutics

Longer Life Through Better Medicines 1900-2010

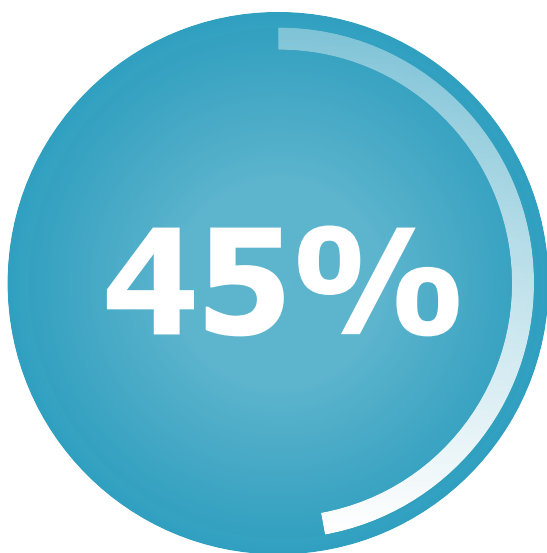


The Gift of Life

“New drugs are no small part of this medical miracle.”
Mark McClellan, FDA



New Therapies are the Greatest Contributor to Increased Life Expectancy



1960 - 1997

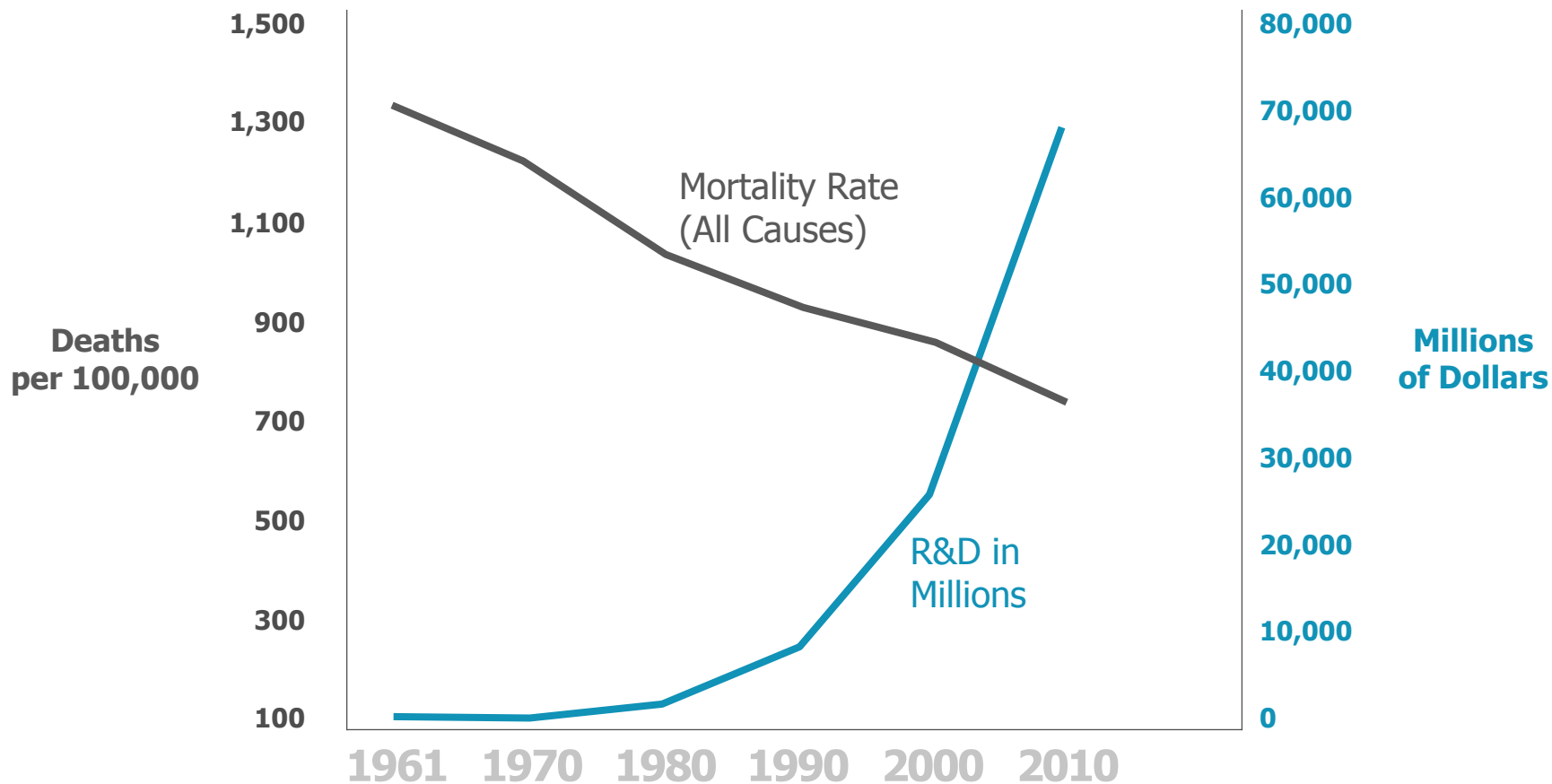
New therapies account for 45% of the increase in life expectancy



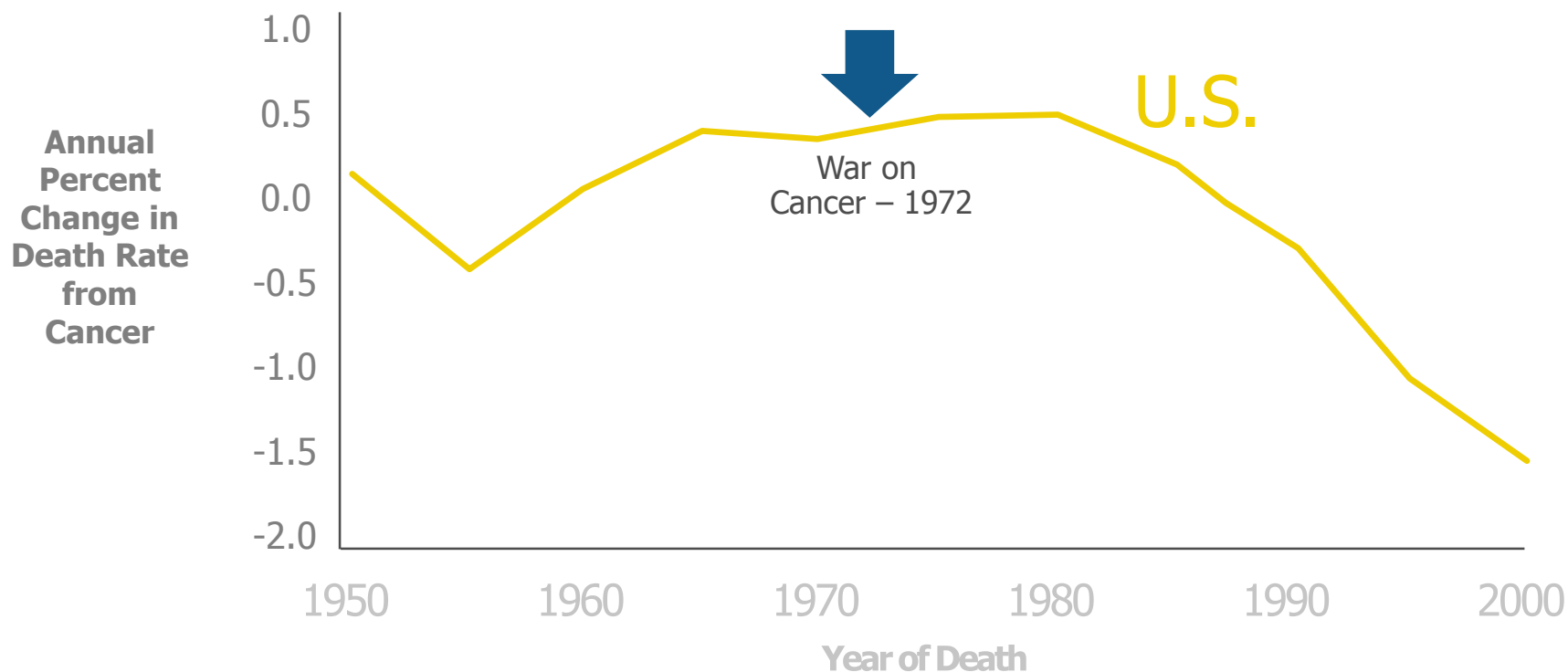
2000 - 2009

New therapies account for 73% of the increase in life expectancy

Impact of New Therapies on Death Rates

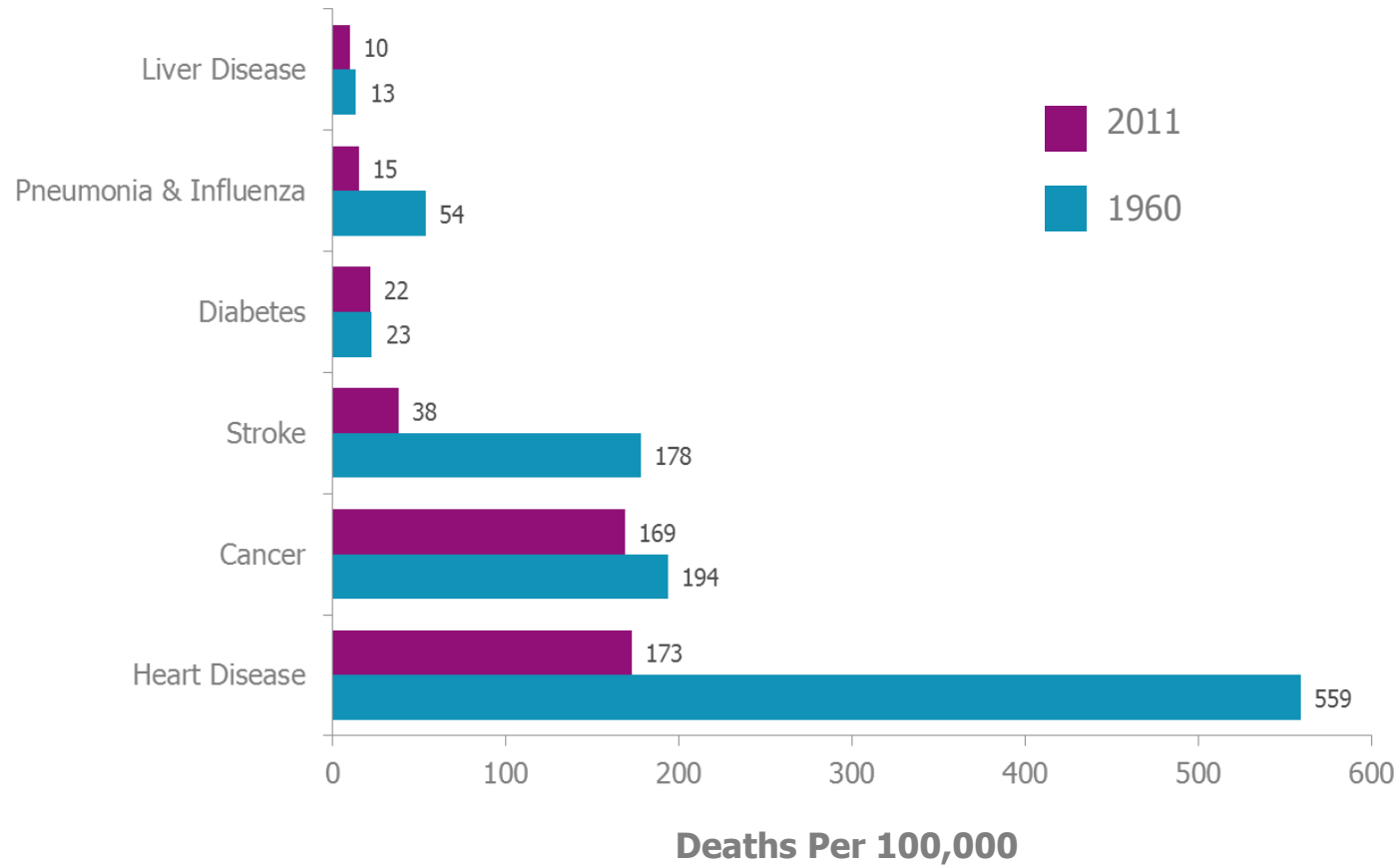


Cancer Innovation Tells the Story

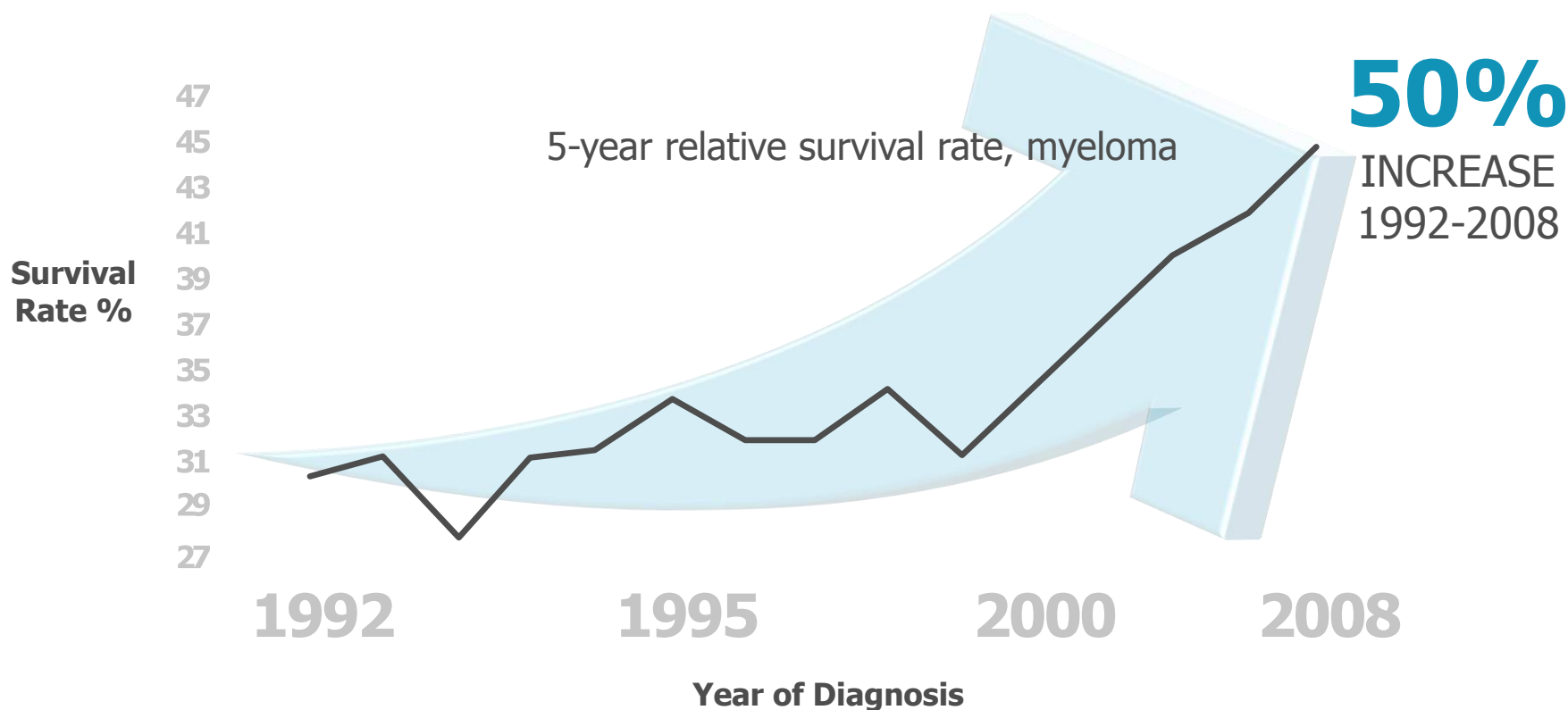


Death Rate from Cancer Has Been on the Decline for Over 30 Years

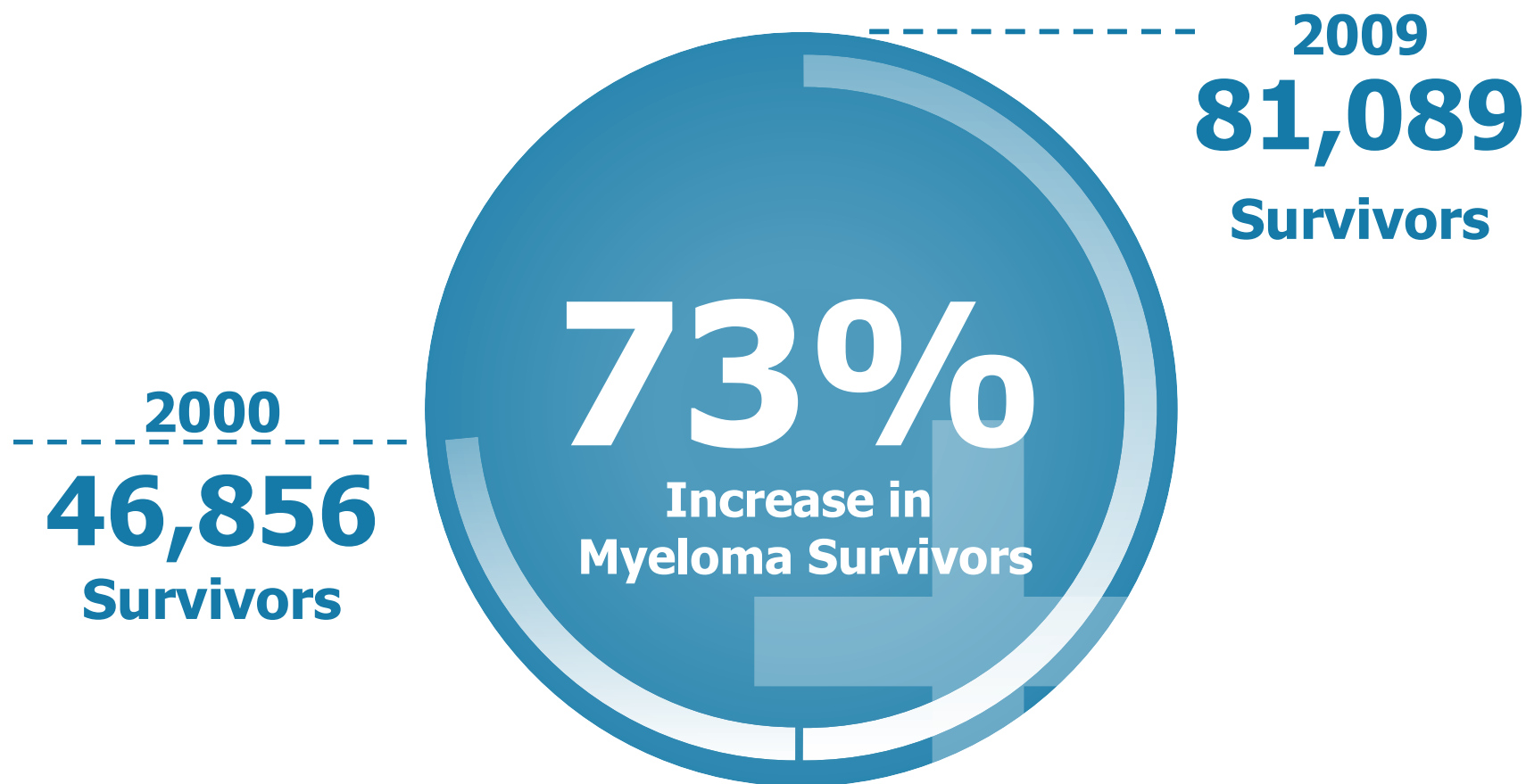
Decline in Death Rates from Leading Causes 1960-2011



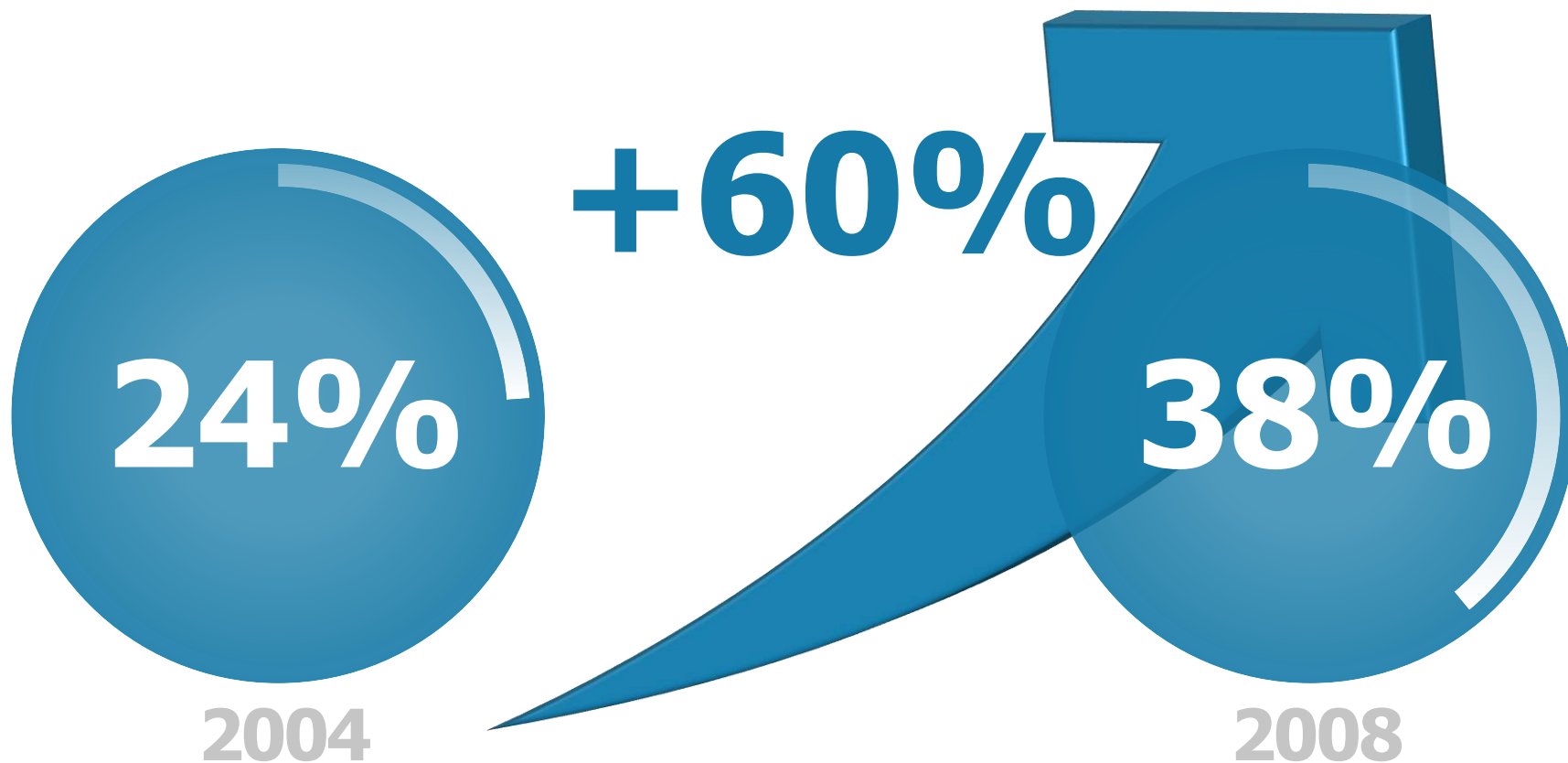
Survival Rate For Myeloma Patients Soars With New Innovative Therapies



Myeloma Survivorship Rapidly Increasing



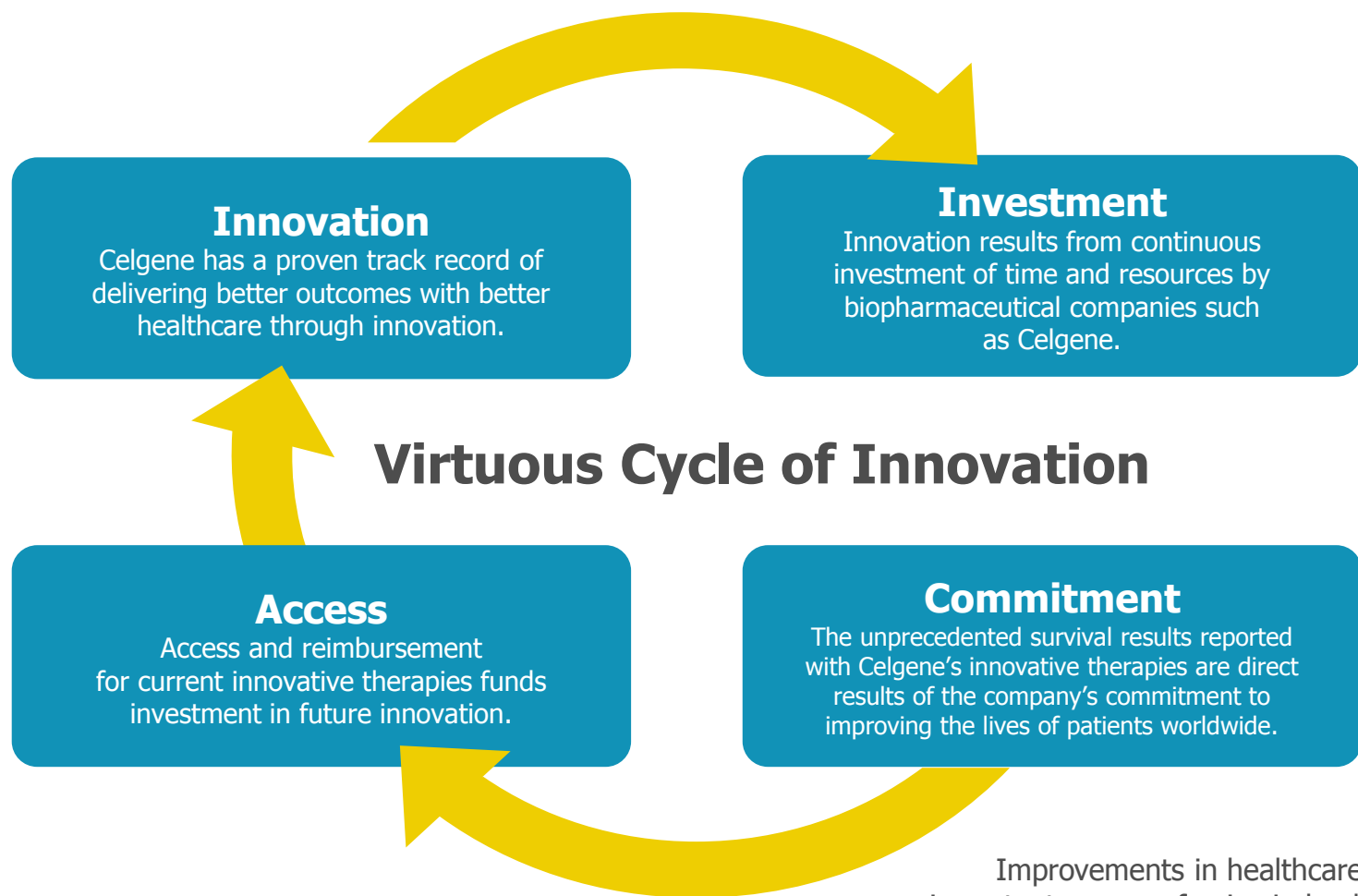
Five-Year Survival from Myelodysplastic Syndromes (MDS) Increasing



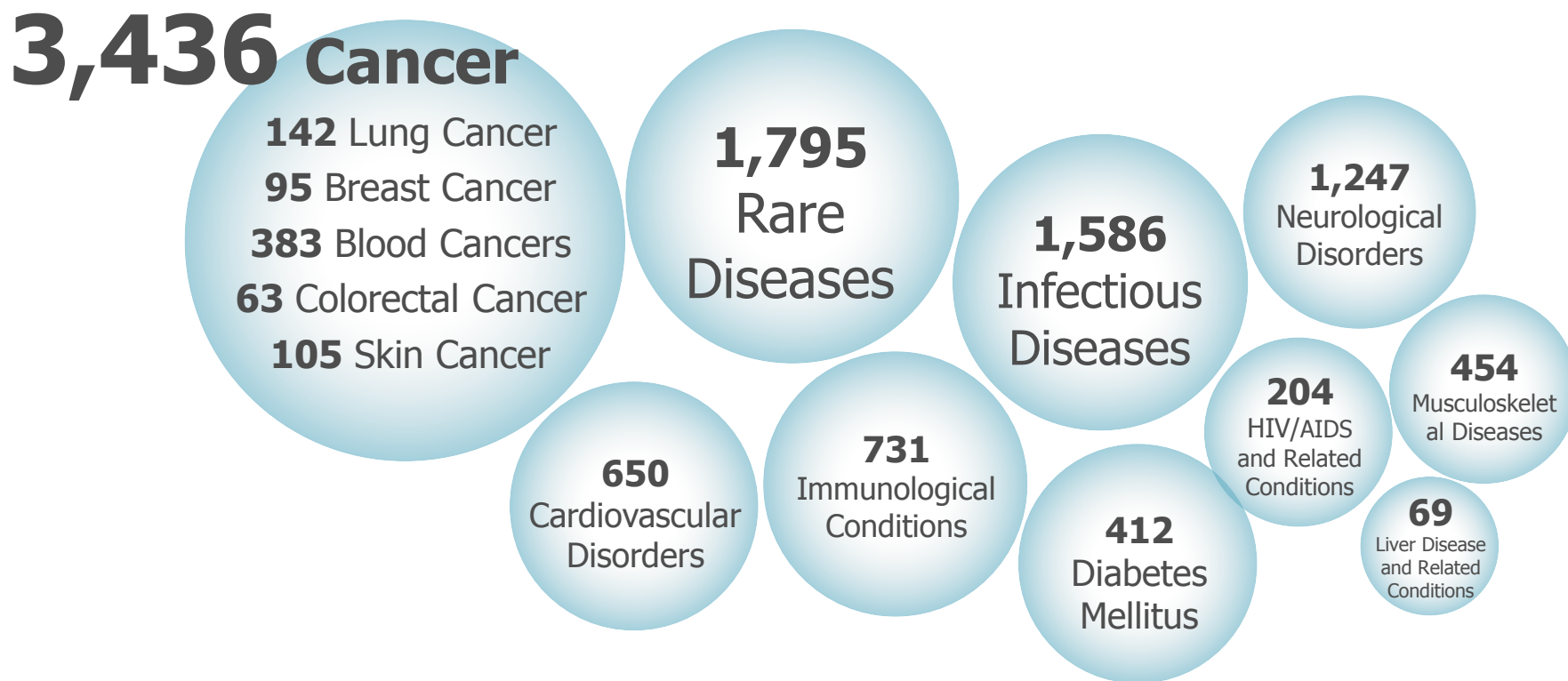


The Virtuous Cycle

Innovation is a Virtuous Cycle. Requiring Commitment. Investment. Vision.

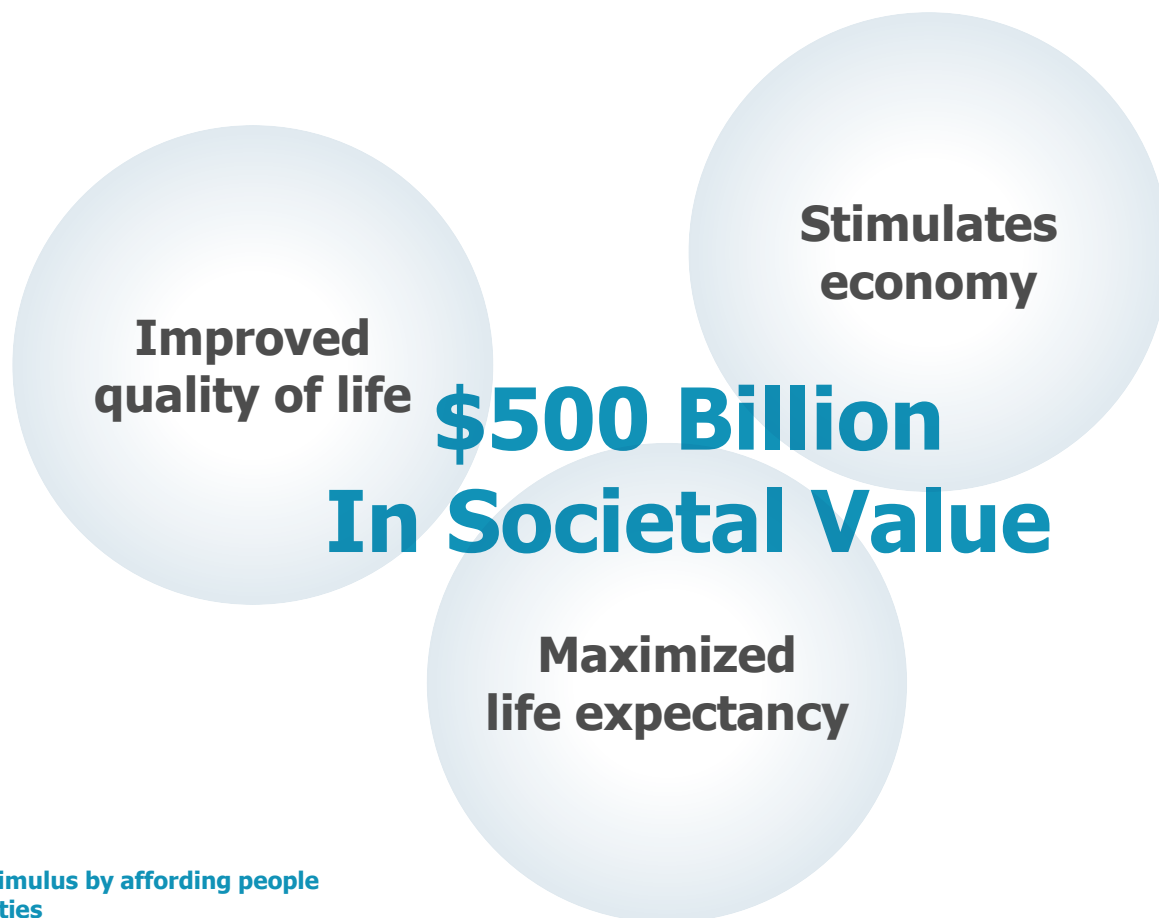
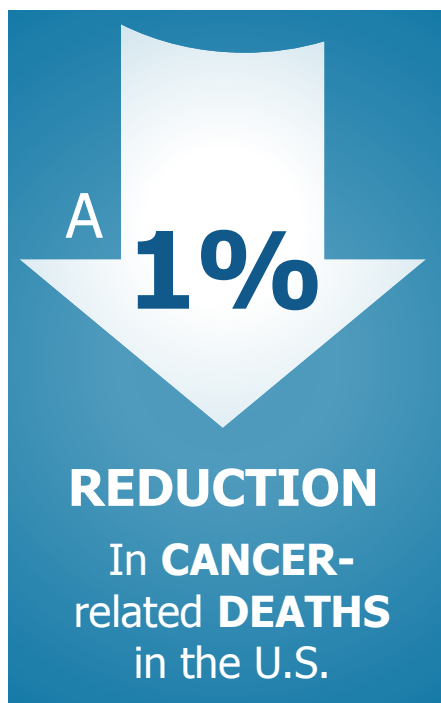


Maximizing the Promise of Science: 5,000+ Medicines in Development in 2011



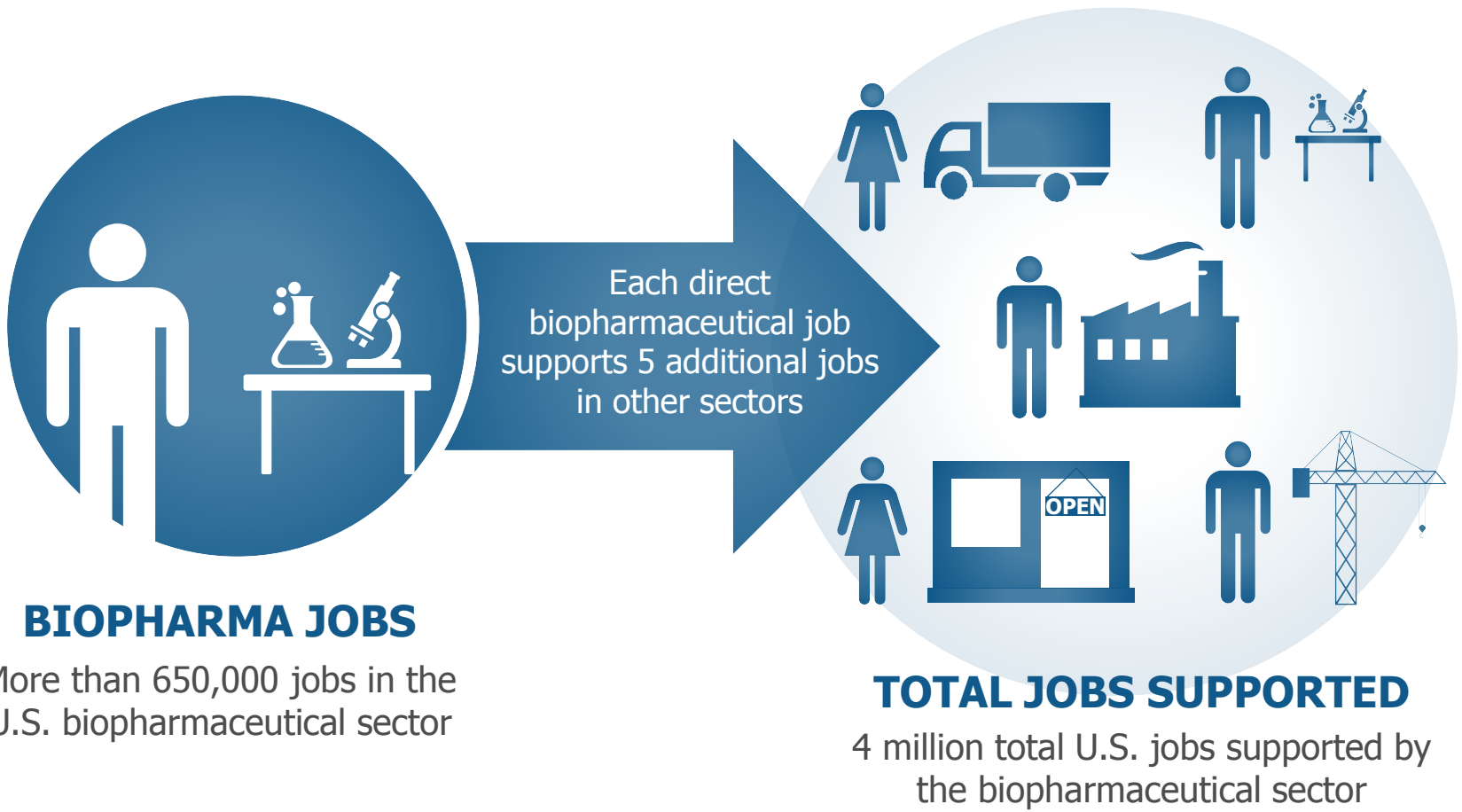
Reflects number of compounds in Phase I, II, III, or having been filed with the FDA, or approved by the FDA, but not yet on the market in the U.S (as of January 2013). Medicines with multiple indications may appear in more than one category but are counted only once for total (3,091).

Living Longer, Better and Healthier Benefits Society

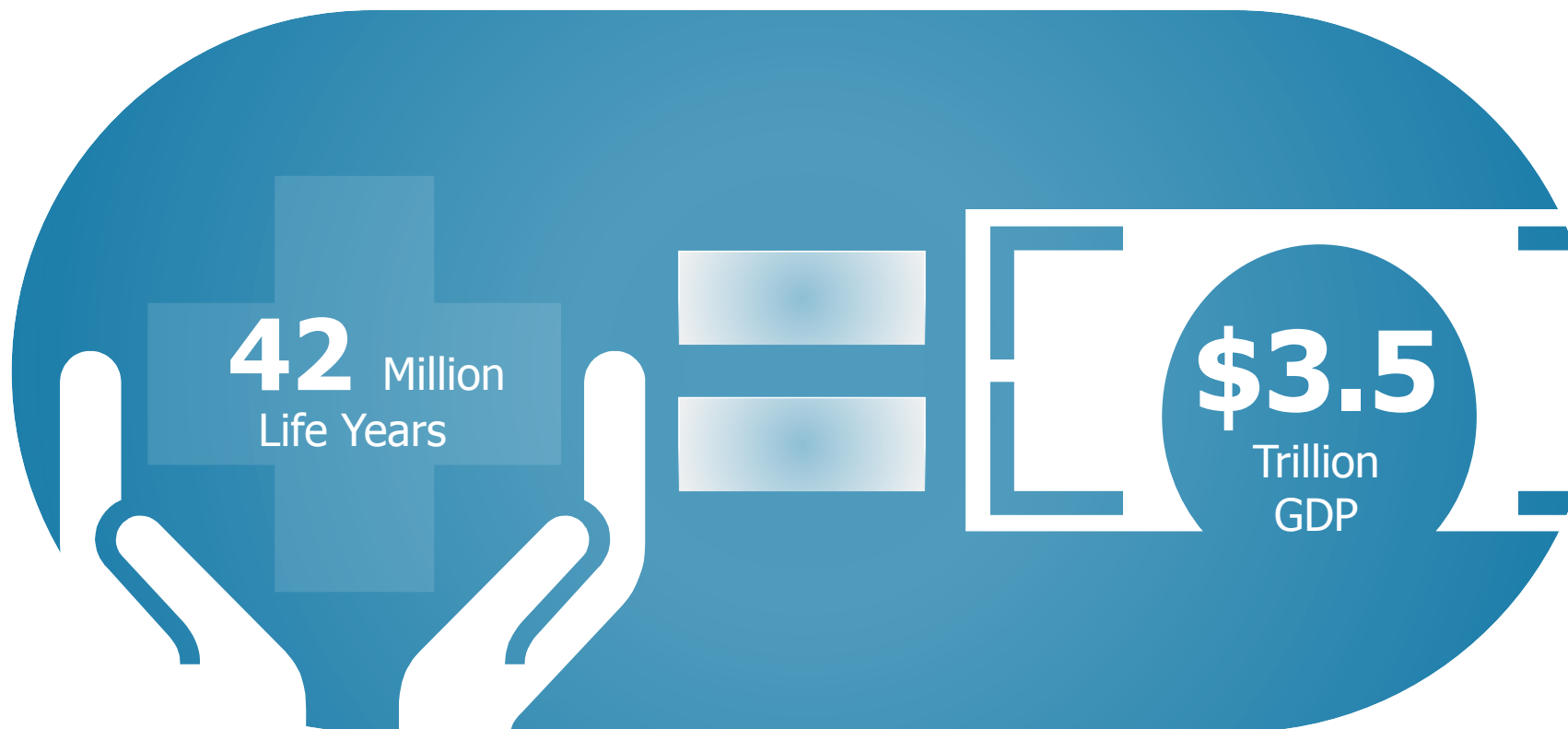


*Extended survival contributes to economic stimulus by affording people more time to purchase and enjoy leisure activities

Greatest Source of Jobs in 21st Century



Estimated Value of Additional Life Years Gained From Innovative Cancer Treatments 1988-2010



The Promise of Medical Innovation = Fewer Lives Lost



**Life Years
Lost to Cancer**

2010

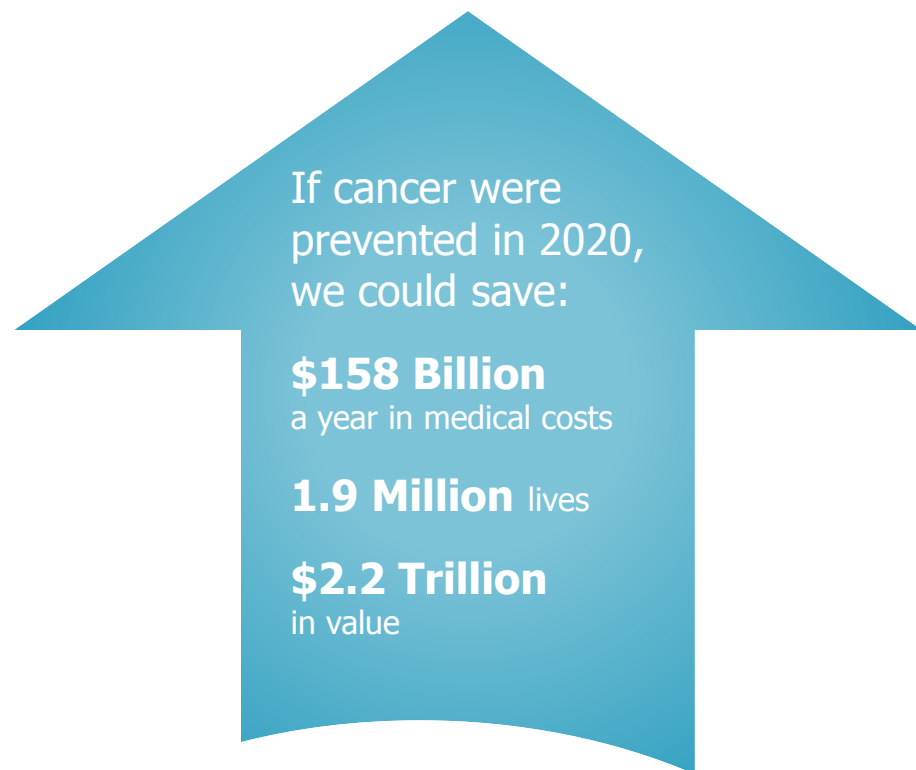
160 Million

40%
REDUCTION

Projected
in 2040

96 Million

Investment in Medical Innovation is the Most Powerful Force for Human Progress



A male scientist with dark hair is wearing a white lab coat, a white surgical mask, safety goggles, and blue nitrile gloves. He is holding a ball-and-stick molecular model of a complex organic molecule with red, white, and black spheres. The background is dark blue with faint, glowing chemical structures, including a purine-like ring and a carboxylic acid group. In the lower right, two white laboratory pipettes are visible, slightly out of focus.

**We are at
Critical Crossroads**

Tremendous Contributions to Economic Growth

Over the past 50 years, medical innovation
has been the source of more than

$\frac{1}{2}$

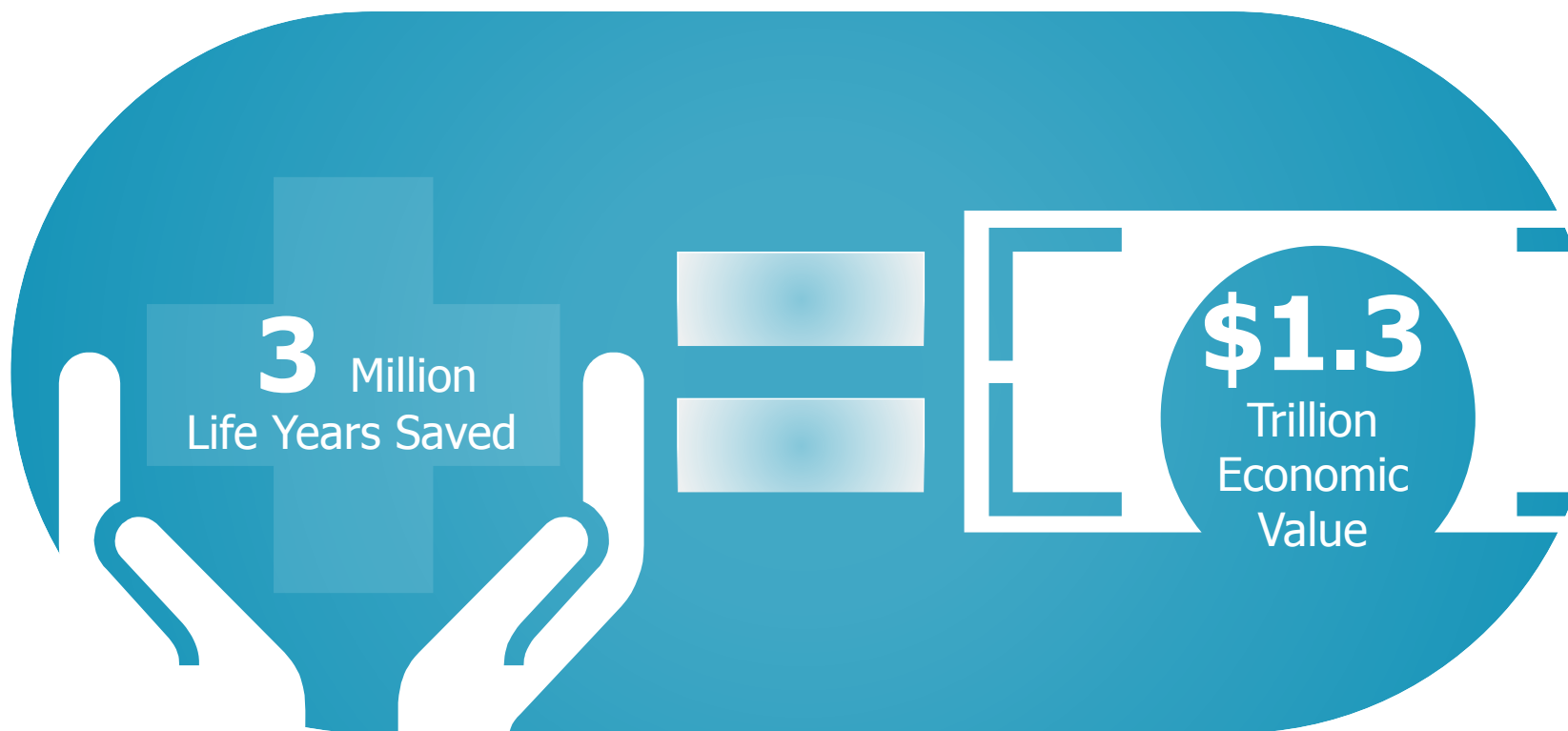
of **all** economic growth

Source 2: Murphy KM and Topel RH. The Value of Health and Longevity. *J Polit Econ*. 2006; 114(4); 871-904.

The Value of Medical Innovation: HIV



Medical Innovation Delivered on Its Promise for Patients with HIV

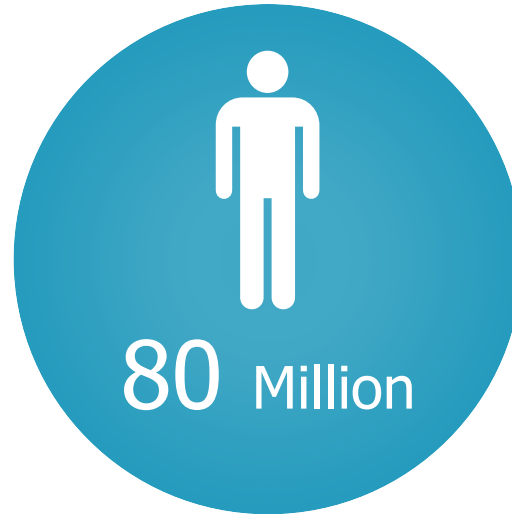


Potential Cost of Increased Reimbursement Regulation on Innovation

Between 2010-2040:



Decline in R&D for
cancer and rare diseases



Fewer life years



Lost economic
growth potential

We Are at a Critical Crossroads for Medical Innovation

A MAJOR PARADOX

The **potential**
of **science** is
greater than ever ...

But the outlook for
investment has
never been more
uncertain



R&D Investment



Longer, Better, Healthier Lives

What's at Stake ...

Today's investments in healthcare and R&D can **create a world free from cancer** for our children and our children's children.

