NCI Director's Report

Norman E. Sharpless, M.D.

NCI Council of Research Advocates

September 14, 2020

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NIH NATIONAL CANCER INSTITUTE

Science 19 June 2020

COVID-19 and cancer

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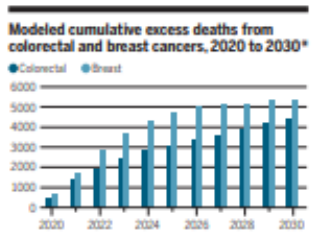
With the spread of coronavirus disease 2019 (COVID-19), countries and states have instituted lockdowns. These decisions have been difficult and are sometimes described as benefiting the public health at the expense of the economy. Fear of contracting the coronavirus in health care settings has dissuaded people from screening, diagnosis, and treatment for non-COVID-19 diseases. The consequences for cancer outcomes, for example, could be substantial. What can be done to minimize this effect?

Cancer is a complex set of diseases whose prognoses are influenced by the timing of diagnosis and intervention. In general, the earlier one receives cancer treatment, the better the results. There already has been a steep drop in cancer diagnoses in the United States since the start of the pandemic, but there is no reason to believe the actual incidence of cancer has dropped. Cancers being missed now will still come to light eventually, but at a later stage ("upstaging") and with worse prognoses. At many hospitals, so-called "elective" cancer treatments and surgeries have been deprioritized to preserve clinical capacity for COVID-19 patients. For example, some patients are receiving less intense chemotherapy and/or radiotherapy, and in other cases, patients' operations to remove a newly detected tumor are being delayed. There can be no doubt that the COVID-19 pandemic is causing delayed diagnosis and suboptimal care for people with cancer.



What will be the likely impact of the pandemic on cancer mortality in the United States? Modeling the effect of COVID-19 on cancer screening and treatment for breast and colorectal cancer (which together account for about one-sixth of all cancer deaths) over the next decade suggests almost 10,000 excess deaths from breast and colorectal cancer deaths; that is, a ~1% increase in deaths from these tumor types during a period when we would expect to see almost 1,000,000 deaths from these two diseases types.* The number of excess deaths per year would peak in the next year or two. This analysis is conservative, as it does not consider other cancer types, it does not account for the additional nonlethal morbidity from upstaging, and it assumes a moderate disruption in care that completely resolves after 6 months. It also does not account for regional variations in the response to the pandemic, and these effects may be less severe in parts of the country with shorter or less severe lockdowns.

Beyond clinical care, the COVID-19 pandemic has caused an unprecedented disruption throughout the cancer research community, shuttering many labs and slowing down cancer clinical trial operations. Many scientists and clinicians are pivoting their cancer research activities to study the impact of SARS-CoV-2 on cancer. The scientific community must ensure that this pause is only temporary, because trials are the only way to make progress in developing new therapies for cancer. Given the long timeline between basic cancer research and changes to cancer care, the effects of pausing research today may lead to slowdowns in cancer progress for many years to come.

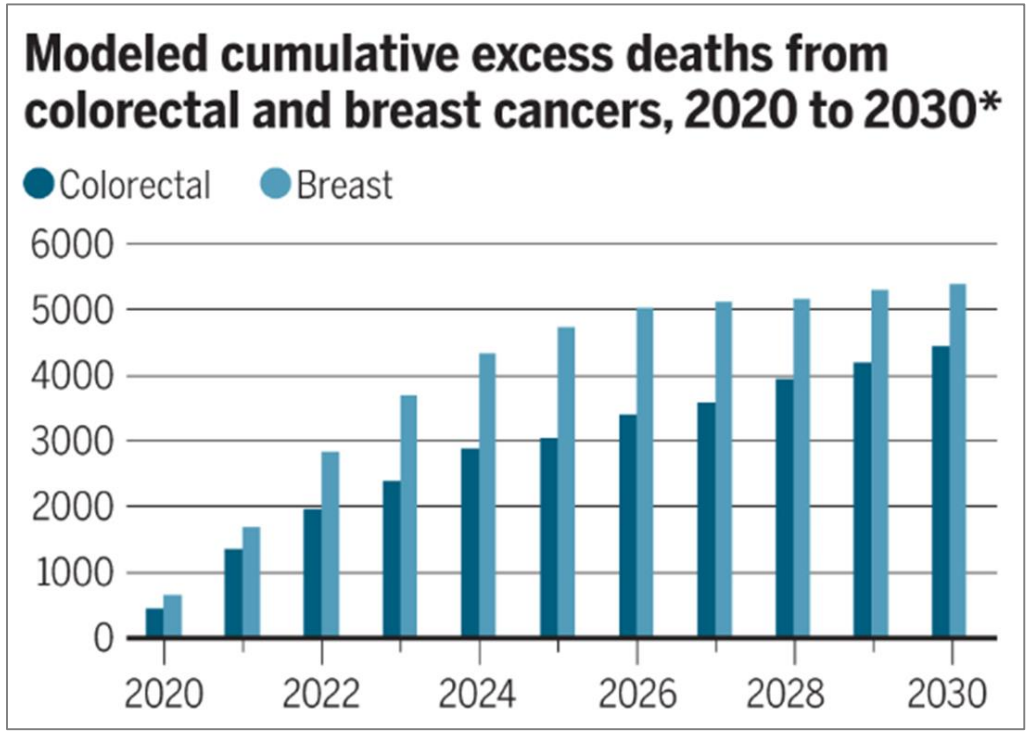
Collective action by the clinical and research communities and by governmental agencies can mitigate this potentially substantial impact. The U.S. National Cancer Institute (NCI), for example, has started to address this challenge (see www.cancer.gov). The NCI has worked with the U.S. Food and Drug Administration to increase flexibility and support for clinical trials during the pandemic. For example, allowances have been made to accept "remote" informed consent, and other protocol deviations. In addition, the NCI has announced several new clinical trials and funding opportunities aimed at addressing the relationship between COVID-19 and cancer. Of particular note is the NCI COVID-19 in Cancer Patients Study, a prospective longitudinal study that will collect blood samples, imaging, and other data to understand how COVID-19 affects cancer patients.

Clearly, postponing procedures and deferring care as a result of the pandemic was prudent at one time, but the spread, duration, and future peaks of COVID-19 remain unclear. However, ignoring life-threatening non-COVID-19 conditions such as cancer for too long may turn one public health crisis into many others. Let's avoid that outcome.

–Norman E. Sharpless

*See supplementary materials (science.sciencemag.org/content/368/6497/1290/suppl/DC1).

10.1126/science.abd3377



The Washington Post

By Laurie McGinley

June 18, 2020 at 7:30 p.m. EDT

...chief warns delays in ... likely to result in ...xtra deaths in coming years

STAT

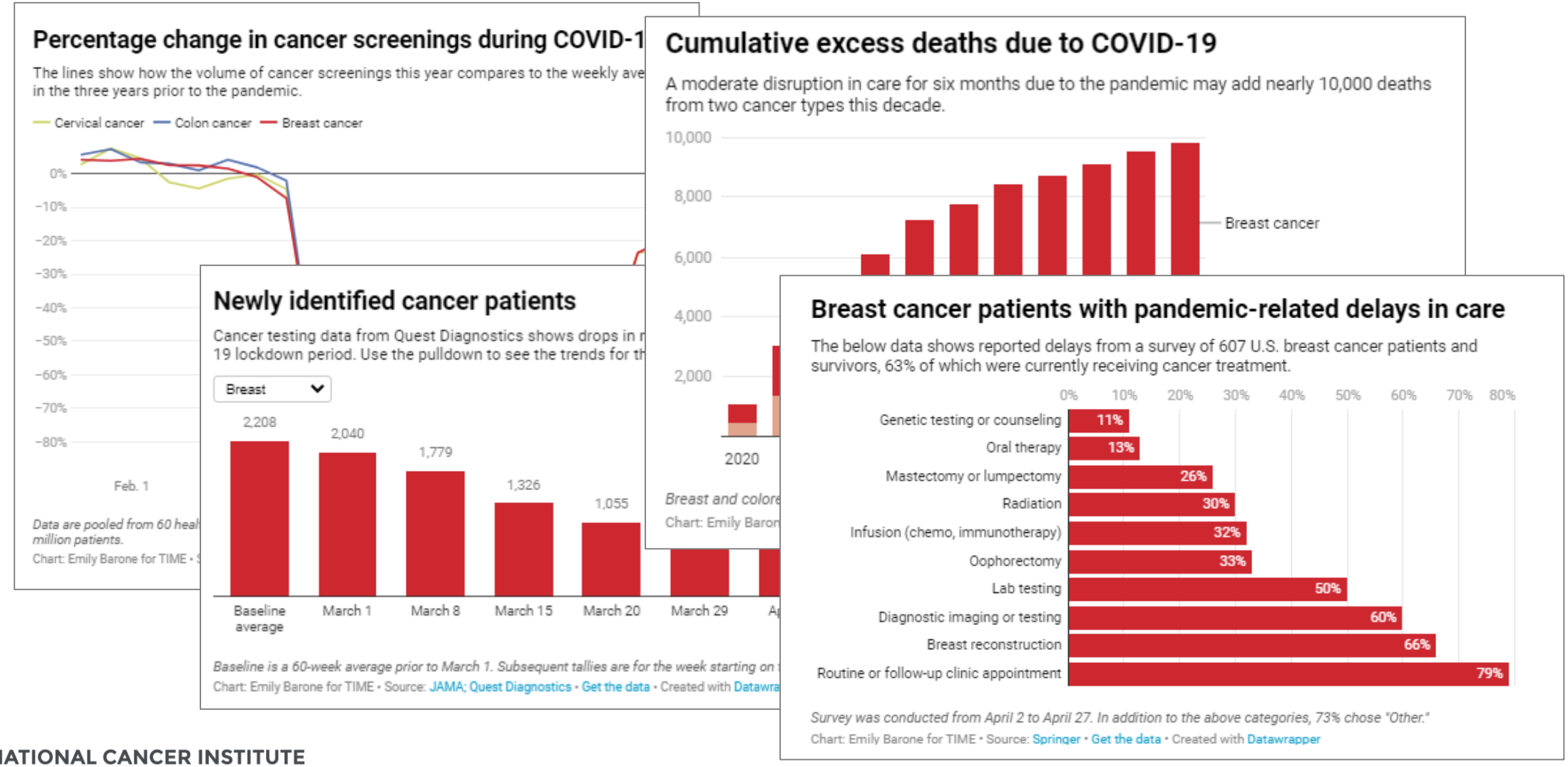
Ignoring cancer care now may trade one public health crisis — Covid-19 — for another, NCI chief warns

By ELIZABETH COONEY @cooney_liz / JUNE 19, 2020

COVID-19 & Cancer

TIME

How the COVID-19 Pandemic Has Changed Cancer Care, In 4 Charts



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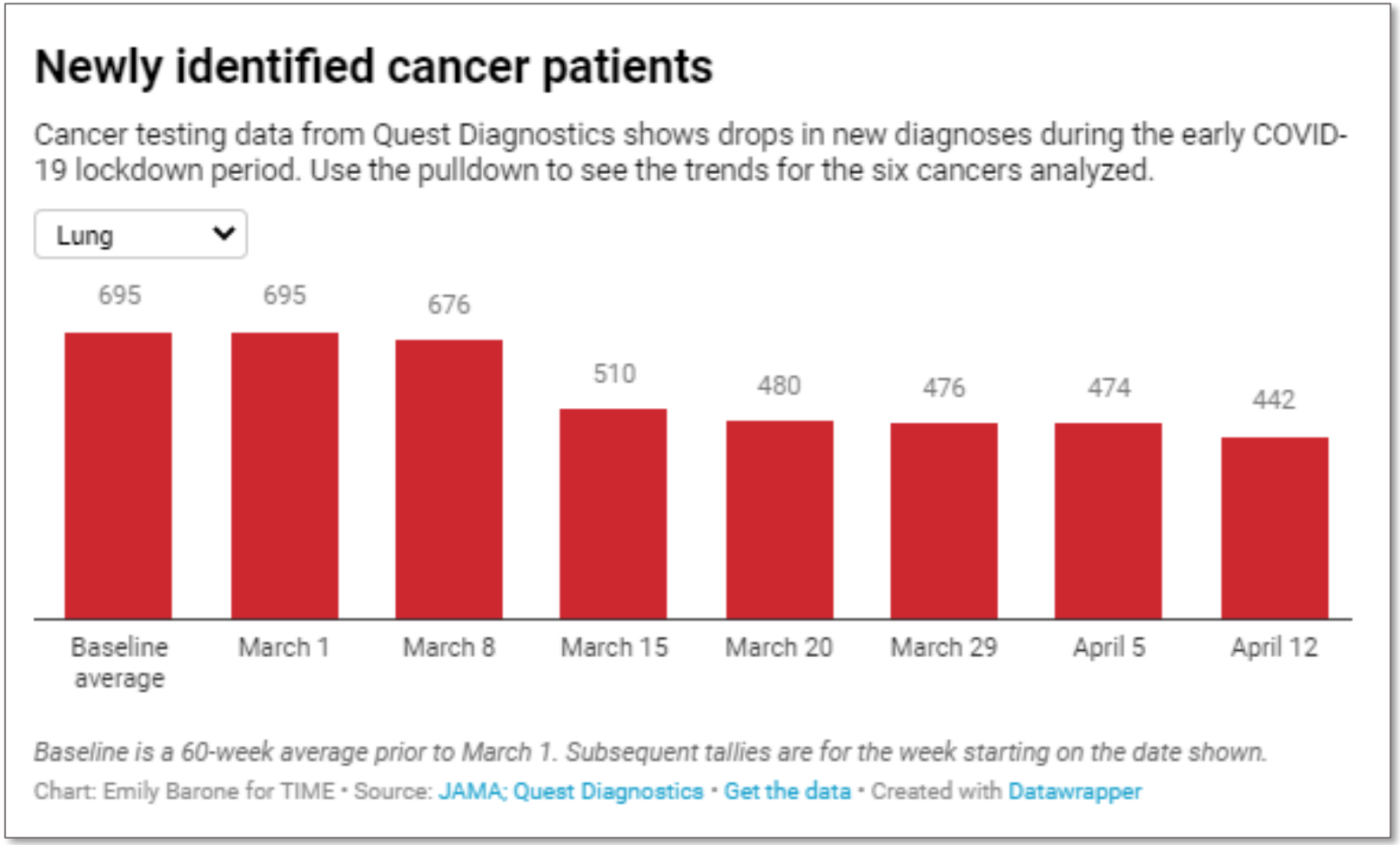

Prioritizing cancer care

AMERICAN COLLEGE OF SURGEONS

Inspiring Quality: Highest Standards, Better Outcomes

Guidelines for Triage and Management of Elective Cancer Surgery Cases During the Acute and Recovery Phases of Coronavirus Disease 2019 (COVID-19) Pandemic

nature reviews clinical oncology

Cancer, COVID-19 and the precautionary principle: prioritizing treatment during a global pandemic

Published: 02 April 2020

ASCO SPECIAL REPORT:

A GUIDE TO CANCER CARE DELIVERY DURING THE COVID-19 PANDEMIC

MAY 19, 2020

COVID-19 Rapid Communication

Practice recommendations for lung cancer radiotherapy during the COVID-19 pandemic: An ESTRO-ASTRO consensus statement ☆

NCI COVID-19 in Cancer Patients Study (NCCAPS)

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Home > News & Events > Cancer Currents Blog

How Does COVID-19 Affect People with Cancer? NCCAPS Will Help Find Out

Subscribe

May 21, 2020, by James H. Doroshow, M.D.

With the sudden explosion of the COVID-19 pandemic, we are all living with a great deal of fear, uncertainty, and anxiety. As an oncologist and cancer researcher, I know that those feelings are heightened for many people with cancer.

People with cancer are already facing the shock of a cancer diagnosis, the tribulations that accompany treatment, or the stress of survivorship. On top of that, we're learning that people with cancer may be at higher risk of severe illness from COVID-19 because their cancer, or its treatment, has left them more vulnerable to complications.

NCI has launched a study called NCCAPS that will help scientists answer questions about COVID-19's impact on cancer patients and cancer's impact on the course of COVID-19.

Credit: iStock

742

TRIAL SITES ACTIVATED IN

49

STATES AND PUERTO RICO

136

PATIENTS SCREENED

96

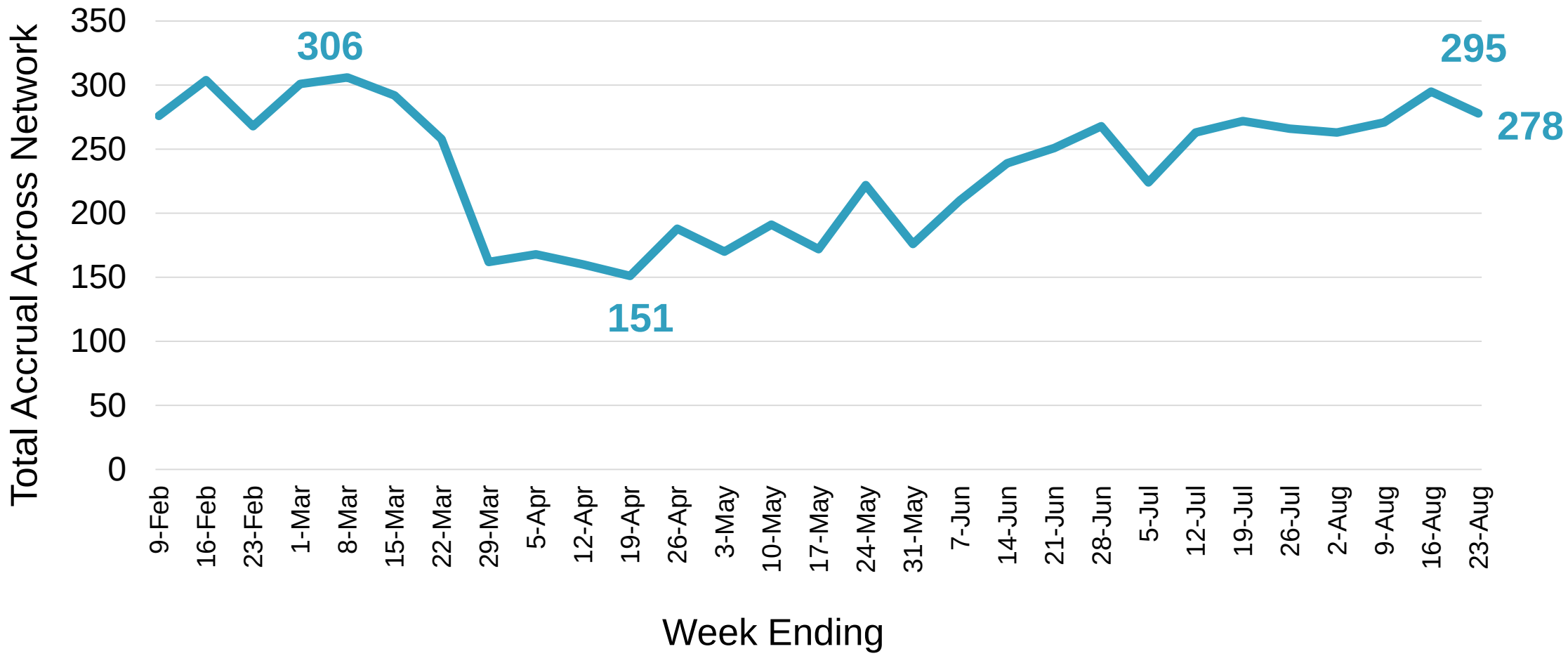
ENROLLED

Figures as of August 24, 2020.

Adapting Clinical Trials during the Pandemic

- Patient care can be transferred to different participating study sites
- Local healthcare providers can provide study activities to provide continuity of care (oversight by responsible investigator)
- NCI and trial sites can ship oral drugs directly to patients
- Alternative procedures that do not compromise safety or the integrity of the study will be considered minor deviations
- NCI CIRB supports “remote” informed consent: telephone discussion in conjunction with patient signature on written document

NCTN Trial Accrual: 2/3/20 to 8/23/20



COVID-19, Cancer, & Telehealth

How telehealth affects the safety and quality of care, and how the regulatory landscape will look when the COVID-19 public health emergency is behind us, remain open questions that deserve continued observation.

Telemedicine for Cancer Care in the Time of COVID-19 Trevor J. Royce, MD, MS, MPH; Hanna K. Sanoff, MD, MPH; Amar Rewari, MD, MBA. JAMA Oncol. Published online July 16, 2020.

Request for Information – July 2020

Scientific Gaps and Research Needs Related to Delivery of Cancer-related Care via Telehealth (Notice NOT-CA-20-080)

Solicited

- Scientific gaps that need to be addressed as cancer-related care via telehealth becomes a more common part of routine clinical practice.
- New resources or approaches needed to address gaps.
- Enduring and sustainable evidence-based approaches in the use of telehealth to advance cancer prevention, detection, and control *rather than short-term responses to the current pandemic.*

46 responses Focused on equity and access, innovative care delivery models, best practices, provider training, and patient education

Emergency Support for Postdoctoral Fellows during COVID-19

Notice of Special Interest (NOSI): **NOT-CA-20-082**

Administrative supplements to cover salary for a postdoctoral fellow whose stipend support from a non-profit funder has been lost because of the COVID-19 global pandemic.

Cancer Grand Challenges

CANCER RESEARCH UK | NIH NATIONAL CANCER INSTITUTE

NCI and Cancer Research UK plan to announce the list of new challenges in October 2020.

Expressions of interest from research teams for the new challenges are expected to be accepted from October 2020 through April 2021.

NCI Equity Council

WORKING GROUP 1:

Enhancing Research to Address Cancer Health Disparities

WORKING GROUP 2:

Ensuring Diversity of Thought and Background in the Cancer Research Workforce

WORKING GROUP 3:

Promoting an Inclusive and Equitable Community at NCI

Lung cancer mortality

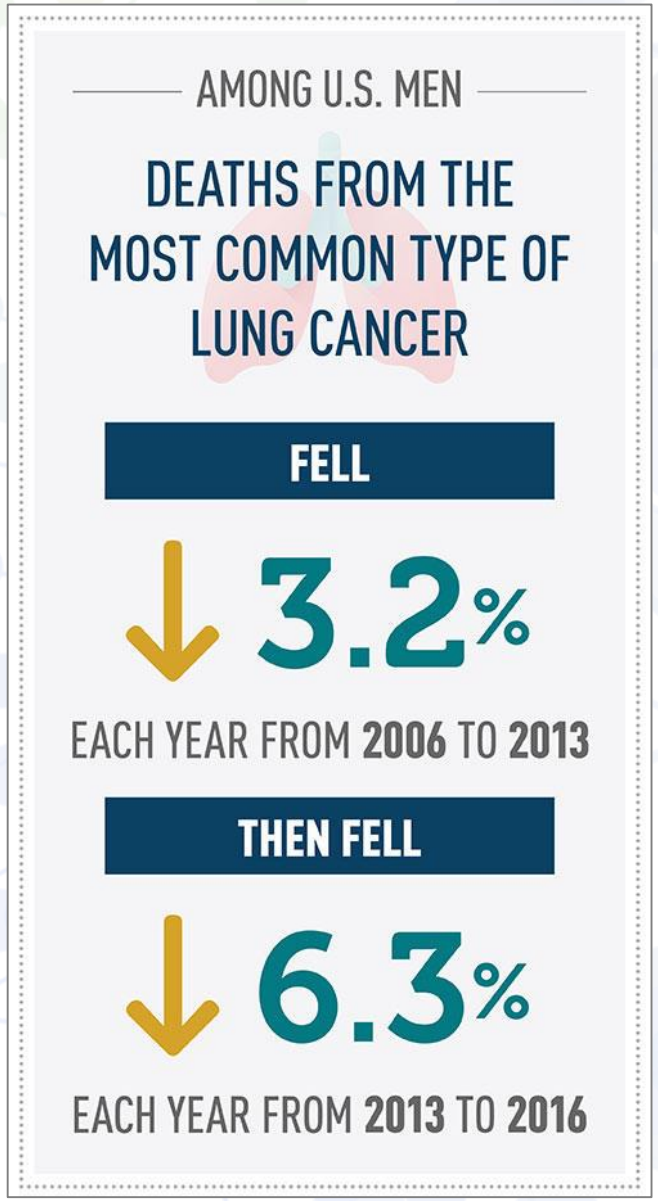
The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

The Effect of Advances in Lung-Cancer Treatment on Population Mortality

Nadia Howlader, Ph.D., Gonçalo Forjaz, D.V.M., Meghan J. Mooradian, M.D., Rafael Meza, Ph.D., Chung Yin Kong, Ph.D., Kathleen A. Cronin, Ph.D., Angela B. Mariotto, Ph.D., Douglas R. Lowy, M.D., and Eric J. Feuer, Ph.D.

AUGUST 13, 2020



Lung cancer mortality


HEALTH

STAT

Deaths from the most common lung cancer are falling fast, hinting at the impact of improved treatment

By ELIZABETH COONEY @cooney_liz / AUGUST 12, 2020


FIRST OPINION

STAT

Lung cancer deaths are declining faster than new cases. Advances in treatment are making the difference

By NORMAN E. SHARPLESS / AUGUST 13, 2020

NCI Cancer Research Data Commons

datacommons.cancer.gov

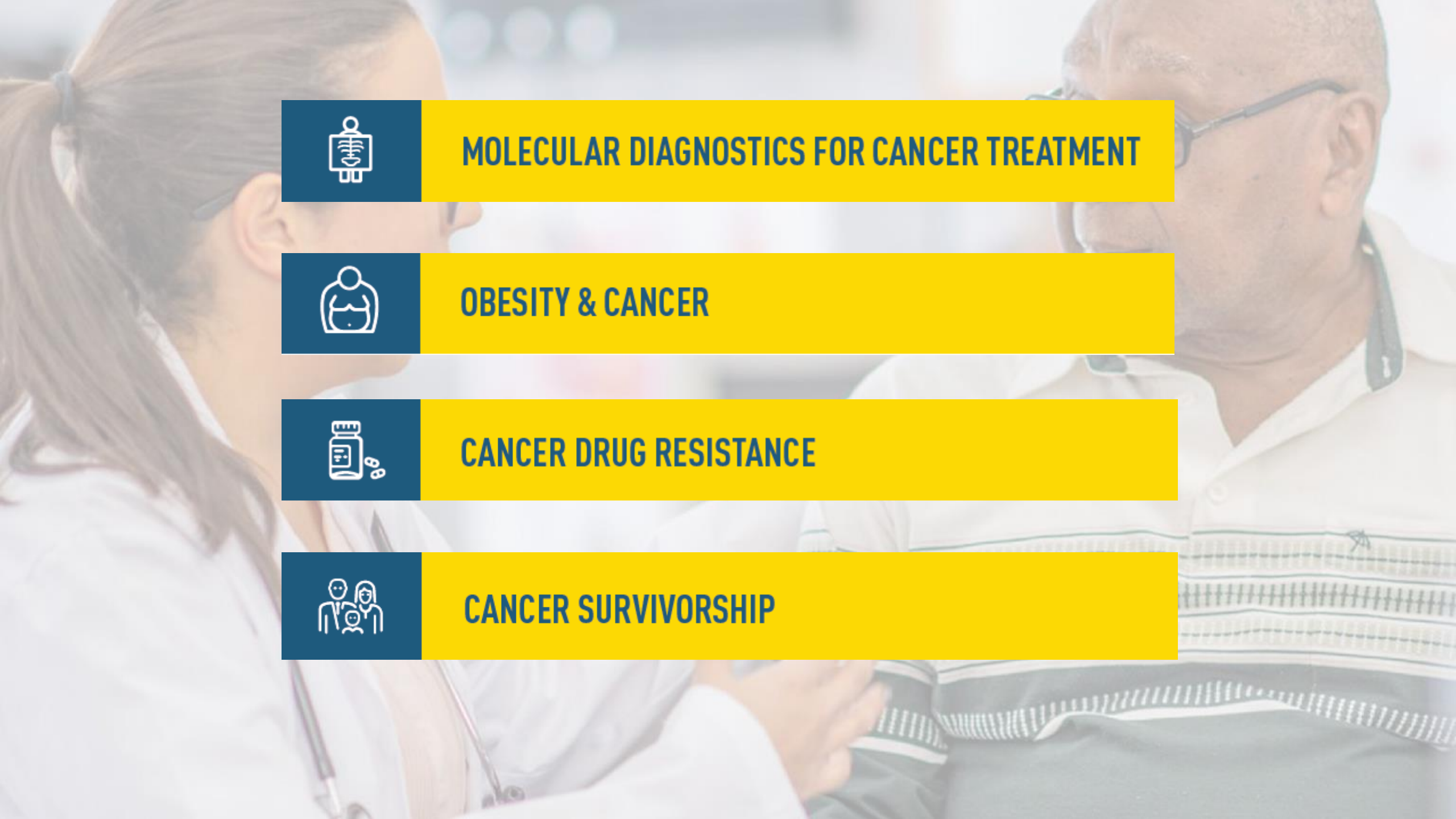
Integrated Canine Data Commons

caninecommons.cancer.gov

ANNUAL PLAN & BUDGET PROPOSAL

Fiscal Year 2022

cancer.gov/research/annual-plan



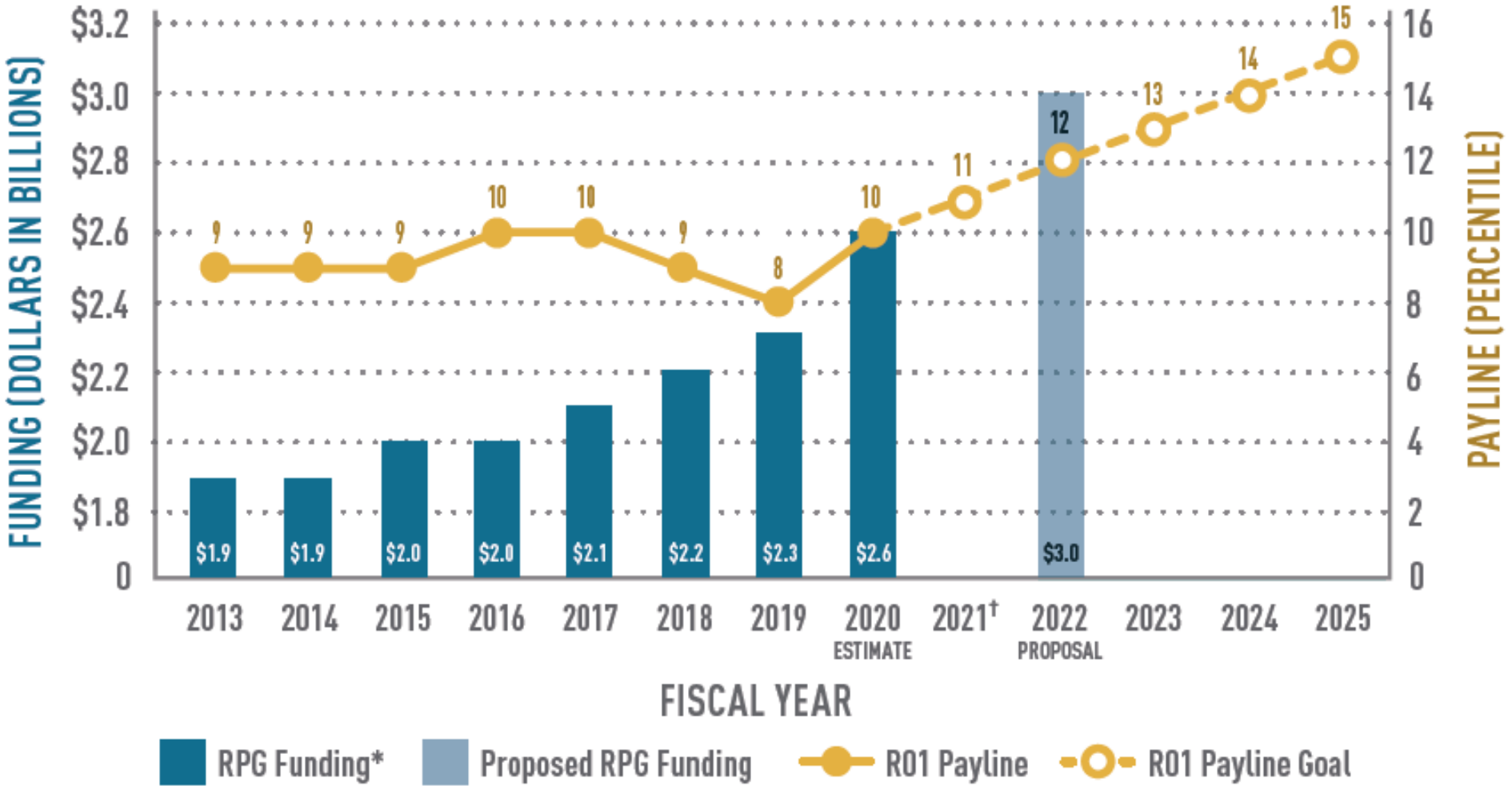
- MOLECULAR DIAGNOSTICS FOR CANCER TREATMENT
- OBESITY & CANCER
- CANCER DRUG RESISTANCE
- CANCER SURVIVORSHIP

PROFESSIONAL JUDGMENT BUDGET PROPOSAL FOR FISCAL YEAR 2022

Dollars in millions

FISCAL YEAR 2020 NCI BASE APPROPRIATION	$6,245	
TOTAL BUDGET INCREASE Proposed Allocation	$1,170+	$310 Inflation Adjustment* $147 Cancer Biology Research $237 Cancer Prevention Research $137 Cancer Detection and Diagnosis Research $218 Cancer Treatment Research $76 Public Health and Cancer Control Research $45 Training & Infrastructure
FY 2022 BUDGET RECOMMENDATION	**$7,415**	
FY 2022 CANCER MOONSHOSM FUNDING	$194	
FY 2022 TOTAL	**$7,609**	

NCI Research Project Grants (RPG) Funding and R01 Paylines



* RPG funding levels exclude small business grant set-asides.
† FY 2021 appropriations not yet finalized.

2021

50th Anniversary of the National Cancer Act of 1971

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Discussion