

# NCI Director's Update

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*Frederick National Lab Advisory Committee  
October 24, 2019*

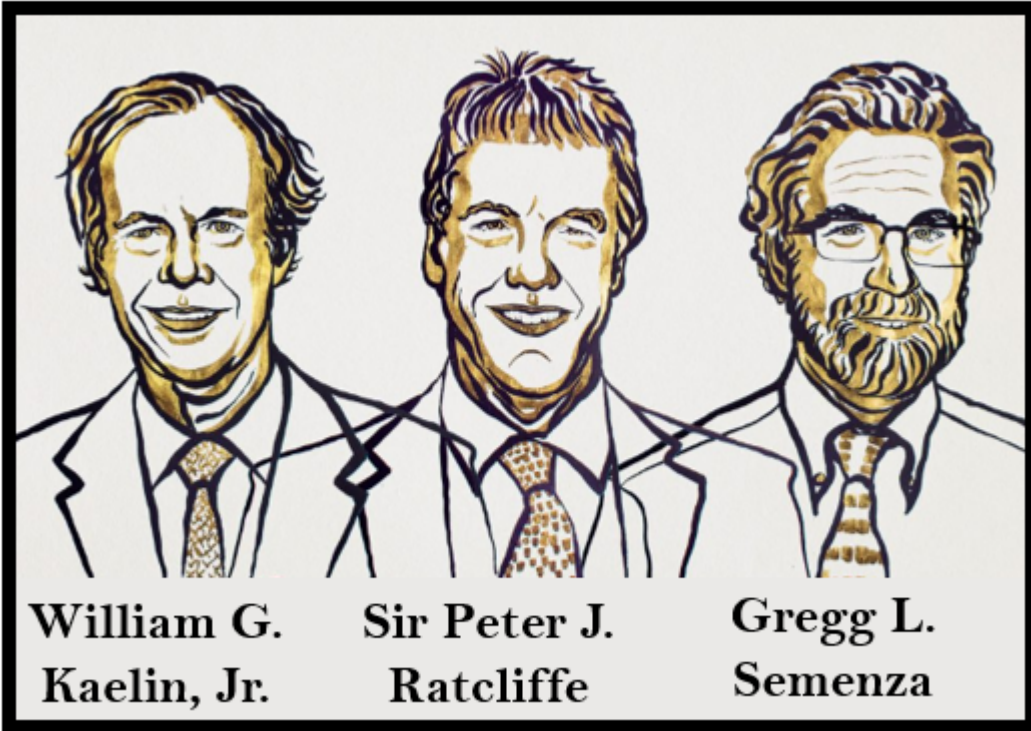
Douglas R. Lowy, M.D.  
Acting Director

@TheNCI  
@NCIDrDougLowy

# Topics on FNLAC Meeting Agenda: All focused on FNLCR

- AIDS and cancer virus program
- Discussion of strategies for developing “RAS-like” projects
- New precision medicine initiatives
- Basic science program
- HPV serology
- Biopharmaceutical program
- Laboratory Animal Sciences Program

# The Nobel Prize in Physiology or Medicine 2019



*For their discovery of how cells can sense and adapt to changing oxygen availability, which paved the way for promising new strategies to fight anemia, cancer and many other diseases.*

“Bill Kaelin, known as a gracious mentor and generous collaborator, is the model of the physician-scientist we need.”

- *W. Marston Linehan, M.D.*

“...Bill has been and continues to be a fierce advocate of rigor and reproducibility. His commitment to those ideals has always been unwavering.”

- *Douglas R. Lowy, M.D.*



**The Washington Post**  
*Democracy Dies in Darkness*

**Movies** • Review

**Four stars for a cancer documentary? Yes, ‘Jim Allison: Breakthrough’ is that good.**

**VARIETY**

## Film Review: ‘Jim Allison: Breakthrough’

Filmmaker Bill Haney takes an effectively straightforward approach to fashioning a respectful portrait of maverick cancer researcher James P. Allison.

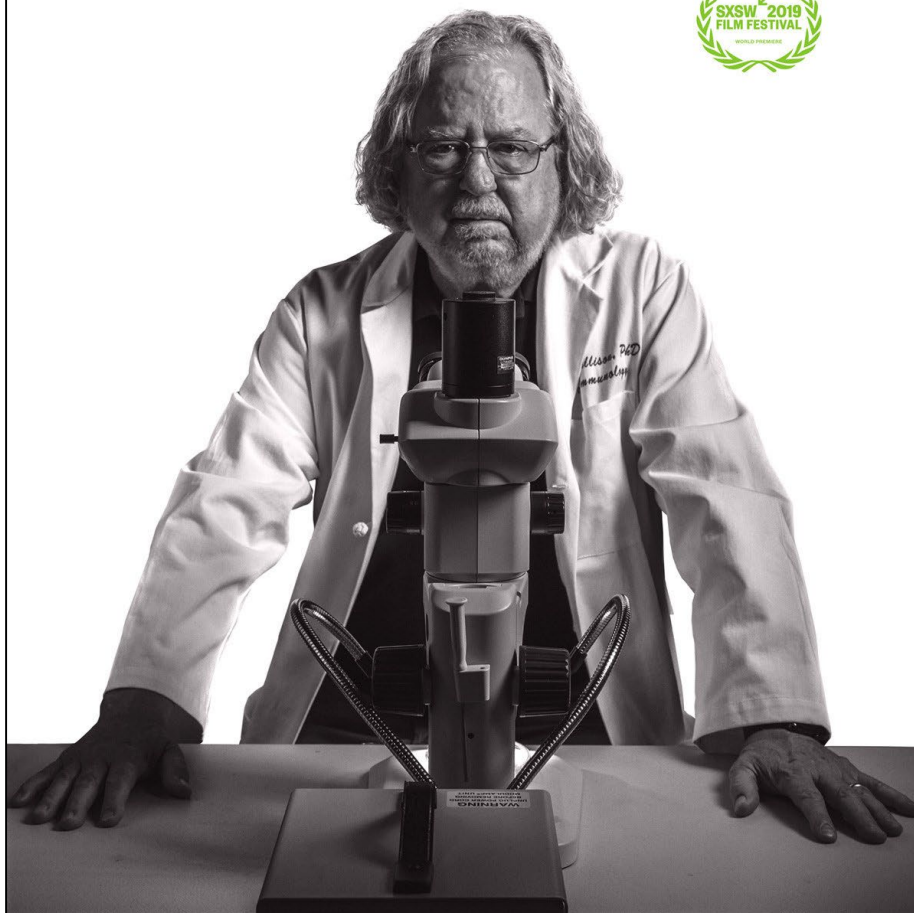
A BILL HANEY DOCUMENTARY

# JIM ALLISON: BREAKTHROUGH

THIS IS WHAT A HERO LOOKS LIKE

UNCOMMON PRODUCTIONS PRESENTS JIM ALLISON: BREAKTHROUGH  
EDITED BY PETER RHODES MUSIC BY MARK ORTON AND MICKEY RAPHAEL NARRATED BY WOODY HARRELSON  
EXECUTIVE PRODUCERS TIM DISNEY R.J. CUTLER MAURA MCCARTHY MICHAEL EISENSON REED PAUL JOBS SEAN REILLY  
PRODUCED BY JENNIFER PEARCE WRITTEN, PRODUCED AND DIRECTED BY BILL HANEY  
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BREAKTHROUGHDOC.COM



**The New York Times**

## ‘Jim Allison: Breakthrough’ Review: Taking On Cancer

He won a Nobel Prize for his discoveries in immunotherapy. This documentary shows how he got there.

**HOUSTON★CHRONICLE**

Houston scientist Jim Allison makes for a compelling star in ‘Breakthrough’ documentary



**Andrew Dansby**

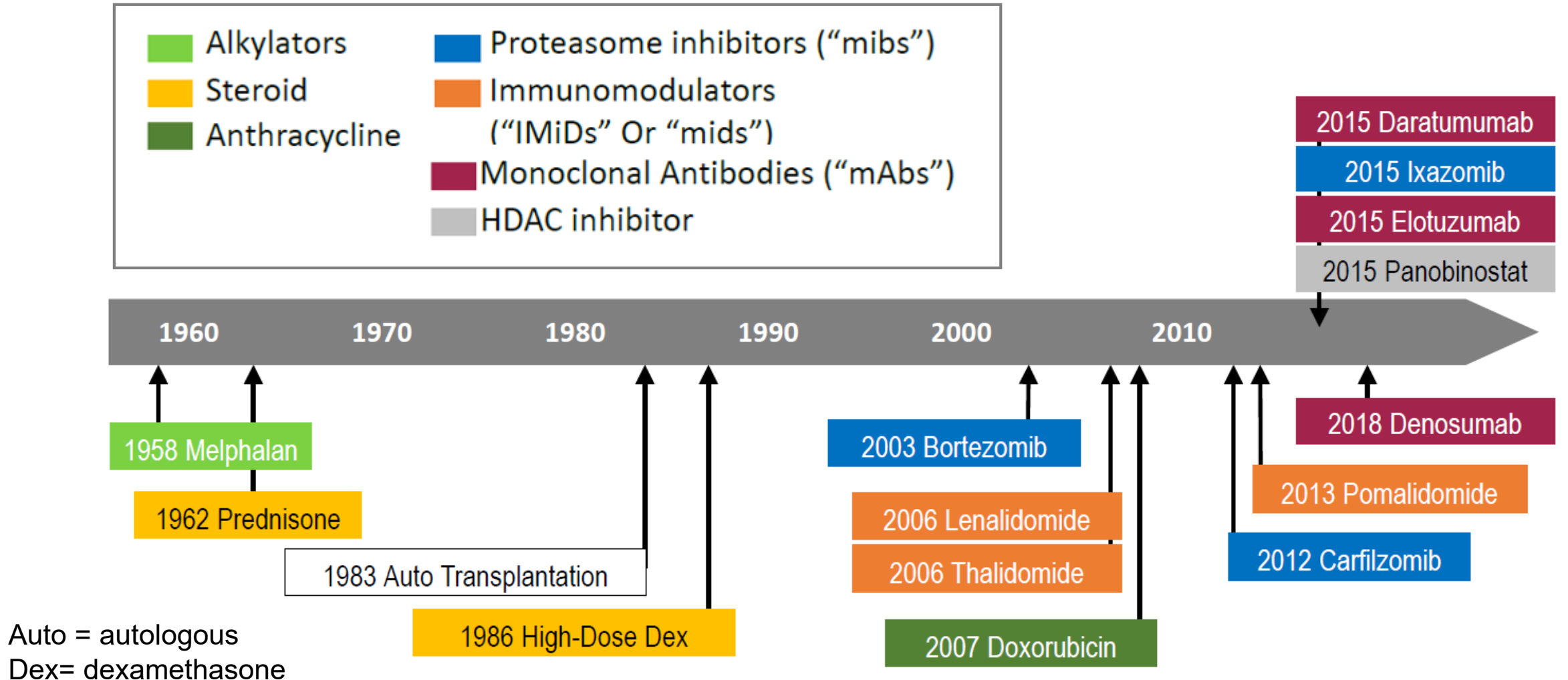
Oct. 1, 2019

# Evidence of improved nationwide, treatment-associated outcomes using SEER “real world” data

- **Multiple Myeloma**
- Non-small cell lung cancer
- Melanoma

*Special thanks to  
Kathy Cronin, NCI.*

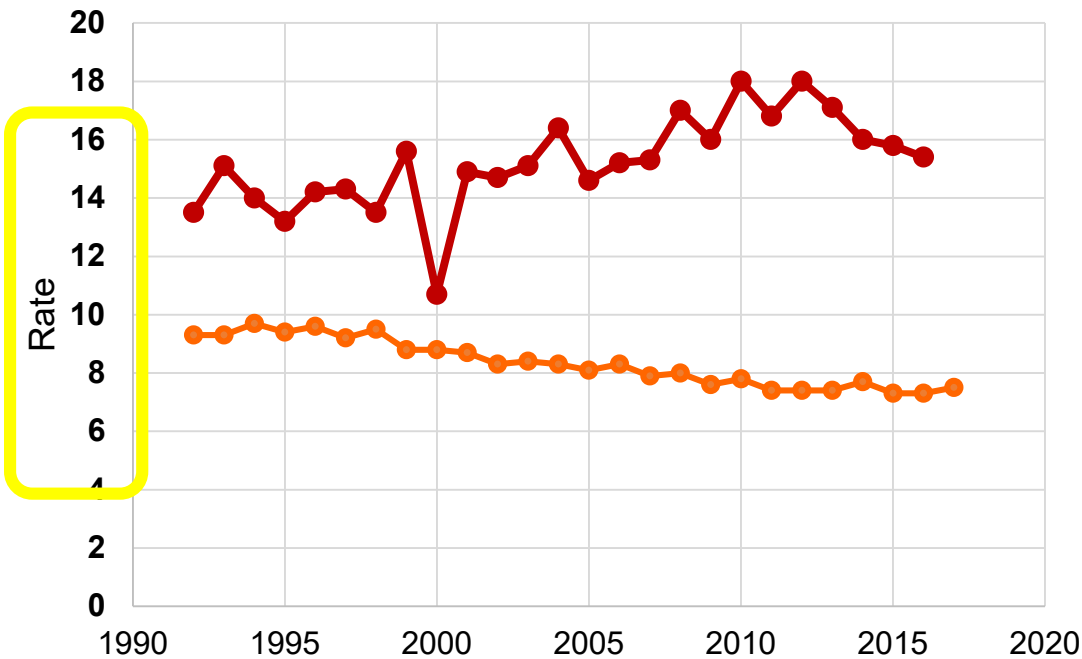
# Timeline of FDA approvals for multiple myeloma



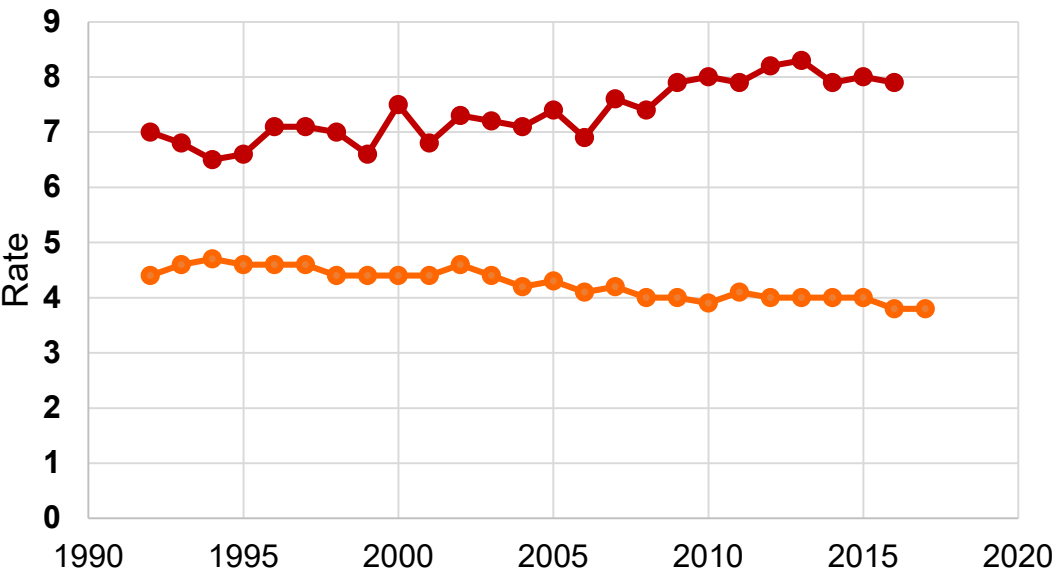


# Multiple Myeloma **Incidence** and **Mortality** in Men

*Mortality is decreasing similarly for Black men and White men*



Black men



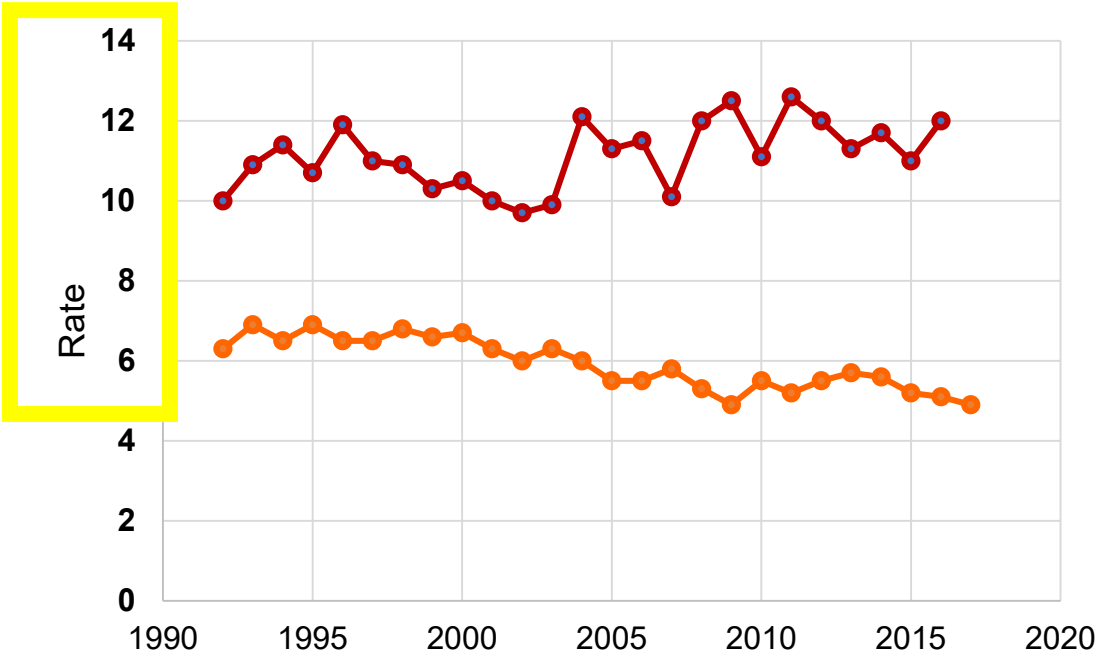
White men



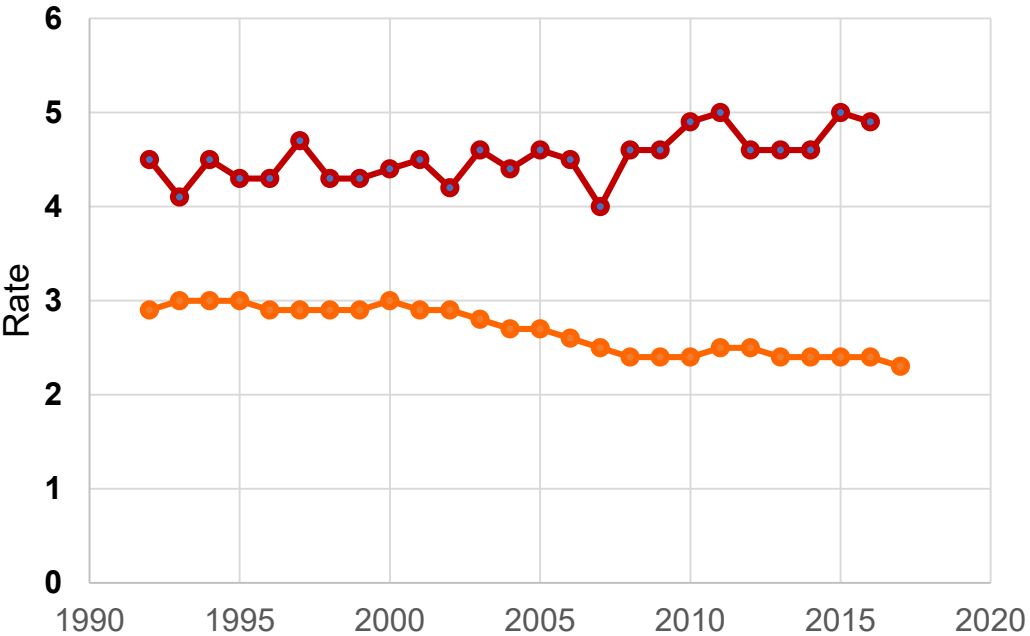


# Multiple Myeloma **Incidence** and **Mortality** in Women

*Mortality is decreasing similarly for Black women and White women*



Black women



White women



# Goals of HPV Vaccination

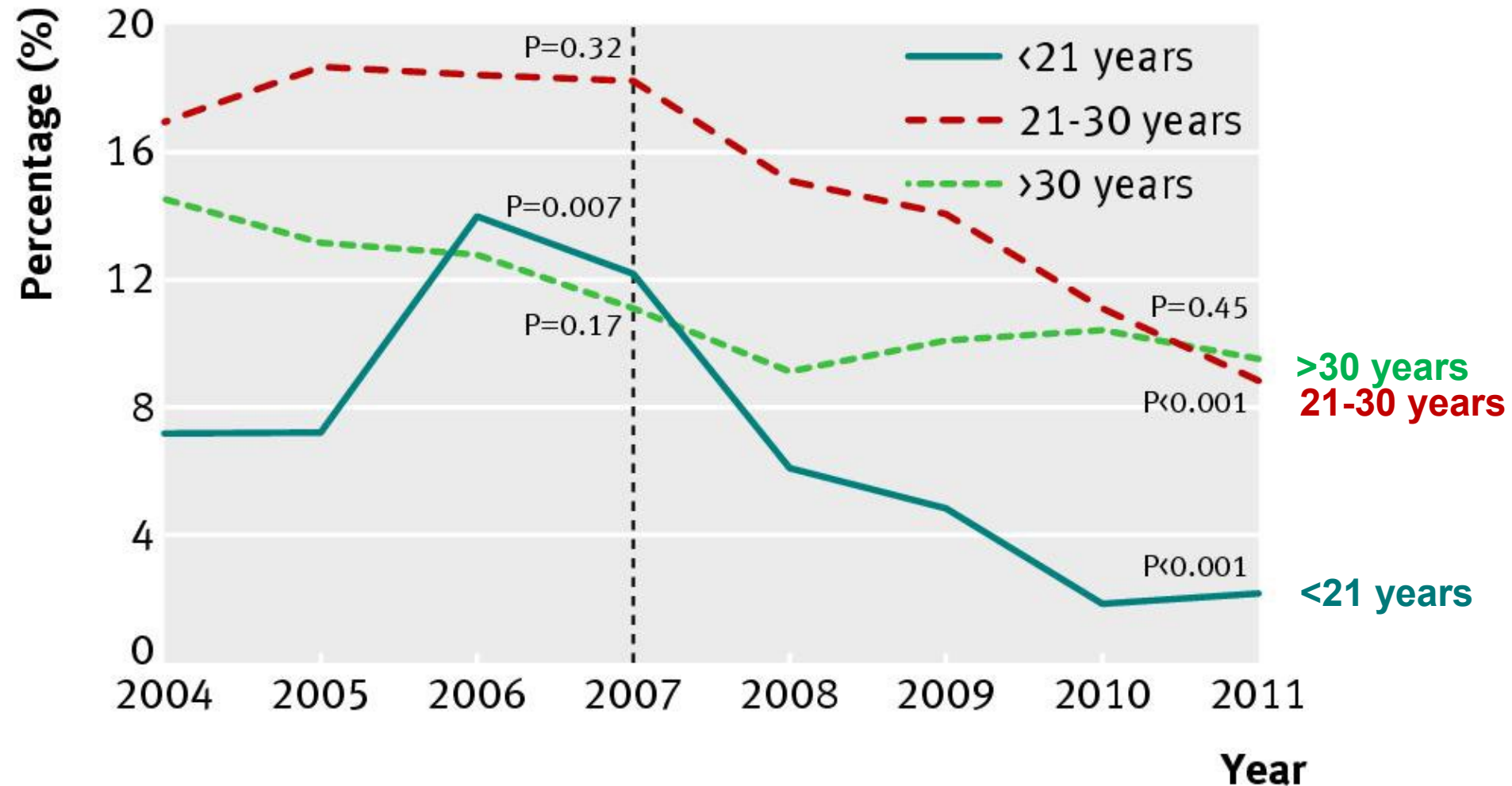
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- Directly reduce risk of infection and disease in vaccinees
- Indirectly reduce risk by reducing prevalence of “HPV vaccine types” in general population (herd immunity)



# Herd Immunity:

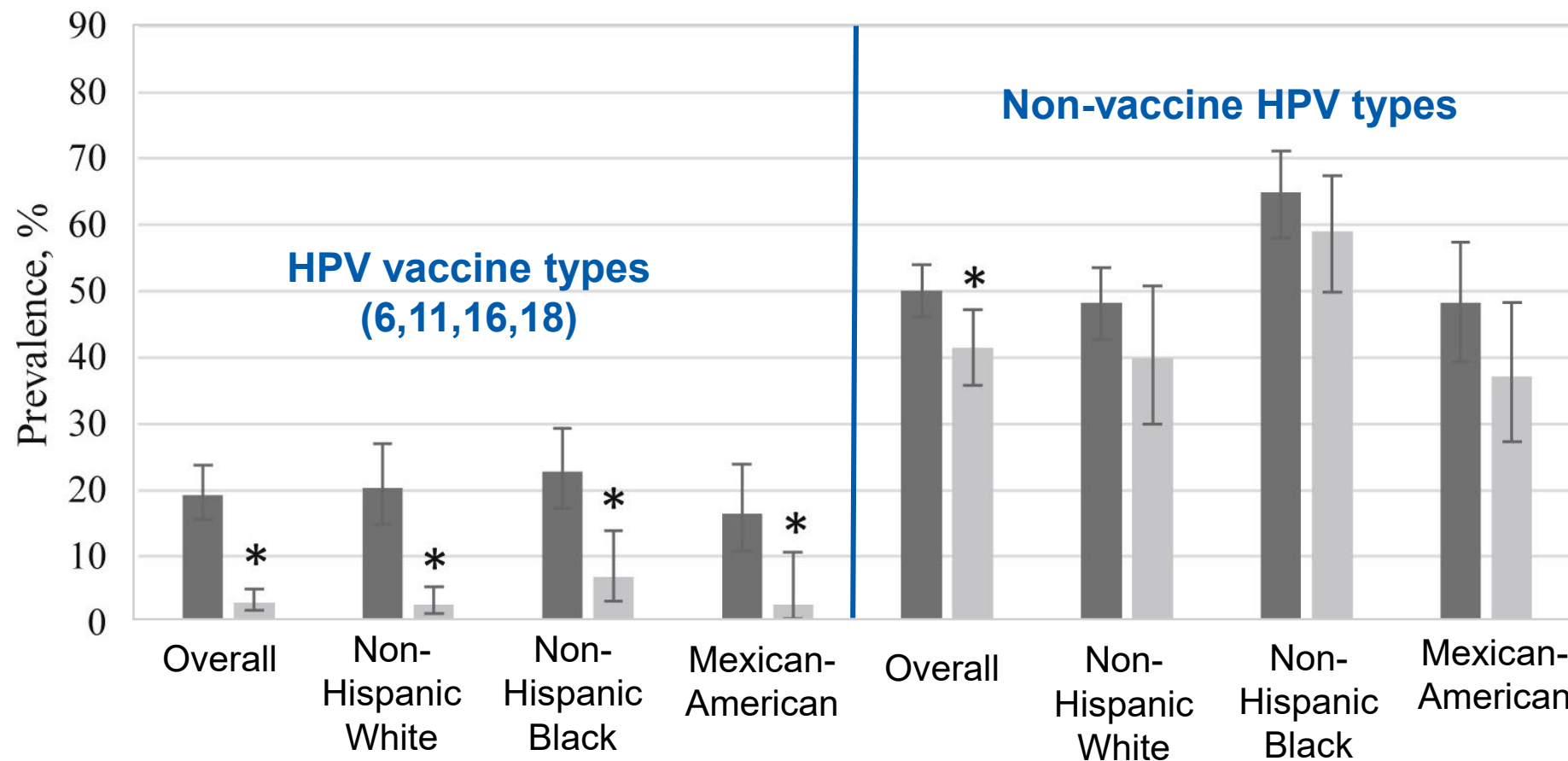
Decreased incidence of genital warts in heterosexual Australian **men** following female HPV vaccine implementation in 2007



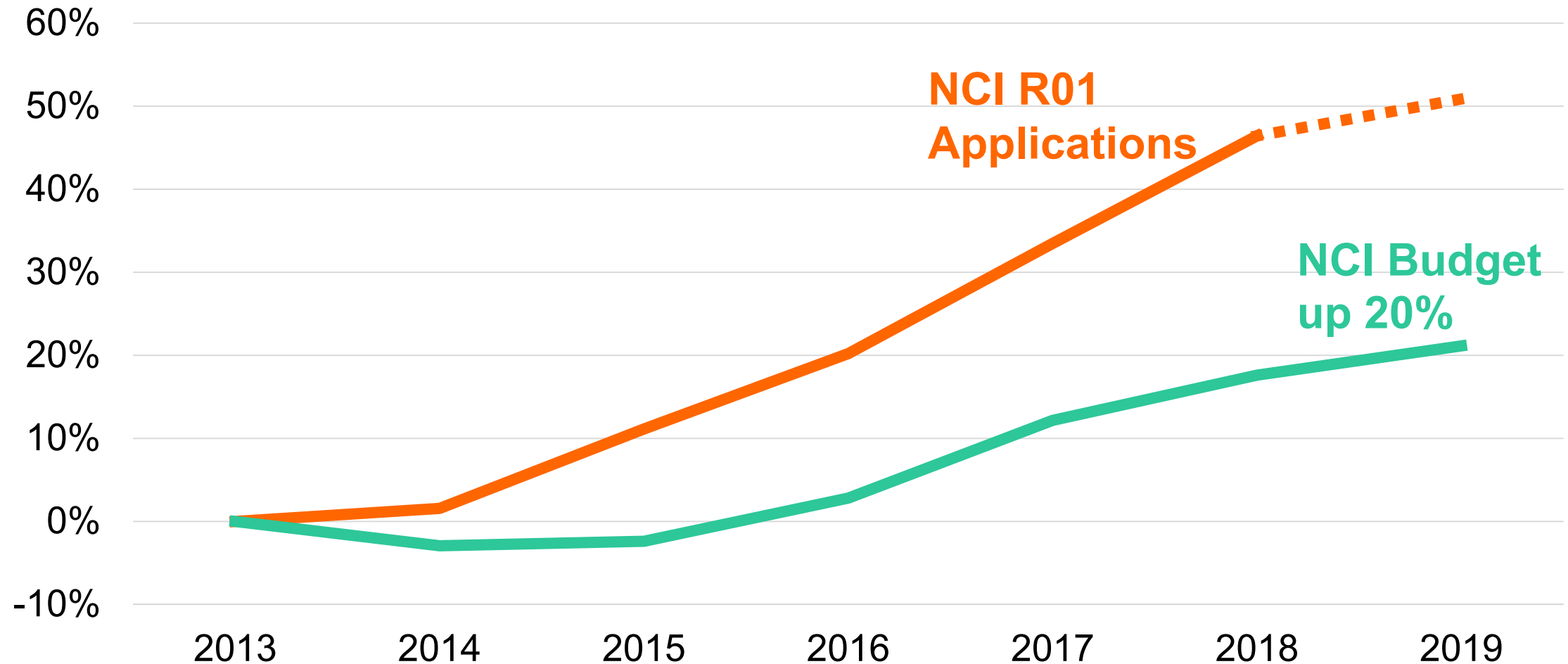


# ***Herd immunity in USA: >80% reduction in prevalence of HPV vaccine types among 14-19 year old sexually active women of whom only 55% had been vaccinated***

■ **2003-2006**  
■ **2013-2016**

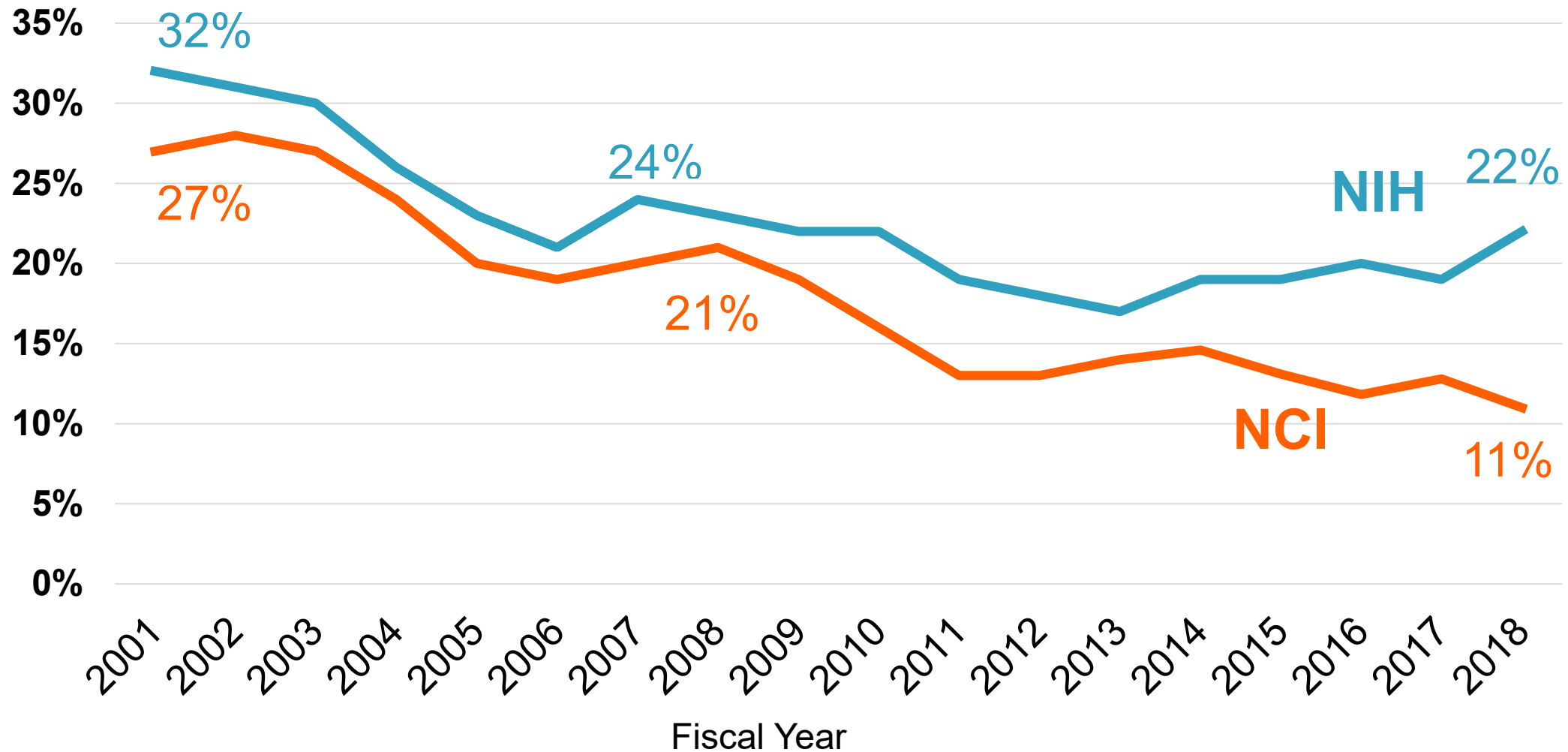


# Competing R01 **applications** vs. budgets for NCI & RPGs: Percent change since FY 2013



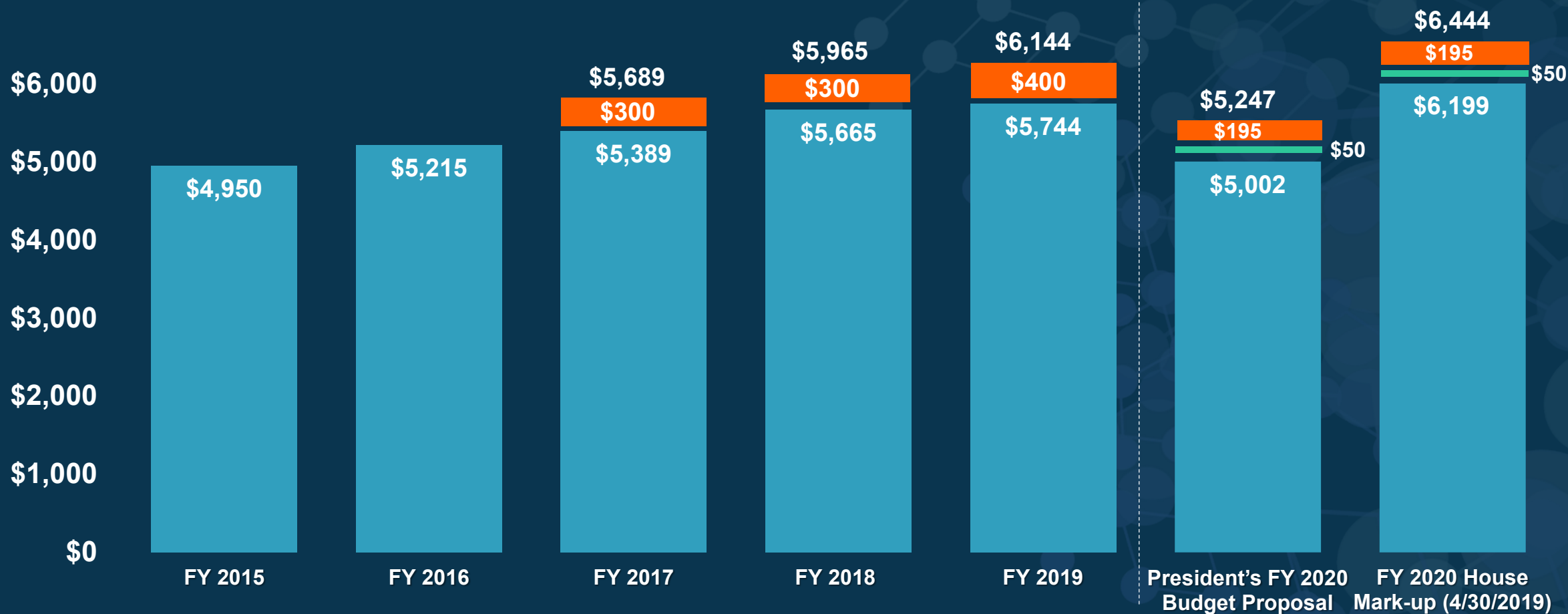
# Success Rates for NIH & NCI Grant Applications

Data include all RPGs, including SBIR/STTR



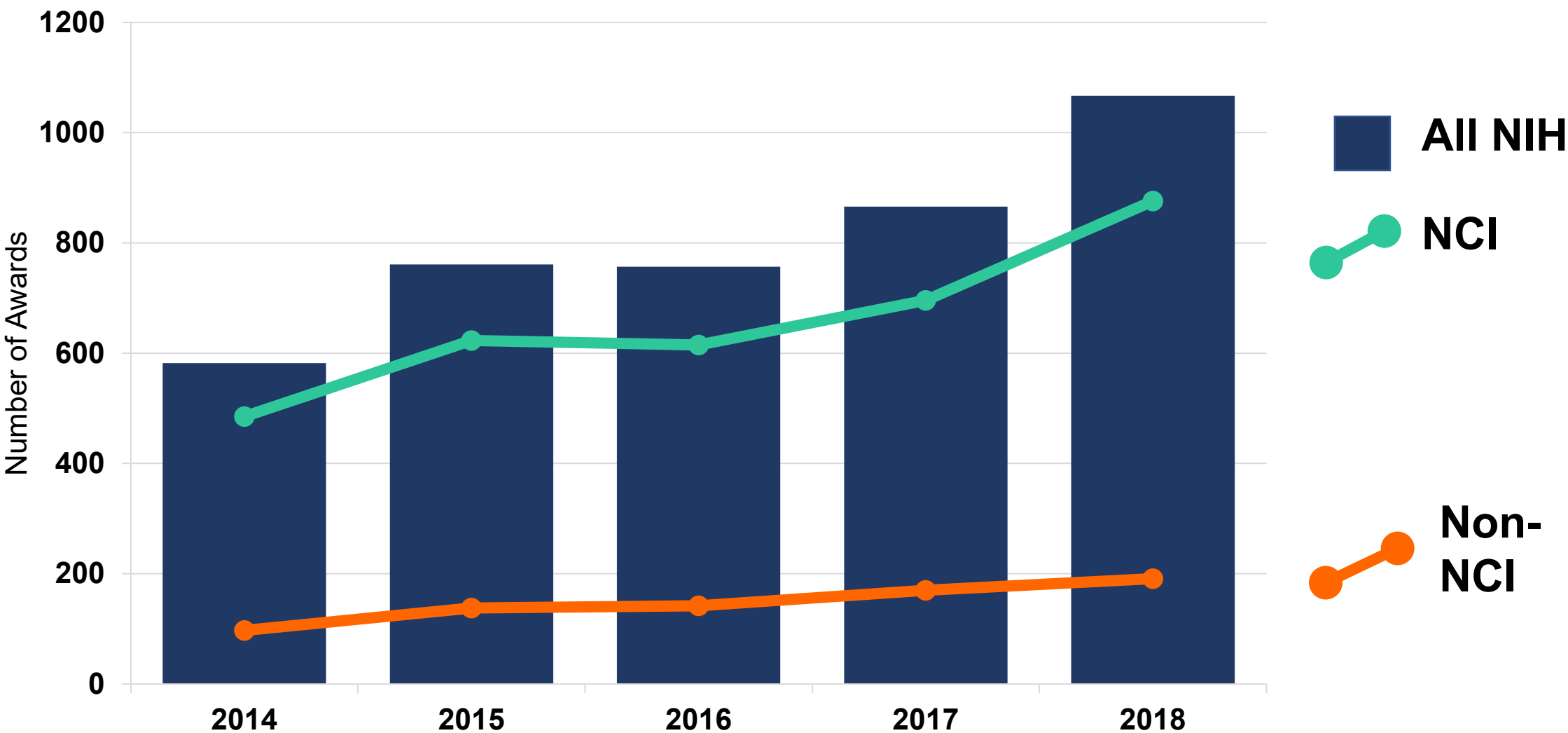
# NCI Appropriations FY 2015 – 2020 (in millions)

21<sup>st</sup> Century Cures Act - orange  
Childhood Cancer Initiative - green





# Pediatric cancer research conducted or supported by NCI/NIH: 2014 - 2018





# Childhood Cancer Research Presidential Initiative



- President's FY 2020 budget proposal includes \$50M.
- White House has convened several stakeholder events.
- NCI held a stakeholder meeting in July 2019.
- Planning is underway in anticipation of funding.



# Critical Importance of Pediatric Cancer Data

**Even our most effective treatments don't work for all patients**

*Improve understanding of why some cancers develop resistance or don't respond to treatment*

**Virtually no progress for some cancer types**

*Generate new ideas for interventions*

**Short- and long-term adverse effects of cancer and its treatment**


*Identify less toxic treatments and strategies for management*

# NCI Bottom Line: A Blog About Grants & More

New blog featuring 1-2 posts per month addressing:

- budget- and funding-related milestones
- funding trends and patterns
- emerging policy or fiscal issues
- analyses of NCI's grants portfolio

***[Subscribe at cancer.gov.](#)***



## NCI Bottom Line: A Blog about Grants and More

[Subscribe](#)

This grantee-focused blog covers the latest on NCI's fiscal landscape, funding decisions, grants policy news, processes, and more.



### Envisioning NCI's Future: Annual Plan and Budget Proposal for FY 2021

October 8, 2019, by L. Michelle Bennett, Ph.D.

For this edition of the NCI Bottom Line, Dr. Michelle Bennett, director of NCI's Center for Research Strategy, provides an overview of NCI's FY2021 Annual Plan and Budget Proposal. In the blog, Dr. Bennett highlights priorities from the Plan that are especially relevant to current and future NCI-funded researchers, including supporting more investigator-initiated research and maximizing opportunities in emerging areas of science.

[Continue Reading >](#)



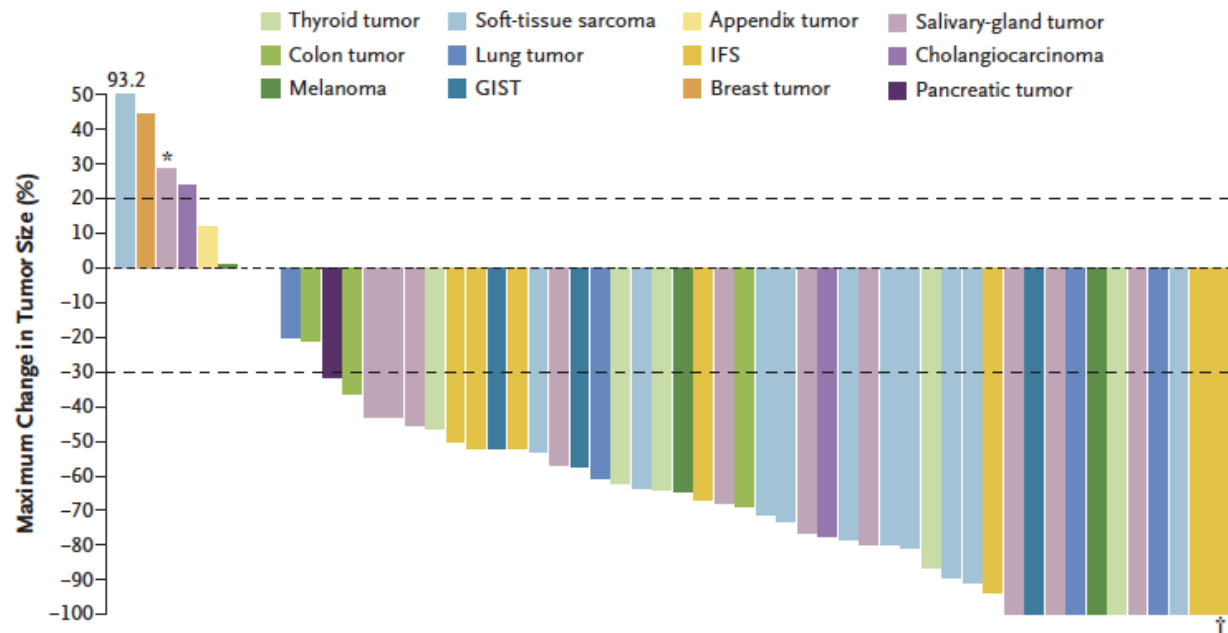


## Efficacy of Larotrectinib in TRK Fusion–Positive Cancers in Adults and Children

A. Drilon, T.W. Laetsch, S. Kummar, S.G. DuBois, U.N. Lassen, G.D. Demetri, M. Nathenson, R.C. Doebele, A.F. Farago, A.S. Pappo, B. Turpin, A. Dowlati, M.S. Brose, L. Mascarenhas, N. Federman, J. Berlin, W.S. El-Deiry, C. Baik, J. Deeken, V. Boni, R. Nagasubramanian, M. Taylor, E.R. Rudzinski, F. Meric-Bernstam, D.P.S. Sohal, P.C. Ma, L.E. Raez, J.F. Hechtman, R. Benayed, M. Ladanyi, B.B. Tuch, K. Ebata, S. Cruickshank, N.C. Ku, M.C. Cox, D.S. Hawkins, D.S. Hong, and D.M. Hyman

N ENGL J MED 378;8 NEJM.ORG FEBRUARY 22, 2018

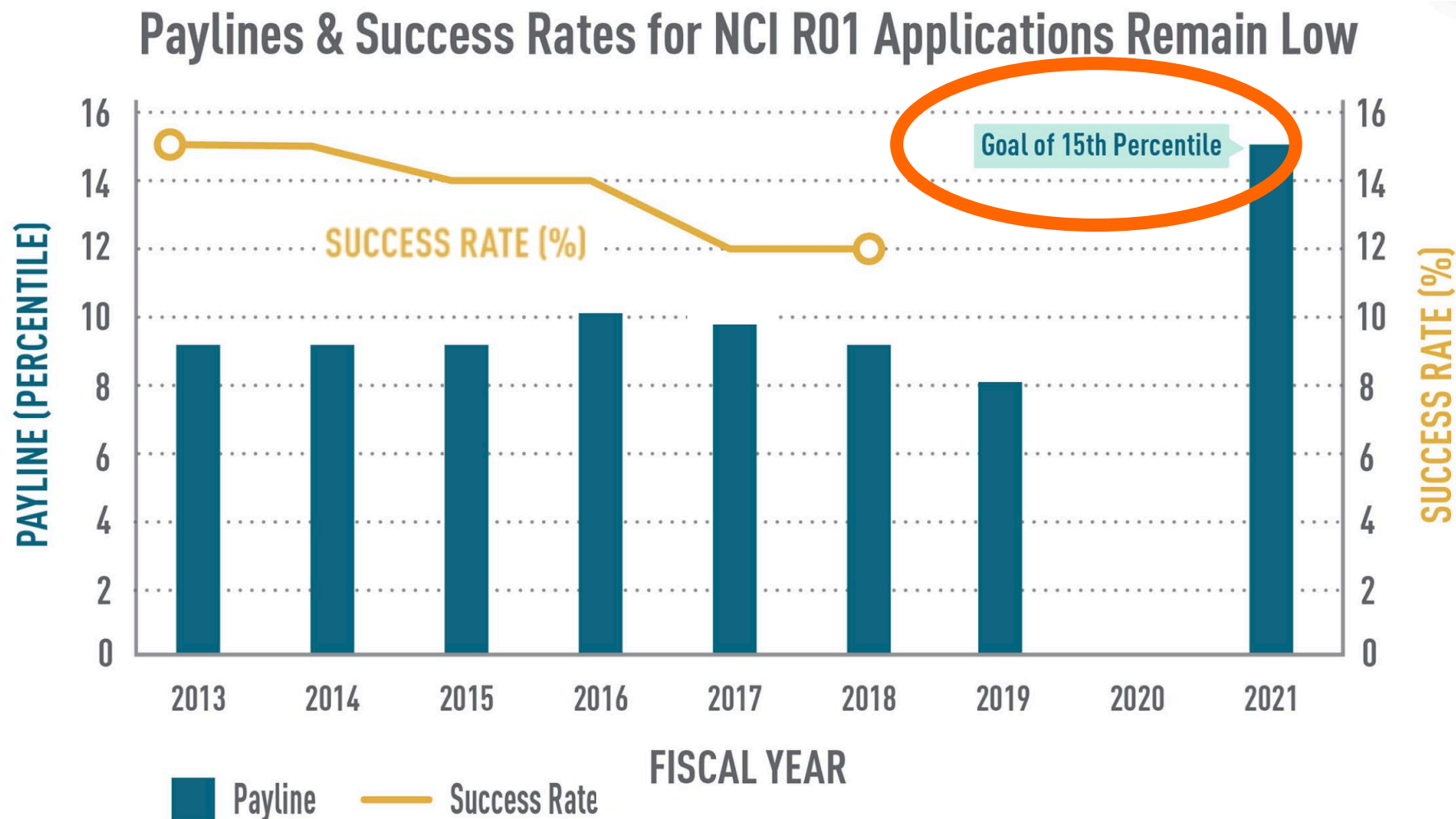
A Maximum Change in Tumor Size, According to Tumor Type



- FDA approved in November 2018; NCI supported the basic & clinical research
- Approved for adults and children for any tumor type that has the abnormal TRK fusion protein
- Most patients treated with the inhibitor have durable responses that increase their life expectancy

# Professional Judgment Budget Proposal

## Fiscal Year 2021



# Open Access to Cancer Moonshot Publications



16 AUGUST 2019  
VOL 365, ISSUE 6454

## SCIENTIFIC PUBLISHING

### *Open access takes root at National Cancer Institute*

Cancer Moonshot program requires grantees to provide immediate free access to papers they publish

By Jocelyn Kaiser

The long-standing debate over open access to research results has been marked by a geographic divide. In Europe, some public funders have launched a high-profile open-access initiative, dubbed Plan S, that would ultimately require grantees to publish only in journals that immediately make papers free to all. But in the United States, federal agencies have stuck to a decade-old policy that allows grantees to publish in journals that keep papers behind a paywall for up to 1 year. Now, the divide is starting to blur, with one prominent U.S. research program starting to require immediate open access to the peer-reviewed publications it funds.

The policy is part of the Cancer Moonshot program at the National Cancer Institute (NCI) in Bethesda, Maryland, the 7-year, \$1.8 billion research initiative spearheaded in 2016 by then-Vice President Joe Biden after his son Beau died of brain cancer.

Biden felt that broader data sharing would speed cancer research, and after hearing

(The agency later realized this paper hadn't been funded by the moonshot.) At first, NCI considered accepting two free sharing strategies allowed by many paywalled journals: Researchers can either publish a draft manuscript in an online preprint repository or post the final accepted paper on their own website. But officials decided that "people aren't going to look at everybody else's website" for papers, Singer says. Instead, NCI opted for a "strictly" open-access policy, with rare exceptions.

The policy says moonshot authors can publish in either a fully open-access journal or a hybrid journal that publishes both free and paywalled papers. The authors

can also include in their grant budgets the fees that open-access journals charge for peer review and other costs, usually about \$2000 to \$3000 per paper.

NCI says it wants to enable grantees to publish in highly selective journals, including *Nature*, *Science*, and *Cell*, that don't offer open access, and it has been

discussing options with such journals. *Cell* says it expects to negotiate ways to make

***"People aren't going to look at everybody else's website" for moonshot papers.***

Dinah Singer,  
National Cancer Institute





# Intellectual property, foreign threats

**America's colleges and universities are aggressively addressing foreign threats**

**August 22, 2019**

Michael A. McRobbie, President of Indiana University  
Morton Schapiro, President of Northwestern University



**No, I won't start spying on my foreign-born students**

**August 30, 2019**

Lee C. Bollinger, President of Columbia University



**Thoughts on How Institutions Can Promote a Culture of Research Integrity**

**August 15, 2019**

Mike Lauer, Deputy Director for Extramural Research, NIH



# Recent Leadership Appointments

## **Director, Committee Management Office**

Joy Wyszneauckas

## **Director, Center for Global Health**

Satish Gopal, M.D. *(pending NIH approvals)*

# Leadership Vacancies

## **Associate Director, Cancer Therapy Evaluation Program (CTEP)**

Meg Mooney, Acting

## **Director, Division of Cancer Prevention (DCP)**

Debbie Winn, Acting


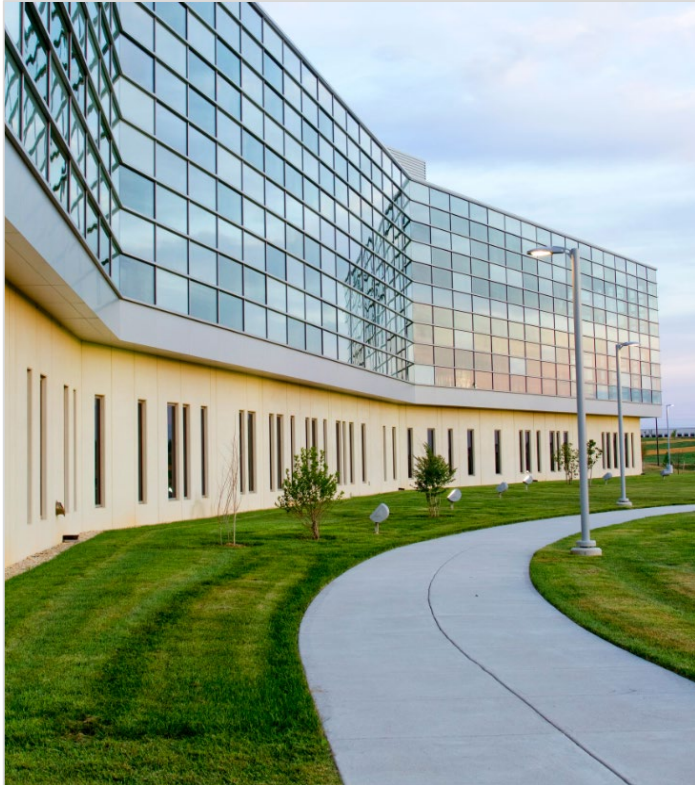
## **Director, Division of Cancer Biology (DCB)**

Daniel Gallahan, Acting

# Director, Division of Cancer Biology

- Executive Recruitment
- Announcement open 9/3/19 to 11/1/19
- <https://hr.nih.gov/jobs/search/job-1560101>

# Save the Date



**3rd RAS Initiative Symposium**  
**June 8-10, 2020**  
Frederick National Laboratory for Cancer Research

# FNL Task Orders Awarded August 30

Research efforts for **NCI** plus:

**NHGRI**

**NHLBI**

**NIA**

**NIAMS**

**NIGMS**

**NEI**

**NINDS**

**NICHD**

**NIDCD**

**NIEHS**

**NIMH**

**NIAID**

**NIDCR**

**NIDDK**

**NIH Clinical Center**

**NCATS**

**USACHEHR (Army)**

**USDA**





# Re-imagining FNLCR



**How can the unique capabilities of FNLCR can best support the NCI mission and serve the broad NCI research community—both intramurally and extramurally?**





# NCI Vision for FNLCR

FNLCR is envisioned to function in support of the NCI mission with three fundamental tasks:

1. to provide to NCI-supported investigators access to services, tools, and resources not readily available to individual labs
2. to serve as a hub for technology development
3. to function as a nucleus for large-scale projects as necessary



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