

MERCK

INVENTING FOR LIFE

ANNUAL SHAREHOLDERS MEETING

BRIDGEWATER MARRIOTT

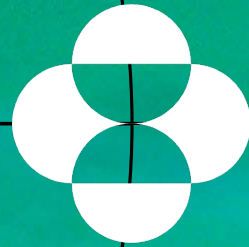
Forward-Looking Statement of Merck & Co., Inc., Kenilworth, NJ, USA

This presentation of Merck & Co., Inc., Kenilworth, N.J., USA (the “company”) includes “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of the company’s management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of pharmaceutical industry regulation and health care legislation in the United States and internationally; global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the company’s ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the company’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

The company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the company’s 2017 Annual Report on Form 10-K and the company’s other filings with the Securities and Exchange Commission (SEC) available at the SEC’s Internet site (www.sec.gov).





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KEN FRAZIER, CHAIRMAN AND CEO

KEYTRUDA Offering New Hope for Patients with Lung Cancer

FORTUNE

Merck's Lung Cancer Triumph

Bloomberg

Lung Cancer Drug Trial
Data: Keytruda Tops
Opdivo Again

Forbes

Adding Merck's
Keytruda To Chemo
Halves Death Risk
For Lung Cancer
Patients

AACR American Association
for Cancer Research



"The totality of the clinical benefit seen in
189 sets a very high competitive bar in 1L
NSCLC"



"... **MRK will remain in the driver's seat,**
in terms of IO penetration into the all-important
1L lung cancer market."



OUR MISSION

TO DISCOVER, DEVELOP AND PROVIDE
INNOVATIVE PRODUCTS AND SERVICES THAT
SAVE AND IMPROVE LIVES AROUND THE WORLD

OUR VISION

WE ARE COMMITTED TO BEING
**THE PREMIER, RESEARCH-INTENSIVE
BIOPHARMACEUTICAL COMPANY**



BUSINESSES

Innovative medicines
and vaccines for human
and animal health



2017 REVENUES

\$40.1 billion, 57% of
sales come from outside
the United States



2017 R&D EXPENSE

\$7.3 billion (non-GAAP);
More than 30 indications across
10 disease areas



HEADQUARTERS
Kenilworth, NJ, U.S.A.
operating in more than
140 countries



EMPLOYEES
worldwide
(as of 12/31/17)



Merck & Co., Inc.
is listed on the New York Stock
Exchange and has a market cap
of \$150 billion



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FOR MORE THAN A CENTURY, MERCK HAS BEEN INVENTING TO SOLVE SOME OF THE GREATEST HEALTH CHALLENGES AROUND THE WORLD



Discovered
streptomycin,
made rights public



First synthesis
of **cortisone**



Introduced
thibenzole, first
drug known to kill
trichinella in
animals



First pneumonia
vaccine



First long-term
measles vaccine
and first **mumps**
and **rubella vaccines**



First to isolate
broad-spectrum
antibiotics



Discovered and started
donation of **MECTIZAN**
to eliminate river
blindness

First
chickenpox
vaccine



Merck for Mothers
established to
reduce maternal
deaths worldwide



FDA approves Merck
vaccines for **HPV**
cancers, **shingles**
and **rotavirus**



CRIVAN
developed
for **HIV**



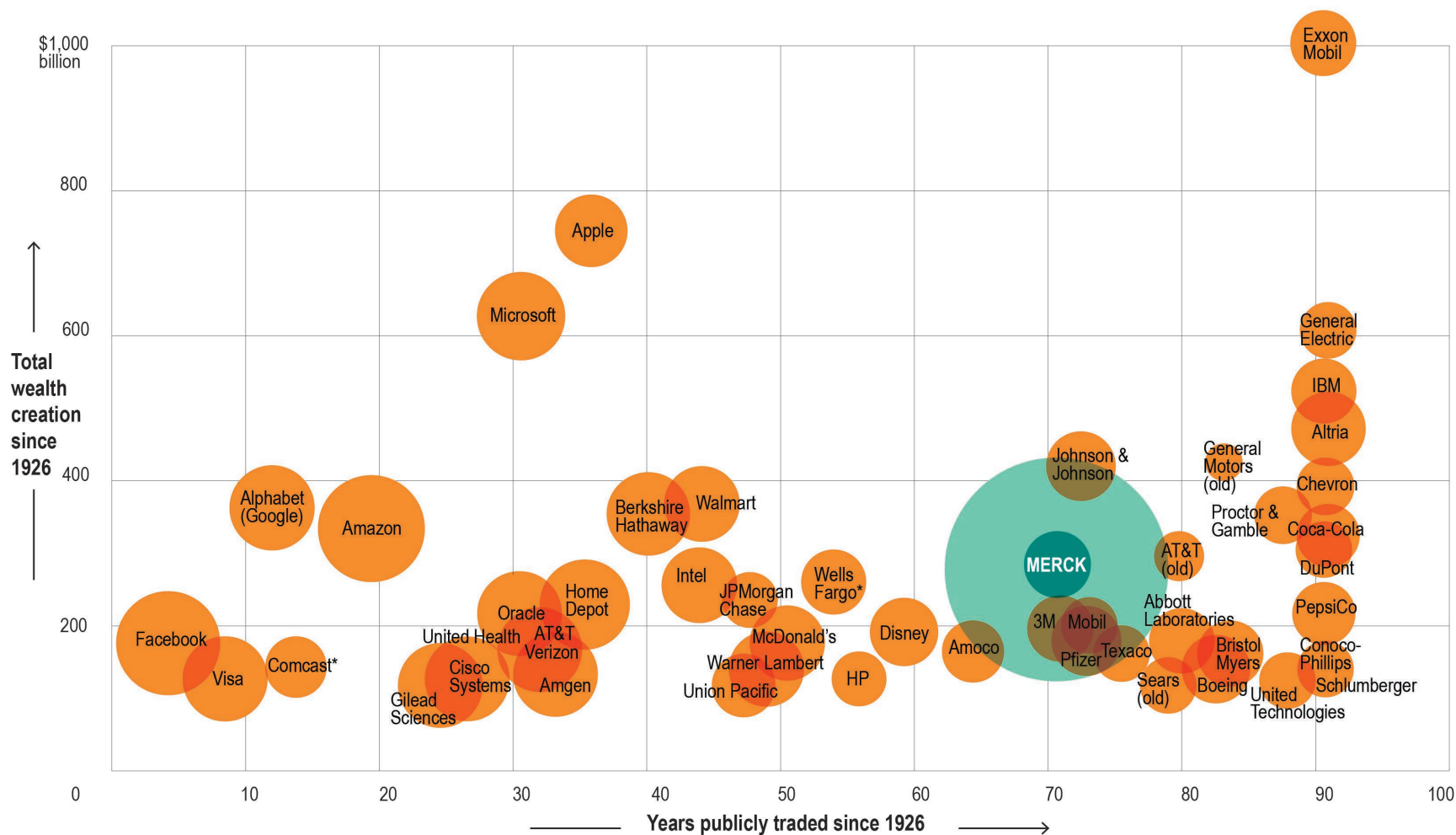
First **anti-PD-1**
therapy approved
in the **US**



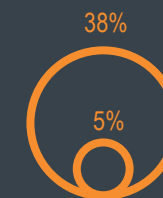
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THE 50 COMPANIES THAT CREATED THE MOST VALUE FROM 1926 TO 2016



Merck is among the top companies which have created the most value over the last century



Circles are sized by the company's compound annualized stock return

Source: The New York Times, September 22, 2017
(<https://www.nytimes.com/2017/09/22/business/app-le-investment.html?mcubz=0>)



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INVESTING IN TOMORROW'S SCIENCE

South San Francisco, CA



London, England



Cambridge, Massachusetts



FY2017 Highlights: SALES & EARNINGS

NON-GAAP
EPS: \$3.98
FY2017 NON-GAAP



GAAP
EPS: \$0.87
FY2017 GAAP



P&L (Non-GAAP)

	FY 2017	Ex-Exchange % vs. Prior
Sales	\$40.1B	1%
PGM PGM%	\$30.7B 76.4%	2%
Operating Expense	\$17.1B	4%
M&A Expense	\$9.8B	2%
R&D Expense	\$7.3B	7%
Net Income	\$10.9B	4%
Non-GAAP EPS	\$3.98	5%

1Q18 Key Highlights

MERCK

1Q18
WORLDWIDE SALES

\$10.0B

+6% GROWTH
+3% EX-EXCHANGE



PHARMACEUTICAL SALES

\$8.9B

+9% GROWTH
+4% EX-EXCHANGE



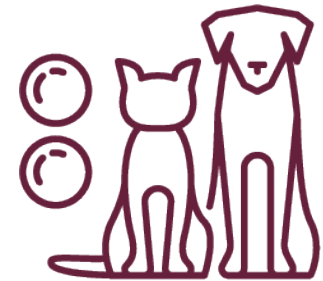
KEY DRIVERS

Continued growth from KEYTRUDA and
GARDASIL / GARDASIL 9

ANIMAL HEALTH SALES

\$1.1B

+13% GROWTH
+7% EX-EXCHANGE



KEY DRIVERS

Continued strength in Ruminants and
Companion Animals

1Q 2018 Highlights: SALES & EARNINGS

NON-GAAP
EPS: \$1.05



GAAP
EPS: \$0.27



P&L (Non-GAAP)

	1Q 2018	Ex-Exchange % vs. Prior
Sales	\$10.0B	3%
PGM PGM%	\$7.6B 75.7%	2%
Operating Expense	\$4.3B	-2%
M&A Expense	\$2.5B	-1%
R&D Expense	\$1.8B	-3%
Net Income	\$2.8B	16%
Non-GAAP EPS	\$1.05	18%

OUR PILLARS OF GROWTH DRIVE LONG-TERM VALUE



FOUNDATION OF DIVERSIFIED BRANDS

ONCOLOGY

We are a leader in immuno-oncology. KEYTRUDA is approved to treat first-line lung cancer and demonstrated improvement in overall survival

KEYTRUDA[®]
(pembrolizumab) Injection 100 mg

86
approved
markets

>700 trials
+25 tumor types
10 indications

20+
novel mechanisms
in the pipeline



"Right then where I was done with Keytruda, they said you're cancer free. I just grabbed my doctor and hugged her."

Joann
KEYTRUDA Clinical Trial Patient



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VACCINES

Our purpose is to protect current and future generations from preventable infectious diseases

**Live the Legacy.
Protect the Future.**



Merck has a rich legacy in vaccines, which are responsible for some of the largest advances in public health



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OVER 100 YEARS OF DEVELOPING VACCINES*

1895

Mulford began producing first diphtheria toxoid

1898

H.K. Mulford Co. introduces its smallpox vaccine

1963

MSD licenses its first measles vaccine in the US

MSD's Dr. Hilleman isolates the mumps virus used to create the first mumps vaccine

1967

MSD introduces the first vaccine against mumps

1969

MSD introduces the first vaccine against rubella

1971

M-M-R® trivalent vaccine introduced

1977

MSD licenses a vaccine against pneumococcal disease

1978



1981

First plasma-derived hepatitis B vaccine licensed, Heptavax-B (Hepatitis B Vaccine)

1983

PNEUMOVAX²³
(Pneumococcal Vaccine Polyvalent)

1986



1990

PedvaxHIB[®]
[Haemophilus b Conjugate Vaccine (Meningococcal Protein Conjugate)]

1995



1996

VAQTA[®]
(HEPATITIS A VACCINE, INACTIVATED)

COMVAX[®]
[Haemophilus b Conjugate (Meningococcal Protein Conjugate) and Hepatitis B (Recombinant) Vaccine]

2005



2006



ZOSTAVAX[®]
Zoster Vaccine Live

GARDASIL[®]
[Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant]

2014

GARDASIL-9[®]
Human Papillomavirus 9-valent Vaccine, Recombinant

2016

vaxelis[®]
Diphtheria, tetanus, pertussis (acellular, component), hepatitis B (DNA), poliomyelitis (inactivated) and Haemophilus type b conjugate vaccine (adsorbed)

(EU)[^]

1890s

1960s

1970s

1980s

1990s

2000s

2010s

*MSD and its predecessor companies have a history with vaccines that dates back more than 100 years. In 1898, the H. K. Mulford Company produced its first batch of smallpox vaccine. In 1929, the H. K. Mulford Company was purchased by the Sharp & Dohme (S&D) Company of Baltimore. In April 1953, Sharp & Dohme merged with Merck & Company, Inc., becoming Merck Sharp & Dohme. The above dates are for US product approvals.

[^] VAXELIS was developed in partnership with Sanofi Pasteur.



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HOSPITAL & SPECIALTY CARE

We are uniquely equipped to address large, intractable health issues that affect the world

Pipeline projects include areas where we are:

Building on our legacy in
HIV

Continuing our commitment to address the challenges in
neuroscience

Remain committed to finding new
antibiotics



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ANIMAL HEALTH

We work to discover, develop and deliver novel animal health products and solutions that improve the health of animals, ensure sustainable food supplies, protect public health and help people and pets enjoy their lives together.

ANIMAL DISEASE
REDUCES GLOBAL
FOOD PRODUCTION BY

20%

BY 2050 THERE WILL
BE AN ADDITIONAL

2B

PEOPLE IN THE
WORLD TO FEED



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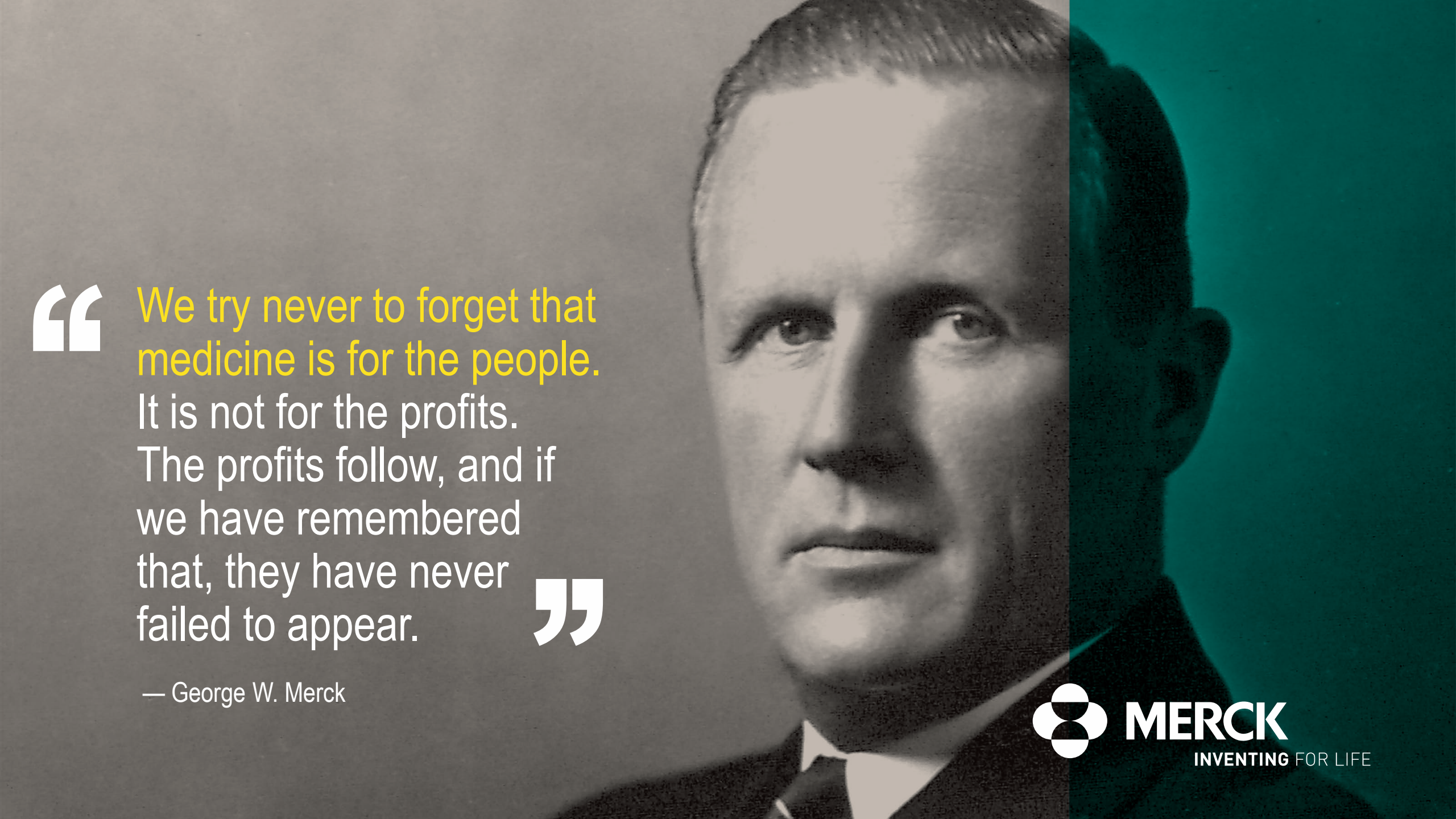
Animal Health Represents an Important Pillar of Growth

+7%* vs. prior year – growth across:

- Companion Animals – a broad-based portfolio
- Livestock – added impact from Vilsan and Vallée acquisitions



* Ex-exchange

A black and white portrait of George W. Merck, a man with short, dark hair, wearing a suit and tie. The portrait is the background of the entire image. On the right side, there is a vertical teal-colored band.

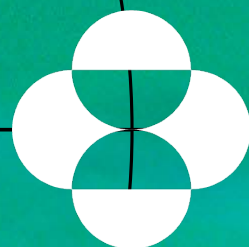
“ We try never to forget that
medicine is for the people.
It is not for the profits.
The profits follow, and if
we have remembered
that, they have never
failed to appear. ”

— George W. Merck



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RESEARCH AND DEVELOPMENT HIGHLIGHTS

ANNUAL SHAREHOLDERS MEETING
MAY 22, 2018

ROGER M. PERLMUTTER

MERCK ONCOLOGY

A LEADER IN
DELIVERING
BREAKTHROUGH
APPROACHES
THAT EXTEND AND
IMPROVE THE
LIVES OF PEOPLE
WITH CANCER



Establish KEYTRUDA as
foundational treatment
in monotherapy and in
combination across multiple
tumor types



Identify patients most likely to
benefit through evaluation of
biomarkers

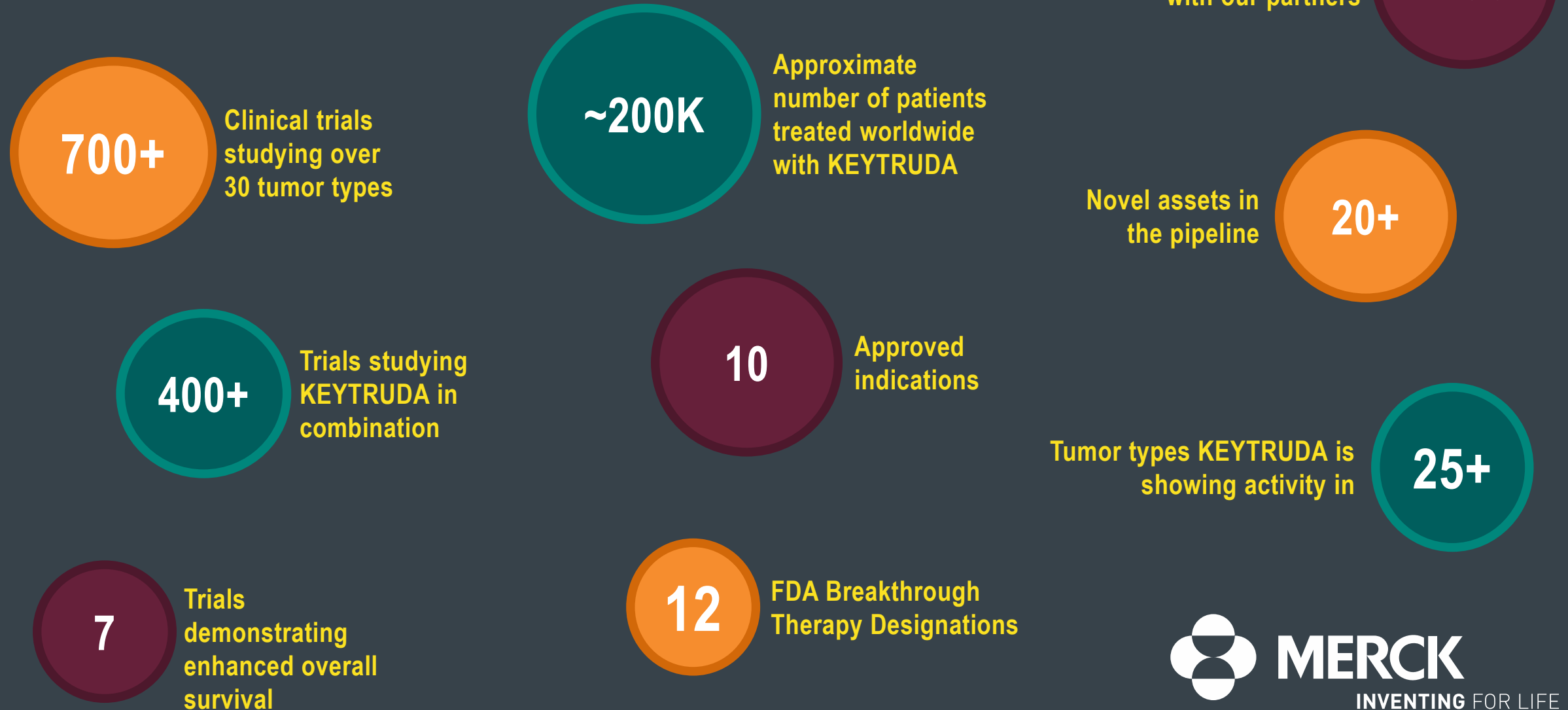


Form strategic
collaborations and
acquisitions to expand
oncology portfolio

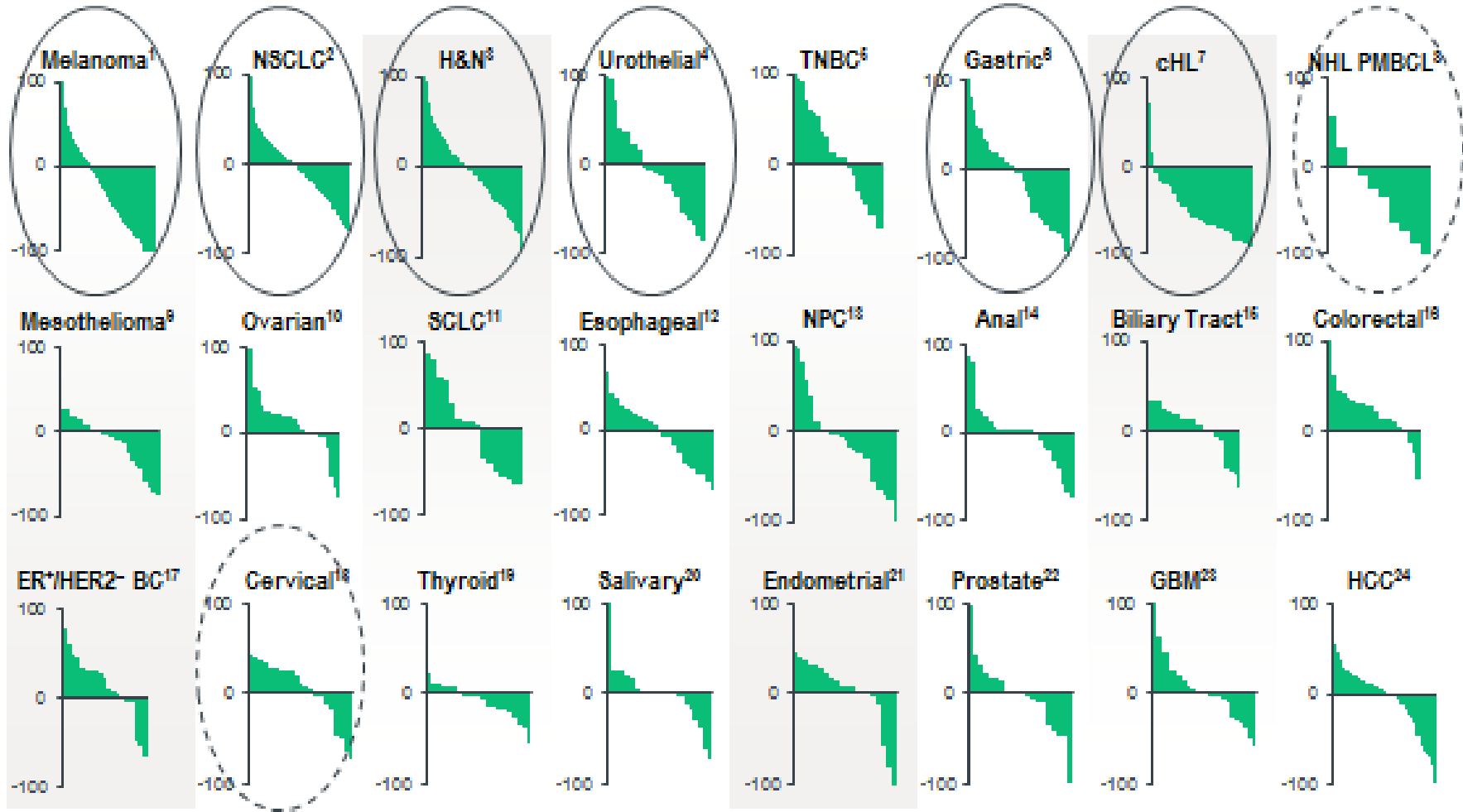


Explore combinations and
other novel agents to broaden
our portfolio in an effort to
reach more patients

Merck is Advancing Research to Improve Outcomes for Cancer Patients



Change From Base line in Tumor Size, %



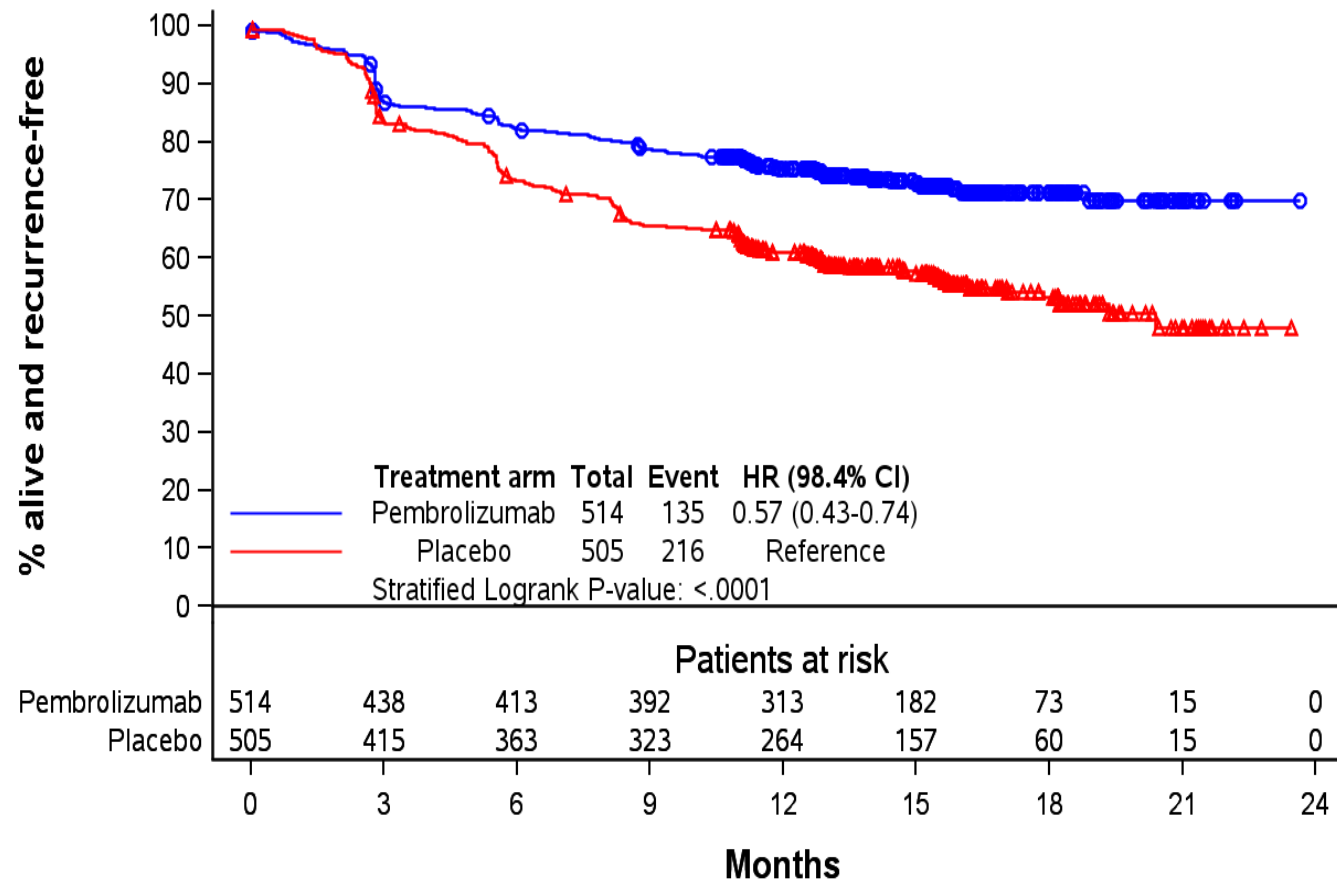
KEYTRUDA
DEMONSTRATED
ANTI-TUMOR
ACTIVITY IN
MORE THAN 25
CANCER TYPES



1. Daud A et al. ASCO 2015; 2. Garon EB et al. ESMO 2014; 3. Seiwert T et al. ASCO 2015; 4. Plimack E et al. ASCO 2015; 5. Nanda R et al. SABCS 2014; 6. Bang YJ et al. ASCO 2015; 7. Moskowitz C et al. ASH 2014; 8. Zinzani PL et al. ASH 2015; 9. Alley EA et al. AACR 2015; 10. Varga A et al. ASCO 2015; 11. Ott PA et al. 2015 ASCO; 12. Doi T et al. ASCO 2015; 13. Hsu C et al. ECC 2015; 14. Ott PA et al. ECC 2015; 15. Bang Y-J et al. ECC 2015; 16. O'Neil B et al. ECC 2015; 17. Rugo HS et al. SABCS 2015; 18. Frenel JS et al. ASCO 2016; 19. Mehnert JM et al. ASCO 2016; 20. Cohen R et al. ASCO 2016; 21. Ott PA et al. ASCO 2016; 22. Hansen AR et al. ESMO 2016; 23. Reardon D et al. SNO 2016; 24. Zhu A et al. ASCO GI 2018

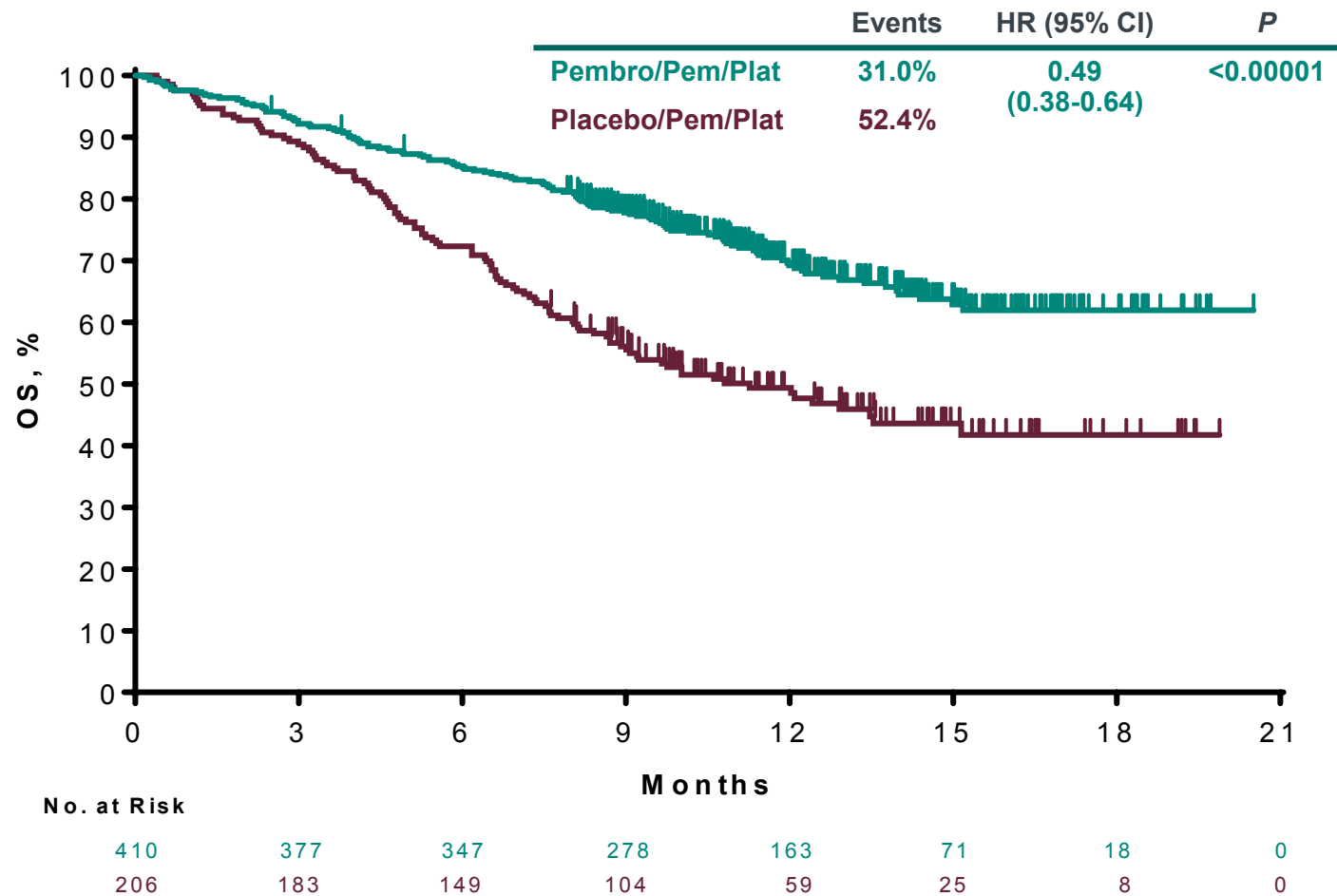
KEYTRUDA REDUCED THE RISK OF RECURRENCE WHEN ADMINISTERED AS ADJUVANT TREATMENT FOR PATIENTS WITH MELANOMA (KEYNOTE-054)

DATA
DEMONSTRATED
PROLONGED
RECURRENCE
FREE SURVIVAL
(RFS) BENEFIT



KEYNOTE-189:

KEYTRUDA PLUS CHEMOTHERAPY FOR NON-SQUAMOUS, NON-SMALL CELL LUNG CANCER



KEYTRUDA
REDUCED THE
RISK OF DEATH
BY HALF
COMPARED TO
CHEMOTHERAPY
ALONE

EXPANDING OUR ONCOLOGY PORTFOLIO THROUGH GLOBAL STRATEGIC COLLABORATIONS



LynparzaTM
olaparib

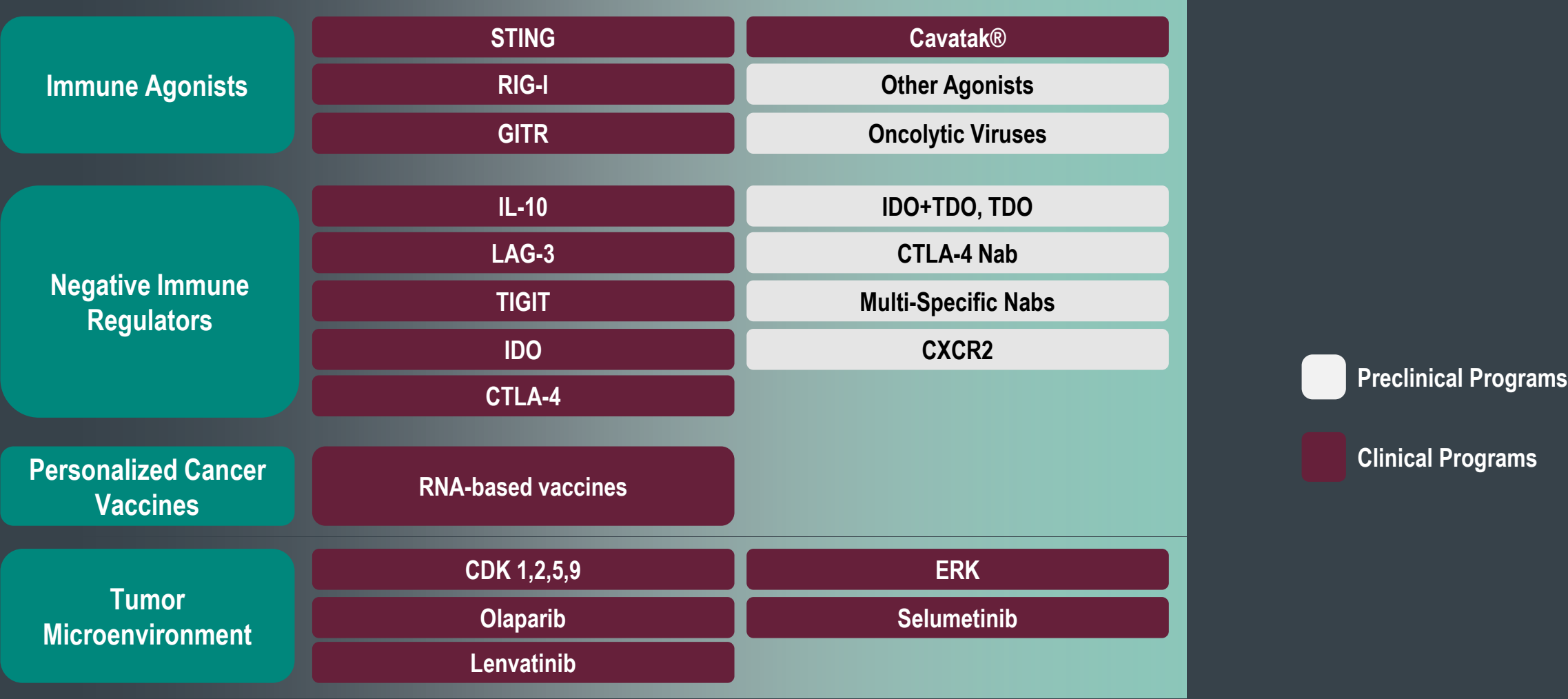
- World's first PARP inhibitor in breast cancer
- Significant long-term opportunity across multiple tumors and treatment settings
- Broad clinical development program

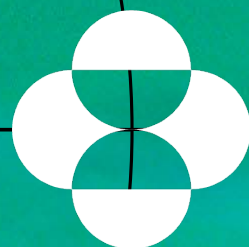


LENVIMA[®]
(lenvatinib) capsules | 10 mg and 4 mg

- Breakthrough Therapy Designation in combination with KEYTRUDA in RCC
- Approved as monotherapy in thyroid cancer and RCC; filed in HCC
- Combination studies in 11 indications across 6 tumor types

MERCK'S ONCOLOGY PIPELINE: 20+ NEW MOLECULES DESIGNED TO IMPROVE CANCER THERAPY





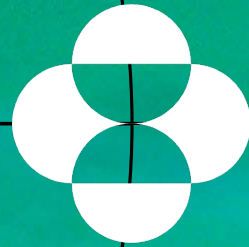
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ANNUAL SHAREHOLDERS MEETING

KEN FRAZIER, CHAIRMAN AND CEO

For voting results, call
1-800-CALLMRK
(1-800-225-5675)
Or visit www.merck.com

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