



Merck Oncology Overview

ASCO 2021



Agenda

- **Overview of Oncology Program |** Dr. Dean Li, President, Merck Research Labs
- **ASCO 2021 Highlights |** Dr. Roy Baynes, SVP and Chief Medical Officer, MRL
- **Late-stage Pipeline |** Dr. Vicki Goodman, VP of Late-stage Oncology Development, MRL
- **Early-stage Pipeline |** Dr. Eric Rubin, SVP of Early-stage Oncology Development, MRL
- **Commercial Update |** Jannie Oosthuizen, SVP of Oncology Human Health, Merck
- **Q&A**

Forward-looking statement of Merck & Co., Inc., Kenilworth, N.J., 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 the global outbreak of novel coronavirus disease (COVID-19); 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 2020 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).



Dr. Dean Li

President, Merck Research Labs

Uniquely positioned to drive long-term success and oncology leadership through continued execution and momentum

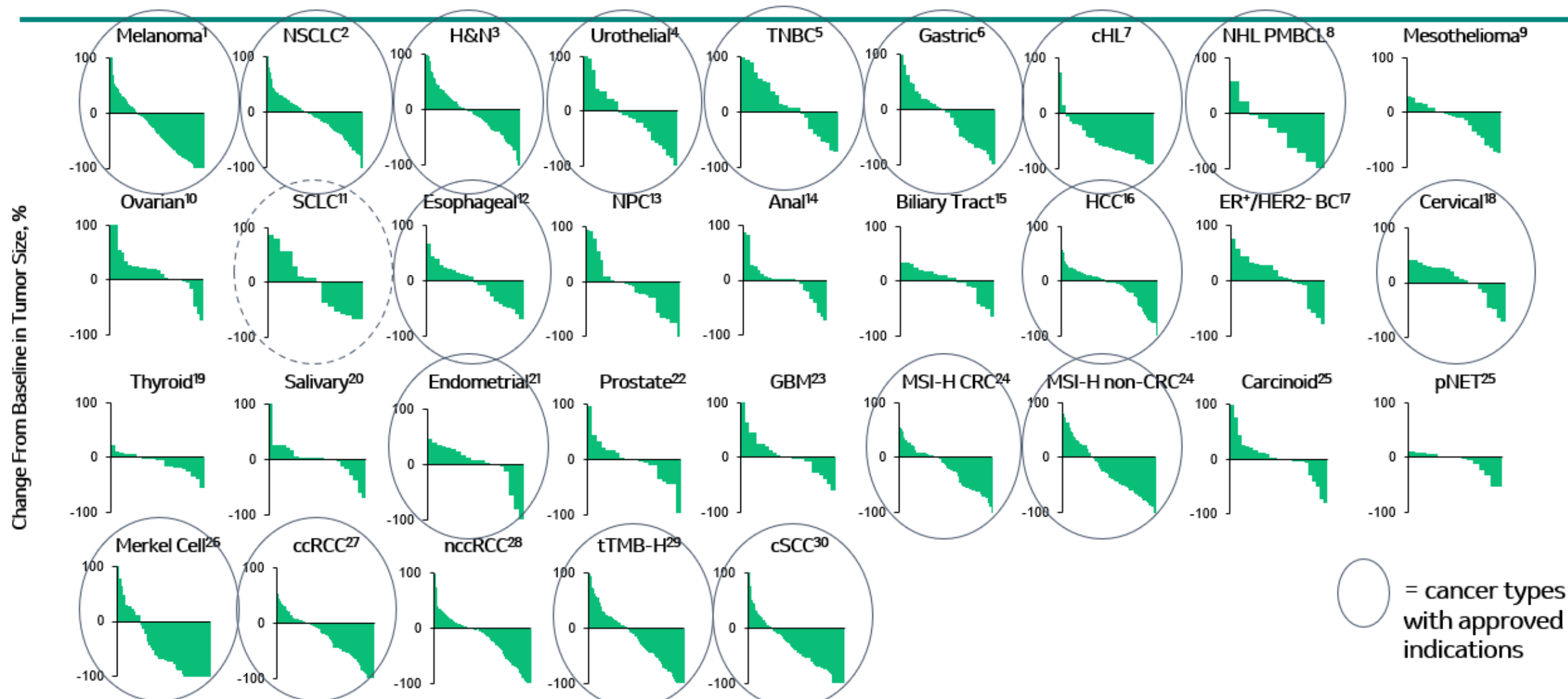
Broad oncology program with deep pipeline of differentiated early- and late-stage assets

World-class scientific expertise and ability to leverage KEYTRUDA's foundational stature

Extensive runway to advance science to reach more patients and solve for unmet need

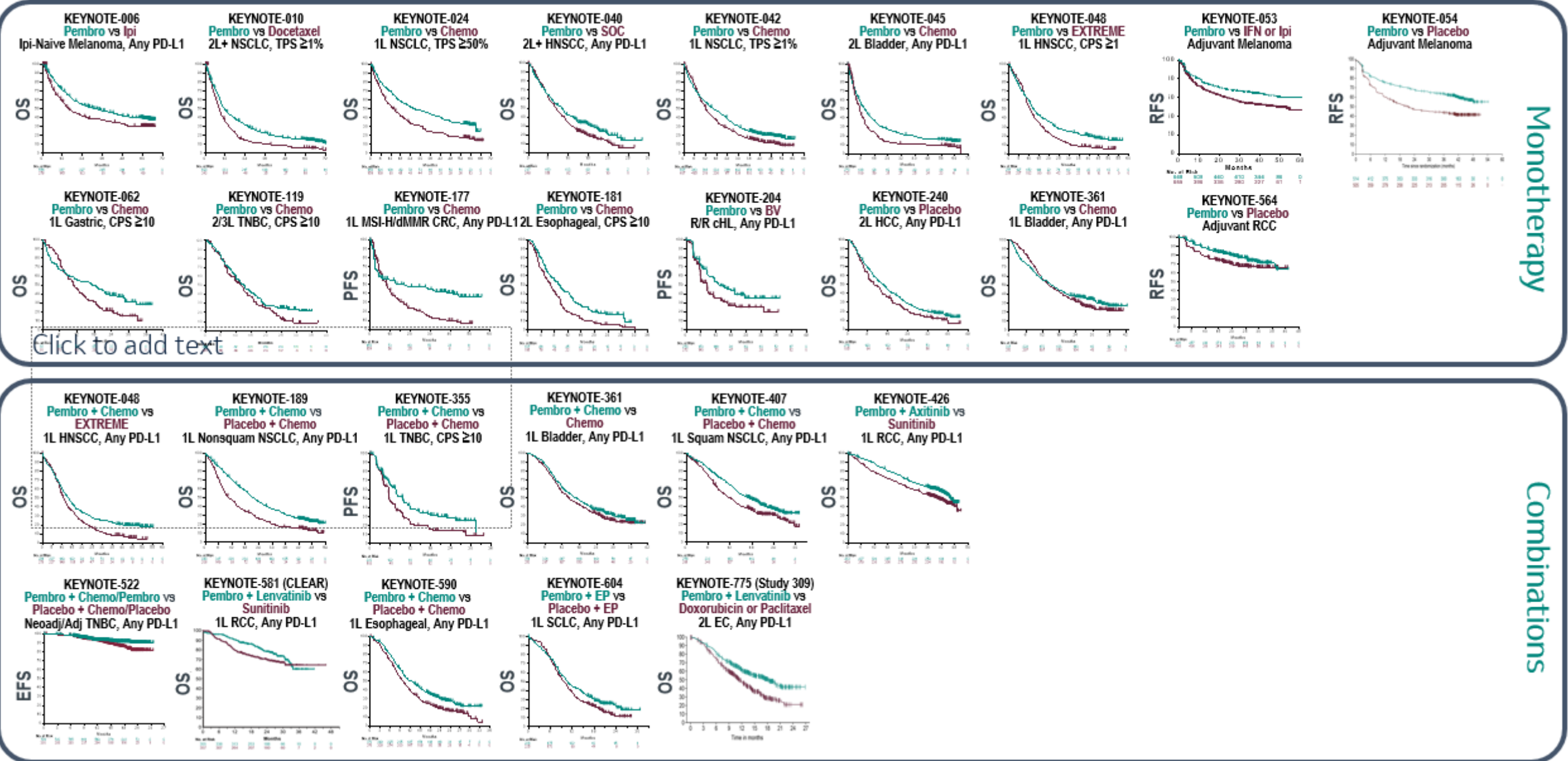
Unmatched commercial expertise to capitalize on significant opportunities

KEYTRUDA has now demonstrated activity in more than 30 different types of cancer defined by site of origin, histology, or genetic markers

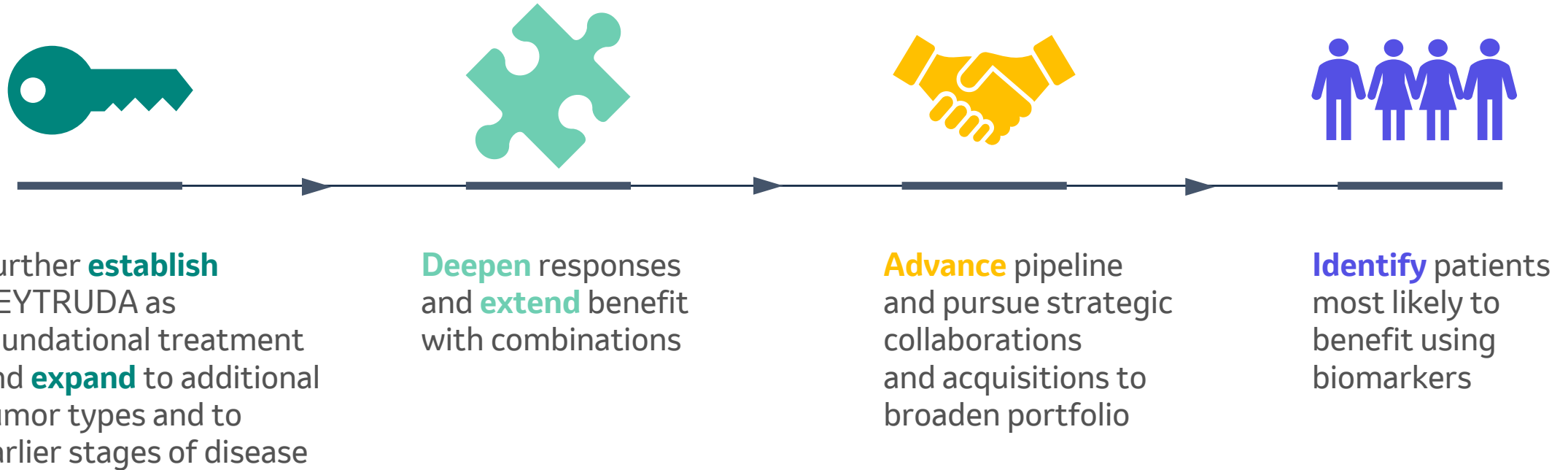


1. Daud A et al. ASCO 2015; 2. Garon EB et al. ESMO 2014; 3. Seiwert T et al. ASCO 2015; 4. Plimack E et al. ASCO 2015; 5. Nanda R et al. SABCs 2014; 6. Bang YJ et al. ASCO 2015; 7. Moskowitz C et al. ASH 2014; 8. Zinzani PL et al. ASH 2015; 9. Alley EA et al. AACR 2015; 10. Varga A et al. ASCO 2015; 11. Ott PA et al. 2015 ASCO; 12. Doi T et al. ASCO 2015; 13. Hsu C et al. ECC 2015; 14. Marabelle A et al. ASCO 2020; 15. Bang Y-J et al. ECC 2015; 16. Zhu A et al. ASCO 2018; 17. Ruqo HS et al. SABCs 2015; 18. Frenel JS et al. ASCO 2016; 19. Mehnerl 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. Diaz L et al. ESMO 2017; 25. Mehnerl J et al. ESMO 2017; 26. Nghiem P et al. ASCO 2018; 27. McDermott DF et al. ASCO 2018; 28. McDermott DF et al. ASCO-GU 2019; 29. Marabelle A et al. ESMO 2019; 30. Grob JJ et al. ESMO 2019.

KEYTRUDA monotherapy and in combination improved cancer outcomes in Phase 3 studies across a broad range of malignancies



Broad oncology strategy to improve outcomes for cancer patients globally

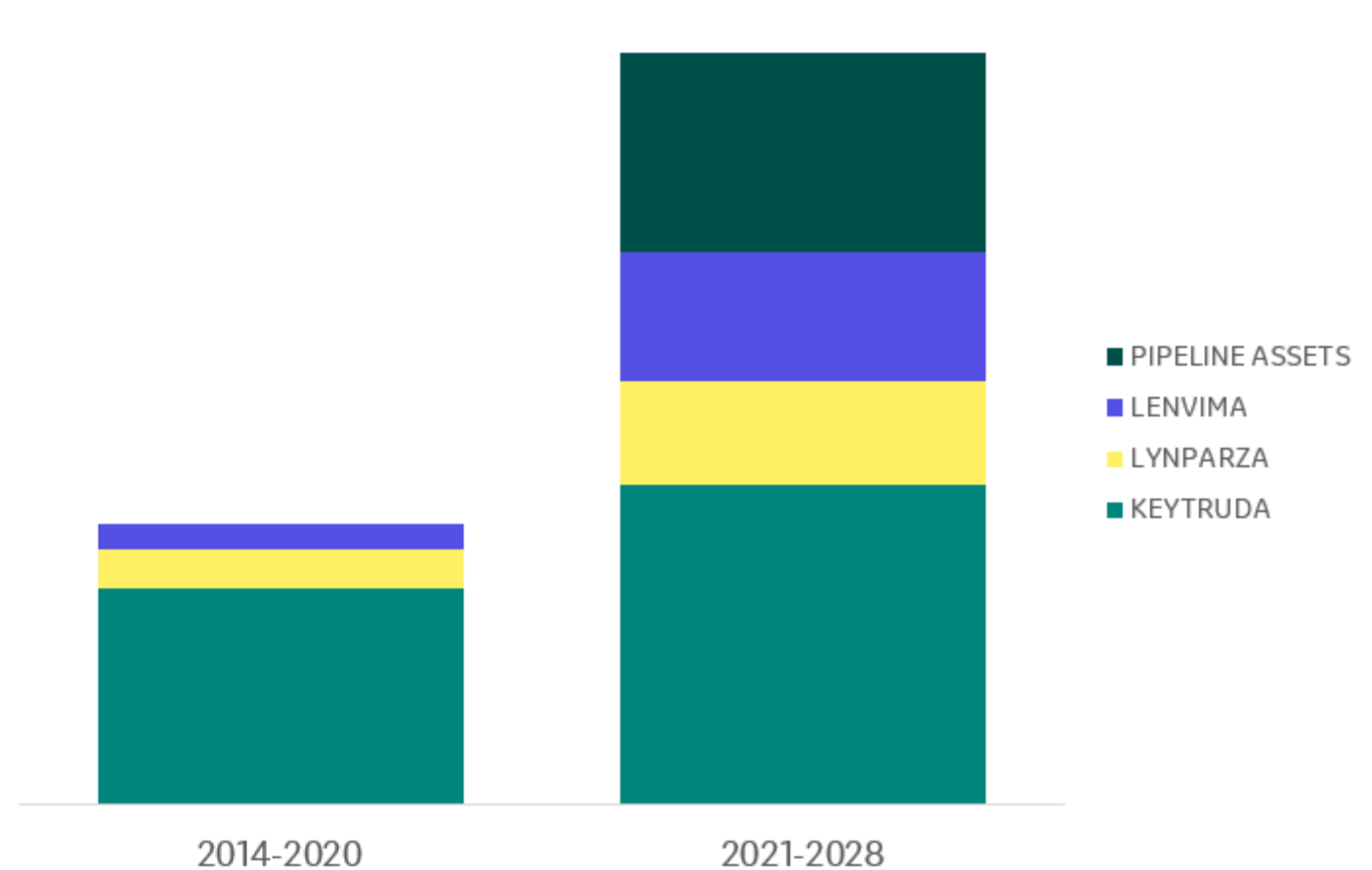


Industry's broadest immuno-oncology development program aimed to advance standard-of-care and address unmet needs



More than tripling the number of new indications and launches across oncology portfolio over the next eight years

>90
potential approvals
expected by 2028
with more than 50
expected by 2025



Shaping the future of oncology by leveraging our robust portfolio and pipeline...

Further establish KEYTRUDA as a foundational anti-PD-1 cancer treatment in monotherapy and in combination regimens

KEYTRUDA
(pembrolizumab) Injection 100 mg

Diversify through partnerships with PARPi, VEGF TKI, HER2 TKI, LIV-1 ADC

Lynparza
olaparib capsules 50 mg
Koselugo
(selumetinib) 10 mg & 25 mg capsules
AstraZeneca

LENVIMA
(lenvatinib) capsules 10 mg and 4 mg
RESULTS THAT MATTER
Eisai

TUKYSA
tucatinib
50 mg | 150 mg tablets

Ladiratuzumab Vedotin (LV)

Diversify through acquisitions of BTK, HIF-2 α , ROR-1 ADC assets

ARQULE
BTK
(MK-1026)

Peloton Therapeutics
HIF-2 α
(MK-6482/belzutifan)

VELOSPIO
ROR-1 ADC
(MK-2140)

Expand the IO-IO strategy through combinations with internal assets

CTLA-4
(MK-1308/
quavonlimab)

TIGIT
(MK-7684/
vibostolimab)

LAG-3
(MK-4280/
favezelimab)

ILT4
(MK-4830)

Expand into cell-based therapies & T/NK cell engagers

Dragonfly

artiva

Biotherapeutics

JANUX

Dr. Roy Baynes

SVP and chief medical officer, MRL

ASCO 2021: new, long-term and early data from broad portfolio

New Data Including in Early-Stage Disease...

New Phase 3 data for KEYTRUDA in Adjuvant RCC (KN-564)

New Lynparza data in adjuvant breast cancer (OlympiA)

Final analysis of OS and RFS in Phase 3 KN-053 studying adjuvant KEYTRUDA in melanoma patients

First-time presentation of KN-811 in HER2+ gastric/GEJ patients

Recent top-line from KN-522 in adjuvant and neoadjuvant TNBC

... Demonstrating Patient Benefit ...

New outcomes data from KN-581 and KN-775 supporting benefit from the combination in RCC and endometrial carcinoma patients

Long-term survival data for KEYTRUDA in urothelial carcinoma based on 5-year follow-up from KN-045 and KN-052

Final analysis from KN-426 in front-line RCC

... And Progressing Novel Mechanisms

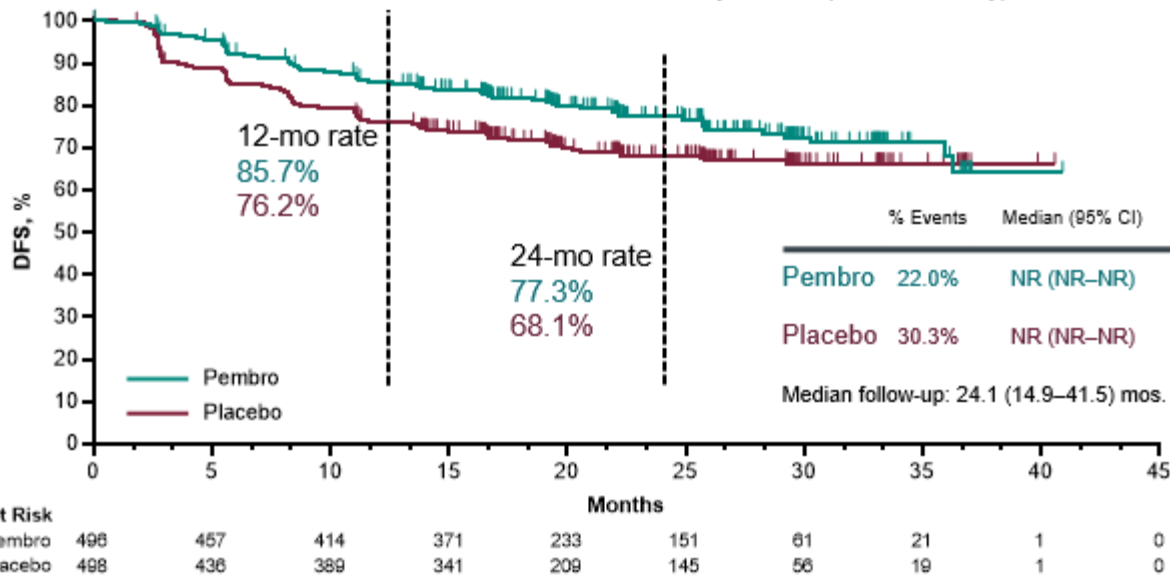
First-time presentation of Phase 1 data studying favezelimab (MK-4280) in MSS CRC patients

Additional data from belzutifan (MK-6482) in RCC and non-RCC malignancies

KEYNOTE-564: new data in adjuvant RCC demonstrated clinically meaningful improvement in disease-free survival compared to placebo

Disease-free survival in ITT population

HR 0.68 (95% CI, 0.53–0.87); $P = 0.0010^a$

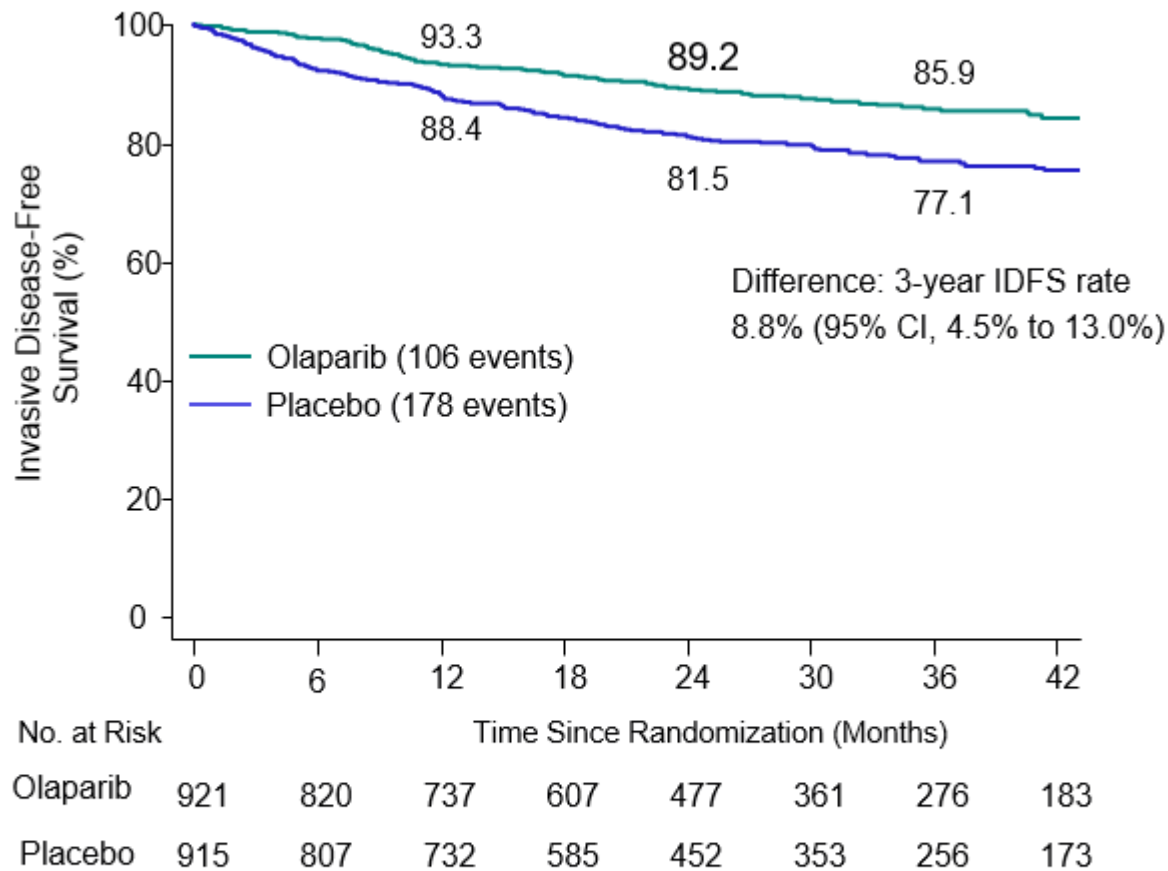


KEYTRUDA following surgery reduced risk of recurrence or death by 32% compared to placebo for patients with RCC

- Favorable trend in overall survival (OS) was observed with a 46% reduction in the risk of death with KEYTRUDA as compared to placebo (HR=0.54 [95% CI, 0.30–0.96]; $p=0.0164$).
- First anti-PD-1 therapy to show positive results for adjuvant immunotherapy in RCC
- Nearly half of high-risk RCC patients experience disease recurrence after surgery

^aCrossed prespecified p-value boundary for statistical significance of 0.0114.
ITT population included all randomized participants. NR, not reached.
Data cutoff date: December 14, 2020.

OlympiA: Lynparza in adjuvant breast cancer changing survival expectations in certain early-stage patients



Lynparza reduced risk of invasive disease recurrence or death by 42% in gBRCAm High-risk HER2- early-stage breast cancer based on Phase 3 study

- Stratified HR=0.58 (99.5% CI, 0.41 to 0.82); P<0.0001
- At three years since trial initiation, 85.9% of patients treated with Lynparza were free of invasive disease versus 77.1% on placebo (difference 8.8%; 99.5% CI 4.5%, 13.0%)
- Improvement in secondary endpoint of distant disease recurrence or death by 43% in the ITT population (HR=0.57 [99.5% CI, 0.39-0.83]; p<0.0001)
- Favorable trend in OS with a 32% reduction in the risk of death (HR=0.68 [99% CI, 0.44 to 1.05]; p=0.024)

Favezelimab (LAG-3): ASCO data shows anti-tumor activity in MSS CRC patients; advancing into Phase 3 study as co-formulation with KEYTRUDA

Antitumor Response

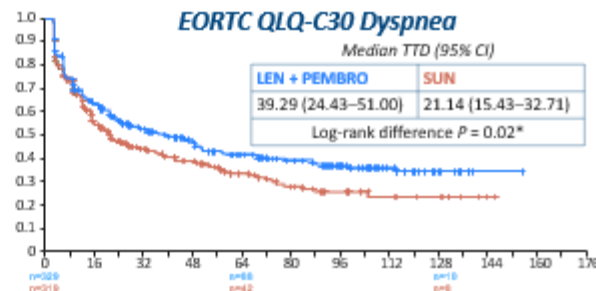
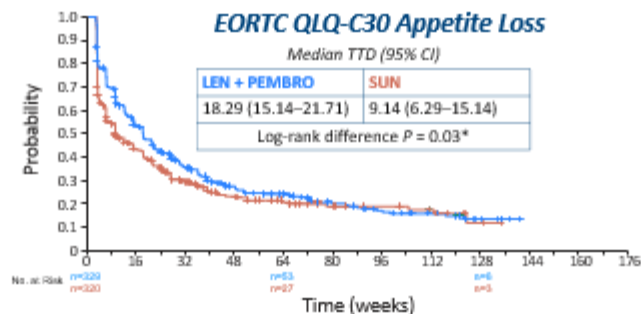
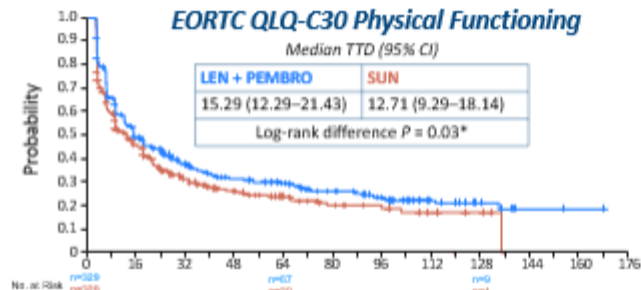
Favezelimab + Pembrolizumab N = 80				
		PD-L1 CPS ≥1 N = 36		PD-L1 CPS <1 N = 35
Best response	n	% (95% CI)	n	% (95% CI)
ORR (CR + PR)	4	11 (3.1-26.1)	1	2.9 (0.1-14.9)
Best overall response				
CR	1	2.8 (0.1-14.5)	0	0 (0.0-10.0)
PR	3	8.3 (1.8-22.5)	1	2.9 (0.1-14.9)
SD	9	25.0 (12.1-42.2)	4	11.4 (3.2-26.7)
PD	15	41.7 (25.5-59.2)	24	68.6 (50.7-83.1)
DCR (CR+PR+SD)	13	36.1 (20.8-53.8)	5	14.3 (4.8-30.3)
Median DOR		10.6 months (range, 5.6-12.5)		

High unmet need in sick patients treated at later stages with low survival rates. Limited treatment options.

- Responses seen in additional tumor types

^aNo patient receiving favezelimab alone responded; No response occurred in patients with missing PD-L1 status (N=9); ^bDoes not include patients with missing PD-L1 status (N=9).

KEYNOTE-581: outcomes data further supports benefit of combination for patients with first-line RCC

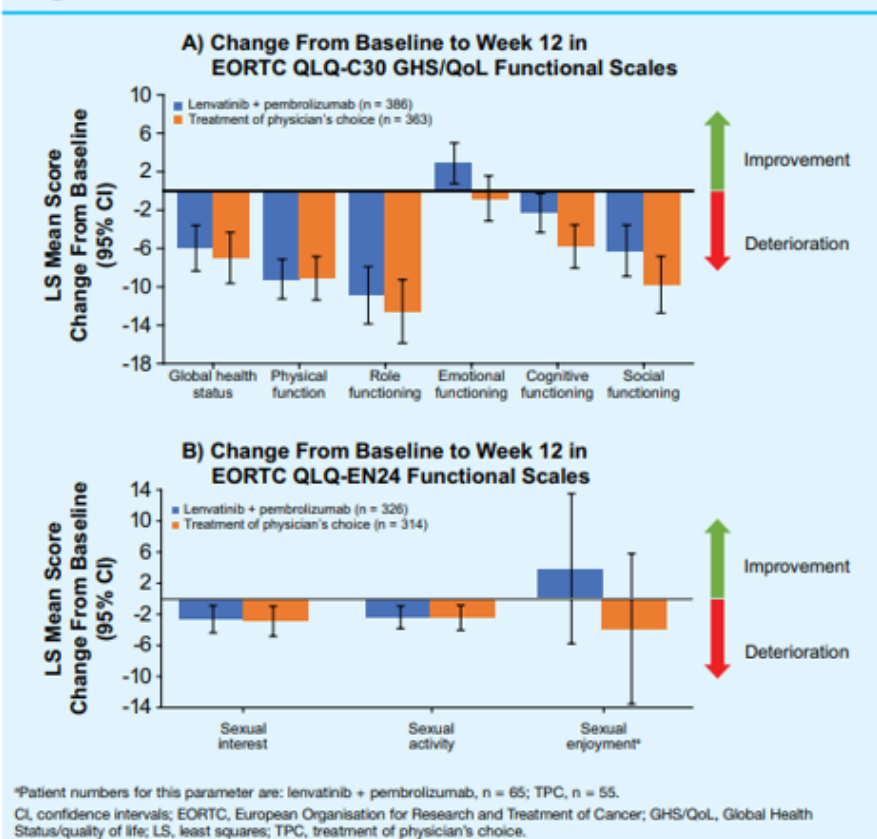


KEYTRUDA plus LENVIMA significantly improved several health-related quality of life (HRQoL) measures compared with sunitinib in RCC patients

- At ASCO GU 2021, data on the combination was highlighted demonstrating significant improvements in PFS (HR=0.39 [95% CI: 0.32-0.49]; $p < 0.001$), and OS (HR=0.66 [95% CI: 0.49-0.88]; $p = 0.005$) vs sunitinib in the same patient population

KEYNOTE-775: outcomes data further supports benefit of combination for patients with previously-treated endometrial carcinoma

Figure 3. Functional Scales

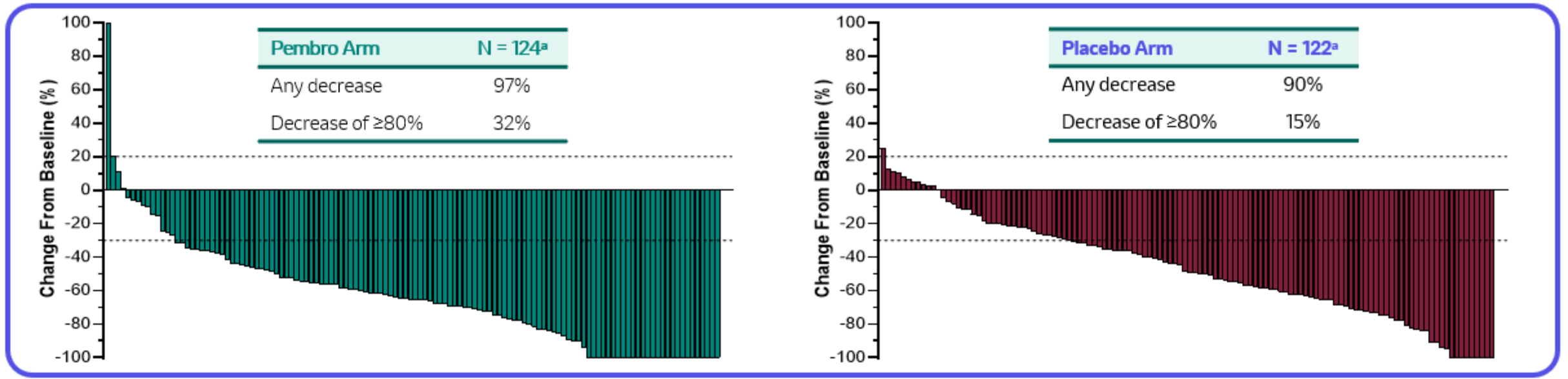


Changes from baseline to week 12 in EORTC QLQ-C30 GHS/QoL and EORTC QLQ-EN24 functional scales where a higher score denotes better quality of life or function.

KEYTRUDA plus LENVIMA shows an overall favorable benefit/risk profile compared with physician's choice treatment in endometrial carcinoma patients based on HRQoL data

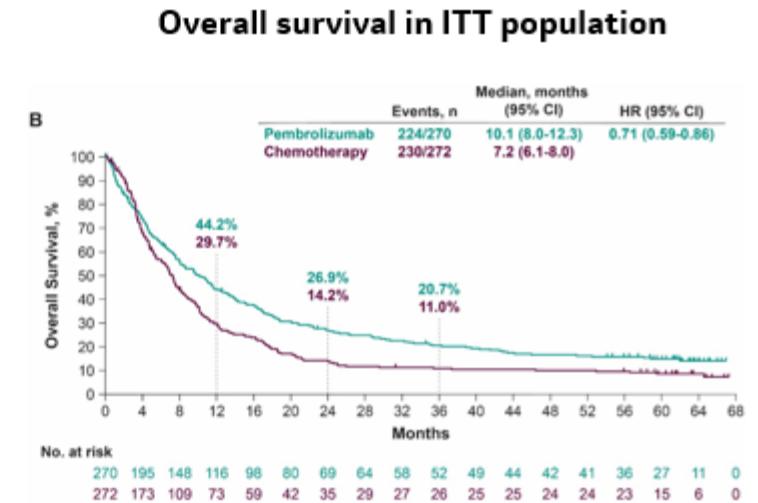
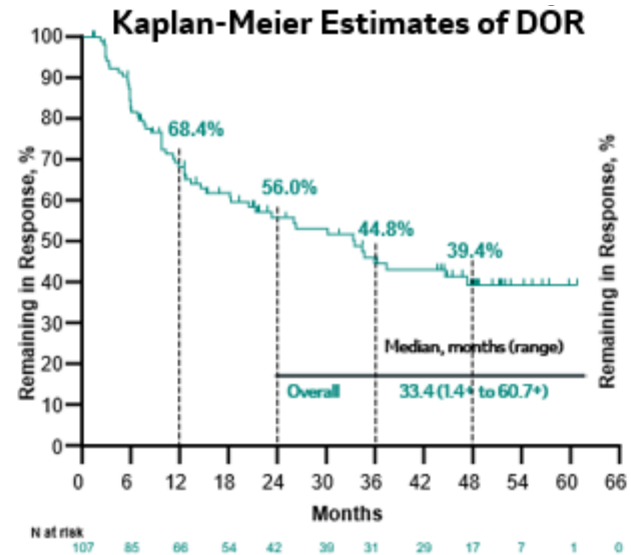
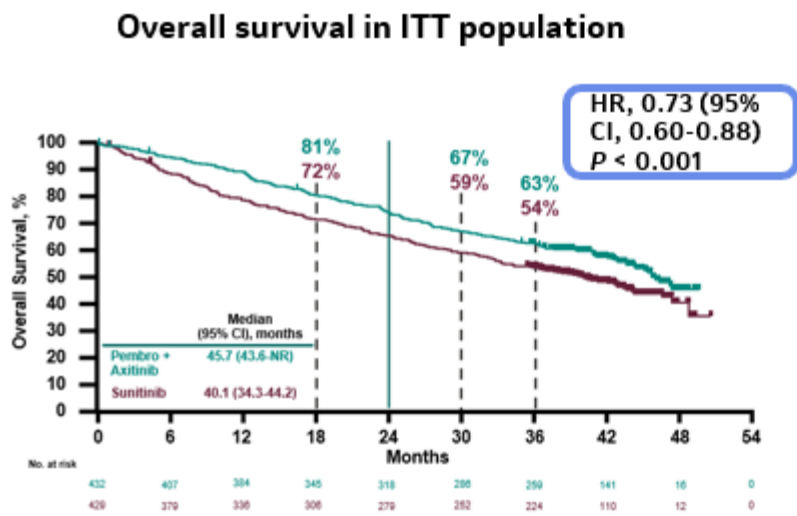
- At SGO 2021, data on the combination was highlighted demonstrating significant improvements in PFS (HR=0.56 [95% CI: 0.47-0.66]; $p < 0.0001$), and OS (HR=0.62 [95% CI: 0.51-0.75]; $p < 0.0001$) vs physician's choice treatment

KEYNOTE-811: KEYTRUDA+trastuzumab+chemotherapy becomes new treatment option for HER2+ metastatic gastric/GEJ cancer



- Results support FDA accelerated approval in May 2021
- Pembrolizumab plus trastuzumab and chemotherapy provided a 74.4% ORR that resulted in a statistically significant, clinically meaningful 22.7% improvement in ORR compared with placebo plus trastuzumab and chemotherapy
- Responses to pembrolizumab plus trastuzumab and chemotherapy were deeper and more durable
- Study is continuing as planned, and analyses of OS and PFS will be performed in the future in accordance with the analysis plan

Long-term follow-up data confirm durable benefits of KEYTRUDA monotherapy or in combination across important indications



1L RCC

In a final analysis of KN-426 (42 months follow-up) KEYTRUDA+axitinib continued to demonstrate clinically significant improved efficacy compared with sunitinib for previously untreated renal cell carcinoma patients (CR rate: 10% vs 3.5%)

1L Bladder

Updated results from KEYNOTE-052 studying cisplatin-ineligible patients with untreated advanced UC after 5 years of follow-up were consistent, showing an ORR of 29% across the entire population (initial results showed an ORR of 24%)

2L Bladder

After at least 5 years of follow-up, KEYTRUDA continued to show improved OS, ORR and DOR compared to chemotherapy in patients with advanced, platinum-resistant/refractory urothelial carcinoma



Dr. Vicki Goodman

Vice President, Late-stage Oncology

Select assets from late-stage oncology program

belzutifan
(HIF-2 α)

vibostolimab
(TIGIT)

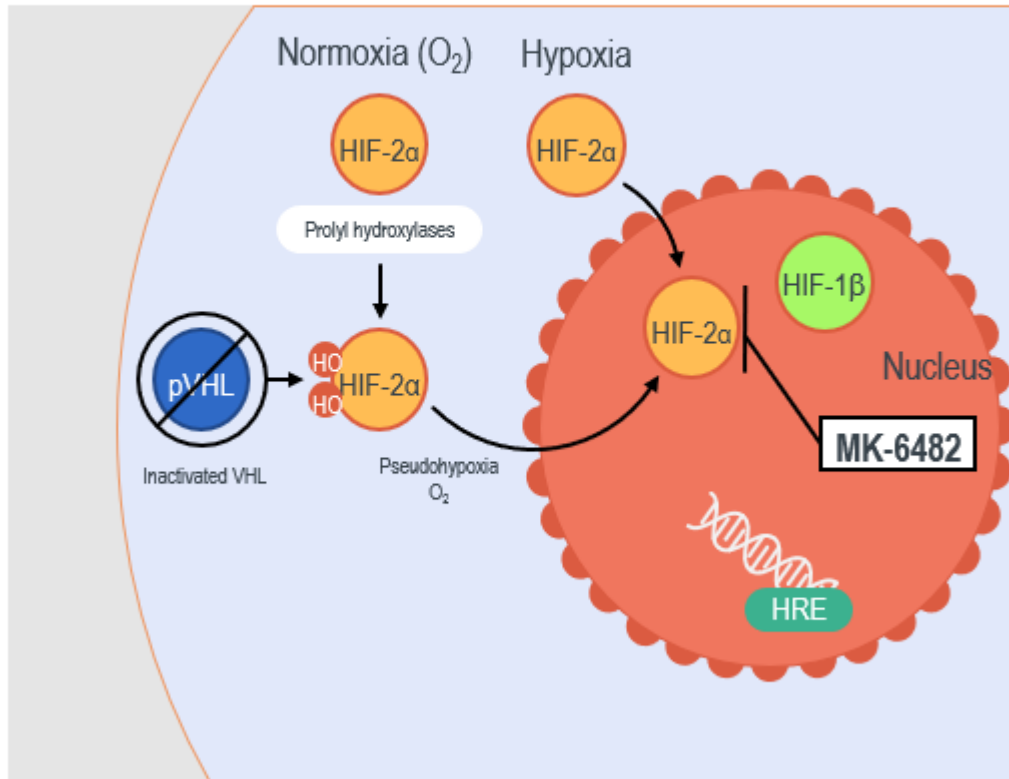
quavonlimab
(CTLA-4)

favezelimab
(LAG-3)

MK-1026
(BTK)

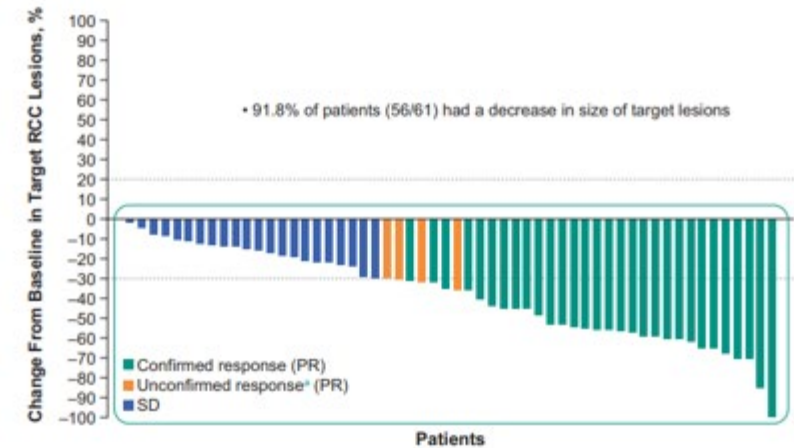
Belzutifan: continues to demonstrate efficacy in VHL-disease associated RCC and potential in other tumor types

MK-6482 Binds to HIF-2 α and Prevents Its Heterodimerization with HIF-1 β



Updated data at ASCO showed durable responses and disease control in VHL-RCC

Figure 2. Maximum Change From Baseline in Sum of Target RCC Lesions by IRC



- Belzutifan, first-in-class HIF-2 α Inhibitor under FDA priority review with Sept. PDUFA; breakthrough therapy and orphan drug designations also granted
- MHRA granted first ever Innovation Passport, part of the Innovative Licensing and Access Pathway (ILAP)
- Advanced into 3 pivotal Phase 3 studies in advanced RCC

Vibostolimab (TIGIT): advancing clinical development of co-formulation based on compelling early data

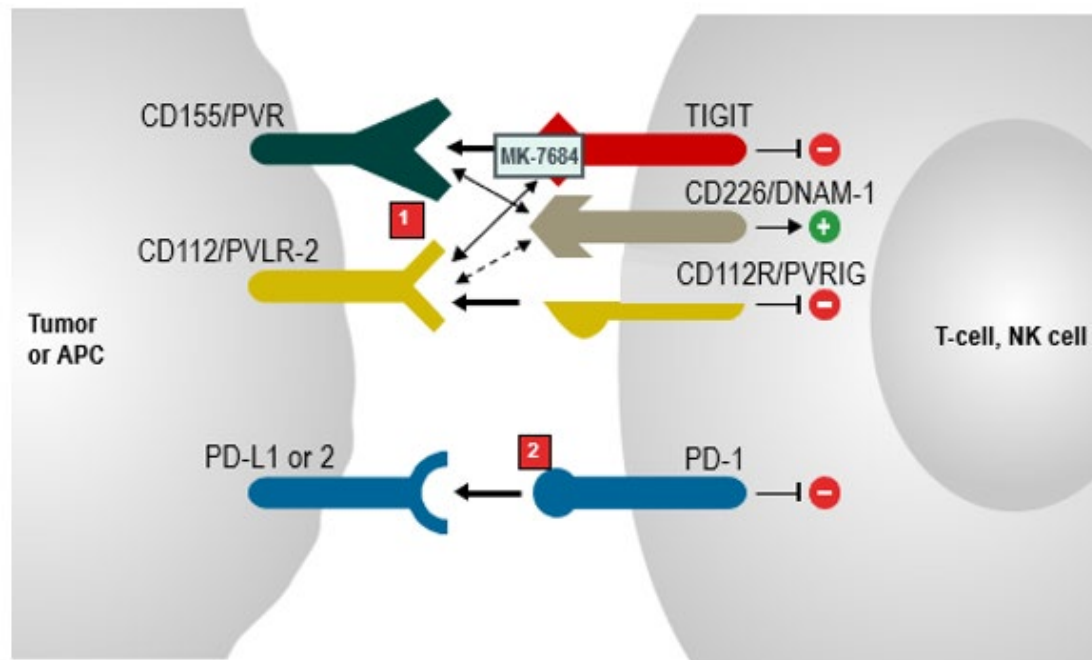
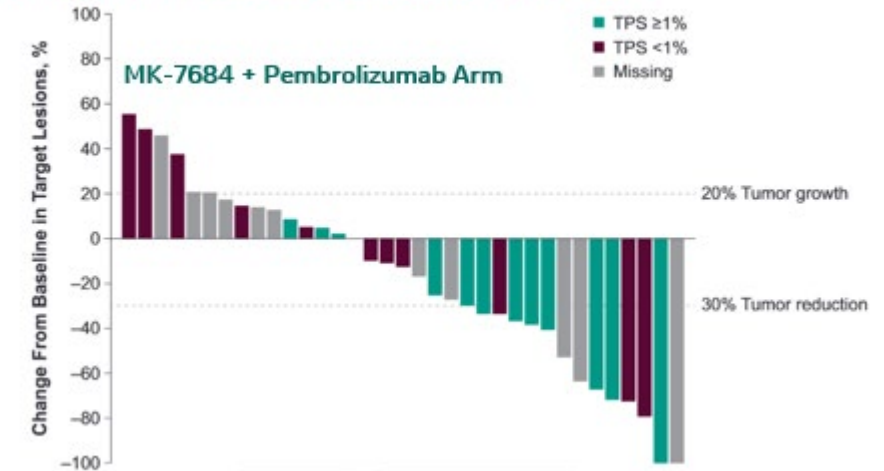
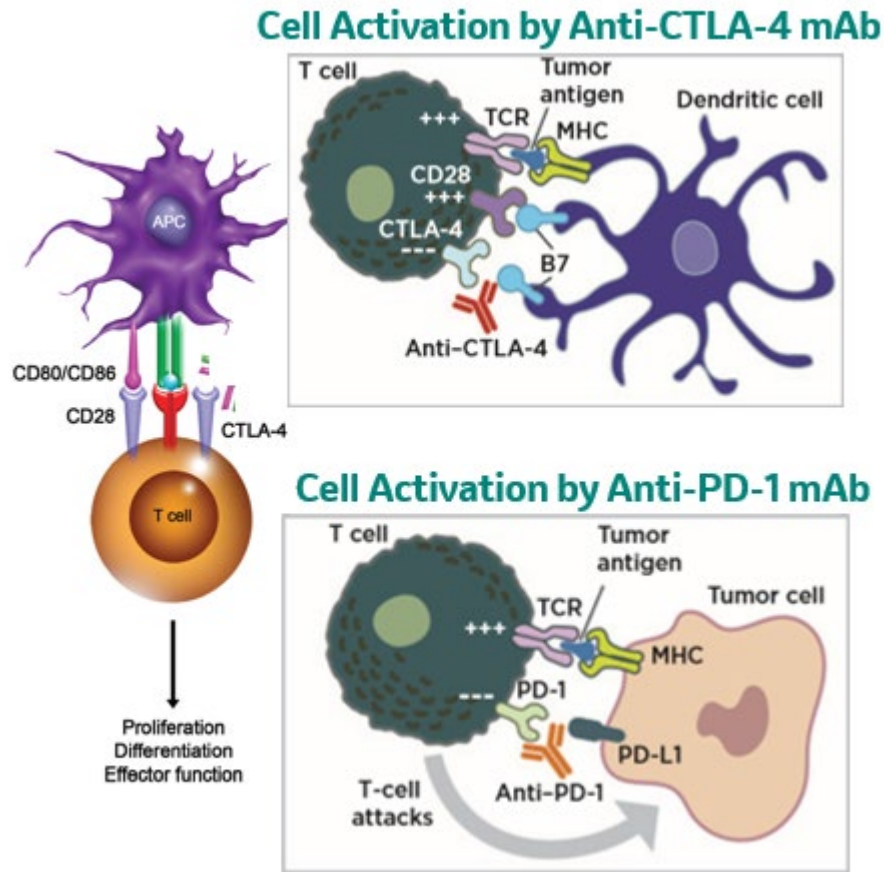


Figure 1. Best Change From Baseline in Target Lesions Based on Investigator Assessment per RECIST v1.1 in Patients With Anti-PD-1/PD-L1-Naïve NSCLC^a



- Presented vibostolimab combination data at ESMO 2020 in PD-1/L1-naïve patients; more to come
- New Phase 3 study in PD-L1+ mNSCLC patients
- New Phase 2 biomarker study in mNSCLC patients
- Additional signal-finding studies under way across multiple other tumor types

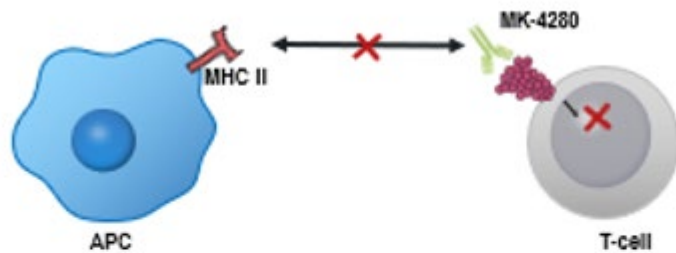
Quavonlimab (CTLA-4): encouraging co-formulation data in patients with RCC leads to late-stage development



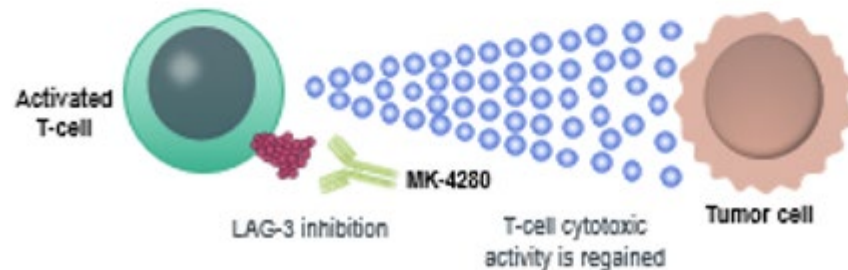
- Evaluating as co-formulation with KEYTRUDA in 6 studies across 5 tumor types, including RCC, HCC, MSI-H CRC and Melanoma
- Newly posted MSI-H CRC Phase 2 study
- Exploring additional combinations with assets in late-stage pipeline, including LENVIMA and belzutifan in patients with RCC
- Encouraging data from Phase 1 studying co-formulation in patients with advanced solid tumors presented at ESMO 2019

Favezelimab (LAG-3): early encouraging co-formulation data in MSS CRC patients leads to Phase 3 advancement

MK-4280 Blocks the Interaction Between MHC Class II Receptors and LAG-3



MK-4280 Could Inhibit LAG-3 Upregulation Restoring T-cell Effector Functions Targeting Tumor Cells



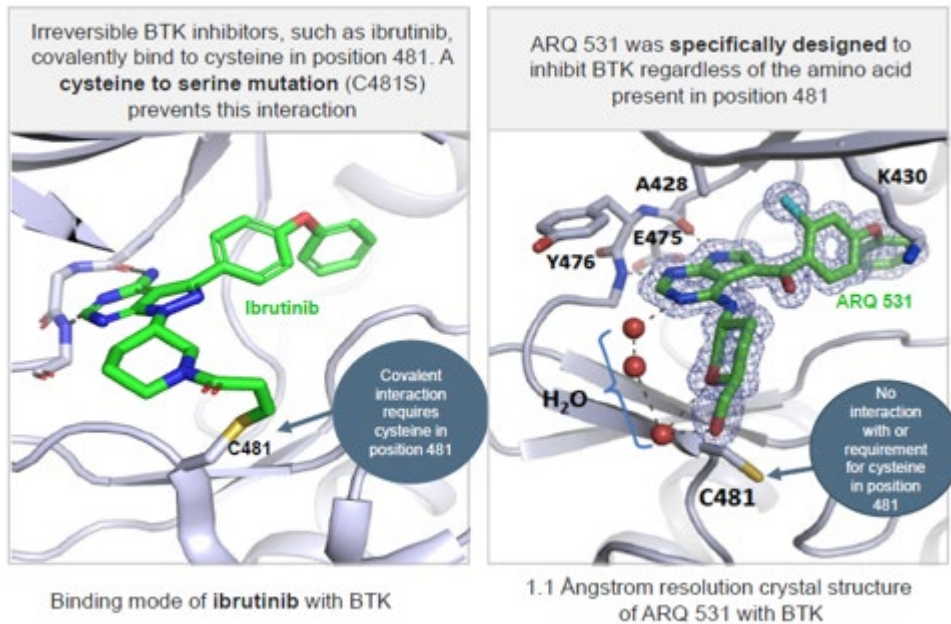
- Encouraged by early data presented at SITC 2018 and most recently the data at ASCO 2021
- Advancing to Phase 3 in 2H 2021 in co-formulation with KEYTRUDA in MSS CRC
- One of three assets being studied in co-formulation with KEYTRUDA
- Responses observed in additional tumor types

^aEvaluated in patients with measurable disease at baseline and ≥ 1 evaluable post-baseline imaging assessment (n = 18 for MK-4280 monotherapy, n = 14 for MK-4280 + pembrolizumab).

Database Cutoff Date: Jun 12, 2018.

1. [Lakhani N et al. Presented at SITC 2018.](#)

MK-1026 (BTK): plans to advance into studies with registrational intent based on strong early data and optimized dose



- Encouraged by early data presented at ASH 2019
- Phase 2 under way to further understand and optimize dose and efficacy
- Planning for registrational trials is under way
- Demonstrates broader interest in hematologic malignancies



Dr. Eric Rubin

SVP, Early-stage Oncology

Early oncology pipeline* includes more than 25 investigational immuno-therapeutic candidates, including novel combinations with KEYTRUDA

		Pre-Clinical	Phase 1	Phase 2
Immune Agonists	<i>Molecules designed to stimulate immune system functions, such as enhancing the activity of anti-tumor immune cells</i>		STING agonist (MK-2118)	CD-27 agonist (MK-5890)
Inhibition of Negative Immune Regulators	<i>Blocking the action of molecules that suppress the immune system may trigger a more robust anti-tumor response</i>		ILT-3 antagonist (MK-0482)	ILT-4 antagonist (MK-4830) LAG-3 (favezelimab/MK-4280) ▶ CTLA-4 (quavonlimab/MK-1308) ▶ TIGIT (vibostolimab/MK-7684) ▶
Personalized Cancer Vaccines	<i>Therapeutic vaccines based on patients' specific cancer could potentially prime the immune system to recognize certain characteristics and attack the cancer cells</i>	KRAS - Taiho/Astex	KRAS (Moderna) (V941 / mRNA-5671)	RNA-based vaccine (Moderna) (V940 / mRNA-4157)
Tumor Microenvironment Modulators	<i>Regulating the environment around tumors, including through ADCs, may influence tumor growth and its interaction with the immune system</i>	Cytokine derivatives (Sutro)		HIF-2α Inhibitor (MK-6482/belzutifan) ▶ BTK Inhibitor (MK-1026) AKT Inhibitors (MK-7075 & MK-4440) ROR-1 (MK-2140) LIV-1 (MK-6440) ERK Inhibitor (MK-8353)
Cell-based therapies & T/NK cell engagers	<i>Use of allogeneic T and NK cells and T/NK cell engagers to attack tumors</i>	Cell-based therapies (A2, Artiva) T/NK cell engagers (Janux, Dragonfly)		

*Select compounds only

Select assets from early-stage oncology program

ILT-4
antagonist
(MK-4830)

CD-27
agonist
(MK-5890)

ROR-1 ADC
(MK-2140)

LIV-1 ADC
(MK-6440)

MK-4830 (ILT-4 antagonist): first-time initial efficacy data from Phase 1 dose escalation study shows potential for asset in solid tumors

Investigator Assessed Confirmed Response per RECIST v1.1

n, (%)	MK-4830 n = 50	MK-4830 + Pembrolizumab n = 34	Crossover to MK-4830 + Pembrolizumab n = 18
ORR	1 (2)	8 (24)	1 (6)
CR	0	1 (3)	0
PR	1 (2)	7 (21)	1 (6)
SD	11 (22)	9 (26)	1 (6)
PD	34 (68)	16 (47)	3 (17)
No RECIST assessment ^a	4 (8)	1 (3)	13 (72) ^b

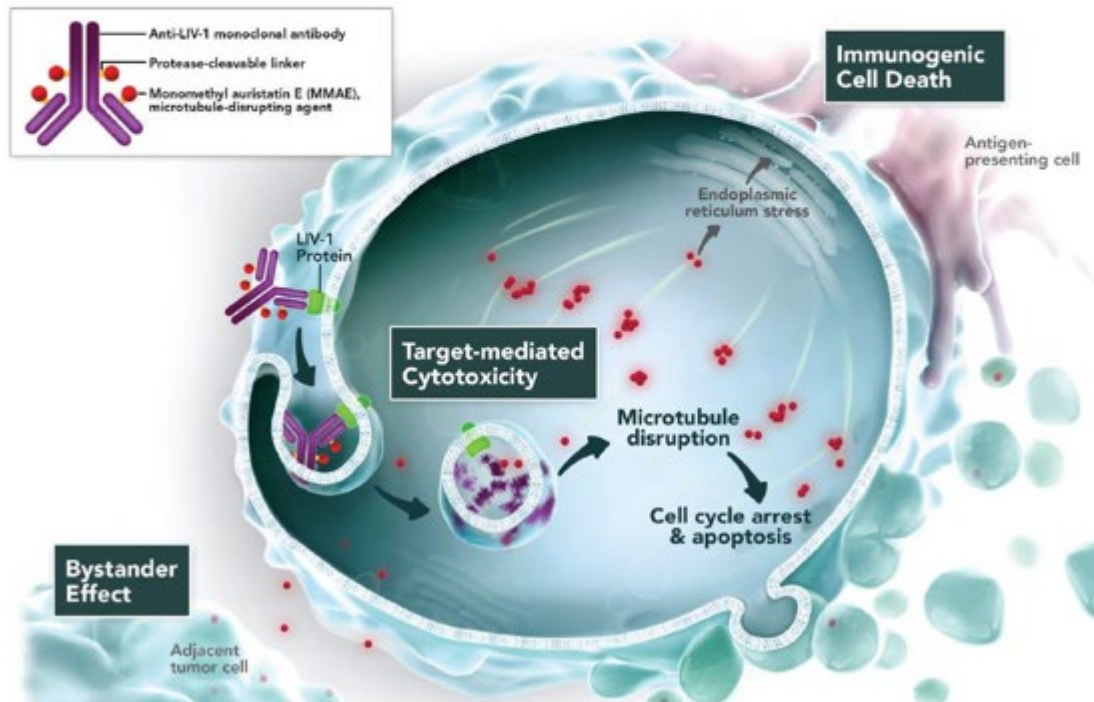
ILT-4 preliminary efficacy data showed an ORR of 24% (8/34) in patients who received MK-4830 in combination with KEYTRUDA

Among 11 patients who progressed on prior PD-1 therapy, there were 5 responses (45%)

Under evaluation in signal-finding studies in combination with Keytruda in 9 different tumor types

MK-6440 (LIV-1 ADC): anti-tumor activity demonstrated in TNBC and signal finding studies under way to evaluate in multiple other tumor types

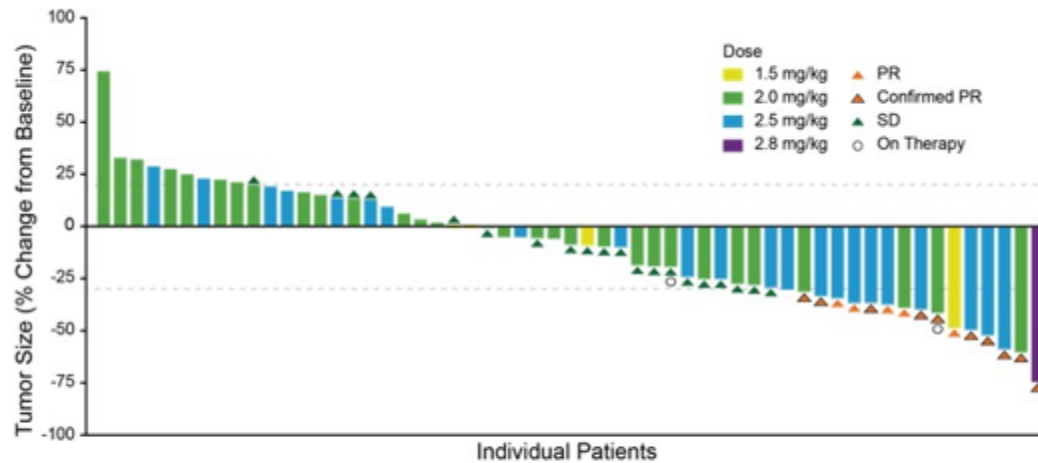
- Humanized IgG1 ADC selectively binds to cells expressing LIV-1
- LV-mediated delivery of MMAE drives anti-tumor activity through cytotoxic cell killing and immunogenic cell death



Tumors	LIV-1 RNA prevalence
Prostate	99-100%
Breast	84-96%
Melanoma	67-92%
Esophageal	24-47%
Head & Neck	38-78%
Squamous lung	27-75%
Stomach adeno	2-14%
Ovarian	2-19%
Non-squamous lung	12-45%

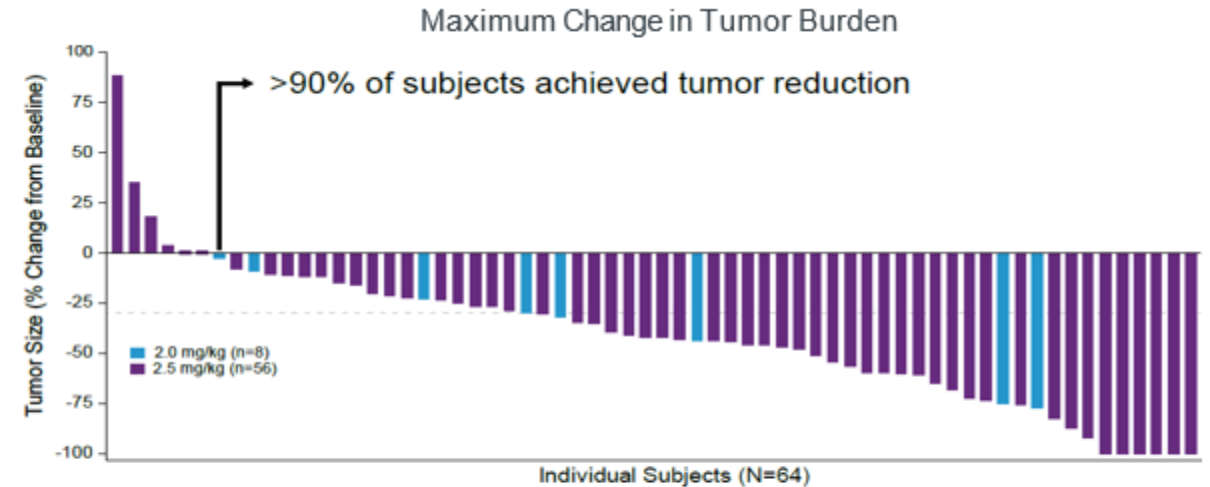
MK-6440 (LIV-1): evaluating as monotherapy and in combination with KEYTRUDA for patients with TNBC

Phase 1 Study of LV in solid tumors Reduction in Total Tumor Burden by Best Overall Response – mTNBC Patients



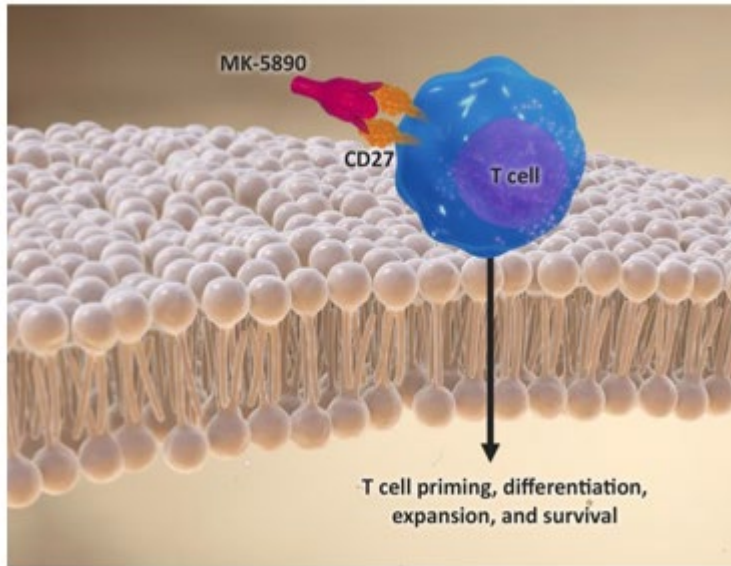
* Best overall responses were determined according to RECIST v1.1. The endpoint of maximum reduction of target lesions from baseline is based only on radiographical evaluation of measurable disease. Three pts are not shown due to clinical progression in the absence of available tumor measurements

Phase 1/2 Trial in for 1L Treatment of Patients with Unresectable Locally-Advanced or Metastatic TNBC: KEYNOTE-721



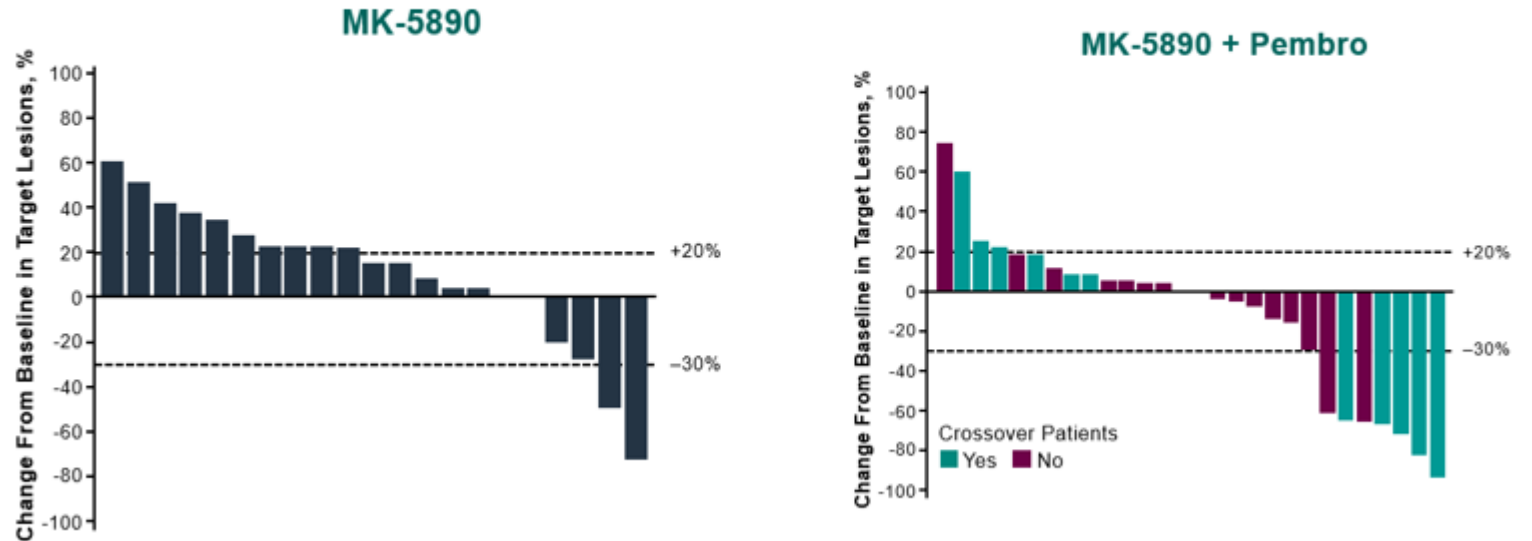
- The efficacy evaluable population includes all treated subjects with at least one evaluable post-baseline assessment according to RECIST v1.1 or who had discontinued from the study (N=69).
- Of the efficacy evaluable population, 5 subjects did not have evaluable response assessments before study discontinuation.

MK-5890 (CD-27 agonist): encouraging anti-tumor activity



MK-5890, anti-CD27

Best Percentage Change From Baseline in Target Lesions



- Early anti-tumor activity observed in patients with advanced solid tumors in both the monotherapy and combination arms
- Signal-finding effort in combination with KEYTRUDA in NSCLC and TNBC under way

Leader in precision medicine, identifying patients most likely to benefit from treatment

PD- L1 Expression

- First companion diagnostic for NSCLC: PD-L1 on tumor cells
- First companion diagnostic for gastric, cervical, bladder, esophageal and head & neck cancers: PD-L1 on tumor and immune cells

Increased Antigenicity Due to High DNA Mutation Load

- First approval based on biomarker, agnostic to tissue/site of origin, for MSI-H Cancer
- Second approval based on biomarker, agnostic to tissue/site of origin, for TMB-H Cancer with FoundationOne Companion Diagnostic (Foundation Medicine Inc)

Homologous Recombination Deficiency

- Companion diagnostics for ovarian, breast, pancreatic & prostate g*BRCA* mutations
- Companion diagnostic for *BRCA* mutations in ovarian tumors
- Companion diagnostic for *BRCA* mutations and/or genomic instability in ovarian tumors
- Companion diagnostic for homologous recombination repair (HRR) gene mutations in prostate
- First companion diagnostic approval in Japan for US-based test

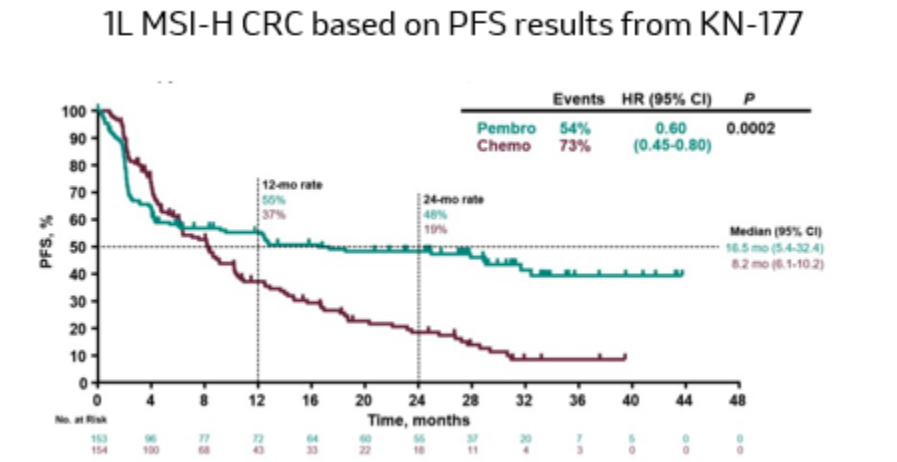
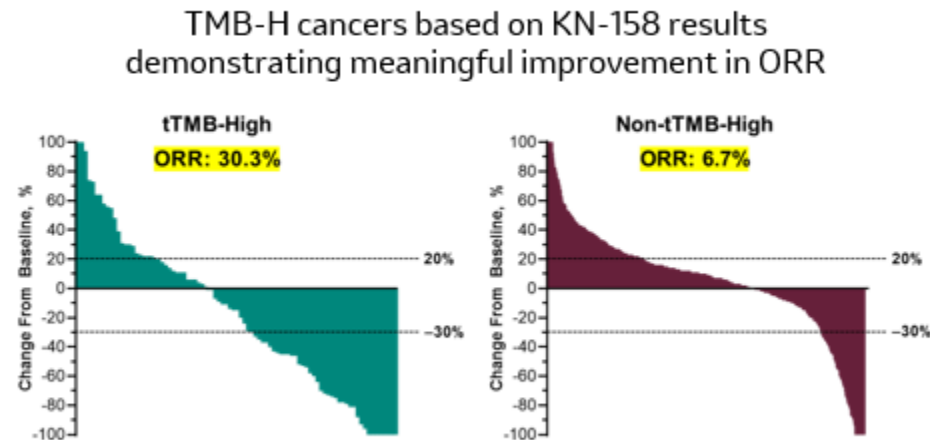
Exploratory Biomarkers

- IHC for TIGIT, ILT-4, ROR-1, LIV-1, Trinkets
- BTK and KRAS mutations and association with efficacy and resistance

Our clinical trials and predictive biomarker approaches are based on strong biological hypotheses
Biomarker cutoffs are defined prospectively based on threshold analyses in independent training sets

Leading biomarker-driven strategy

In 2020, KEYTRUDA was granted two new biomarker-driven approvals:



The PD-L1 IHC22C3 Test was the first FDA-approved companion diagnostic in immuno-oncology

Diagnostic testing for treatment decisions has become a standard and a widespread practice in NSCLC as well as other tumor types

Companion diagnostic approved in 1L/2L NSCLC, 2L cervical, 1L bladder, 2L esophageal and 1L H&N



Jannie Oosthuizen

President, Global Oncology

Unmet needs are high and pace of innovation has accelerated



Unmet needs remain and cancer patients need continued innovation



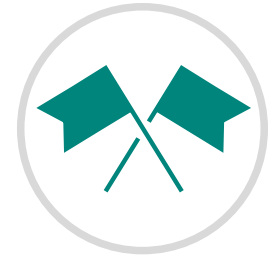
The science of oncology is accelerating, including the advancement of precision medicines



Cost, health system capability and affordability barriers limit access to innovation

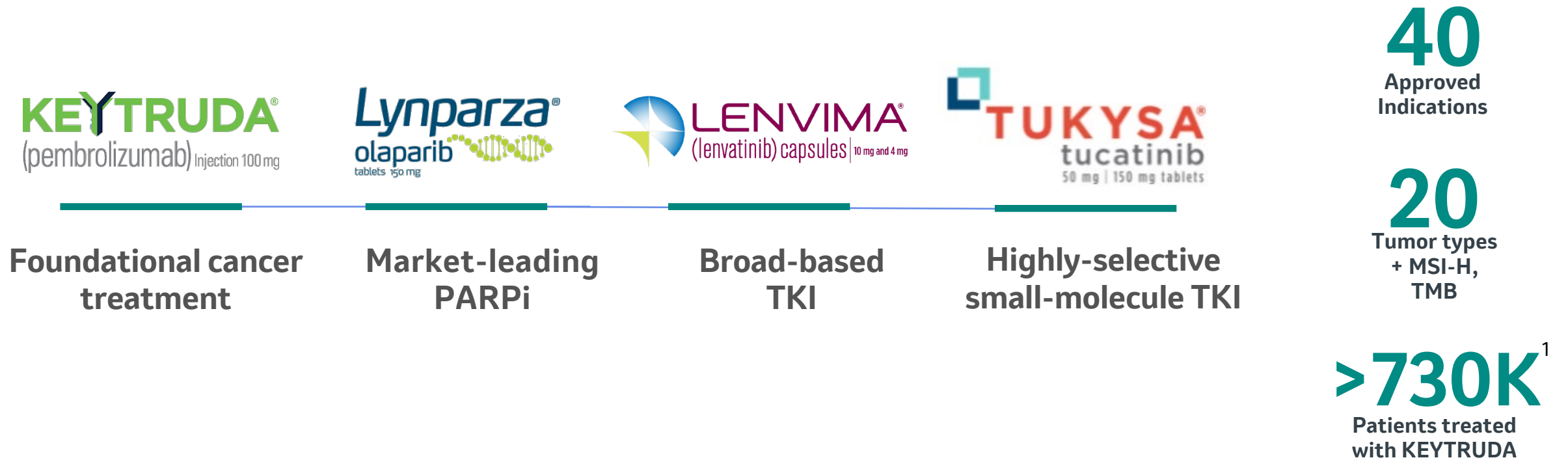


Strong need to demonstrate value with data supporting clear patient outcomes



Urgency to act now to advance standard of care and provide more options for patients

Driving global leadership across broad portfolio of commercial assets

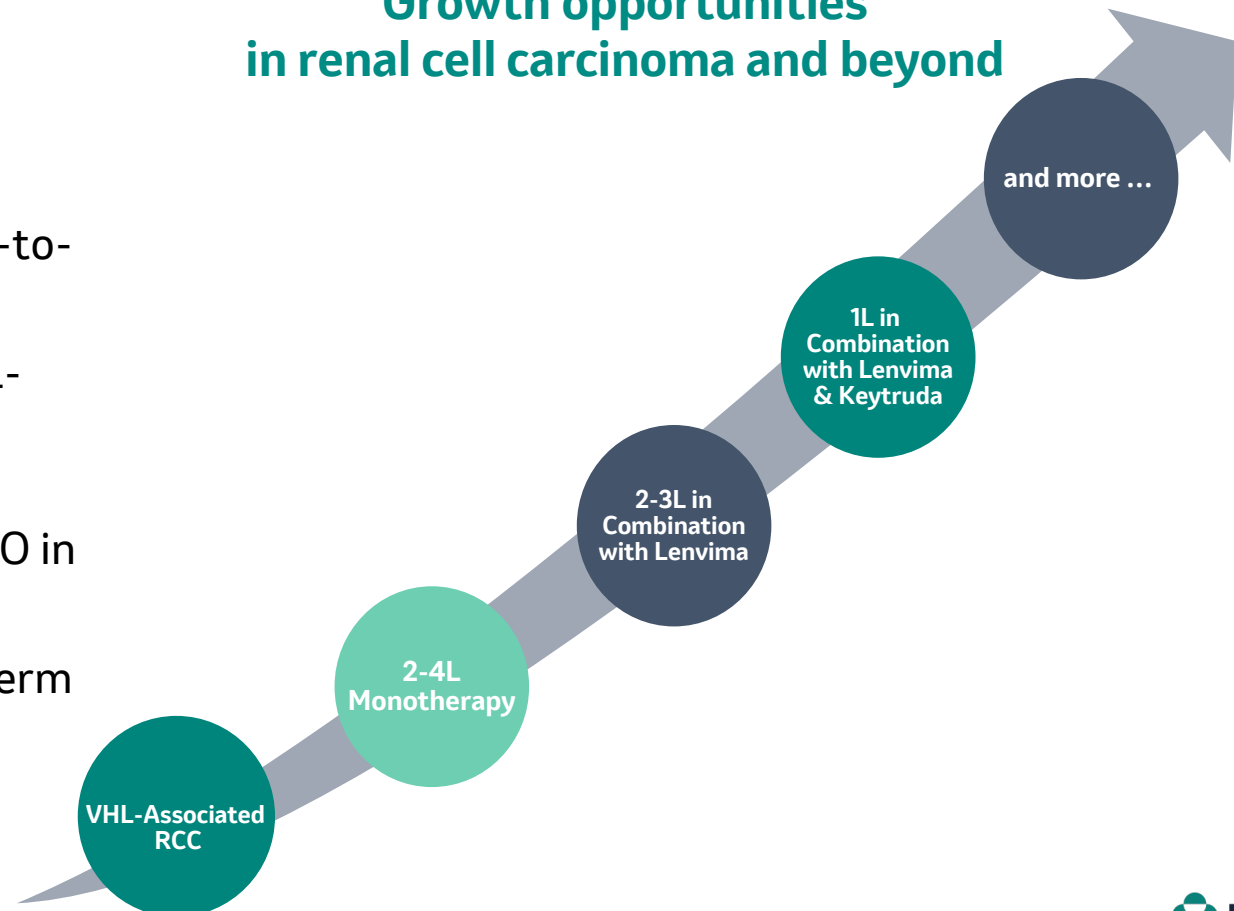


1. Patients treated with commercially-available product as of May 2021

Belzutifan: first-in-class molecule well positioned for success in RCC and beyond

- First-in-class molecule targeting a gene transcription factor, based on Nobel Prize-winning science
- Result of successful business development
- Merck's rapid execution has resulted in speed-to-market
- First market entry (US) expected 3Q21 in VHL-associated renal cell carcinoma
- 3 pivotal clinical trials in progress assessing efficacy alone and in combination with TKI & IO in advanced renal cell carcinoma
- Expected to be a blockbuster in the medium term

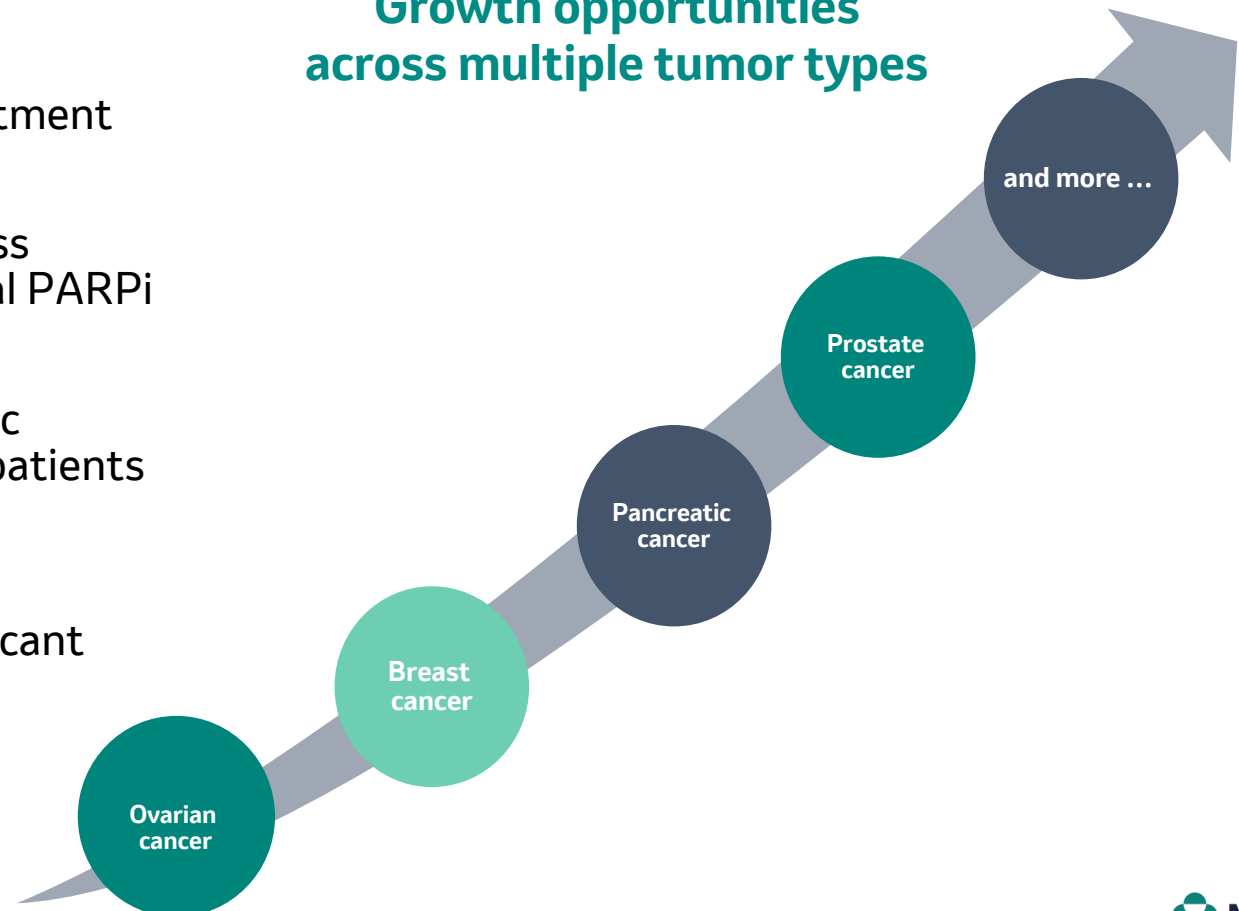
Growth opportunities in renal cell carcinoma and beyond



Lynparza: set for sustained class leadership in women's cancers and beyond with earlier stage disease

- Only PARPi approved in 7 indications across 4 different tumor types in the U.S.
- Moving into earlier lines of breast cancer treatment with OlympiA in adjuvant setting
- Lynparza has class leadership in the U.S. across ovarian cancer treatments, with ~60% of total PARPi prescriptions
- Only PARPi approved in pre-chemo metastatic castration-resistant prostate cancer beyond patients with *BRCA* mutations
- Additional indications with monotherapy and combinations with KEYTRUDA to drive significant growth going forward

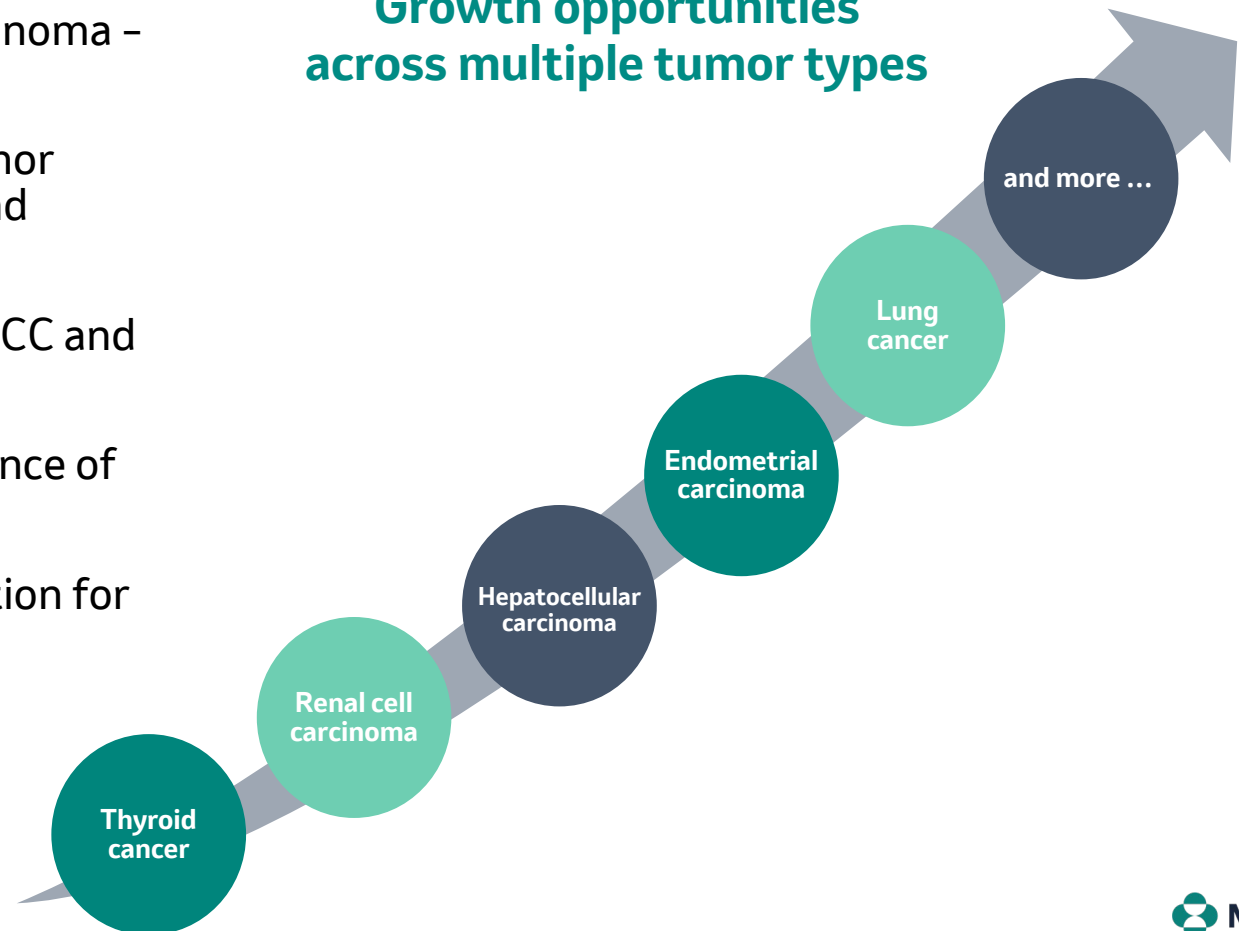
**Growth opportunities
across multiple tumor types**



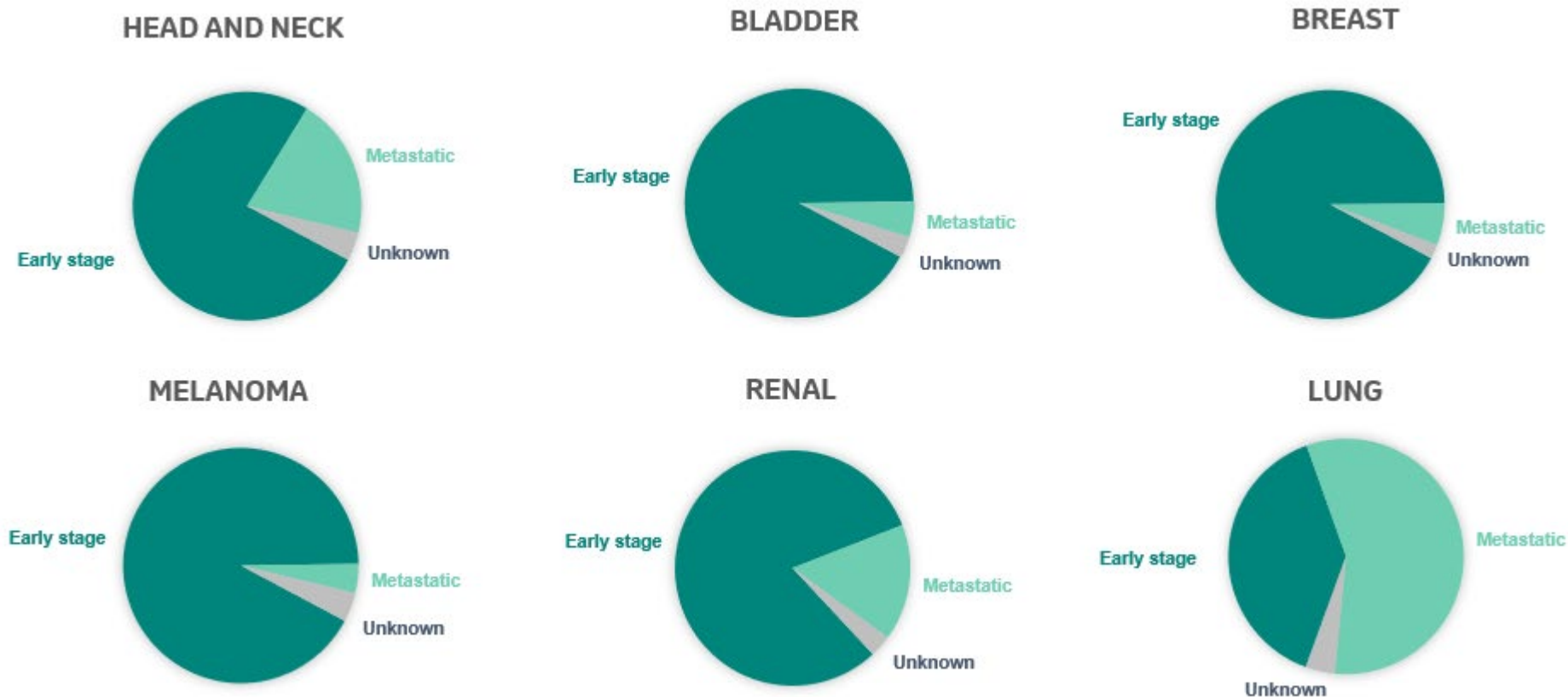
Lenvima: establishing as TKI of choice with roll-out of new indications

- Combination program rolling out with new indications in 1L RCC and 2L Endometrial carcinoma – approvals expected in 3Q21
- 20 combination studies ongoing across 14 tumor types including NSCLC, HCC, Gastric, H&N and Melanoma
- Approved in markets worldwide in RCC, EC, HCC and differentiated thyroid cancer
- Significant opportunity in China given prevalence of HCC in the market
- Strong commercial collaboration sets foundation for execution in many future indications

**Growth opportunities
across multiple tumor types**



Well positioned for opportunity in early-stage treatment across cancer types where prevalence is significant

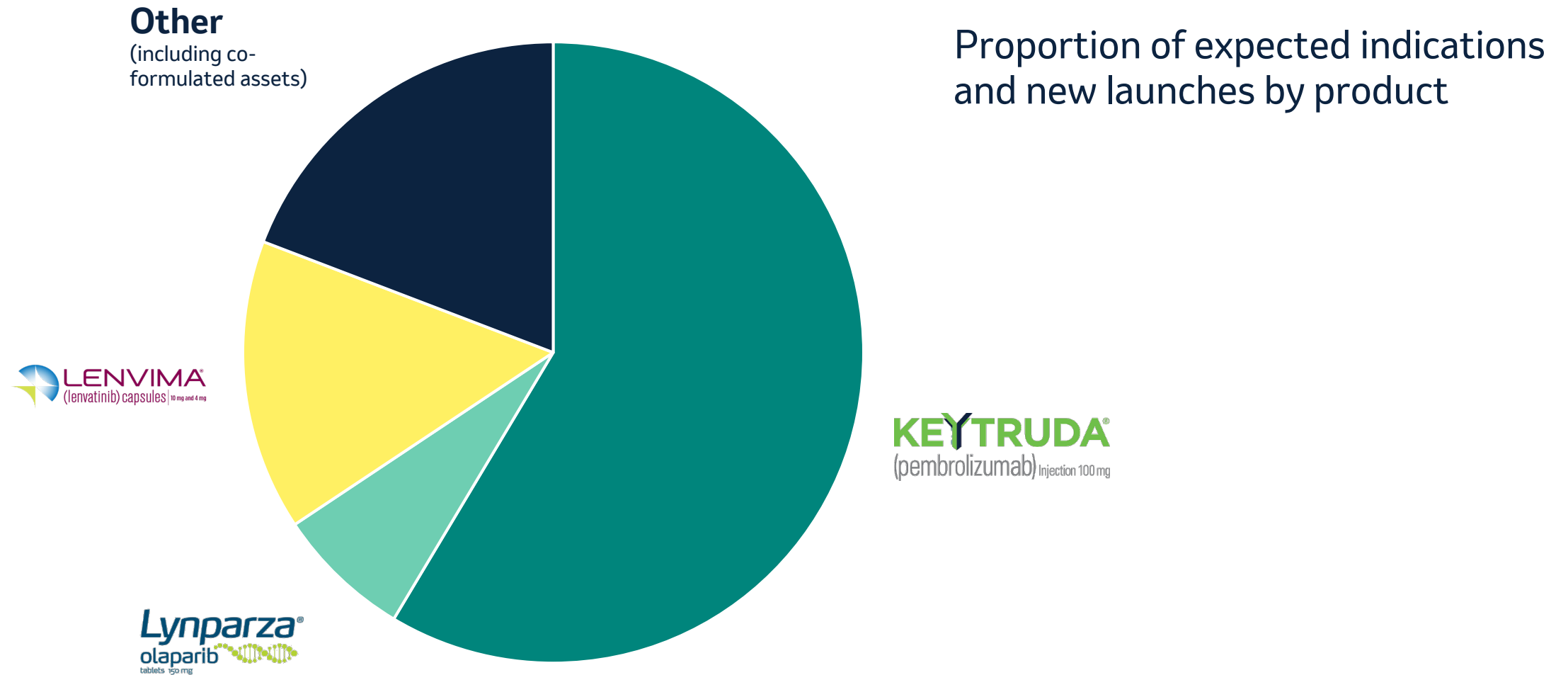


Meaningful opportunity to improve patient outcomes with earlier diagnosis and treatment

KEYTRUDA is being explored in a broad adjuvant program with 20 registrational studies ongoing

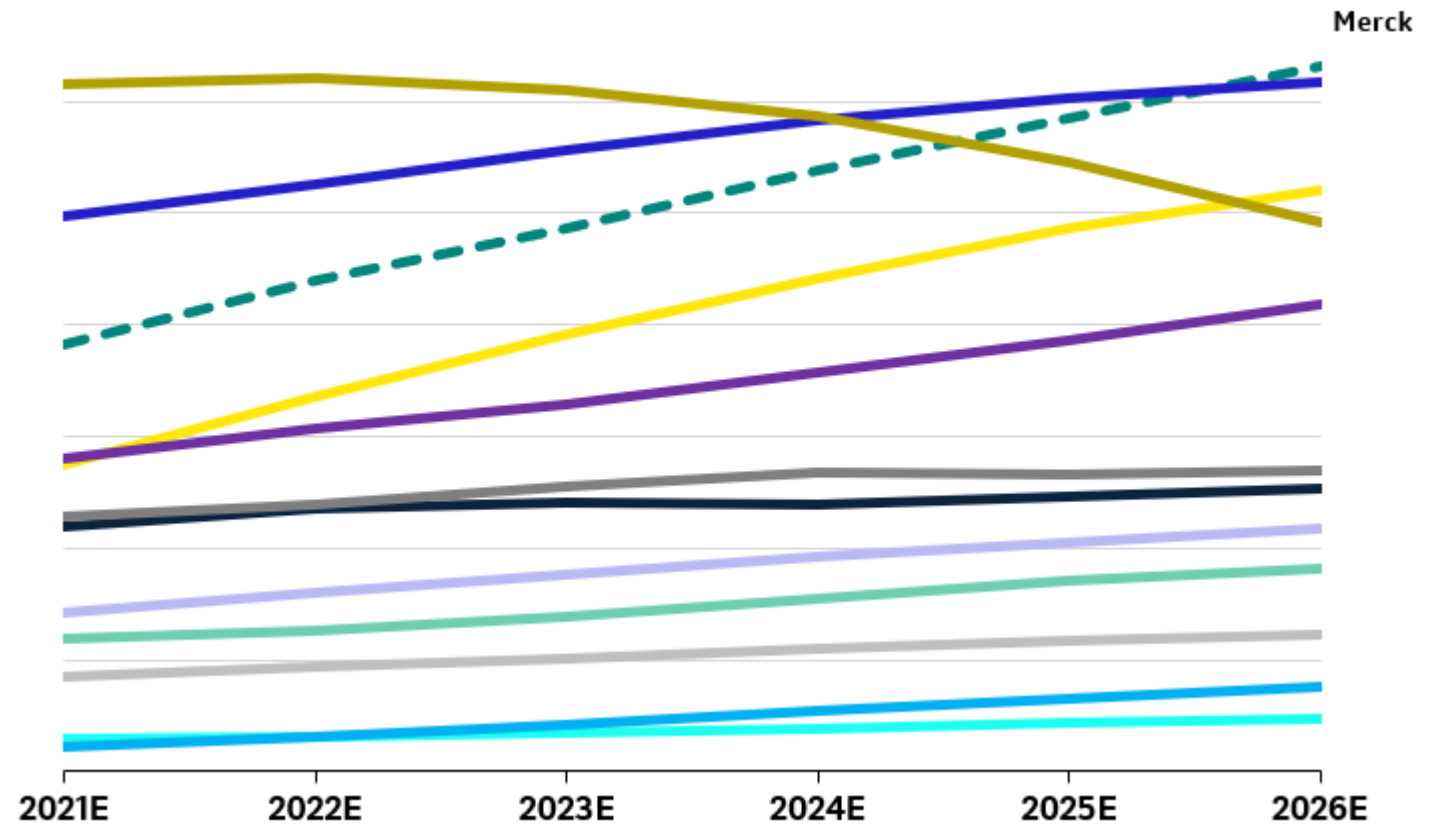
2018	2019	2020	2021	2022	2023	2024	2025	2026+
Adjuvant Melanoma (KEYNOTE-054) APPROVED	TNBC Neoadjuvant / Adjuvant (KEYNOTE-522) Met dual primary EP in pCR and EFS	NMIBC (KEYNOTE-057) APPROVED cSCC Locally Advanced (KEYNOTE-629) APPROVED in recurrent or metastatic; Sept. 2021 PDUFA for locally advanced	RCC Adjuvant (KEYNOTE-564) Met primary EP of DFS NSCLC Adjuvant (KEYNOTE-091 - Interim)	Adjuvant Melanoma (KEYNOTE-716) HNSCC Adjuvant (KEYNOTE-412) Locally Advanced MIBC (KEYNOTE-676 - Interim; Final Analysis 2025)	Gastric & Esophageal Adjuvant / Neoadjuvant (KEYNOTE-585) HNSCC Adjuvant / Neoadjuvant (KEYNOTE-689)	NSCLC Neoadjuvant (KEYNOTE-671)	Neo/adjuvant MIBC (KEYNOTE-866) Neo/adjuvant MIBC (KEYNOTE-905) NSCLC Stage I/IIa (KEYNOTE-867) HCC Adjuvant (KEYNOTE-937) Ovarian BRCAwt + chemo (KEYLYNK-001)	TNBC Adjuvant (KEYNOTE-242) cSCC Locally Advanced (KEYNOTE-630) ER+ / HER2-Breast Cancer Adjuvant / Neoadjuvant (KEYNOTE-756)

Potential for 90+ approvals across oncology portfolio through 2028



Expect to be oncology market leader by 2026 driven by additional indications, earlier lines of therapy and new assets and technologies

- Indications expected to more than triple over next 8 years
 - Earlier lines of therapy, including adjuvant / neoadjuvant
 - New combinations and co-formulations
 - New tumor types
 - New assets
- Building on leadership in lung with early stage launches and further penetration of existing indications in Europe and other markets
- Encouraged by uptake of Q6W dosing in U.S., Europe and Japan
- Excited to launch additional adjuvant indications as data becomes available
- Well-positioned with early-stage assets, co-formulations and new routes of administration to sustain success well into next decade



Source: Evaluate Pharma (as of 2/28/2021)



Dr. Dean Li

President, Merck Research Labs

Uniquely positioned to drive long-term success and oncology leadership through continued execution and momentum

Broad oncology program with deep pipeline of differentiated early- and late-stage assets

World-class scientific expertise and ability to leverage KEYTRUDA's foundational stature

Extensive runway to advance science to reach more patients and solve for unmet need

Unmatched commercial expertise to capitalize on significant opportunities

Q&A

To ask a question on the operator-assisted audio line, press *1.

Note: be sure to mute your computer speakers if you are listening to the audio webcast.