

MERCK

INVENTING FOR LIFE

MERCK ONCOLOGY OVERVIEW
ASCO 2018
JUNE 4, 2018

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).



MERCK ONCOLOGY

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



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



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



Identify patients most likely to benefit through evaluation of biomarkers



Advance internal pipeline and pursue strategic collaborations and acquisitions to expand oncology portfolio

ASCO: BREADTH OF DATA FROM EXPANSIVE CLINICAL PROGRAM

LUNG	CERVICAL
RENAL CELL	MERKEL CELL
PROSTATE	ENDOMETRIAL
HEAD AND NECK	ESOPHAGEAL
MELANOMA	OVARIAN

25+ TUMOR TYPES

140 ABSTRACTS
ACCEPTED FROM
OUR BROAD
ONCOLOGY
PORTFOLIO

ASCO 2018

SPOTLIGHT ON NSCLC

KEYNOTE-407

Randomized, double-blind, placebo controlled, Phase 3 study in patients with metastatic squamous NSCLC

KEYNOTE-042

Randomized, open-label Phase 3 study in patients with locally advanced or metastatic PD-L1 positive (TPS > 1%) NSCLC

KEYNOTE-021G

Multicenter, open-label, Phase 1/2 multi-cohort study in patients with metastatic, nonsquamous NSCLC

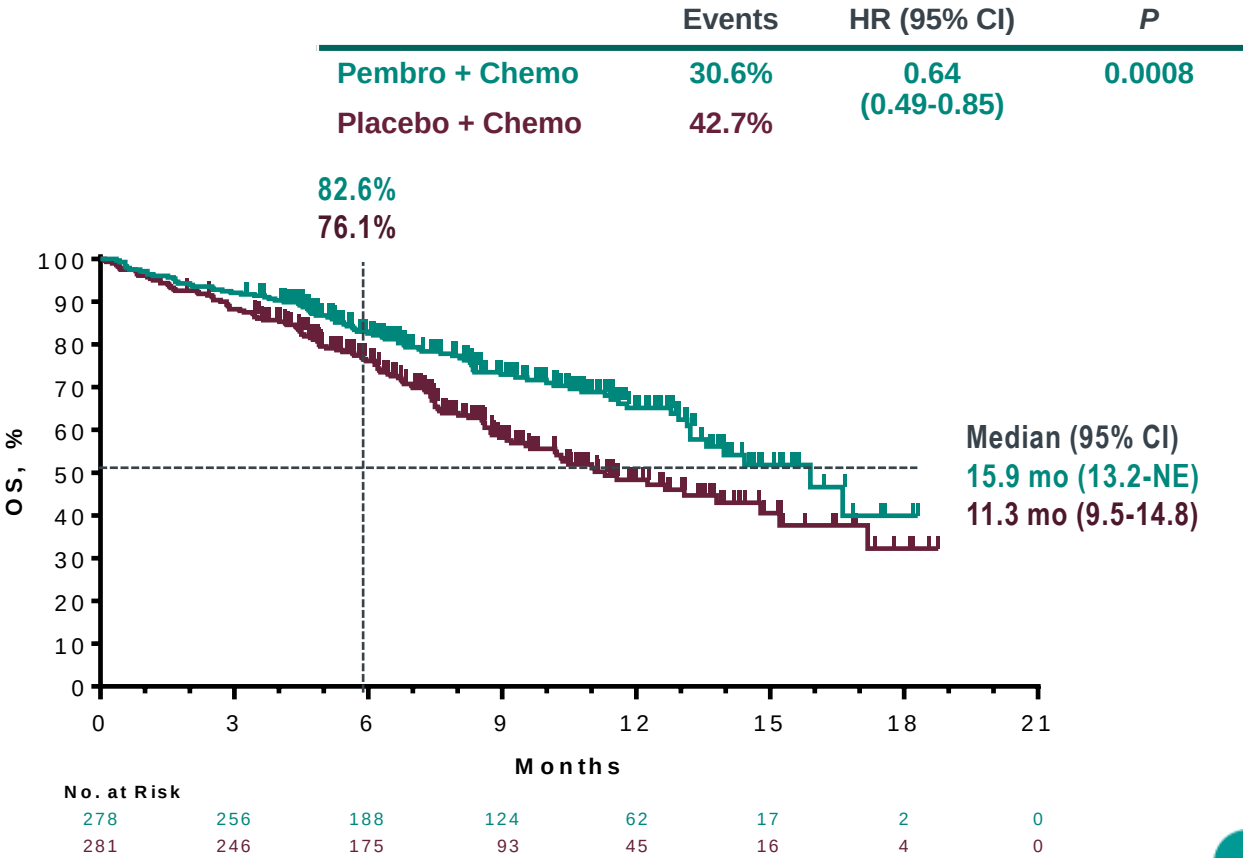
KEYNOTE-407

DEMONSTRATES SIGNIFICANT IMPROVEMENT IN OS

HR = .64

[95% CI, 0.49-0.85]

KEYTRUDA is the first immunotherapy in combination with chemotherapy to significantly extend survival in 1L squamous NSCLC patients



KEYTRUDA

REDUCED RISK

OF DEATH BY

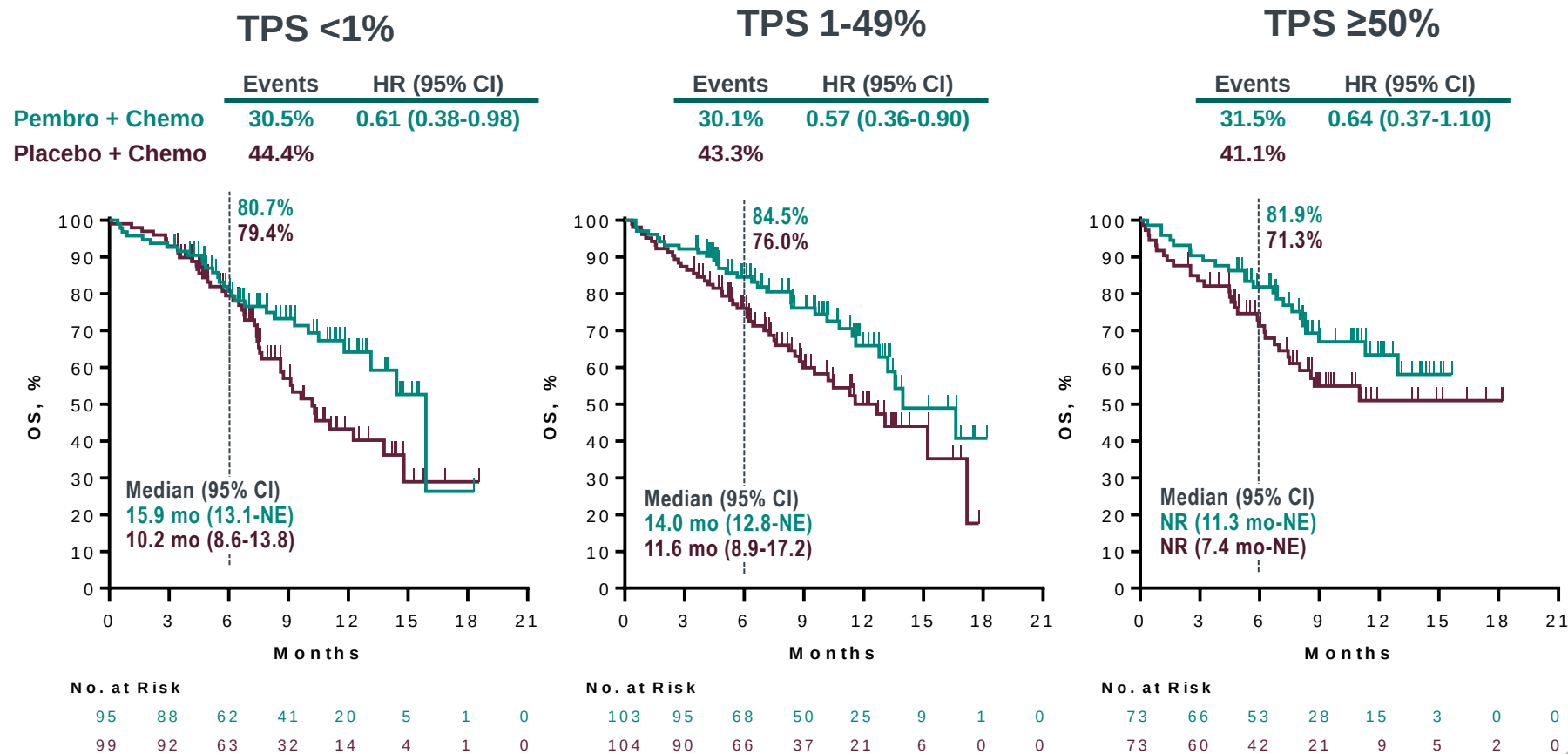
36% COMPARED

TO CHEMO

ALONE

KEYNOTE-407

OS BENEFIT ACROSS ALL PD-L1 SUBGROUPS



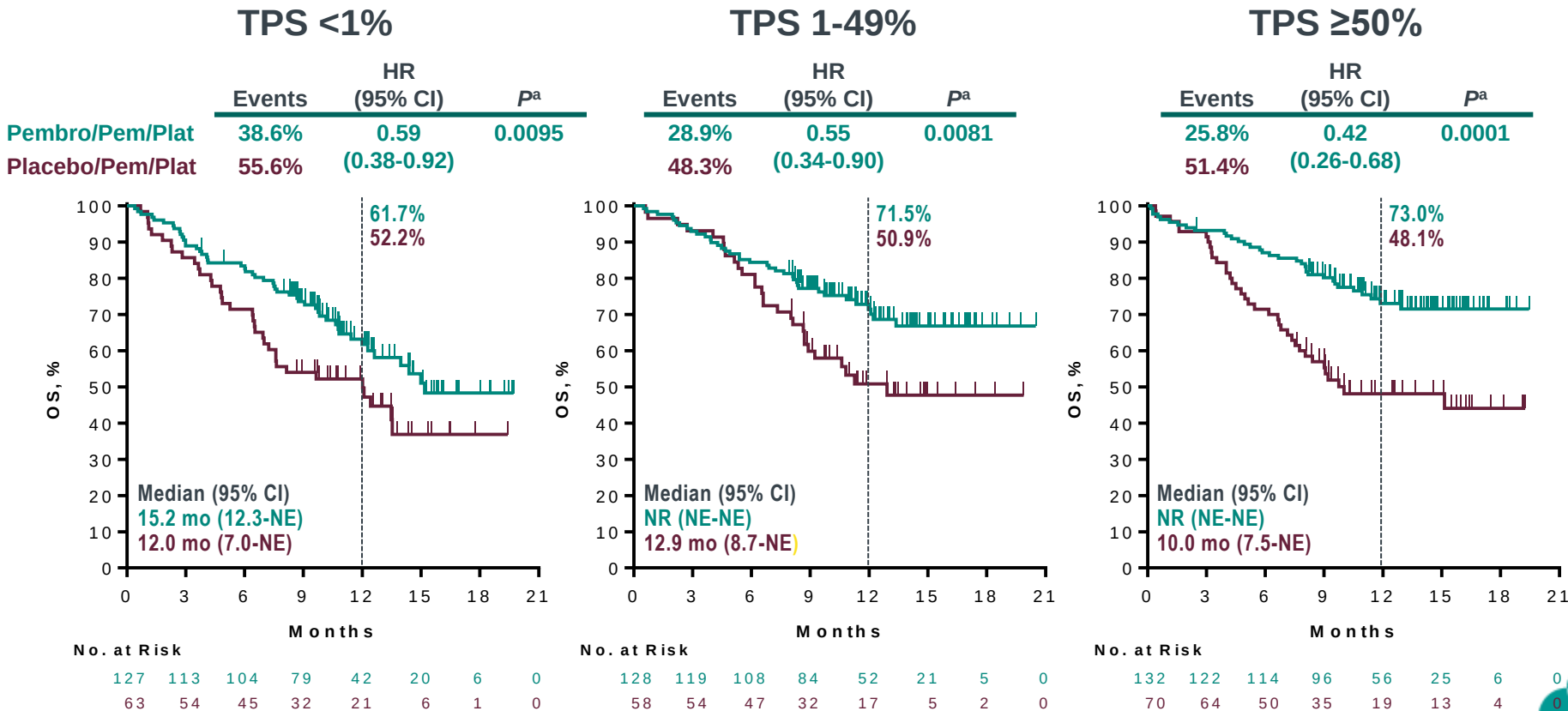
FIFTH KEYTRUDA
PHASE 3 TRIAL TO
DEMONSTRATE
IMPROVED
SURVIVAL
BENEFIT IN
METASTATIC
NSCLC

KEYNOTE-189 (AACR 2018)

OS BENEFIT ACROSS ALL PD-L1 SUBGROUPS

OVERALL
SURVIVAL IS THE
GOLD STANDARD

SETS THE BAR
FOR FUTURE
TRIALS IN 1L NSQ
NSCLC



^aNominal and one-sided. Data cutoff date: Nov 8, 2017.



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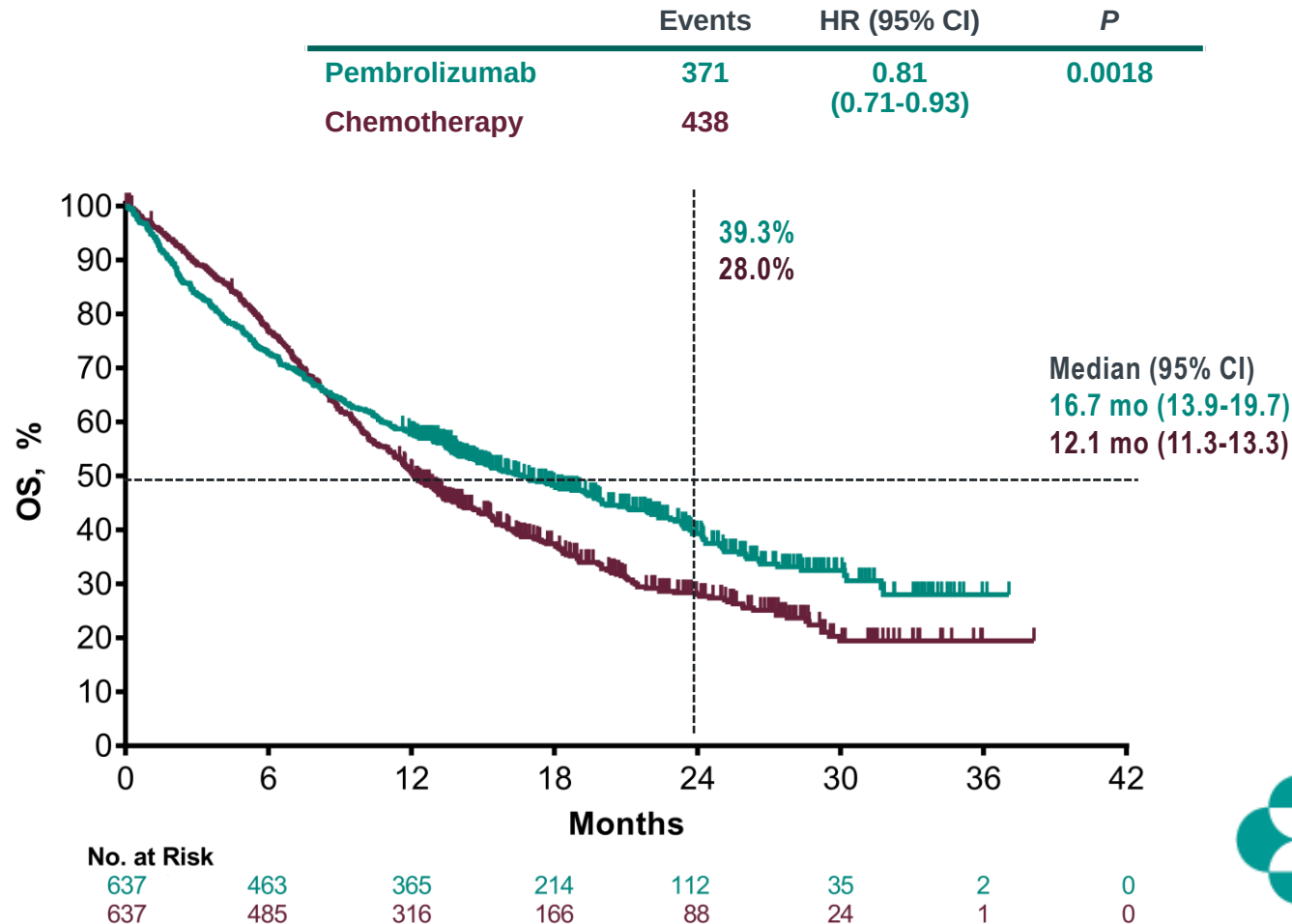
KEYNOTE-042

PHASE 3 TRIAL STUDYING KEYTRUDA IN METASTATIC NONSQ AND SQ NSCLC AT TPS $\geq 1\%$

SIGNIFICANT
IMPROVEMENT IN
OVERALL
SURVIVAL IN
PATIENTS WITH
PD-L1 $\geq 1\%$

HR=0.81
[95% CI, 0.71-0.93]

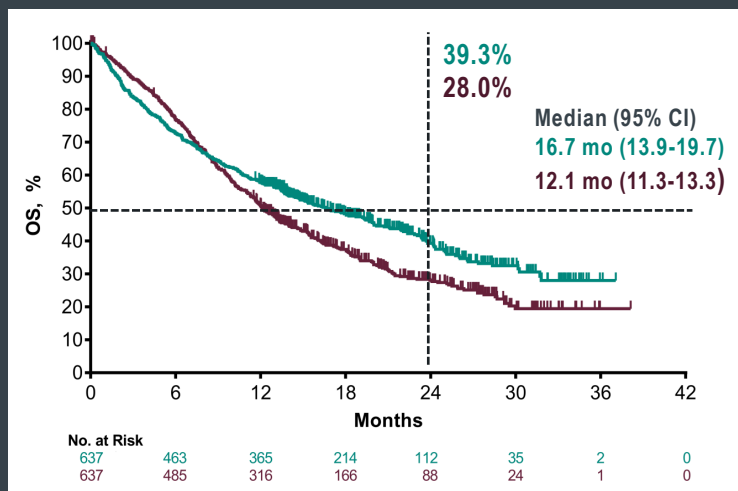
Entire study population
with TPS $\geq 1\%$



KEYNOTE-042

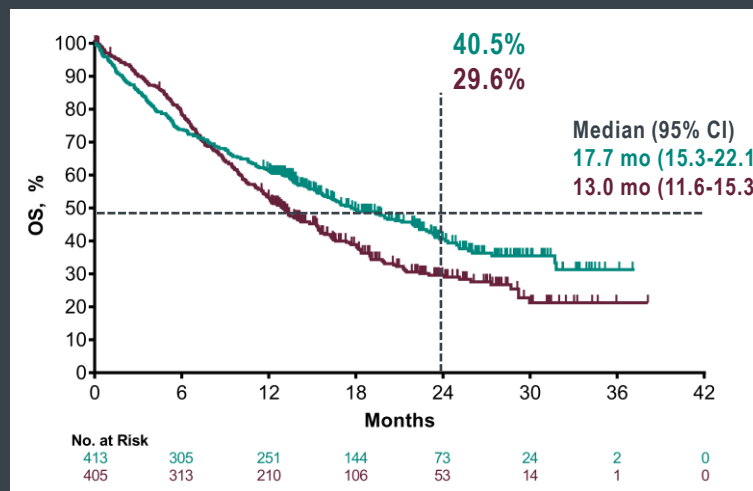
OS BENEFIT IN PATIENTS WITH ANY LEVEL OF PD-L1 EXPRESSION

TPS ≥ 1%



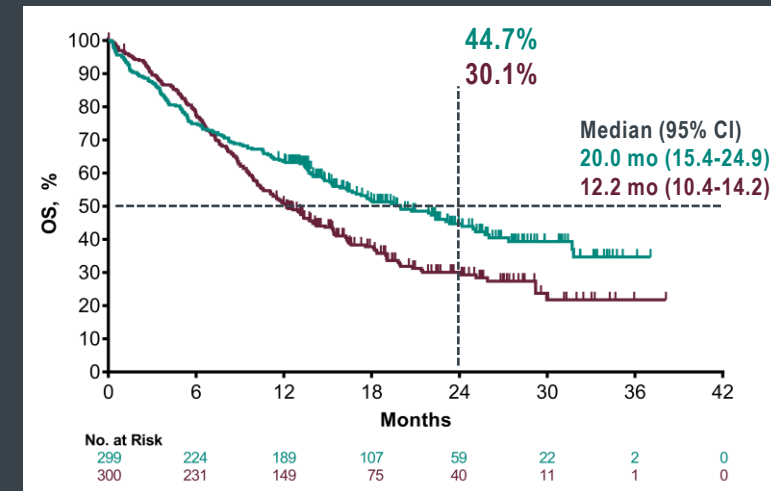
	Events	HR (95% CI)	P
Pembrolizumab	371	0.81 (0.71-0.93)	0.0018
Chemotherapy	438		

TPS ≥ 20%



	Events	HR (95% CI)	P
Pembrolizumab	230	0.77 (0.64-0.92)	0.0020
Chemotherapy	266		

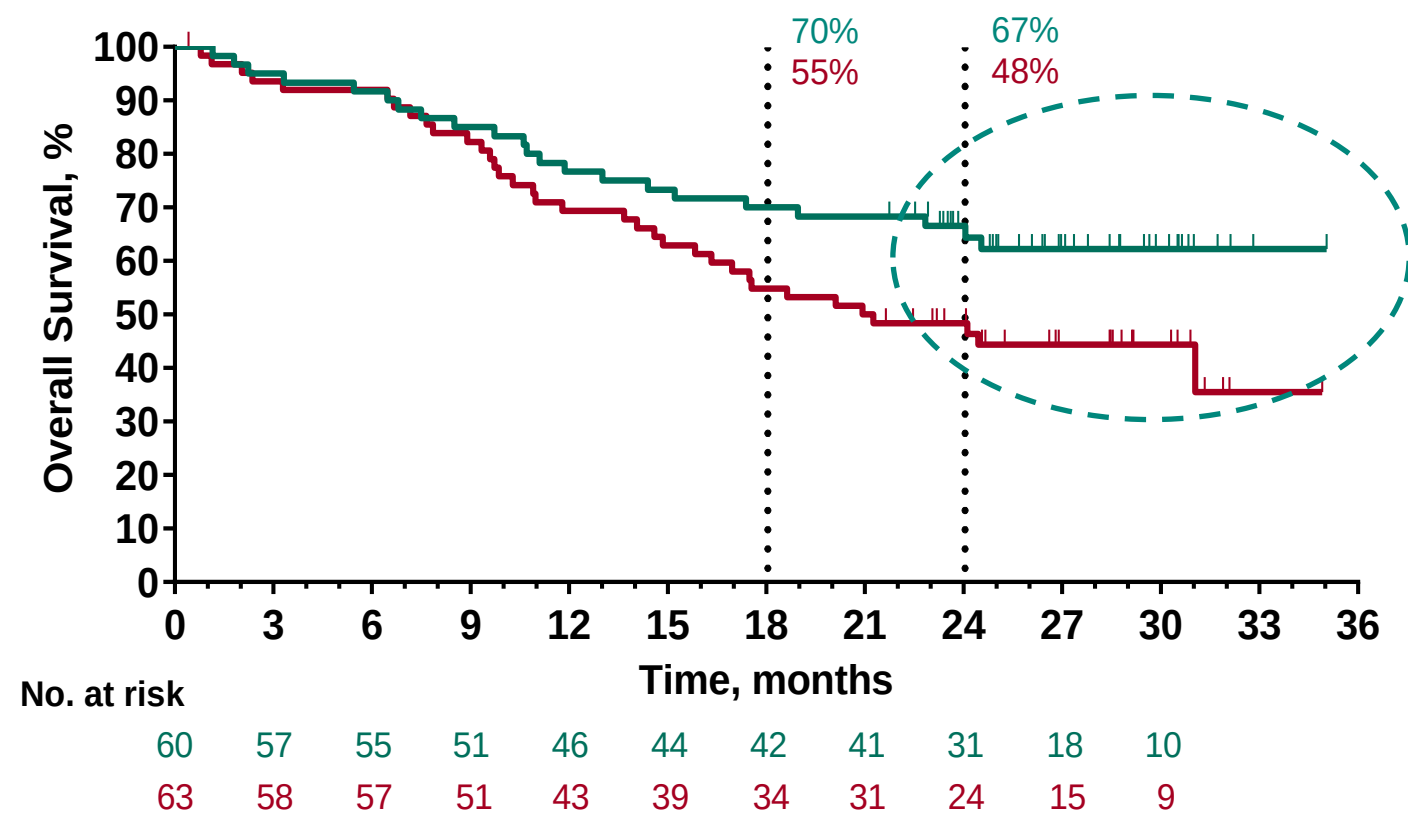
TPS ≥ 50%



	Events	HR (95% CI)	P
Pembrolizumab	157	0.69 (0.56-0.85)	0.0003
Chemotherapy	199		

KEYNOTE-021G

24-MONTH OS DATA

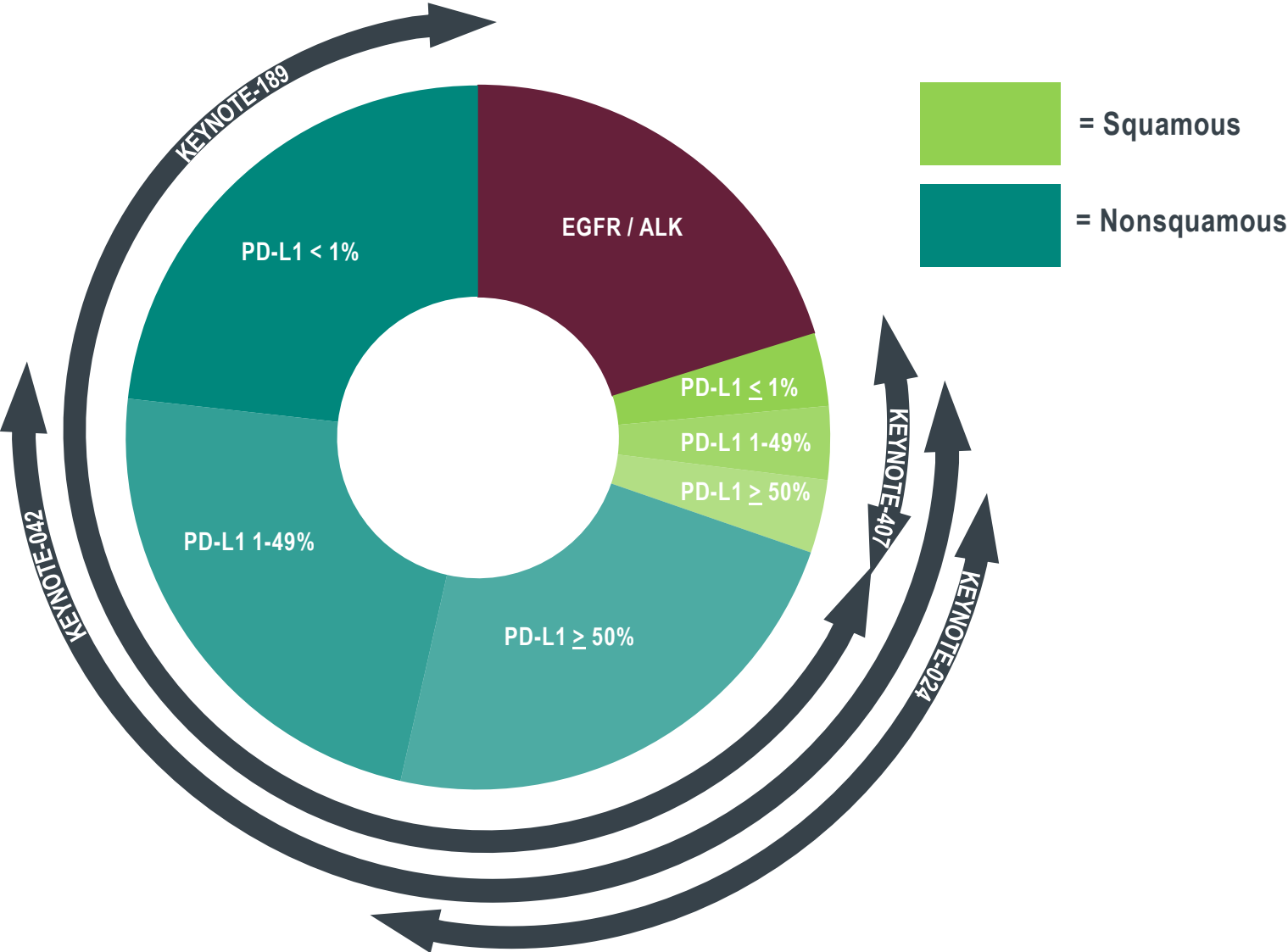


	Events	Median, mo (95% CI)	HR (95% CI)	P
Pembrolizumab +PC	22/60	NR (24.5-NR)	0.56 (0.32-0.95)	0.01508
PC alone	35/63	21.1 (14.9-NR)		

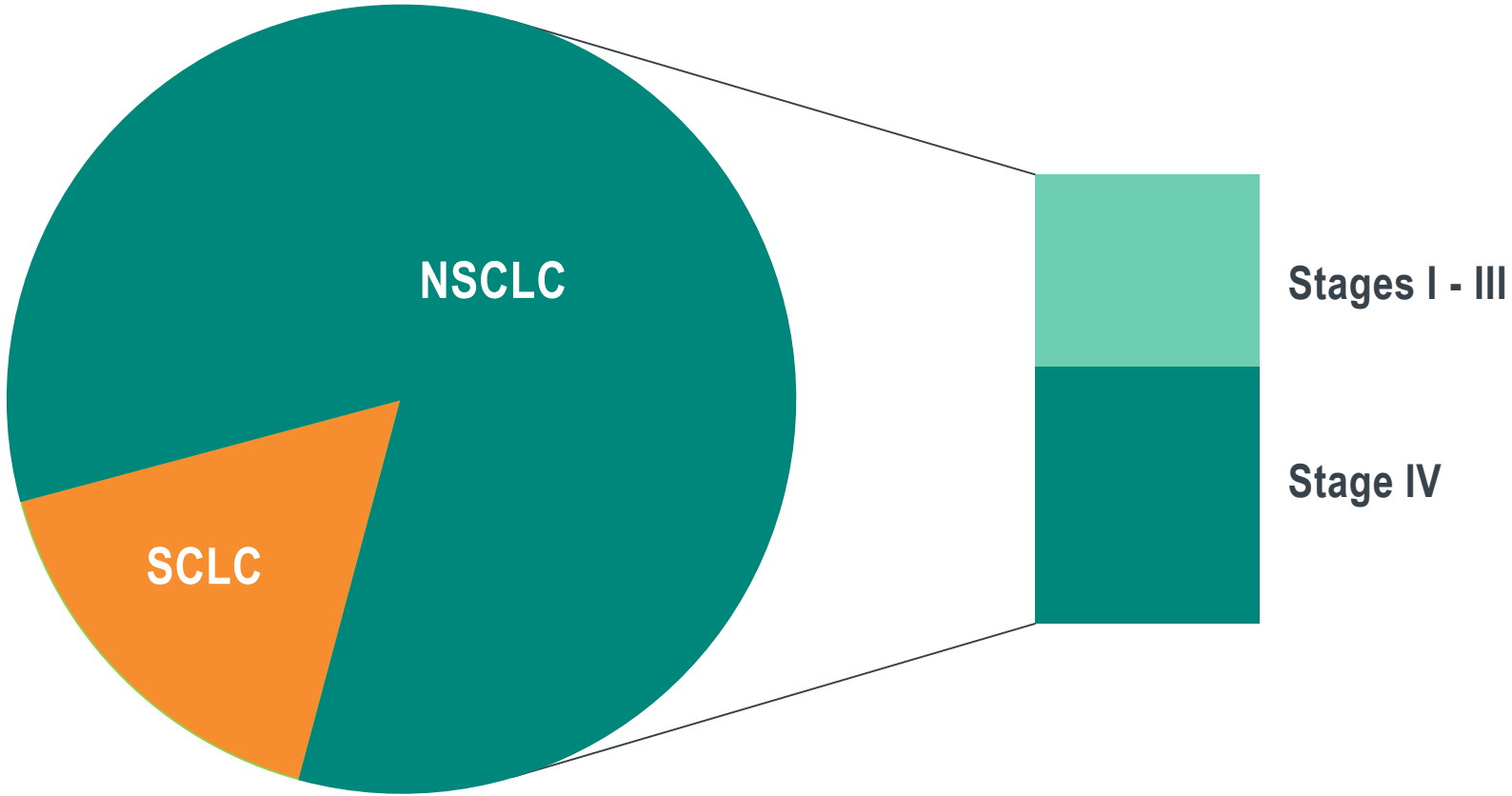
LONG-TERM FOLLOW UP DEMONSTRATES CONTINUED DURABILITY OF CHEMO-COMBO

LEADERS IN FIRST-LINE LUNG

SPANNING 80%
OF NSCLC
PATIENTS



EXPANDING FOOTPRINT IN LUNG BEYOND METASTATIC NSCLC



SCLC
KEYNOTE-158 and -604

STAGE IV NSCLC
KEYNOTE-001, 010, 024,
189, 042, 407

STAGE III NSCLC
KEYNOTE-091, 671,
HOOSIER STUDY

REACHING
EVEN MORE
TYPES OF
LUNG CANCER

KEYNOTE-146

Multi-center, open-label
Phase 1b/2 study of renal cell carcinoma
as second-line combination therapy
(lenvatinib + pembrolizumab)

STUDY 08

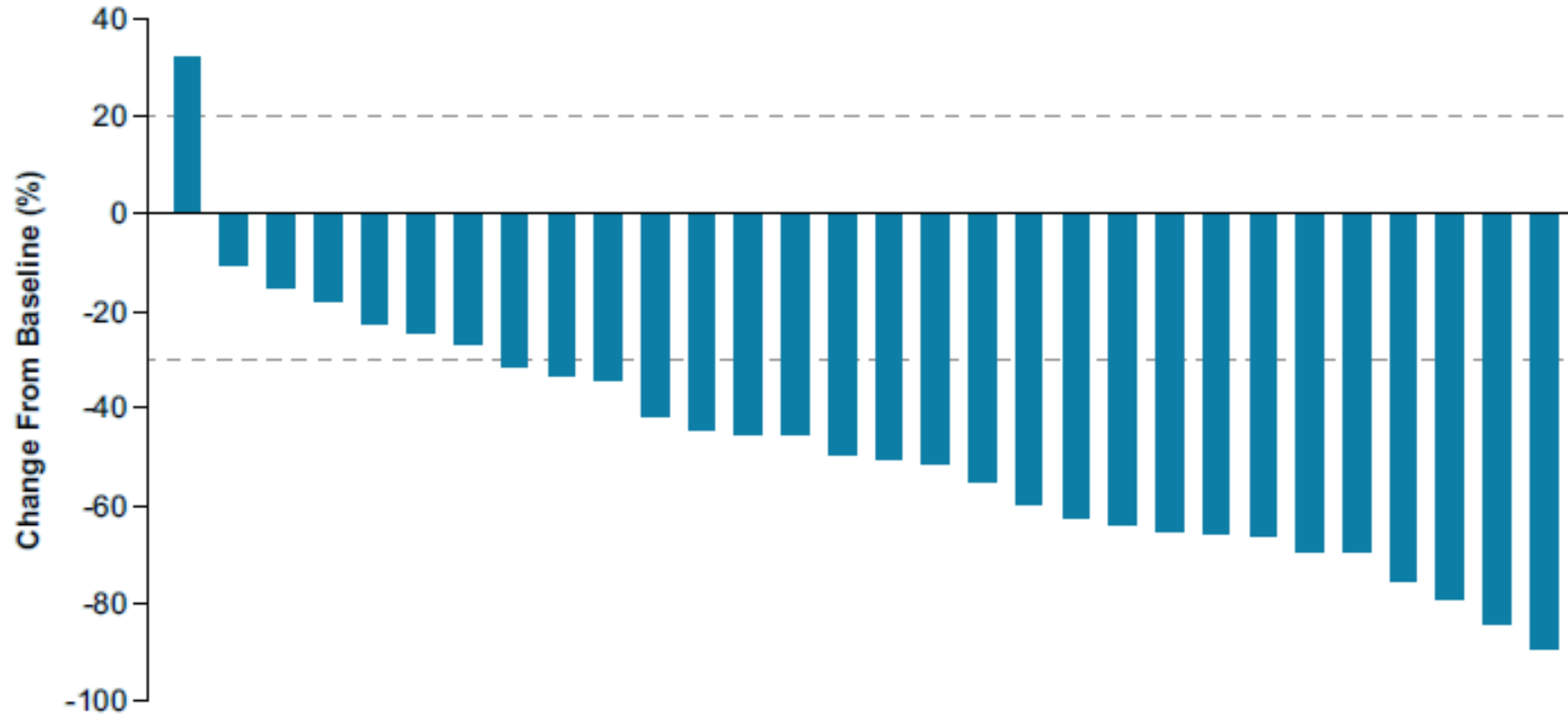
Randomized, double-blinded, multi-center
Phase 2 trial, comparing LYNPARZA in
combination with abiraterone to abiraterone
monotherapy alone in patients with previously
treated mCRPC

ASCO 2018

SPOTLIGHT ON COLLABORATION DATA

KEYNOTE-146

LENVIMA + KEYTRUDA FOR TREATMENT OF PATIENTS WITH aRCC



ALMOST ALL PATIENTS (N=29) EXPERIENCED TUMOR REDUCTION FROM BASELINE

DEMONSTRATED
ANTITUMOR
ACTIVITY AS 2L
RCC THERAPY
WITH ORR 70.0%

PHASE 3 TRIALS IN
1L RCC UNDER
WAY (KN-581 &
KN-426)



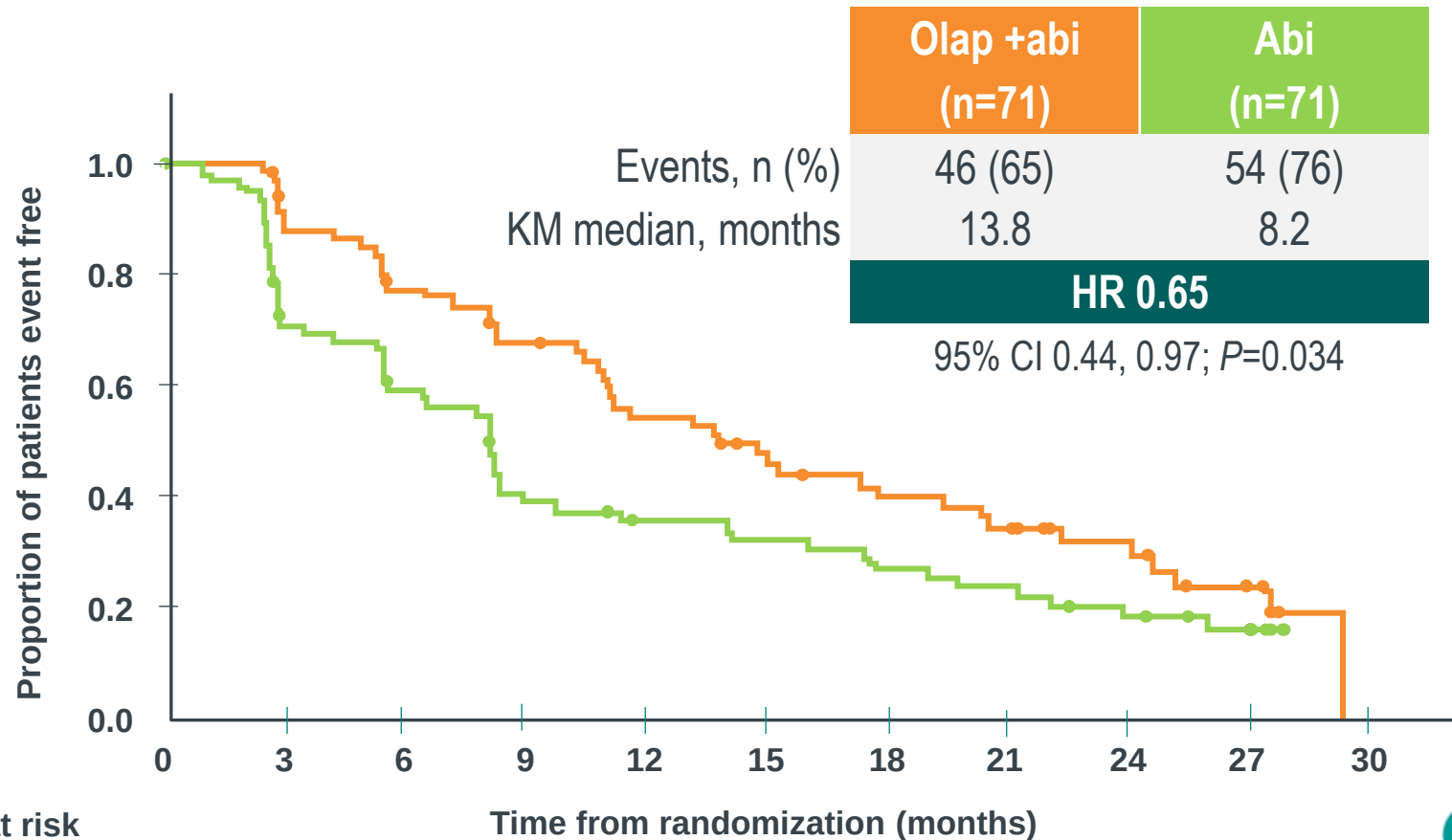
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STUDY 08

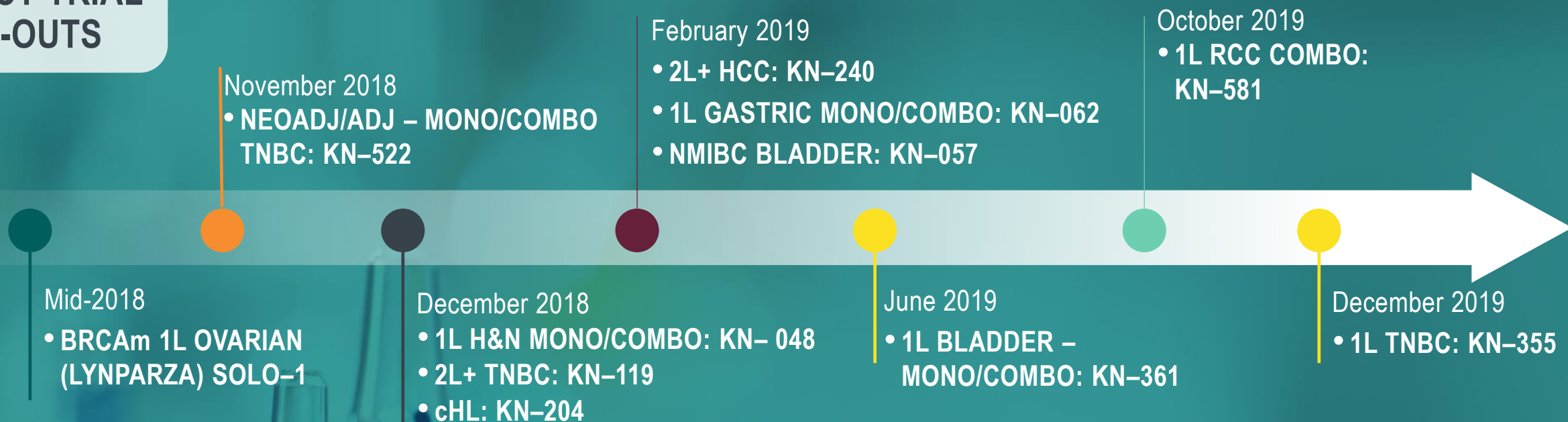
LYNPARZA + ABIRATERONE IN PATIENTS WITH PREVIOUSLY TREATED mCRPC

FIRST PARP TO DEMONSTRATE ACTIVITY IN COMBINATION WITH STANDARD OF CARE IN PROSTATE CANCER



WHAT TO WATCH: NEXT 18 MONTHS*

SELECT TRIAL READ-OUTS



**Dates based on clinicaltrials.gov as of 6/4/18: All trials are event-driven*

FDA ACTION DATES 2018

JUNE 28
Cervical KN-158

JULY 3
PMBCL KN-173

AUG 24
HCC (LENVIMA)

DEC 28
2L H&N KN-040

SEPT 23
1L NSCLC KN-189

Q&A