Roy D. Baynes
Senior Vice President
Global Clinical Development
Merck Research Laboratories

Merck & Co., Inc.

Bank of America Merrill Lynch HCC

May 13, 2015

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Forward-Looking Statement

This presentation 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 Merck’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; Merck’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 Merck’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

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Merck is Positioned for Long-Term Growth through Innovation

Premier Research-Driven Biopharmaceutical Company

New Focused Model

- Four Key Growth Platforms
- Accelerating BD Strategy
- Improving Operating Model

Suite of Opportunities

- Advancing Innovative Pipeline
- Programs in Areas with Large Unmet Needs
- Multiple New Product Launches

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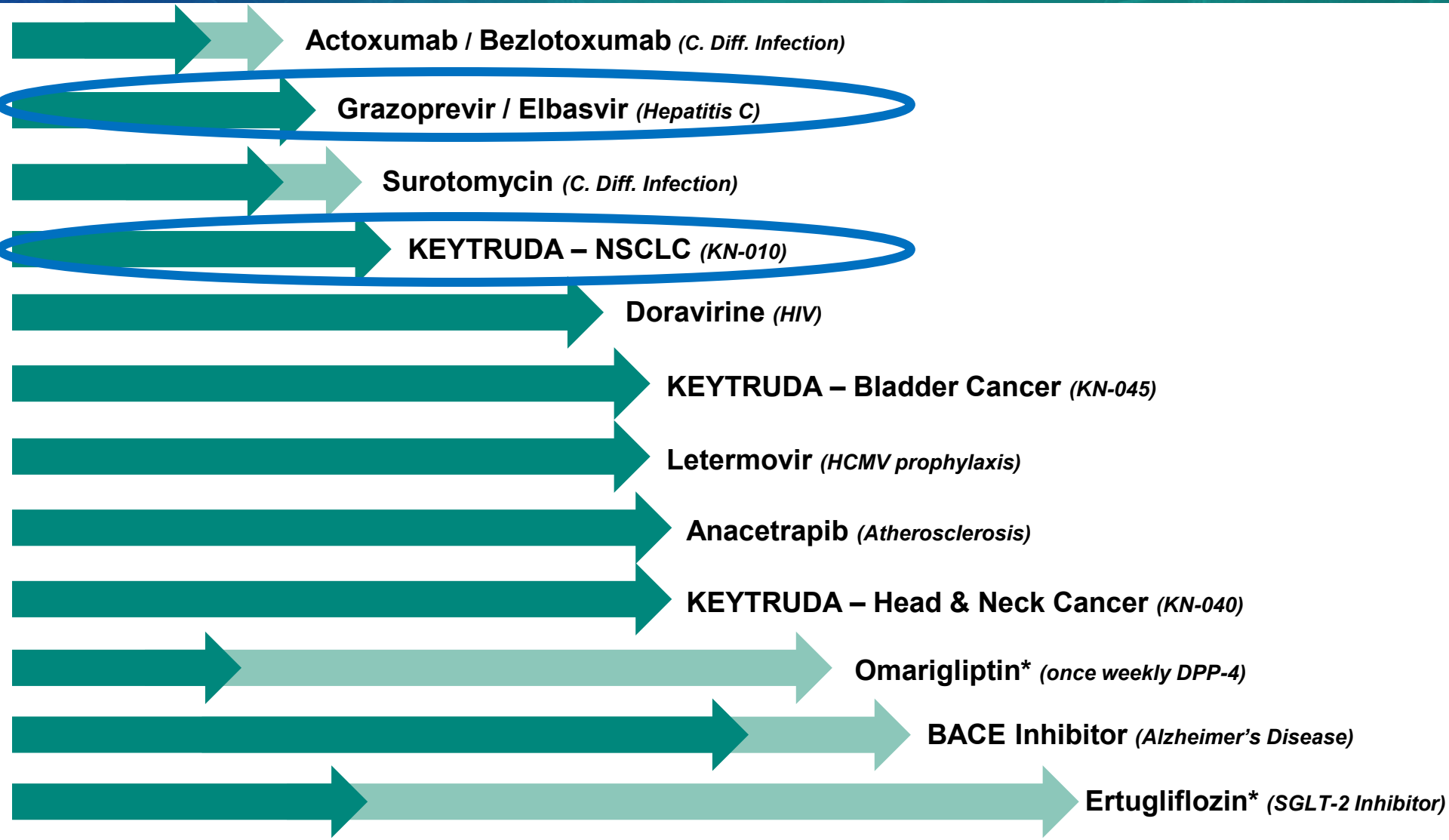
Merck is Advancing its Innovative Pipeline



* Light green arrow reflects CV outcomes studies for Omarigliptin and Ertugliflozin.

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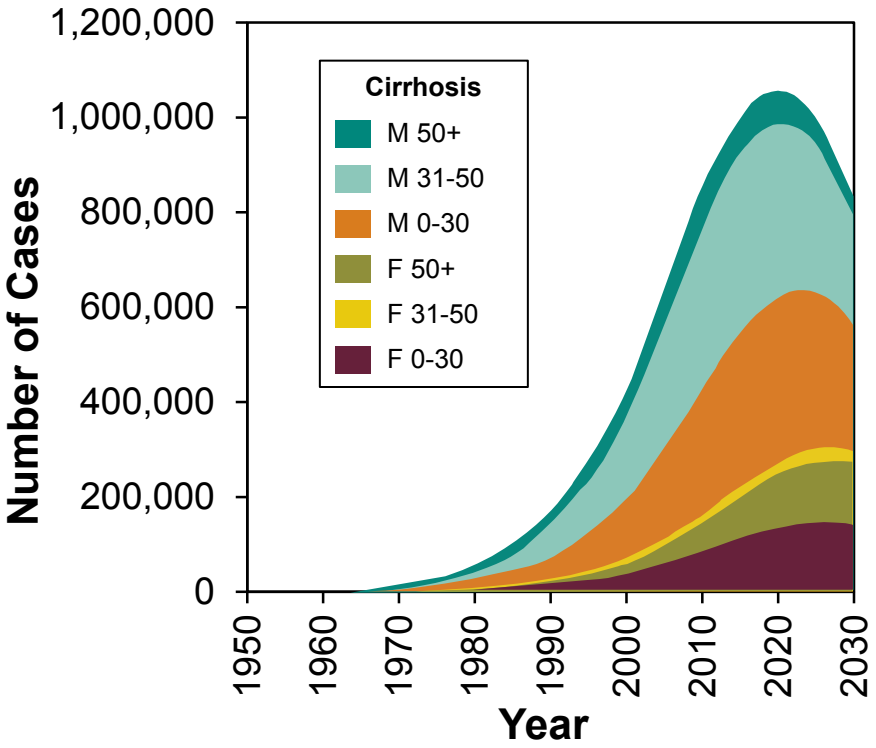
Hepatitis C: Fast-growing market with high unmet need

- In U.S., 3.2 million people with chronic HCV
  - 50% diagnosed
  - ~170,000 – 200,000 successfully treated
  - >450,000 may get insurance between 2014 and 2020
- Without changes to historical diagnosis and treatment paradigm, annual medical costs expected to rise to $85 billion in 5 years

The number of patients with chronic HCV infection and cirrhosis will peak in the next 7-10 years



There is an unmet medical need for an interferon-free, ribavirin-free, short duration HCV therapy that is highly effective across patient populations, including patients with cirrhosis.

Source. Hepatitis C in the United States, Holmberg, NEJM 2013; Decision Resources (2013), Health care reform and Hepatitis C: a convergence of risk and opportunity - Milliman , 2013; CDC Draft Recommendations – May 18, 2002

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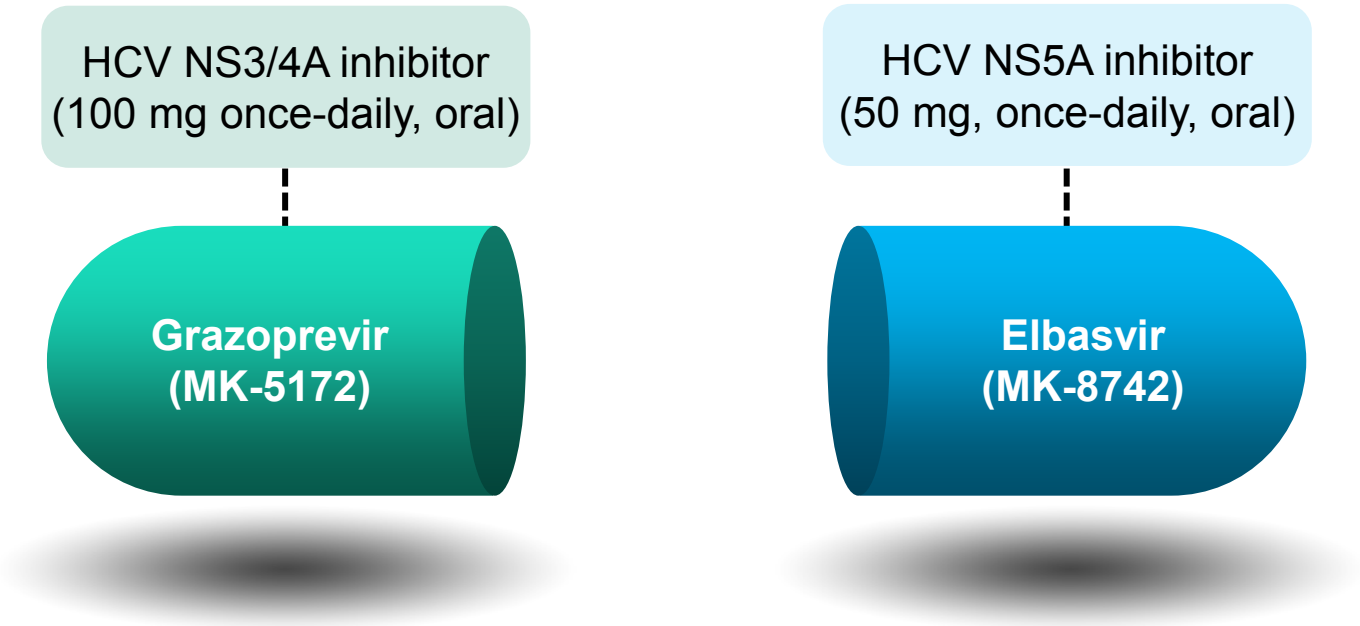
Grazoprevir/Elbasvir regimen for the treatment of HCV infection

All-oral, once-daily, fixed-dose tablet



- High rates of efficacy* demonstrated against key genotypes in a broad range of patients, including patients with cirrhosis, HIV co-infection, and other co-morbidities
- High barrier to resistance and activity against common resistance-associated variants of HCV
- Single tablet given once-daily, no significant food effect
- Breakthrough designation from FDA for selected populations

*Defined as Sustained Virologic Response 12 weeks post-treatment, or SVR12

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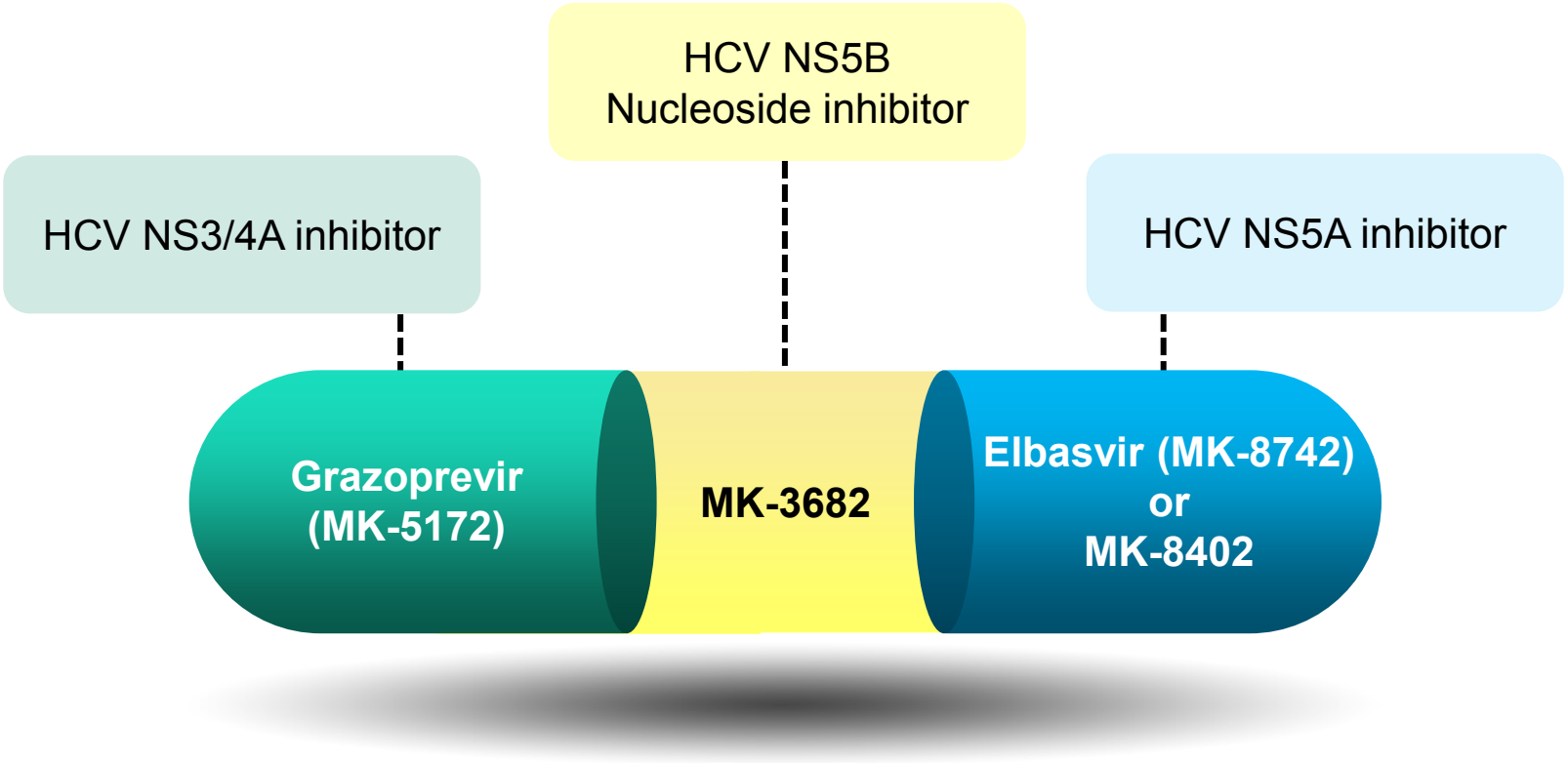
Looking to the future: The Merck triplet regimens



- C-CREST: Phase 2 program evaluates two different 3-drug regimens
- Designed to target broad range of genotypes
- Starts with 8 week regimens, and based on the results, will proceed to investigate shorter durations

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Merck is Committed to the Treatment of Hepatitis C

- Hepatitis C is a priority area for Merck
- There is significant unmet need across a large and diverse group of patients infected with Hepatitis C
- At EASL, Merck Grazoprevir/Elbasvir regimen demonstrated high rates of virologic efficacy in Phase 3 C-EDGE and Phase 2/3 C-SURFER studies
  - Anticipated filing in H1 2015
- C-CREST Phase 2 studies are ongoing for an 8-week Merck triplet regimen
  - Results anticipated in 2015

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Merck is Committed to Immuno-Oncology

- Oncology is a priority area of focus for Merck
- Our strategy:
  - Building a foundation with monotherapy
  - Expanding experience in combination therapy
- At present we have more than 90 clinical trials – across more than 30 tumor types and more than 14,000 patients
- New pivotal data for advanced melanoma and non-small-cell lung cancer (NSCLC) presented at AACR and published in the *New England Journal of Medicine*
- Data now in 8 tumor types, including new data in pleural mesothelioma

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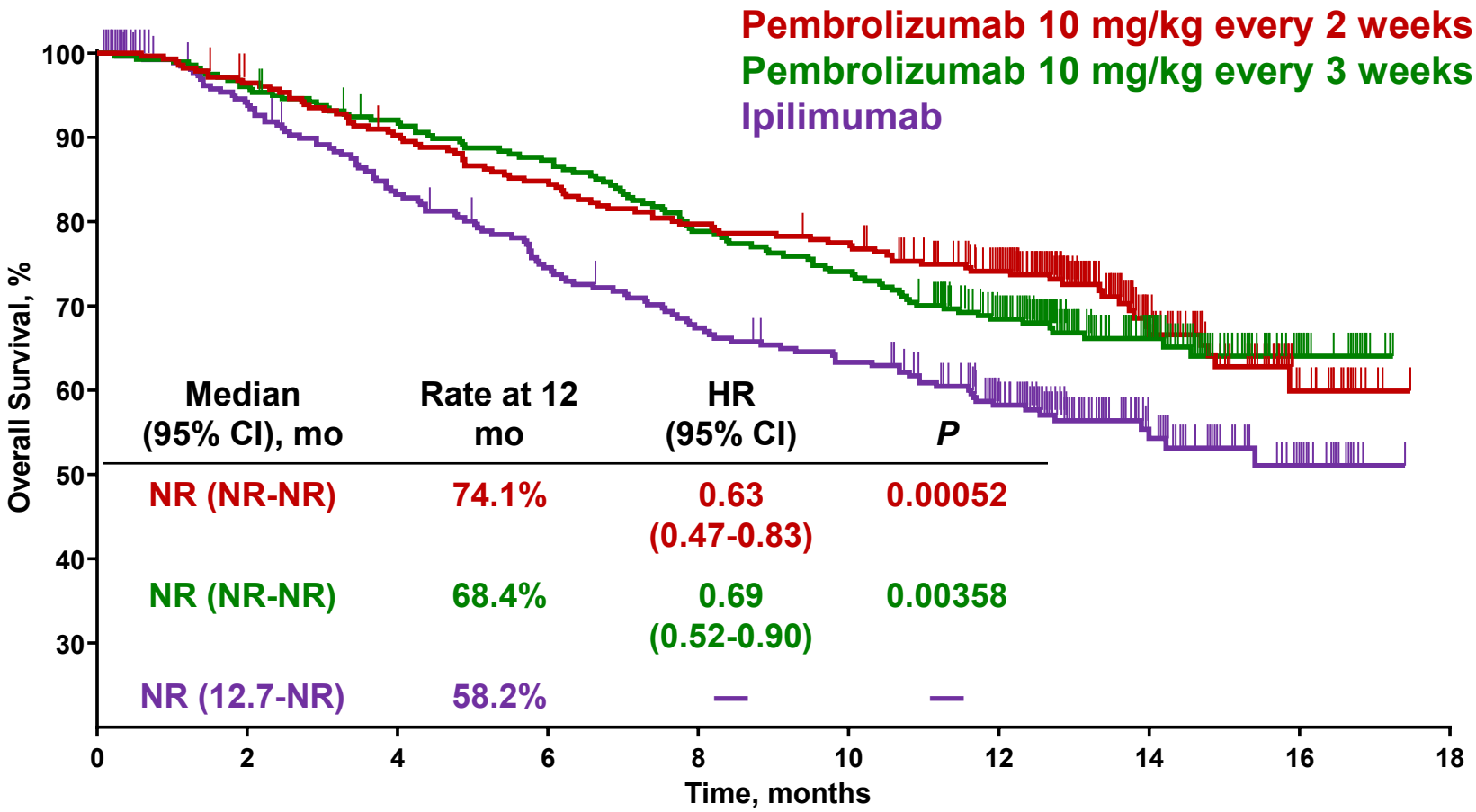
Keynote-006: KEYTRUDA Demonstrates Overall Survival Advantage vs. Ipilimumab in Advanced Melanoma



Analysis cut-off date: March 3, 2015.

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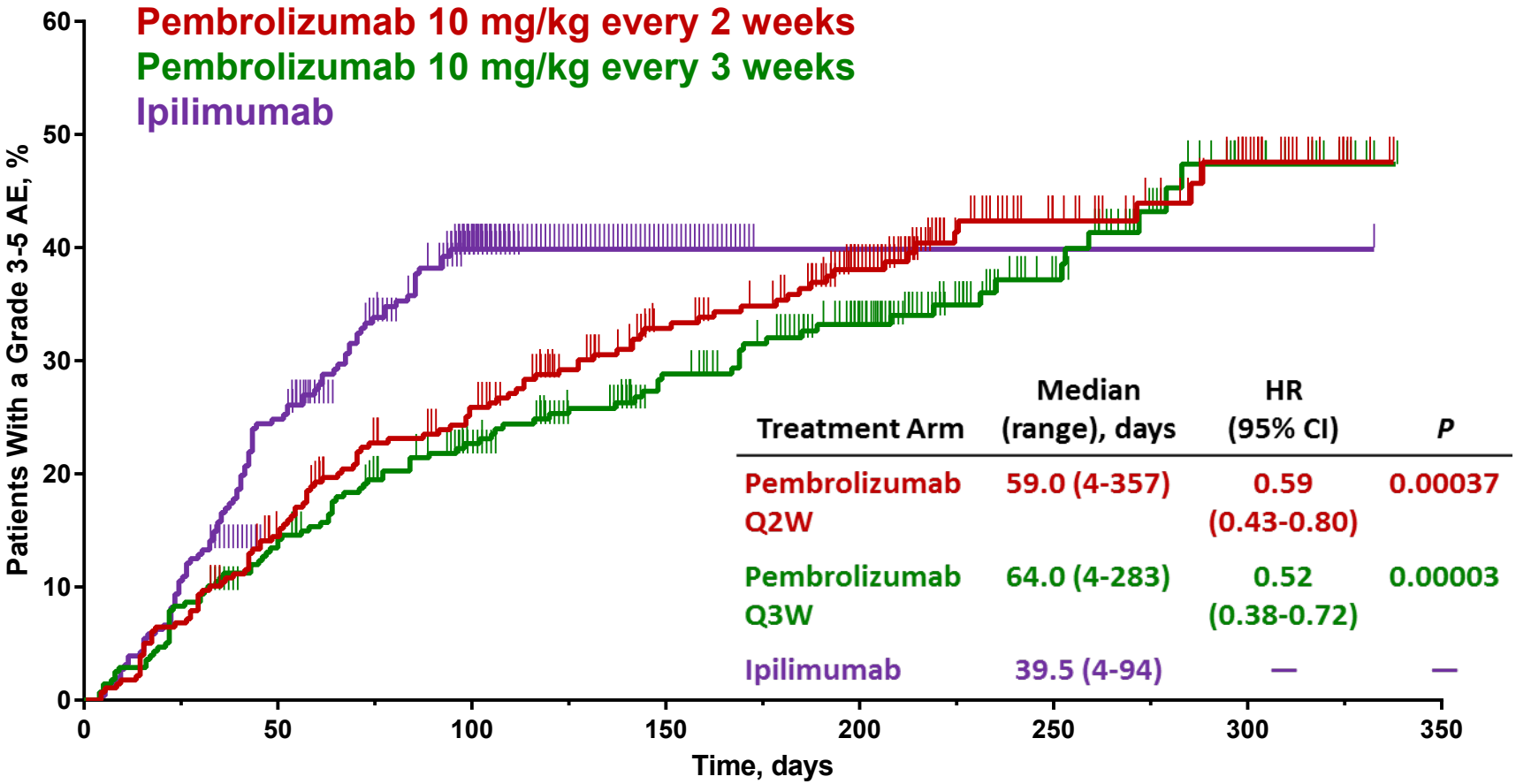
Keynote-006: Time to First Grade 3-5 Adverse Event[a] In Advanced Melanoma



Treatment Arm	Median (range), days	HR (95% CI)	*P*
Pembrolizumab Q2W	59.0 (4-357)	0.59 (0.43-0.80)	0.00037
Pembrolizumab Q3W	64.0 (4-283)	0.52 (0.38-0.72)	0.00003
Ipilimumab	39.5 (4-94)	—	—

No. at risk							
278	230	188	139	98	45	22	1
277	233	179	140	97	47	17	0
256	182	6	1	1	1	1	0

[a]Adverse events are presented regardless of causality.
Analysis cut-off date: September 3, 2014.

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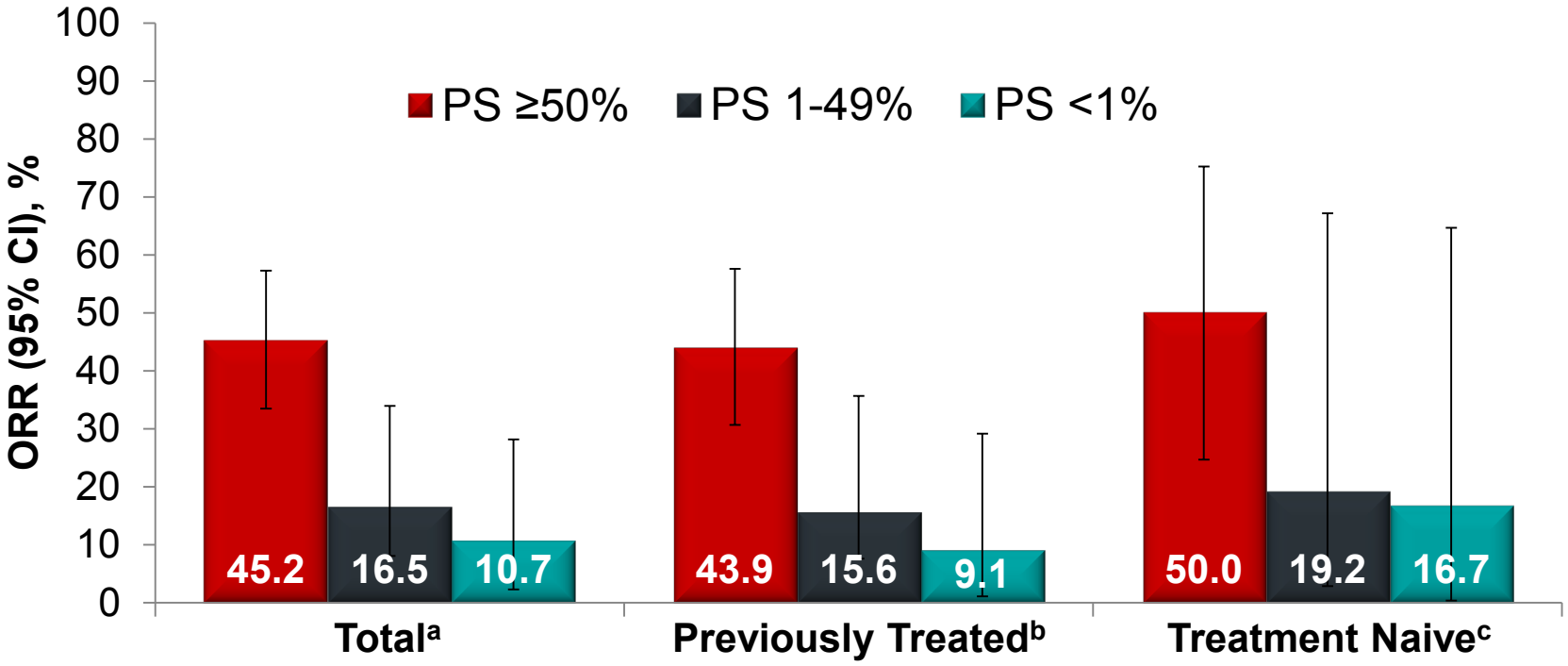
Keynote-001: Assessing NSCLC Clinical Outcomes by PD-L1 Biomarker

ORR by PD-L1 Proportion Score: CTA-Evaluable Validation Set Patients With Measurable Disease



When measurable disease is NOT required, the ORR (95% CI) in the PS ≥50% subgroups are: **42.3%, 41.0%, and 47.1%** in the total, previously treated, and treatment-naive populations[d]

[a]n = 73, 103, and 28, respectively. [b]n = 57, 77, and 22, respectively. [c]n = 16, 26, and 6, respectively. [d]n = 78, 61, and 17, respectively.

ORR was assessed per RECIST v1.1 by central review in the biomarker-evaluable population (ie, patients with measurable disease per RECIST v1.1 by central review at baseline whose slides were cut within 6 months of staining and for which a proportion score could be assigned).

Analysis cut-off date: August 29, 2014.

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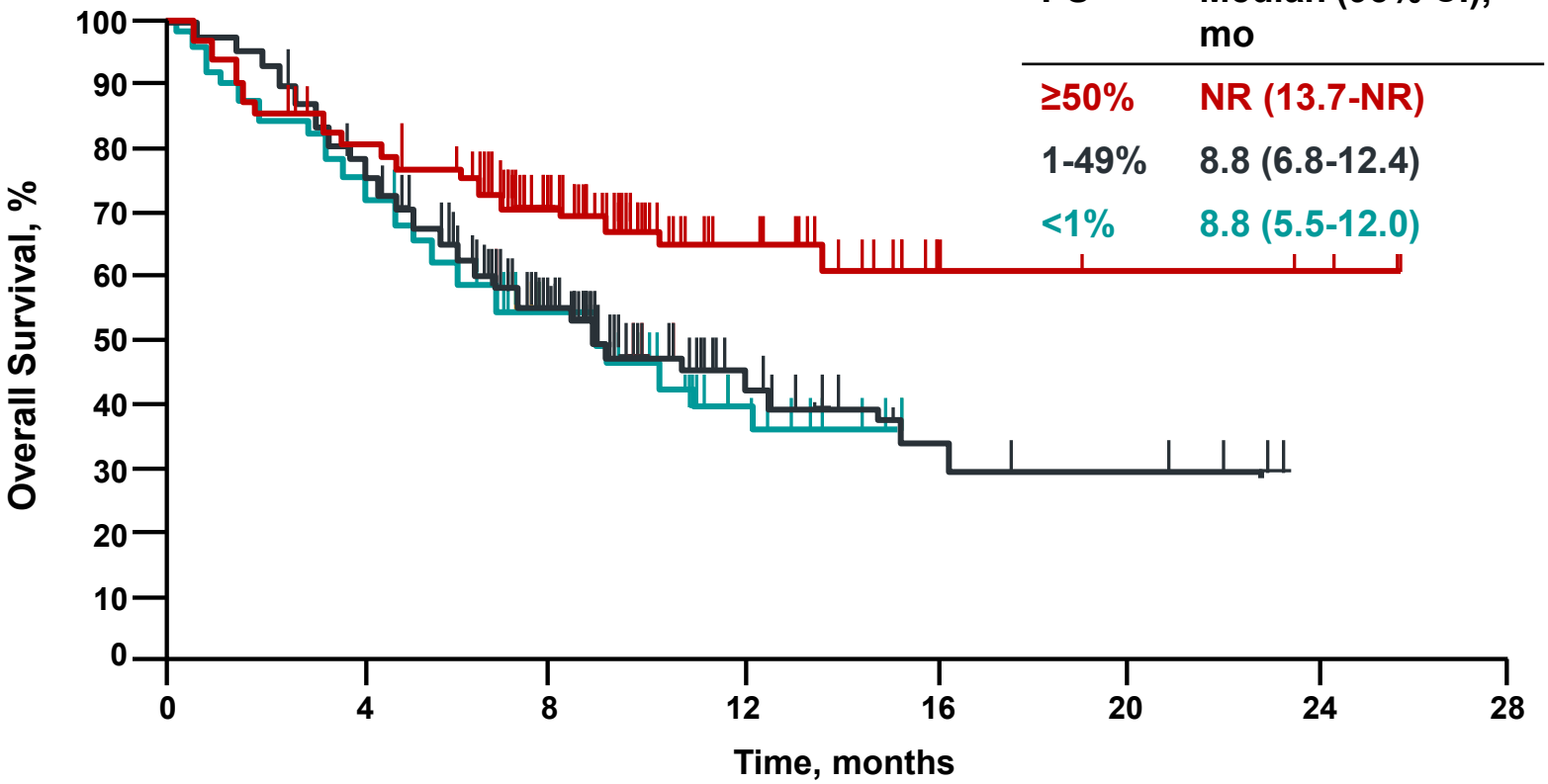
Keynote-001: Overall Survival by PD-L1 Expression, All CTA-Evaluable Patients[a]



n at risk

PS ≥50%	119	92	56	22	5	4	3	0
PS 1-49%	161	119	58	15	6	4	0	0
PS <1%	76	55	33	8	0	0	0	0

OS was assessed in all patients whose samples were stained within 6 months of cutting.
Analysis cut-off date: August 29, 2014.

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Broad Merck Immuno-Oncology Pipeline

PHASE 1 AND PHASE 2

- Melanoma & NSCLC (KN001)
- Head & Neck, Bladder, TNBC, & Gastric (KN012)
- Hematologic malignancies (KN013)
- MSI-high Colerectal and non-colon (KN016)
- NSCLC (Japan) (KN025)
- Melanoma brain metastasis (KN027)
- 20-tumor signal-finding study (KN028)
- RCC (KN031)
- Melanoma (Japan) (KN041)
- Pediatric melanoma, solid tumors, lymphoma (KN051)
- 1L Bladder (KN052)
- 2L Head & Neck (KN055)
- 3L Gastric (KN059)
- MK-8628 (BET inhibitor): Solid tumors, hematologic malignancies
- 40+ Additional Investigator-Initiated Monotherapy and Combination Studies
- Hodgkin's Lymphoma (KN087)
- Triple Negative Breast (KN086)
- MK-4166 (Anti-GITR): Solid tumors
- Melanoma / RCC with IPI/Sylatron (KN029)
- Melanoma BRAF & MEK Inh. (KN022, GSK)
- Melanoma with T-VEC (AMGN)
- Melanoma with entinostat (Syndax)
- Melanoma with PLX3397 (CSF-1R, Plexxikon)
- RCC with pazopanib (KN018, GSK)
- RCC with axitinib (PFE)
- Multiple Myeloma with len. & dex. (KN-023)
- NSCLC with chemo (KN011)
- NSCLC with IDO1 (KN037, INCY)
- NSCLC with chemo, Ipi, kinase inh's. (KN021)
- NSCLC with abraxane (KN026)
- NSCLC with necitumumab (LLY)
- NSCLC with Xalkori (PFE)
- NSCLC with entinostat (Syndax)
- Prostate with *Lm*-LLO (KN046, ADXS)
- HER2+ breast with trastuzumab
- TNBC with eribulin (Eisai)
- Solid tumors with 41BB (KN036, PFE)
- Solid Tumors with ramucirumab (LLY)
- Solid Tumors with lenvatinib (Eisai)
- Solid Tumors with birinipant (TetraLogic)
- Solid Tumors with PLX3397 (CSF-1R, Plexxikon)

REGISTRATION

- 1L Melanoma (KN006)
- 2L Melanoma (KN002)
- Adjuvant Melanoma (KN054)
- 2/3 L NSCLC (KN010)
- 1L NSCLC (KN024)
- 1L NSCLC (KN042)
- 1L Head & Neck (KN048)
- 2L Head & Neck (KN040)
- 2L Bladder (KN045)
- 2L Gastric (KN061)

STUDIES

- Ongoing
- Planned
- Combination

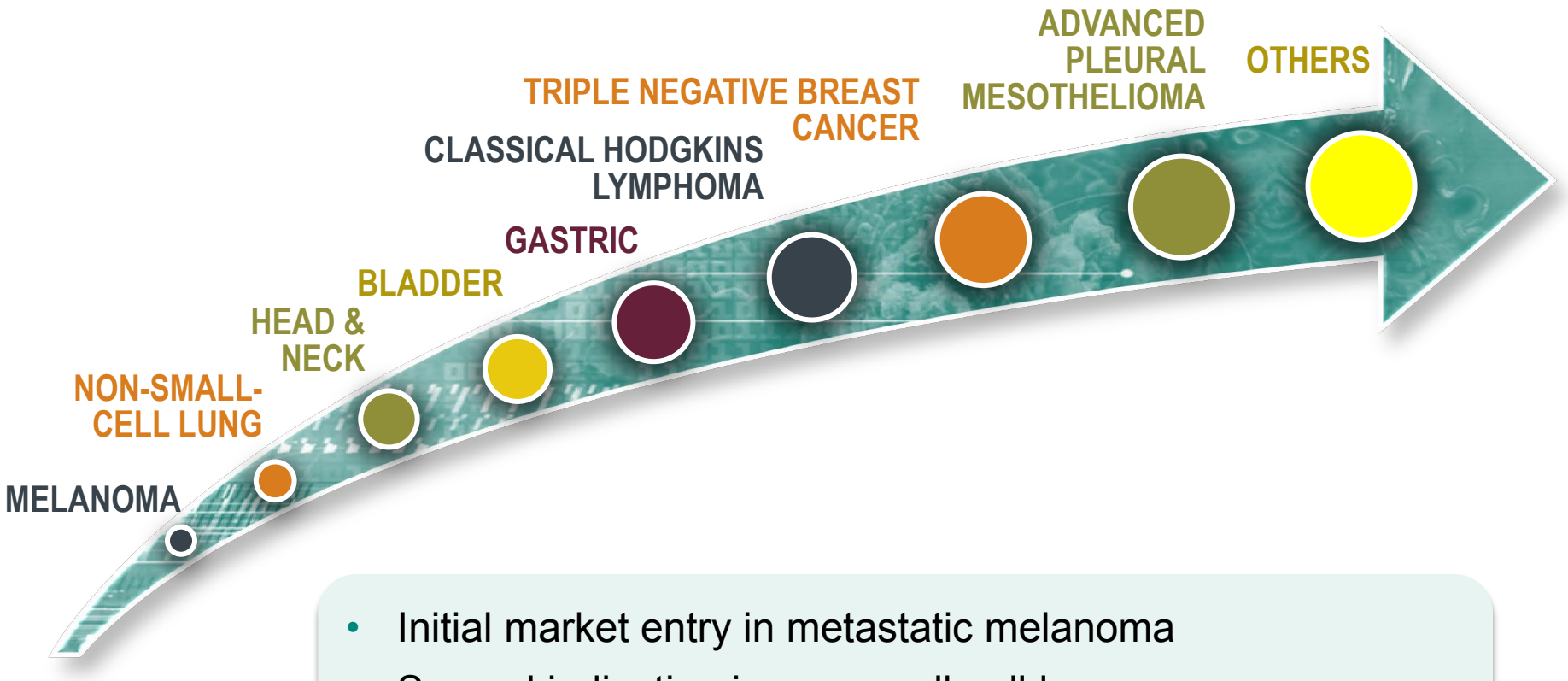
ASCO: Multiple Presentations in Advanced Malignancies

Selected Titles	Type/Session	Date
Antitumor activity and safety of pembrolizumab in patients (pts) with advanced squamous cell carcinoma of the head and neck (SCCHN): Preliminary results from KEYNOTE-012 expansion cohort	Oral Presentation; Head and Neck Cancer	Monday, June 1 3:39PM–3:51PM
Long-term efficacy of pembrolizumab (pembro; MK-3475) in a pooled analysis of 655 patients (pts) with advanced melanoma (MEL) enrolled in KEYNOTE-001	Oral Presentation; Melanoma/Skin Cancers	Saturday, May 30 2:39PM–2:51PM
Atypical patterns of response in patients (pts) with metastatic melanoma treated with pembrolizumab (MK-3475) in KEYNOTE-001	Oral Presentation; Developmental Therapeutics and Translational Research	Monday, June 1 1:15PM–1:27PM
Association of response to programmed death receptor 1 (PD-1) blockade with pembrolizumab (MK-3475) with an interferon-inflammatory immune gene signature	Oral Presentation; Developmental Therapeutics and Translational Research	Monday, June 1 1:27PM–1:39PM
Phase I study of pembrolizumab (pembro; MK-3475) plus ipilimumab (IPI) as second-line therapy for advanced non-small cell lung cancer (NSCLC): KEYNOTE-021 cohort D	Clinical Science Symposium; Lung Cancer	Sunday, May 31 4:54PM–5:06PM
Pembrolizumab (MK-3475) in patients (pts) with extensive-stage small cell lung cancer (SCLC): Preliminary safety and efficacy results from KEYNOTE-028	Oral Presentation; Lung Cancer	Saturday, May 30 3:48PM–4:00PM
PD-1 blockade in tumors with mismatch repair deficiency	Clinical Science Symposium; Special Sessions	Saturday, May 30 8:05AM-8:17AM
Relationship between PD-L1 expression and clinical outcomes in patients with advanced gastric cancer treated with the anti-PD-1 monoclonal antibody pembrolizumab (MK-3475) in KEYNOTE-012	Oral Presentation; Gastrointestinal (Noncolorectal) Cancer	Sunday, May 31 8:12AM-8:24AM
Pembrolizumab (MK-3475) for patients (pts) with advanced esophageal carcinoma: Preliminary results from KEYNOTE-028	Clinical Science Symposium; Gastrointestinal (Noncolorectal) Cancer	Sunday, May 31 4:54PM-5:06PM
Pembrolizumab (MK-3475) for advanced urothelial cancer: Updated results and biomarker analysis from KEYNOTE-012	Oral Presentation; Genitourinary Cancer	Monday, June 1 10:09AM-10:21AM
Antitumor activity and safety of pembrolizumab in patients (pts) with PD-L1 positive advanced ovarian cancer: Interim results from a phase Ib study	Clinical Science Symposium; Gynecologic Cancer	Monday, June 1 3:12PM-3:24PM

Frank Clyburn

President, Global Oncology

Potential Launches in Multiple Tumor Types



- Initial market entry in metastatic melanoma
- Second indication in non-small-cell lung cancer
- Possible application in up to 30 different types of tumors

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Rapid Penetration of Ipilimumab-Refractory Melanoma

- **$83mm in Q1 2015 sales**
- Vast majority of ipilimumab-refractory melanoma patients being treated with KEYTRUDA
- Strong access in labeled indication
- Broad acceptance of KEYTRUDA in NCCN melanoma treatment guidelines

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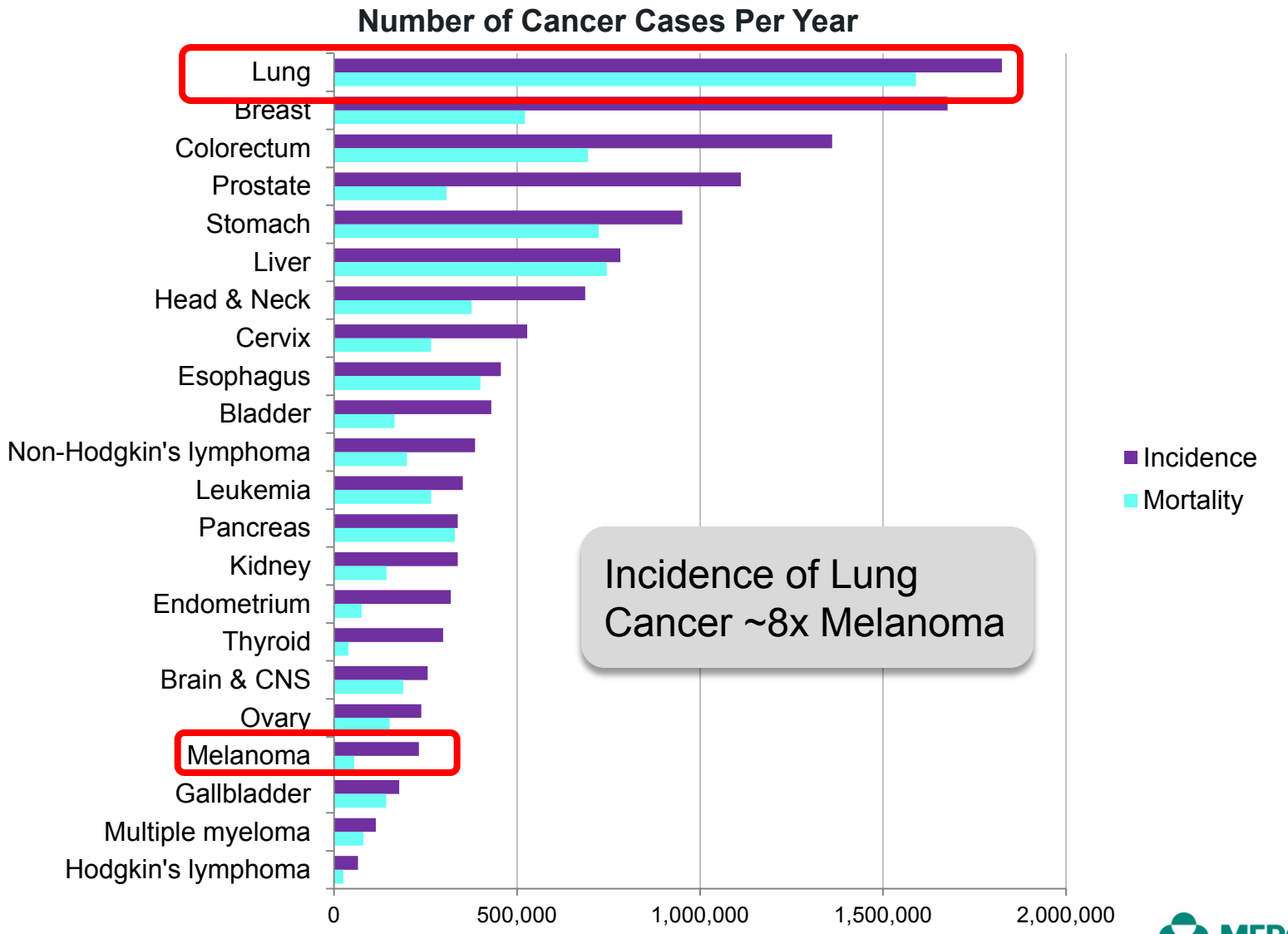
Lung Cancer: Largest Global Incidence and Worst Mortality



Source: GLOBOCAN 2012: Estimated cancer incidence, mortality and prevalence worldwide, in 2012.

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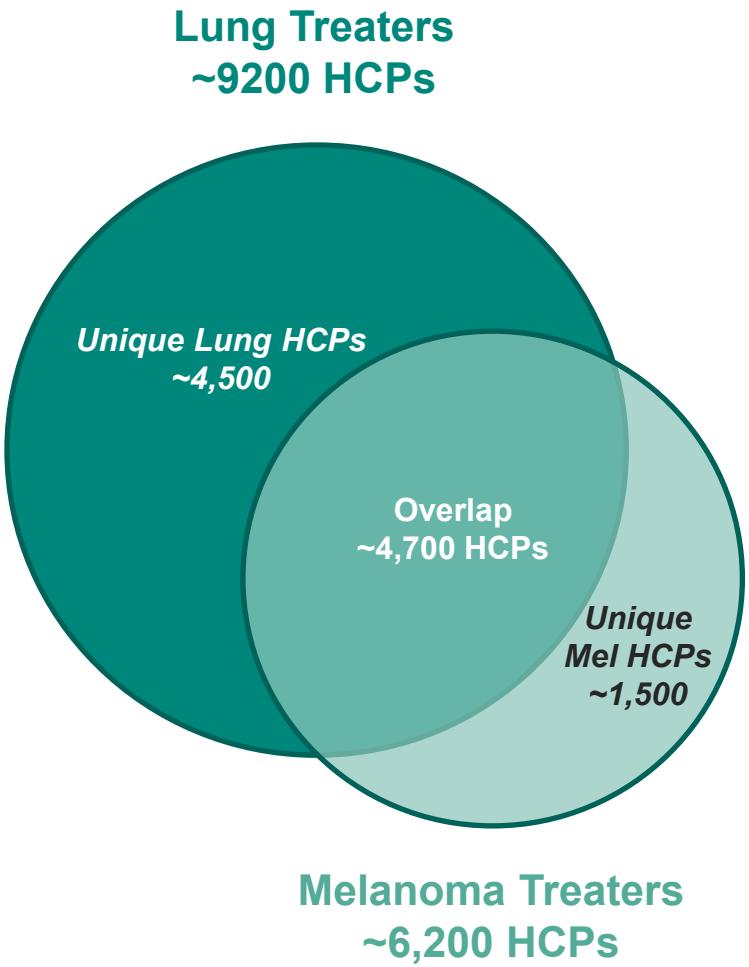
U.S. Fully Prepared for Lung Indication

Maximizing opportunity in NSCLC with reach into the community oncology setting

- Significant overlap with melanoma HCP's
  - Sales force expansion completed 1Q15
- Substantial education planned
- Heavy focus on community-based KOLs
- Preparing for companion diagnostic



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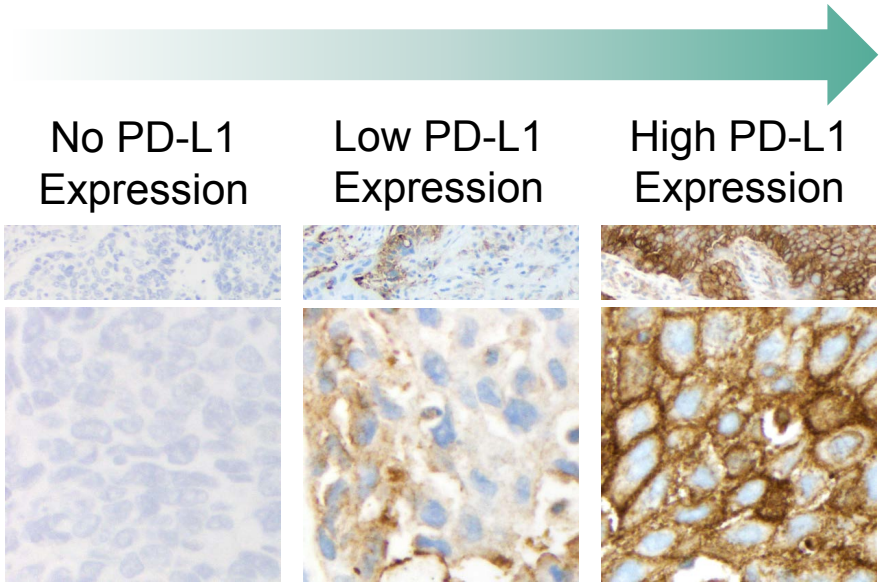
Companion Diagnostic: Identifying Patients Who May Benefit Most from Treatment with KEYTRUDA

Value of PD-L1 Diagnostic to Customers

Correlation with Improved Outcomes



- Diagnostic testing for treatment decisions has become a standard and widespread practice in NSCLC
- PD-L1 diagnostic may help identify **patients** who may benefit most from treatment with KEYTRUDA
- Enables **physicians** to have personalized conversations with patients
- Empowers **physicians** to prioritize treatment options
- **Payers** are interested in potential health economics

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Preparing for Launch in Key ex-U.S. Markets

Merck is preparing to launch KEYTRUDA in Europe, Canada, Japan, and other Global Markets

KOL engagement

- KOLs identified and plans developed
- Regulatory and reimbursement support secured
- Expanding clinical and medical teams

Scientific Awareness

- Majority of oncologists engaged for Melanoma
- Strong awareness pre-launch
  - High in Melanoma
  - Building in NSCLC

Customer-Facing Organizations

- Building Commercial, Medical, and Sales teams
- Field expansion in progress

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2015: Merck Looking Forward to...

- Ongoing U.S. melanoma launch and other global markets
- Anticipated approval in NSCLC in U.S. and melanoma in EU
- Anticipated full approval from Keynote-002 submission in U.S. for ipilimumab-refractory melanoma
- Filing of KN-006 data for ipilimumab-naïve melanoma
- Data updates, including new tumors, at ASCO and other medical meetings

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