AMGEN AT ASCO 2019: ADVANCING A PORTFOLIO OF NOVEL, HIGH-POTENTIAL CANCER THERAPIES

JUNE 3, 2019

AMGEN®

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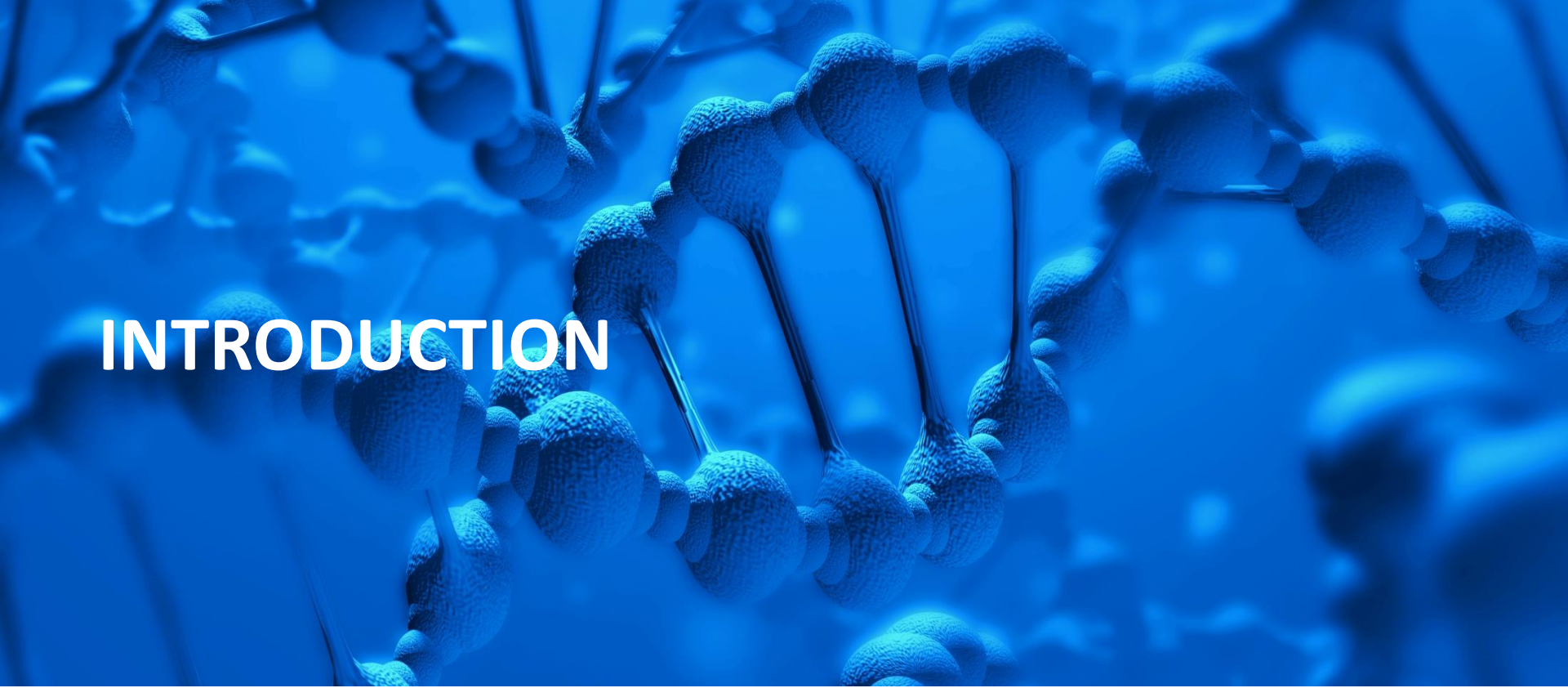
The scientific information discussed in this presentation related to our product candidates is preliminary and investigative. Such product candidates are not approved by the U.S. Food and Drug Administration, and no conclusions can or should be drawn regarding the safety or effectiveness of the product candidates. Further, the scientific information discussed in this presentation relating to new indications for our products is preliminary and investigative and is not part of the labeling approved by the U.S. Food and Drug Administration for the products. The products are not approved for the investigational use(s) discussed in this presentation, and no conclusions can or should be drawn regarding the safety or effectiveness of the products for these uses.

AGENDA

Introduction	**David Reese, M.D.—Executive Vice President, Research and Development**
AMG 510	**Marwan Fakih, M.D.—Professor, Department of Medical Oncology and Therapeutics Research, City of Hope, Duarte, CA**
AMG 212 and AMG 420	**Gregory Friberg, M.D.—Vice President, Global Development and Oncology Therapeutic Area Head**
Q&A	**David Reese, M.D.** **Gregory Friberg, M.D.** **Marwan Fakih, M.D.** **Ramaswamy Govindan, M.D.—Professor of Medicine, Director, Section of Medical Oncology, Division of Oncology, Washington University School of Medicine, St. Louis, MO**



INTRODUCTION

DAVID REESE, M.D.

EXECUTIVE VICE PRESIDENT, RESEARCH AND DEVELOPMENT

AMGEN®

AMGEN ONCOLOGY: A BROAD, DIFFERENTIATED PORTFOLIO

- **Built on differentiated, first-in-class molecules with high potential**
- **Developing combination/sequential therapies against multiple targets in several indications to drive deep, durable responses**
- **Programs with compelling efficacy may rapidly advance toward registration**
- **Data generated in 2019 will provide key insights**

DATA EXPECTED FROM MANY NOVEL, HIGH-POTENTIAL ONCOLOGY PROGRAMS

Multiple Myeloma	Leukemia/Lymphoma		Solid Tumors	
KYPROLIS® proteasome inhibitor	BLINCYTO® CD19 BiTE® molecule	ALL NHL	IMLYGIC® oncolytic virus	Melanoma
AMG 420 BCMA BiTE® molecule	AMG 562 CD19 HLE-BiTE® molecule	NHL	AMG 509* prostate bispecific Ab (XmAb®)	Prostate Cancer
			AMG 212 PSMA BiTE® molecule	
AMG 701 BCMA HLE-BiTE® molecule	AMG 397 MCL-1 inhibitor (oral)		AMG 160 PSMA HLE-BiTE® molecule	
AMG 424 CD38 bispecific Ab (XmAb®)	AMG 330 CD33 BiTE® molecule	AML	AMG 757 DLL3 HLE-BiTE® molecule	Small Cell Lung Cancer
AMG 176 MCL-1 inhibitor (iv)	AMG 673 CD33 HLE-BiTE® molecule		AMG 119 DLL3 CAR T	
AMG 397 MCL-1 inhibitor (oral)	AMG 427 FLT3 HLE-BiTE® molecule		AMG 510 KRAS G12C inhibitor	Solid Tumors
	AMG 553* FLT3 CAR T		AMG 199* HLE-BiTE® molecule	Gastric Cancer
	AMG 176 MCL-1 inhibitor (iv)		AMG 910* HLE-BiTE® molecule	
	AMG 397 MCL-1 inhibitor (oral)		AMG 596 EGFRviii BiTE® molecule	Glioblastoma

Data expected 2019

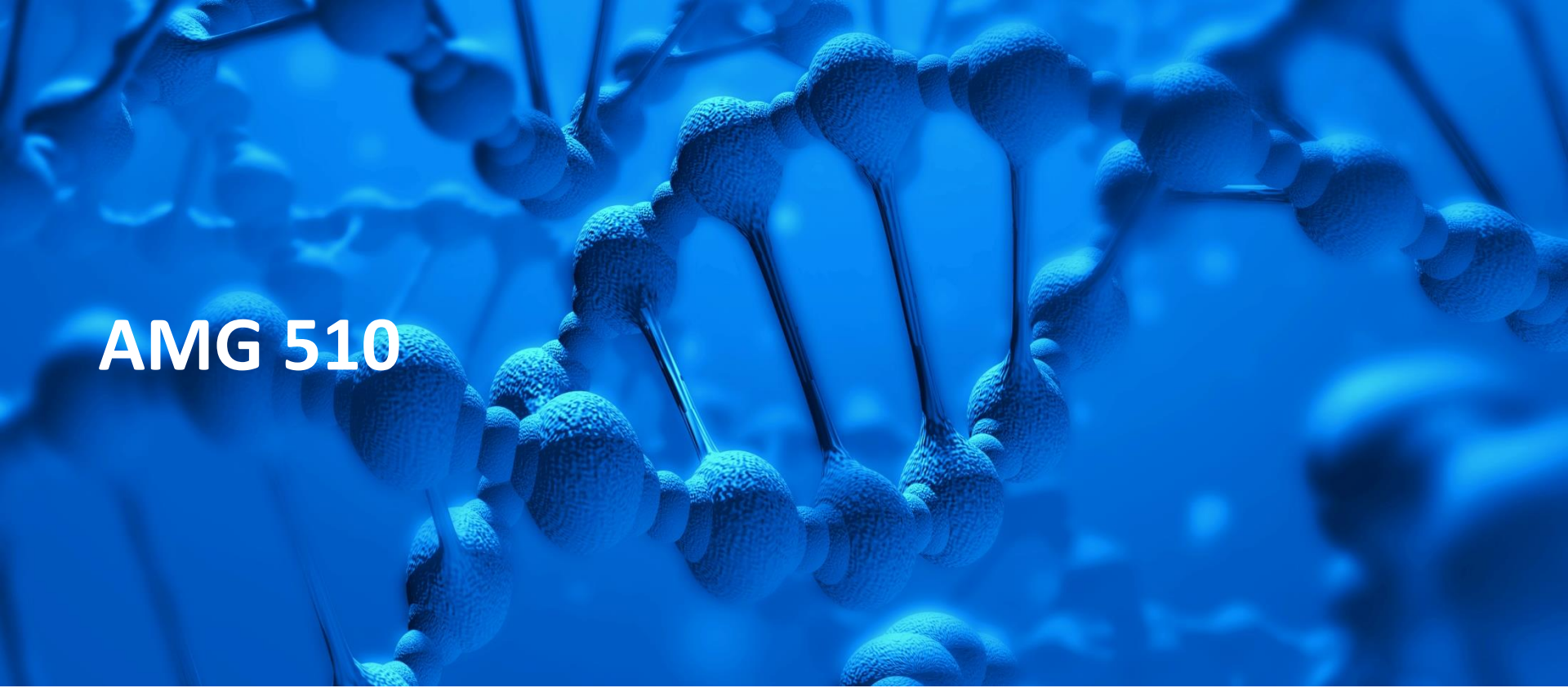
Data possible 2019

*Not yet enrolling patients; BCMA = B-cell maturation antigen; BiTE® = bispecific T-cell engager; Ab = antibody; Mcl-1 = myeloid cell leukemia-1; iv = intravenous; HLE = half-life extended; FLT3 = fms-like tyrosine kinase 3; CAR T = chimeric antigen receptor enhanced T cells; ALL = acute lymphoblastic leukemia; NHL = non-Hodgkin's lymphoma AML = acute myeloid leukemia; PSMA = prostate-specific membrane antigen; DLL3 = delta-like 3; EGFRviii = epithelial growth factor receptor variant iii

Bispecific

Small Molecule/Other

AMGEN®



AMG 510

MARWAN FAKIH, M.D.

PROFESSOR, DEPARTMENT OF MEDICAL ONCOLOGY &
THERAPEUTICS RESEARCH, CITY OF HOPE, DUARTE, CA

AMGEN®

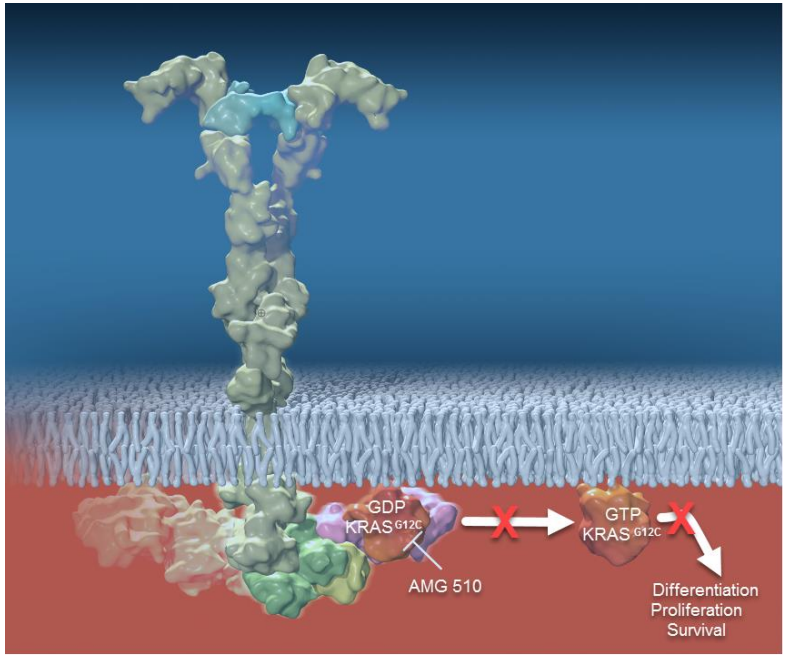
Phase 1 Study Evaluating the Safety, Tolerability, Pharmacokinetics (PK) and Efficacy of AMG 510, a Novel Small Molecule KRAS^{G12C} Inhibitor, in Advanced Solid Tumors

Marwan G Fakih, MD;[1] Bert Howard O'Neil, MD;[2] Timothy J Price, MBBS, FRACP;[3] Gerald S Falchook, MD;[5] Jayesh Desai, MBBS, FRACP;[6] James Kuo, MBBS, FRACP;[7] Ramaswamy Govindan, MD;[8] Erik Rasmussen, MS;[4] Phuong Khanh Morrow, MD;[4] Jude Ngang, PharmD;[4] Haby Henary, MD;[4] David Hong, MD[9]

[1]City of Hope, Duarte, CA, USA; [2]Indiana University, Simon Cancer Center, Indianapolis, IN, USA; [3]The Queen Elizabeth Hospital, Woodville South, AU; [4]Amgen Inc, Thousand Oaks, CA, USA; [5]Sarah Cannon Research Institute, Denver, CO, USA; [6]Peter MacCallum Cancer Centre, Melbourne, AU; [7]Scientia Clinical Research, Randwick, AU, [8]Washington University, St Louis, MO, USA; [9]MD Anderson Cancer Center, Houston, TX, USA

AMG 510 is a First in Class KRAS^{G12C} Inhibitor

- KRAS is a GTP-binding protein that links receptor tyrosine kinase activation to intracellular signaling [1,2]
- Mutation of KRAS favors the GTP-bound active state and constitutive activation of downstream effects (differentiation, proliferation, survival)[3]
- *KRAS^{G12C}* mutation has been identified as an oncogenic driver of tumorigenesis
- *KRAS^{G12C}* mutation is found in approximately 13% of lung cancer[4], 3% of colorectal (CRC)[5] and appendix cancer, and 1-3% of other solid tumors[6]
- Currently there is no approved therapy targeting this mutation
- AMG 510 is a novel, first in class, small molecule that specifically and irreversibly inhibits KRAS^{G12C} by locking it in an inactive GDP-bound state



1. Prior IA, et al. *Cancer Res.* 2012;72:2457-2467.
2. Ostrem JM, et al. *Nat Rev Drug Discov*. 2016;15:771-785.
3. Ryan MB, et al. *Nat Rev Clin Oncol.* 2018;15:709-720.
4. Biernacka A, et al. *Cancer Genet*. 2016;209:195-198.
5. Neumann J, et al. *Pathol Res Pract*. 2009;205:858-862
6. Zhou L et al. *Med Oncol*. 2016;33:32.

GDP, guanosine diphosphate; GTP, guanosine triphosphate;
KRAS, Kirsten rat sarcoma viral oncogene homolog;
KRAS^{G12C}, KRAS protein with a G12C mutation at the protein level.

AMG 510 First in Human Study Design

This is a multicenter, open-label, phase 1, first in human study (NCT 03600883) in adult patients with locally advanced or metastatic *KRAS*^{G12C} mutant solid tumors

Key Eligibility Criteria

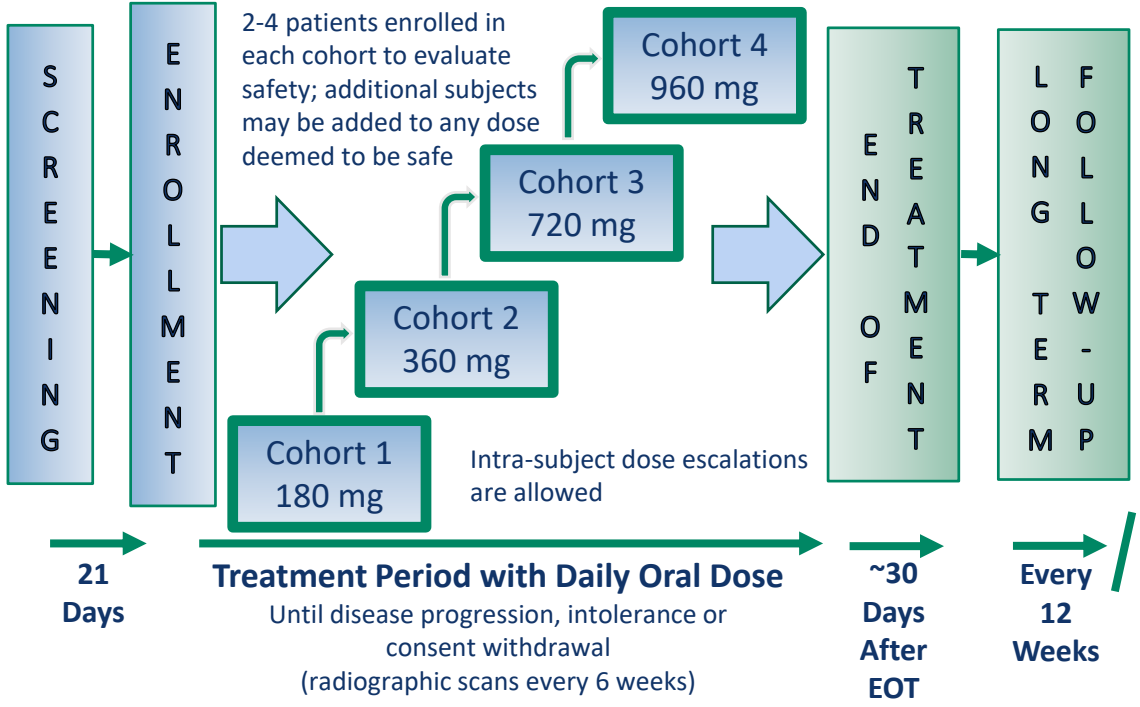
- Documented locally-advanced or metastatic *KRAS*^{G12C} measurable or evaluable solid tumors
- Received prior standard therapy appropriate for tumor type and stage of disease
- No active brain metastases

Primary Endpoints

- Safety and tolerability including the incidence of AEs and DLTs

Key Secondary Endpoints

- PK, best response
- Objective response rate , duration of response and duration of stable disease and PFS



Patient Disposition

* All due to disease progression

First patient enrolled 27 August 2018; Data cutoff date: 4 April 2019

Demographics and Baseline Characteristics

	180 mg (n = 6)	360 mg (n = 12)	720 mg (n = 11)	960 mg (n = 6)	Total (n = 35)
Sex, n (%)					
Male	3 (50)	3 (25)	4 (36)	4 (67)	14 (40)
Female	3 (50)	9 (75)	7 (64)	2 (33)	21 (60)
Age, median (range), years	60 (54–75)	50 (33–67)	67 (40–76)	55 (48–77)	55 (33–77)
Race, n (%)					
White	6 (100)	10 (83)	9 (82)	6 (100)	31 (88)
Non-white	0	2 (17)	2 (18)	0	4 (11)
ECOG PS, n (%)					
0	2 (33)	2 (17)	1 (9)	2 (33)	7 (20)
1	4 (67)	10 (83)	9 (81)	4 (67)	27 (77)
2	0 (0)	0 (0)	1 (9)	0 (0)	1 (3)
≥ 2 lines of prior systemic therapy	6 (100)	12 (100)	11 (100)	6 (100)	35 (100)

Patient Incidence of Common (>10%) and Serious Treatment Emergent Adverse Events (TEAE)

Adverse Event	Gr 1 n	Gr 2 n	Gr 3 n	All Grades n
Any Treatment Emergent Adverse Event				25
Decreased Appetite	3	3	0	6
Diarrhea	5	0	1	6
Fatigue	1	3	1	5
Headache	3	1	1	5
Cough	2	2	0	4
Hot Flush	4	0	0	4
Nausea	4	0	0	4

6 of 35 patients reported serious AEs:

- 2 Grade 3
  - Pneumonia
  - Malignant biliary obstruction
- 1 Grade 4
  - Pericardial effusion
- 3 Fatal
  - Dyspnea
  - 2 Colorectal cancer metastatic
- None of these serious AEs were reported as related to AMG 510

Patient Incidence of Treatment Related TEAE

Adverse Event	Gr 1 n	Gr 2 n	Adverse Event	Gr 1 n	Gr 2 n
Diarrhea	3		Proteinuria		1
Decreased appetite	2		Dry mouth	1	
Nausea	2		Flatulence	1	
Elevated creatine phosphokinase	2		Vomiting	1	
Elevated or change in AST	1	1	Fatigue	1	
Elevated or change in ALT	1	1	WBC Decrease	1	
Elevated alkaline phosphatase	1	1	Pyrexia	1	
Cheilitis		1	Arthralgia	1	
Hyperkalemia		1	Hot Flush	1	

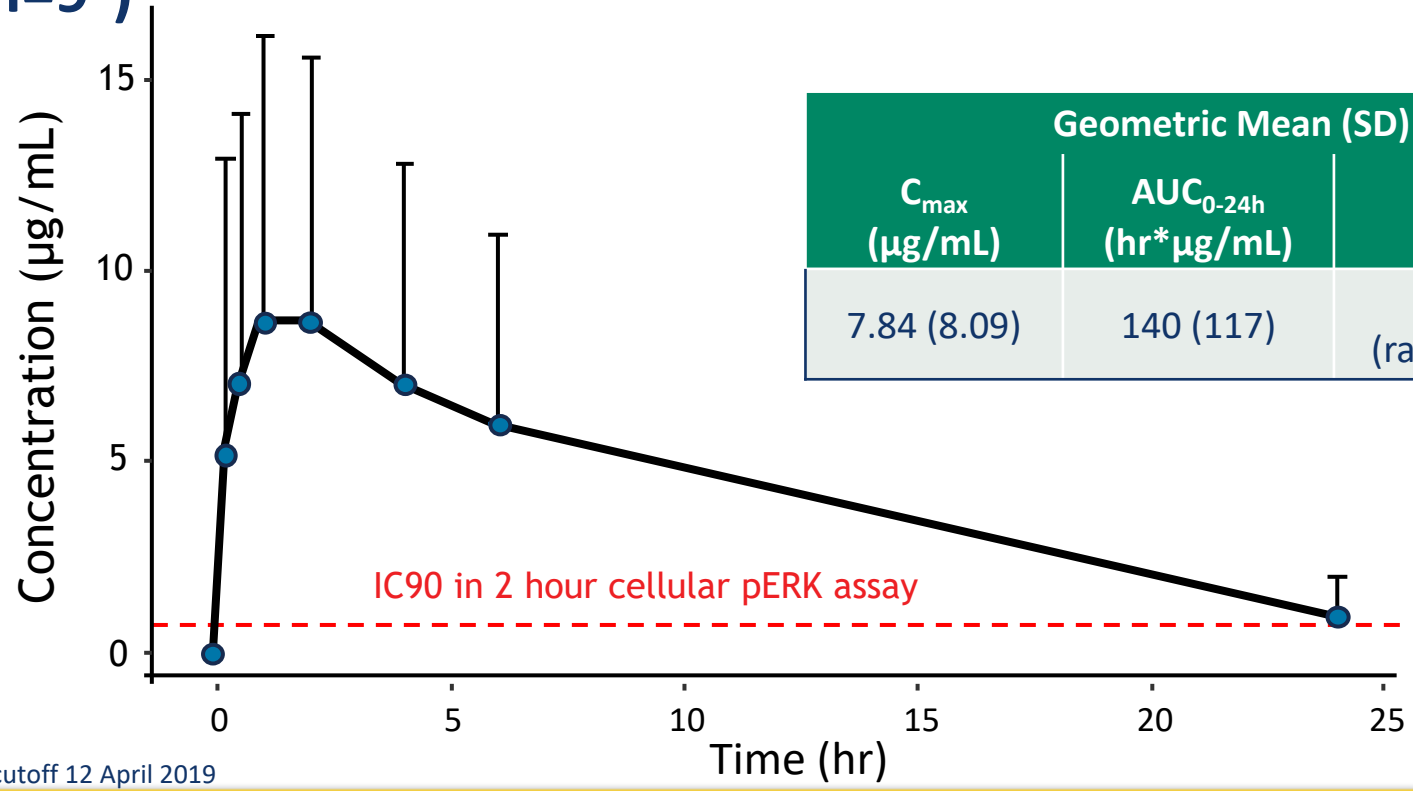
Grade 3 Adverse Event	n
Anemia[a]	1
Diarrhea[b]	1

[a]Patient had grade 2 anemia at baseline
[b]Lasting 2 days

None of the 35 patients reported:

- DLTs
- Grade 4 related AEs
- Serious related AEs

AMG 510 Pharmacokinetic Profile - 960 mg PO Dose (n=9*)



Geometric Mean (SD)		
C_{max} (µg/mL)	AUC_{0-24h} (hr*µg/mL)	$t_{1/2,z}$ (hr)
7.84 (8.09)	140 (117)	6.5 (range: 4.2-8.0)

*PK data cutoff 12 April 2019

NSCLC: Individual Patient Radiologic Responses

Demographics:

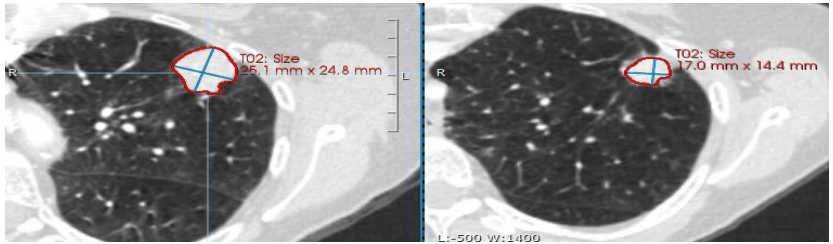
61 y.o. Female, diagnosed with KRAS^{G12C} metastatic NSCLC August 2010

Treatment history:

- Radiation + Carboplatin/Taxol from Aug 2010 until Oct 2010
- Carboplatin/Pemetrexed from Oct 2016 until Jun 2017
- Nivolumab from Aug 2017 until Apr 2018
- AMG 510 – 180 mg since Sept 2018

Best Response:

- PR (-34% central read) Still on treatment (27.4 weeks as of data cutoff)



Demographics:

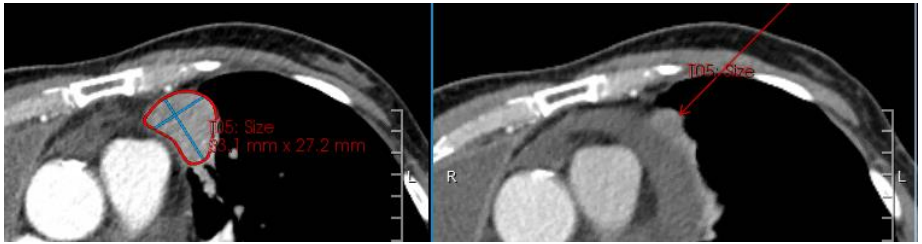
59 y.o. Male, with KRAS^{G12C} metastatic NSCLC, December 2013

Treatment history:

- Carboplatin/Pemetrexed Feb 2014 until Feb 2015
- Erlotinib from April 2015 until Jun 2015
- Nivolumab Aug 2015 until Aug 2017
- Dasatinib from Jul 2016 until Aug 2017
- M3541 (Targeted biologic) from Oct 2017 until Nov2017
- AMG 510 - 360 mg since Dec 2018

Best Response:

- PR (-67% central read) Still on treatment (14.3 weeks as of data cutoff)
- CR to the targeted lesions were reported at week 18 (post data cutoff)



CRC: Individual Patient Radiologic Response and Biomarkers

Demographics:

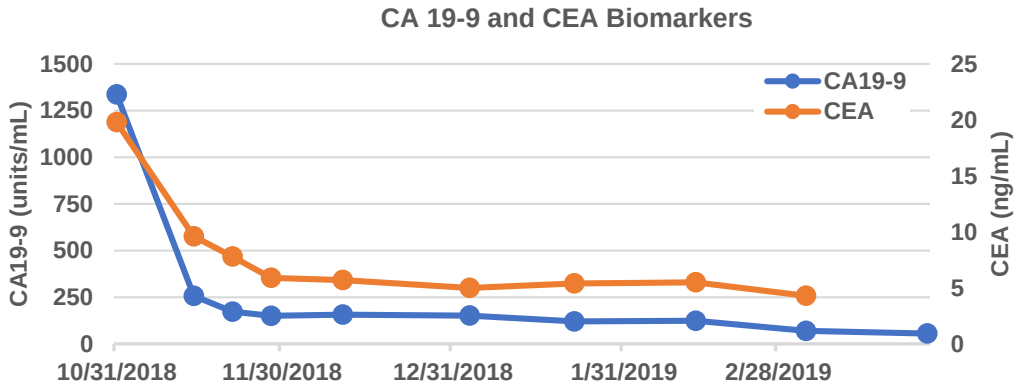
34 y.o. Female, diagnosed with metastatic colon adenocarcinoma April 2014

Treatment history:

- FOLFOX and HIPEC in Aug 2015, followed by FOLFOX until Dec 2015
- FOLFIRI with PD in Aug 2016
- HIPEC Oct 2016
- Capecitabine + bevacizumab Aug 2017
- Phase I clinical trial March-June 2018
- AMG 510 - 360 mg since Oct 2018

Response:

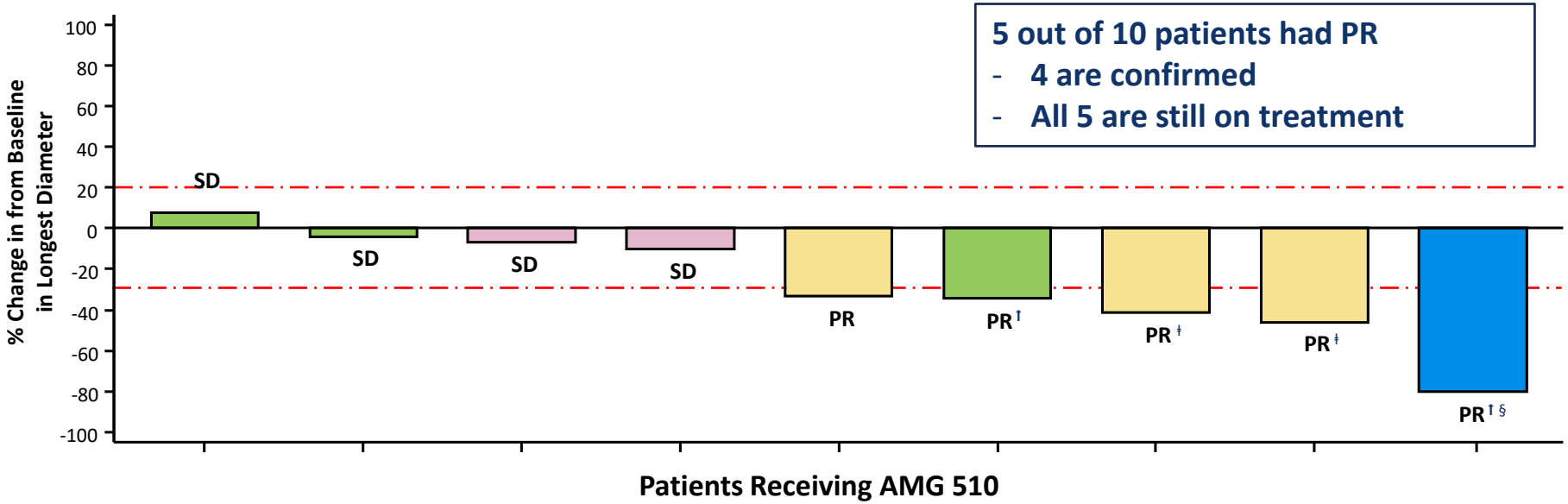
- Biochemical response (normal CEA)
- SD (-18% local read), still on treatment (22.3 weeks as of data cutoff)



Baseline

Week 24 Follow-up

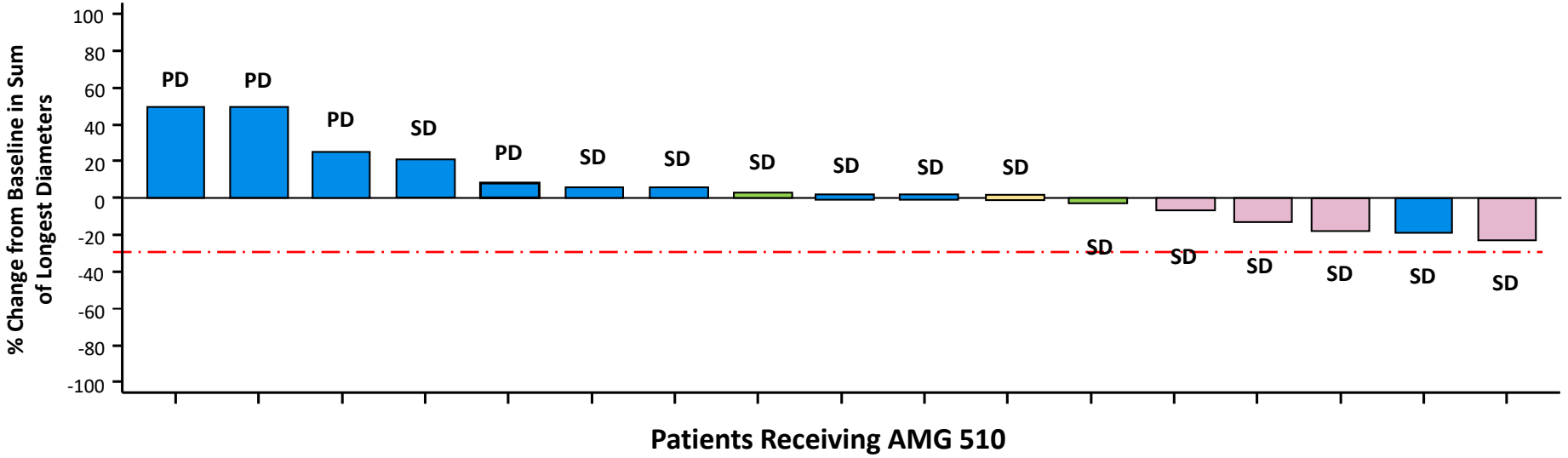
NSCLC: Best Tumor Response* (n=10)



* Based on local radiographic scans every 6 weeks using RESIST 1.1 criteria
1 patient had clinical progression prior to week 6 and is not on this graph
† Confirmed response
‡ 2 additional patients had confirmed PR post data cutoff
§Patient had a CR of the target lesions at week 18, post data cutoff

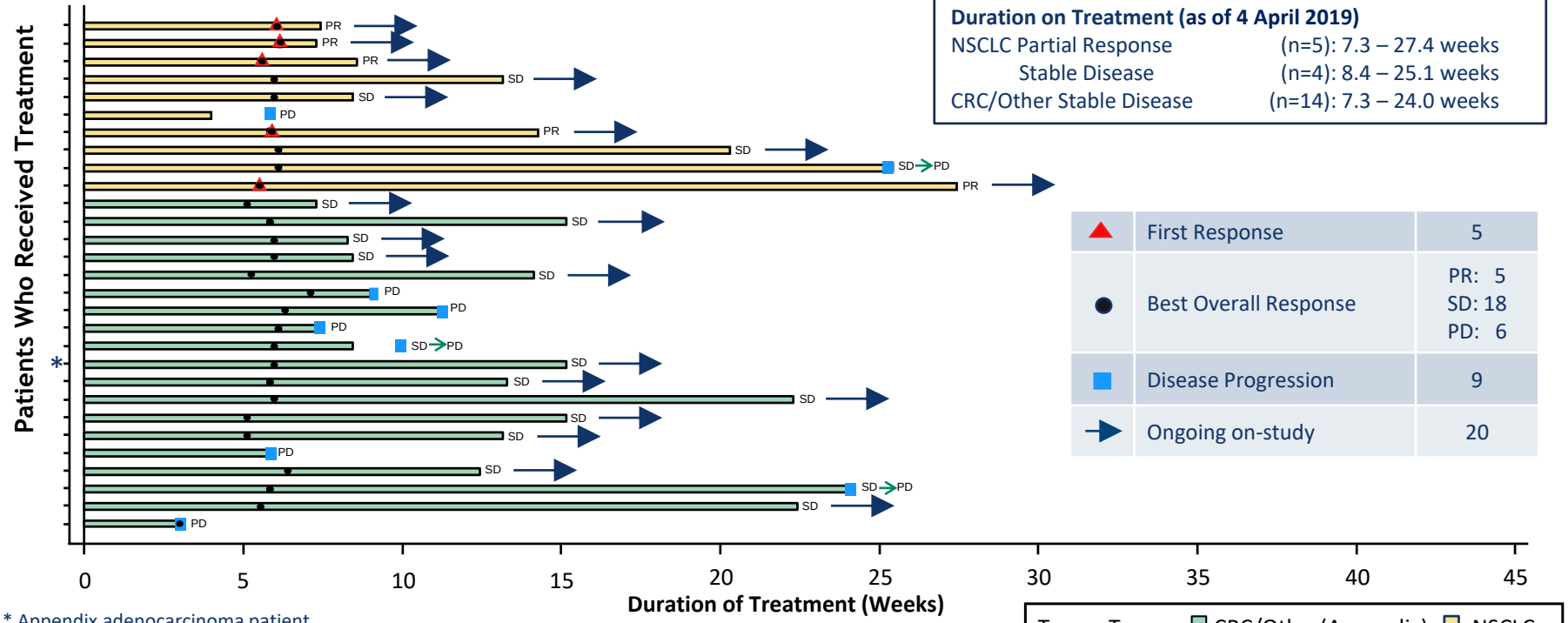
Planned Dose 180 mg 360 mg 720 mg 960 mg

CRC and Other Solid Tumors: Best Tumor Response* (n=19)



* Based on local radiographic scans every 6 weeks using RESIST 1.1 criteria
1 CRC patient progressed prior to week 6 and is not on this graph
1 appendix patient had clinically stable disease but is not shown on this graph

Duration of Treatment by Tumor Types and Responses (n=29)



Duration on Treatment (as of 4 April 2019)

NSCLC Partial Response	(n=5): 7.3 – 27.4 weeks
Stable Disease	(n=4): 8.4 – 25.1 weeks
CRC/Other Stable Disease	(n=14): 7.3 – 24.0 weeks

▲	First Response	5
●	Best Overall Response	PR: 5 SD: 18 PD: 6
■	Disease Progression	9
→	Ongoing on-study	20

Tumor Type: CRC/Other(Appendix) NSCLC

* Appendix adenocarcinoma patient

SD → PD: Patient with best response of SD but who later progressed

Conclusions

- AMG 510 is a novel, first in class, irreversible inhibitor of $KRAS^{G12C}$
- AMG 510 had a favorable PK profile with exposures exceeding the threshold for tumor growth inhibition in preclinical models
- AMG 510 has been safe and well tolerated at the dose levels tested in 35 patients in dose exploration
  - No DLTs have been observed
  - No cumulative toxicities were noted with extended treatment
- Preliminary monotherapy antitumor activity in $KRAS^{G12C}$ NSCLC was observed
  - 5 of 10 patients with NSCLC had a PR, with 4 confirmed PRs
- Enrollment is ongoing

Acknowledgements

- We would like to thank the patients involved in the study as well as their physicians and study teams at all participating study centers
- We thank Dianne Tomita for medical writing support and Nitish Upadhyay for biostatistics support
- This study was funded by Amgen Inc (NCT 03600883)

AMG 212 AND AMG 420

GREGORY FRIBERG, M.D.

VICE PRESIDENT, GLOBAL DEVELOPMENT AND ONCOLOGY
THERAPEUTIC AREA HEAD

AMGEN®

BITE®: A DIFFERENTIATED IMMUNO-ONCOLOGY PLATFORM

- **BiTE® molecules engage T cells to specifically target cancer cells**
  - **Clinically validated in ALL with BLINCYTO®**
  - **Clinical activity in both liquid and solid tumors (ALL, NHL, MM, AML, prostate)**
- **Provides an off-the-shelf immunotherapy**
- **We are actively exploring strategies to prevent resistance**
  - **Evidence of clinical activity in combinations with PD-1 antibodies (BLINCYTO®)**
  - **Additional combinations and rational sequences are planned**
- **We are in a competitive position for new indications**
  - **Advancing ~ 12 molecules directed against high-value targets**
- **Encouraging early activity seen with half-life extended (HLE) BiTE® molecules**

NHL = non-Hodgkin's lymphoma; MM = multiple myeloma; AML = acute myeloid leukemia; PD-1 = programmed cell death protein 1

PHASE 1 STUDY OF PASOTUXIZUMAB (BAY 2010112)*, A PSMA-TARGETING BISPECIFIC T-CELL ENGAGER (BITE®) IMMUNOTHERAPY FOR METASTATIC CASTRATION-RESISTANT PROSTATE CANCER (MCRPC)

Horst-Dieter Hummel, MD,[1] Peter Kufer, MD,[2] Carsten Grüllich, MD,[3] Barbara Deschler-Baier, MD,[1] Manik Chatterjee, MD,[1] Maria-Elisabeth Goebeler, MD,[1] Kurt Miller, MD,[4] Maria De Santis, MD,[4] Wolfgang Loidl, MD,[5] Andreas Buck, MD,[6] Sabine Wittemer-Rump, PhD,[7] Gökben Koca, MD,[7] Oliver Boix,[7] Wolf Dietrich-Döcke,[7] Sabine Stienen, PhD,[2] Cyrus Michael Sayehli, MD,[6] Ralf C. Bargou, MD[1]

[1]Comprehensive Cancer Center Mainfranken, University Hospital Würzburg, Würzburg, Germany; [2]Amgen Research Munich, Munich, Germany; [3]National Center for Tumor Diseases, Heidelberg University Medical Center, Heidelberg, Germany; [4]Charité Universitätsmedizin Berlin, Berlin, Germany; [5]Ordensklinikum Linz GmbH Elisabethinen, Linz, Austria; [6]Department of Nuclear Medicine, University Hospital Würzburg, Würzburg, Germany; [7]Bayer AG, Berlin, Germany

***Now known as AMG 212**

Abstract #: 5034 ; 2019 ASCO Annual Meeting; May 31–June 4, 2019; Chicago, IL

AMGEN®

INTRODUCTION

- **Prostate cancer is the most common cancer in men in developed countries and is among the leading causes of cancer-related deaths in men[1]**
- **Prostate-specific membrane antigen (PSMA) is highly expressed in prostate cancer and is therefore considered a compelling target for therapies[2]**
- **Although T-cell–based immunotherapies have been approved for several cancer indications over the last decade, these novel therapies have not been extended to the majority of mCRPC patients**

mCRPC = metastatic castration-resistant prostate cancer

[1]Torre LA, et al. *CA Cancer J Clin.* 2015;65(2):87-108. [2]Caromile LA, et al. *Sci Signal*. 2017;10:470.

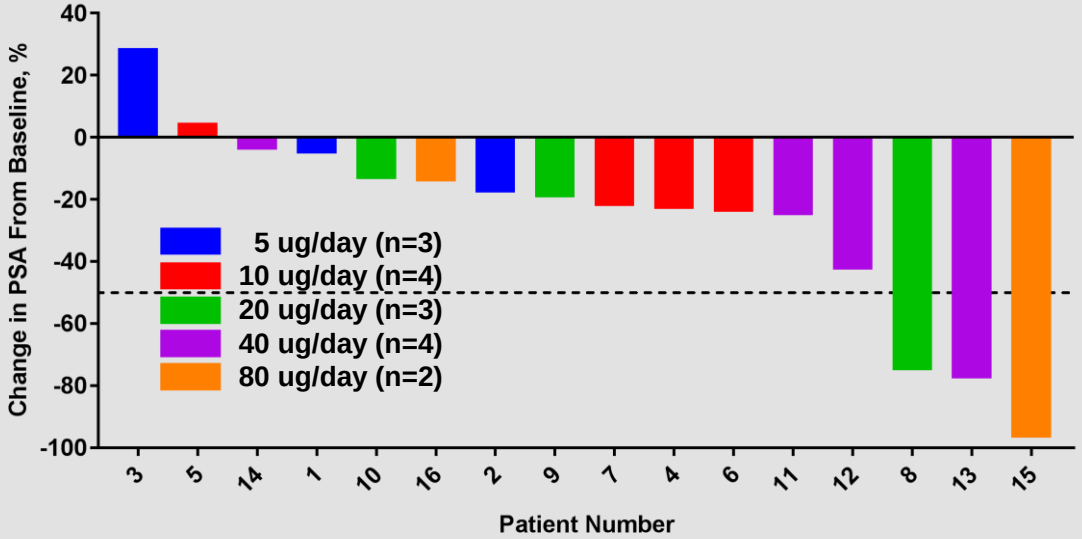
AMGEN®

AMG 212: DOSE ESCALATION STUDY

- 16 patients with castrate-resistant prostate cancer were enrolled
- AMG 212 (pasotuxizumab) was administered as a continuous intravenous infusion at doses of 5, 10, 20, 40 and 80 µg/day
- Dosing schedule was 5 weeks on and 1 week off, with the option to switch to a schedule of 4 weeks on and 2 weeks off after cycle 5 (each cycle was 21 days)
- Dexamethasone was administered prophylactically with the first infusion of AMG 212 and before infusions after treatment interruptions

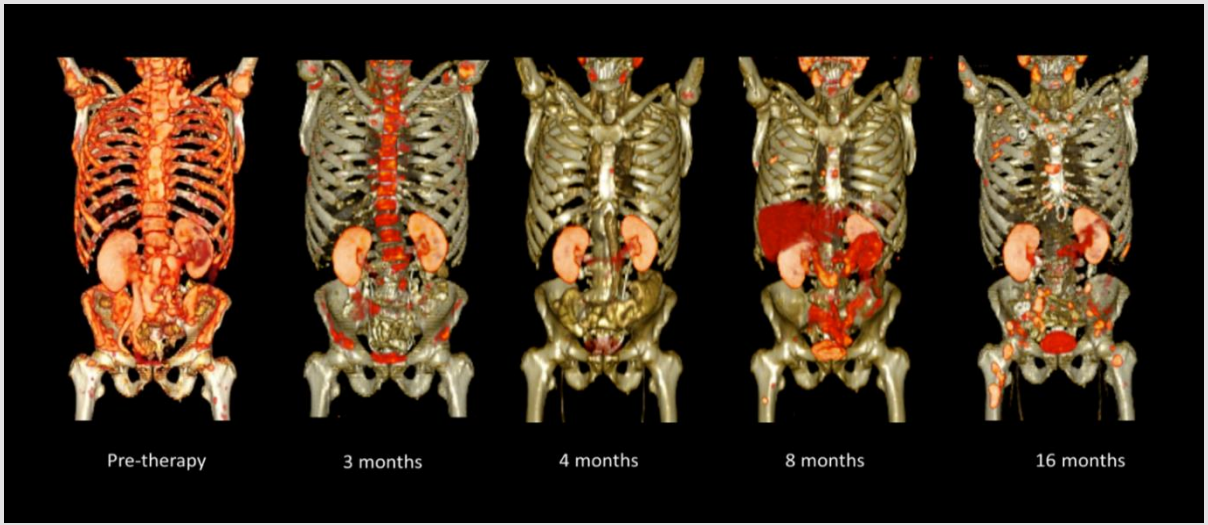
AMG 212: BEST PSA RESPONSE

- **AMG 212 antitumor activity (PSA serum level decline) appeared dose dependent, with a mean best change versus baseline of 0.7% (5 µg/day), –17.9% (10 µg/day), –37.4% (20 µg/day), –42.5% (40 µg/day) and –54.9% (80 µg/day)**



PSA = prostate-specific antigen

AMG 212: COMPLETE REGRESSION OF SOFT-TISSUE METASTASES AND MARKED REGRESSION OF BONE METASTASES



- **Patient 15 showed a complete regression of soft-tissue metastases and marked regression of bone metastases as assessed by PSMA-PET/CT**
- **> 90% reduction in PSA and alkaline phosphatase with a significant and durable improvement in disease-related symptoms**

PET/CT = Positron emission tomography–computed tomography

AMGEN®

AMG 212: ADVERSE EVENTS*

n (%)	AMG 212 Dose, µg/day					Total (N = 16)
	5 (n = 3)	10 (n = 4)	20 (n = 3)	40 (n = 4)	80 (n = 2)	
Any treatment-emergent AE	3 (100)	4 (100)	3 (100)	4 (100)	2 (100)	16 (100)
Serious treatment-emergent AE	3 (100)	3 (75)	1 (33)	3 (75)	2 (100)	12 (75)
Treatment-emergent AE that led to study drug discontinuation	0	1 (25)	0	0	0	1 (6)
Any study drug–related AE	2 (67)	4 (100)	3 (100)	4 (100)	2 (100)	15 (94)
Worst grade study drug–related AE						
1 or 2	1 (33)	1 (25)	2 (67)	0	1 (50)	5 (31)
≥ 3	1 (33)	3 (75)	1 (33)	4 (100)	1 (50)	10 (63)
5	0	0	0	0	0	0
Serious study drug–related AE	0	0	1 (33)†	0	0	1 (6)†
Study drug–related AE that led to study drug discontinuation	0	0	0	0	0	0
Study drug–related AEs that occurred in ≥ 10% of patients						
Fever	2 (67)	4 (100)	3 (100)	4 (100)	2 (100)	15 (94)
Chills	2 (67)	2 (50)	2 (67)	4 (100)	1 (50)	11 (69)
Lymphocyte count decreased	1 (33)	2 (50)	1 (33)	2 (50)	1 (50)	7 (44)
Fatigue	0	0	2 (67)	2 (50)	1 (50)	5 (31)
Cytokine release syndrome	0	0	0	1 (25)	2 (100)	3 (19)
Dyspnea	0	0	1 (33)	1 (25)	0	2 (13)
General disorders and administration site conditions	0	0	1 (33)	0	1 (50)	2 (13)
Hypophosphatemia	0	0	0	1 (25)	1 (50)	2 (13)
Infections and infestations	0	0	0	2 (50)	0	2 (13)
Investigations	0	0	0	0	2 (100)	2 (13)
Platelet count decreased	0	0	0	1 (25)	1 (50)	2 (13)
White blood cell count decreased	0	0	0	1 (25)	1 (50)	2 (13)

AE = adverse event; *Adverse events were coded according to the Preferred Terms of the Medical Dictionary for Regulatory Activities, version 20.0. Severity of adverse events was graded according to the National Cancer Institute Common Terminology Criteria for Adverse Events, version 4.03. †A study drug–related adverse event of grade 3 fatigue, the only dose-limiting toxicity, was reported for one patient in the 20 µg/day cohort.

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AMG 212: CONCLUSION

- **This is the first clinical study showing that a BiTE® immuno-oncology therapy can be efficacious in solid tumors**
- **AMG 212 had an acceptable safety profile and dose-dependent clinical activity in mCRPC patients**
- **Reductions of serum PSA values were dose-dependent across the doses tested**
- **There were two long-term PSA responders in the dose escalation; one treated at the highest dose level had a near-complete remission, including normalization of lymph nodes and marked regression of bone metastases**
- **The MTD was not reached, and dose escalation will continue in another study**
- **HLE-BiTE® molecule AMG 160 in dose escalation study**

MTD = maximum tolerated dose

AMG 420, AN ANTI-BCMA BISPECIFIC T-CELL ENGAGER (BITE®) MOLECULE, IN PATIENTS WITH R/R MULTIPLE MYELOMA: UPDATED RESULTS OF A FIRST-IN-HUMAN PHASE 1 DOSE ESCALATION STUDY

Max S Topp,[1] Johannes Duell,[1] Gerhard Zugmaier,[2] Michel Attal,[3] Philippe Moreau,[4] Christian Langer,[5] Jan Kroenke,[6] Thierry Facon,[7] Alexey V Salnikov,[8] Robin Lesley,[9] Karl Beutner,[10] James Kalabus,[9] Erik Rasmussen,[10] Kathrin Riemann,[8] Alex C Minella,[10] Gerd Munzert,[8*] Hermann Einsele[1*]

[1]Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany, [2]Amgen Research (Munich), Munich, Germany, [3]University of Toulouse, Toulouse, France, [4]Hematology Department Chair, University Hospital Center of Nantes, Nantes, France, [5]Kempten Clinic, Kempten, Germany, [6]Ulm University, Ulm, Germany, [7]Regional University Hospital of Lille, Lille, France, [8]Boehringer Ingelheim, Biberach, Germany, [9]Amgen Inc., South San Francisco, California, US, [10]Amgen Inc., Thousand Oaks, California, US, *contributed equally

PRESENTED BY: PROF MAX TOPP

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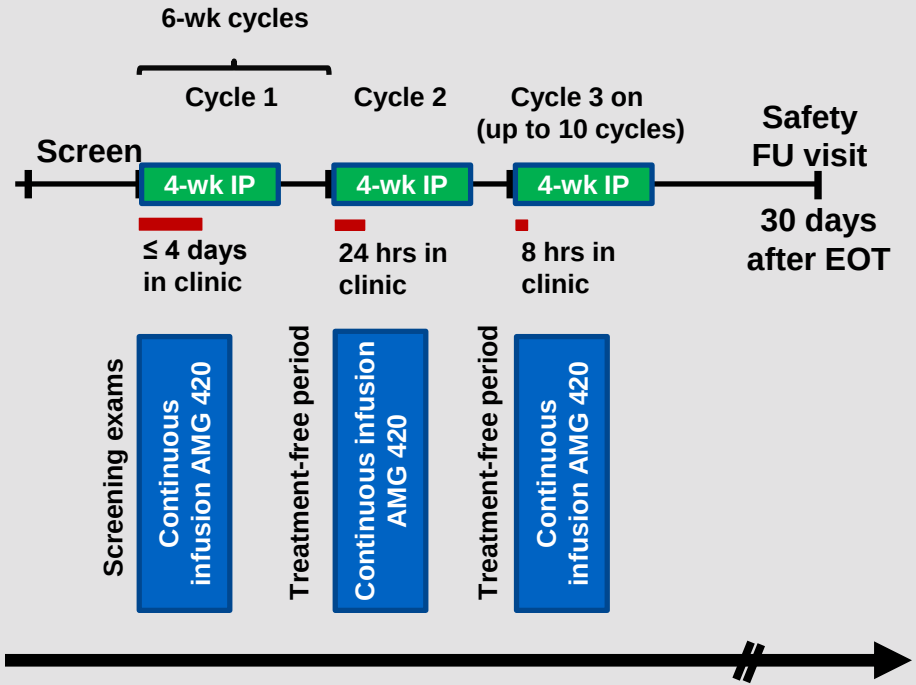
AMG 420: STUDY SCHEMATIC/OBJECTIVES



- First-in-human (FIH) Phase 1 dose escalation study* of AMG 420 for up to 10 cycles, depending on response
- Single-patient cohorts [0.2–1.6 µg/day (d)] were followed by cohorts of 3–6 patients (3.2–800 µg/d)
- Objectives of this Phase 1 study of AMG 420 in patients with relapsed and/or refractory (R/R) MM included:
  - Assessing safety and tolerability per CTCAE 4.03
  - Determining the maximum tolerated dose (MTD)
  - Assessing antitumor activity

*NCT02514239; IP = investigational product; FU = follow-up; EOT = end of treatment; CTCAE = Common Terminology Criteria for Adverse Effects

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AMG 420: PATIENT BASELINE CHARACTERISTICS

	N = 42
Male, n (%)	27 (64%)
Age, median (range), year	65 (39, 79)
ECOG performance status, 0 / 1 / 2, %	57% / 40% / 2%
Disease duration, median (range), year	5.2 (1.3–20)
Cytogenetics*, standard / intermediate / high, %	55% / 31% / 14%
Plasma cells at baseline, median (range), %	18% (0%–95%)
Prior lines of therapy, median (range)	4 (2–13)
Number of prior therapies, median (range)†	4 (2–10)
Prior daratumumab / prior elotuzumab, n (%)	11 (26%) / 4 (10%)
Prior auto stem cell transplant, n (%)	36 (86%)
Refractory to past therapies, number, median (range)	1 (0–6)
Refractory to IMiD / PI / IMiD and PI, %	55% / 45% / 31%
Refractory to daratumumab / elotuzumab, %	21% / 10%

As of February 27, 2019. *Per Rajkumar SV. *Am J Hematol.* 2012;87:79-88. †A given therapy could be counted as a line more than once (i.e., different dose / schedule after intervening therapies). IMiD = immunomodulatory drug; PI = proteasome inhibitor

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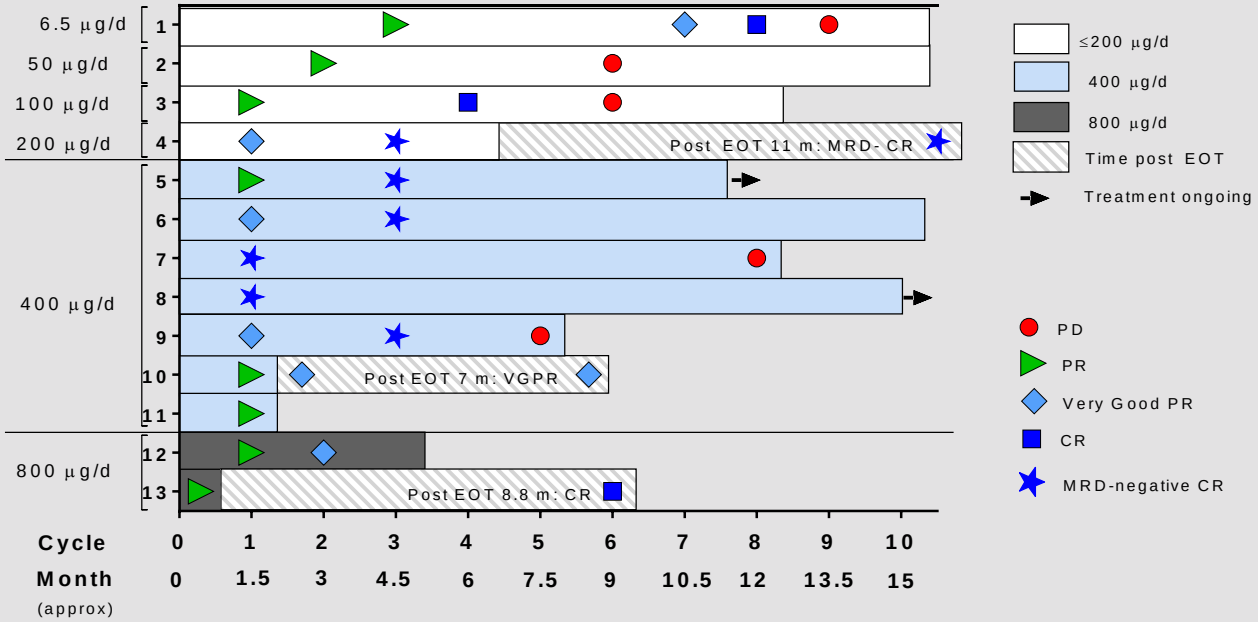
AMG 420: RESPONDING PATIENTS



Unless PD was the last response indicated, patients were responding at last evaluation

As of April 8, 2019. EOT = end of treatment; CR = complete response; PD = progressive disease; PR = partial response

AMG 420: CRS ADVERSE EVENTS (AES) AND SERIOUS AES

		N = 42	# Gr 1	# Gr 2	# Gr 3	# Gr 4	# Gr 5
CRS	All treatment-related, max grade	16 (38%)	13	2	1	–	–
SAEs in ≥ 2 patients	Infections	13 (31%)	–	3	8	–	2*
	Peripheral polyneuropathy	2 (5%)	–	–	2	–	–
Treatment-related SAEs	Peripheral polyneuropathy	2 (5%)	–	–	2	–	–
	Edema	1 (2%)	–	–	1	–	–

*One patient died of aspergillosis/flu and one of fulminant hepatitis related to adenovirus infection, neither treatment-related

- Of those with serious AEs (n = 19, 45%), 16 patients were hospitalized and four had prolonged hospitalization (one patient had both on separate occasions)
- No grade 3 or 4 central nervous system toxicities were observed

As of February 27, 2019
CRS = cytokine release syndrome

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AMG 420: CONCLUSION

In this FIH dose escalation study, AMG 420, a short half-life BiTE® molecule targeting BCMA, demonstrated clinical activity in patients with heavily pretreated multiple myeloma

- **No major toxicities prior to DLTs at 800 µg/day of CRS and polyneuropathy; a patient in the subsequent 400 µg/day dose group also had a DLT of polyneuropathy, which resolved**
- **Careful evaluation of infections should be conducted in future clinical trials to enable development of optimal management guidelines**
- **Of doses tested in this study, 400 µg/day was the MTD; other doses may be tested in the future**
  - **There was a 70% response rate (7/10) with 5 out of 7 responders achieving a MRD-negative CR at 400 µg/day, a recommended dose for further investigation**
  - **As of April 8, 2019, responses lasted for a median of 9.0 months (range: 5.8–13.6 months),* with two patients ongoing treatment**
  - **All (7/7) responses at this dose started in the first cycle**
- **These data warrant further clinical investigation of AMG 420; a Phase 1b/2 trial is underway**

***Excludes patient 11; death one day following PR assessment. DLT = dose-limiting toxicity; MRD = minimal residual disease**

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ASCO 2019: SUMMARY

- **AMG 510 demonstrated single-agent activity and was safe and well tolerated at highest target dose**
  - **50% response rate in NSCLC, with one complete response in measurable lesions**
  - **Dose expansion underway, including in combination with PD-1 antibody**
- **Proof of concept now established for BiTE® platform in solid tumors with AMG 212**
  - **AMG 160 HLE-BiTE® molecule currently in dose escalation**
  - **Other programs targeting brain, gastric and small cell lung cancers**
- **Durable MRD–complete responses with AMG 420 lasting beyond 12 months**
  - **Dose expansion underway for AMG 420**
  - **AMG 701 HLE-BiTE® molecule currently in dose escalation**
- **Multiple oncology programs advancing rapidly in hematologic and solid tumors with key data expected in 2019**

NSCLC = non-small cell lung cancer

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DATA EXPECTED FROM MANY NOVEL, HIGH-POTENTIAL ONCOLOGY PROGRAMS

Multiple Myeloma	Leukemia/Lymphoma		Solid Tumors	
KYPROLIS® proteasome inhibitor	BLINCYTO® CD19 BiTE® molecule	ALL NHL	IMLYGIC® oncolytic virus	Melanoma
AMG 420 BCMA BiTE® molecule	AMG 562 CD19 HLE-BiTE® molecule	NHL	AMG 509* prostate bispecific Ab (XmAb®)	Prostate Cancer
AMG 701 BCMA HLE-BiTE® molecule	AMG 397 MCL-1 inhibitor (oral)		AMG 212 PSMA BiTE® molecule	
			AMG 160 PSMA HLE-BiTE® molecule	
AMG 424 CD38 bispecific Ab (XmAb®)	AMG 330 CD33 BiTE® molecule	AML	AMG 757 DLL3 HLE-BiTE® molecule	Small Cell Lung Cancer
AMG 176 MCL-1 inhibitor (iv)	AMG 673 CD33 HLE-BiTE® molecule		AMG 119 DLL3 CAR T	
AMG 397 MCL-1 inhibitor (oral)	AMG 427 FLT3 HLE-BiTE® molecule		AMG 510 KRAS G12C inhibitor	Solid Tumors
	AMG 553* FLT3 CAR T		AMG 199* HLE-BiTE® molecule	Gastric Cancer
	AMG 176 MCL-1 inhibitor (iv)		AMG 910* HLE-BiTE® molecule	
	AMG 397 MCL-1 inhibitor (oral)		AMG 596 EGFRviii BiTE® molecule	Glioblastoma

Data expected 2019

Data possible 2019

*Not yet enrolling patients; BCMA = B-cell maturation antigen; BiTE® = bispecific T-cell engager; Ab = antibody; Mcl-1 = myeloid cell leukemia-1; iv = intravenous; HLE = half-life extended; FLT3 = fms-like tyrosine kinase 3; CAR T = chimeric antigen receptor enhanced T cells; ALL = acute lymphoblastic leukemia; NHL = non-Hodgkin's lymphoma AML = acute myeloid leukemia; PSMA = prostate-specific membrane antigen; DLL3 = delta-like 3; EGFRviii = epithelial growth factor receptor variant iii

Bispecific

Small Molecule/Other

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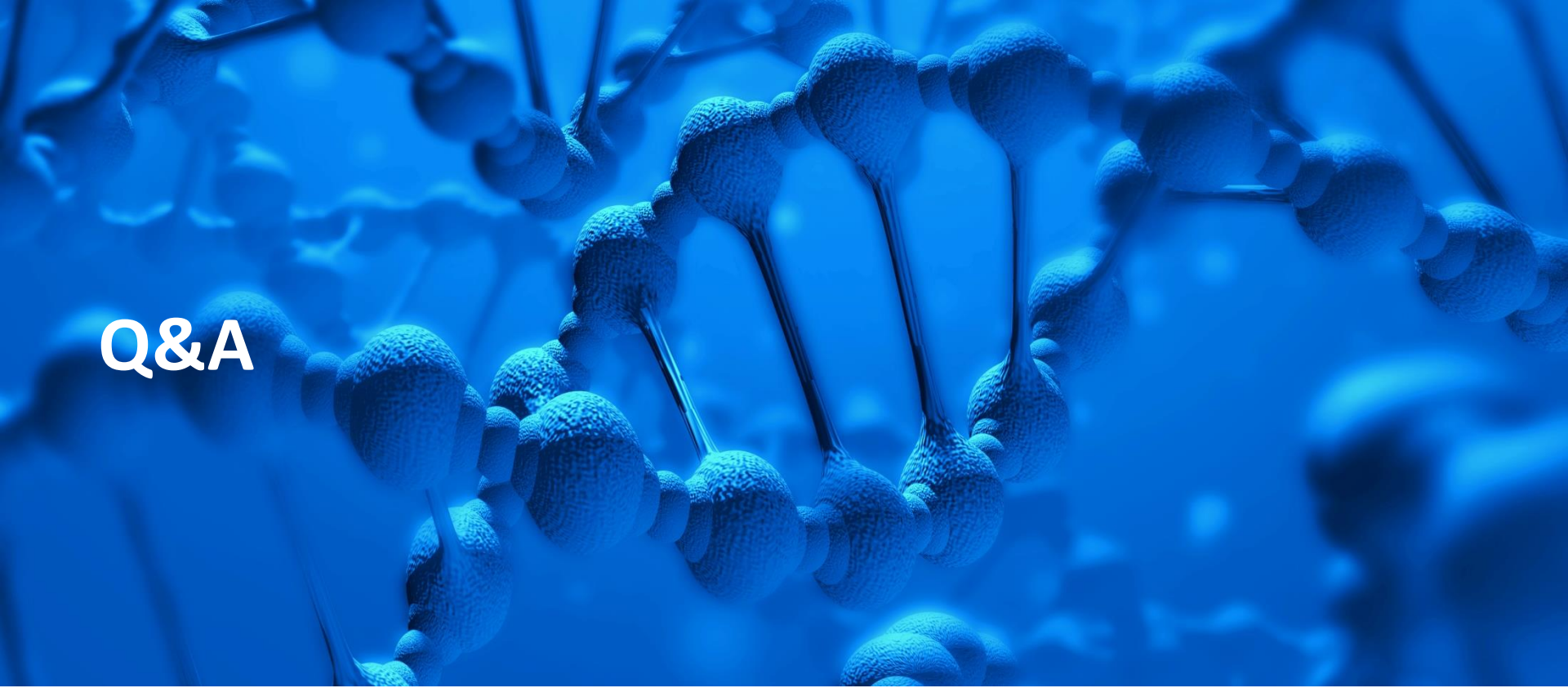

Q&A

JUNE 3, 2019

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AMGEN AT ASCO 2019: ADVANCING A PORTFOLIO OF NOVEL, HIGH-POTENTIAL CANCER THERAPIES

JUNE 3, 2019

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