



Society for Immunotherapy of Cancer 2020 Annual Meeting

Investor & Analyst Call

November 11, 2020

This presentation includes forward-looking statements regarding Nektar's proprietary drug candidates, the timing of the start of and plans for ongoing or planned clinical trials with partners, the therapeutic potential of our drug candidates, the timing and outcome of regulatory decisions, and future availability of clinical trial data. Actual results could differ materially, and these statements are subject to important risks detailed in Nektar's filings with the SEC including the Form 10-Q filed on November 6, 2020. Nektar undertakes no obligation to update forward-looking statements as a result of new information or otherwise.

Today's Speakers



Dr. Adi Diab

Associate Professor of Melanoma Medical Oncology at MD Anderson



Dr. Brendan D. Curti

Director of the Melanoma Program, Cytokine and Adoptive Immunotherapy and Genitourinary Oncology Research at Providence Cancer Institute



Dr. Nina Shah

Associate Professor, Department of Medicine at University of California San Francisco

Dr. Alan Tan

Assistant Professor Department of Internal Medicine, Division of Hematology, Oncology and Cell Therapy at Rush Medical College



Dr. Jonathan Zalevsky

Chief Research & Development Officer at Nektar Therapeutics



Dr. Wei Lin

Senior Vice President and Head of Development at Nektar Therapeutics

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Dr. Adi Diab – MD Anderson



Adi Diab, M.D., serves as Associate Professor of Melanoma Medical Oncology at The University of Texas MD Anderson Cancer Center. Dr. Diab is one of the lead investigators in PIVOT-02, the Phase 1/2 study of BEMPEG plus nivolumab, and in REVEAL, the Phase 1/2 study of NKTR-262 and BEMPEG. He is also on the steering committee for the BMS-sponsored Phase 3 registrational study, PIVOT IO 001, which is ongoing, in patients with previously untreated metastatic melanoma. His research is focused on developing new immunotherapeutic strategies that will improve clinical outcomes in patients. He has authored or co-authored over thirty scientific publications and abstracts and serves as a reviewer for Cancer Discovery, Journal of Clinical Oncology, Nature Reviews Journal of Immunotherapy and Journal of the American Society of Hematology.

Dr. Brendan D. Curti – Providence Cancer Institute



Brendan D. Curti, M.D., is the Robert W. Franz Chair for Clinic Research and Member in the Earle A. Chiles Research Institute at Providence Cancer Institute. He serves as the Director of Cytokine and Adoptive Immunotherapy, Melanoma Program and Genitourinary Oncology Research. His clinical research focuses on developing new immunotherapies for melanoma, renal cell carcinoma, prostate cancer and bladder cancer. He previously served as a Senior Investigator in the Biological Response Modifiers Program at the National Cancer Institute and was an Associate Professor at the Penn State College of Medicine before joining the Earle A. Chiles Research Institute at Providence Cancer Institute.

Dr. Nina Shah – University of California San Francisco



Nina Shah, M.D., is an Associate Professor in the Department of Medicine at the University of California San Francisco and a specialist in blood diseases who focuses on treating multiple myeloma, a type of cancer affecting certain cells in the bone marrow. Her areas of professional interest include the intersection of immunology and oncology as well as helping patients fight multiple myeloma by boosting their immune systems. She is an investigator in the NKTR-255 Phase 1/2 study in hematological malignancies. She belongs to the American Society of Clinical Oncology, American Society of Hematology and American Society for Transplantation and Cellular Therapy.

Dr. Alan Tan – Rush Medical College



Alan Tan, MD, is an Assistant Professor in the Division of Hematology, Oncology and Cell Therapy at Rush Medical College. He specializes in kidney cancer, bladder cancer, prostate cancer and melanoma. He also has an extensive background in hematologic malignancies. Dr. Tan has clinical research interest in designing and implementing clinical trials to test novel immunotherapies and targeted therapies for renal cell carcinoma and GU malignancies. He is an investigator in the NKTR-255 Phase 1/2 study in hematological malignancies. He also has interest in precision genomic cancer medicine, identifying molecular alterations that will serve as targets for individualized treatment strategies.

Today's Agenda



IL-2

"Progression-free Survival and Biomarker Correlates of Response With BEMPEG Plus NIVO in Previously Untreated Patients With Metastatic Melanoma: Results From The PIVOT-02 Study"

• Wei Lin, M.D., Nektar Therapeutics

TLR 7/8

"REVEAL: Phase 1 Dose-Escalation Study of NKTR-262, a Novel TLR7/8 Agonist, Plus Bempegaldesleukin: Local Innate Immune Activation and Systemic Adaptive Immune Expansion for Treating Solid Tumors"

• Jonathan Zalevsky, Ph.D., Nektar Therapeutics

IL-15

"First-in-human Phase I Study of NKTR-255 in Patients With Relapsed/Refractory Hematologic Malignancies"

- Nina Shah, M.D., UCSF
- Alan Tan, M.D., Rush University

Q&A Expert Panel

BEMPEG: CD-122 Preferential IL-2 Pathway Agonist

IL-2



Progression-free Survival and Biomarker Correlates of Response With BEMPEG Plus NIVO in Previously Untreated Patients With Metastatic Melanoma: Results From The PIVOT-02 Study

<u>Adi Diab¹</u>, Scott S. Tykodi², Gregory A. Daniels³, Michele Maio⁴, Brendan D. Curti⁵, Karl D. Lewis⁶; Sekwon Jang⁷, Ewa Kalinka⁸, Igor Puzanov⁹, Alexander I. Spira¹⁰, Daniel C. Cho¹¹, Shanhong Guan¹², Erika Puente¹², Ute Hoch¹², Sue L. Currie¹², Tuan Nguyen¹², Wei Lin¹², Mary A.Tagliaferri¹², Jonathan Zalevsky¹², Mario Sznol¹³, Michael E. Hurwitz¹³

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BEMPEG Signals Preferentially Through The Interleukin-2 Receptor Pathway



- Bempegaldesleukin (BEMPEG; NKTR-214) is a CD122-preferential IL-2 pathway agonist shown to increase tumor-infiltrating lymphocytes, T-cell clonality and PD-1 expression^{1,2}
- BEMPEG plus the CPI nivolumab (NIVO) has been shown to convert tumors from PD-L1(-) at baseline to PD-L1(+) on-treatment³
- Low levels of baseline tumor-infiltrating lymphocytes^{4–6} and T-cell inflammation⁷ is predictive of a poor response to CPIs

CPI, checkpoint inhibitor; IL, interleukin; NK, natural killer; PD-(L)1, programmed death-(ligand) 1; Treg, regulatory T cell. 1. Charych D, et al. *PLoS One* 2017; 12: e0179431; 2. Bentebibel SE, et al. *Cancer Discov* 2019;9:711–21; 3. Diab A, et al. *Cancer Discov* 2020;10:1158–73; 4. Daud AI, et al. *J Clin Oncol* 2016;34:4102–09; 5. Daud AI, et al. *J Clin Invest* 2016;126:3447–52; 6. Tumeh PC, et al. *Nature* 2014;515:568–71; 7. Ayers M, et al. *J Clin Invest* 2017;127:2930–40.

BEMPEG Development Program in Solid Tumors

Pipeline						
Partner	Indication	Program	Preclinical	Phase 1	Phase 2	Phase 3
ر <mark>الاا</mark> Bristol Myers Squibb	Metastatic Melanoma	Bempegadesleukin (bempeg) + OPDIVO [®]			Registra	ational Study
ر ^{ال} Bristol Myers Squibb	Renal Cell Carcinoma	Bempeg + OPDIVO [®]			Registra	ational Study
ر ^{ال} Bristol Myers Squibb	Muscle-invasive Bladder Cancer	Bempeg + OPDIVO [®]			Registrational St	udy
ر ^{ال} Bristol Myers Squibb	Adjuvant Melanoma	Bempeg + OPDIVO [®]			Registrational St	udy
ر ^{ال} Bristol Myers Squibb	Bladder Cancer	Bempeg + OPDIVO [®]		AA Registrat	tional Study	
ر ^{ال} Bristol Myers Squibb	Renal Cell Carcinoma	Bempeg + OPDIVO [®] + TKI				
	1L NSCLC	Bempeg + KEYTRUDA [®]				
vaccibody	Head & Neck SCC	Bempeg + VB10.NEO				
	Multiple Solid Tumors	NKTR-262 + Bempeg				

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BEMPEG Plus NIVO in Metastatic Melanoma

- Despite CPI therapy as an effective treatment option, there is an unmet need for therapies to produce durable and deeper responses in more patients with metastatic melanoma
- Safety and clinical activity of BEMPEG plus NIVO was evaluated in PIVOT-02, a multicenter phase 1/2 study in multiple solid tumors¹
 - Encouraging preliminary clinical activity and safety data were seen in metastatic melanoma, including durable responses that deepened over time^{1,2}
- BEMPEG plus NIVO received FDA Breakthrough Therapy Designation in July 2019 for patients with previously untreated, unresectable or metastatic melanoma
- Here, we report the updated results from PIVOT-02 (NCT02983045) in previously untreated patients with metastatic melanoma, including median PFS and biomarker correlates of response

TAR CPI, checkpoint inhibitor; FDA, U.S. Food and Drug Administration; PFS, progression-free survival. 1. Diab A, et al. *Cancer Discov* 2020;10:1158–73; 2. Diab A, et al. Oral presentation at SITC 2019:O35.

Stage IV 1L Melanoma: Best Overall Response by Independent Radiology





Data cutoff: 1SEPT2020. Response evaluable population includes eligible patients with measurable disease (per RECIST 1.1) at baseline and have ≥1 post-baseline tumor assessment. All objective responses are confirmed. #Best overall response is progressive disease due to non-target lesion progression or presence of new lesion; *Best overall response is SD; +Best overall response is PR. CR for target lesion, non-target lesion still present. CR complete response; LDH, lactate dehydrogenase; ORR, objective response rate; PD-L1, programmed death-ligand 1; PR, partial response; SD, stable disease; ULN, upper limit of normal.

mPFS 30.9 Months (95% CI: 5.3; NE) at Median Follow-up of 29.0 Months



Kaplan–Meier Estimate of PFS by BICR (RECIST v1.1)	Total (N=41)
Rate at 12 months, % (95% CI)	56.2 (38.4; 70.6)
Rate at 24 months, % (95% CI)	53.1 (35.4; 67.9)
Rate at 36 months, % (95% CI)	45.5 (25.5; 63.5)

mOS Not Reached (95% CI: NE, NE) at Median Follow-up of 29.0 Months



Kaplan–Meier Estimate of Overall Survival	Total (N=41)
Rate at 12 months, % (95% CI)	82.3 (66.4; 91.1)
Rate at 24 months, % (95% CI)	77.0 (60.4; 87.3)
Rate at 36 months, % (95% CI)	70.9 (53.5; 82.8)

Data cutoff: 1SEPT2020. NE, not estimable; mOS, median overall survival.

ASCO 2019 Osgood et. al., Retrospective Analysis of Untreated Metastatic Melanoma Patients: Depth of Response (DpR) Correlates with Longer OS

4,826 patients across 10 randomized controlled trials with previously untreated unresectable or metastatic melanoma



NEKTAR Source: 2019 ASCO FDA presentation J Clin Oncol 37, 2019 (suppl; abstr 9508). "Depth of Response and Survival in Advanced or Metastatic Melanoma", Osgood, C., et al.

Historical Comparisons in 1L Metastatic Melanoma

	BEMPEG PLUS NIVO			NIVO ONLY		NIVO PLUS IPI			
	PIVOT-02 ≈7 months*	PIVOT-02 ≈1.6 year*	PIVOT-02 ≈2.4 year*	CM067 1 year¹	CM067 2 year ²	CM067 3 year ³	CM067 1 year¹	CM067 2 year ²	CM067 3 year ³
Median Time of Follow-Up (months)	7.2	18.6	29.0	12.2-12.5	20.7	38.0	12.2-12.5	20.7	38.0
Complete Response (CR)	24%	34%	34%	9%	NA	16%	12%	NA	19%
Overall Response Rate (ORR)	53%	53%	53%	44%	44%	44%	58%	NA	58%
Median Progression-Free Survival (mPFS)	NR	NR	30.9 months	6.9 months	6.9 months ³	6.9 months	11.5 months	11.5 months	11.5 months
	BE	MPEG PLUS NI	vo				NIVO PLUS IPI		
	PIVOT-02 1 year	PIVOT-02 2 year	PIVOT-02 3 year	CM067 1 year¹	CM067 2 year ²	CM067 3 year ³	CM067 1 year ¹	CM067 2 year ²	CM067 3 year ³
Landmark Overall Survival (OS)	82%	77%	71%	NA	59% ³	52%	NA	64%	58%

NR – not reached; NA – not available or not reported; PEMBRO – pembrolizumab; NIVO – nivolumab; IPI – ipilimumab; 1. Larkin J, et al. N Engl J Med 2015;373:23-34; 2. Wolchok et al. ASCO 2016: Abstract 9505; 3. Wolchok et al. N Engl J Med 2017; 377:1345-1356 **NEKTAR**

Relationship Between Baseline Biomarkers and Response

Increased CD8⁺ TIL and IFNy GEP





Data cutoff: 1SEPT2020. ^aBest overall response (RECIST 1.1) by BICR; median (≥median vs <median) cutoff for markers; efficacy-evaluable population, n=38. ^bCD8+ TIL and IFNγ GEP (high vs low by median cutoff); safety population (N=41). GEP, gene expression profile; NEU.LYM ratio, neutrophil to lymphocyte ratio; NK, natural killer; ORR, objective response rate; PFS, progression-free survival; PSI, polyfunctional strength index, using IsoPlexis technology; TIL, tumor-infiltrating lymphocyte; TMB, tumor mutational burden.

Relationship Between On-treatment (Day 8) Blood Biomarkers in Matched Samples and Response



Increased CD8⁺ PSD, but not eosinophils associated with longer PFS^b

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Data cutoff: 1SEPT2020. ^aBest overall response (RECIST 1.1) by BICR; median (≥median vs < median) cutoff for markers; efficacy-evaluable population, n=38. ^bCD8+ PSD (high vs low by median cutoff); PFS, by BICR; safety population (N=41). EOS, eosinophils; FC, fold change at C1D8 vs C1D1; NEU.LYM ratio, neutrophil to lymphocyte ratio; NK, natural killer; ORR, objective response rate; PFS, progression-free survival; PSD, difference in PSI between C1D1 and C1D8; PSI, polyfunctional strength index, using IsoPlexis technology.

PIVOT IO 001 Study Design in Patients with Previously Untreated, Unresectable or Metastatic Melanoma



^aTumor cell PD-L1 expression (≥1% or <1%/Indeterminate) determined using 28-8 pharmDx (Dako, an Agilent Technologies, Inc. company, Santa Clara, CA). ^bV600-mutant vs wild-type. ^cM0/M1 any [0] vs M1 any [1], based on the screening imaging and laboratory test results (lactate dehydrogenase level).

AJCC, American Joint Committee on Cancer; BICR, blinded independent central review; IV, intravenous; NIVO, nivolumab; ORR, overall response rate; OS, overall survival; PD-L1, programmed death ligand 1; PFS, progression-free survival; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria In Solid Tumors.

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PIVOT 12 Study Design in Adjuvant Melanoma Setting

A Phase 3, Randomized, Open-label Study to Compare Adjuvant Immunotherapy of Bempegaldesleukin (BEMPEG) Combined With Nivolumab (NIVO) Versus NIVO After Complete Resection of Melanoma in Patients at High Risk for Recurrence



^aTumor cell PD-L1 expression (≥1% or <1%/Indeterminate) determined using 28-8 pharmDx (Dako, an Agilent Technologies, Inc. company, Santa Clara, CA). ^bM0/M1 any [0] vs M1 any [1], based on the screening imaging and laboratory test results (lactate dehydrogenase level).

AJCC, American Joint Committee on Cancer; BICR, blinded independent central review; IV, intravenous; NIVO, nivolumab; RFS, relapse-free survival; PD-L1, programmed death ligand 1; Q3W, every 3 weeks; Q4W, every 4 weeks

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NKTR-262: TLR 7/8 Agonist



TLR 7/8

REVEAL: Phase 1 Dose-Escalation Study of NKTR-262, a Novel TLR7/8 Agonist, Plus Bempegaldesleukin: Local Innate Immune Activation and Systemic Adaptive Immune Expansion for Treating Solid Tumors

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MoA: Targeting the Innate and Adaptive Immune Response With NKTR-262 Plus BEMPEG

- NKTR-262 is an intratumorally delivered TLR7/8 agonist that activates APCs to prime new antigen-specific cytotoxic T cells
- Bempegaldesleukin (BEMPEG or NKTR-214) is an investigational, first-in-class, CD122-preferential, IL-2-pathway agonist
- In preclinical models, NKTR-262 plus BEMPEG combined innate immune signaling and enhanced antigen presentation with sustained T-cell activation, resulting in tumor growth inhibition of treated and abscopal lesions¹
- High levels of TLR activation in the TME after NKTR-262 dose¹ allow us to understand PK/PD, and subsequently characterize the safety of NKTR-262



REVEAL: Phase 1/2 Study Schema



^aInjected lesions 20–90 mm in diameter.



Cohorts 1 and 2 explored staggered administration of NKTR-262 and BEMPEG; cohort 3 onwards explored same-day administration of NKTR-262 and BEMPEG.

Ti, intratumoral; MTD, maximum tolerated dose; ORR, objective response rate; OS, overall survival; PD, pharmacodynamics; PFS, progression-free survival; PK, pharmacokinetics; q3w, every 3 weeks; RP2D, recommended Phase 2 dose; TNBC, triple-negative breast cancer.

Dose-Escalation Cohorts and the Clinical Activity of NKTR-262 Combined With BEMPEG

Dose Escalation	N=36	NKTR-262 (mg IT)	BEMPEG (mg/kg q3w IV)	Tumor Type
Cohort 1	3	0.03 (starting dose)	0.006	Melanoma, sarcoma
Cohort 2	7	0.00	0.000	Malanama arrange CDC
Cohort 3	7	0.06	0.006 M	Melanoma, sarcoma, CRC
Cohort 4	3	0.12	0.006	TNBC, RCC
Cohort 5	4	0.24	0.006	TNBC, RCC, CRC, Merkel cell
Cohort 6	4	0.48	0.006	Melanoma
Cohort 7	4	0.96	0.006	Melanoma
Cohort 8	3	1.92	0.006	Melanoma
Cohort 9 (RP2D)	8	3.84	0.006	Melanoma

- As of 1 Sept 2020, 36 patients with R/R metastatic solid tumors were enrolled across nine cohorts
 - Of the 28 patients in the efficacy-evaluable population, eight (29%) had regression in the injected lesions
- 2 of 22 efficacy-evaluable, heavily pretreated melanoma patients (9%) experienced an objective response
 - 1 had a 50% reduction in tumor burden and 1 had a 100% reduction in sum of diameters in the non-injected target lesions



Initial results of clinical activity; further assessments are ongoing.

Treatment-Related Adverse Events

Preferred Term, n (%)	Total (N=36)
Patients reporting ≥1 TRAE (NKTR-262 monotherapy) (≥10% listed below)	17 (47.2)
Flu-like symptoms ^a	8 (22.2)
Fatigue	4 (11.1)
Nausea	4 (11.1)
Patients reporting ≥1 TRAE (NKTR-262 + BEMPEG) (≥20% listed below)	35 (97.2)
Flu-like symptoms ^a	28 (77.8)
Fatigue	16 (44.4)
Nausea	15 (41.7)
Pruritus ^b	15 (41.7)
Rash ^c	13 (36.1)
Vomiting	9 (25.0)
Grade ≥3 TRAEs (NKTR-262 + BEMPEG) (≥5% listed below)	11 (30.6)
Elevated ALT	2 (5.6)
Hypotension	2 (5.6)
Leukocytosis	2 (5.6)
Rash ^c	2 (5.6)
Syncope	2 (5.6)

The safety profile of NKTR-262 + BEMPEG was favorable and tolerable, with few treatment discontinuations due to adverse events^d

The MTD was not reached^{*}

*One DLT of transient grade 3 elevated ALT and grade 4 elevated AST in the highest dose cohort



^aFlu-like symptoms included the following preferred terms: influenza-like illness, influenza, pyrexia, chills. ^bPruritus included the following preferred terms: pruritus, pruritus generalized. ^cRash included the following preferred terms: erythema, rash, rash erythematous, rash maculo-papular, rash papular, rash pruritic, rash pustular, rash vesicular, rash generalized, rash macular. ^dFour patients discontinued treatment due to an adverse event. ALT, alanine aminotransferase; AST, aspartate aminotransferase; DLT; dose-limiting toxicity; MTD, maximum tolerated dose; TRAE, treatment-related adverse event.

Dose-dependent Induction of Type 1 IFN Genes and CXCL10 Chemokine in Blood Consistent With TLR7/8 Target Engagement

Gene expression changes in peripheral blood, Cycle 1 (24-hours post-treatment/pre-dose)



6000-600-

Induction of plasma CXCL10/IP10 in Cycle 1

Increased Proliferation (%Ki67⁺) of CD4⁺, CD8⁺, and NK Cells in Blood in Cycle 2 is Consistent With the MoA of BEMPEG^{*}



Minimal induction of proliferative immune cell subsets in Cycle 1 reflects retention of NKTR-262 in the TME following local delivery



Induction of Type 1 IFN Genes in Biopsies Correlates With **Density of CD11c⁺ NKTR-262–Targeted Cells**



^aCorrelation between fold change of induction for each gene (at Day 2) and CD11c⁺ density (by IHC) at baseline across samples where both datasets available (melanoma [6], sarcoma [1], Merkel cell [1], CRC [1]). IFN, interferon; TLR, toll-like receptor.

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Higher Density of CD11c⁺ Target Cells in Melanoma Baseline **Biopsies vs Other Tumor Types**



Location of biopsy

Preliminary data show a potential trend for a higher density of CD11c⁺ cells with an anti-tumor effect in melanoma

REVEAL: Conclusions

- NKTR-262 IT, as monotherapy or in combination, showed early signs of clinical activity and an acceptable safety profile in this highly relapsed/refractory melanoma patient population
- MTD was not reached; the totality of the safety, PK/PD, and biomarker data supported selection of NKTR-262 3.84 mg IT plus BEMPEG 0.006 mg IV q3w as the RP2D
 - For NKTR-262, robust TLR7/8 engagement supported the MoA, and the minimal toxicity profile underscored the benefit of local delivery
 - NKTR-262 plus BEMPEG induced systemic activation of T and NK cells demonstrating engagement of the entire immune activation cascade required for systemic tumor clearance
 - CD11c+ target cells were significantly more abundant in baseline melanoma biopsies vs other tumor types; induction of TLR7/8-responsive genes significantly correlated with CD11c⁺ baseline density
- Our findings support the ongoing Phase 1b dose expansion of NKTR-262 plus BEMPEG, with or without nivolumab, in patients with relapsed/refractory melanoma



NKTR-255: IL-15 Agonist





NKTR-255 Engages With IL-15Rα/IL-2Rβγ Receptor Complex to Boost NK Cell Number and CD8+ T-cell Expansion, Proliferation, Activation, Function and Survival



Phase 1, Open-Label, Multicenter Dose-Escalation and Dose-Expansion Study in Patients With R/R MM or NHL



NKTR-255 was Well Tolerated With No DLTs or Serious AEs (Safety Data During the DLT Period Only)

Number of AEs, n (%) ^a	NKTR-255 1.5 μg/kg (n=3)	NKTR-255 3.0 μg/kg (n=1)
Patients reporting ≥1 TRAE	3 (100.0)	1 (100.0)
Grade 1/2 TRAE	_	
Flu-like symptoms ^b	1 (33.3)	1 (100.0)
Headache	0	1 (100.0)
Hypercalcemia	0	1 (100.0)
Hypotension	0	1 (100.0)
Liver function test	0	1 (100.0)
Muscle tightness	1 (33.3)	0
Myalgia	1 (33.3)	0
Platelet count decreased	0	1 (100.0)
Grade 3 TRAE		
Flu-like symptoms ^c	1 (33.3)	0
Lymphocyte count decreased	0	1 (100.0)
White blood cell count decreased	0	1 (100.0)
Patients with AEs leading to discontinuation	0	0

- As of July 6, 2020, 4 patients aged 59–66 years were enrolled:
 - NKTR-255 1.5 µg/kg
 - Male MM patient (n=1)
 - Female NHL patient (n=1)
 - Male NHL patient (n=1)
 - NKTR-255 3.0 µg/kg
 - Male MM patient (n=1)
- NKTR-255 was well tolerated
- No serious TRAE, no delayed DLT, and no dose modifications during the DLT period



Data cutoff: July 6, 2020. ^aWorst toxicity grades are summarized. ^bGrade 1/2 flu-like symptoms comprise influenza-like illness (1 patient: worst Grade 1 [n=1]), pyrexia (2 patients: worst Grade 1 [n=2]), and chills (2 patients: worst Grade 1 [n=1], Grade 2 [n=1]). ^cGrade 3 flu-like symptoms comprise Grade 3 pyrexia (n=1), which resolved <24 hours with over-the-counter medications.

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AE, adverse event; DLT, dose-limiting toxicity; TRAE, treatment-related adverse event.

NKTR-255 1.5 µg/kg Exhibited a Long Half-life With No Accumulation After Every 21-day Dosing



Cycle	N	C _{max} (ng/mL)	AUC_{0-last} (ng∙hr/mL)	T_{1/2 (hr)}
1	3	18.1 (46)	212 (69)	27 (10)
2	2	19.8 (26)	250 (39)	27 (67)

Preliminary PK analyses

PK parameters: Mean (coefficient of variance %). All pre-dose NKTR-255 concentrations at Cycle 2+ were below the lower limit of quantification of 0.05 ng/mL.

- Mean plasma NKTR-255 1.5 µg/kg concentration-time profiles were superimposable for cycles 1 and 2
- Mean half-life of NKTR-255 was 27 hours, which is over 10-fold longer than that reported for rhIL-15 IV dose,³ with no accumulation following repeat dosing



Transient Upregulation and Rapid Decline of Cytokines to Baseline Levels by Day 2 With No Further Increases



- NKTR-255-dependent changes in inflammatory cytokines were transient, supporting the safety of NKTR-255
- No further changes observed after Day 15

*Values below LLOQ are approximate but calculated based on standard control curve.

NKTR-255 Increased Total Expansion and Proliferative Capacity (Ki67+) of NK and CD8+ T Cells in Blood, Peaking Around Days 8–10 Per Cycle



- NKTR-255 1.5 µg/kg expanded NK cells by ~5-fold and CD8⁺ T cells by ~3-fold
- Proliferative capacity (Ki67⁺) was maintained across multiple cycles of NKTR-255 1.5 µg/kg
- NKTR-255 3 µg/kg increased NK cell numbers in cycle 1 by ~10-fold in the heavily pretreated patient with MM
- Differences in baseline levels and fold increases of NK and CD8⁺ cells may be due to different disease types (MM vs NHL), disease severity and bone marrow capacity

NKTR-255 Increased Memory and Naïve CD8+ T-cell Subpopulations



 NKTR-255 induced CD8⁺ memory T-cell expansion in all patients, including a >9-fold increase in one patient receiving NKTR-255 1.5 μg/kg

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No Meaningful Changes Were Observed in CD4+ Tregs With NKTR-255 Treatment*



Clinical Vignette: First Patient Enrolled in the NKTR-255 1.5 µg/kg Cohort (Stable Disease per IMWG)



ECOG PS = 1; diagnosed with MM (IgG Kappa, with positive +5 and del 13) in August 2017, transplant ineligible

Presented with pancytopenia at initial diagnosis

Prior treatment:

- 1. RVD (lenalidomide, bortezomib, and dexamethasone)
- 2. DRD (daratumumab, lenalidomide, and dexamethasone)
- 3. KD (carfilzomib and dexamethasone)

Current treatment:

4. NKTR-255 1.5 μg/kg

(Baseline: October 2019)

Patient received NKTR-255 as monotherapy at 1.5 µg/kg IV for 9 cycles

	Baseline (Oct 2019)	Cycle 3 (Dec 2019)	Cycle 7 (Feb 2020)	Cycle 9 (Apr 2020)
K/L chain ratio	638	632	128	554
Lambda/L	2.08	<2.0	5.44	6.0
Карра К	1328	1265	693	2223
M Protein	1.9	1.9	2.1	2.0
lgG	1340	1757	1928	2004
Bone marrow	44% CD138⁺ core	NA	30% CD138⁺ core	40% CD138⁺ core
Bone marrow FACS	NA	NA	13–17%	6%

Clinical Vignette: First Patient Enrolled in the NKTR-255 1.5 µg/kg Cohort (Stable Disease per IMWG)



• Patient received NKTR-255 as monotherapy at 1.5 µg/kg IV for 9 cycles

BM FACS	Baseline (09/20)	Cycle 5 (01/20)	Cycle 9 (April 9)
+CD4%	2.1%	2.3%	3.9%
+CD8%	2.5%	4.7%	4.4%
+CD56% *	0.4%	2.7%	5.3%

*indirect gating strategy for CD56+

NK cells can form long term memory pool and can migrate to niche tissue like BM and liver

The increase in BM may suggest that NKTR-255 the expanded NK cells may be converting to memory like NK cells and migrating to NK memory niche like BM

13 fold

Clinical Vignette: First Patient Enrolled in the NKTR-255 1.5 µg/kg Cohort (Stable Disease per IMWG)

Infusion (Baseline: October 2019)



4–5 hours post-infusion

- Mild rigors (Grade 1) and flu-like symptoms (Grade 1), which were treated with acetaminophen and resolved by Day 2
 - Reproducible pattern was observed in Cycle 2, 3 and 4
- Neutropenia (Grade 3) and low platelet counts (Grade 3) related to study drug – required stimulating factors and platelet transfusion in order to schedule bone marrow biopsy

Treatment-related AEs during the DLT period (November 2019)

	NKTR-255 (1.5 µg/kg) MM patient
Grade 1 flu-like symptoms (fever and rigors)	Resolved
Grade 1 muscle aches	Resolved

AEs, adverse events; DLT, dose-limiting toxicity; MM, multiple myeloma.

Clinical Vignette: Second Patient Enrolled NKTR-255 Metabolic Response in Splenic Target Lesion on Cycle 5

66-year-old, female

ECOG PS = 0; diagnosed with NHL (DLBCL (splenic biopsy(+)), BM Bx clear; Target lesions: spleen SUV+, LVEF: 60-65%) in August 2017, transplant ineligible

Prior treatment:

- 1. RCHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisone) + enzastaurin maintenance
- 2. RICE (rituximab, ifosfamide, carboplatin, etoposide)
- 3. BEAM conditioning (BCNU, etoposide, Ara-C, and melphalan) + ASCT

Disease progressed March 2020 with splenic lesion

Current treatment:

 NKTR-255 1.5 μg/kg for 7 cycles (Baseline: March 2020) Last Cycle: C7D1 – 13-Jul-2020 Patient received 7 cycles of NKTR-255 as monotherapy at 1.5 μg/kg IV

Baseline Scan



Cycle 5 Scan





Clinical Vignette: Second Patient Enrolled NKTR-255 Metabolic Response in Splenic Target Lesion on Cycle 5

Infusion (Baseline: March 2019)



24 hours post-infusion

- Muscle tension (Grade 1), which resolved same day
 - Reproducible pattern was observed in Cycle 2, 3, 4 and etc. were treated with acetaminophen

Treatment-related AEs during the DLT period (Late March 2020)

	NKTR-255 (1.5 µg/kg) NHL patient
Grade 1 muscle tension	Resolved

AEs, adverse events; DLT, dose-limiting toxicity; NHL, non-hodgkin lymphoma

- SAEs: None
- AEs Grade ≥2: None
- Other Related AEs Ongoing: None
- Other Non-related AEs: None

Clinical Vignette: Third Patient Enrolled NKTR-255 Pharmacodynamic Analysis of CD19 CAR-T

NEKTAR



Comp-PerCP-Cy5-5-A :: CD4

ECOG PS, Eastern Cooperative Oncology Group Performance Status; DLBCL, diffuse large B-cell lymphoma; BM Bx, bone marrow biopsy; LVEF, left ventricular ejection fraction; NHL, non-hodgkin lymphoma; NA, not available; FACS: fluorescence-activated cell sorting; Scan Source: Dr. Cameron Turtle - Fred Hutchinson Cancer Center; *Out of the total CD+3 T-cell population 46

Clinical Vignette: Third Patient Enrolled NKTR-255 PD Analysis of CD19 CAR-T

Infusion (Baseline: March 2019)



24 hours post-infusion

- Muscle tension (Grade 1), which resolved same day
 - Reproducible pattern was observed in Cycle 2, 3, 4 and etc. were treated with acetaminophen

Treatment-related AEs during the DLT period (May 2020)

	NKTR-255 (1.5 µg/kg) NHL patient
Grade 3 fever	Resolved
Grade 2 chills	Resolved

AEs, adverse events; DLT, dose-limiting toxicity; MM, multiple myeloma.

- SAEs: None
- Other Related AEs Ongoing: None
- Other Non-related AEs:
 - Grade 1 fever Resolved
 - Grade 1 intermittent fatigue Ongoing

NKTR-255: Conclusions

- Patients with relapsed or refractory (r/r) MM or NHL, who had exhausted all available therapeutic options, were eligible for the dose-escalation portion of this study
- For dose-escalation, successive cohorts of three patients each received escalating doses of NKTR-255 monotherapy to determine the maximum tolerated dose (MTD)*
- NKTR-255 was well tolerated with low-grade, cytokine-related AEs that were transient and easily managed
 - No DLTs were observed
 - No drug-related AEs led to treatment discontinuation, dose delay or dose modification
- NKTR-255 exhibited a long half-life with no evidence of accumulation
- NKTR-255 was biologically active and demonstrated consistent expansion of lymphocytes, with durable and sustained increases in NK and CD8⁺ T cells in this highly refractory population of patients with MM and NHL
- These data support continued dose escalation of NKTR-255, and subsequent evaluation in combination with other anticancer agents



Q&A Session



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