

### EUROPEAN HEMATOLOGY ASSOCIATION

Antibody-Dependent Cellular Phagocytosis

Pembrolizuma

Fislelizumab has minimal FcvRI binding thus

Based on FcyR Binding

abrogating ADCP activity

PD-1

04

CD8<sup>+</sup> T cell CD4<sup>+</sup> T cell

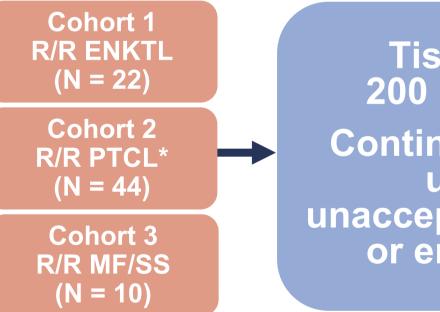
### INTRODUCTION

- Patients with relapsed/refractory (R/R) extra nodal natural killer (NK)/T-cell lymphoma (ENKTL) have a poor prognosis after failure of an L-asparaginase (LASP)–based regimen.
- ENKTL cells are invariably infected by Epstein-Barr virus, which upregulates programmed death ligand 1 (PD-L1) expression on lymphoma cells. The PD-L1/PD-1 axis is therefore a potential target for NK/T-cell lymphomas. Some PD-1 inhibitors, such as nivolumab and pembrolizumab, have shown clinical antitumor activity.
- Binding to FcγR on macrophages compromises antitumor activity of PD-1 antibodies through activation of antibody-dependent macrophage-mediated killing of T effector cells.<sup>1,2</sup>
- Tislelizumab is a humanized IgG4 investigational anti– PD-1 mAb specifically designed to minimize binding to FcyR on macrophages.
- Presented here are the results of a phase 2 trial of tislelizumab in patients with R/R ENKTL (Cohort 1).

mAb, monoclonal antibody; FcγR, Fc region of IgG receptors; IgG, immunoglobulin; PD-1, programmed cell death-1.

# **METHOD(S)**

Figure 1. Global Phase 2, Multicenter, Open-Label, Single-Arm Trial



Tislelizumab 200 mg IV Q3W **Continue treatment** until PD. unacceptable toxicity or end or study

**Primary endpoint:**  ORR assessed by investigator

Macrophage Monocyte MDSC Dendritic cell

Key secondary endpoints:

• DOR, PFS, CR rate, TTR, safety, etc.

#### Patients with R/R ENKTL:

• Previously received 1 or more appropriate systemic therapies (eg, non-anthracycline-based regimens such as L-asparaginasebased therapy). Radiation therapy alone would not be acceptable as previous therapy.

#### **Response assessments:**

• Responses for cohorts 1 and 2 were assessed by investigator using PET-based imaging according to the Lugano classification.<sup>3</sup>

\*Cohort 2 enrolled PTCL-NOS, ALCL, and AITL. The result could be referred to Abstract EP1235. Data of cohort 3 is not mature due to the relatively short follow-up time.

CR, complete response; DOR, duration of response; ORR, overall response rate; PD, progressive disease; PFS, progression-free survival; R/R, relapsed/refractory; TTR, time to response.

<sup>a</sup>Percentages are based on number of patients enrolled. <sup>b</sup>Percentages are based on number of patients received treatment

# TISLELIZUMAB (BGB-A317) FOR RELAPSED/REFRACTORY EXTRANODAL NK/T-CELL LYMPHOMA: PRELIMINARY EFFICACY AND SAFETY RESULTS FROM A PHASE 2 STUDY

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# **RESULT(S)**

 
 Table 1. Patient Disposition and Reasons for Treatment
Discontinuation

	Total (N = 22)
lumber of patients enrolled	22
Number of patients treated <sup>a</sup> (%)	22 (100)
Patients discontinued from treatment <sup>b</sup> , n (%)	16 (72.7)
Reason for discontinuation <sup>b</sup> , n (%)	
Progressive disease	12 (54.5)
Adverse event	3 (13.6)
Withdrawal by subject	1 (4.5)
Other	0 (0)
Patients remained on treatment <sup>b</sup> , n (%)	6 (27.3)

#### **Table 2. Patient and Disease Characteristics**

	Total (N = 22)
Median age, years (range)	47.5 (24-76)
Age group $>$ 60 years, n (%)	9 (45)
Gender, male/female, n (%)	14 (63.6)/ 8 (36.4)
Race, n (%)	
Asian	19 (86.4)
White	2 (9.1)
Not reported	1 (4.5)
ECOG , n (%)	
0-1	20 (90.9)
2	2 (9.1)
Median time from initial diagnosis to study entry, months (range)	16.8 (5.5-95.0)
Stage IV at study entry, n (%)	12 (54.5)
EBER positive, n (%)	22 (100)
Prior lines of regimens, median (range)	2 (1-5)
Type of prior therapy, n (%) L-asparagine (LASP) Radiotherapy Allo-SCT	8 (36.4) 16 (72.7) 1 (4.5)

#### Table 3. Efficacy: Best Overall Response by Investigator

#### **Best Overall Resp**

ORR (CR+PR), n (% Complete respon Partial response Stable disease Progressive disea Discontinued price

#### <sup>a</sup> Response criteria: Lugano 2014.

<sup>b</sup> 1-sided Clopper-Pearson 95% Cl.

<sup>c</sup> Two subjects discontinued study before first tumor assessment timepoint due to 'death of unknown reason' One subject

discontinued study due to tumor compression (grade 5).

# Response

086027-003

086033-004

086006-003

086051-003

033001-007

039020-004

086020-004 086051-001

086051-005 086022-002

086051-004

039050-001

086051-008

086019-002

086027-004

086051-006

086006-001

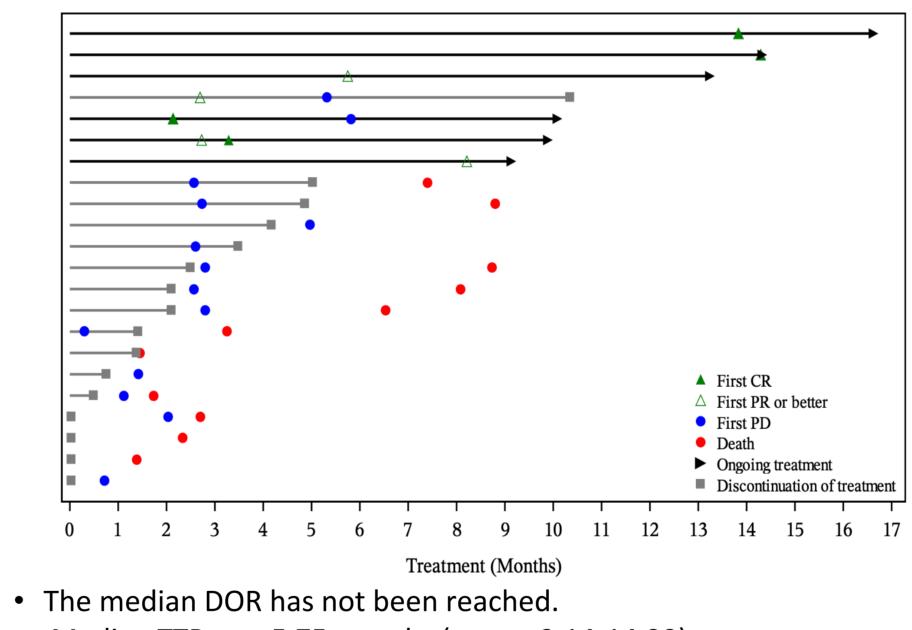
086027-005

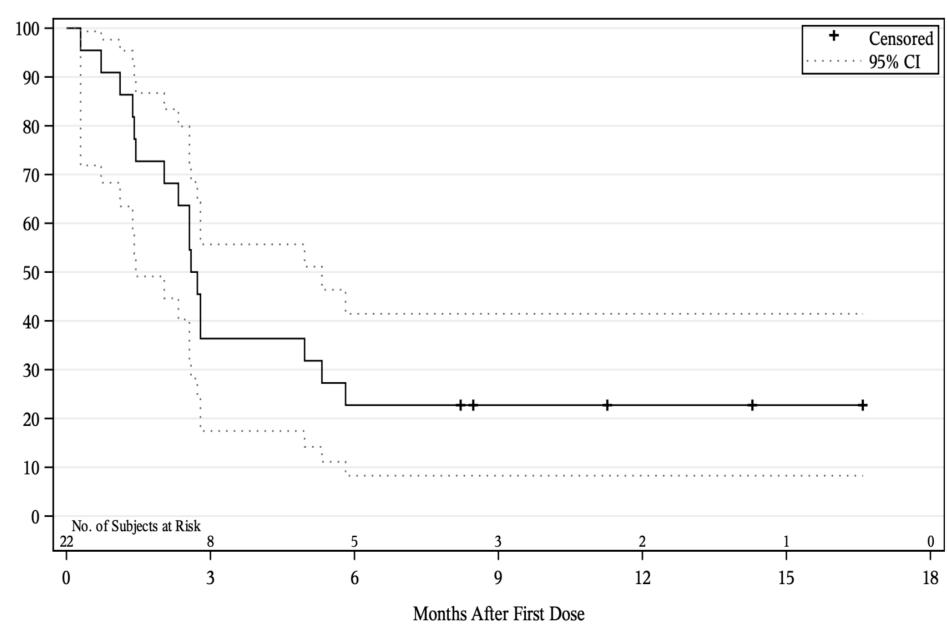
086091-004

086048-003

086027-001

086022-011





• Median PFS was 2.7 months (95% CI, 1.45, 5.32). Median PFS follow-up duration was 11.3 months.

oonse <sup>a</sup> , n (%)	N = 22
%) [95% CI] <sup>b</sup> nse	7 (31.8) [13.9, 54.9] 4 (18.2) 3 (13.6)
ase or to first assessment <sup>c</sup>	1 (4.5) 11 (50.0) 3 (13.6)

#### Figure 2. Duration of Treatment and Time to

• Median TTR was 5.75 months (range, 2.14-14.29)

#### Figure 3. Kaplan-Meier Plot of Progression-Free Survival: Investigator

#### **Table 4. Summary of Treatment-Emergent** Adverse Events (TEAEs)

Event, n (%)Grade ≥3 TEAEsGrious TEAEsSerious TEAEsTEAEs leading to treatment discontinuationTEAEs leading to deathImmune-related (ir) TEAEs (by aggregate category) ≥1 irTEAE <sup>c</sup> Skin adverse reactions Investigations (blood thyroid- stimulating hormone decreased) Eye disorders (retinopathy) Musculoskeletal and connective tissue disorders (arthralgia ) Gastrointestinal disorders (abdominal pain) Infections and infestations (upper respiratory tract infection)	
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TEAEs leading to treatment discontinuation TEAEs leading to death Immune-related (ir) TEAEs (by aggregate category) ≥1 irTEAE <sup>c</sup> Skin adverse reactions Investigations (blood thyroid- stimulating hormone decreased) Eye disorders (retinopathy) Musculoskeletal and connective tissue disorders (arthralgia ) Gastrointestinal disorders (abdominal pain) Infections and infestations (upper	Grade ≥3 TEAEs
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<sup>a</sup> SAEs in 4 patients determined to be possibly related to tislelizumab. <sup>b</sup> Grade 5, respiratory failure (n = 1); not related to tislelizumab as assessed by investigator

<sup>c</sup> Only one Grade 3 irTEAE 'upper respiratory tract infection', others are Grade 1-2



N = 22

11 (50)

8<sup>a</sup> (36.4)

 $1^{b}(4.5)$ 

1 (4.5)

7 (31.8)

3 (13.6)

1 (4.5)

1 (4.5)

1 (4.5)

1 (4.5)

1 (4.5)

# **CONCLUSION(S)**

- Tislelizumab is an investigational anti-PD-1 mAb specifically designed to minimize binding to FcyR on macrophages.
- Tislelizumab had modest antitumor activity in patients with R/R ENKTL and tolerable toxicity. Although several patients achieved CR, the PFS is short.
- Future studies in such aggressive diseases should include consideration for combination regimens and biomarker strategy.

### ACKNOWLEDGEMENTS

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### REFERENCES

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