# The preliminary efficacy and safety of KN026 combined with KN046 treatment in HER2-positive locally advanced unresectable or metastatic gastric/gastroesophageal junction cancer without prior systemic treatment in a phase II study

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### BACKGROUND

- KN026 is a novel bispecific antibody that simultaneously binds to two distinct HER2 epitopes. KN046 is a novel bispecific antibody that blocks both PD-L1 interaction with PD-1 and CTLA-4 interaction with CD80/CD86.
- Both preclinical and clinical studies have showed synergistic effect with the combination of an anti-HER2 antibody and an immune checkpoint blockade.
- This phase II study was to assess the efficacy and safety of KN026 (30mg/kg, Q3W, C1D1 & C1D8 loading) in combination with KN046 (5mg/kg, Q3W) treatment in patients with HER2-positive (IHC 3+ or HER2 gene amplification) solid tumors. Here we reported the efficacy and safety in patients with HER2-positive gastric/gastroesophageal junction cancer (GC/GEJ) without prior systemic treatment (NCT04521179).

KN026

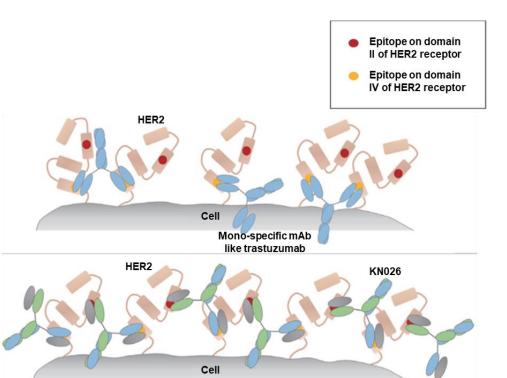
KN046

Relationship between KN026/KN046 drug exposure levels and safety/efficacy

5 mg/kg, Q3W

30 mg/kg, Q3W

C1D1 & C1D8 loading



KN026 is a fully humanized, IgG1-like antibody, binds to two distinct HER2 epitopes, the same domains as trastuzumab (ECD4) and pertuzumab (ECD2).

STUDY DESIGN

1<sup>st</sup> line or ≥2 line HER2-positive

GC/GEJ

n = 30 ~ 60

≥2 line HER2-positive

**Breast Cancer** 

n = 30 ~ 36

≥2 line other HER2-positive

solid tumor

n = 20 ~ 26

ORR and DOR (RECIST v1.1)

ADA and Nab of KN026/KN046

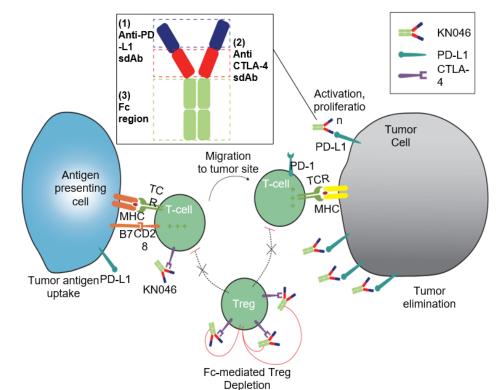
Other efficacy endpoint (PFS, CBR, OS etc.)

Relationship between biomarker and clinical efficacy

**Primary endpoint** 

Second endpoint:

Safety



bispecific single-domain antibody that blocks both PD-L1 interaction with PD-1 and CTLA-4 interaction with CD80/CD86.

Progression disease (PD)

or intolerable toxicity

### **Demographics & Baseline Characteristics** N = 31Sex 21 (67.7) Male (n, %) 10 (32.3) Female (n, %) 14 (45.2) ≥ 65 (n, %) Age (years 17 (54.8) < 65 (n, %) 6 (19.4) **ECOG** 0 (n, %) 25 (80.6) 1 (n, %) 26 (83.9) HER2 IHC 3+ (n, %) 5 (16.1) IHC 2+ & FISH + (n, %)

19 (61.3)

4 (12.9)

Safety (TRAE ≥ 10%)		
Preferred Term	Any grade (N = 31)	≥Gr3 (N=31)
Subjects with TRAE	25 (80.6%)	5 (16.1%)
Diarrhea	10 (32.3%)	2 (6.5%)
Pyrexia	10 (32.3%)	1 (3.2%)
Leukopenia	7 (22.6%)	0
Neutropenia	5 (16.1%)	0
Infusion related reaction	5 (16.1%)	0
Hypothyroidism	5 (16.1%)	0
ALT increased	4 (12.9%)	0
Direct bilirubin increased	4 (12.9%)	0
Rash	4 (12.9%)	0

liver (n, %)

lung (n, %)

## **RESULTS**

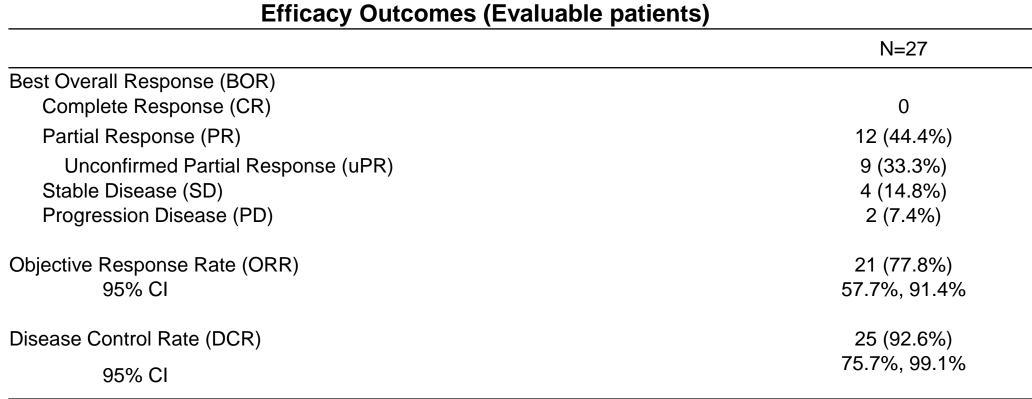
- (80.6%) were ECOG 1. Most patients (61.3%) had liver metastasis.
- As of 30 Jan 2022, 27 patients were evaluable for efficacy with 12 confirmed PRs, 9 unconfirmed PRs, 4 SDs and 2 PDs. The ORR was 77.8% (95% CI: 57.7, 91.4), and the DCR was 92.6% (95% CI: 75.7, 99.1).
- The most common related TEAEs (TRAEs) were diarrhea (32.3%), pyrexia (32.3%), leukopenia (22.6%), neutropenia (16.1%), infusion related reaction (16.1%) and hypothyroidism (16.1%). The majority of the AEs were grade 1 or 2 in severity. Only 5 patients (16.1%) experienced ≥ Gr3 TRAEs and almost all of them had been relieved or recovered. The most common ≥ Gr3 TRAE was diarrhea (6.5%). 3 patients discontinued treatment due to AE of KN046 treatment and no patients discontinued treatment due to AE caused by KN026. There was no treatment related death.

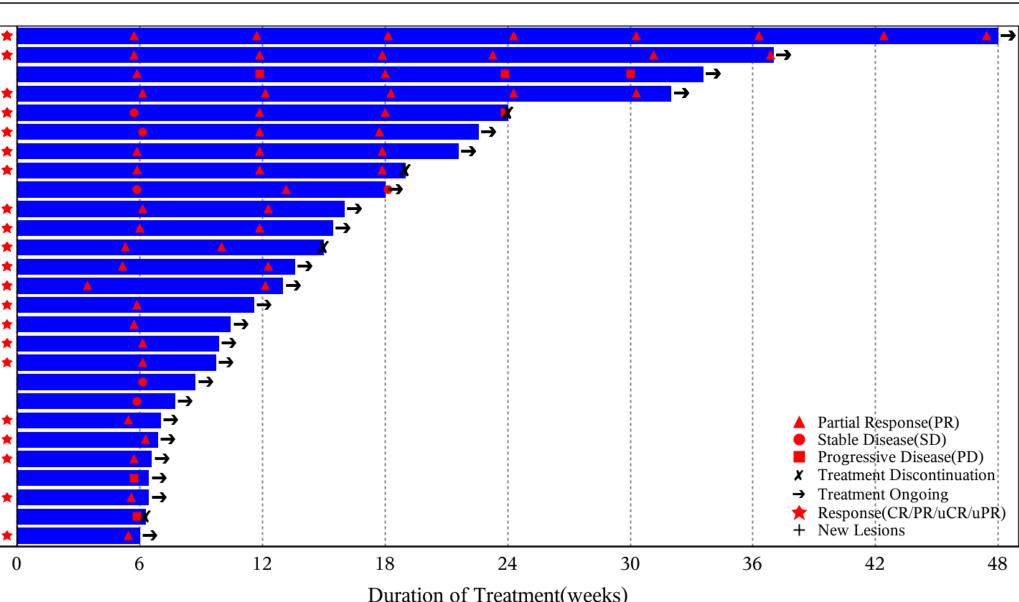
**Distant Metastasis** 

### As of 30 Jan 2022, a total of 31 HER2 positive locally advanced unresectable or metastatic GC/GEJ patients without prior systemic treatment were enrolled, and 26 patients still received study treatment. The median age was 64 years old with 14 patients (45.2%) aged ≥ 65 years. 26 patients (83.9%) were HER2 IHC 3+ and 5 patients (16.1%) were HER2 IHC 2+ with HER2 gene amplification, and 25 patients

# CONCLUSIONS

KN026 combined with KN046 treatment had demonstrated outstanding efficacy and manageable safety in HER2 positive GC/GEJ patients without prior systemic treatment. It is interesting to further test the efficacy and safety in randomized studies or larger sample studies.





**Swimlane Plot (Evaluable patients)** 

