

Updated results of the efficacy and safety of KN046 (a bispecific anti-PD-L1/CTLA-4) in patients with metastatic non-small cell lung cancer (NSCLC) who failed prior EGFR-TKI (s)

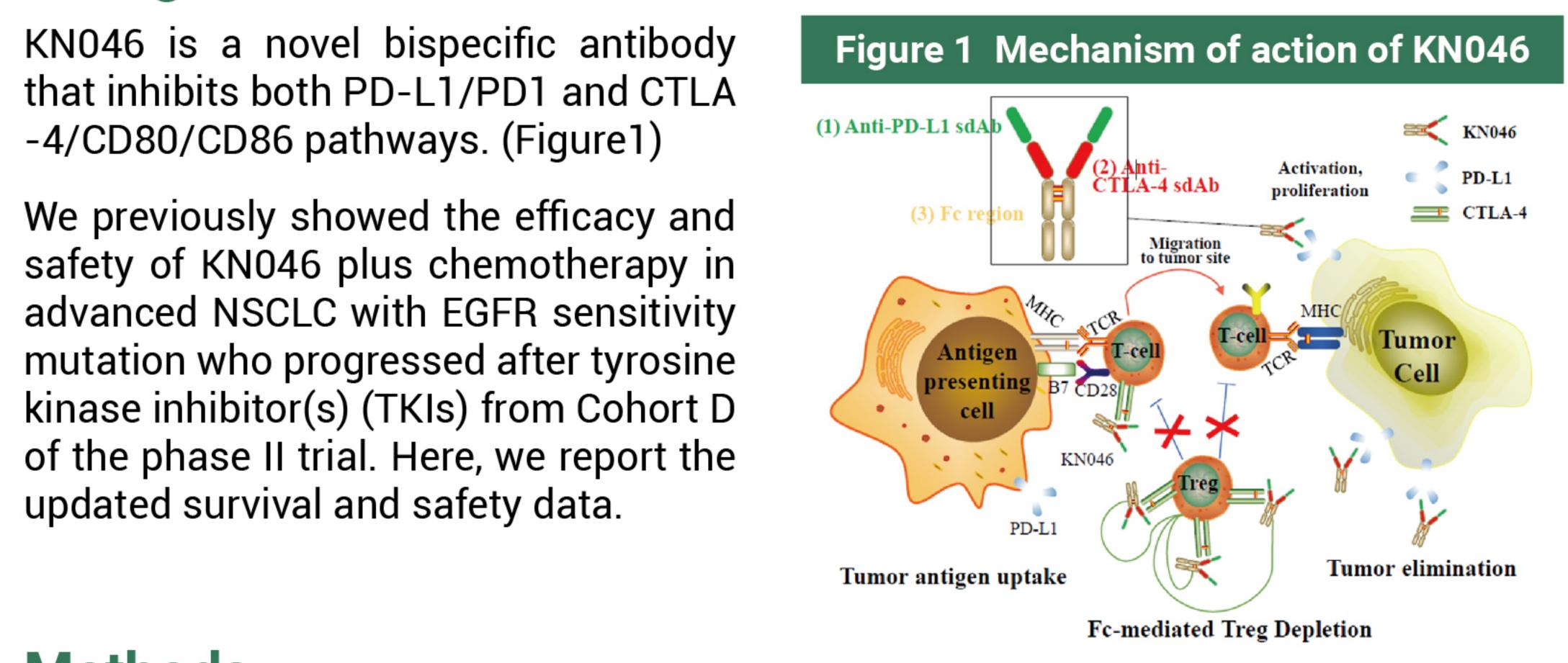
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Background

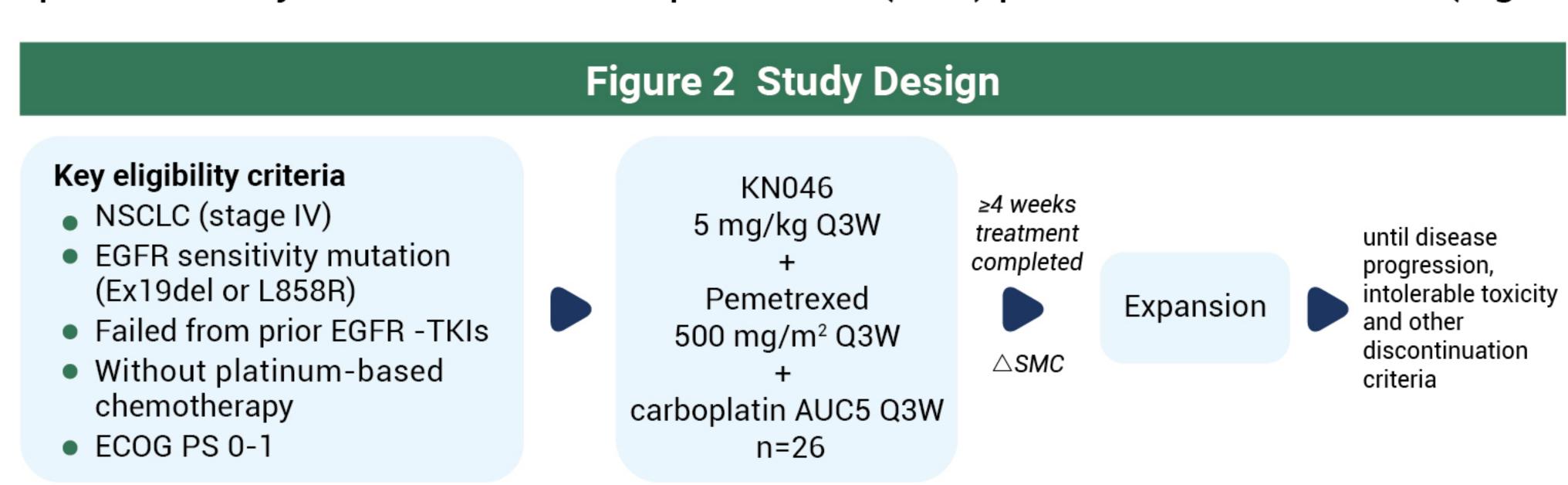
that inhibits both PD-L1/PD1 and CTLA -4/CD80/CD86 pathways. (Figure1)

We previously showed the efficacy and safety of KN046 plus chemotherapy in advanced NSCLC with EGFR sensitivity mutation who progressed after tyrosine kinase inhibitor(s) (TKIs) from Cohort D of the phase II trial. Here, we report the updated survival and safety data.



Methods

This is an open-label, multi-center, single arm study to evaluate the efficacy, safety and tolerability of KN046 combined with chemotherapy in NSCLC (Cohort D). Primary endpoint was objective confirmed response rate (ORR) per RECIST version 1.1. (Figure 2)

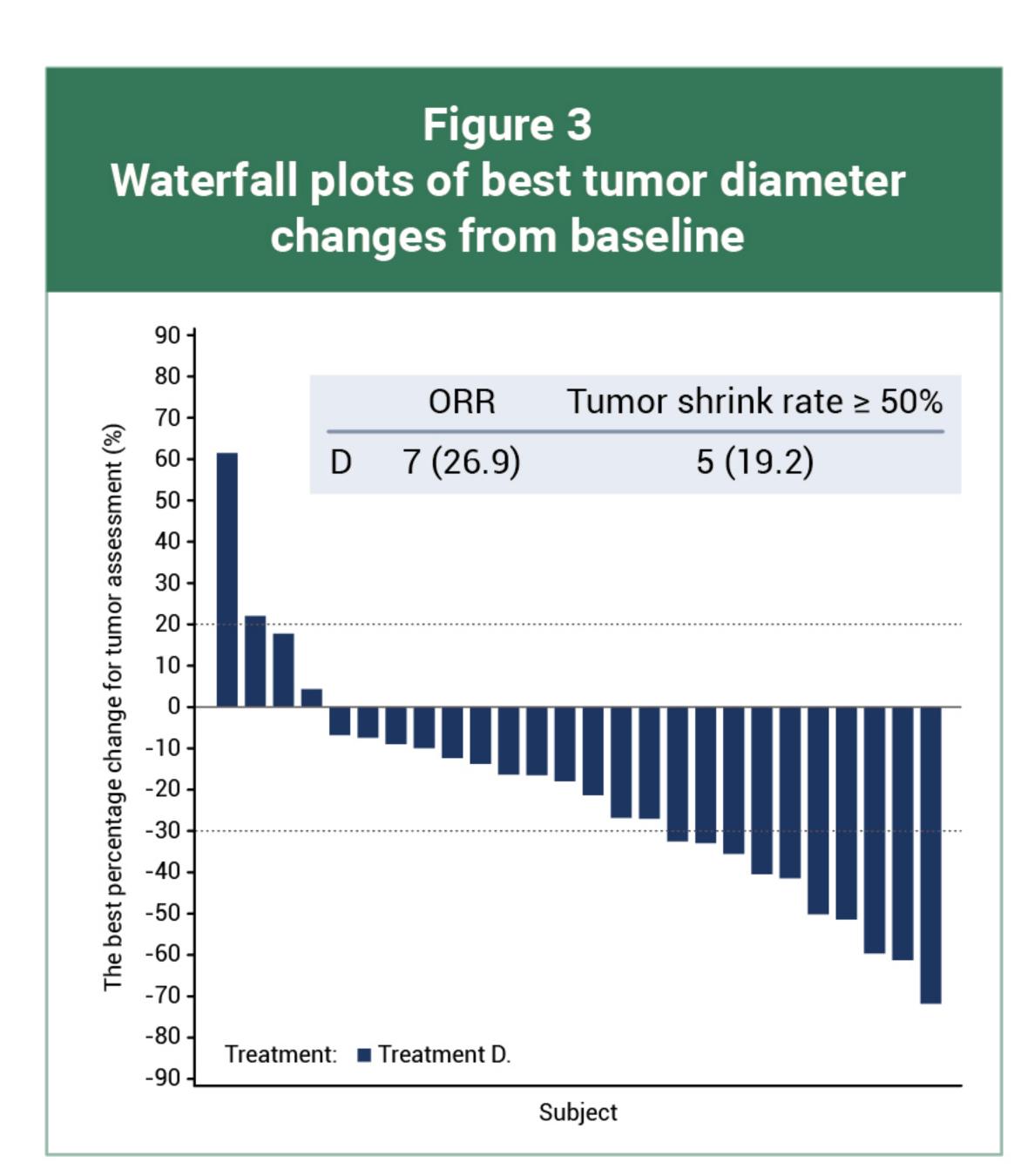


Results

From Jan 7, 2020 to Dec 17, 2021, 26 patients with metastatic NSCLC were enrolled. The median follow-up was 17.8 months (95% CI, 13.0, 19.5) at the data cutoff of Jul 30, 2022. (Table 1)

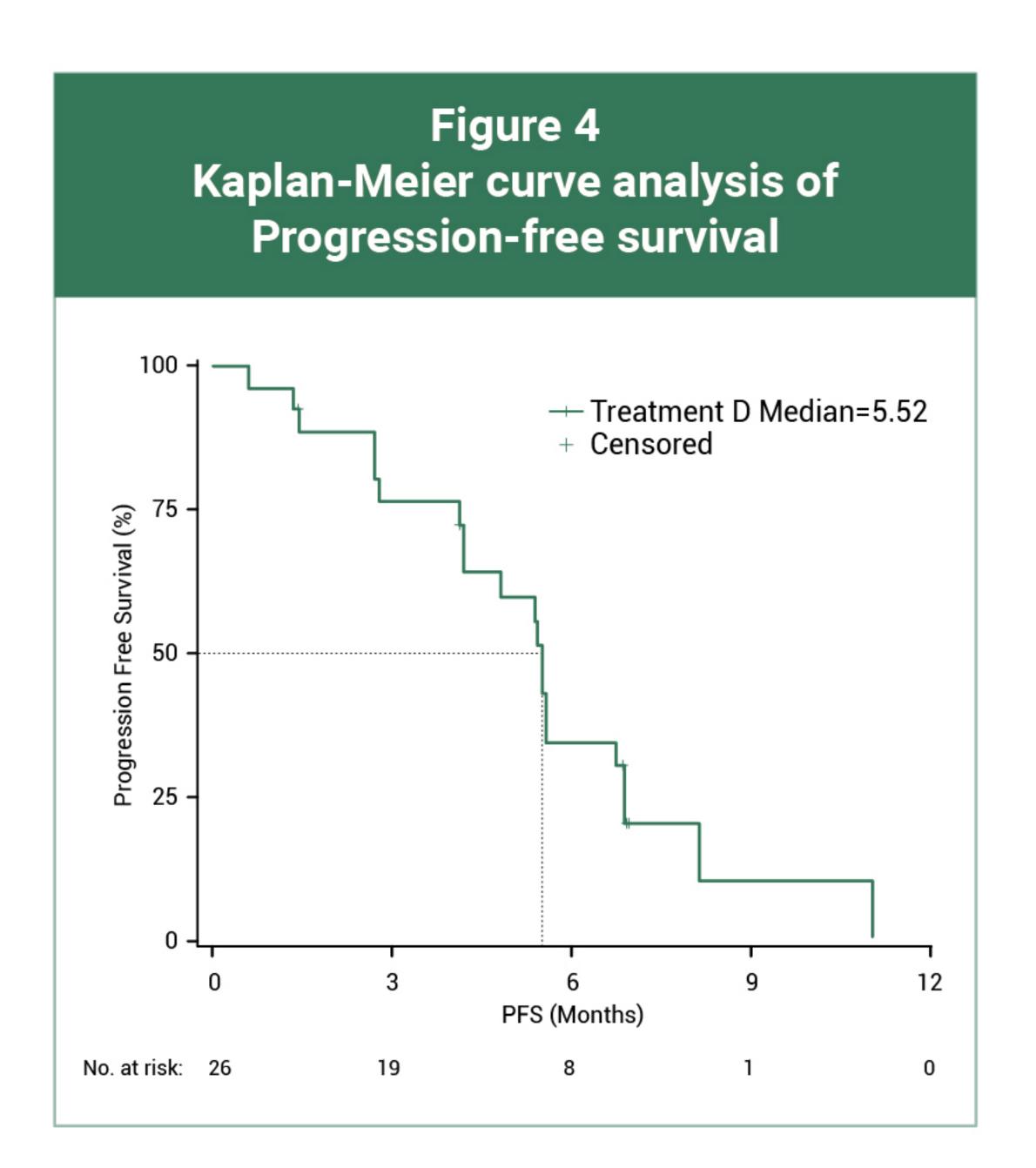
Table 1 Baseline characteristics				
Characteristic		n=26		
Age (years), median (range)		57 (38-73)		
Male, n (%)		13 (50.0%)		
ECOG PS score, n (%)	0 1	3 (11.5%) 23 (88.5%)		
Smoking	Never smoking Smoking Quit smoking	16 (61.5%) 1 (3.8%) 9 (34.6%)		
Brain metastasis, n (%)	Yes No	10 (38.5%) 16 (61.5%)		
Pathological type, n (%)	Non-squamous cell carcinoma	26 (100%)		
Clinical stages, n (%)	IVa IVb	11 (42.3%) 15 (57.7%)		

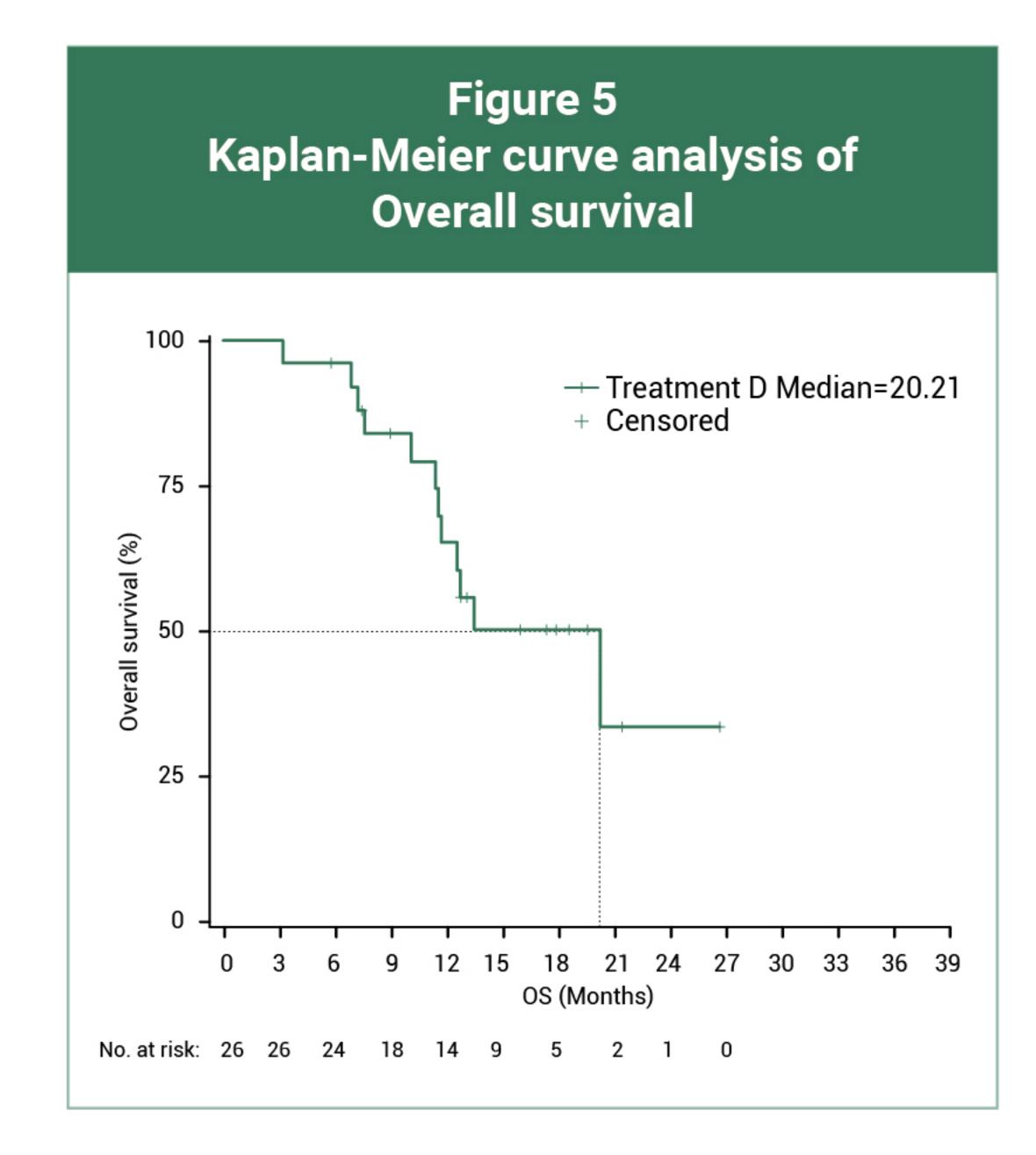
Among all 26 patients, the ORR was 26.9% (7/26, 95% CI, 11.6,47.8%) and 5 (19.2%) pts had tumor shrink rate ≥50%. DCR was 84.6% (22/26, 95% CI, 65.1, 95.6%) with 7 PR and 15 SD. The CBR was 38.5% (10/26, 95% CI, 20.2, 59.4%). (Figure 2, Table2)



	sponses n=26
Best overall response, n (%)	
Partial response	7 (26.9%)
Stable disease	15 (57.7%)
Progressive disease	4 (15.4%)
Objective response rate, n (%) 95% CI	7 (26.9%) 11.57, 47.79
Disease control rate, n (%)	22 (84.6%)
95% CI	65.13, 95.64
Clinical benefit rate#, n (%)	10 (38.5%)
95% CI	20.23, 59.43

Median progression-free survival (mPFS) was 5.5 months (95% CI, 4.2, 6.8) and median overall survival (mOS) was 20.2 months (95% CI, 11.5, -). The 12-month OS rate was 65.29% (95% CI, 42.16, 81.02). (Figure 4, Figure 5)





In terms of the treatment-related adverse event (TRAE), 15 (57.7%) out of the 26 patients had experienced TRAE at grade 3 or higher levels due to chemotherapy or KN046. The most common (≥10%) TRAEs were anemia (11/26 [42.3%]), AST increased (11/26 [42.3%]), ALT increased (9/26 [34.6%]), infusion-related reaction (8/26 [30.8%]), etc. (Table 3)

Conclusions

KN046 showed encouraging efficacy result especially in OS benefit and a favorable safety profile in advanced NSCLC with EGFR sensitivity mutation who progressed after EGFR-TKI(s). Further study is warranted to confirm the clinical results.

Treatment-related adverse events				
Events	n=26			
TRAEs Grade ≥ 3	24 (92.3%) 15 (57.7%)			
TRAEs with incidence ≥ 10% during the treatment				
Anemia	11 (42.3%)			
AST increased	11 (42.3%)			
ALT increased	9 (34.6%)			
Platelet count decreased	8 (30.8%)			
Neutrophil counts decreased	8 (30.8%)			
White blood cell count decreased	8 (30.8%)			
Infusion-related reaction	8 (30.8%)			
Fatigue	6 (23.1%)			
Nausea	5 (19.2%)			
Hypokalemia	4 (15.4%)			
Abnormal liver function	4 (15.4%)			
Elevated glucose	4 (15.4%)			
Elevated bilirubin	3 (11.5%)			
Hyperglycemia	3 (11.5%)			
Hyponatremia	3 (11.5%)			
Rash	3 (11.5%)			

Table 3

Editorial acknowledgement

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Disclosure

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