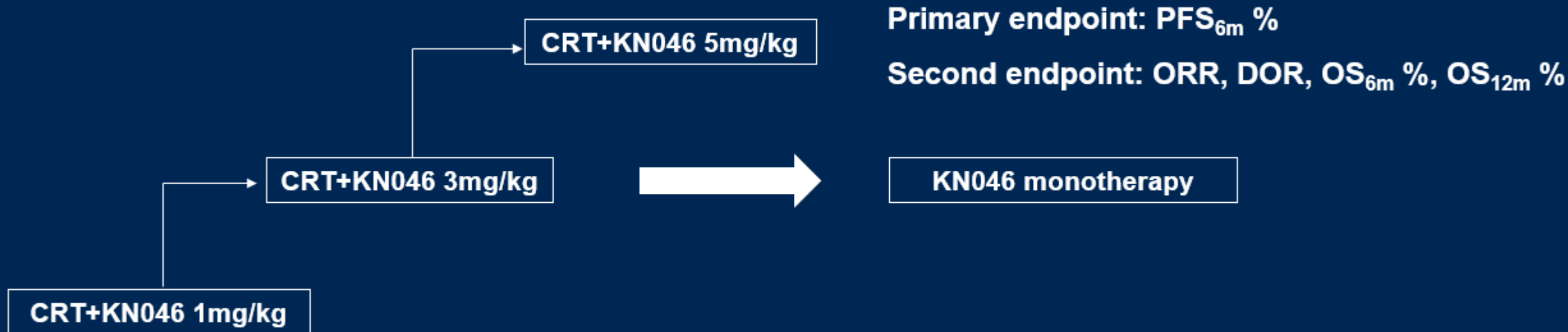


The preliminary efficacy and safety of KN046 plus concurrent chemoradiation therapy in recurrent and metastatic esophageal squamous cell carcinoma

Bing Song Qin^{1}, Qi Zhao¹, Dong Yan Liu¹, Jiao Xue¹, Xing Jia Zhu¹
*Corresponding author ¹ Department of Radiation Oncology, The
First Affiliated Hospital of Soochow University, Soochow, China*

Study Design



- Chemotherapy: cisplatin 75mg/m² and paclitaxel 135-175mg/m², D1, 21 days/cycle
- Radiotherapy: dose, frequency and sites are decided by investigators
- KN046: 7-14 days after RT with Q3W and then Q2W maintenance

Demographics & Baseline characteristics

	1mg/kg (N=3)	3mg/kg (N=11)	5mg/kg (N=4)	ALL (N=18)
Age (years)				
Mean (SD)	67.7 (2.08)	64.5 (7.63)	68.0 (3.74)	65.8 (6.34)
Median (Min, Max)	67.0 (66, 70)	67.0 (52, 75)	67.5 (64, 73)	67.0 (52,75)
Sex				
Male	3 (100.0%)	8 (72.7%)	3 (75.0%)	14 (77.8%)
Female	0	3 (27.3%)	1 (25.0%)	4 (22.2%)
ECOG				
0	1 (33.3%)	1 (9.1%)	0	2 (11.1%)
1	2 (66.7%)	10 (90.9%)	4 (100.0%)	16 (88.9%)
Clinical Stage				
II	0	2 (18.2%)	0	2 (11.1%)
III	1 (33.3%)	5 (45.5%)	0	6 (33.3%)
IVb	2 (66.7%)	4 (36.4%)	4 (100.0%)	10 (55.6%)
Distant Metastases				
Yes	2 (66.7%)	4 (36.4%)	4 (100%)	10 (55.6%)
Lung	1 (33.3%)	2 (18.2%)	1 (25.0%)	4 (22.2%)
Prior Radiotherapy				
Yes	1 (33.3%)	10 (90.9%)	1 (25.0%)	12 (66.7%)
Prior Chemotherapy				
Yes	1 (33.3%)	9 (81.8%)	2 (50.0%)	12 (66.7%)

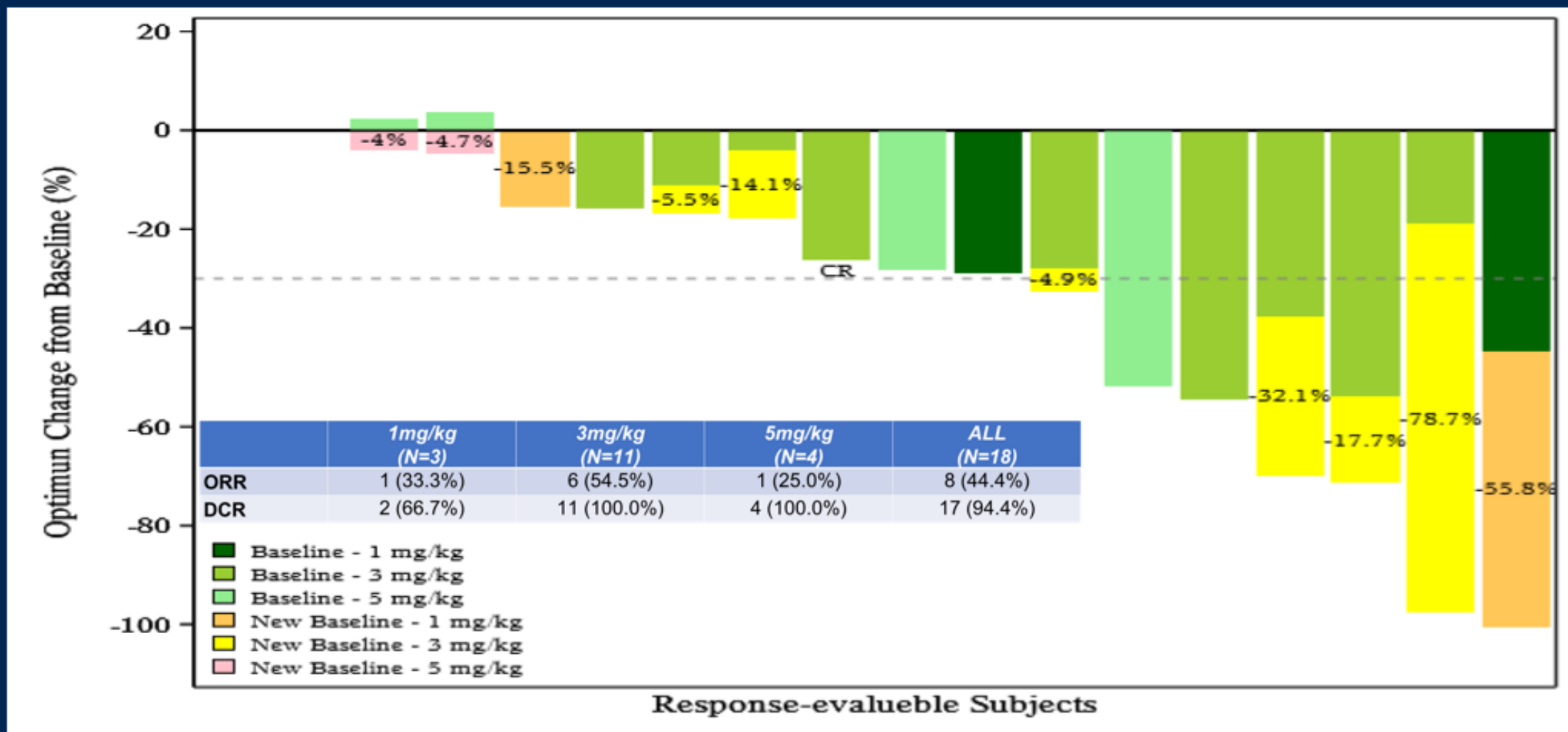
Treatment Overview

	1mg/kg (N=3)	3mg/kg (N=11)	5mg/kg (N=4)	ALL (N=18)
Radiotherapies (Gy)				
Mean (SD)	108.8 (8.1)	39.1 (14.5)	72.5 (78.5)	58.1 (44.2)
Median (Min, Max)	110.4 (100.0, 116.0)	40.0 (30.0, 80.0)	35.0 (30.0, 190.0)	40.0 (30.0,190.0)
Radiotherapy Site				
Esophagus	0	0	1 (25.0%)	1 (5.6%)
Non-esophagus	0	10 (90.9%)	2 (50.0%)	12 (66.7%)
Both	3 (100%)	1 (9.1%)	1 (25.0%)	5 (27.8%)
Chemotherapies (Cycles)				
Mean (SD)	4.7 (1.2)	3.5 (0.7)	3.5 (1.0)	3.7 (0.9)
Median (Min, Max)	4.0 (4,6)	4.0 (2,4)	4.0 (2,4)	4.0 (2,6)
KN046 treatment (weeks)				
Mean (SD)	28.7 (12.4)	17.7 (14.9)	11.1 (6.5)	18.1 (13.7)
Median (Min, Max)	33.3 (14.6, 38.1)	11.1 (3.1, 46.1)	12.5 (2.1, 17.4)	13.5 (2.1, 46.1)

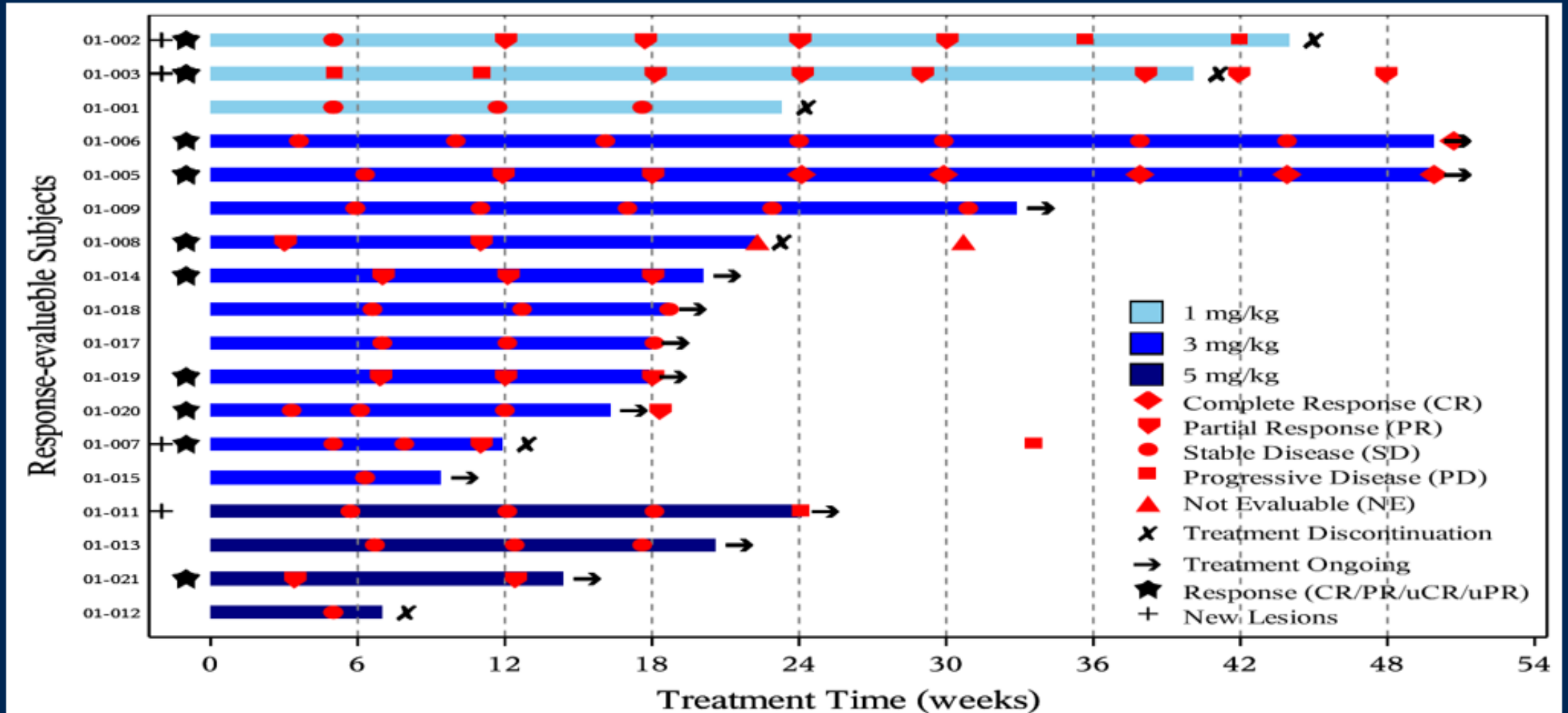
Safety Overview

	ALL (N=18)
TEAEs	18 (100.0%)
Related to KN046	6 (33.3%)
≥Gr 3 TEAEs	11 (61.1%)
Related to KN046	3 (16.7%)
irAEs	6 (33.3%)
≥Gr 3 irAEs	3 (16.7%)
SAE	9 (50.0%)
Related to KN046	3 (16.7%)
≥Gr 3 SAEs	9 (50.0%)
Related to KN046	3 (16.7%)
DLT	0
TEAE leading to discontinuation of KN046	4 (22.2%)
TEAE leading to discontinuation of DDP	3 (16.7%)
TEAE leading to discontinuation of Paclitaxel	3 (16.7%)
TEAE leading to dose adjustment of DDP	9 (50.0%)
TEAE leading to dose adjustment of Paclitaxel	8 (44.4%)

Waterfall plot before & after KN046 treatment



Swimming lane plot



Conclusion

- No DLT occurred. The addition of KN046 to CRT was well tolerated.
- Three subjects discontinued KN046 treatment due to irAE — pneumonitis (11.1%) and colitis (11.1%).
- Two subjects achieved CR, the promising efficacy signal was observed and the survival results will be validated in the future.