# REAL-WORLD EFFECTIVENESS OF TRASTUZUMAB DERUXTECAN IN PATIENTS WITH BREAST CANCER

Sin-Rou Wang<sup>1</sup>, Kai-Cheng Chang<sup>1,2</sup>, Shih-Chieh Shao<sup>2,3</sup>, Po-Jung Su<sup>4</sup>, Hui-Yu Chen<sup>1</sup>

1. Department of Pharmacy, Linkou Chang Gung Memorial Hospital, Taoyuan, Taiwan 2. Institute of Clinical Pharmacy and Pharmaceutical Sciences, National Cheng Kung University, Tainan, Taiwan 3. Department of Pharmacy, Keelung Chang Gung Memorial Hospital, Keelung, Taiwan 4. Division of Hematology-Oncology, Department of Internal Medicine, Chang Gung Memorial Hospital, Linkou, Taoyuan, Taiwan



### **Background and Objectives**

- Trastuzumab Deruxtecan (T-DXd) is an antibody drug conjugate that targets the human epidermal growth factor receptor 2 (HER2).
- T-Dxd shows good treatment efficacy in patients with metastatic breast cancer (mBC) in HER2-positive (Destiny 01) and low (Destiny 04).
- However, limited real-world data directly compare HER2-positive and HER2-low in Asian populations

#### Methods

**Study Design** Retrospective cohort study

Data source

Chang Gung Research Database (CGRD), the largest multiinstitutional electronic medical records database in Taiwan.

**Study Period** Study cohort from 2022/4/1 to 2023/12/31

Statistical Analysis Kaplan – Meier Method

**Study Outcomes** Progression free survival (PFS), overall survival (OS)

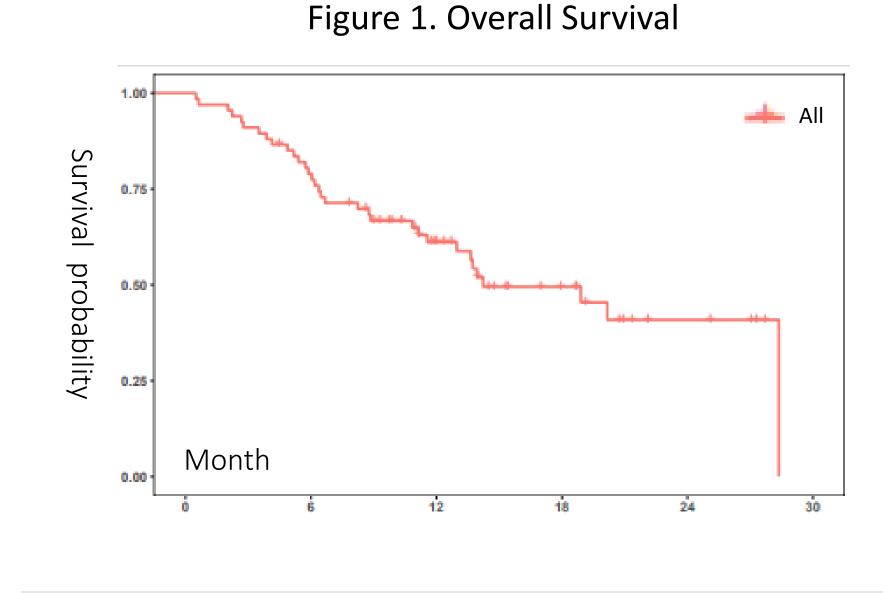
#### **Study Population**

- Metastatic breast cancer (mBC) patients
- Newly receiving at least one administration of T-DXd at any line.
- HER2-positive
- HER2-low: IHC 1+ or IHC 2+ with negative results on in situ hybridization

### Results

Table 1. Baseline Characteristics

Variable	Case ( N = 68 )
Age - years, mean ± SD	55.0 ± 11.5
Cell markers - positive	
HER2, n (%)	35 (51.47%)
HR, n (%)	33 (48.53%)
Metastasis Type	
De novo, n (%)	43 (63.24%)
Recurrent, n(%)	22 (32.35%)
Organ Metastasis	
Bone, n(%)	25 (36.76%)
Lung, n (%)	36 (52.94%)
Liver, n (%)	28 (41.18%)
Brain, n (%)	12 (17.65%)
Others, n (%)	33 (48.53%)

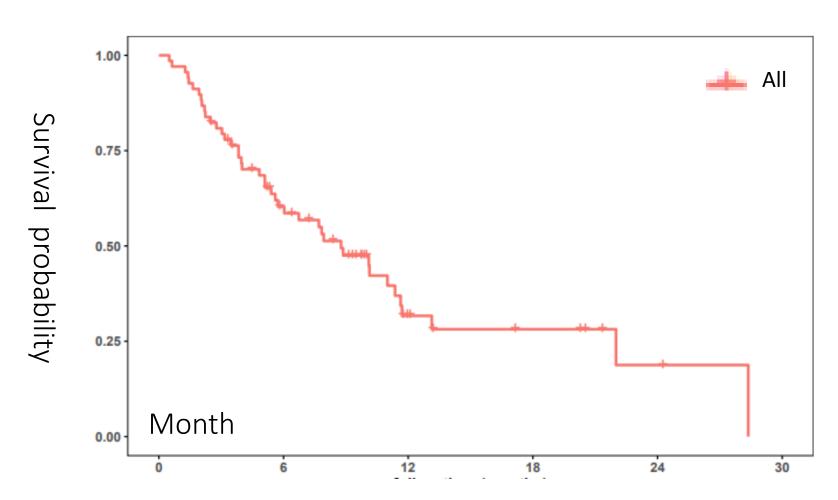


OS: 11.5 months (95% CI: 8.2-18.9)

Figure 3. Overall Survival Subgroup HER2 positive + HER2 low Survival obability Month

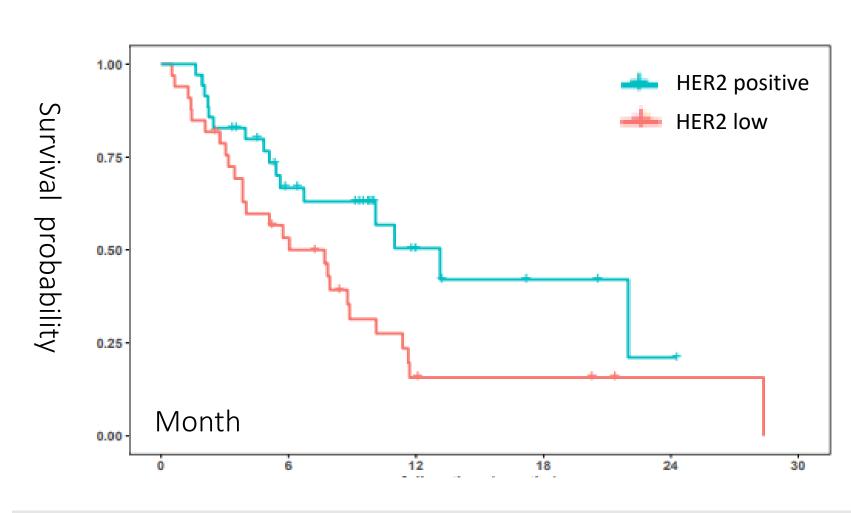
OS: 13.9 months vs. 8.7 months P < 0.05

Figure 2. Progression Free Survival



PFS: 8.7 months (95% CI: 5.4-11.3)

Figure 4. Progression Free Survival Subgroup



PFS: 11.0 months vs. 6.0 months, P < 0.05

## Conclusions

Though our study found slightly lower PFS an OS than clinical trials, this may be due to poorer health conditions in real-world patients and economic barriers preventing them from accessing the recommended full dose. Even then, with nearly a year of PFS and OS as a late-line treatment for mBC, T-DXd is still believed to offer a significant benefits to patients in Asian populations.