## **Supplementary Materials**

### **Results of Scenario Analysis**

In this study, we presented two sets of results: in the scenario analysis, we matched upon the variables which had significant prognostic value identified by our Cox regression analysis. In the base-case (results presented in the main poster), we matched on more complete sets of variables - we additionally included age (median), sex, smoking status and histology as these were commonly reported as prognostic factors for NSCLC and often matched in MAIC or IPTW submitted to NICE (Table S1)

#### Table S1. Matching variables for OS and PFS in base-case and scenario analysis

Scenario	OS	PFS
Base-case	Age (median), sex, ECOG PS, smoking status, histology, liver metastases and metastasis staging	Age (median), sex, ECOG PS, smoking status, histology, brain metastases, liver metastases and metastasis staging
Scenario analysis	Age (median), ECOG PS, liver metastases and metastasis staging	ECOG PS, brain metastases, liver metastases and metastasis staging

Below we present the results of scenario analysis.

#### **Overall Survival (OS)**

# Table S2. Baseline characteristics for Dab-Tram trial Cohort C, before and after weighting, compared with KEYNOTE-189 trial, for OS, in the scenario analysis

Characteristics	Dab-Tram Before Weighting	Dab-Tram After Weighting	KEYNOTE-189
ESS	36	31.9	410
Median age, years	67	65	65
ECOG PS 0	36.1%	45.1%	45.1%
Liver metastases	11.1%	16.1%	16.1%
M1a metastasis	25.0%	30.0%	30.0%

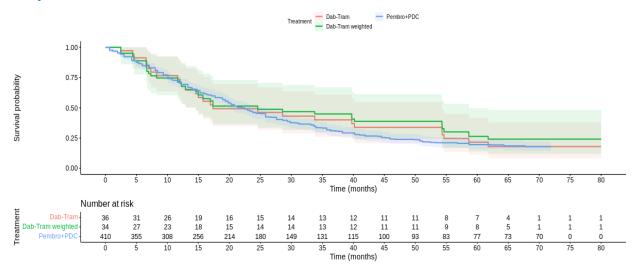


Figure S1. KM curves of OS for Dab-Tram vs Pembrolizumab + Chemotherapy, in the scenario analysis

#### Table S3. OS HR of Dab-Tram vs Pembrolizumab + Chemotherapy, in the scenario analysis

	Naive		Adjusted	
	Hazard Ratio	95% CI	Hazard Ratio	95% CI
Dab-Tram vs Pembro + Chemo	0.944	0.638 - 1.398	0.838	0.526 - 1.336

#### Progression-Free Survival (PFS)

 Table S4. Baseline characteristics for Dab-Tram trial Cohort C, before and after weighting, compared with KEYNOTE-189 trial, for PFS, in the scenario analysis

Characteristics	Dab-Tram Before Weighting	Dab-Tram After Weighting	KEYNOTE-189
ESS	36	23.5	410
ECOG PS 0	36.1%	45.1%	45.1%
Brain metastases	5.6%	17.8%	17.8%
Liver metastases	11.1%	16.1%	16.1%
M1a metastasis	25.0%	30.0%	30.0%

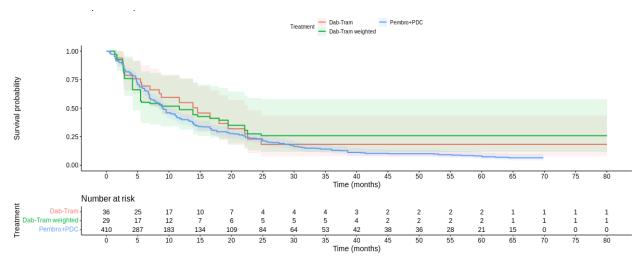


Figure S2. KM curves of PFS for Dab-Tram vs Pembrolizumab + Chemotherapy, in the scenario analysis

Table S5. PFS HR of Dab-Tram vs Pembrolizumab + Chemotherapy, in the scenario analysis

	Naive		Adjusted	
	Hazard Ratio	95% CI	Hazard Ratio	95% CI
Dab-Tram vs Pembro + Chemo	0.759	0.493 - 1.167	0.747	0.382 - 1.461