

TABLES IN APPENDIX

Table 1A. Baseline demographics and patient and disease characteristics in the ITT population of NSCLC patients with primary and secondary resistance to ICB

		OSE2101 (N=139)	SoC (N=80)	Total (N=219)
Age (years)	Mean (sd)	65.3 (8.77)	63.6 (7.89)	64.7 (8.48)
	Median	65.0	64.0	65.0
	Min-Max	41-86	43-81	41-86
Gender	Male	99 (71.2%)	56 (70.0%)	155 (70.8%)
	Female	40 (28.8%)	24 (30.0%)	64 (29.2%)
Race	White	124 (95.4%)	76 (97.4%)	200 (96.2%)
	Black or African American	4 (3.1%)	2 (2.6%)	6 (2.9%)
	Asian	2 (1.5%)	0	2 (1.0%)
Ethnicity	Hispanic or Latino	0	2 (2.5%)	2 (0.9%)
	Not Hispanic or Latino	134 (100.0%)	77 (97.5%)	211 (99.1%)
Smoking status	Never -smoker	13 (9.4%)	8 (10.0%)	21 (9.6%)
	Ex-smoker	104 (74.8%)	56 (70.0%)	160 (73.1%)
	Current smoker	22 (15.8%)	16 (20.0%)	38 (17.4%)
Line of prior ICB treatment	1st line ICB	20 (14.4%)	16 (20.0%)	36 (16.4%)
	2nd line ICB	118 (84.9%)	64 (80.0%)	182 (83.1%)
	3rd line ICB	1 (0.7%)	0	1 (0.5%)
Histology	Squamous	41 (29.5%)	24 (30.4%)	65 (29.8%)
	Non-squamous	98 (70.5%)	55 (69.6%)	153 (70.2%)
Previous pemetrexed treatment	Yes	77 (55.4%)	46 (57.5%)	123 (56.2%)
Best response during ICB therapy	Complete response	2 (1.5%)	1 (1.3%)	3 (1.4%)
	Partial response	32 (23.7%)	15 (19.2%)	47 (22.1%)
	Stable disease	34 (25.2%)	19 (24.4%)	53 (24.9%)
	Progressive disease	67 (49.6%)	43 (55.1%)	110 (51.6%)
Duration of prior ICB therapy	0-12 weeks	41 (29.5%)	29 (36.3%)	70 (32.0%)
	>12-24 weeks	46 (33.1%)	15 (18.8%)	61 (27.9%)
	>24 weeks	52 (37.4%)	36 (45.0%)	88 (40.2%)
Disease stage at study entry	III	8 (5.8%)	6 (7.5%)	14 (6.4%)
	IV	131 (94.2%)	74 (92.5%)	205 (93.6%)
Brain metastases at study entry	Yes	23 (16.5%)	10 (12.5%)	33 (15.1%)
Liver metastases at study entry	Yes	31 (22.3%)	20 (25.0%)	51 (23.3%)
Number of different metastasis locations	0	10 (7.4%)	13 (16.3%)	23 (10.6%)
	1	60 (44.1%)	31 (38.8%)	91 (42.1%)
	2	41 (30.1%)	21 (26.3%)	62 (28.7%)
	≥3	25 (18.4%)	15 (18.8%)	40 (18.5%)
ECOG PS at baseline	0	47 (33.8%)	24 (30.0%)	71 (32.4%)
	1	92 (66.2%)	56 (70.0%)	148 (67.6%)
PD-L1	<1%	43 (30.9%)	16 (20.0%)	59 (26.9%)
	≥1%	58 (41.7%)	32 (40.0%)	90 (41.1%)
	Unknown	38 (27.3%)	32 (40.0%)	70 (32.0%)
Baseline LDH classification	>ULN	45 (37.2%)	27 (40.3%)	72 (38.3%)
dNLR at baseline	≥3	49 (36.0%)	31 (39.7%)	80 (37.4%)

Data are shown for number of patients (%) unless otherwise stated.

ALK, Anaplastic Lymphoma Kinase, dNLR, derived neutrophil-to-lymphocyte ratio; ECOG, Eastern Cooperative Oncology Group; EGFR, Epidermal Growth Factor Receptor; ICB, immune checkpoint blocker; LDH, lactate

dehydrogenase; PD-L1, programmed death ligand 1; PS, performance status; SoC, standard of care (docetaxel or pemetrexed); ULN, upper limit of normal.

Table 2A: Post-progression treatments in NSCLC patients with secondary resistance to ICB

	OSE2101 (N=80)	SoC (N=38)	Total (N=118)
Any treatment received	55 (68.8%)	16 (42.1%)	71 (60.2%)
Pyrimidines analogues	23 (28.8%)	10 (26.3%)	33 (28.0%)
Taxanes	29 (36.3%)	1 (2.6%)	30 (25.4%)
Platinum compounds	14 (17.5%)	4 (10.5%)	18 (15.3%)
Surgical and medical procedures	13 (16.3%)	3 (7.9%)	16 (13.6%)
Vinca alkaloids and analogues	11 (13.8%)	2 (5.3%)	13 (11.0%)
Monoclonal antibodies	6 (7.5%)	2 (5.3%)	8 (6.8%)
Folic acid analogues	6 (7.5%)	2 (5.3%)	8 (6.8%)
Protein kinase inhibitors	4 (5.0%)	3 (7.9%)	7 (5.9%)
Antineoplastic Agents	4 (5.0%)	1 (2.6%)	5 (4.2%)
Podophyllotoxin derivatives	2 (2.5%)	0	2 (1.7%)
Antimetabolites	1 (1.3%)	0	1 (0.8%)
Other antineoplastic agents	1 (1.3%)	0	1 (0.8%)
Biphosphonates	1 (1.3%)	0	1 (0.8%)
Investigational drug	1 (1.3%)	0	1 (0.8%)
Nitrogen mustard analogues	0	1 (2.6%)	1 (0.8%)

NSCLC, Non-small cell lung cancer; SoC, standard of care (docetaxel or pemetrexed).

Table 3A. Best Response according to RECIST 1.1 in NSCLC patients with secondary resistance to ICB

	OSE2101 (N=80)	SoC (N=38)	Total (N=118)
Patients with measurable lesions at baseline	78	38	116
Best response			
Complete Response (CR)	0	0	0
Partial Response (PR)	6 (7.7%)	7 (18.4%)	13 (11.2%)
Stable Disease (SD)	36 (46.2%)	19 (50.0%)	55 (47.4%)
Progressive Disease (PD)	32 (41.0%)	7 (18.4%)	39 (33.6%)
No Post-baseline Assessment	4 (5.1%)	5 (13.2%)	9 (7.8%)

Table 4A. Grade 3-5 drug-related adverse events by treatment group in NSCLC patients with secondary resistance to ICB

	OSE2101 (N=79)		SoC (N=37)		Total (N=116)	
	N	%	N	%	N	%
At least adverse event	9	(11.4%)	13	(35.1%)	22	(19.0%)
Pyrexia	2	(2.5%)	0		2	(1.7%)
Injection site pruritus	1	(1.3%)	0		1	(0.9%)
Chills	1	(1.3%)	0		1	(0.9%)
Hypertransaminasemia	1	(1.3%)	0		1	(0.9%)
Cytokine release syndrome	1	(1.3%)	0		1	(0.9%)
Drug hypersensitivity	1	(1.3%)	0		1	(0.9%)
Giant cell arteritis	1	(1.3%)	0		1	(0.9%)
Tachycardia	1	(1.3%)	0		1	(0.9%)
Vomiting	1	(1.3%)	1	(2.7%)	2	(1.7%)
Myalgia	1	(1.3%)	0		1	(0.9%)
Tubulointerstitial nephritis	1	(1.3%)	0		1	(0.9%)
Dyspnea	1	(1.3%)	1	(2.7%)	2	(1.7%)
Wheezing	1	(1.3%)	0		1	(0.9%)
Hypertension	1	(1.3%)	0		1	(0.9%)
Hypotension	1	(1.3%)	0		1	(0.9%)
Neutropenia	0		6	(16.2%)	6	(5.2%)
Asthenia	0		6	(16.2%)	6	(5.2%)
Leukopenia	0		2	(5.4%)	2	(1.7%)
Febrile neutropenia	0		1	(2.7%)	1	(0.9%)
Diarrhea	0		1	(2.7%)	1	(0.9%)
Erysipeloid	0		1	(2.7%)	1	(0.9%)
Pneumonia	0		1	(2.7%)	1	(0.9%)
Alopecia	0		1	(2.7%)	1	(0.9%)
Blood bilirubin increased	0		1	(2.7%)	1	(0.9%)

NSCLC, Non-small cell lung cancer; SoC, standard of care (docetaxel or pemetrexed).

Table 5A. Drug-related adverse events in >5% of NSCLC patients with primary and secondary resistance to ICB

	OSE2101 (N=138)		SoC (N=74)		Total (N=212)	
	N	%	N	%	N	%
Any TEAE	94	(68.1%)	59	(79.7%)	153	(72.2%)
Pyrexia	18	(13.0%)	3	(4.1%)	21	(9.9%)
Asthenia	18	(13.0%)	25	(33.8%)	43	(20.3%)
Injection site induration	15	(10.9%)	0		15	(7.1%)
Injection site reaction	13	(9.4%)	0		13	(6.1%)
Cytokine release syndrome	10	(7.2%)	0		10	(4.7%)
Arthralgia	10	(7.2%)	2	(2.7%)	12	(5.7%)
Nausea	9	(6.5%)	9	(12.2%)	18	(8.5%)
Chills	9	(6.5%)	0		9	(4.2%)
Fatigue	9	(6.5%)	11	(14.9%)	20	(9.4%)
Injection site pain	8	(5.8%)	0		8	(3.8%)
Diarrhea	7	(5.1%)	17	(23.0%)	24	(11.3%)
Vomiting	7	(5.1%)	6	(8.1%)	13	(6.1%)
Alopecia	0		21	(28.4%)	21	(9.9%)
Neutropenia	0		13	(17.6%)	13	(6.1%)
Anemia	1	(0.7%)	10	(13.5%)	11	(5.2%)
Decreased appetite	6	(4.3%)	10	(13.5%)	16	(7.5%)
Neuropathy peripheral	0		5	(6.8%)	5	(2.4%)
Leukopenia	0		4	(5.4%)	4	(1.9%)
Constipation	0		4	(5.4%)	4	(1.9%)
Stomatitis	2	(1.4%)	4	(5.4%)	6	(2.8%)
Oedema peripheral	3	(2.2%)	4	(5.4%)	7	(3.3%)
Myalgia	5	(3.6%)	4	(5.4%)	9	(4.2%)
Pain in extremity	1	(0.7%)	4	(5.4%)	5	(2.4%)
Nail toxicity	0		4	(5.4%)	4	(1.9%)

NSCLC, Non-small cell lung cancer; SoC, standard of care (docetaxel or pemetrexed).