Supplementary material

Real-World Treatment Patterns and Clinical Outcomes in Patients with Extensive-Stage Small Cell Lung Cancer Treated with First-Line Platinum-Based Chemotherapy and ≥ 2 Subsequent Lines of Therapy in the United States

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Table S1 Treatment classifications

Category	Included therapies
PBC + topoisomerase inhibitor	• PBC[a] + topoisomerase inhibitor[b] in combination, with no other agents
PBC + anti-PD-(L)1 + topoisomerase inhibitor	• PBC[a] + anti-PD-(L)1 therapy[c] + topoisomerase inhibitor[b], with or without additional hormonal or other targeted therapy
PBC "other"	• PBC[a] monotherapy or other PBC regimens (excluding those that meet criteria for PBC + topoisomerase inhibitor, PBC + topoisomerase inhibitor + anti-PD-(L)1, or other anti-PD-(L)1 combinations)
Anti-PD-(L)1 monotherapy	• Anti-PD-(L)1 agents[c] as monotherapy
Anti-PD-(L)1 "other"	• Any regimens that contain anti-PD-(L)1 agents[c] in combination with other therapies, unless categorized as PBC + anti-PD-(L)1 + topoisomerase inhibitor
Any lurbinectedin-containing regimen	• Any regimen containing lurbinectedin
Topoisomerase inhibitor(s) only	• Topoisomerase inhibitors[b], given as monotherapy or as two topoisomerase inhibitors in combination • Topoisomerase inhibitors given in combination with other agents that do not meet the criteria for other categories are classified as Chemotherapy "other"
Chemotherapy "other"	• Chemotherapy regimens that do not contain PBC, topoisomerase inhibitor(s), anti-PD-(L)1 agents, other targeted therapy, or lurbinectedin
Other	• Any treatments not classified above

ICI immune checkpoint inhibitor, *PBC* platinum-based chemotherapy, *PD-(L)1*

programmed death (ligand) 1

[a]Cisplatin or carboplatin

[b]Topotecan, irinotecan, or etoposide

[c]Nivolumab, pembrolizumab, cemiplimab, durvalumab, or atezolizumab

Table S2 Treatment patterns in 3L and 4L cohort patient subgroups

Treatment category, *n* (%)[a]	3L cohort (*n* = 344)			4L cohort (*n* = 114)		
	1L anti-PD-(L)1 (*n* = 191)	ECOG PS 0–1 (*n* = 225)	PBC rechallenge (*n* = 125)	1L anti-PD-(L)1 (*n* = 59)	ECOG PS 0–1 (*n* = 72)	PBC rechallenge (*n* = 50)
Any lurbinectedin-containing regimen	56 (29.3)	51 (22.7)	45 (36.0)	10 (16.9)	14 (19.4)	9 (18.0)
Topoisomerase inhibitor(s) only	46 (24.1)	40 (17.8)	21 (16.8)	19 (32.2)	24 (33.3)	19 (38.0)
Chemotherapy “other”	34 (17.8)	38 (16.9)	9 (7.2)	14 (23.7)	14 (19.4)	9 (18.0)
Anti-PD-(L)1 monotherapy	11 (5.8)	25 (11.1)	16 (12.8)	0	3 (4.2)	1 (2.0)
PBC + topoisomerase inhibitor	18 (9.4)	28 (12.4)	9 (7.2)	8 (13.6)	6 (8.3)	6 (12.0)
Anti-PD-(L)1 “other”	13 (6.8)	18 (8.0)	13 (10.4)	3 (5.1)	3 (4.2)	3 (6.0)
PBC + anti-PD-(L)1 + topoisomerase inhibitor	6 (3.1)	12 (5.3)	5 (4.0)	1 (1.7)	2 (2.8)	2 (4.0)
PBC “other”	3 (1.6)	8 (3.6)	5 (4.0)	1 (1.7)	2 (2.8)	0
Other	4 (2.1)	5 (2.2)	2 (1.6)	3 (5.1)	4 (5.6)	1 (2.0)

1L first line, *3L* third line, *4L* fourth line, *ECOG* Eastern Cooperative Oncology Group, *PBC* platinum-based chemotherapy, *PD-(L)1* programmed death (ligand) 1

[a]Categories are ordered based on frequency of use in the ECOG PS 0–1 subgroup of the 3L cohort

Table S3 Real-world clinical outcomes in 3L cohort subgroups defined according to ECOG PS 2 and CTFI

	ECOG PS 2 (*n* = 68)	CTFI subgroups			
		CTFI < 90 days (*n* = 149)	CTFI ≥ 90 days (*n* = 195)	CTFI < 180 days (*n* = 264)	CTFI ≥ 180 days (*n* = 80)
rwOS					
Events, *n* (%) Death before 4L therapy	63 (92.6)	131 (87.9)	164 (84.1)	232 (87.9)	63 (78.8)
Median (95% CI), months	2.69 (2.20–3.71)	3.84 (2.99–4.83)	5.59 (3.81–6.64)	3.94 (3.09–4.90)	8.97 (6.64–11.63)
rwTTD/D					
Events, *n* (%) Death before 4L therapy Started 4L therapy No structured activity within 120 days	66 (97.1) 49 (72.1) 17 (25.0) 0	140 (94.0) 94 (63.1) 45 (30.2) 1 (0.7)	185 (94.9) 106 (54.4) 78 (40.0) 1 (0.5)	251 (95.1) 162 (61.4) 88 (33.3) 1 (0.4)	74 (92.5) 38 (47.5) 35 (43.8) 1 (1.3)
Median (95% CI), months	2.23 (1.87–2.63)	2.56 (2.20–2.89)	2.56 (2.14–2.99)	2.40 (2.14–2.76)	2.83 (2.33–4.17)
rwTTNT/D					
Events, *n* (%) Death before 4L therapy Started 4L therapy	66 (97.1) 49 (72.1) 17 (25.0)	139 (93.3) 94 (63.1) 45 (30.2)	184 (94.4) 106 (54.4) 78 (40.0)	250 (94.7) 162 (61.4) 88 (33.3)	73 (91.3) 38 (47.5) 35 (43.8)
Median (95% CI), months	2.40 (1.97–2.76)	2.89 (2.43–3.12)	3.02 (2.69–3.65)	2.83 (2.56–3.02)	4.37 (2.76–5.09)

3L third line, *4L* fourth line, *CI* confidence interval, *CTFI* chemotherapy-free interval, *ECOG PS* Eastern Cooperative Oncology Group performance status, *rwOS* real-world overall survival, *rwTTD/D* real-world time to treatment discontinuation or death, *rwTTNT/D* real-world time to next treatment or death