

**S6 Table.** Patient characteristics for each individual

Patient ID	Hospital Id <sup>a)</sup>	Sex	Smoking status	ECOG PS	Age at diagnosis (yr)	Pathology	Distant metastasis site at diagnosis	Stage UIC	Stage VALG	First-line response (RECIST 1.1)	Thoracic radiotherapy	Prophylactic cranial irradiation	Last follow-up date	PFS of first-line therapy (mo)	Disease status of first-line therapy	Survival status (last follow-up time)	Follow-up time	OS (mo)	Maintenance therapy	Recurrence pattern	New metastasis at PD
P01	1	Male	Recent quitters	0	51	SCLC	No	IIIB	Limited stage	PR	Late concurrent radiotherapy (C5)	Yes	2021/5/10	13.1	Progressed	Survival	29.8	NA	Apatinib	Sensitive	no
P03	1	Female	Never smokers	0	61	SCLC	No	IIIC	Limited stage	PR	Sequential radiotherapy	no	2019/11/23	7.6	Progressed	Die of other reason	11.6	11.6	No	Resistant	no
P04	1	Male	Recent quitters	0	63	SCLC	No	IIIB	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	12.5	Progressed	Survival	28.3	NA	No	Sensitive	liver
P05	1	Male	Recent quitters	1	60	SCLC	No	IIIC	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	9	Progressed	Survival	26.4	NA	No	Sensitive	brain
P06	1	Female	Never smokers	0	66	SCLC	Liver	IVA	extensive stage	PR	Late concurrent radiotherapy (C3)	no	2021/5/10	4.2	Progressed	Dead	26.4	26.4	No	Refractory	liver
P07	2	Female	Never smokers	1	53	SCLC	Liver	IVB	extensive stage	PR	Sequential radiotherapy	no	2021/5/10	12.6	Progressed	Survival	25.7	NA	No	Sensitive	no
P08	2	Male	Recent quitters	1	59	SCLC	No	IIIC	Limited stage	PR	Sequential radiotherapy	no	2021/5/10	6.6	Progressed	Survival	25.6	NA	No	Sensitive	brain
P09	1	Female	Never smokers	0	45	SCLC	No	IIIA	Limited stage	PR	Late concurrent radiotherapy (C4)	Yes	2021/5/10	NA	Not progressed	Survival	25.5	NA	Apatinib	Sensitive	NA
P10	1	Female	Recent quitters	1	59	SCLC	No	IIB	Limited stage	PR	No	No	2021/5/10	9	Progressed	Dead	25.3	25.3	Etoposide soft capsule	Sensitive	No
P11	1	Male	Former smokers	0	65	SCLC	No	IIIC	Limited stage	PR	No	No	2020/11/19	2.9	Progressed	Die of other reason	19.5	19.5	No	Refractory	No
P12	2	Male	Recent quitters	1	61	SCLC	No	IIIB	Limited stage	SD	Sequential radiotherapy	No	2020/2/26	6.2	Progressed	Dead	10.8	10.8	No	Sensitive	liver

Patient ID	Age	Sex	Smoking History	Years since quit	Age at quit	Primary Cancer	Metastatic Sites	Stage	Extent of Disease	Primary Treatment	Systemic Therapy	Response	Start Date	Duration (months)	Current Status	Survival (months)	Quality of Life (0-100)	Adjuvant Therapy	Response to Adjuvant	Other Notes	
P13	1	Female	Recent quitter	1	65	SCLC	No	IIIA	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	NA	Not progressed	Survival	25.0	NA	Apatinib	Sensitive	NA
P14	1	Male	former smokers	0	64	SCLC	Liver bone	IVB	extensive stage	PR	Sequential radiotherapy	No	2020/11/28	5.2	Progressed	Dead	19.5	19.5	Apatinib	Resistant	No
P15	1	Male	Recent quitter	0	69	SCLC	No	IIIA	Limited stage	PR	Late concurrent radiotherapy (C3)	Yes	2021/2/27	NA	Not progressed	Dead	22.1	22.1	No	Sensitive	NA
P16	2	Male	Never smokers	1	66	SCLC	Brain abdominal lymph nodes	IVB	extensive stage	PR	Sequential radiotherapy	No	2020/9/10	9.8	Progressed	Dead	16.3	16.3	No	Sensitive	No
P17	1	Male	Recent quitter	1	66	SCLC	No	IIIB	Limited stage	PR	Sequential radiotherapy	Yes	2020/12/14	10.2	Progressed	Dead	18.7	18.7	No	Sensitive	Pleura peritoneum
P18	1	Male	Recent quitter	0	67	SCLC	No	IIIC	Limited stage	PR	No	No	2020/8/12	4.4	Progressed	Dead	14.5	14.5	No	Refractory	No
P19	1	Male	Recent quitter	1	58	SCLC	Bone	IVA	extensive stage	PR	Sequential radiotherapy	No	2021/5/10	NA	Not progressed	Survival	23.2	NA	Etoposide soft capsule	Sensitive	NA
P20	1	Male	Recent quitter	0	61	SCLC	Liver adrenal gland	IVB	extensive stage	PR	No	No	2021/4/13	9.6	Progressed	Dead	22.2	22.2	Sintilimab plus anlotinib	Sensitive	No
P21	1	Female	Never smokers	1	43	SCLC	No	IIIC	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	NA	Not progressed	Survival	23.2	NA	Apatinib	Sensitive	NA
P22	1	Male	former smokers	0	55	SCLC	No	IIB	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	NA	Not progressed	Survival	23.1	NA	No	Sensitive	NA
P25	1	Male	Recent quitter	1	53	SCLC	No	IIIC	Limited stage	SD	Sequential radiotherapy	No	2020/8/21	5.5	Progressed	Dead	14.1	14.1	No	Resistant	Brain
P26	1	Female	Recent quitter	0	69	SCLC	No	IIIC	Limited stage	PR	Late concurrent radiotherapy (C3)	Yes	2021/5/10	13.6	Progressed	Survival	22.5	NA	No	Sensitive	Brain
P27	2	Male	Recent quitter	0	55	SCLC	Liver	IVB	extensive stage	PR	No	No	2021/5/10	20.9	Progressed	Survival	21.7	NA	Initial etoposide plus cisplatin regimen	Sensitive	No
P28	1	Male	Recent quitter	1	65	SCLC	No	IIIA	Limited stage	PR	Sequential radiotherapy	No	2021/4/20	17.6	Progressed	Dead	19.6	19.6	No	Sensitive	No

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P29	3	Male	Recent quitters	1	55	SCLC	No	IIIB	Limited stage	SD	No	No	2020/8/25	3.5	Progressed	Dead	11.2	11.2	No	Refractory	Bone
P30	1	Male	Recent quitters	0	45	SCLC	Adrenal gland	IVA	extensive stage	PR	Sequential radiotherapy	No	2021/5/10	11.3	Progressed	Survival	19.4	NA	No	Sensitive	Brain
P31	1	Male	Recent quitters	0	68	SCLC	Liver	IVA	extensive stage	SD	No	No	2020/7/28	3.2	Progressed	Dead	10.0	10.0	No	Refractory	No
P32	1	Male	Recent quitters	0	57	SCLC	Brain	IVB	extensive stage	SD	Sequential radiotherapy	No	2021/5/10	4.8	Progressed	dead	18.5	18.5	No	Resistant	Pleura
P33	1	Male	Recent quitters	1	68	SCLC	No	IIIC	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	NA	Not progressed	Survival	18.4	NA	Etoposide soft capsule	Sensitive	NA
P34	1	Female	Never smokers	0	65	SCLC	No	IIIB	Limited stage	PR	Sequential radiotherapy	Yes	2021/5/10	NA	Not progressed	Survival	17.6	NA	Apatinib	Sensitive	NA
P35	1	Male	Recent quitters	1	61	SCLC	No	IIIB	Limited stage	SD	No	No	2020/10/23	3	Progressed	Dead	10.8	10.8	No	Refractory	Adrenal gland
P36	1	Female	Never smokers	0	67	SCLC	No	IIIC	Limited stage	PR	Late concurrent radiotherapy (C3)	Yes	2021/5/10	NA	Not progressed	Survival	18.5	NA	No	Sensitive	NA
P37	1	Male	Recent quitters	1	65	SCLC	Bone adrenal gland abdominal cavity peritoneum	IVB	extensive stage	PD	No	No	2020/3/11	1.6	Progressed	Dead	2.8	2.8	No	Refractory	No
P38	1	Male	Recent quitters	0	66	SCLC	No	IIIC	Limited stage	PR	early concurrent radiotherapy (C2)	No	2021/4/25	7.3	Progressed	Die of other reason	15.7	15.7	No	Resistant	Brain

ECOG, Eastern Cooperative Oncology Group; OS, overall survival; PD, progressive disease; PFS, progression-free survival; PR, partial response; PS, performance status; RECIST, Response Evaluation Criteria in Solid Tumors; SCLC, small-cell lung cancer; SD, stable disease; UICC, Union for International Cancer Control; VALS, Veterans Administration Lung Study Group. <sup>a)</sup>Hospital ID: 1, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, 100021, China; 2, The People's Hospital of Tangshan city, Tangshan, 063001, China; 3, Beijing Luhe Hospital, Capital Medical University, Beijing, 101100, China, <sup>b)</sup>In terms of the recurrence pattern, sensitive was defined as disease progression  $\geq$  90 days after first-line platinum-based chemotherapy, resistant as disease progression  $<$  90 days and refractory as during first-line chemotherapy.