

《 肺癌抗癌藥物治療指引 》

Small Cell Lung Cancer

Chemotherapy as primary or adjuvant therapy

Limited Stage (maximum of 4-6 cycles):

During chemotherapy + RT, cisplatin/etoposide is recommended

The use of myeloid growth factors is not recommended during

藥品名	劑量 * mg/m^2	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4-6	8
Etoposide	100	1-3	Q3W	4-6	

藥品名 *	劑量 mg/m^2	給藥日	頻率	週期	參考文獻
Cisplatin	25	1-3	Q3W	4-6	8
Etoposide	100	1-3	Q3W	4-6	

藥品名	劑量 mg/m^2	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5-6	1	Q3W	4-6	1
Etoposide	100	1-3	Q3W	4-6	

Extensive Stage (maximum of 4-6 cycles):

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	1200 mg	1	Q3W	4	9
Carboplatin	AUC 5	1	Q3W	4	
Etoposide	100	1-3	Q3W	4	
Followed by Atezolizumab	1200/1680 mg	1	Q3W/Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W	4	11
Cisplatin	75-80	1	Q3W	4	
Etoposide	80-100	1-3	Q3W	4	
Followed by Durvalumab	1500 mg	1	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W	4	11
Carboplatin	AUC 5-6	1	Q3W	4	
Etoposide	80-100	1-3	Q3W	4	
Followed by Durvalumab	1500 mg	1	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75-80	1	Q3W	4-6	2, 3
Etoposide	100	1-3	Q3W	4-6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	25	1-3	Q3W	4-6	12
Etoposide	100	1-3	Q3W	4-6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5-6	1	Q3W	4-6	4
Etoposide	100	1-3	Q3W	4-6	

Subsequent Chemotherapy (PS 0-2)

Chemotherapy-free interval (CTFI) > 6 months

Preferred

- Clinical trial enrollment
- Re-treatment with platinum-based doublet

Other Recommended Regimens

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Topotecan	1.5	1-5	Q3W		5

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Topotecan	2.3 PO	1-5	Q3W		6

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Lurbinectedin	3.2	1	Q3W		13

Chemotherapy-free interval (CTFI) ≤ 6 months

Preferred

- Clinical trial enrollment
- Re-treatment with platinum-based doublet may be considered for CTFI 3~6 months

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Topotecan	1.5	1-5	Q3W		5

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Topotecan	2.3 PO	1-5	Q3W		6

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Lurbinectedin	3.2	1	Q3W		13

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cyclophosphamide	1000	1	Q3W		5
Doxorubicin	45	1	Q3W		
Vincristine	2 mg	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Lurbinectedin	3.2	1	Q3W		13

> 6M original

Other Recommended Regimens

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	3 mg/kg	1	Q2W		7

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W		10

★三院有個別版本

參考文獻

1. Skarlos DV, Samantas E, Briassoulis E, et al. Randomized comparison of early versus late hyperfractionated thoracic irradiation concurrently with chemotherapy in limited disease small-cell lung cancer: a randomized phase II study of the Hellenic Cooperative Oncology Group (HeCOG). Ann Oncol 2001;12(9):1231-1238.
2. Spigel R, Townley PM, Waterhouse DM, et al. Randomized phase II study of bevacizumab in combination with chemotherapy in previously untreated extensive-stage small-cell lung cancer: results from the SALUTE trial. J Clin Oncol 2011;29:2215-2222.
3. Niell HB, Herndon JE, Miller AA, et al. Randomized phase III Intergroup trial of etoposide and cisplatin with or without paclitaxel and granulocyte-colony stimulating factor in patients with extensive-stage small-cell lung cancer: Cancer and Leukemia Group B trial 9732. J Clin Oncol 2005;23:3752-3759.
4. Okamoto H, Watanabe K, Nishiwaki Y, et al. Phase II study of area under the plasmaconcentration-versus-time curve-based carboplatin plus standard-dose intravenous etoposide in elderly patients with small cell lung cancer. J Clin Oncol

- 1999;17(11):3540-3545.
5. von Pawel J, Schiller JH, Shepherd FA, et al. Topotecan versus cyclophosphamide, doxorubicin, and vincristine for the treatment of recurrent small-cell lung cancer. *J Clin Oncol* 1999;17(2):658-667.
6. O'Brien ME, Ciuleanu TE, Tsekov H, et al. Phase III trial comparing supportive care alone with supportive care with oral topotecan in patients with relapsed small-cell lung cancer. *J Clin Oncol*. 2006;24:5441-5447.
7. Atonia SJ, Lopez-Martin JA, Bendell J, et al. Nivolumab alone and nivolumab plus ipilimumab in recurrent small-cell lung cancer (CheckMate 032): a multicentre, open-label, phase 1/2 trial. *Lancet Oncol* 2016;17:883-895.
8. Faivre-Finn C, Snee M, et al. Concurrent once-daily versus twice-daily chemoradiotherapy in patients with limited-stage small-cell lung cancer (CONVERT): an open-label, phase 3, randomised, superiority trial. *Lancet Oncol* 2017;18:1116-1125.
9. Leora Horn, Aaron S. Mansfield, et al. First-Line Atezolizumab plus Chemotherapy in Extensive-Stage Small-Cell Lung Cancer. *N Engl J Med*. 2018;379(23):2220-2229.
10. Hyun Cheol Chung, Jose A. Lopez-Martin, et al. Phase 2 study of pembrolizumab in advanced small-cell lung cancer (SCLC): KEYNOTE-158. *J Clin Oncol* 2018;36(15_suppl):8506-8506.
11. Paz-Ares L, Dvorkin M, Chen Y, et al. Durvalumab plus platinum-etoposide versus platinum-etoposide in first-line treatment of extensive-stage small-cell lung cancer (CASPIAN): a randomised, controlled, open-label, phase 3 trial. *Lancet*. 2019;394(10212):1929-1939.
12. Evans WK, Shepherd FA, Feld R, et al. VP-16 and cisplatin as first-line therapy for small-cell lung cancer. *J Clin Oncol*. 1985;3(11):1471-7
13. Trigo J, Subbiah V, et al. Lurbinectedin as second-line treatment for patients with small-cell lung cancer: a single-arm, open-label, phase 2 basket trial. *Lancet*. 2020;21(5):645-654.

Non-Small Cell Lung Cancer

Adjuvant therapy

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	80	1	Q3W	4	1-3, 25
Vinorelbine	30	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	19
Vinorelbine	60 PO	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	4
Gemcitabine	1250	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	5
Docetaxel	75	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	6
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
UFUR	200 PO BID/TID				20

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q3W	4	12
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q3W	4	13
Gemcitabine	1000	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	4	14
Paclitaxel	200	1	Q3W	4	

藥品名 *	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	100	1	Q4W	4	21
Etoposide	100	1-3	Q4W	4	

Neoadjuvant therapy

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	80	1	Q3W	4	1-3, 25
Vinorelbine	30	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	19
Vinorelbine	60 PO	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	4
Gemcitabine	1250	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	5
Docetaxel	75	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	4	6
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Uracil-Tegafur (UFUR)	200 PO BID/TID				20

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q3W	4	12
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q3W	4	13
Gemcitabine	1000	1, 8	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	4	14
Paclitaxel	200	1	Q3W	4	

藥品名*	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	100	1	Q4W	4	21
Etoposide	100	1-3	Q4W	4	

Neoadjuvant for Candidate of IO

Nivolumab with Platinum Doublet

Any histology

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Carboplatin	AUC 5-6	1	Q3W	3	
Paclitaxel	175-200	1	Q3W	3	

Any histology

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Cisplatin	75	1	Q3W	3	
Paclitaxel	175-200	1	Q3W	3	

Non-squamous

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Cisplatin	75	1	Q3W	3	
Pemetrexed	500	1	Q3W	3	

Squamous

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Cisplatin	75	1	Q3W	3	
Gemcitabine	1000-1250	1, 8	Q3W	3	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	4	56
Cisplatin	75	1	Q3W	4	
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	4	56
Cisplatin	75	1	Q3W	4	
Gemcitabine	1000	1, 8	Q3W	4	

Patients who are not candidates for cisplatin-based therapy

Non-squamous

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Carboplatin	AUC 5-6	1	Q3W	3	
Pemetrexed	500	1	Q3W	3	

Squamous

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	3	52
Carboplatin	AUC 5-6	1	Q3W	3	
Gemcitabine	1000-1250	1, 8	Q3W	3	

Systemic Therapy Following Previous Neoadjuvant or Adjuvant Systemic Therapy

Completely resected stage IIB-IIIA or high risk stage IB-IIA, EGFR mutation, with or without previous adjuvant chemotherapy

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Osimertinib	80 mg PO QD				39

Completely resected stage IIB-IIIA or high risk stage IIA, PD-L1 $\geq 1\%$, post adjuvant chemotherapy

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	840/1200/1680 mg	1	Q2W/Q3W/Q4W	For 1 year	40

Chemotherapy Regimens Used with Radiation Therapy

Concurrent chemotherapy/RT regimens

Regimens can be used as neoadjuvant/preoperative/induction chemoradiotherapy

Regimens can be used as adjuvant or definitive concurrent chemotherapy/RT

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	50	1, 8	Q4W	2	24
Etoposide	50	1-5	Q4W	2	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	50	1, 8	Q4W	2	7, 8
Etoposide	50mg PO BID	1, 2, 5, 6	QW	10	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q3W	4	9
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	3	10
Pemetrexed	500	1	Q3W	3 + 4 (additional)	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	45-50	1	QW		11
Carboplatin	AUC 2	1	QW		
± Paclitaxel	200	1	Q3W	2 (additional)	
± Carboplatin	AUC 6	1	Q3W	2 (additional)	

藥品名*	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	100	1, 29		concurrent thoracic RT	22
Vinblastine	5	1, 8, 15, 22, 29			

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W	2	38
Cisplatin	40	1, 2	Q3W	2	
Followed by CCRT					
Docetaxel	20	1	Q3W	6	
Cisplatin	20	1	Q3W	6	

Consolidation Therapy

Unresectable stage III, PS 0-1, no progression after ≥ 2 cycles of CCRT

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	10 mg/kg	1	Q2W	24	26

Sequential Chemotherapy/RT Regimens (Adjuvant):

As all the neoadjuvant/adjuvant chemotherapy regimens

Target Therapy for Advanced or Metastatic Disease

EGFR-mutation-positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Erlotinib	150 mg		QD AC		15

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Afatinib*	40 mg		QD AC		16

*Also preferred if EGFR mutation: S768I, L861Q, G719X

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gefitinib	250 mg		QD		17

藥品名*	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Osimeertinib*	80 mg		QD		23

*Also preferred if EGFR mutation: S768I, L861Q, G719X

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Dacomitinib	45 mg		QD		27

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Ramucirumab	10 mg/kg	1	Q2W		35
Erlotinib	150 mg		QD		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Bevacizumab	15 mg/kg	1	Q3W		36
Erlotinib	150 mg		QD		

EGFR exon 20 insertion positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Amivantamab	350 mg	1	QW	1	41
Amivantamab	700 mg (<80kg) / 1050 mg (≥ 80kg)	2	QW	1	
Followed by					
Amivantamab	1050 mg (<80kg) / 1400 mg (≥ 80kg)	1	QW	2-4	
Followed by					
Amivantamab	1050 mg (<80kg) / 1400 mg (≥ 80kg)	1	Q2W	maintenance	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Mobocertinib	160 mg		QD		42

ALK positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Crizotinib	250 mg		BID		18

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Alectinib	600 mg		BID		28, 29

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Ceritinib	450 mg		QD		30

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Brigatinib	90 mg (180 mg)	d1-7 (d8 after)	QD		31

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Lorlatinib	100 mg		QD		32

ROS1 positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Crizotinib	250 mg		BID		33

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Ceritinib	450 mg		QD		34

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Entrectinib	600 mg		QD		37

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Lorlatinib	100 mg		QD		32

KRAS G12C positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Sotorasib	960 mg PO QD				43

MET Exon 14 Skipping Mutation

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Capmatinib	400 mg PO BID				44

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Tepotinib	450 mg PO QD*				45

*with food

RET Rearrangement

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Selpercatinib	120 mg (<50kg) 160 mg (≥ 50kg) PO BID				49

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pralsetinib	400 mg PO QD AC				50

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cabozantinib	60 mg PO QD				51

BRAF V600E mutation positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Dabrafenib	150 mg PO BID				46
Trametinib	2 mg PO QD				

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Vemurafenib	960 mg PO Q12H				53

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Dabrafenib	150 mg PO BID				54

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Encorafenib	450 mg PO QD				57
Binimetinib	45 mg PO BID				

NTRK1/2/3 gene fusion positive

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Larotrectinib	100 mg (BSA ≥ 1) / 100mg/m ² (BSA < 1)	1	QW	1	47

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Entrectinib	600 mg PO QD				48

HER2

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Trastuzumab-detuxtecan (T-dxd)	5.4 mg/kg	1	Q3W		55

★三院有個別版本

參考文獻

1. Winton T, Livingston R, Johnson D, et al. Vinorelbine plus cisplatin vs. observation in resected non-small-lung cancer. N Engl J Med 2005;352:2589-2597.
2. Arriagada R, Bergman B, Dunant A, et al. The International Adjuvant Lung Cancer Trial Collaborative Group. Cisplatin-based adjuvant chemotherapy in patients with completely resected non-small cell lung cancer. N Engl J Med 2004;350:351-360.

3. Douillard JY, Rosell R, De Lena M, et al. Adjuvant vinorelbine plus cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. *Lancet Oncol* 2006;7:719-727.
4. Pérol M, Chouaid C, Pérol D, et al. Randomized, phase III study of gemcitabine or erlotinib maintenance therapy versus observation, with predefined second-line treatment, after cisplatin-gemcitabine induction chemotherapy in advanced non-small-cell lung cancer. *J Clin Oncol* 2012;30:3516-3524.
5. Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. *J Clin Oncol* 2003;21:3016-3024.
6. Kreuter M, Vansteenkiste J, Fishcer JR, et al. Randomized phase 2 trial on refinement of early-stage NSCLC adjuvant chemotherapy with cisplatin and pemetrexed versus cisplatin and vinorelbine: the TREAT study. *Ann Oncol* 2013;24:986-992.
7. Albain KS, Crowley JJ, Turrisi AT III, et al. Concurrent cisplatin, etoposide, and chest radiotherapy in pathologic stage IIIB non-small-cell lung cancer: A Southwest Oncology Group Phase II Study, SWOG 9019. *J Clin Oncol* 2002;20:3454-3460.
8. Curran WJ Jr, Paulus R, Langer CJ, et al. Sequential vs. concurrent chemoradiation for stage III non-small cell lung cancer: randomized phase III trial RTOG 9410. *J Natl Cancer Inst.* 2011;103:1452-1460.
9. Govindan R, Bogart J, Stinchcombe T, et al. Randomized phase II study of pemetrexed, carboplatin, and thoracic radiation with or without cetuximab in patients with locally advanced unresectable non-small-cell lung cancer: Cancer and Leukemia Group B trial 30407. *J Clin Oncol* 2011;29:3120-3125.
10. Choy H, Gerber DE, Bradley JD, et al. Concurrent pemetrexed and radiation therapy in the treatment of patients with inoperable stage III non-small cell lung cancer: a systematic review of completed and ongoing studies. *Lung Cancer* 2015;87:232-240.
11. Bradley JD, Paulus R, Komaki R, et al. Standard-dose conformal radiotherapy with concurrent and consolidation carboplatin plus paclitaxel with or without cetuximab for patients with stage IIIA or IIIB non-small-cell lung cancer (RTOG 0617): a randomized, two-by-two factorial phase 3 study. *Lancet Oncol* 2015;16:187-199.
12. Zhang L, Ou W, Liu Q, et al. Pemetrexed plus carboplatin as adjuvant chemotherapy in patients with curative resected non-

- squamous non-small cell lung cancer. *Thoracic Cancer*. 2014;5(1):50-56.
13. Usami N, Yokoi K, Hasegawa Y, et al. Phase II study of carboplatin and gemcitabine as adjuvant chemotherapy in patients with completely resected non-small cell lung cancer: a report from the Central Japan Lung Study Group, CJLSG 0503 trial. *Int J Clin Oncol*. 2010;15(6):583-7.
14. Strauss GM, Herndon JE, Maddaus MA, et al. Adjuvant paclitaxel plus carboplatin compared with observation in stage IB non-small-cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. *J Clin Oncol*. 2008;26(31):5043-51.
15. Product Information: TARCEVA(R) oral tablets, erlotinib oral tablets. OSI Pharmaceuticals, LLC (per FDA), Farmingdale, NY, 2013.
16. Product Information: GILOTTRIF(TM) oral tablets, afatinib oral tablets. Boehringer Ingelheim Pharmaceuticals, Inc. (per FDA), Ridgefield, CT, 2013.
17. Product Information: IRESSA(R) oral tablets, gefitinib oral tablets. AstraZeneca Pharmaceuticals (per FDA), Wilmington, DE, 2015.
18. Product Information: XALKORI(R) oral capsules, crizotinib oral capsules. Pfizer Labs (per FDA), New York, NY, 2013.
19. Krzakowski M, Provencio M, Utracka-Hutka B, et al. Oral vinorelbine and cisplatin as induction chemotherapy and concomitant chemo-radiotherapy in stage III non-small cell lung cancer: final results of an international phase II trial. *J Thorac Oncol*. 2008 Sep;3(9):994-1002.
20. Product Information: UFUR Capsule. tegafur, uracil oral capsules. 2015.
21. Arriagada R, Bergman B, Dunant A, et al. Cisplatin-based adjuvant chemotherapy in patients with completely resected non-small-cell lung cancer. *N Engl J Med*. 2004;350(4):351-360.
22. Curran WJ, Jr., Paulus R, Langer CJ, et al. Sequential vs. concurrent chemoradiation for stage III non-small cell lung cancer: randomized phase III trial RTOG 9410. *J Natl Cancer Inst*. 2011;103(19):1452-1460.
23. Mok TS, Wu YL, Ahn MJ, et al. Osimertinib or Platinum-Pemetrexed in EGFR T790M-Positive Lung Cancer. *N Engl J Med*. 2017;376(7):629-640.
24. J. Liang, N. Bi, S. Wu, et al. Etoposide and cisplatin versus paclitaxel and carboplatin with concurrent thoracic radiotherapy in

- unresectable stage III non-small cell lung cancer: a multicenter randomized phase III trial. *Ann Oncol.* 2017;28(4):777-783.
25. Szilasi M, Müller V, Juhász E, et al. Cisplatin-vinorelbine chemotherapy in non-small cell lung cancer is safe and well tolerated: results of a retrospective Hungarian clinical data analysis. *Expert Opin Drug Saf.* 2009 Jan;8(1):9-14.
 26. Antonia SJ, Villegas A, Daniel D, et al. Overall Survival with Durvalumab after Chemoradiotherapy in Stage III NSCLC. *N Engl J Med.* 2018;379(24):2342-2350.
 27. Wu YL, Cheng Y, Zhou X, et al. Dacomitinib versus gefitinib as first-line treatment for patients with EGFR-mutation-positive non-small-cell lung cancer (ARCHER 1050): a randomised, open-label, phase 3 trial. *Lancet Oncol.* 2017;18(11):1454-1466.
 28. Peters S, Camidge DR, Shaw AT, et al. Alectinib versus Crizotinib in Untreated ALK-Positive Non-Small-Cell Lung Cancer. *N Engl J Med.* 2017;377(9):829-838.
 29. Hida T, Nokihara H, Kondo M, et al. Alectinib versus crizotinib in patients with ALK-positive non-small-cell lung cancer (J-ALEX): an open-label, randomised phase 3 trial. *Lancet Oncol.* 2017;390(10089):29-39.
 30. Soria JC, Tan DSW, Chiari R, et al. First-line ceritinib versus platinum-based chemotherapy in advanced ALK-rearranged non-small-cell lung cancer (ASCEND-4): a randomised, open-label, phase 3 study. *Lancet Oncol.* 2017;389(10072):917-929.
 31. Camidge DR, Kim HR, Ahn MJ, et al. Brigatinib versus Crizotinib in ALK-Positive Non-Small-Cell Lung Cancer. *N Engl J Med.* 2018;379(21):2027-2039.
 32. Solomon BJ, Besse B, Bauer TM, et al. Lorlatinib in patients with ALK-positive non-small-cell lung cancer: results from a global phase 2 study. *Lancet Oncol.* 2018;19(12):1654-1667.
 33. Shaw AT, Ou SH, Bang YJ, et al. Crizotinib in ROS1-rearranged non-small-cell lung cancer. *N Engl J Med.* 2014;371(21):1963-71.
 34. Lim SM, Kim HR, Lee JS, et al. Open-Label, Multicenter, Phase II Study of Ceritinib in Patients With Non-Small-Cell Lung Cancer Harboring ROS1 Rearrangement. *J Clin Oncol.* 2017;35(23):2613-2618.
 35. Nakagawa K, Garon EB, Seto K, et al. Ramucirumab plus erlotinib in patients with untreated, EGFR-mutated, advanced non-small-cell lung cancer (RELAY): a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Oncol.* 2019;20(12):1655-1669.
 36. Saito H, Fukuhara T, Furuya N, et al. Erlotinib plus bevacizumab versus erlotinib alone in patients with EGFR-positive

- advanced non-squamous non-small-cell lung cancer (NEJ026): interim analysis of an open-label, randomised, multicentre, phase 3 trial. *Lancet Oncol.* 2019;20(5):625-635.
37. Drilon A, Siena S, Dziadziuszko R, et al. Entrectinib in ROS1 fusion-positive non-small-cell lung cancer: integrated analysis of three phase 1-2 trials. *Lancet Oncol.* 2020;21(2):261-270.
38. Senan S, Cardenal F, Vansteenkiste J, et al. A randomized phase II study comparing induction or consolidation chemotherapy with cisplatin-docetaxel, plus radical concurrent chemoradiotherapy with cisplatin-docetaxel, in patients with unresectable locally advanced non-small-cell lung cancer. *Ann Oncol.* 2011;22(3):553-558.
39. Wu Y-L, Tsuboi M, He J, et al. Osimertinib in resected EGFR-mutated non-small-cell lung cancer. *N Engl J Med* 2020;383:1711-1723.
40. Felip E, Altorki N, Zhou C, et al. Adjuvant atezolizumab after adjuvant chemotherapy in resected stage IB–IIIA non-small-cell lung cancer (IMpower010): a randomised, multicentre, open-label, phase 3 trial. *Lancet* 2021;398:1344-1357.
41. Park K, Haura EB, Leighl NB, et al. Amivantamab in EGFR exon 20 insertion-mutated non-small cell lung cancer progressing on platinum chemotherapy: initial results from the CHRYSALIS phase I study. *J Clin Oncol* 2021 Epub August 2, 2021.
42. Ramalingam SS, Zhou C, Kim TM, et al. Mobocertinib (TAK-788) in EGFR exon 20 insertion (ex20ins)+ metastatic NSCLC (mNSCLC): Additional results from platinum-pretreated patients (pts) and EXCLAIM cohort of phase 1/2 study [abstract]. *J Clin Oncol* 2021;39:9014-9014.
43. Skoulidis F, Li BT, Dy GK, et al. Sotorasib for lung cancers with KRAS p.G12C mutation. *N Engl J Med* 2021;384:2371-2381.
44. Drilon A, Clark JW, Weiss J, et al. Antitumor activity of crizotinib in lung cancers harboring a MET exon 14 alteration. *Nat Med* 2020;26:47-51.
45. Paik PK, Felip E, Veillon R, et al. Tepotinib in Non-Small-Cell Lung Cancer with MET Exon 14 Skipping Mutations. *N Engl J Med* 2020;383:931-943.
46. Planchard D, Smit EF, Groen HJM, et al. Dabrafenib plus trametinib in patients with previously untreated BRAF(V600E)-mutant metastatic non-small-cell lung cancer: an open-label, phase 2 trial. *Lancet Oncol* 2017;18:1307-1316.
47. Drilon A, Laetsch TW, Kummar W et al. Efficacy of larotrectinib in TRK fusion-positive cancers in adults and children. *N Engl J Med* 2018;378:731-739.
48. Doebele RC, Drilon A, Paz-Ares L, et al. Entrectinib in patients with advanced or metastatic NTRK fusion-positive solid

- tumours: integrated analysis of three phase 1-2 trials. *Lancet Oncol* 2020;21:271-282.
49. Drilon A, et al. Efficacy of selpercatinib in RET fusion-positive non-small-cell lung cancer. *N Engl J Med* 2020;383:813-824
 50. Gainor JF, et al. Pralsetinib for RET fusion-positive non-small cell lung cancer (ARROW): a multi-cohort, open-label, phase 1/2 study. *Lancet Oncol* 2021;22:959-969.
 51. Drilon A, et al. Cabozantinib in patients with advanced RET-rearranged nonsmall-cell lung cancer: an open-label, single-centre, phase 2, single-arm trial. *Lancet Oncol* 2016;17:1653-1660.
 52. Forde PM, Spicer J, Lu S, et al. Neoadjuvant nivolumab plus chemotherapy in resectable lung cancer. *N Engl J Med* 2022;386:1973-1985.
 53. Product Information: Zelboraf F.C. Tablets. Vemurafenib Tablets. 2022.
 54. Planchard D, Kim TM, et al. Dabrafenib in Patients with Braf V600E-Mutant Advanced Non-Small Cell Lung Cancer (Nsc lc): a Multicenter, Open-Label, Phase Ii Trial (Brf113928). *Annals of Oncology* 25 (Supplement 5): v1-v41, 2014.
 55. Li BT, Smit EF, et al. Trastuzumab Deruxtecan in HER2-Mutant Non-Small-Cell Lung Cancer. *N Engl J Med*. 2022 Jan 20;386(3):241-251.
 56. Wakelee H, Liberman M, Kato T, et al. Perioperative pembrolizumab for early-stage non-small-cell lung cancer. *N Engl J Med*; 2023;389:491-503.
 57. Riely GJ, et al. Phase II, open-label study of encorafenib plus binimetinib in patients with BRAF V600-mutant metastatic non-small-cell lung cancer. *J Clin Oncol* 2022;41:3700-3711.

Systemic Therapy for Advanced or Metastatic Disease of NSCLC

First-line systemic therapy options

Adenocarcinoma, large cell, NSCLC NOS (PS 0-1)

No contraindications to the addition of PD-1 or PD-L1 inhibitors

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	4	37-39

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	4-PD	28
Carboplatin	AUC 5	1	Q3W	4	
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	4-PD	29
Cisplatin	75	1	Q3W	4	
Pemetrexed	500	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	1200 mg	1	Q3W		40

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemipilimab	350 mg	1	Q3W		42

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemipilimab	350 mg	1	Q3W	36	43
Paclitaxel	200	1	Q3W	4	
Carboplatin	AUC 5-6	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemipilimab	350 mg	1	Q3W	36	43
Paclitaxel	200	1	Q3W	4	
Cisplatin	75	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemipilimab	350 mg	1	Q3W	36	43
Pemetrexed*	500	1	Q3W	4	
Carboplatin	AUC 5-6	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemipilimab	350 mg	1	Q3W	36	43
Pemetrexed*	500	1	Q3W	4	
Cisplatin	75	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	1200 mg	1	Q3W	6-PD	30
Bevacizumab	15 mg/kg	1	Q3W	6-PD	
Paclitaxel	175	1	Q3W	6	
Carboplatin	AUC 6	1	Q3W	6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	1200 mg	1	Q3W	4/6-PD	31
Nab-Paclitaxel	100	1	QW	4/6	
Carboplatin	AUC 6	1	Q3W	4/6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	3 mg/kg	1	Q2W		32
Ipilimumab	1 mg/kg	1	Q6W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	2~PD	33
Ipilimumab	1 mg/kg	1	Q6W	2~PD	
Carboplatin	AUC 5	1	Q3W	2	
Pemetrexed	500	1	Q3W	2	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		41
Tremelimumab	75 mg	1	Q3W		
Carboplatin	AUC 5 or 6	1	Q3W	4	
Nab-Paclitaxel	100	1, 8, 15	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		1
Tremelimumab	75 mg	1	Once at week 16	1	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		41
Tremelimumab	75 mg	1	Q3W		
Carboplatin	AUC 5 or 6	1	Q3W	4	
Pemetrexed	500	1	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		1
Tremelimumab	75 mg	1	Once at week 16	1	
Pemetrexed	500	1	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		41
Tremelimumab	75 mg	1	Q3W		
Cisplatin	75	1	Q3W	4	
Pemetrexed	500	1	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		1
Tremelimumab	75 mg	1	Once at week 16	1	
Pemetrexed	500	1	Q4W		

Contraindications to PD-1 or PD-L1 inhibitors

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Bevacizumab	15 mg/kg	1	Q3W	6	1
Carboplatin	AUC 6	1	Q3W		
Paclitaxel	200	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Bevacizumab	15 mg/kg	1	Q3W	4	2
Carboplatin	AUC 6	1	Q3W		
Pemetrexed	500	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Bevacizumab	15 mg/kg	1	Q3W	4	3
Cisplatin	75	1	Q3W		
Pemetrexed	500	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	6	4
Nab-Paclitaxel	100	1, 8, 15	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6		Q3W		5
Docetaxel	75		Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 4-5	1	Q4W		7
Etoposide	50mg PO BID	1-14 or 1-21	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q4W	4	8
Gemcitabine	1000	1, 8, 15	Q4W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		9
Paclitaxel	200	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	6	10
Pemetrexed	500	1	Q3W	6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W		5
Docetaxel	75	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W		36
Docetaxel	30	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	100	1	Q3W		11
Etoposide	100	1-3	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	80	1	Q3W		9
Gemcitabine	1000	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W	6	12
Gemcitabine	1250	1, 8	Q3W	6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	135	1	Q3W		13
Cisplatin	75	2	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W		12
Pemetrexed	500	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W	8	14
Docetaxel	85	8	Q3W	8	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W	6	15
Vinorelbine	25	1, 8	Q3W	6	

Adenocarcinoma, large cell, NSCLC NOS (PS 2)

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nab-Paclitaxel	260	1	Q3W		16

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nab-Paclitaxel	100	1, 8, 15	Q4W		17

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	6	18
Nab-Paclitaxel	100	1, 8, 15	Q3W	6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		5
Docetaxel	75	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	325	1			6
Etoposide	100	1-3			

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 4-5	1	Q4W		7
Etoposide	50mg PO BID	1-14 or 1-21	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q4W	4	8
Gemcitabine	1000	1, 8, 15	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		9
Paclitaxel	200	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W	6	10
Pemetrexed	500	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W	6	19, 20

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	30	1, 8	Q3W		35

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1250	1, 8, 15	Q4W	9	21

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1250	1, 8	Q3W	6	22, 23

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W	8	14
Docetaxel	85	8	Q3W	8	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W	6	15
Vinorelbine	25	1, 8	Q3W	6	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	225	1	Q3W	6	24

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	80	1, 8, 15	Q4W	4	25, 26

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pemetrexed	500	1	Q3W		27

Adenocarcinoma, large cell, NSCLC NOS (PS 2)

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	90	1	QW	6	34

★三院有個別版本

參考文獻

1. Sandler A, Gray R, Perry MC, et al. Paclitaxel-carboplatin alone or with bevacizumab for non-small lung cancer. N Engl J Med 2006;355:2542-2550.
2. Patel JD, Socinski MA, Garon EB, et al. Pointbreak: a randomized phase III study of pemetrexed plus carboplatin and bevacizumab followed by maintenance pemetrexed and bevacizumab versus paclitaxel plus carboplatin and bevacizumab followed by maintenance bevacizumab in patients with stage IIIB or IV nonsquamous non-small cell lung cancer. J Clin Oncol 2013;31:3004-3011.
3. Barlesi F, Scherpereel A, Rittmeyer A, et al. Randomized phase III trial of maintenance bevacizumab with or without pemetrexed after first-line induction with bevacizumab, cisplatin, and pemetrexed in advanced nonsquamous non-small cell lung cancer: AVAPERL. J Clin Oncol 2013;31:3004-3011.
4. Socinski MA, Bondarenko I, Karaseva NA, et al. Weekly nab-paclitaxel in combination with carboplatin versus solvent-based paclitaxel plus carboplatin as first-line therapy in patients with advanced non-small-cell lung cancer: final results of a phase III trial. J Clin Oncol 2012;30:2055-2062.

5. Fossella F, Periera JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. *J Clin Oncol* 2003;21(16):3016-3024.
6. Klastersky J, Sculier JP, Lacroix H, et al. A randomized study comparing cisplatin or carboplatin with etoposide in patients with advanced non-small-cell lung cancer: European Organization for Research and Treatment of Cancer Protocol 07861. *J Clin Oncol* 1990;8:1556-1562.
7. Frasci G, Comella P, Panza N, et al. Carboplatin-oral etoposide personalized dosing in elderly non-small cell lung cancer patients. Gruppo Oncologico Cooperativo Sud-Italia. *Eur J Cancer*. 1998;34:1710-1714.
8. Danson S, Middleton MR, O'Byrne KJ, et al. Phase III trial of gemcitabine and carboplatin versus mitomycin, ifosfamide, and cisplatin or mitomycin, vinblastine, and cisplatin in patients with advanced nonsmall cell lung carcinoma. *Cancer*. 2003;98:542-553.
9. Ohe Y, Ohashi Y, Kubota K, et al. Randomized phase III study of cisplatin plus irinotecan versus carboplatin plus paclitaxel, cisplatin plus gemcitabine, and cisplatin plus vinorelbine for advanced nonsmall-cell lung cancer: Four-Arm Cooperative Study in Japan. *Ann Oncol* 2007;18:317-323.
10. Scagliotti GV, Kortsik C, Dark GG, et al. Pemetrexed combined with oxaliplatin or carboplatin as first-line treatment in advanced non-small cell lung cancer: a multicenter, randomized, phase II trial. *Clin Cancer Res*. 2005;11:690-696.
11. Cardenal F, Lopez-Cabrerizo MP, Anton A, et al. Randomized phase III study of gemcitabine-cisplatin versus etoposide-cisplatin in the treatment of locally advanced or metastatic non-small cell lung cancer. *J Clin Oncol* 1999;17:12-18.
12. Scagliotti GV, Parikh P, von Pawel J, et al. Phase III study comparing cisplatin plus gemcitabine with cisplatin plus pemetrexed in chemotherapy-naïve patients with advanced-stage NSCLC. *J Clin Oncol* 2008;26:3543-3551.
13. Schiller JH, Harrington D, Belani CP, et al. Comparison of Four Chemotherapy Regimens for Advanced Non-Small-Cell Lung Cancer. *N Engl J Med* 2002; 346:92-98.
14. Pujol JL, Breton JL, Gervais R, et al. Gemcitabine-docetaxel versus cisplatin-vinorelbine in advanced or metastatic non-small-cell lung cancer: a phase III study addressing the case for cisplatin. *Ann Oncol* 2005;16:602-610.
15. Tan EH, Szczesna A, Krzakowski M, et al. Randomized study of vinorelbine--gemcitabine versus vinorelbine--carboplatin in

- patients with advanced non-small cell lung cancer. *Lung Cancer*. 2005;49:233-240.
16. Green MR, Manikhas GM, Orlov S, et al. Abraxane , a novel Cremophor -free, albumin-bound particle form of paclitaxel for the treatment of advanced non-small-cell lung cancer. *Ann Oncol*. 2006;17:1263-1268.
17. Rizvi NA, Riely GJ, Azzoli CG, et al. Phase I/II trial of weekly intravenous 130-nm albumin-bound paclitaxel as initial chemotherapy in patients with stage IV non-small-cell lung cancer. *J Clin Oncol*. 2008;26:639-643.
18. Socinski MA1, Bondarenko I, et al. Weekly nab-paclitaxel in combination with carboplatin versus solvent-based paclitaxel plus carboplatin as first-line therapy in patients with advanced non-small-cell lung cancer: final results of a phase III trial. *J Clin Oncol* 2012;30:2055-2062.
19. Fossella FV, DeVore R, Kerr RN, et al. Randomized phase III trial of docetaxel versus vinorelbine or ifosfamide in patients with advanced non-small cell lung cancer previously treated with platinum-containing chemotherapy regimens. The TAX 320 Non-Small Cell Lung Cancer Study Group. *J Clin Oncol* 2000;18:2354-2362.
20. Fidias PM, Dakhil SR, Lyss AP, et al. Phase III study of immediate compared with delayed docetaxel after front-line therapy with gemcitabine plus carboplatin in advanced non-small-cell lung cancer. *J Clin Oncol*. 2009;27:591-598.
21. Zatloukal P, Kanitz E, Magyar P, Jassem J, et al. Gemcitabine in locally advanced and metastatic non-small cell lung cancer: the Central European phase II study. *Lung Cancer*. 1998;22:243-250.
22. Sederholm C, Hillerdal G, Lamberg K, et al. Phase III trial of gemcitabine plus carboplatin versus single-agent gemcitabine in the treatment of locally advanced or metastatic non-small-cell lung cancer: the Swedish Lung Cancer Study Group. *J Clin Oncol*. 2005;23:8380-8388.
23. Pérol M, Chouaid C, Pérol D, et al. Randomized, phase III study of gemcitabine or erlotinib maintenance therapy versus observation, with predefined second-line treatment, after cisplatin-gemcitabine induction chemotherapy in advanced non-small-cell lung cancer. *J Clin Oncol*. 2012;30:3516-24.
24. Lilenbaum RC, Herndon JE 2nd, List MA, et al. Single-agent versus combination chemotherapy in advanced non-small-cell lung cancer: the cancer and leukemia group B (study 9730). *J Clin Oncol*. 2005;23:190-196.
25. Ceresoli GL, Gregorc V, Cordio S, et al. Phase II study of weekly paclitaxel as second-line therapy in patients with advanced non-small cell lung cancer. *Lung Cancer*. 2004;44:231-239.
26. Yasuda K, Igishi T, Kawasaki Y, et al. Phase II study of weekly paclitaxel in patients with non-small cell lung cancer who have

- failed previous treatments. *Oncology*. 2004;66:347-352.
27. Hanna N, Shepherd FA, Fossella FV, et al. Randomized phase III trial of pemetrexed versus docetaxel in patients with non-small-cell lung cancer previously treated with chemotherapy. *J Clin Oncol*. 2004;22:1589-1597.
28. Langer CJ, et al. Carboplatin and pemetrexed with or without pembrolizumab for advanced, non-squamous non-small-cell lung cancer: a randomised, phase 2 cohort of the open-label KEYNOTE-021 study. *The Lancet Oncology*. 2016;17:1497-1508.
29. Leena Gandhi, Delvys Rodríguez-Abreu, et al. Pembrolizumab plus Chemotherapy in Metastatic Non-Small-Cell Lung Cancer. *N Engl J Med* 2018; 378:2078-2092.
30. Mark A. Socinski, Robert M. Jotte, et al. Atezolizumab for First-Line Treatment of Metastatic Nonsquamous NSCLC. *N Engl J Med* 2018; 378:2288-2301.
31. West H, McCleod M, Hussein M, et al. Atezolizumab in combination with carboplatin plus nab-paclitaxel chemotherapy compared with chemotherapy alone as first-line treatment for metastatic non-squamous non-small-cell lung cancer (IMpower130): a multicentre, randomised, open-label, phase 3 trial. *Lancet Oncol*. 2019;20(7):924-937.
32. Hellmann MD, Paz-Ares L, Bernabe Caro R, et al. Nivolumab plus Ipilimumab in Advanced Non-Small-Cell Lung Cancer. *N Engl J Med*. 2019;381(21):2020-2031.
33. Reck M, Ciuleanu T-E, Dols MC, et al. Nivolumab (NIVO) + ipilimumab (IPI) + 2 cycles of platinum-doublet chemotherapy (chemo) vs 4 cycles chemo as first-line (1L) treatment (tx) for stage IV/recurrent non-small cell lung cancer (NSCLC): CheckMate 9LA [Abstract]. *J Clin Oco*. 2020;38:Abstract 9501-9501.
34. Panos F, Jeffrey G.S, Renato M, et al. A phase II study of weekly paclitaxel in elderly patients with advanced non-small cell lung cancer. *Clin Cancer Res*. 2001;7(12):3942-9.
35. Fu-Tsai C, Kang-Yun L, Yueh-Fu F, et al. Low-dose weekly docetaxel is as tolerable as pemetrexed in previously treated advanced non-small-cell lung cancer. *Chemotherapy*. 2011;57(2):147-55.
36. Schuette W, Nagel S, Blankenburg T, et al. Phase III study of second-line chemotherapy for advanced non-small-cell lung cancer with weekly compared with 3-weekly docetaxel. *J Clin Oncol*. 2005;23(33):8389-95.
37. Reck M, Rodriguez Abreu D, Robinson AG, et al. Pembrolizumab versus chemotherapy for PD L1 positive non small cell lung

- cancer. N Engl J Med 2016;375:1823-1833.
38. Langer CJ, Gadgeel SM, Borghaei H, et al. Carboplatin and pemetrexed with or without pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.
39. Mok TSK, Wu YL, Kudaba I, et al. Pembrolizumab versus chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (Keynote-042): a randomized open-label, controlled, phase 3 trial. Lancet 2019;393:1819-1830.
40. Herbst RS, Giaccone G, de Marinis F, et al. Atezolizumab for first-line treatment of PD-L1-selected patients with NSCLC. N Engl J Med 2020;383:1328-1339.
41. Johnson ML, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.
42. Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.
43. Johnson ML, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Squamous cell carcinoma (PS 0-1)

No contraindications to PD-1 or PD-L1 inhibitors

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	35	28-30

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	35	22
Paclitaxel	200	1	Q3W	4	
Carboplatin	AUC 6	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Pembrolizumab	200 mg	1	Q3W	35	22
Nab-Paclitaxel	100	1, 8, 15	Q3W		
Carboplatin	AUC 6	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Atezolizumab	1200 mg	1	Q3W		31

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemiplimab	350 mg	1	Q3W		32

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemiplimab	350 mg	1	Q3W	36	34
Paclitaxel	200	1	Q3W	4	
Carboplatin	AUC 5-6	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cemiplimab	350 mg	1	Q3W	36	34
Paclitaxel	200	1	Q3W	4	
Cisplatin	75	1	Q3W	4	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	3 mg/kg	1	Q2W		23
Ipilimumab	1 mg/kg	1	Q6W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nivolumab	360 mg	1	Q3W	2~PD	24
Ipilimumab	1 mg/kg	1	Q6W	2~PD	
Paclitaxel	200	1	Q3W	2	
Carboplatin	AUC 5	1	Q3W	2	

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		33
Tremelimumab	75 mg	1	Q3W		
Carboplatin	AUC 5 or 6	1	Q3W	4	
Nab-Paclitaxel	100	1, 8, 15	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		1
Tremelimumab	75 mg	1	Once at week 16		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		33
Tremelimumab	75 mg	1	Q3W		
Carboplatin	AUC 5 or 6	1	Q3W	4	
Gemcitabine	1000 or 1250	1, 8	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		1
Tremelimumab	75 mg	1	Once at week 16		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Durvalumab	1500 mg	1	Q3W		33
Tremelimumab	75 mg	1	Q3W		
Cisplatin	75	1	Q3W	4	
Gemcitabine	1000 or 1250	1, 8	Q3W	4	
Followed by					
Durvalumab	1500 mg	1	Q4W		
Tremelimumab	75 mg	1	Once at week 16	1	

Contraindications to PD-1 or PD-L1 inhibitors

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		13
Nab-Paclitaxel	100	1, 8, 15	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		1
Docetaxel	75	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q4W		4
Gemcitabine	1000	1, 8, 15	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	200	1	Q3W		5
Carboplatin	AUC 6	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W		1
Cisplatin	75	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W		27
Docetaxel	30	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	100	1	Q3W		6
Etoposide	100	1-3	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	80	1	Q3W		5
Gemcitabine	1000	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Cisplatin	75	1	Q3W		7
Gemcitabine	1250	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	135	1	Q3W		8
Cisplatin	75	2	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W		9
Docetaxel	85	8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W		10
Vinorelbine	25	1, 8	Q3W		

Squamous cell carcinoma (PS 2)

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Nab-Paclitaxel	260	1	Q3W		11

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		12, 13
Nab-Paclitaxel	100	1, 8, 15	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		1
Docetaxel	75	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	325	1			2
Etoposide	100	1-3			

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 4-5	1	Q4W		3
Etoposide	50	1-14 or 1-21	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 5	1	Q4W		4
Gemcitabine	1000	1, 8, 15	Q4W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Carboplatin	AUC 6	1	Q3W		5
Paclitaxel	200	1	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W		14, 15

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Docetaxel	30	1, 8	Q3W		25

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1250	1, 8, 15	Q4W		16

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1250	1, 8	Q3W		17, 18

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W		9
Docetaxel	85	8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Gemcitabine	1000	1, 8	Q3W		10
Vinorelbine	25	1, 8	Q3W		

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	225	1	Q3W		19

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	80	1, 8, 15	Q4W		20, 21

Squamous cell carcinoma (PS 2) (Age ≥ 70)

藥品名	劑量 mg/m ²	給藥日	頻率	週期	參考文獻
Paclitaxel	90	1	QW	6	26

參考文獻

1. Fossella F, Periera JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21(16):3016-3024.
2. Klastersky J, Sculier JP, Lacroix H, et al. A randomized study comparing cisplatin or carboplatin with etoposide in patients with advanced non-small-cell lung cancer: European Organization for Research and Treatment of Cancer Protocol 07861. J Clin

- Oncol 1990;8:1556-1562.
3. Frasci G, Comella P, Panza N, et al. Carboplatin-oral etoposide personalized dosing in elderly non-small cell lung cancer patients. Gruppo Oncologico Cooperativo Sud-Italia. Eur J Cancer. 1998;34:1710-1714.
 4. Danson S, Middleton MR, O'Byrne KJ, et al. Phase III trial of gemcitabine and carboplatin versus mitomycin, ifosfamide, and cisplatin or mitomycin, vinblastine, and cisplatin in patients with advanced nonsmall cell lung carcinoma. Cancer. 2003;98:542-553.
 5. Ohe Y, Ohashi Y, Kubota K, et al. Randomized phase III study of cisplatin plus irinotecan versus carboplatin plus paclitaxel, cisplatin plus gemcitabine, and cisplatin plus vinorelbine for advanced non-small cell lung cancer: Four-Arm Cooperative Study in Japan. Ann Oncol 2007;18:317-323.
 6. Cardenal F, Lopez-Cabrerizo MP, Anton A, et al. Randomized phase III study of gemcitabine-cisplatin versus etoposide-cisplatin in the treatment of locally advanced or metastatic non-small cell lung cancer. J Clin Oncol 1999;17:12-18.
 7. Scagliotti GV, Parikh P, von Pawel J, et al. Phase III study comparing cisplatin plus gemcitabine with cisplatin plus pemetrexed in chemotherapy-naïve patients with advanced-stage NSCLC. J Clin Oncol 2008;26:3543-3551.
 8. Schiller JH, Harrington D, Belani CP, et al. Comparison of Four Chemotherapy Regimens for Advanced Non-Small-Cell Lung Cancer. N Engl J Med 2002; 346:92-98.
 9. Pujol JL, Breton JL, Gervais R, et al. Gemcitabine-docetaxel versus cisplatin-vinorelbine in advanced or metastatic non-small-cell lung cancer: a phase III study addressing the case for cisplatin. Ann Oncol 2005;16:602-610.
 10. Tan EH, Szczesna A, Krzakowski M, et al. Randomized study of vinorelbine--gemcitabine versus vinorelbine--carboplatin in patients with advanced non-small cell lung cancer. Lung Cancer. 2005;49:233-240.
 11. Green MR, Manikhas GM, Orlov S, et al. Abraxane , a novel Cremophor -free, albumin-bound particle form of paclitaxel for the treatment of advanced non-small-cell lung cancer. Ann Oncol. 2006;17:1263-1268.
 12. Rizvi NA, Riely GJ, Azzoli CG, et al. Phase I/II trial of weekly intravenous 130-nm albumin-bound paclitaxel as initial chemotherapy in patients with stage IV non-small-cell lung cancer. J Clin Oncol. 2008;26:639-643.
 13. Socinski MA1, Bondarenko I, Karaseva NA, et al. Weekly nab-paclitaxel in combination with carboplatin versus solvent-based

- paclitaxel plus carboplatin as first-line therapy in patients with advanced non-small-cell lung cancer: final results of a phase III trial. *J Clin Oncol* 2012;30:2055-2062.
14. Fossella FV, DeVore R, Kerr RN, et al. Randomized phase III trial of docetaxel versus vinorelbine or ifosfamide in patients with advanced non-small cell lung cancer previously treated with platinum-containing chemotherapy regimens. The TAX 320 Non-Small Cell Lung Cancer Study Group. *J Clin Oncol* 2000;18:2354-2362.
15. Fidias PM, Dakhil SR, Lyss AP, et al. Phase III study of immediate compared with delayed docetaxel after front-line therapy with gemcitabine plus carboplatin in advanced non-small-cell lung cancer. *J Clin Oncol.* 2009;27:591-598.
16. Zatloukal P, Kanitz E, Magyar P, Jassem J, et al. Gemcitabine in locally advanced and metastatic non-small cell lung cancer: the Central European phase II study. *Lung Cancer.* 1998;22:243-250.
17. Sederholm C, Hillerdal G, Lamberg K, et al. Phase III trial of gemcitabine plus carboplatin versus single-agent gemcitabine in the treatment of locally advanced or metastatic non-small-cell lung cancer: the Swedish Lung Cancer Study Group. *J Clin Oncol.* 2005;23:8380-8388.
18. Pérol M, Chouaid C, Pérol D, et al. Randomized, phase III study of gemcitabine or erlotinib maintenance therapy versus observation, with predefined second-line treatment, after cisplatin-gemcitabine induction chemotherapy in advanced non-small-cell lung cancer. *J Clin Oncol.* 2012;30:3516-24.
19. Lilenbaum RC, Herndon JE 2nd, List MA, et al. Single-agent versus combination chemotherapy in advanced non-small-cell lung cancer: the cancer and leukemia group B (study 9730). *J Clin Oncol.* 2005;23:190-196.
20. Ceresoli GL, Gregorc V, Cordio S, et al. Phase II study of weekly paclitaxel as second-line therapy in patients with advanced non-small cell lung cancer. *Lung Cancer.* 2004;44:231-239.
21. Yasuda K, Igishi T, Kawasaki Y, et al. Phase II study of weekly paclitaxel in patients with non-small cell lung cancer who have failed previous treatments. *Oncology.* 2004;66:347-352.
22. Luis Paz-Ares, Alexander Luft, et al. Pembrolizumab plus Chemotherapy for Squamous Non-Small-Cell Lung Cancer. *N Engl J Med* 2018; 379:2040-2051.
23. Hellmann MD, Paz-Ares L, Bernabe Caro R, et al. Nivolumab plus Ipilimumab in Advanced Non-Small-Cell Lung Cancer. *N Engl J Med.* 2019;381(21):2020-2031.
24. Reck M, Ciuleanu T-E, Dols MC, et al. Nivolumab (NIVO) + ipilimumab (IPI) + 2 cycles of platinum-doublet chemotherapy

- (chemo) vs 4 cycles chemo as first-line (1L) treatment (tx) for stage IV/recurrent non-small cell lung cancer (NSCLC): CheckMate 9LA [Abstract]. J Clin Oncol. 2020;38:Abstract 9501-9501.
25. Fu-Tsai C, Kang-Yun L, Yueh-Fu F et al. Low-dose weekly docetaxel is as tolerable as pemetrexed in previously treated advanced non-small-cell lung cancer. Chemotherapy. 2011;57(2):147-55.
 26. Panos F, Jeffrey G.S, Renato M, et al. A phase II study of weekly paclitaxel in elderly patients with advanced non-small cell lung cancer. Clin Cancer Res. 2001;7(12):3942-9.
 27. Schuette W, Nagel S, Blankenburg T, et al. Phase III study of second-line chemotherapy for advanced non-small-cell lung cancer with weekly compared with 3-weekly docetaxel. J Clin Oncol. 2005;23(33):8389-95.
 28. Reck M, Rodriguez Abreu D, Robinson AG, et al. Pembrolizumab versus chemotherapy for PD L1 positive non small cell lung cancer. N Engl J Med 2016;375:1823-1833.
 29. Langer CJ, Gadgeel SM, Borghaei H, et al. Carboplatin and pemetrexed with or without pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.
 30. Mok TSK, Wu YL, Kudaba I, et al. Pembrolizumab versus chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (Keynote-042): a randomized open-label, controlled, phase 3 trial. Lancet 2019;393:1819-1830.
 31. Herbst RS, Giaccone G, de Marinis F, et al. Atezolizumab for first-line treatment of PD-L1-selected patients with NSCLC. N Engl J Med 2020;383:1328-1339.
 32. Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.
 33. Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.
 34. Johnson ML, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.