

# 《 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 |      |

## Consolidation Therapy

### Durvalumab

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Durvalumab | 1500 mg              | 1   | Q4W | 24 | 14   |

### Extensive Stage (maximum of 4-6 cycles):

| 藥品名                         | 劑量 mg/m <sup>2</sup> | 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<br>Atezolizumab | 1200/1680 mg         | 1   | Q3W/Q4W |    |      |

| 藥品名                       | 劑量 mg/m <sup>2</sup> | 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<br>Durvalumab | 1500 mg              | 1   | Q4W |    |      |

| 藥品名                       | 劑量 mg/m <sup>2</sup> | 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<br>Durvalumab | 1500 mg              | 1   | Q4W |    |      |

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

| 藥品名       | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|---------------|----------------------|-----|-----|----|------|
| Lurbinectedin | 3.2                  | 1   | Q3W |    | 13   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日   | 頻率  | 週期                    | 參考文獻 |
|------------|----------------------|-------|-----|-----------------------|------|
| Tarlatabab | 1 mg                 | 1     | Q4W | 1 <sup>st</sup>       | 15   |
|            | 10 mg                | 8, 15 | Q4W | 1 <sup>st</sup>       |      |
|            | 10 mg                | 1, 15 | Q4W | 2 <sup>nd</sup> to PD |      |

## Chemotherapy-free interval (CTFI) $\leq$ 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|---------------|----------------------|-----|-----|----|------|
| Lurbinectedin | 3.2                  | 1   | Q3W |    | 13   |

| 藥品名      | 劑量 mg/m <sup>2</sup> | 給藥日   | 頻率  | 週期        | 參考文獻 |
|----------|----------------------|-------|-----|-----------|------|
| Tarlatab | 1 mg                 | 1     | Q4W | 1st       | 15   |
|          | 10 mg                | 8, 15 | Q4W | 1st       |      |
|          | 10 mg                | 1, 15 | Q4W | 2nd to PD |      |

### Other Recommended Regimens

| 藥品名              | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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.
14. Cheng Y, Spigel D, Cho BC, et al. Durvalumab after Chemoradiotherapy in Limited-Stage Small-Cell Lung Cancer. *N Engl J Med* 2024;39:1313-1327.
15. Ahn MJ, Cho BC, Felip E, et al. Tarlatamab for patients with previously treated small-cell lung cancer. *N Engl J Med* 2023;389:2063-2075.

## Non-Small Cell Lung Cancer

### Adjuvant therapy

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

### Non-squamous

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



# Non-squamous

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

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|-------------|----------------------|-----|-----|----|------|
| Carboplatin | AUC 5                | 1   | Q3W | 4  | 13   |
| Pemetrexed  | 500                  | 1   | Q3W | 4  |      |

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

## Non-squamous

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

# Non-squamous

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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

### Platinum Doublet

#### Any histology

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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  |      |

#### Any histology

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Durvalumab | 1500 mg              | 1   | Q3W | 4  | 66   |
| Cisplatin  | 75                   | 1   | Q3W | 4  |      |
| Paclitaxel | 175-200              | 1   | Q3W | 4  |      |

### Non-squamous

| 藥品名        | 劑量 mg/m <sup>2</sup> | 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  |      |

### Non-squamous

| 藥品名           | 劑量 mg/m <sup>2</sup> | 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  |      |

### Non-squamous

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Durvalumab | 1500 mg              | 1   | Q3W | 4  | 66   |
| Cisplatin  | 75                   | 1   | Q3W | 4  |      |
| Pemetrexed | 500                  | 1   | Q3W | 4  |      |

**Squamous**

| 藥品名           | 劑量 mg/m <sup>2</sup> | 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  |      |

**Squamous**

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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  |      |

**Squamous**

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日  | 頻率  | 週期 | 參考文獻 |
|-------------|----------------------|------|-----|----|------|
| Durvalumab  | 1500 mg              | 1    | Q3W | 3  | 66   |
| Cisplatin   | 75                   | 1    | Q3W | 3  |      |
| Gemcitabine | 1000                 | 1, 8 | Q3W | 3  |      |

**Patients who are not candidates for cisplatin-based therapy****Non-squamous**

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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

| 藥品名           | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|---------------|----------------------|-----|-----|----|------|
| Pembrolizumab | 200 mg               | 1   | Q3W | 13 | 58   |

For up to 39 weeks for patients who received previous neoadjuvant pembrolizumab + chemotherapy (category 1)

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率   | 週期 | 參考文獻 |
|------------|----------------------|-----|------|----|------|
| Durvalumab | 1500 mg              | 1   | Q43W | 12 | 59   |

For patients with completely resected tumors  $\geq 4$  cm and/or node positive NSCLC who received previous neoadjuvant durvalumab + chemotherapy and no known EGFR mutations or ALK rearrangements (category 1)

| 藥品名       | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|-----------|----------------------|-----|-----|----|------|
| Nivolumab | 480 mg               | 1   | Q4W | 12 | 60   |

For patients with completely resected stage II–IIIB NSCLC who received previous neoadjuvant nivolumab + chemotherapy and no known EGFR mutations or ALK rearrangements (category 1)

## Systemic Therapy Following Surgical Resection

| 藥品名       | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期         | 參考文獻 |
|-----------|----------------------|-----|----|------------|------|
| Alectinib | 600 mg PO BID        |     |    | For 2 year | 62   |

For patients with completely resected stage II–IIIA or stage IIIB (T3, N2) NSCLC and positive for ALK rearrangements (category 1)

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期          | 參考文獻 |
|-------------|----------------------|-----|----|-------------|------|
| Osimertinib | 80 mg PO QD          |     |    | For 3 years | 39   |

For patients with completely resected stage IB–IIIA or stage IIIB (T3, N2) NSCLC and positive for EGFR (exon 19 deletion, exon 21 L858R) mutations who received previous adjuvant chemotherapy or are ineligible to receive platinum-based chemotherapy

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

For patients with completely resected stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC with PD-L1  $\geq 1\%$  and negative for EGFR exon 19 deletion or exon 21 L858R mutations or ALK rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.

| 藥品名           | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|---------------|----------------------|-----|-----|----|------|
| Pembrolizumab | 200 mg               | 1   | Q3W | 4  | 67   |

For patients with completely resected stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC and negative for EGFR exon 19 deletion or exon 21 L858R mutations or ALK rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.\*,<sup>14</sup> The benefit for patients with PD-L1  $<1\%$  is unclear.



## 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Durvalumab | 10 mg/kg             | 1   | Q2W | 24 | 26   |

Category 1 for stage III; category 2A for stage II

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-------------|----------------------|-----|----|----|------|
| Osimertinib | 80 mg PO QD          |     |    |    | 61   |

Category 1 for stage III; category 2A for Stage II) if EGFR exon 19 deletion or L858R

## 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 <sup>2</sup> | 給藥日 | 頻率    | 週期 | 參考文獻 |
|-----------|----------------------|-----|-------|----|------|
| Erlotinib | 150 mg               |     | QD AC |    | 15   |

| 藥品名       | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-----------|----------------------|-----|----|----|------|
| Gefitinib | 250 mg               |     | QD |    | 17   |

| 藥品名           | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|---------------|----------------------|-----|----|----|------|
| Osimeertinib* | 80 mg PO QD          |     |    |    | 23   |

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

Osimeertinib + pemetrexed + (cisplatin or carboplatin) (nonsquamous)

| 藥品名          | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|--------------|----------------------|-----|-----|----|------|
| Osimeertinib | 80 mg PO QD          |     |     |    | 63   |
| Cisplatin    | 75                   | 1   | Q3W | 4  |      |
| Pemetrexed   | 500                  | 1   | Q3W | 4  |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|--------------|----------------------|-----|-----|----|------|
| Osimeertinib | 80 mg PO QD          |     |     |    | 63   |
| Carboplatin  | AUC 5                | 1   | Q3W | 4  |      |
| Pemetrexed   | 500                  | 1   | Q3W | 4  |      |

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-------------|----------------------|-----|----|----|------|
| Dacomitinib | 45 mg                |     | QD |    | 27   |

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

## Amivantamab-vmjw +lazertinib

| 藥品名         | 劑量 mg/m <sup>2</sup>               | 給藥日  | 頻率  | 週期                | 參考文獻 |
|-------------|------------------------------------|------|-----|-------------------|------|
| lazertinib  | 240 mg PO QD                       |      |     |                   |      |
| Amivantamab | 350 mg                             | 1    | Q2W | 1 <sup>st</sup>   | 66   |
|             | 700 mg (<80kg) / 1050 mg (≥ 80kg)  | 2    | Q2W | 1 <sup>st</sup>   |      |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 8    | Q2W | 1 <sup>st</sup>   |      |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 1, 8 | Q2W | 2 <sup>nd</sup>   |      |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 1    | Q2W | 3 <sup>rd</sup> + |      |

Amivantamab was administered weekly at a dose of 1050 mg (1400 mg in patients ≥ 80 kg) for the first 4 weeks, with the first infusion split over a period of 2 days (350 mg on day 1, the remainder on day 2)

## EGFR exon 20 insertion positive

### First-line therapy

#### Amivantamab-vmjw + carboplatin +pemetrexed (nonsquamous)

| 藥品名         | 劑量 mg/m <sup>2</sup>               | 給藥日   | 頻率  | 週期                | 參考文獻 |
|-------------|------------------------------------|-------|-----|-------------------|------|
| Amivantamab | 350 mg                             | 1     | Q3W | 1 <sup>st</sup>   | 66   |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 2     | Q3W | 1 <sup>st</sup>   |      |
|             | 1400 mg (<80kg) / 1750 mg (≥ 80kg) | 8, 15 | Q3W | 1 <sup>st</sup>   |      |
|             | 1400 mg (<80kg) / 1750 mg (≥ 80kg) | 1     | Q3W | 2 <sup>nd</sup>   |      |
|             | 1750 mg (<80kg) / 2100 mg (≥ 80kg) | 1     | Q3W | 3 <sup>rd</sup> + |      |
| Carboplatin | AUC 5                              | 1     | Q3W | 4                 |      |
| Pemetrexed  | 500                                | 1     | Q3W | 4                 |      |

## Subsequent therapy

| 藥品名         | 劑量 mg/m <sup>2</sup>               | 給藥日  | 頻率  | 週期                | 參考文獻 |
|-------------|------------------------------------|------|-----|-------------------|------|
| Amivantamab | 350 mg                             | 1    | Q2W | 1 <sup>st</sup>   | 41   |
|             | 700 mg (<80kg) / 1050 mg (≥ 80kg)  | 2, 8 | Q2W | 1 <sup>st</sup>   |      |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 1, 8 | Q2W | 2 <sup>nd</sup>   |      |
|             | 1050 mg (<80kg) / 1400 mg (≥ 80kg) | 1    | Q2W | 3 <sup>rd</sup> + |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Crizotinib | 250 mg               |     | BID |    | 18   |

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

| 藥品名       | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-----------|----------------------|-----|----|----|------|
| Ceritinib | 450 mg               |     | QD |    | 30   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Crizotinib | 250 mg               |     | BID |    | 33   |

| 藥品名       | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-----------|----------------------|-----|----|----|------|
| Ceritinib | 450 mg               |     | QD |    | 34   |

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-------------|----------------------|-----|----|----|------|
| Entrectinib | 600 mg               |     | QD |    | 37   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|------------|----------------------|-----|----|----|------|
| Lorlatinib | 100 mg               |     | QD |    | 32   |

| 藥品名           | 劑量 mg/m <sup>2</sup> | 給藥日                                | 頻率 | 週期 | 參考文獻 |
|---------------|----------------------|------------------------------------|----|----|------|
| Repotrectinib | 160 mg PO QD         | 1 <sup>st</sup> - 14 <sup>th</sup> |    |    | 65   |
|               | 160 mg PO BID        | 15 <sup>th</sup> +                 |    |    |      |

### KRAS G12C positive

| 藥品名       | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|------------|----------------------|-----|----|----|------|
| Capmatinib | 400 mg PO BID        |     |    |    | 44   |

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

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-------------|----------------------|-----|----|----|------|
| Vemurafenib | 960 mg PO Q12H       |     |    |    | 53   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|------------|----------------------|-----|----|----|------|
| Dabrafenib | 150 mg PO BID        |     |    |    | 54   |

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

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率 | 週期 | 參考文獻 |
|-------------|----------------------|-----|----|----|------|
| Entrectinib | 600 mg PO QD         |     |    |    | 48   |

### HER2-mutation

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

### HER2-overexpressing, IHC3+

| 藥品名                            | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|--------------------------------|----------------------|-----|-----|----|------|
| Trastuzumab-detuxtecan (T-dxd) | 5.4 mg/kg            | 1   | Q3W |    | 68   |

### 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: GILOTRIF(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 non-small-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 (NscLc): 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.
58. 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.
59. Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative durvalumab for resectable non-small-cell lung cancer. *N Engl J Med* 2023;389:1672-1684.
60. Cascone T, Awad M, Spicer J, et al. Perioperative nivolumab in resectable lung cancer. *N Engl J Med* 2024;390:1756-1769.
61. Lu S, Kato T, Dong X, et al. Osimertinib after chemoradiotherapy in stage III EGFR-mutated NSCLC. *N Engl J Med* 2024.
62. Wu Y-L, Dziadziuszko R, Ahn JS, et al. Alectinib in resected ALK-positive non-small-cell lung cancer. *N Engl J Med* 2024;390:1265-1276.
63. Planchard D, et al. Osimertinib with or without chemotherapy in EGFR-mutated advanced NSCLC. *N Eng J Med* 2023;389:1935-1948.
64. Cho BC, Lu S, Felip E, et al. Amivantamab plus lazertinib in previously untreated EGFR-mutated advanced NSCLC. *N Engl J Med*. Published online June 26, 2024.
65. Drilon A, et al. Repotrectinib in ROS1 fusion-positive non-small-cell lung cancer. *N Engl J Med* 2024;390:118-131.
66. Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative durvalumab for resectable non-small-cell lung cancer. *N Engl J Med* 2023;389:1672-1684.

67. O'Brien M, Paz-Ares L, Marreaud S, et al. Pembrolizumab versus placebo as adjuvant therapy for completely resected stage IB-IIIA non-small-cell lung cancer (PEARLS/KEYNOTE-091): an interim analysis of a randomised, triple-blind, phase 3 trial. *Lancet Oncol* 2022;23:1274-1286.
68. Smit EF, et al. Trastuzumab deruxtecan in patients with metastatic non-small cell lung cancer (DESTINY-Lung01): primary results of the HER2-overexpressing cohorts from a single-arm, phase 2 trial. *Lancet Oncol* 2024;25:439-454.



# 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|--------------|----------------------|-----|-----|----|------|
| Atezolizumab | 1200 mg              | 1   | Q3W |    | 40   |

| 藥品名         | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|-------------|----------------------|-----|-----|----|------|
| Cemipilimab | 350 mg               | 1   | Q3W |    | 42   |

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 in week 16 |    |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 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 in week 16 |    |      |
| Pemetrexed   | 500                  | 1   | Q4W             |    |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 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 in week 16 | 1  |      |
| Pemetrexed   | 500                  | 1   | Q4W             |    |      |

### Contraindications to PD-1 or PD-L1 inhibitors

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|-------------|----------------------|-----|-----|----|------|
| Bevacizumab | 7.5 mg/kg            | 1   | Q3W | 4  | 3    |
| Cisplatin   | 75                   | 1   | Q3W |    |      |
| Pemetrexed  | 500                  | 1   | Q3W |    |      |

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

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

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

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

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#### 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. 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.

## Squamous cell carcinoma (PS 0-1)

### No contraindications to PD-1 or PD-L1 inhibitors

| 藥品名           | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|--------------|----------------------|-----|-----|----|------|
| Atezolizumab | 1200 mg              | 1   | Q3W |    | 31   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Cemiplimab | 350 mg               | 1   | Q3W |    | 32   |



| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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             |    |      |
| Tremelimumab   | 75 mg                | 1        | Once in week 16 | 1  |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 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             |    |      |
| Tremelimumab | 75 mg                | 1    | Once in week 16 | 1  |      |

| 藥品名          | 劑量 mg/m <sup>2</sup> | 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 in week 16 | 1  |      |

## Contraindications to PD-1 or PD-L1 inhibitors

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

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

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

| 藥品名         | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 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 <sup>2</sup> | 給藥日 | 頻率  | 週期 | 參考文獻 |
|------------|----------------------|-----|-----|----|------|
| Paclitaxel | 225                  | 1   | Q3W |    | 19   |

| 藥品名        | 劑量 mg/m <sup>2</sup> | 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 <sup>2</sup> | 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. 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.