MESOTHELIOMA TREATMENT REGIMENS

The selection, dosing, and administration of anticancer agents and the management of associated toxicities are complex. Drug dose modifications and schedule and initiation of supportive care interventions are often necessary because of expected toxicities and because of individual patient variability, prior treatment, and comorbidities. Thus, the optimal delivery of anticancer agents requires a healthcare delivery team experienced in the use of such agents and the management of associated toxicities in patients with cancer. The cancer treatment regimens below may include both FDA-approved and unapproved uses/regimens and are provided as references only to the latest treatment strategies. Clinicians must choose and verify treatment options based on the individual patient.

NOTE: GREY SHADED BOXES CONTAIN UPDATED REGIMENS.

General treatment note: Management by a multidisiplinary team is recommended. Chemotherapy can be utilized as induction regimen (pemetrexed + cisplatin) prior to surgical exploration. A number of regimens may be used after exploration in patients found to be unresectable.

REGIMEN	DOSING
First-Line Treatment	
Pemetrexed (Alimta) **+ cisplatin** (Platinol; CDDP)*,[1-3] *Category 1 recommendation.	**Day 1:** Pemetrexed 500mg/m² IV **+** cisplatin 75mg/m² IV beginning 30 min after pemetrexed administration. Repeat cycle every 3 weeks. **Vitamin prophylaxis:** Multivitamin with folic acid 400–1000mcg orally daily starting at least 5 days prior to first dose of pemetrexed and continuing until 21 days after the last dose. Vitamin B_{12} injection 1000mcg IM once during the week prior to the first dose of pemetrexed. Repeat every 3 cycles on the same day as chemo. **Premedication regimen:** Dexamethasone 4mg orally twice daily (or equivalent) the day before, day of and day after pemetrexed to reduce cutaneous reaction.
Pemetrexed + carboplatin (Paraplatin)[1,2,4]	**Day 1:** Pemetrexed 500mg/m² IV **+** carboplatin AUC=5mg/mL/min. Repeat cycle every 3 weeks. **Vitamin prophylaxis:** Multivitamin with folic acid 400–1000mcg orally daily starting at least 5 days prior to first dose of pemetrexed and continuing until 21 days after the last dose. Vitamin B_{12} injection 1000mcg IM once during the week prior to the first dose of pemetrexed. Repeat every 3 cycles on the same day as chemo. **Premedication regimen:** Dexamethasone 4mg orally twice daily (or equivalent) the day before, day of and day after pemetrexed to reduce cutaneous reaction.
Gemcitabine (Gemzar) **+ cisplatin**[1,5,6]	**Day 1:** Cisplatin 80–100mg/m² IV, plus **Days 1, 8 and 15:** Gemcitabine 1,000–1,250mg/m². Repeat cycle every 3–4 weeks.
Pemetrexed[1,2,7]	**Day 1:** Pemetrexed 500mg/m² IV. Repeat cycle every 3 weeks. **Vitamin prophylaxis:** Multivitamin with folic acid 400–1000mcg orally daily starting at least 5 days prior to first dose of pemetrexed and continuing until 21 days after the last dose. Vitamin B_{12} injection 1000mcg IM once during the week prior to the first dose of pemetrexed. Repeat every 3 cycles on the same day as chemo. **Premedication regimen:** Dexamethasone 4mg orally twice daily (or equivalent) the day before, day of and day after pemetrexed to reduce cutaneous reaction.
Vinorelbine (Navelbine)[1,8]	**Day 1:** Vinorelbine 25–30mg/m² once weekly for 12 weeks, with a 2-week gap between injections 6 and 7.
Second-Line Treatment	
Pemetrexed (if not administered as first-line treatment)[1,2,9]	**Day 1:** Pemetrexed 500mg/m² IV. Repeat cycle every 3 weeks. **Vitamin prophylaxis:** Multivitamin with folic acid 400–1000mcg orally daily starting at least 5 days prior to first dose of pemetrexed and continuing until 21 days after the last dose. Vitamin B_{12} injection 1000mcg IM once during the week prior to the first dose of pemetrexed. Repeat every 3 cycles on the same day as chemo. **Premedication regimen:** Dexamethasone 4mg orally twice daily (or equivalent) the day before, day of and day after pemetrexed to reduce cutaneous reaction.
Vinorelbine[1,10]	**Day 1:** Vinorelbine 30mg/m² once weekly for 6 weeks.

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