

MESOTHELIOMA CHEMOTHERAPY REGIMENS

The selection, dosing, and administration of anti-cancer 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 anti-cancer agents requires a healthcare delivery team experienced in the use of such agents and the management of associated toxicities in patients with cancer. The chemotherapy 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.

REGIMEN	DOSING
FIRST-LINE TREATMENT	
Pemetrexed (Alimta) + cisplatin (Platinol; CDDP) ^{1,2}	Day 1: Pemetrexed 500mg/m ² IV + cisplatin 75mg/m ² IV beginning 30 min after pemetrexed administration; repeat cycle every 21 days Premedication regimen: Instruct patients to take folic acid and vitamin B ₁₂ . Pretreatment with dexamethasone or equivalent reduces cutaneous reaction ²
Pemetrexed + carboplatin (Paraplatin) ¹	Day 1: Pemetrexed 500mg/m ² IV + carboplatin AUC= 5mg/mL/min; repeat cycle every 21 days Premedication regimen: Instruct patients to take folic acid and vitamin B ₁₂ . Pretreatment with dexamethasone or equivalent reduces cutaneous reaction ²
Gemcitabine (Gemzar) + cisplatin ¹	Day 1: Cisplatin 80–100mg/m ² IV, plus Days 1, 8, 15: Gemcitabine 1,000–1,250mg/m ² ; repeat cycle every 21–28 days
Pemetrexed ¹	Day 1: Pemetrexed 500mg/m ² IV; repeat cycle every 21 days Premedication regimen: Instruct patients to take folic acid and vitamin B ₁₂ . Pretreatment with dexamethasone or equivalent reduces cutaneous reaction ²
Vinorelbine (Navelbine) ^{1,3}	25–30mg/m ² once weekly for 12 weeks, with a two-week gap between injections 6 and 7
SECOND-LINE TREATMENT	
Pemetrexed (if not administered as first-line treatment) ^{1,4}	Day 1: Pemetrexed 500mg/m ² IV; repeat cycle every 21 days Premedication regimen: Instruct patients to take folic acid and vitamin B ₁₂ . Pretreatment with dexamethasone or equivalent reduces cutaneous reaction ²
Vinorelbine ^{1,5}	30mg/m ² once weekly for 6 weeks

REFERENCES

1. NCCN Clinical Practice Guidelines in Oncology™. Malignant Pleural Mesothelioma. v 1.2011. Available at: http://www.nccn.org/professionals/physician_gls/pdf/mpm.pdf. Accessed February 16, 2011.
2. Alimta [prescribing information]. Indianapolis, IN: Eli Lilly & Co.; 2010.
3. Muers MF, Stephens RJ, Fisher P, et al.; MS01 Trial Management Group. Active symptom control with or without chemotherapy in the treatment of patients with malignant pleural mesothelioma (MS01): a multicentre randomised trial. *Lancet*. 2008;371:1685–1694.
4. Jassem J, Ramlau R, Santoro A, et al. Phase III trial of Pemetrexed plus best supportive care compared with best supportive care in previously treated patients with advanced malignant pleural mesothelioma. *J Clin Oncol*. 2008;26: 1698–1704.
5. Stebbing J, Powles T, McPherson K, et al. The efficacy and safety of weekly Vinorelbine in relapsed malignant pleural mesothelioma. *Lung Cancer*. 2009;63:94–97.

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