MESOTHELIOMA TREATMENT REGIMENS

Clinical Trials: The NCCN recommends cancer patient participation in clinical trials as the gold standard for treatment.

Cancer therapy selection, dosing, administration, and the management of related adverse events can be a complex process that should be handled by an experienced healthcare team. Clinicians must choose and verify treatment options based on the individual patient; drug dose modifications and supportive care interventions should be administered accordingly. The cancer treatment regimens below may include both U.S. Food and Drug Administration-approved and unapproved indications/regimens. These regimens are only provided to supplement the latest treatment strategies.

These Guidelines are a work in progress that may be refined as often as new significant data becomes available. The NCCN Guidelines® are a consensus statement of its authors regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult any NCCN Guidelines® is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment. The National Comprehensive Cancer Network makes no warranties of any kind whatsoever regarding their content, use, or application and disclaims any responsibility for their application or use in any way.

First-line Chemotherapy¹

Note: All recommendations are Category 2A unless otherwise indicated.

Note. All recommendations are co	ategory ZA unless otherw	ושונמנכע.
REGIMEN	DOSING	
Pemetrexed + cisplatin $(category 1)^2$	Day 1: Pemetrexed 500mg/m ² IV day 1 followed 30 minutes later by cisplatin 75mg/m ² over 2 hours. Repeat every 21 days up to 12 cycles.	
Pemetrexed + carboplatin ³⁻⁵	Day 1: Pemetrexed 500mg/m ² IV and carboplatin AUC=5. Repeat every 21 days for a max of 9 cycles.	
Gemcitabine + cisplatin ^{6,7}	Day 1: Cisplatin 100mg/m ² IV over 1 hour Days 1, 8, and 15: Gemcitabine 1000mg/m ² over 30 minutes. Repeat every 28 days for 6 cycles.	
Pemetrexed ⁸	Day 1: Pemetrexed 500mg/m ² IV. Repeat every 21 days for 4 cycles.	
Vinorelbine ⁹	Vinorelbine 30mg/m ² (max 60mg) every week for 12 weeks.	
Second-line Chemotherapy ¹		
Pemetrexed (if not administered as first-line) (category 1) ^{10*}	Day 1: Pemetrexed 500mg/m ² . Repeat every 3 weeks for 8 cycles.	
Vinorelbine ¹²	Vinorelbine 30mg/m ² (max 60mg) weekly. Repeat every 6 weeks for 11 cycles.	
Gemcitabine ¹³	Days 1, 8, and 15: Gemcitabine 1250mg/m ² . Repeat every 28 days for a max of 10 cycles.	
* Consider rechallenge if good sustain	ed response at the time initia	al chemotherapy was interrupted.11
References		
 Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCNGuidelines[®]) for Malignant Pleural Mesothelioma. V1.2014. Available at: http://www. nccn.org. Accessed April 27, 2014. 		 Taylor P, Castagneto B, Dark G, et al. Single-agent pemetrexed for chemonaive and pretreated patients with malignant pleural mesothelioma: results of an International Expanded Access Program. J Thorac Oncol. 2008;3:764–771.
 Vogelzang NJ, Rusthoven JJ, Symanowski J, et al. Phase III study of pemetrexed in combination with cisplatin versus cisplatin alone in patients with malignant pleural mesothelioma. J Clin 		 Muers MF, Stephens RJ, Fisher P, et al. Active symptom control with or without chemotherapy in the treatment of patients with malignant pleural mesothelioma (MS01): a multicentre

- Oncol. 2003;21:2636-2644.
 3. Castagneto B, Botta M, Aitini E, et al. Phase II study of pemetrexed in combination with carboplatin in patients with malignant pleural mesothelioma. Ann Oncol. 2008;19:370-373.
- Ceresoli GL, Zucali PA, Favaretto AG, et al. Phase II study of pemetrexed plus carboplatin in malignant pleural mesothelioma. *J Clin Oncol.* 2006;24:1443–1448.
- Santoro A, O'Brien ME, Stahel RA, et al. Pemetrexed plus cisplatin or pemetrexed plus carboplatin for chemonaive patients with malignant pleural mesothelioma. *J Thorac Oncol.* 2008;3:756–763.
- Nowak AK, Byrne MJ, Willianson R, et al. A multicentre phase II study of cisplatin and gemcitabine for malignant mesothelioma. Br J Cancer. 2002;87:491–496.
- Van Haarst JM, Baas J, Manegold CH, et al. Multicentre phase Il study of gemcitabine and cisplatin in malignant pleural mesothelioma. Br J Cancer. 2002; 86:342–345.

- randomised trial. *Lancet.* 2008;371:1685–1694.
 10. 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
- Zucal PA, Simonelli M, Michetti G, et al. Second-line chemotherapy in malignant pleural mesothelioma: results of a retrospective multicenter survey. *Lung Cancer.* 2012;75:360–367.
- 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.
- van Meerbeeck JP, Baas P, Debruyne C, et al. A phase II study of gemcitabine in patients with malignant pleural mesothelioma. European Organization for Research and Treatment of Cancer Lung Cancer Cooperative Group. Cancer. 1999;85:2577-2582.