

Appendix 2: Prognostic Scores

The EORTC Prognostic Score

The score is:

EPS = 0.55 (if WBC>8.3 x 10⁹/L) + 0.6 (if PS=1 or 2) + 0.52 (if histological diagnosis probable or possible) + 0.67 (if histology=sarcomatoid) + 0.6 (if male)

The patient has a good prognosis if EPS ≤ 1.27 and a poor prognosis if EPS > 1.27.

Information about the CALGB Prognostic groups will be include if necessary.

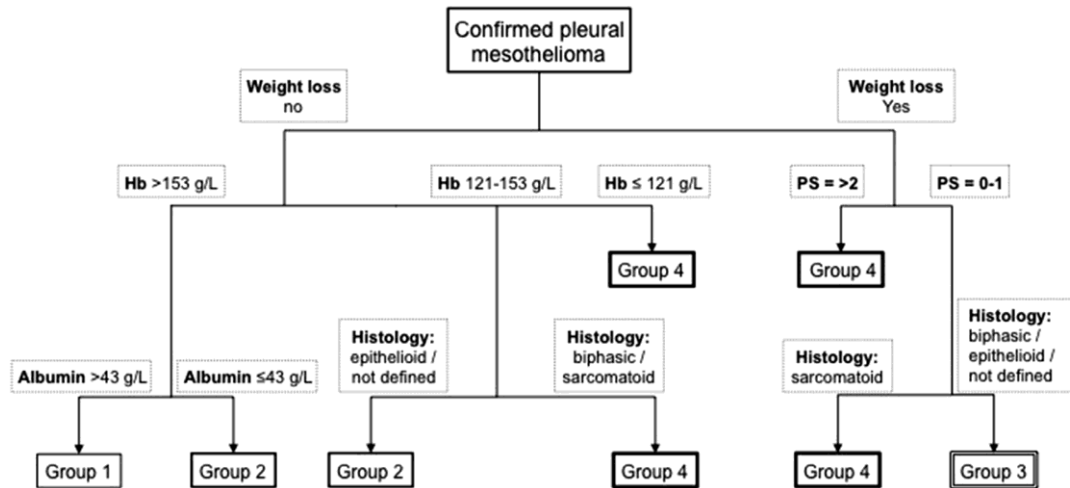
The Neutrophil-to-Lymphocyte ratio (NLR):

Table 4. Published multivariate analyses of neutrophil-to-lymphocyte ratio in malignant mesothelioma					
	Kao et al (2010)	Kao et al (2011)	Pinato et al (2012)	Kao et al (2013)	Meniawy et al (this study)
Total no. of study patients	173	85	171	148	274
No. in multivariate model	NR	NR	NR	130	274
No. with NLR available	168 (97%)	84 (99%)	159 (94%)	79 (53%)	274 (100%)
Treatments received	Chemotherapy First line (69%) Second line (31%)	Extrapleural pneumonectomy (EPP)	Chemotherapy (41%) Supportive care (42%) Unknown (17%)	Chemotherapy (53%) Radiotherapy (34%) EPP (5%)	Chemotherapy (62%) Supportive care (38%) EPP (1%)
Median baseline NLR	NR	3	NR	3.5	3.5
Cutoff used in analysis	<5 vs ≥5	<3 vs ≥3	<5 vs ≥5	<3 vs ≥3	<5 vs ≥5
Prognostic variables entered into final multivariate model					
Age		NS		NS	+
Gender	NS	NS	NS	NS	NS
Nonepithelioid histology	+	NS	NS	+	+
Sarcomatous histology					+
Stage				+	NS
Performance status			NS		+
Weight loss					+
Chest pain					+
Hb level				+	NS
White cell count	NS		NS	NS	NS
Platelet count	NS			NS	+
Baseline NLR	+	+	+	+	NS
Calretinin score		+			
mGPS			+		
Albumin, EPS, CRP, PLR			NS		
Treatments received	NS			+	

Abbreviations: CRP = C-reactive protein, EPS = european organization for the research and treatment of cancer prognostic score, Hb = haemoglobin, mGPS = modified glasgow prognostic score, NLR = neutrophil-to-lymphocyte ratio, NR = not reported, NS = nonsignificant, PLR = platelet-to-lymphocyte ratio; + = significant (P<0.05)

Reprinted with permission from Meniawy TM, Creaney J, Lake, RA et al. Existing models, but not neutrophil-to-lymphocyte ratio, are prognostic in malignant mesothelioma. Br J Cancer 2013;109(7):1813-20

Prognostic model using decision tree analysis



Reprinted from *Journal of Thoracic Oncology*, Vol 11, 4. Brims JH, Menjawy ID, de Fonseca D et al. A Novel Clinical Prediction Model for Prognosis in Malignant Pleural Mesothelioma Using Decision Tree Analysis. 573-582. With permission from Elsevier.

The LENT scoring system

Mnemonic	Variable	Score
L	Pleural fluid LDH (IU/L)	
	<1500	0
	>1500	1
E	ECOG Performance Status	
	0	0
	1	1
	2	2
	3-4	3
N	NLR	
	<9	0
	>9	1
T	Tumour type	
	Low risk (mesothelioma, haematological malignancy)	0
	Moderate risk (breast, renal, gynaecological cancer)	1
	High risk (lung cancer, other tumour types)	2

Reproduced with permission from Clive AO, Kahan BC, Hooper CE et al. Predicting survival in malignant pleural effusion: development and validation of the LENT prognostic score. *Thorax* 2014; 69 (12); 1098-104 under licence (CC BY-NC 3.0)