

Mesothelioma Case Discussion

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Disclosures

No potential conflicts of interest declared

The diagnosis mesothelioma (MPM) can best be made on:

- ESMO guidelines 2010:
 - *Cytological examination of the effusion can be diagnostic, but often shows equivocal results. Therefore, histology, including immunohistochemistry, is the gold standard*
 - Remarks:
 - specialized centers can make the diagnosis in 30-50% of epithelial cases
 - For financial reimbursement, histology is often required

The optimal staging approach

■ ESMO guidelines:

- *Clinical staging is based on the CT scan of the chest. However, the translation of the images into TNM stages is often not conclusive*
- Remarks:
 - Invasive procedures as mediastinoscopy or thoracoscopy are not always desired/possible
 - Staging systems include AJCC 2010 and IMIG 2005 an update is planned for 2013

ESMO staging example

Stage	TNM	Comments
Ia	T1a N0 M0	Primary tumour limited to ipsilateral parietal pleura
Ib	T1b N0 M0	As stage Ia plus focal involvement of visceral pleura
II	T2 N0 M0	As stage Ia or Ib plus confluent involvement of diaphragm or visceral pleura or involvement of the lung
III	Any T3 M0 Any N1 M0	Locally advanced tumour Ipsilateral, bronchopulmonary or hilar lymph node involvement
	Any N2 M0	Subcarinal or ipsilateral mediastinal lymph node involvement
IV	Any T4	Locally advanced technically unresectable tumour
	Any N3	Contralateral mediastinal, internal mammary, and ipsilateral or contralateral supraclavicular lymph node involvement
	Any M1	Distant metastases

What is the standard treatment?

- 1th line
 - Platin with an anti-folate (level IIA)
- 2nd line
 - No standard defined (yet)
- Maintenance therapy
 - Negative so far
- Surgery
 - As part of multimodality treatment only in study in selected patients

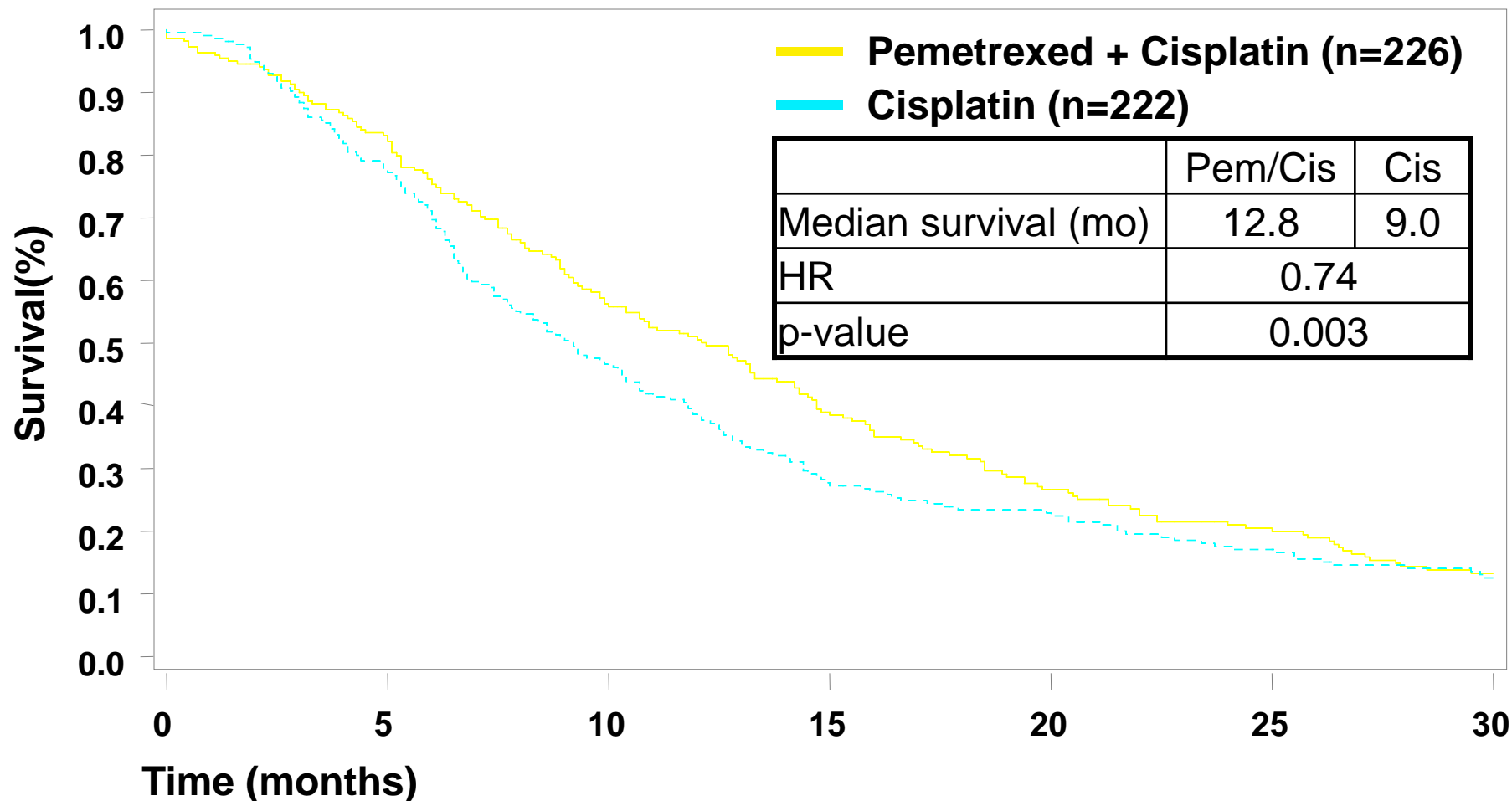
Phase II studies in 1th line

	Byrne JCO 1999	Nowak BJC 2002	Utkan LC 2006	v. Haarst BCJ 2002	Favaretto Cancer 2002
Patients	21	53	25	25	50
Gemcitabin e	1000 d1,8,15	1000 d1,8,15	1250 d1,8	1250 d1,8	1000 d1,8,15
Platin	Cis 100	Cis 100	Cis 80 q3	Cis 80 q3	Carbo AUC 5
Response	48%	33%	23%	16%	26%
Survival (median)	9.5 m	11.2 m	19.5 m	9.6 m	15 m

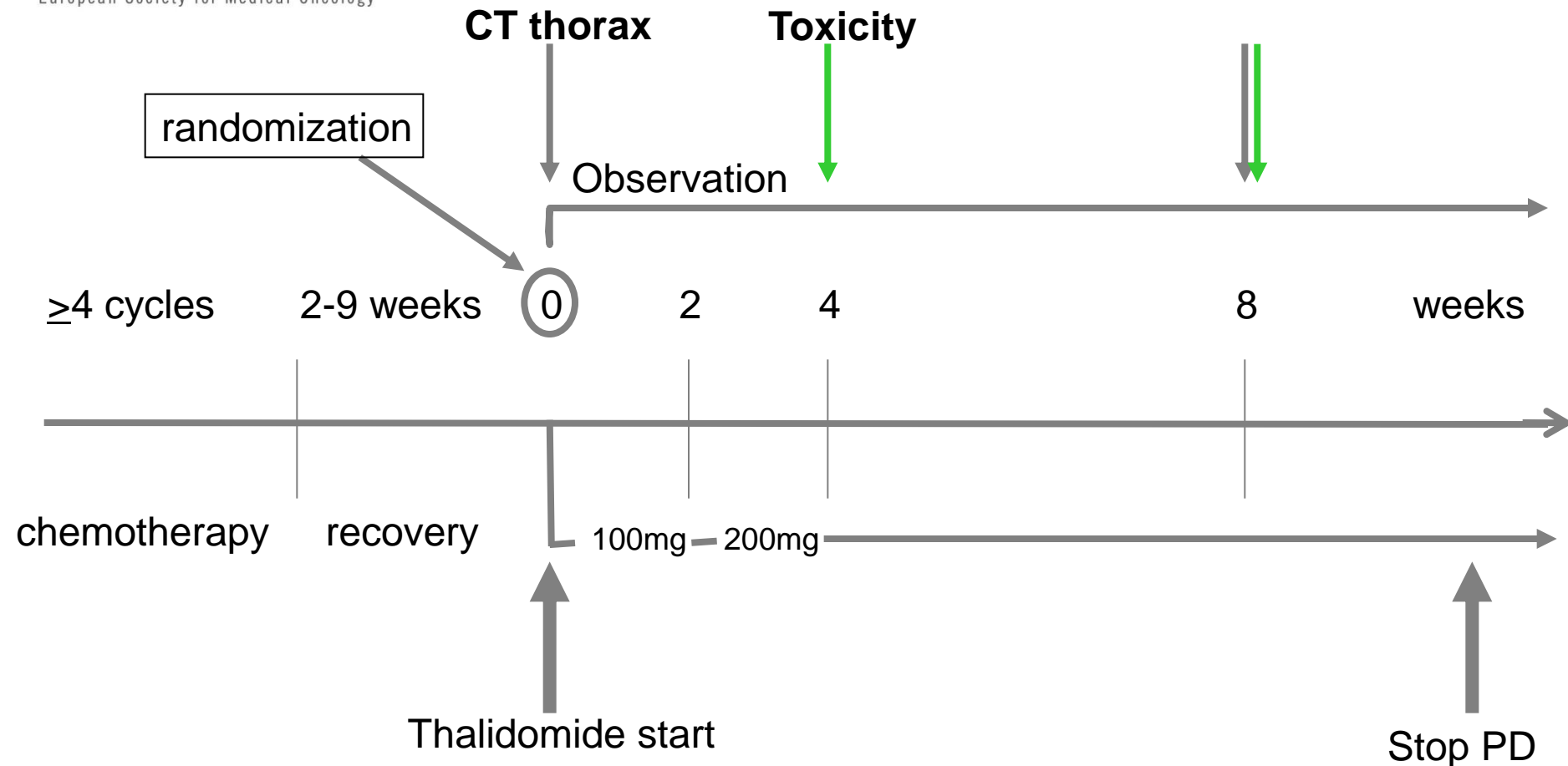
Phase III studies in 1th line

Therapy	# patients	MST	1 yr surv	<i>P</i>
<hr/>				
Vogelzang				
Cisplatin	222	9.3	38%	} < 0.001
Pemetrexed/Cis	226	12.3	52%	
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EORTC				
Cisplatin	124	8.8	39.4%	} 0.046
Raltitrexed/Cis	125	11.2	45.5%	

Phase III pemetrexed + cisplatin vs. cisplatin in MPM



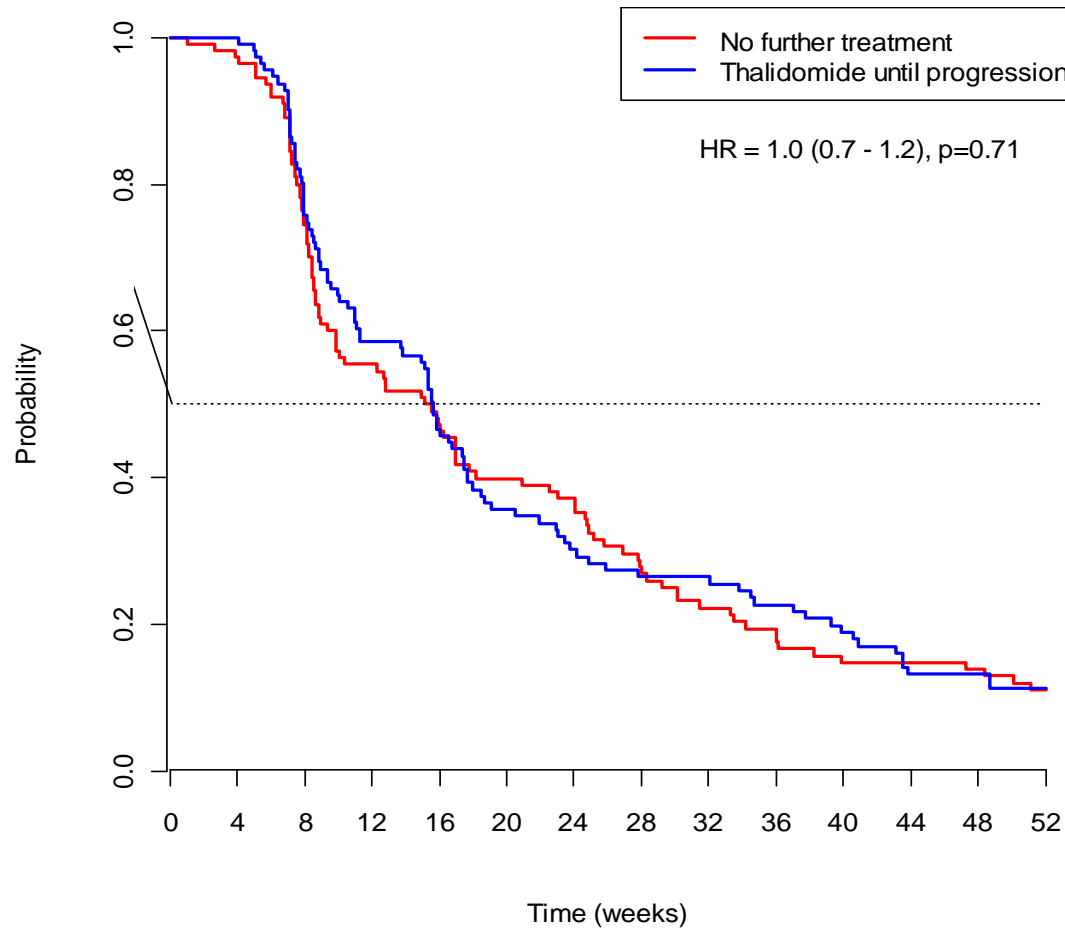
Maintenance studies in 1th line



Thalidomide vs observation in non progressing patients after CT
Primary Objective: 50% increase in TTP
222 patients randomized

TTP and OS

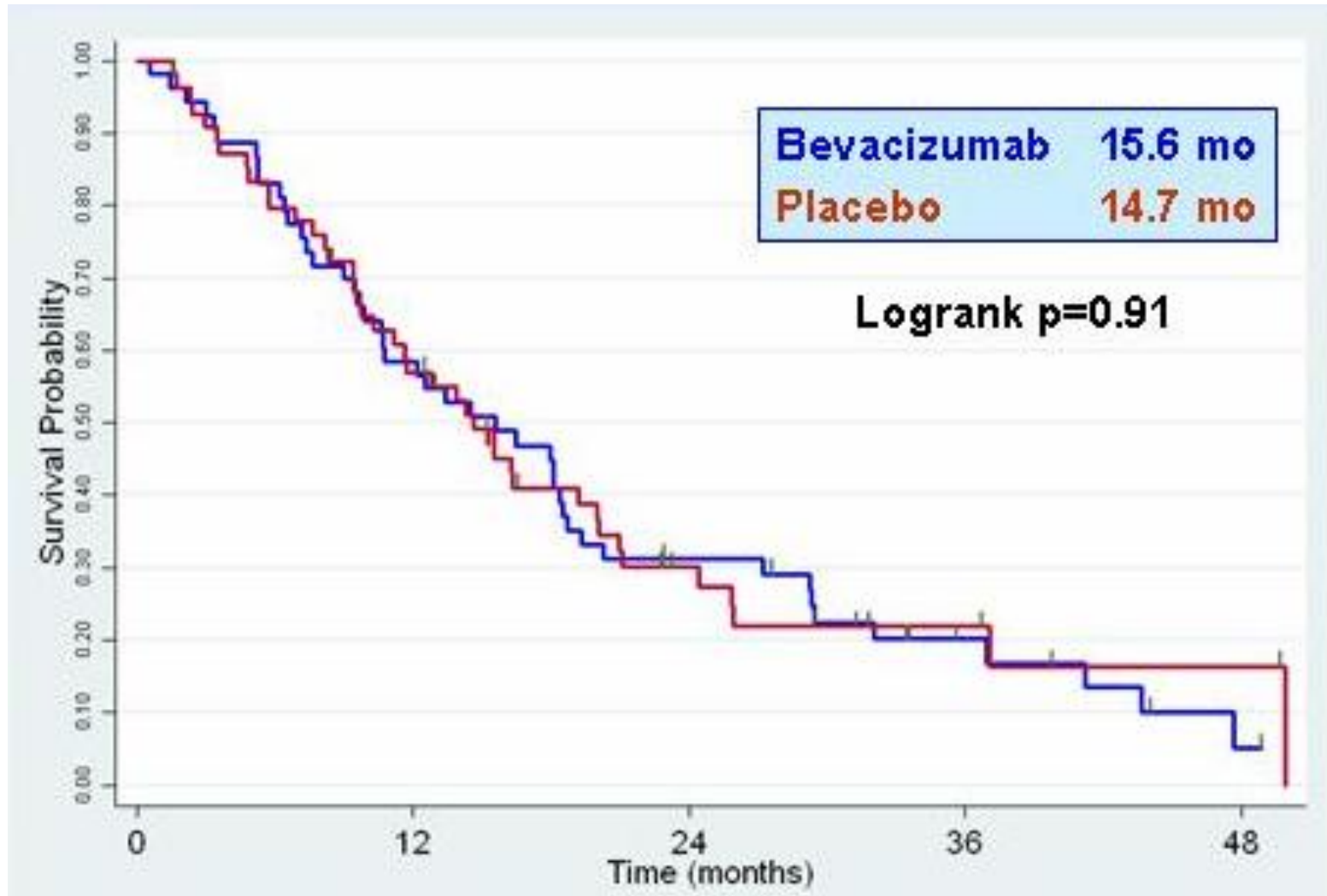
TTP



Cis-gemcitabine ± bevacizumab placebo-controlled Phase II, 1st line

	GCB	GC	HR	<i>P-value</i>
PFS	6.9 (5.3-7.3)	6.0 (5.5-7.0)	0.94	0.88
PFS at 1 year	17%	14%		
MST	15.6 (10.6-18.7)	14.7 (10.3-20)	1.13	0.91
1 year survival	59%	57%		

Results



Maintenance Studies

■ Thalidomide vs. obs	Phase III	negative
■ Bevacizumab vs. obs	Phase III	ongoing
■ Cetuximab vs. obs	Phase II	ongoing
■ Pemetrexed vs. obs	Phase III	planned

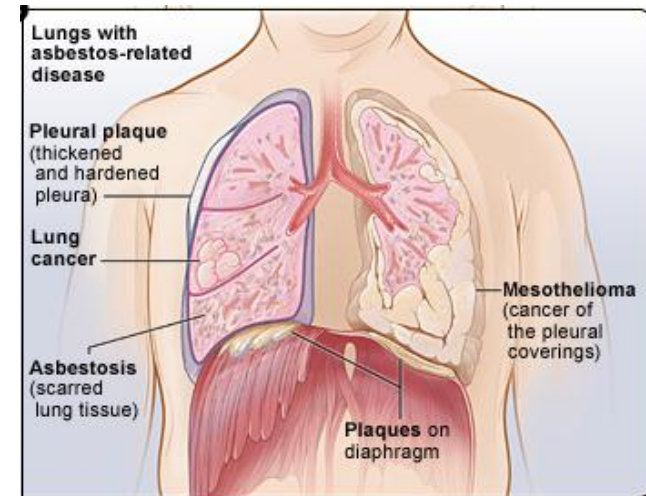
Operative Procedures

- Diagnostic
 - pleural Bx, VATS

- Palliative for effusion control
 - talk pleurodesis VATS/open
 - parietal pleurectomy VATS/open

- Curative Intent
 - Pleurectomy / Decortication (P/D)
 - Extrapleural Pneumonectomy (EPP)

- P/D and EPP always as part of MMT



Radiation Therapy

- Prophylactic: irradiation of tracts (level IIC)
- Therapeutic: Thoracic wall invasion
- As part of MMT: (level IIIB)
 - Conformal radiation therapy
 - IMRT
 - Hybrids