Poster Discussion

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Rationale for Risk Adapted Strategies

- Improve outcome in poor-risk patients
- Reduce therapy for lower risk patients

Interim FDG-PET – DLBCL: The Early Days

Heterogeneity of Prediction of PFS

	PET-	MRU	PET+
Spaepen (‘02)	84%	-	0% (median fu 1107 d)
Haioun (‘05)	82 %	-	43% (2-year PFS)
Mikhaeel (‘05)	93%	59%	30% (2-year PFS)

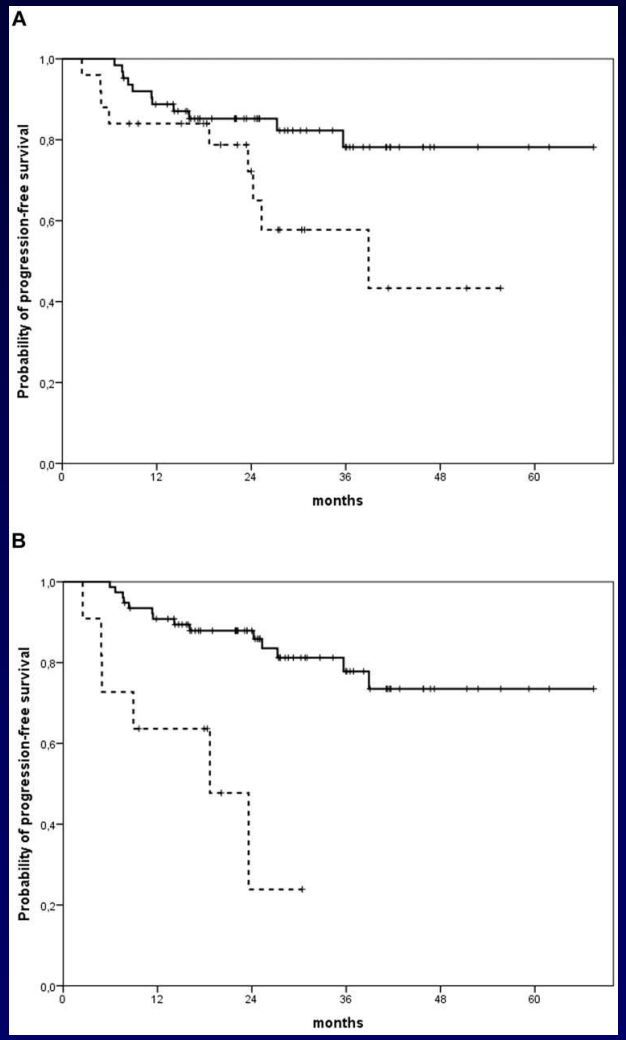
	Spaepen	Haioun	Mikhaeel
% progression	51	23	40
% PET+	53	40	43
% DLBCL	67	94	79
% CHOP or RCHOP	80	30	74
% Rituximab	0	41	NR (<74)

Mikhaeel GN, Leukemia & Lymphoma, 2009;50:1931

Negative Studies in DLBCL

1. Gigli, ASH 2008
2. Safar, ASH 2009
3. Micallet, ASH 2009
4. Moskowitz, JCO 2010
5. Cashen, J Nucl Med 2011
6. Pregno, Blood 2012

PFS By Interim vs Posttreatment PET in 88 DLBCL Pts Treated with R-CHOP



I-PET

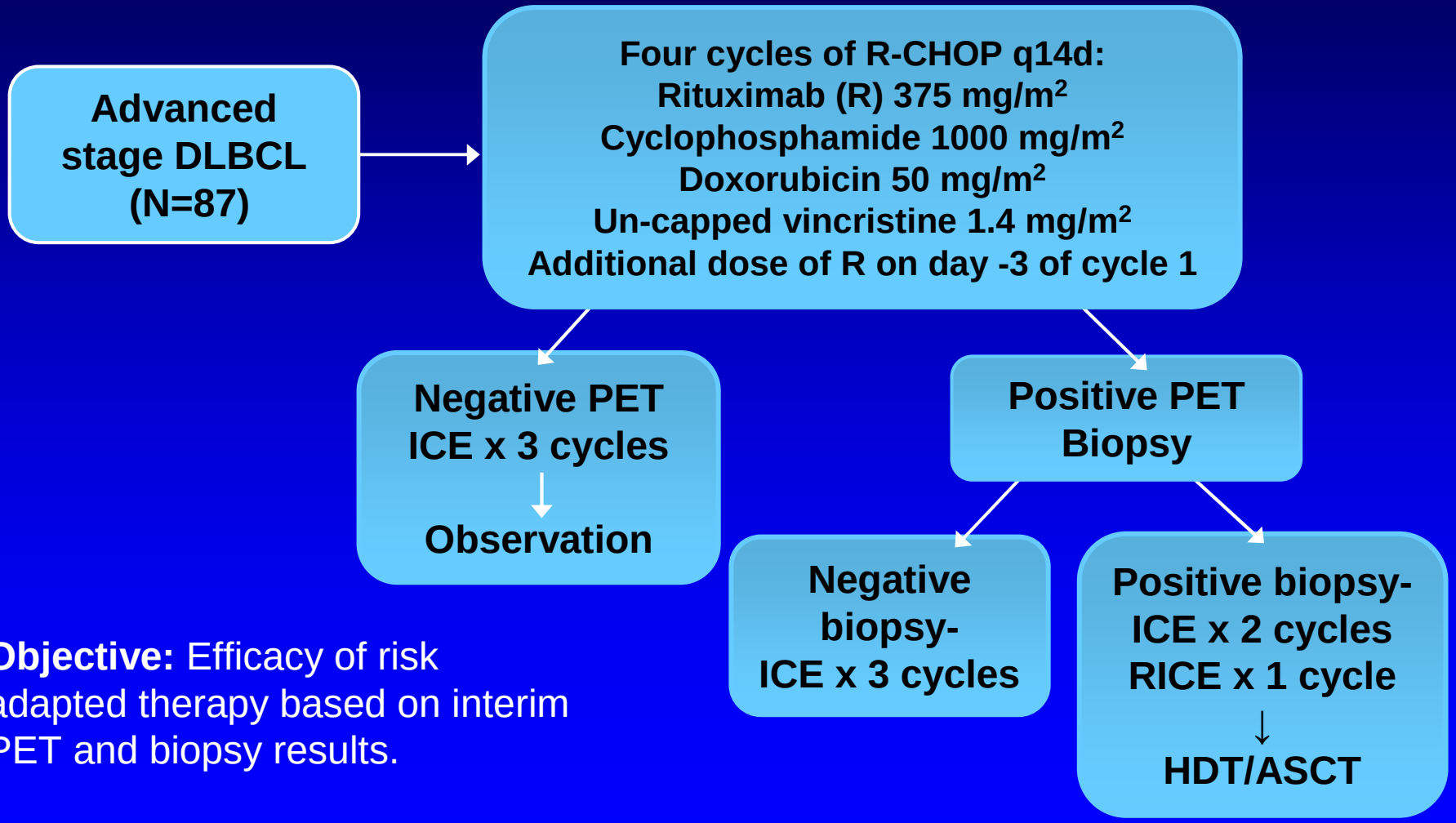
F-PET

Pregno P et al. Blood 2012;119:2066-2073

Variability in Interim Studies

- Differences in patient groups
- More standardized conduct of scans
- Differences in interpretation of scans
- Differences in treatments
- Use of rituximab

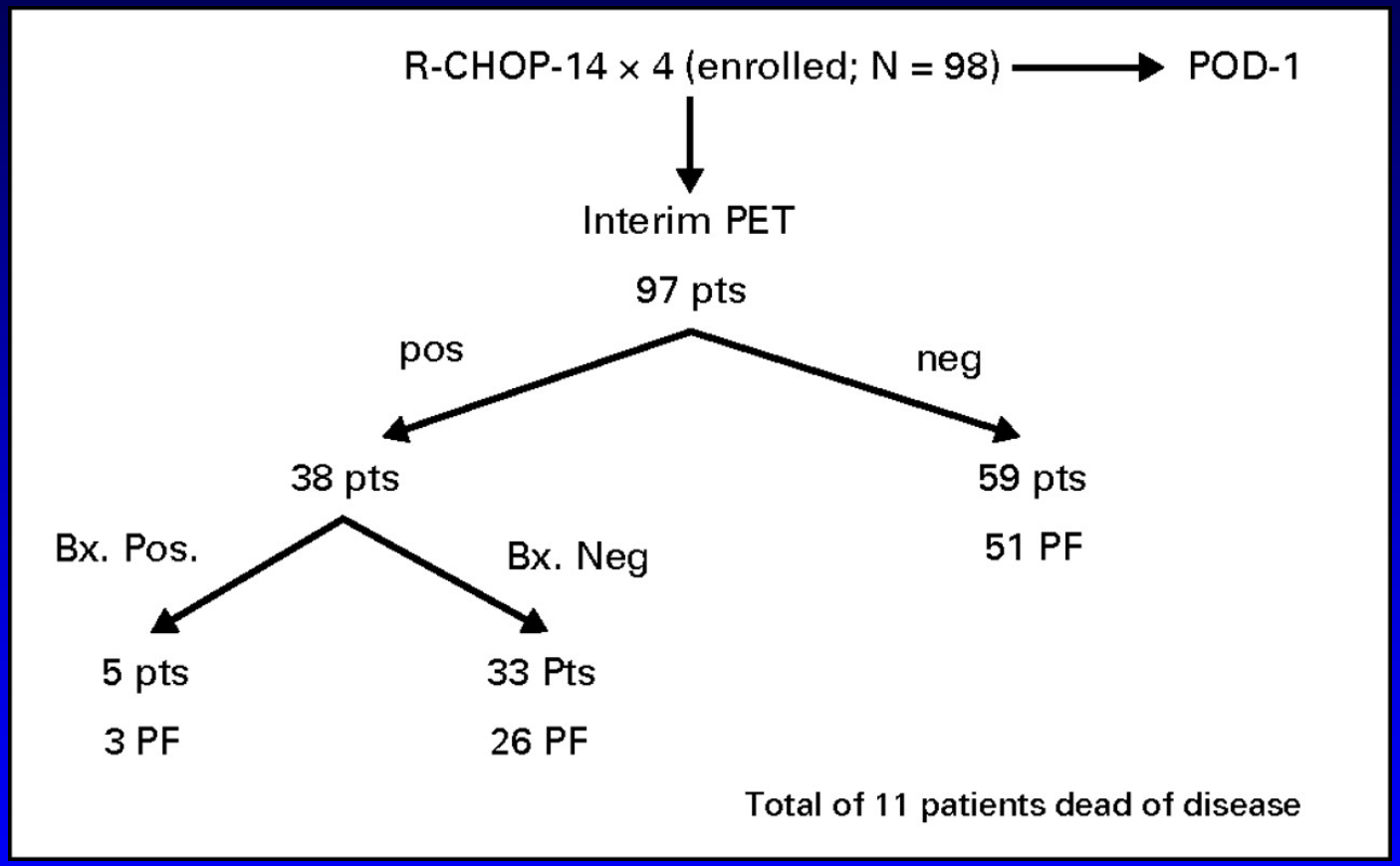
Phase II Trial of Dose-Dense R-CHOP With Risk Adapted Therapy for DLBCL



Objective: Efficacy of risk adapted therapy based on interim PET and biopsy results.

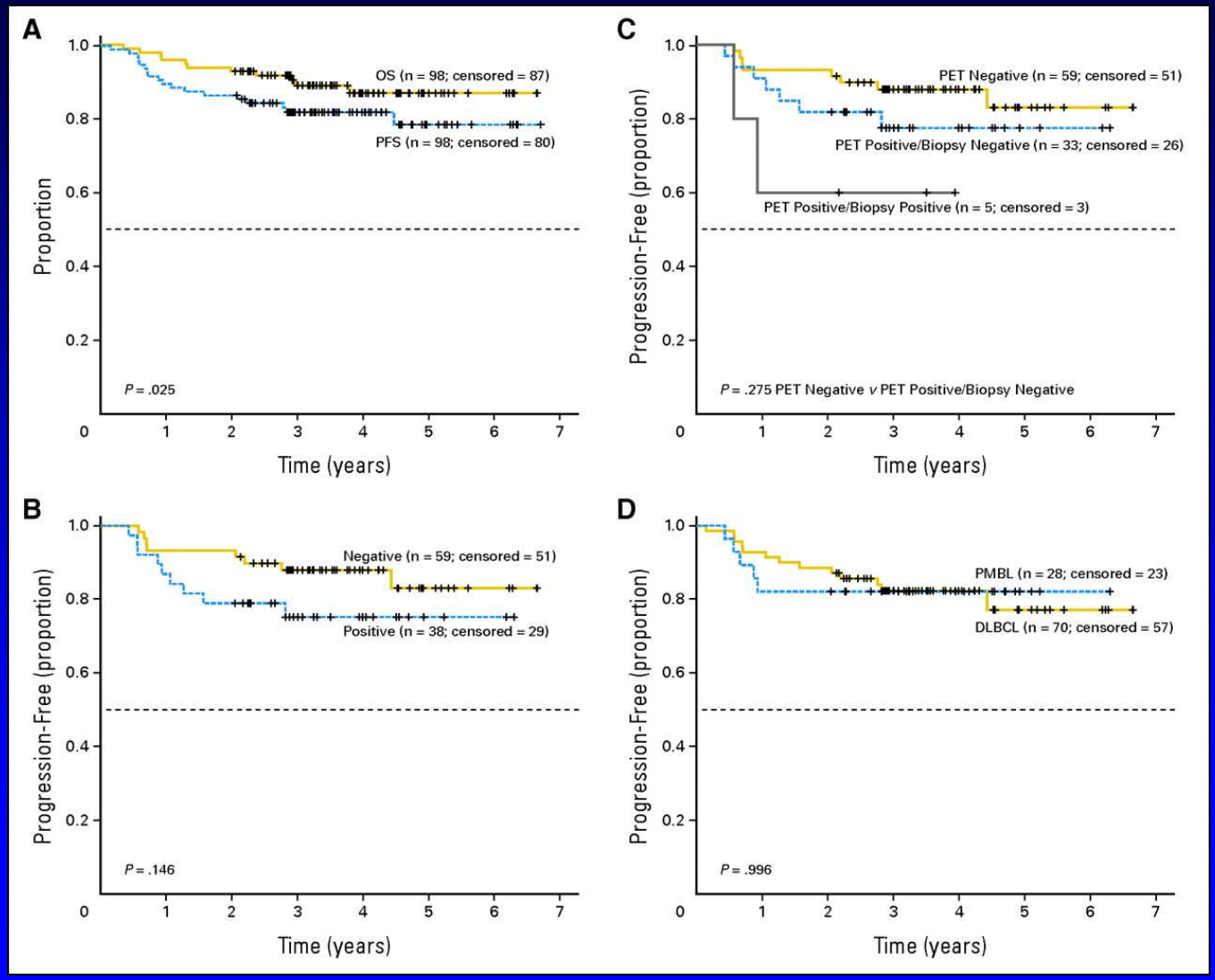
Moskowitz, C. H. et al. J Clin Oncol; 28:1896-1903 2010

Outcome based on interim evaluation



Moskowitz, C. H. et al. J Clin Oncol; 28:1896-1903 2010

Outcome estimates based on Kaplan-Meier analysis

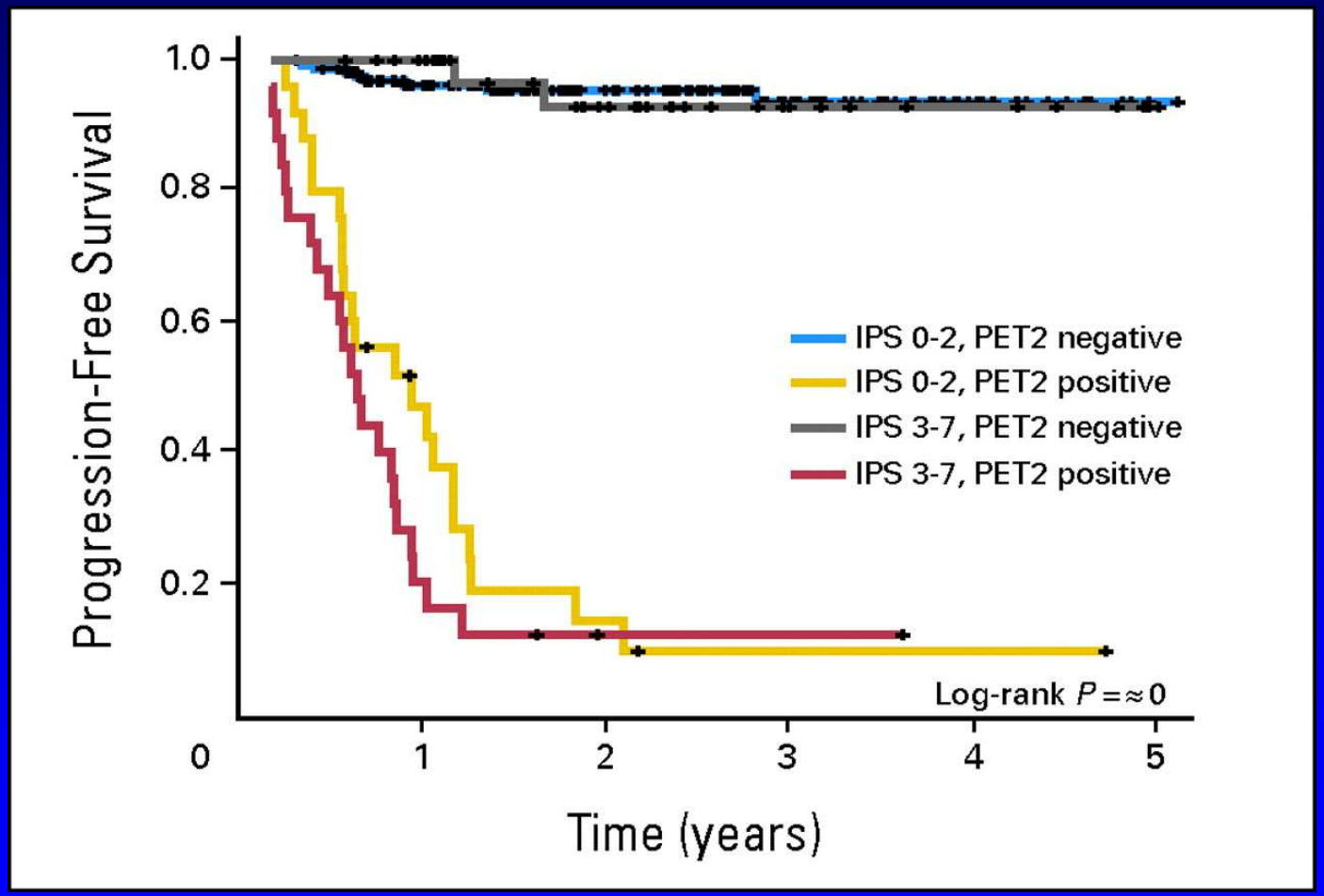


Moskowitz, C. H. et al. J Clin Oncol; 28:1896-1903 2010

Interim PET in HL

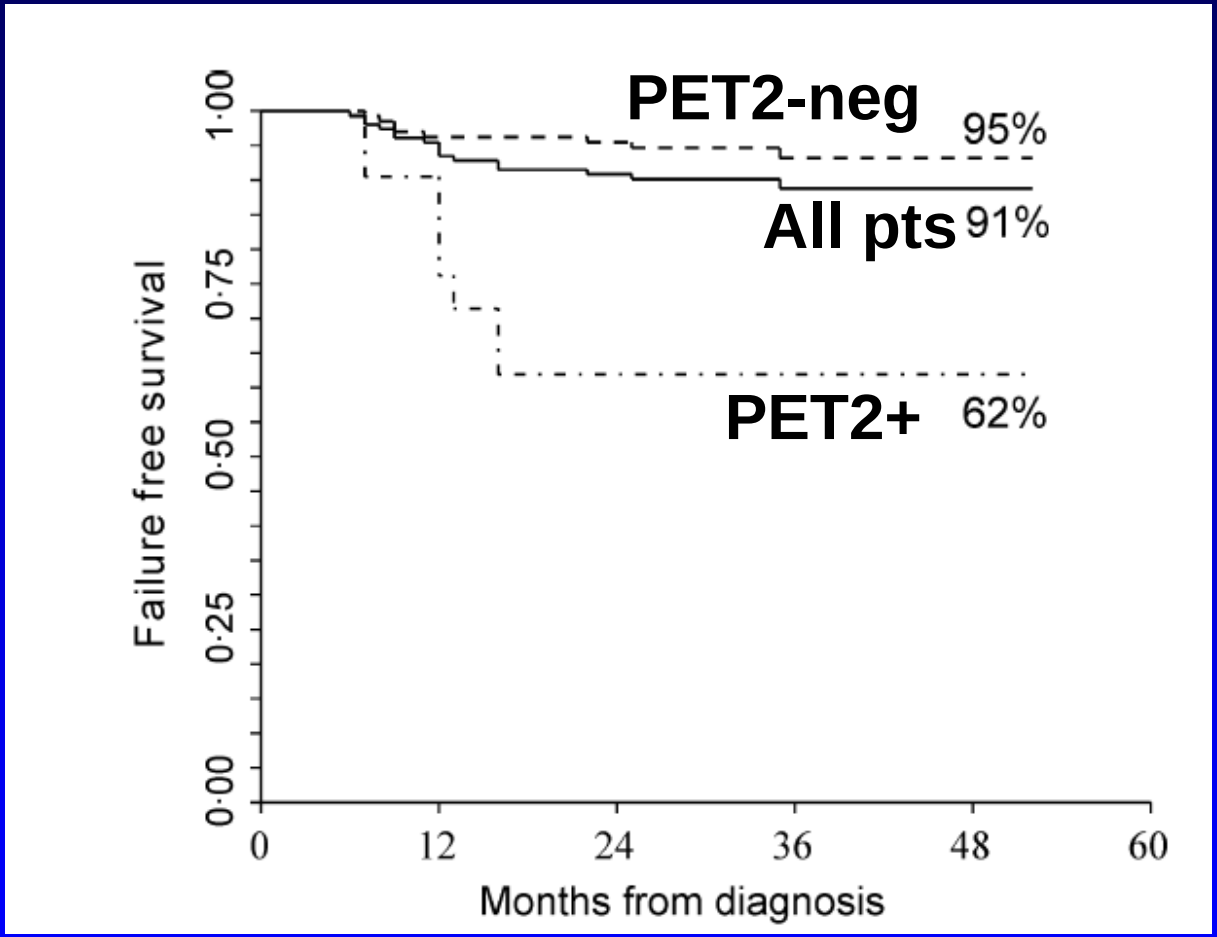
Author	Pts	Cycles of Tx	PET- (%)	PFS/EFS (%)	PET+ (%)	PFS/EFS (%)
Zinzani (‘99)	40	2	80	97	20	12
Kostakoglu (‘06)	23	1	74	100	26	12.5
Hutchings (‘05)	85	2-3	72	94	13	38
Hutchings (‘06)	77	2	79	95	21	31
Gallamini (‘07)	260	2	81	95	19	14
Markova (‘09)	50	4	72	100	28	86

Progression-free survival according to IPS group and PET results after two cycles of ABVD



Gallamini, A. et al. J Clin Oncol; 25:3746-3752 2007

BEACOPP treatment for 154 PET-2-positive advanced-stage HL patients



Gallamini A. et al, Br J Haematol, 152:551, 2011

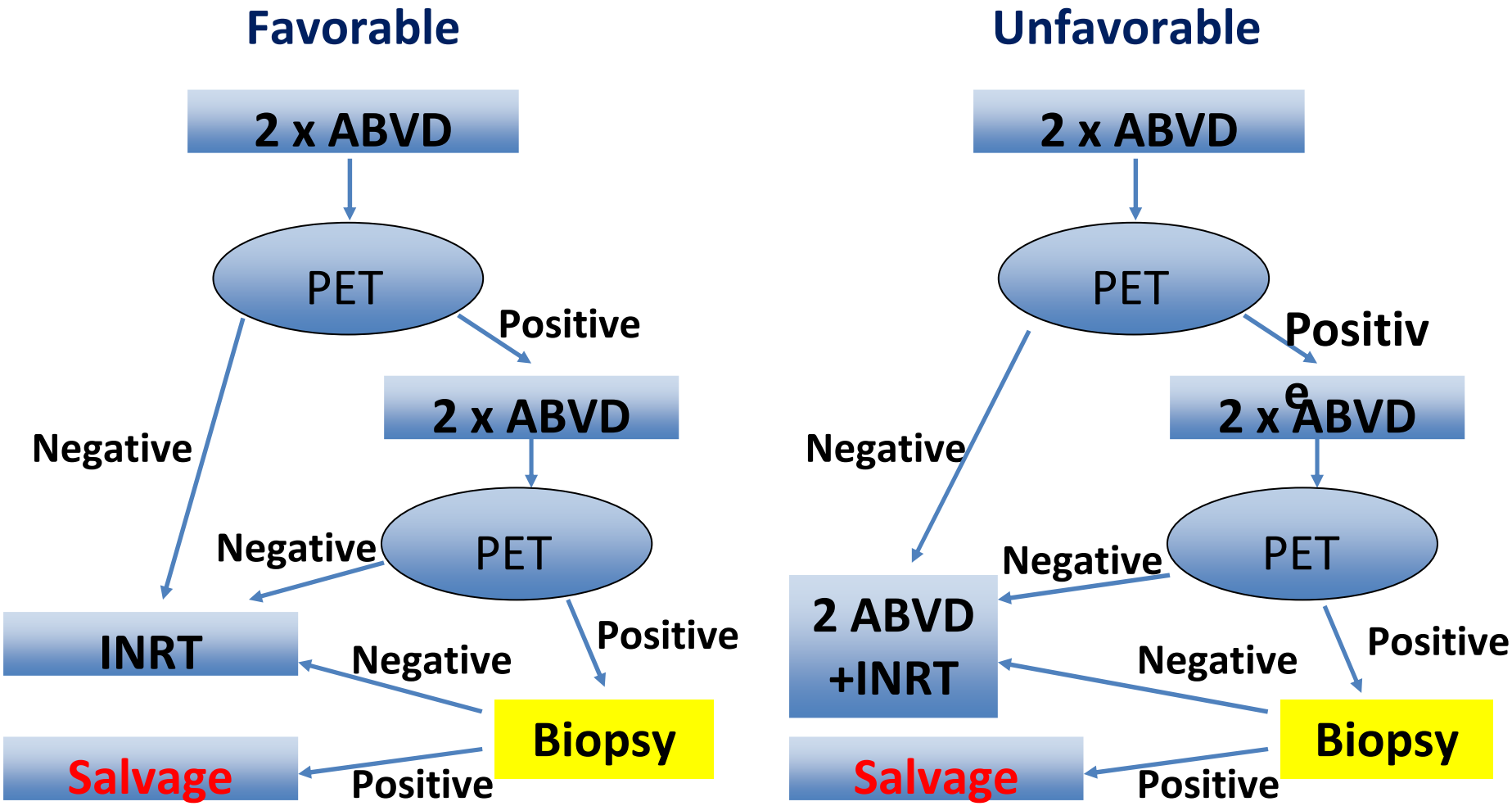
CALGB Risk-Adapted Studies in HL

Protocol Number	PI	Pt. Population
CALGB-50604	Straus	Stage I-II non-bulky
CALGB-50801	LaCasce	Stage I-II bulky
S0816	Press/Bartlett/Evens	Stage III-IV

Role of Interim PET in HL

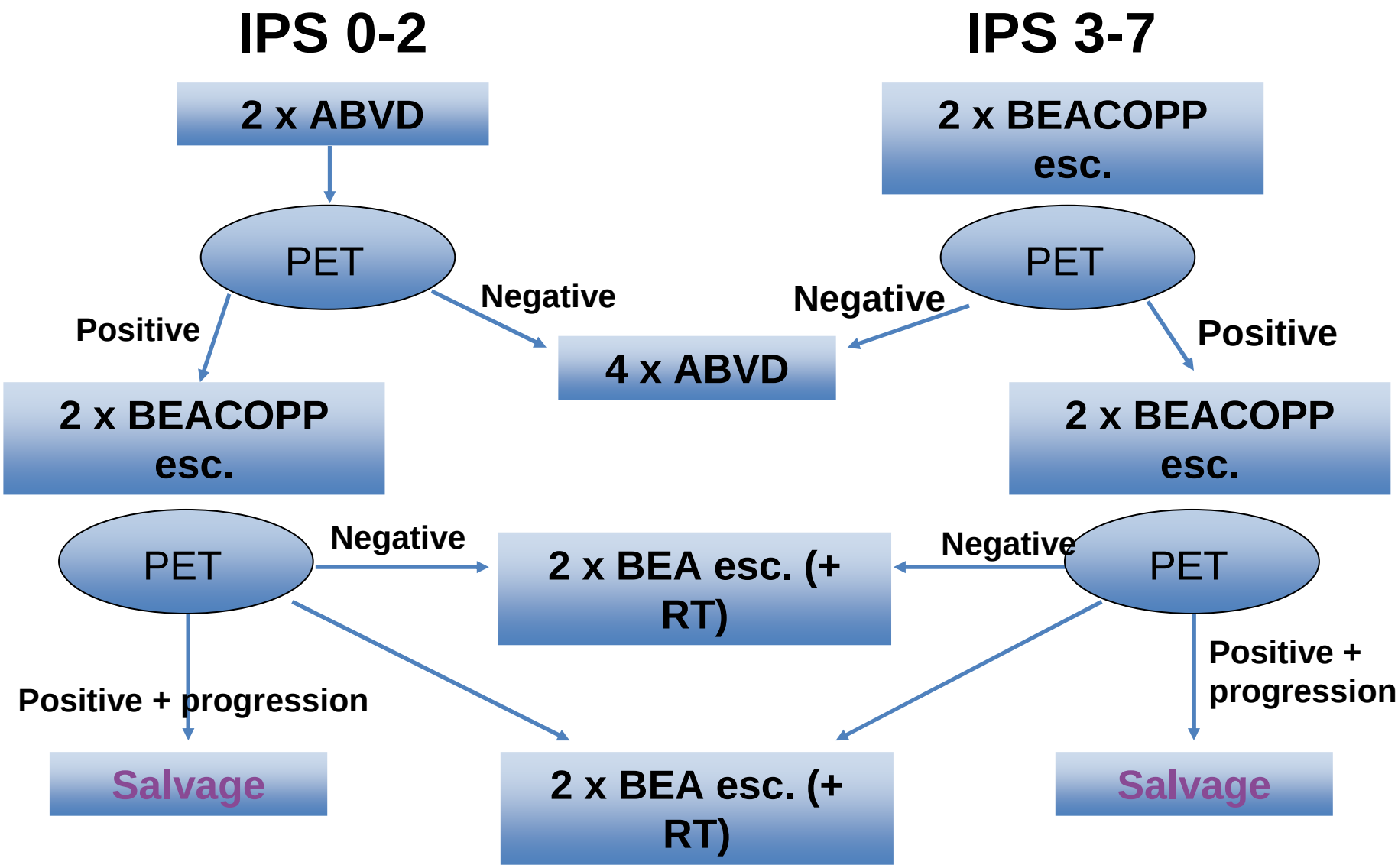
- Dann et al, abstract A4
  - 275 patients (ongoing study)
- Conclusions
  - Minimal tx for early stage
  - Decrease tx for advanced

Israel H2 trial – stages IA and IIA



Risk factors: Extra-nodal disease, MM>10cm, ESR > 50, ≥3 regions, Age > 50, LD histology

Israel H2 Trial for Advanced Hodgkin Lymphoma



Role of Interim PET in HL

- Dann et al, abstract A4
  - 275 patients (ongoing study)
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Role of Interim PET in HL

- Miltényi et al, abstract A9
  - n =108
  - Treatment not specified
  - NPV - 93.8
  - PPV - 59.2
  - Added value of LDH, age, histology (cMC)

Role of Interim PET in HL

- Angelopoulou, abstract A5
  - Predicts outcome with ASCT
  - Some positive patients still benefit
  - Time points/interpretation not clear
  - Chemosensitivity important vs PET +/-
  - Posttreatment PET a better predictor

Interim PET in MCL

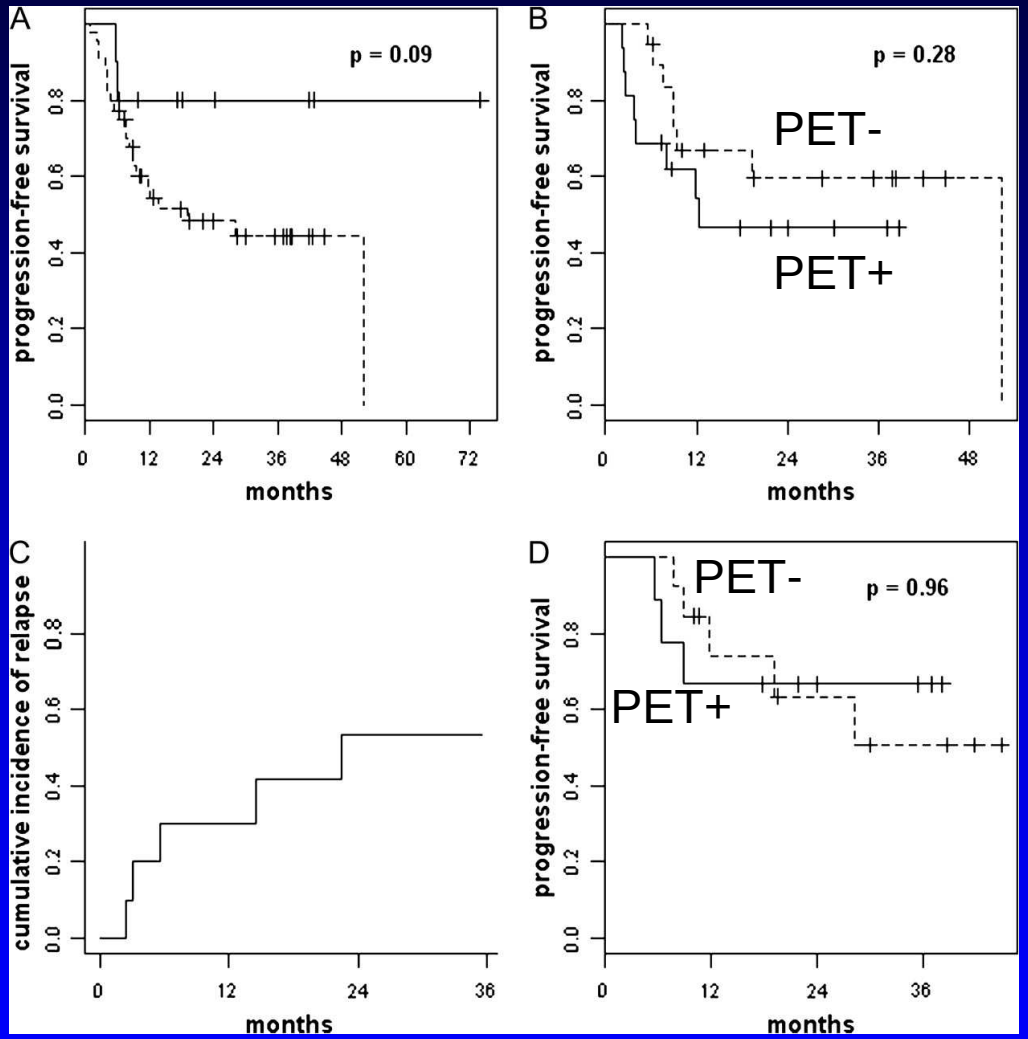
- Ribakovsky et al – abstract A16
  - Predicts neither PFS nor OS
  - ASCT may have improved outcome
- Bourre et al – abstract A17
  - 39 elderly patients
  - No intervention
  - Predicts outcome

Interim PET in NKT-cell NHL

- Khong, et al – abstract A19
  - 23 pts
  - Mid-tx PET only predictor of PFS, OS

Outcome of patients with T/NK

ALK+ vs -



Interim PET
ALK-s

PET- Post Tx

PostTx PET
ALK-s

Cahu et al, Ann Oncol, 22:705, 2011

Problems in Interpreting Data

- Small numbers of heterogeneous pts
- Was there standardization/adjudication of interpretation?
- Treatment not-specified/not standard
- What do we do with the information?
- How does it compare with post-tx PET?
- Not clear that changing therapy makes a difference?