German Hodgkin Study Group
Deutsche Hodgkin Studiengruppe

GHSG
www.ghsg.org

Aktuelle Studienergebnisse beim Hodgkin Lymphom

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University Hospital of Cologne

Aktuelle Studienergebnisse
beim Hodgkin Lymphom

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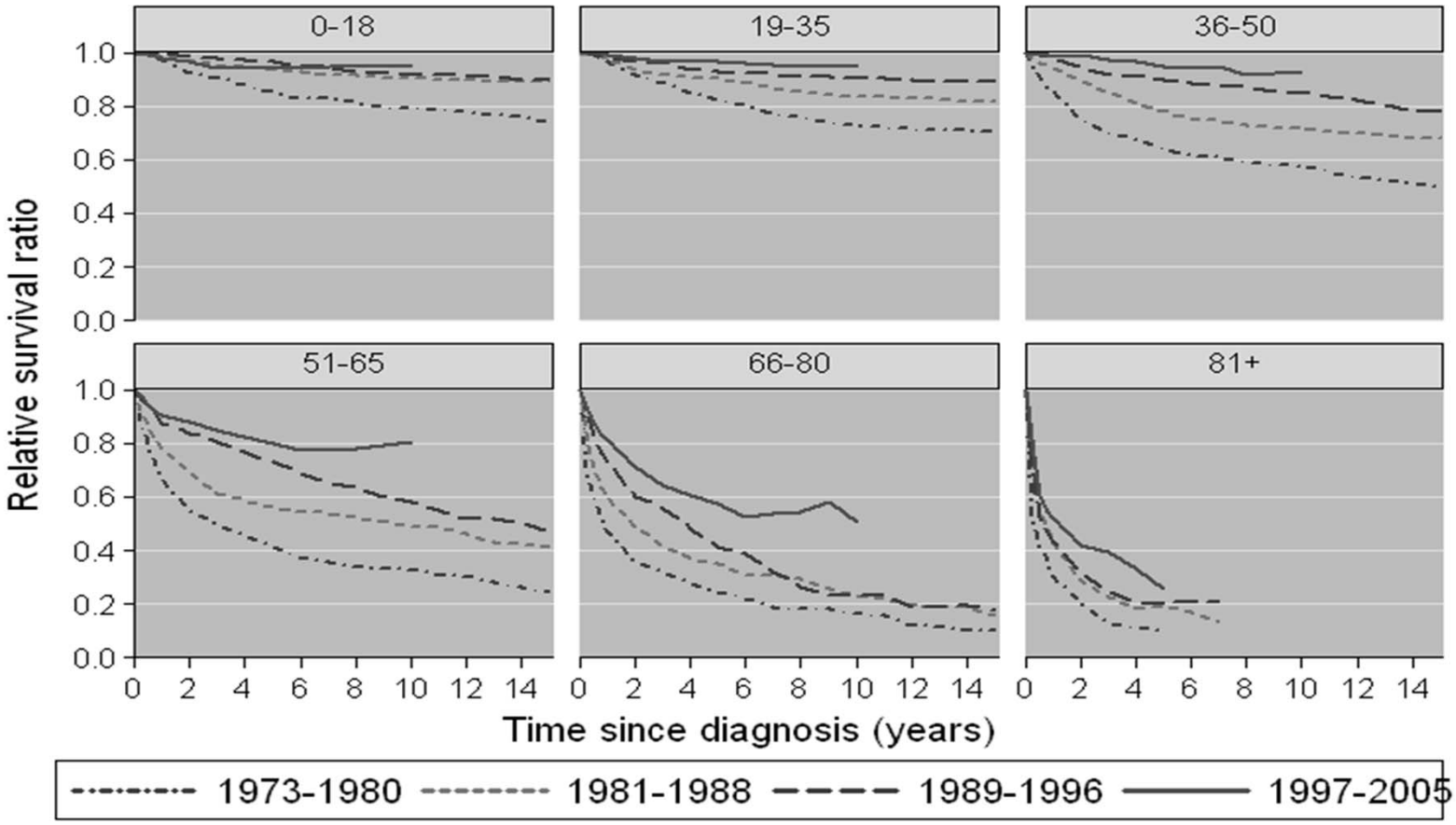
- Hintergrund
- **First-line**
- **Rezidive**
- **Zusammenfassung**

Hodgkin Lymphoma

Cumulative relativ survival of HL pts in Sweden



Courtesy of Magnus Björkholm 2010

Hodgkin Lymphoma
Late side effects after treatment

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- **2nd NPL**
  - **AML**
  - **NHL**
  - **Solid tumours**
- **Organ damage**
  - **Lung**
  - **Heart**
  - **Thyroid**
- **Others**
  - **Fertility**
  - **OPSI**
  - **Fatigue**
  - **Psycho-social**

Hodgkin Lymphoma Management
Considerations for Individual Treatment

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Highest Cure Rate with Primary Therapy

Fewest Complications for Optimal Survivorship

Survivorship starts with initial treatment selection.

Courtesy of Sandra Horning 2007

Aktuelle Studienergebnisse
beim Hodgkin Lymphom

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- **Hintergrund**
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HL risk groups (GHSG)

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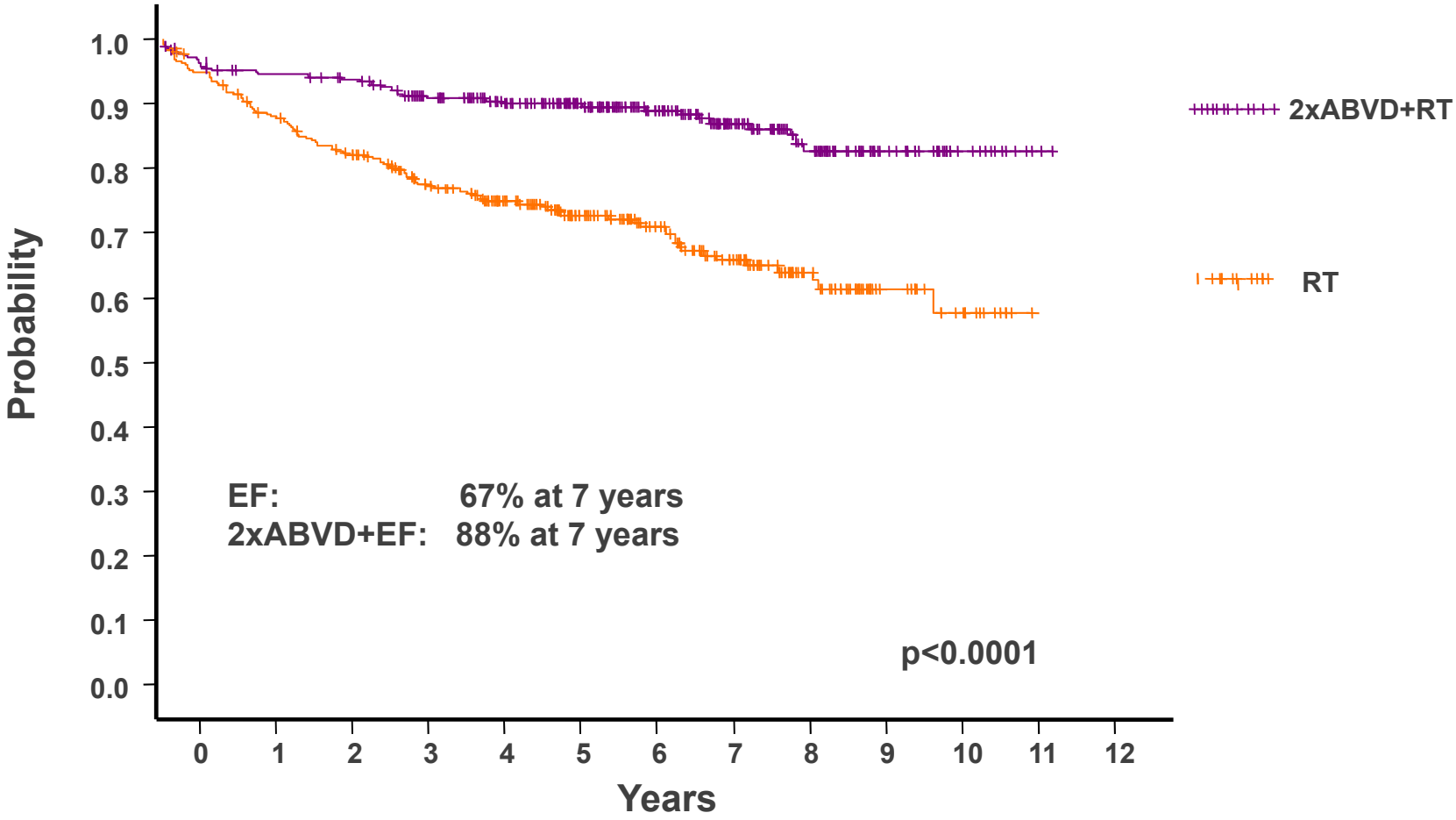
- **Early favorable stages:** **CS I/II without risk factors***
- **Early unfavorable stages:** **CS I/II with risk factors***
- **Advanced stages:** **CS III/IV; selected CS IIB**

***a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas**

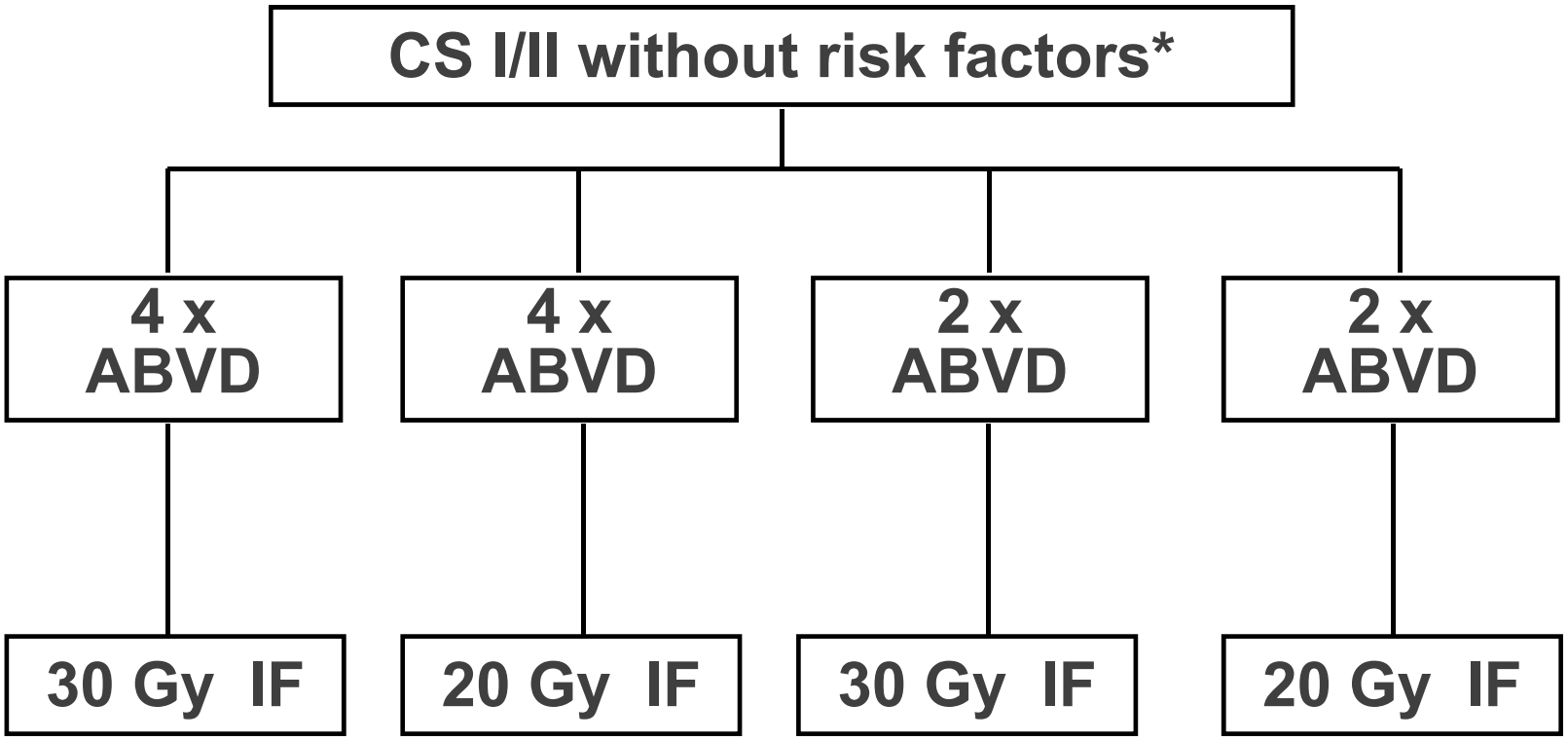
HD7 trial
For early favorable HL (FFTF)



Engert et al JCO 2007

GHSG HD10 Study

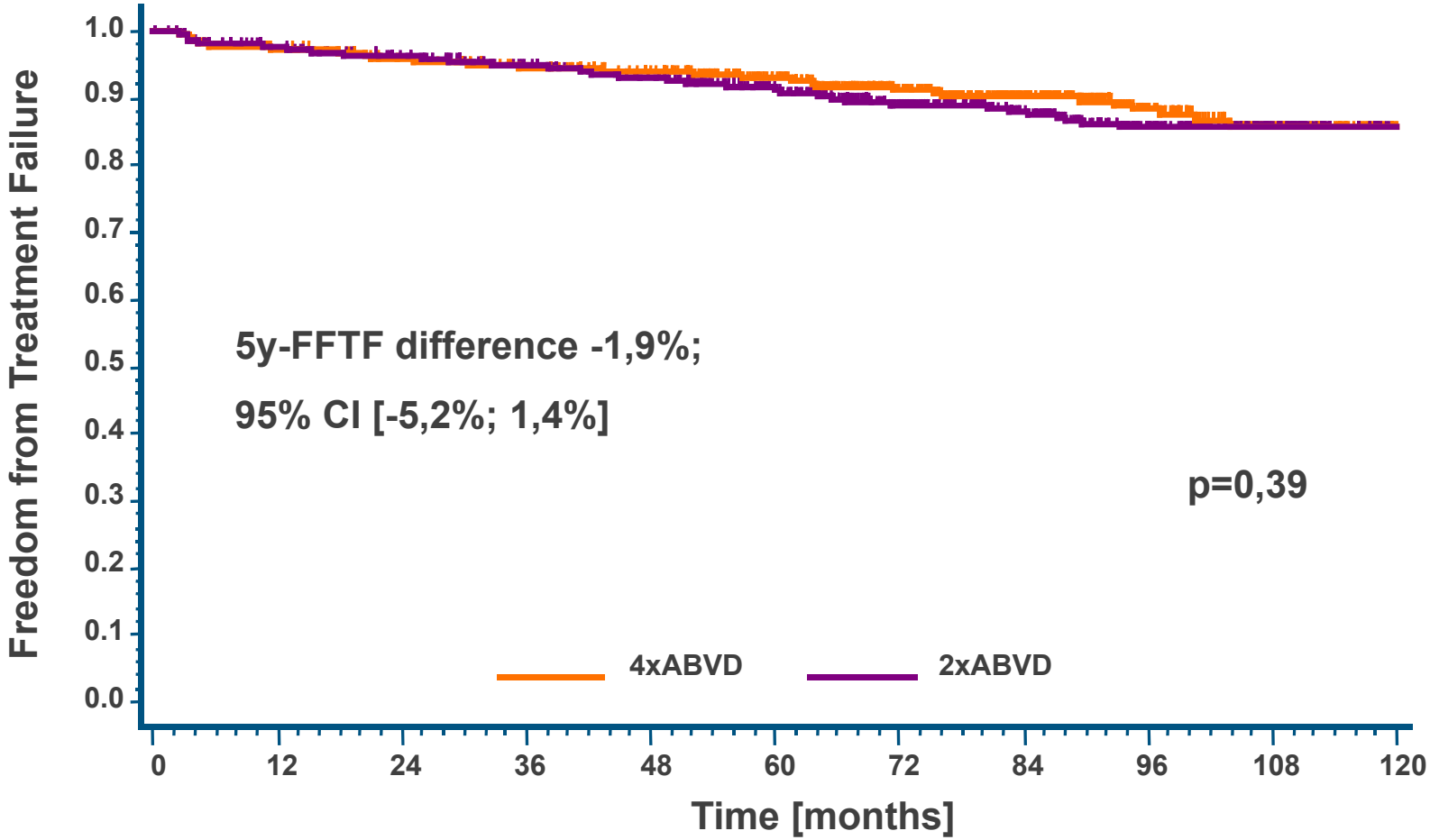
Early favorable HL



*Large mediastinal mass; extranodal disease; high ERS; 3 or more areas involved

AP9

GHSG HD10 Study
Chemotherapy (FFTF)



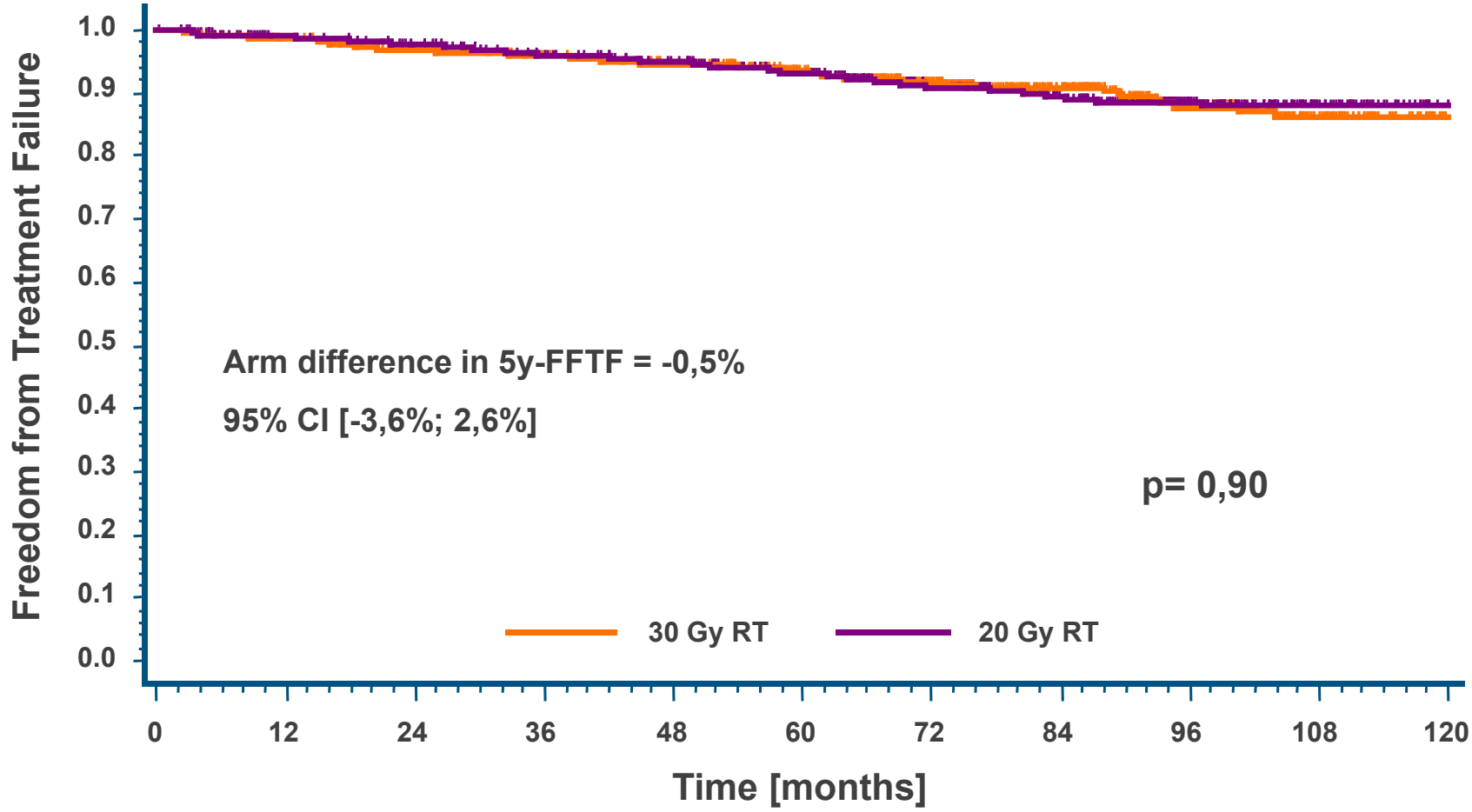
Engert et al NEJM 2010

Folie 10

AP9 "aus allgemeiner Farbpalette?" Überschrift!

zweiseitiger p-Wert ist bei Test auf Nichtunterlegenheit nicht sinnvoll! Stattdessen könnte man die HR mit Konfidenzintervall angeben.
Pluetschowa; 05.11.2009

GHSG HD10 Study
Radiotherapy (FFTF)

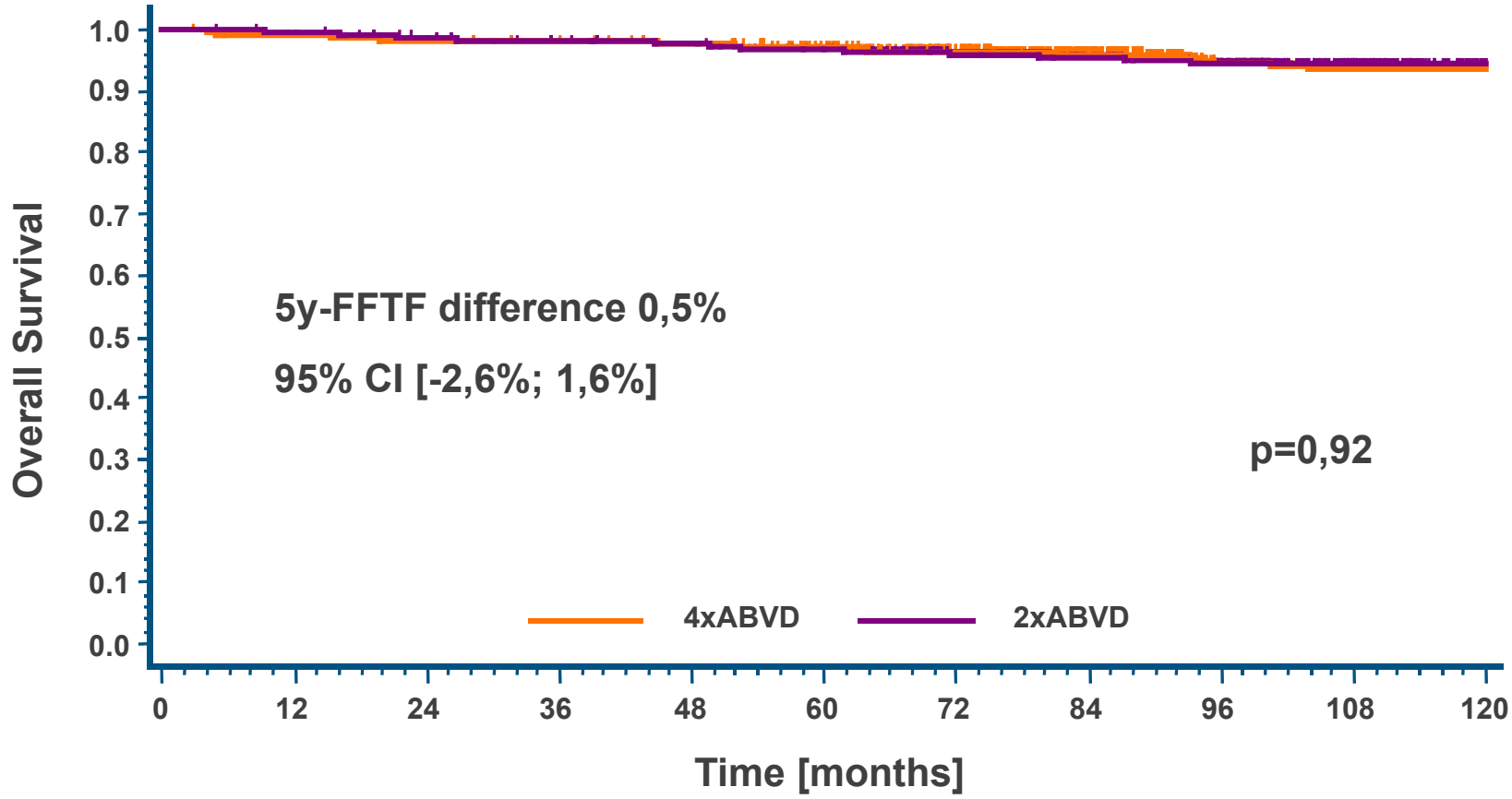


Engert et al NEJM 2010

AP7

GHSG HD10 Study

Overall Survival



Engert et al NEJM 2010

AP7 Da wir keinen Unterschiedstest gemacht haben, ist der p-Wert hier bedeutungslos.

Pluetschowa; 05.11.2009

HL: Individualized Estimates
of 2NPL Risks after Contemporary RT

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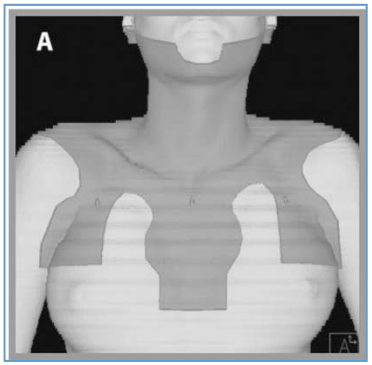
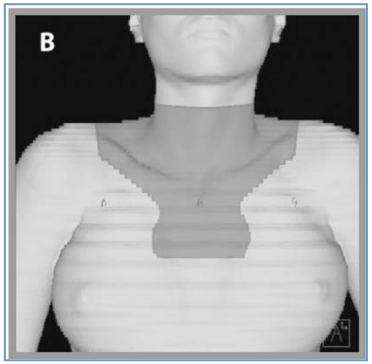
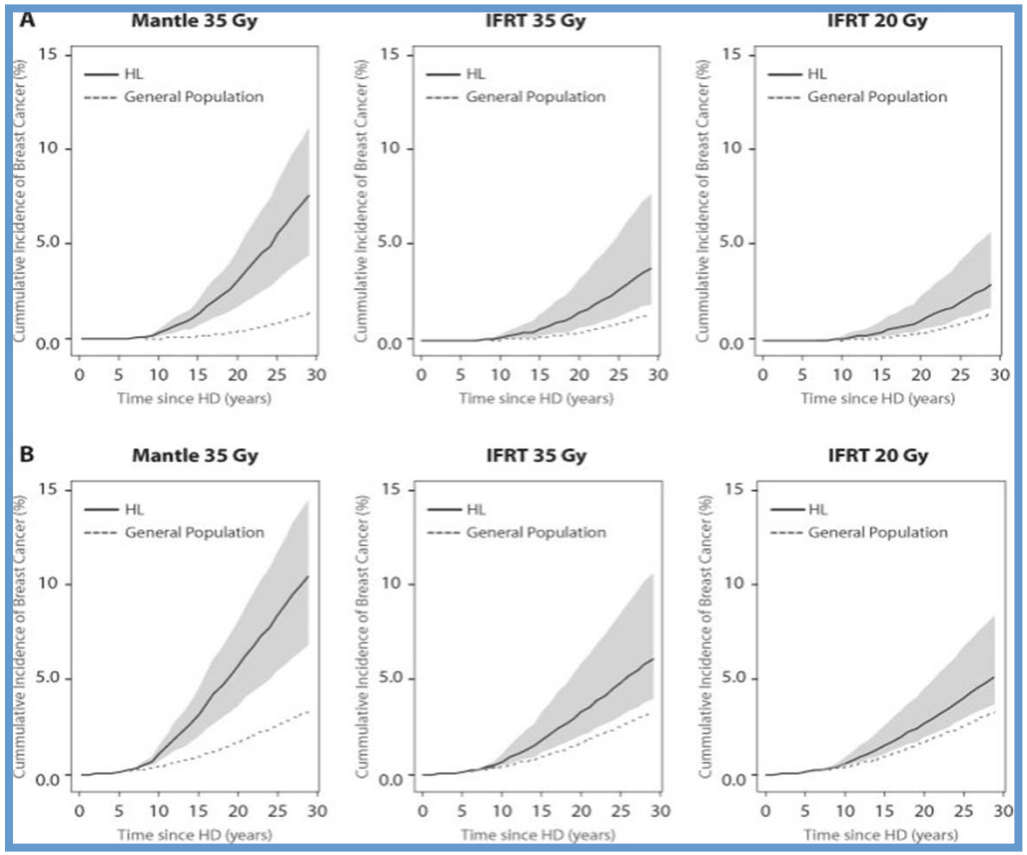
Breast Cancer Reduced 77%
Lung Cancer Reduced 57%w



Age 20



Age 30



Hodgson et al Cancer 2007

HD13 Study
Early favorable HL

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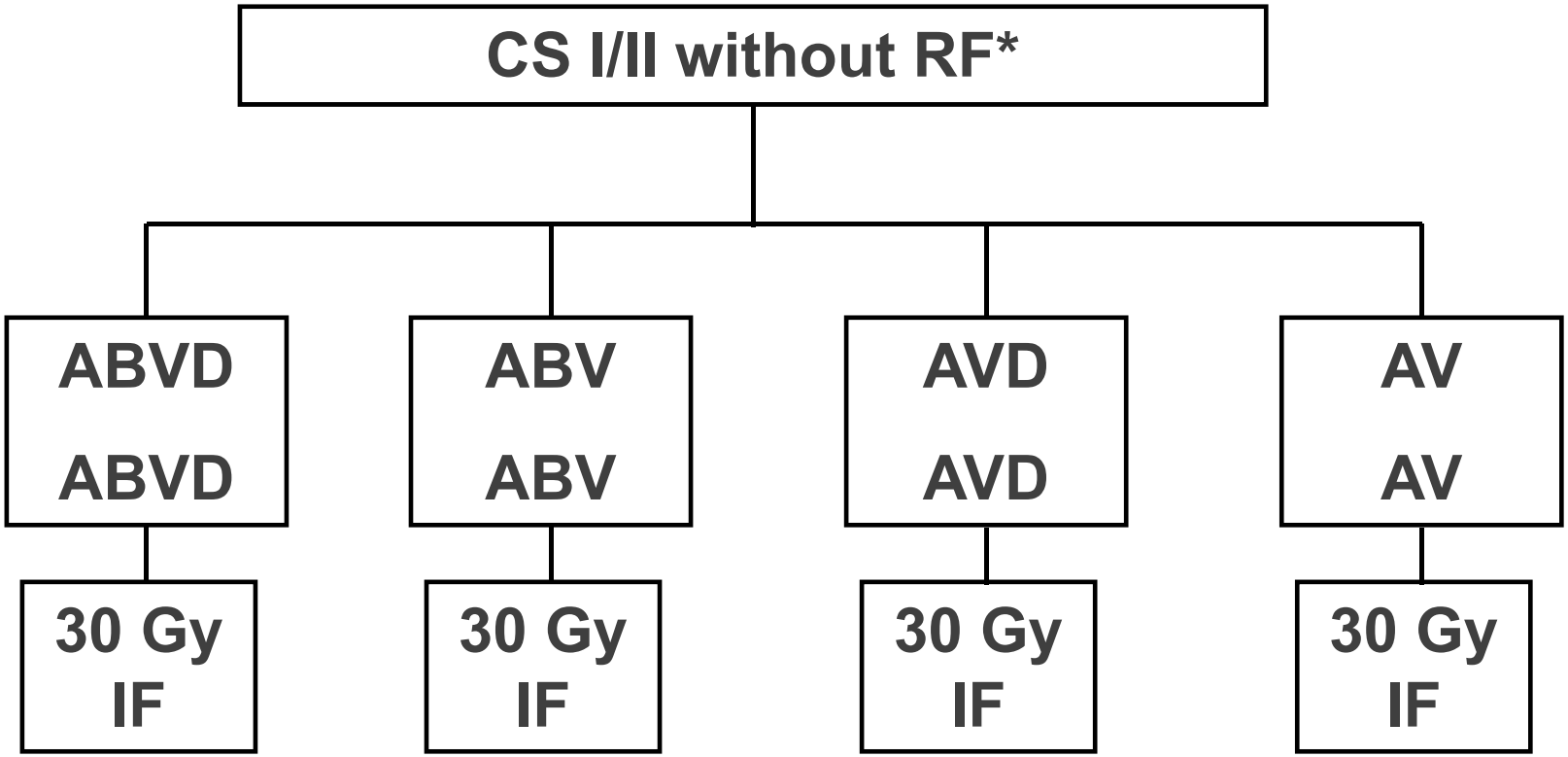
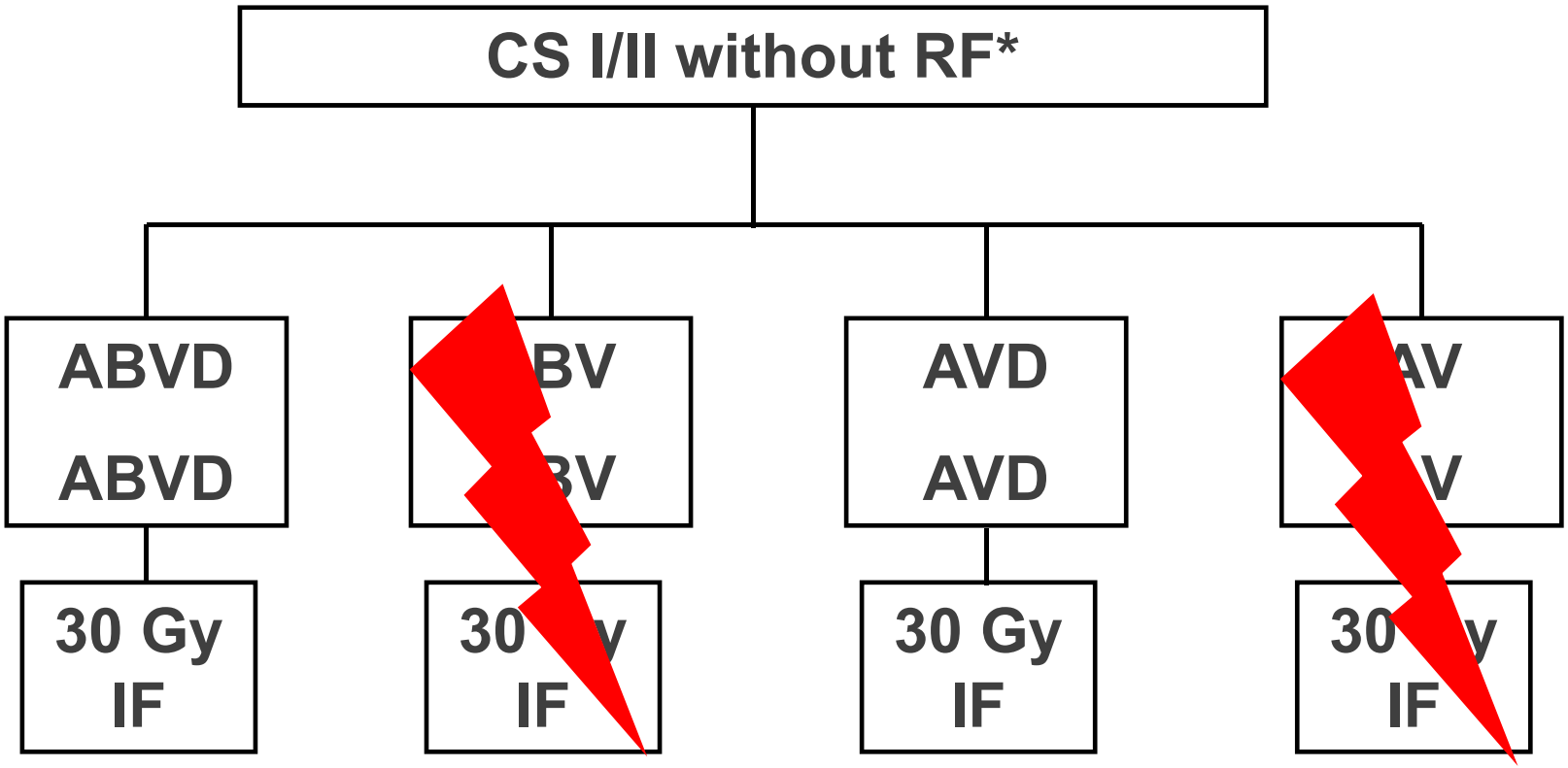


*Large mediastinal mass; extranodal disease; high ERS; 3 or more areas involved

HD13 Study
Early favorable HL



*Large mediastinal mass; extranodal disease; high ERS; 3 or more areas involved

PET used for early
prognostic assessment in HL

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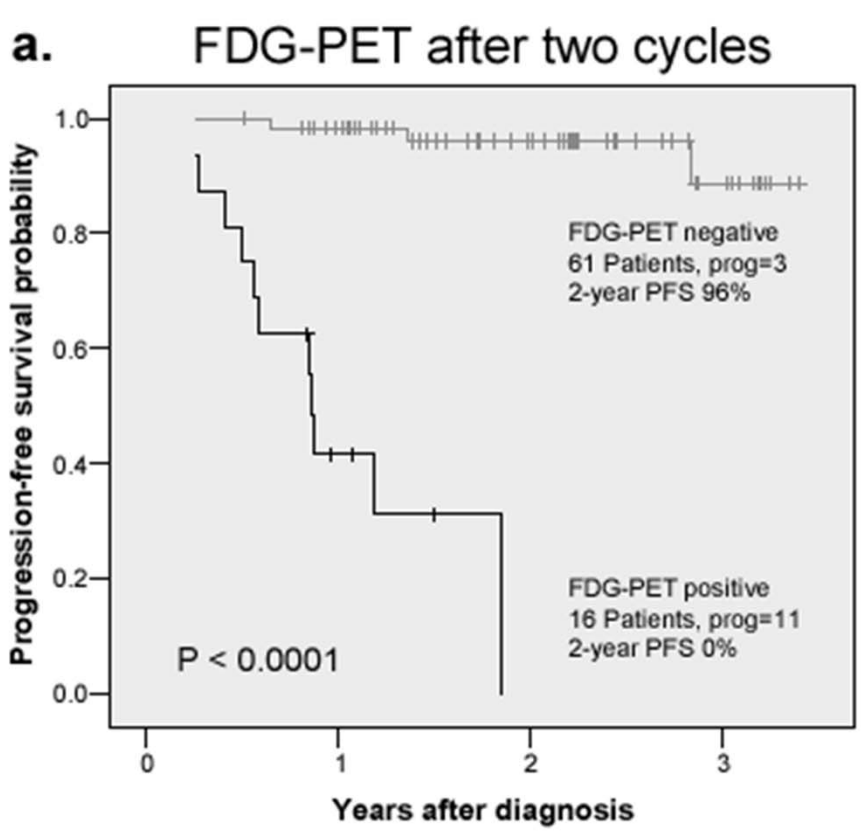

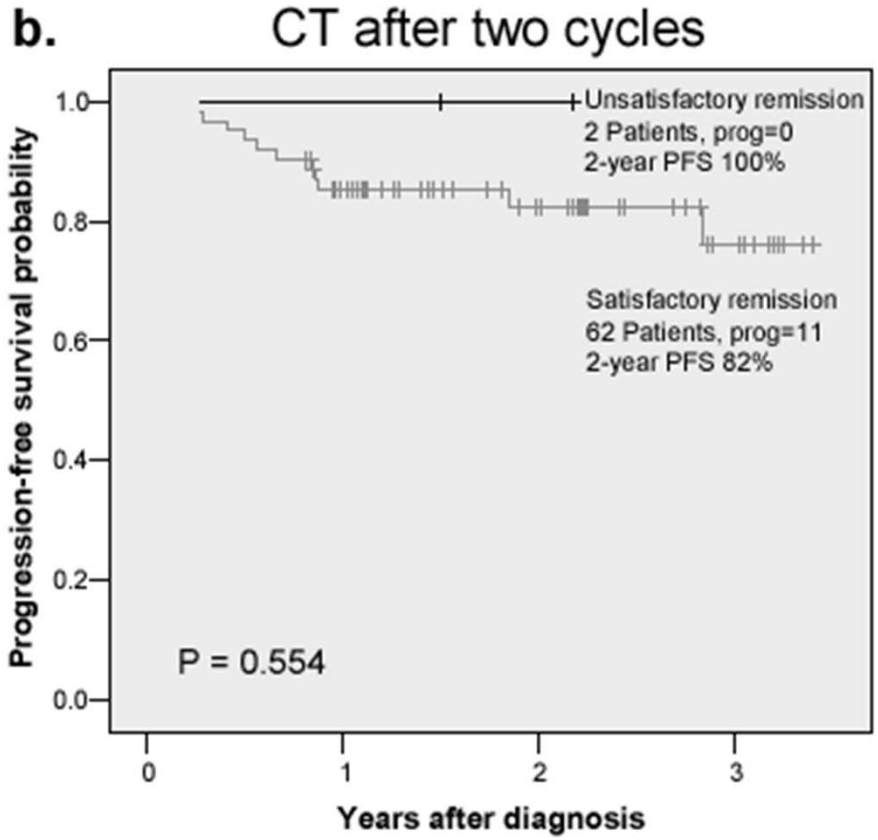

Hutchings et al Blood 2005

Ongoing GHSG trial (HD16)
for early favorable HL

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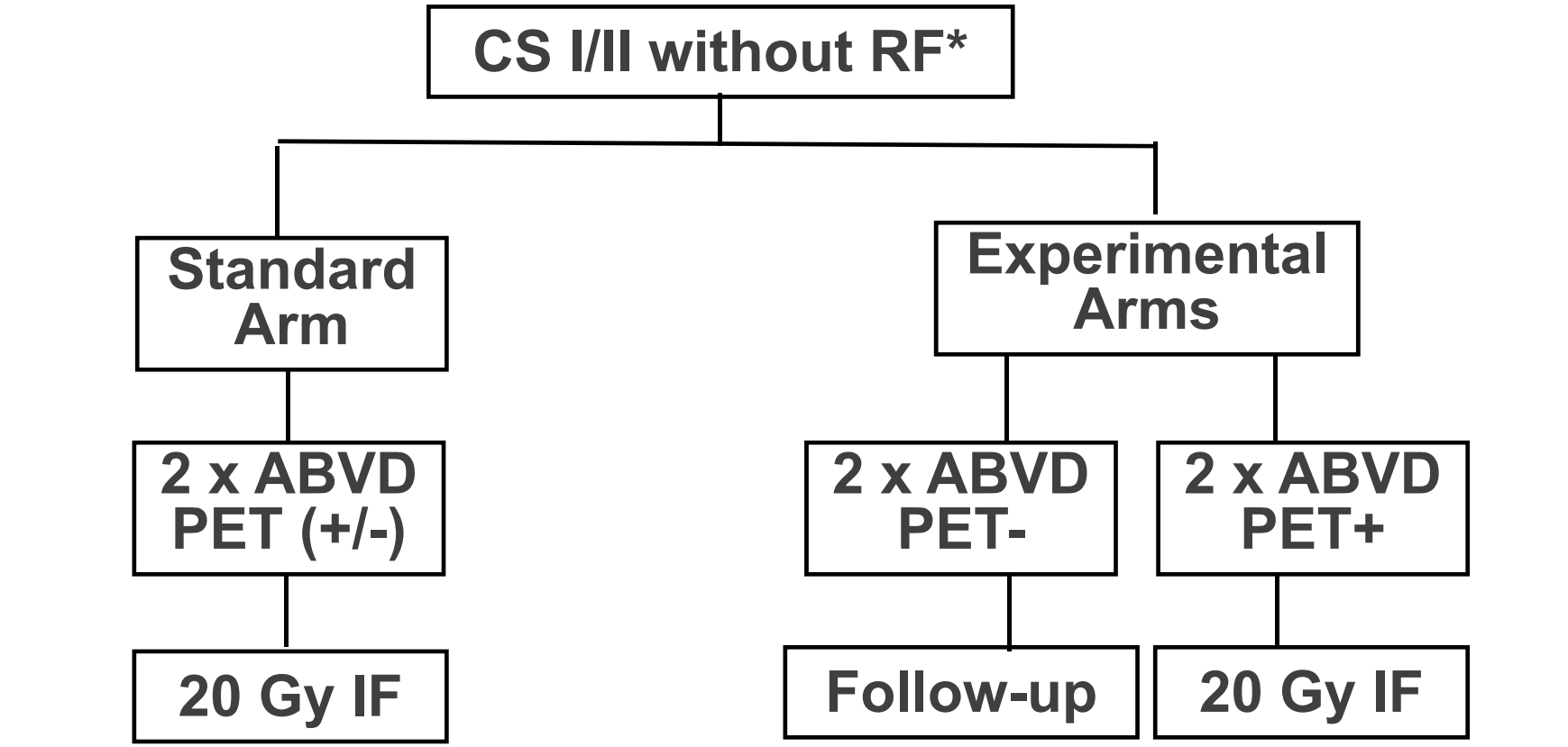

*a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas

HL risk groups (GHSG)

- **Early favorable stages:** **CS I/II without risk factors***
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***a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas**

HD8 Study
for early unfavorable HL (FFTF)

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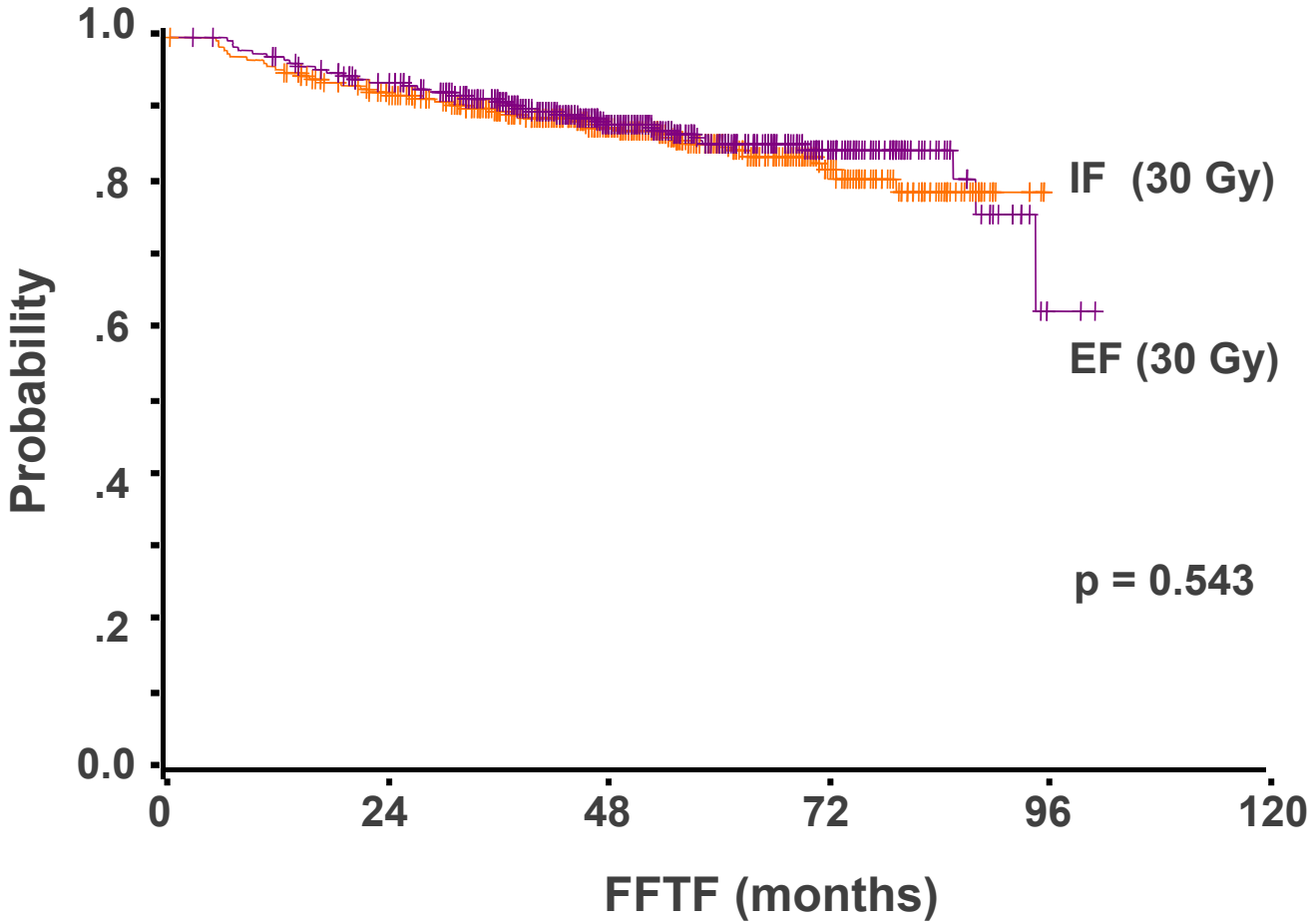

FFTF @ 5years

EF-RT: 85.0%

IF-RT: 85.9%

Engert et al JCO 2003

HD11 trial
for early unfavorable HL

GHSG
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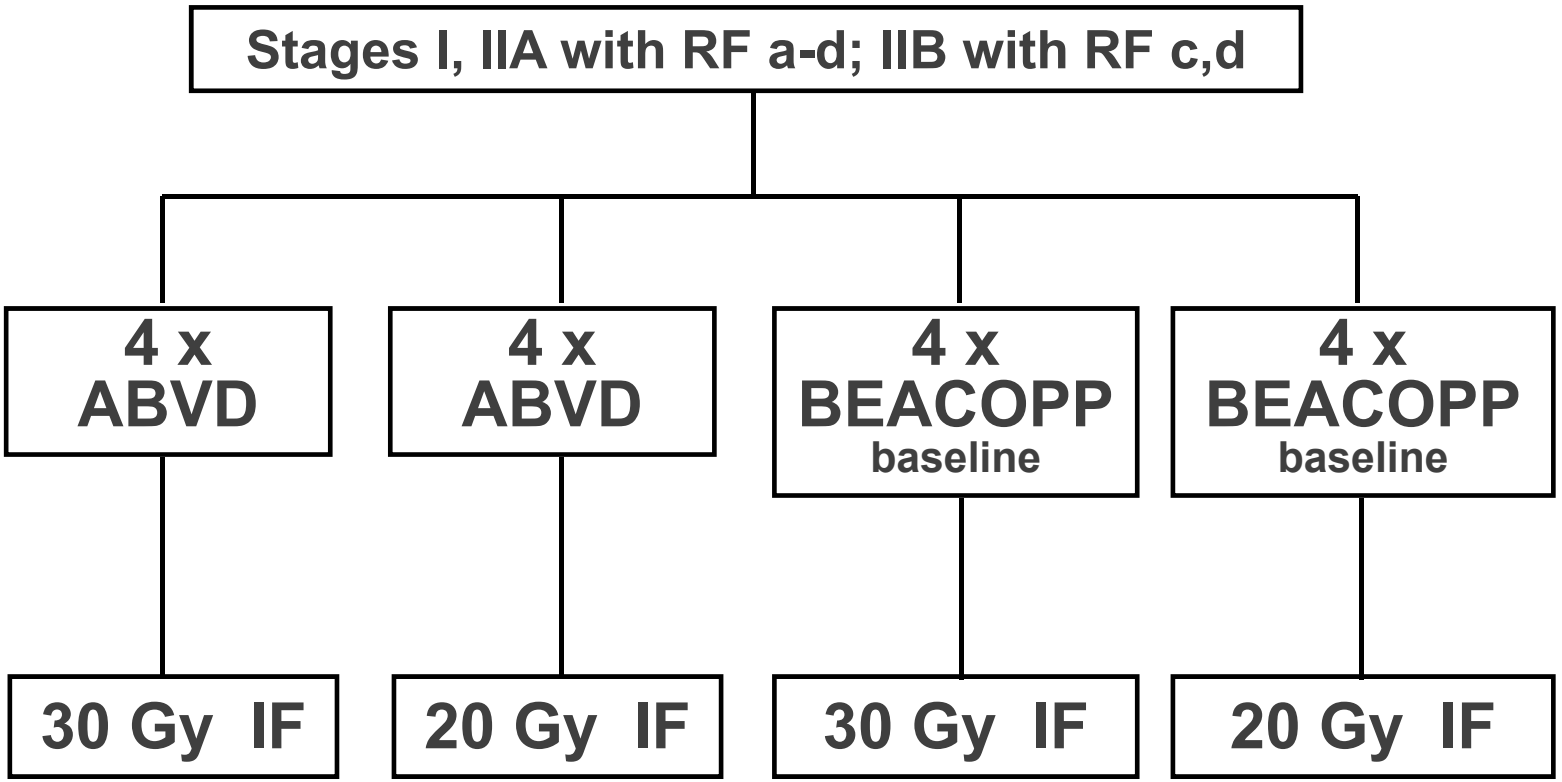
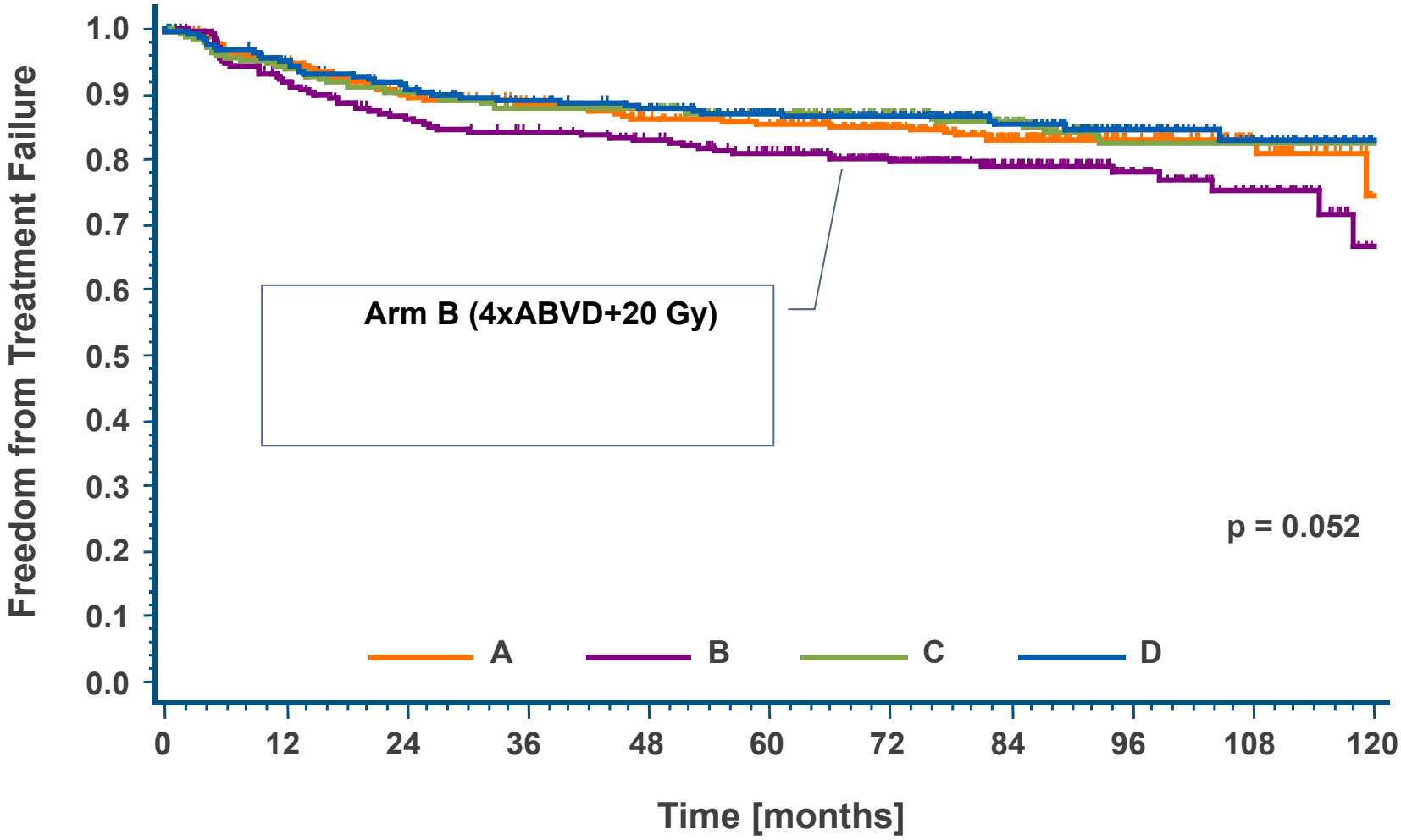


*a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas

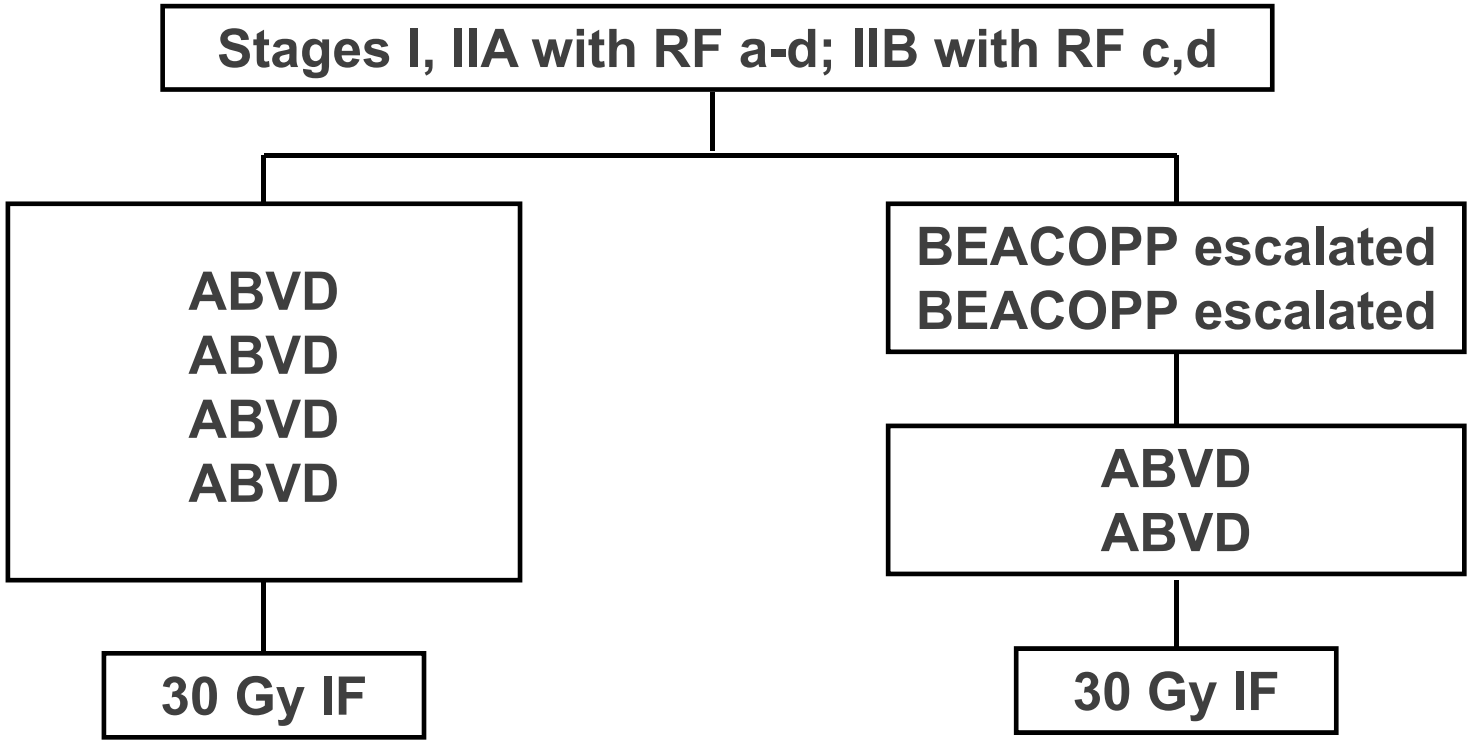
HD11 trial
FFTF – all 4 arms



Eich et al JCO 2010

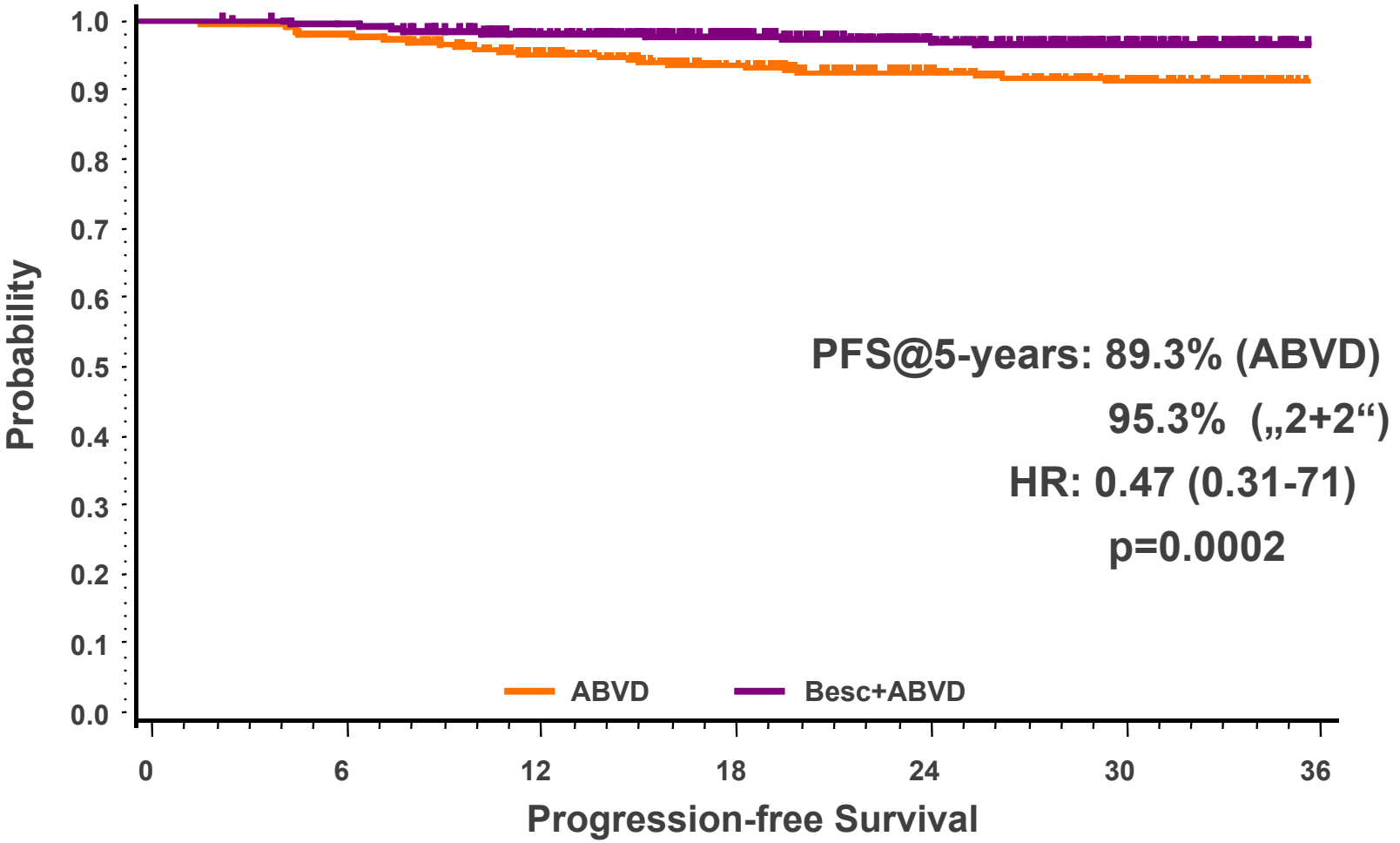
HD14 study (GHSG)
for early unfavorable HL

GHSG
www.ghsg.org



*a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas

HD14 study
for early unfavorable HL (PFS)



HD14 for early unfavorable HL
Mortality

	4xABVD	2+2
	n=495	n=479
Tox during 1st-line	-	2
Tox during salvage	5	-
HL	2	1
SN	3	-
Other	1	2
Total	11 (2.2%)	5 (1.0%)

HL risk groups (GHSG)

- **Early favorable stages:** **CS I/II without risk factors***
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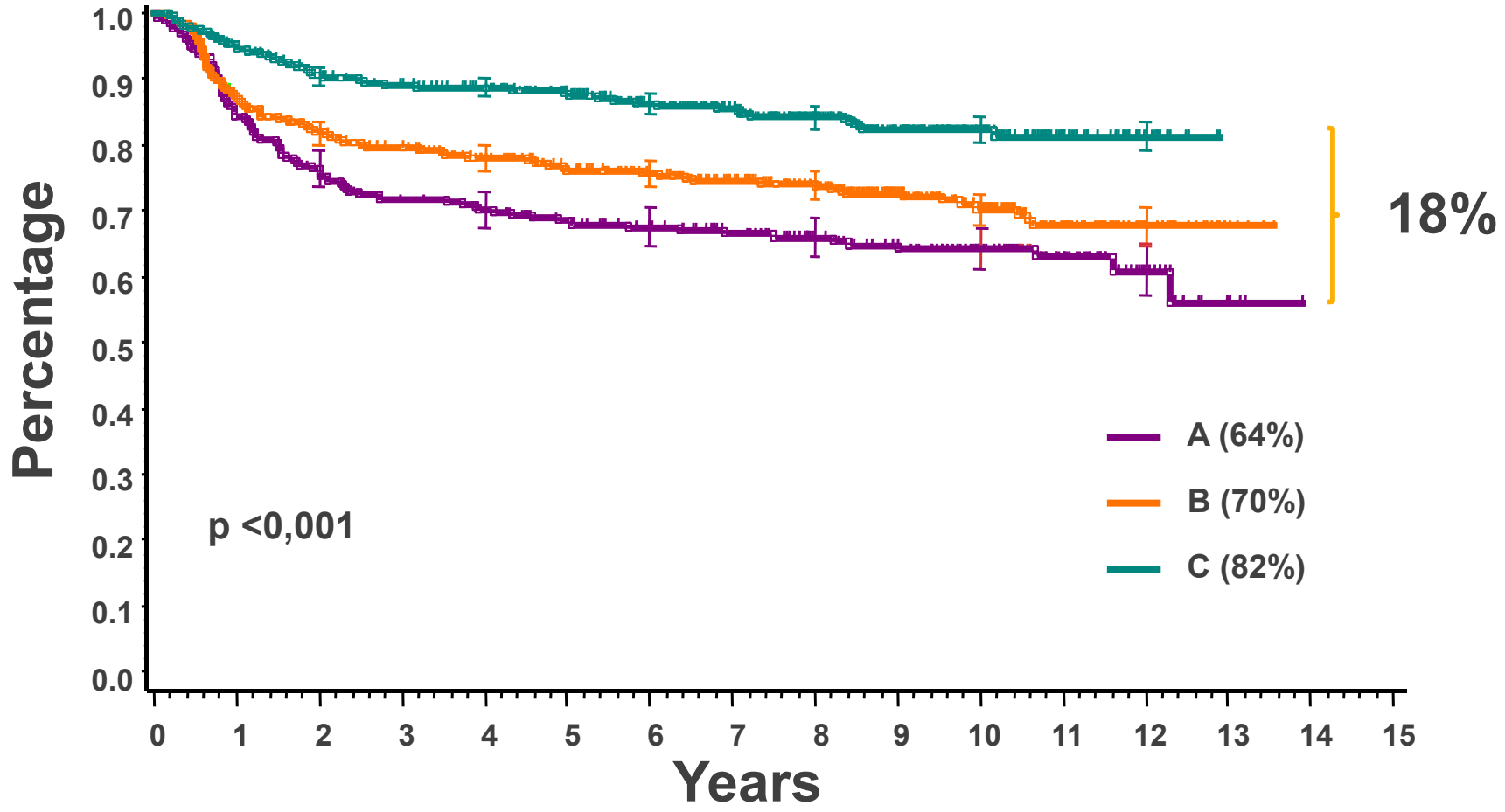
***a) large mediastinal mass; b) extranodal disease; c) high ERS; d) 3 or more areas**

GHSG HD9 trial

FFTF by treatment arm



Engert et al; JCO 2009

GHSG study for advanced-stage HL (HD15)

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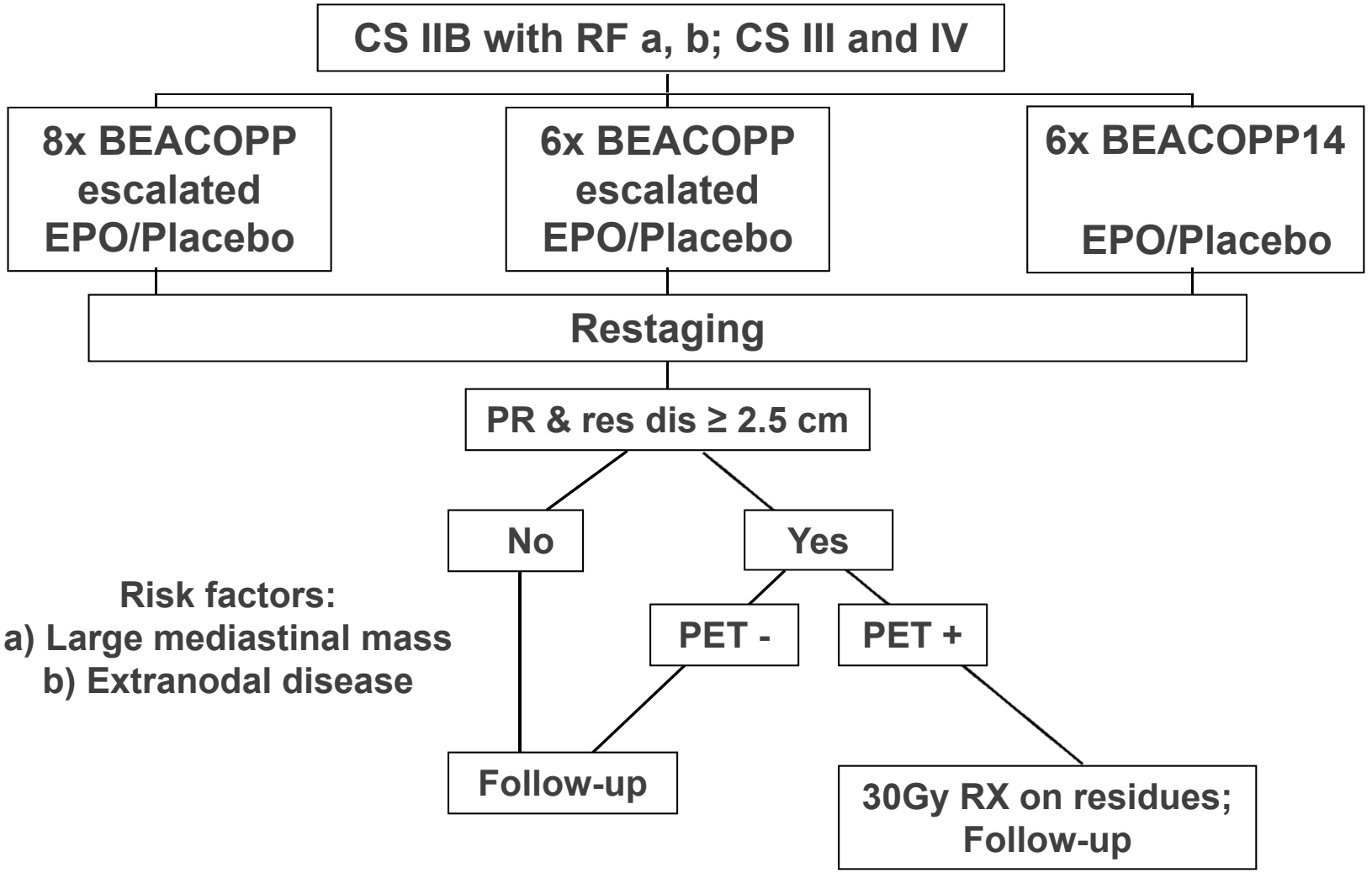

HD15-PET trial
TTP in pts with PET^{+} and PET^{-} residues (n=728)

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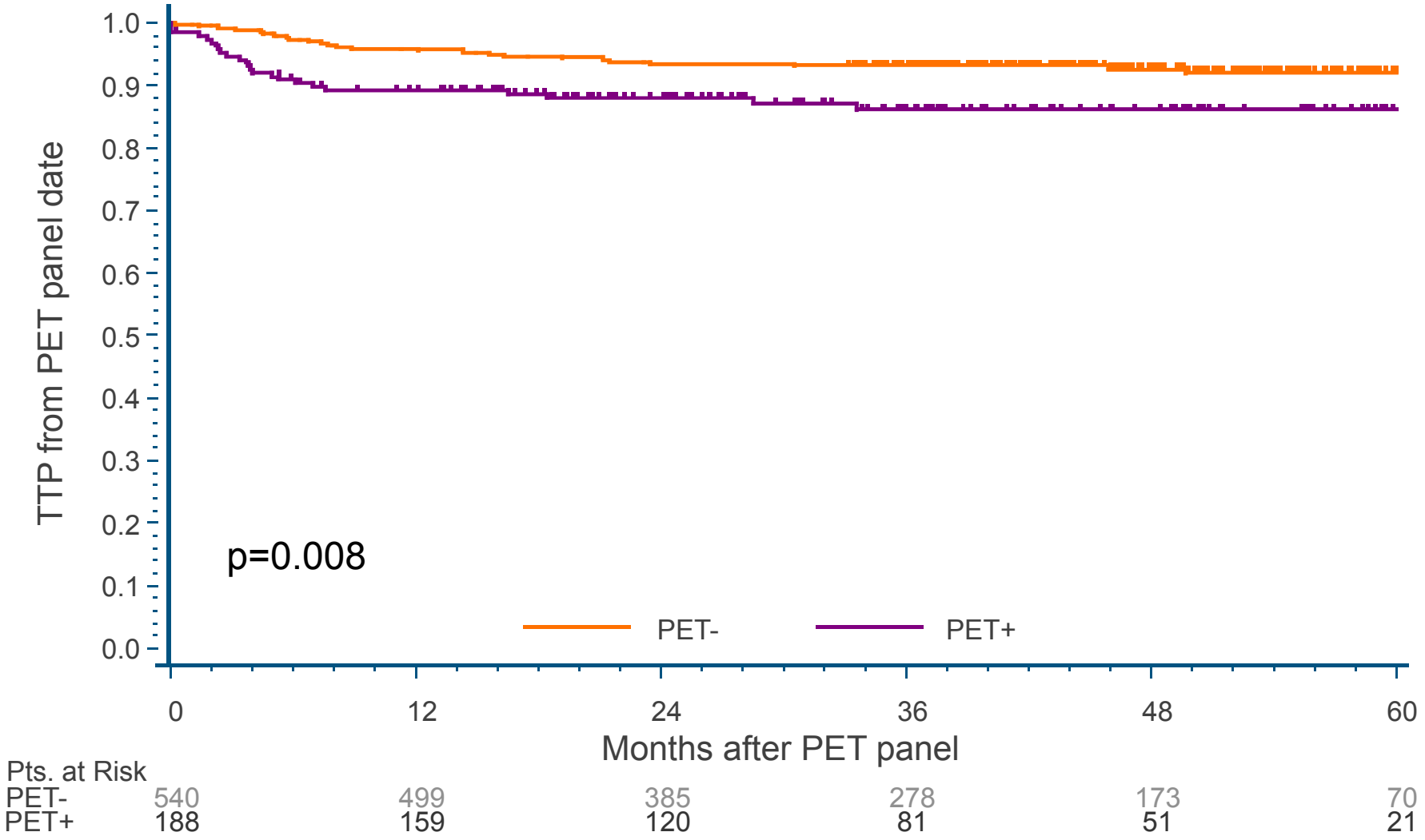
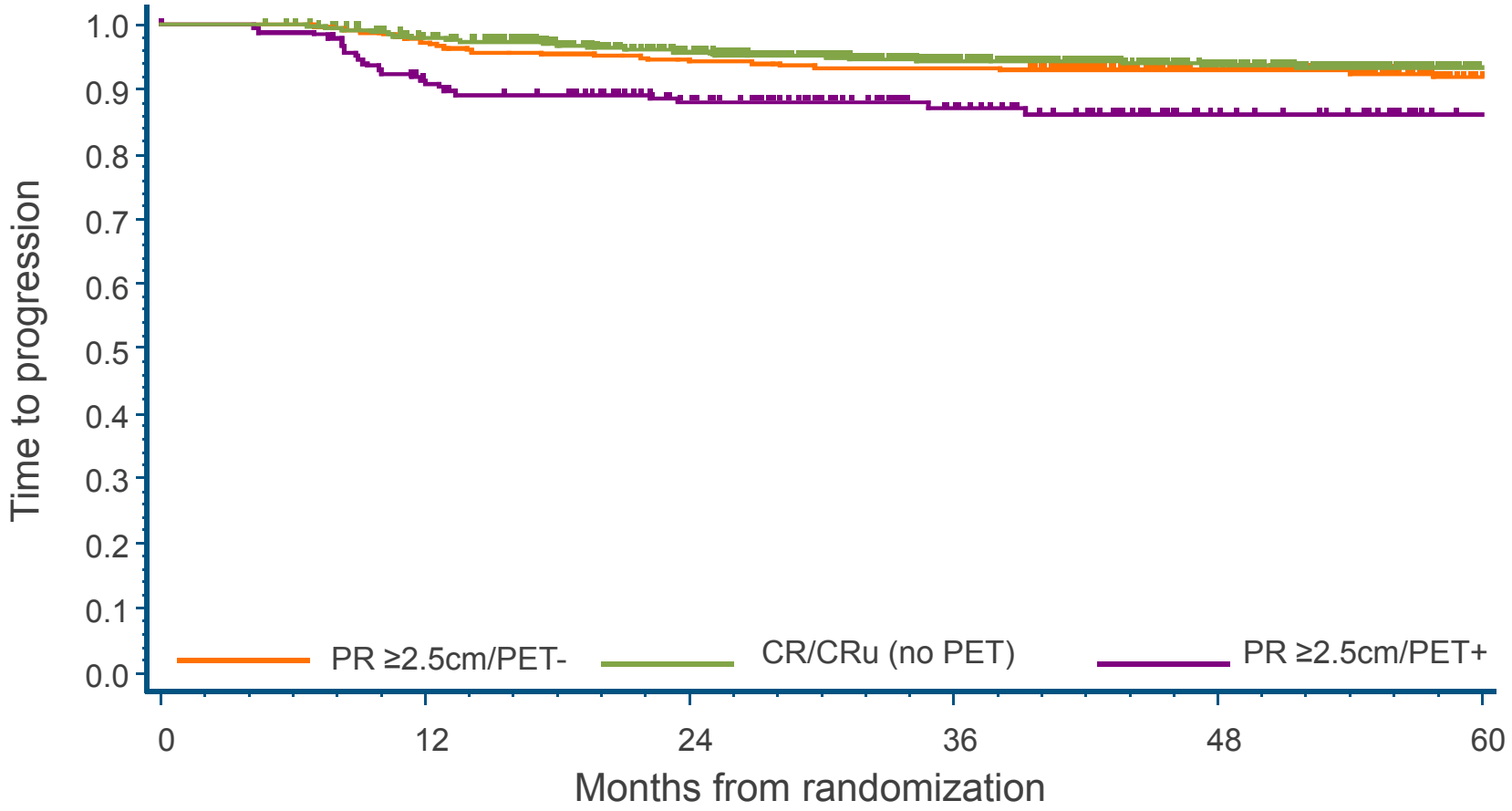


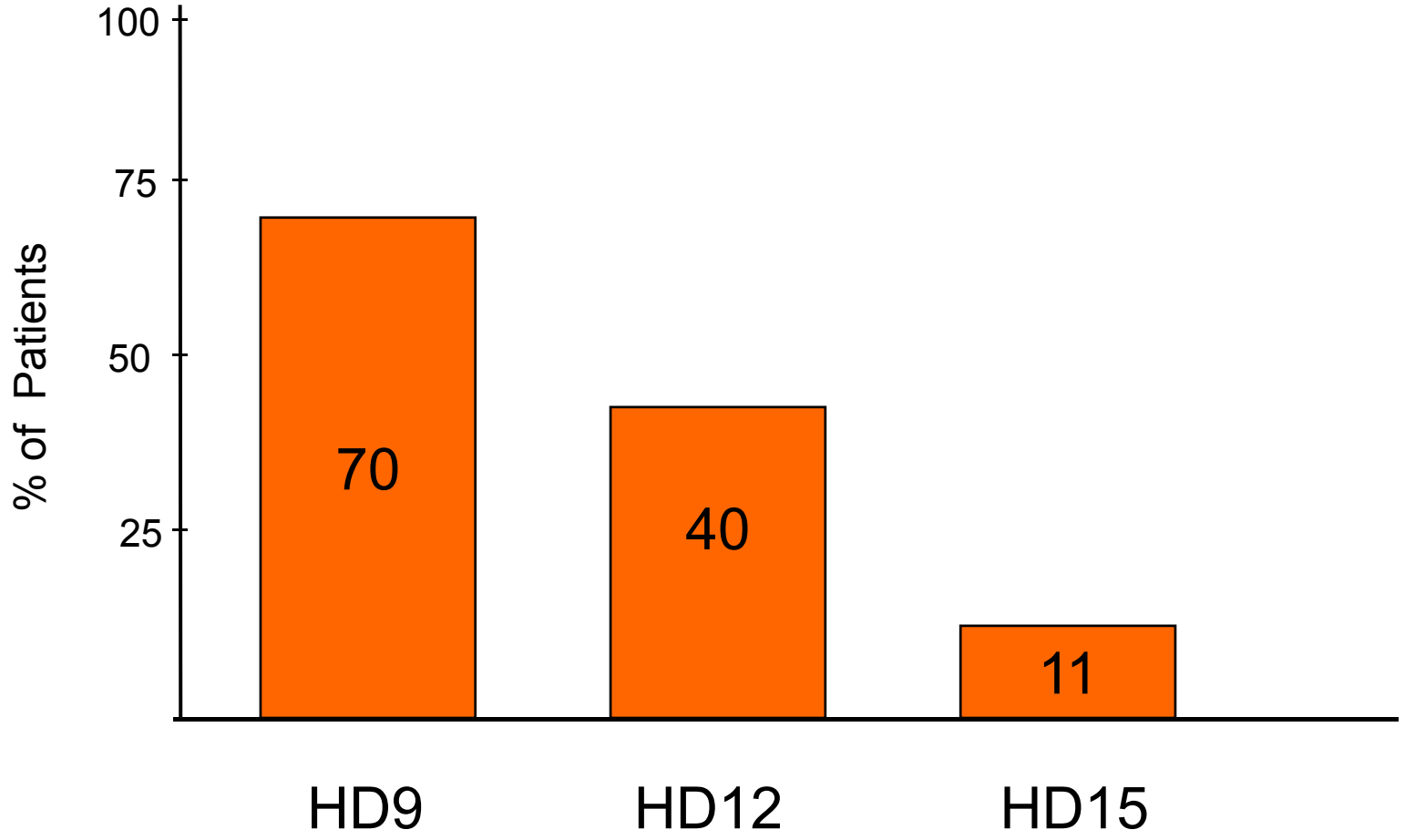
HD15-PET trial
Impact of response and PET status (TTP)

GHSG
www.ghsg.org



Pts. at Risk						
PET-	540	517	449	338	224	118
PET+	188	166	139	97	58	35
CR/CRu	854	811	690	482	303	155

Additional RT after chemo
GHSG studies HD9, HD12 and HD15 (% of all pts)



Comparison
of GHSG trials HD9, HD12, HD15

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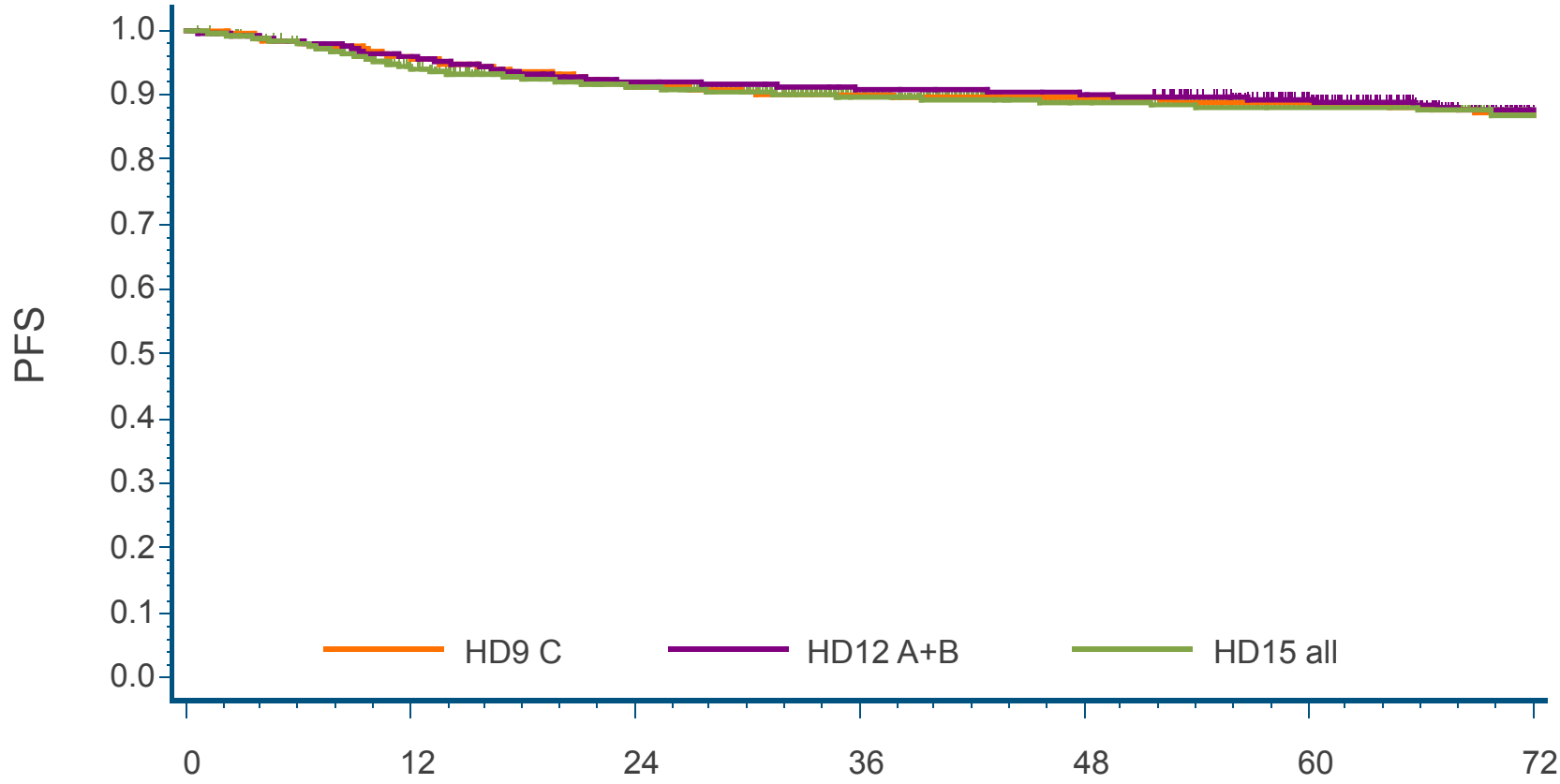
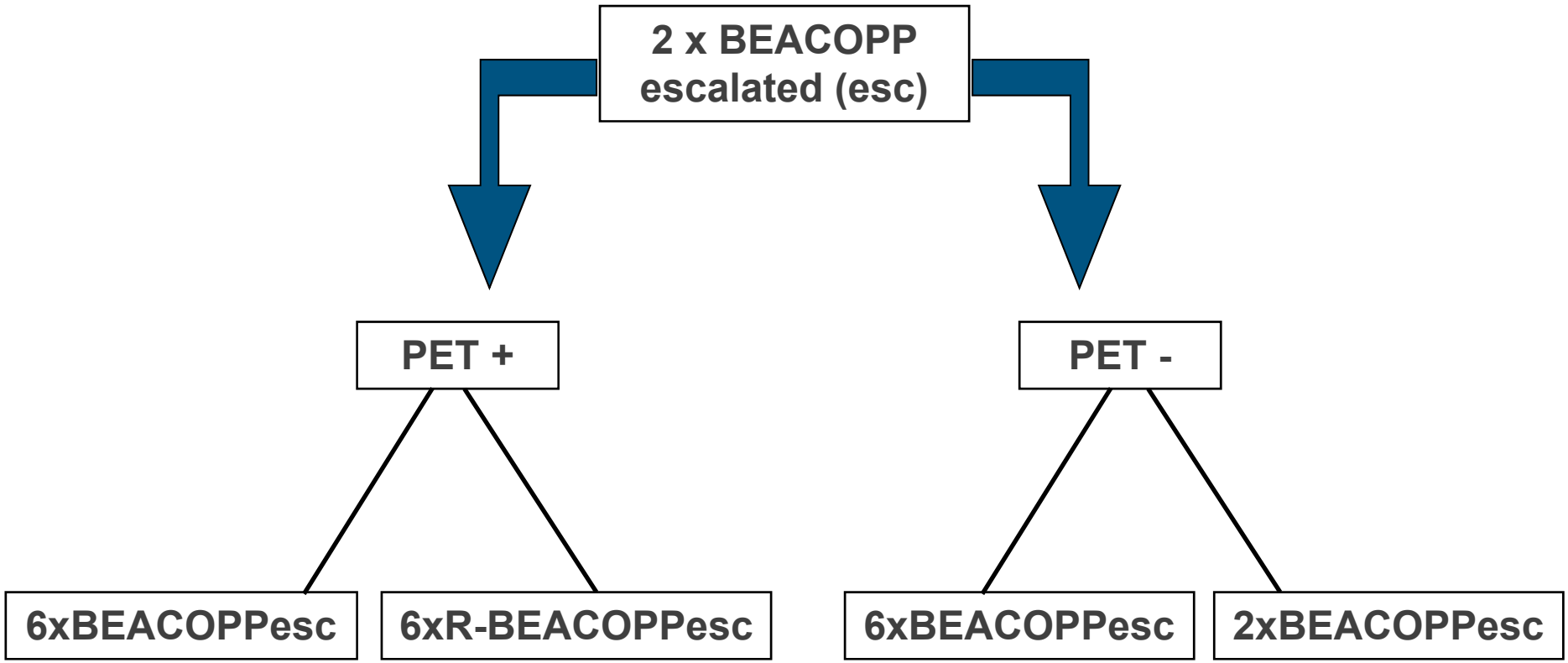


Pts. at Risk							
HD9 C	431	409	385	374	358	334	298
HD12 A+B	715	669	619	592	543	447	282
HD15 all	2012	1848	1560	1122	702	359	122

GHSG ongoing HD18 trial
for advanced stages



After chemo: PET; RX to PET+ res nodes >2.5 cm

PET-: Follow up

Aktuelle Studienergebnisse
beim Hodgkin Lymphom

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- **Hintergrund**
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HDR2: European study for relapsed Hodgkin Lymphoma*

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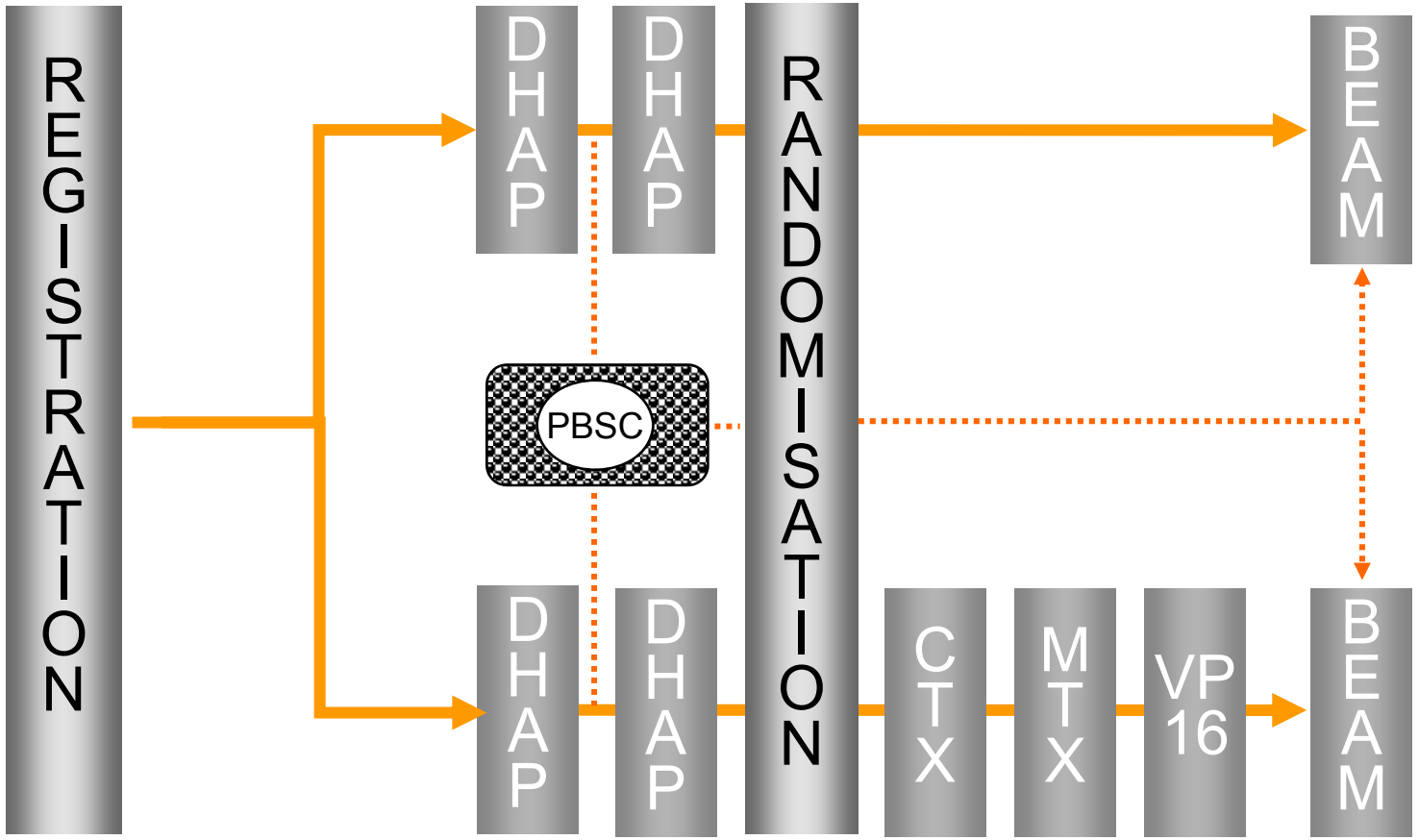
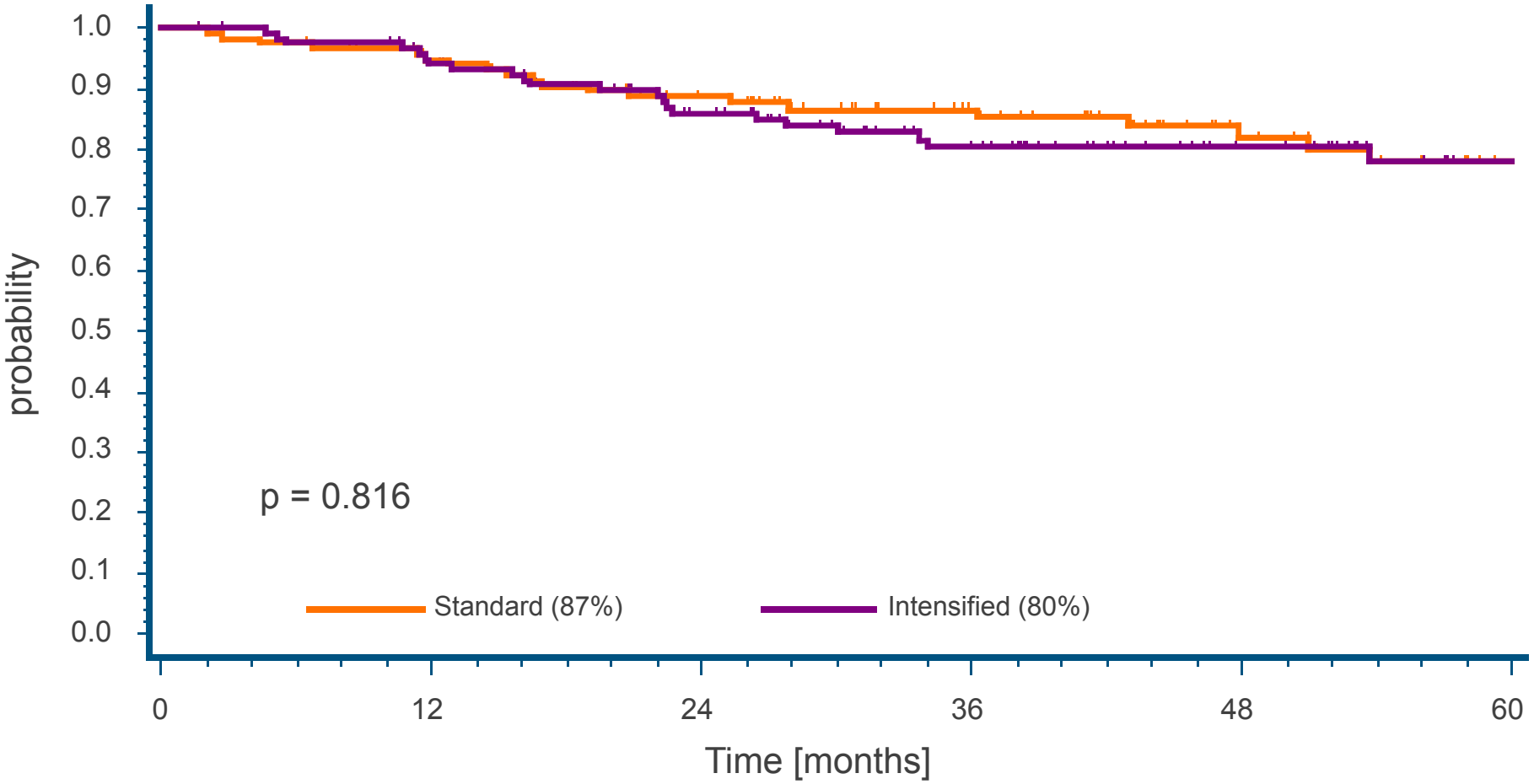


*GHSG, EORTC, EBMT, GELTAMO

HDR2 study for relapsed HL
OS by treatment arm (final analysis)



New antibodies and molecules
Clinical trials in HL

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- **Rituximab (anti-CD20, Roche)**
- **HCD122 (anti-CD40, Novartis)**
- **SGN35 (Immunotoxin, Seattle Genetics)**
- **Lenalidomide (IMID, Celgene)**
- **LBH589 (H-Dac Inhibitor, Novartis)**
- **AF13 (CD16xCD30 bispecific; Affimed)**
- **RAD001 (mTor-inhibitor, Novartis)**

Hodgkin Lymphoma
Immunohistology (anti-CD30)

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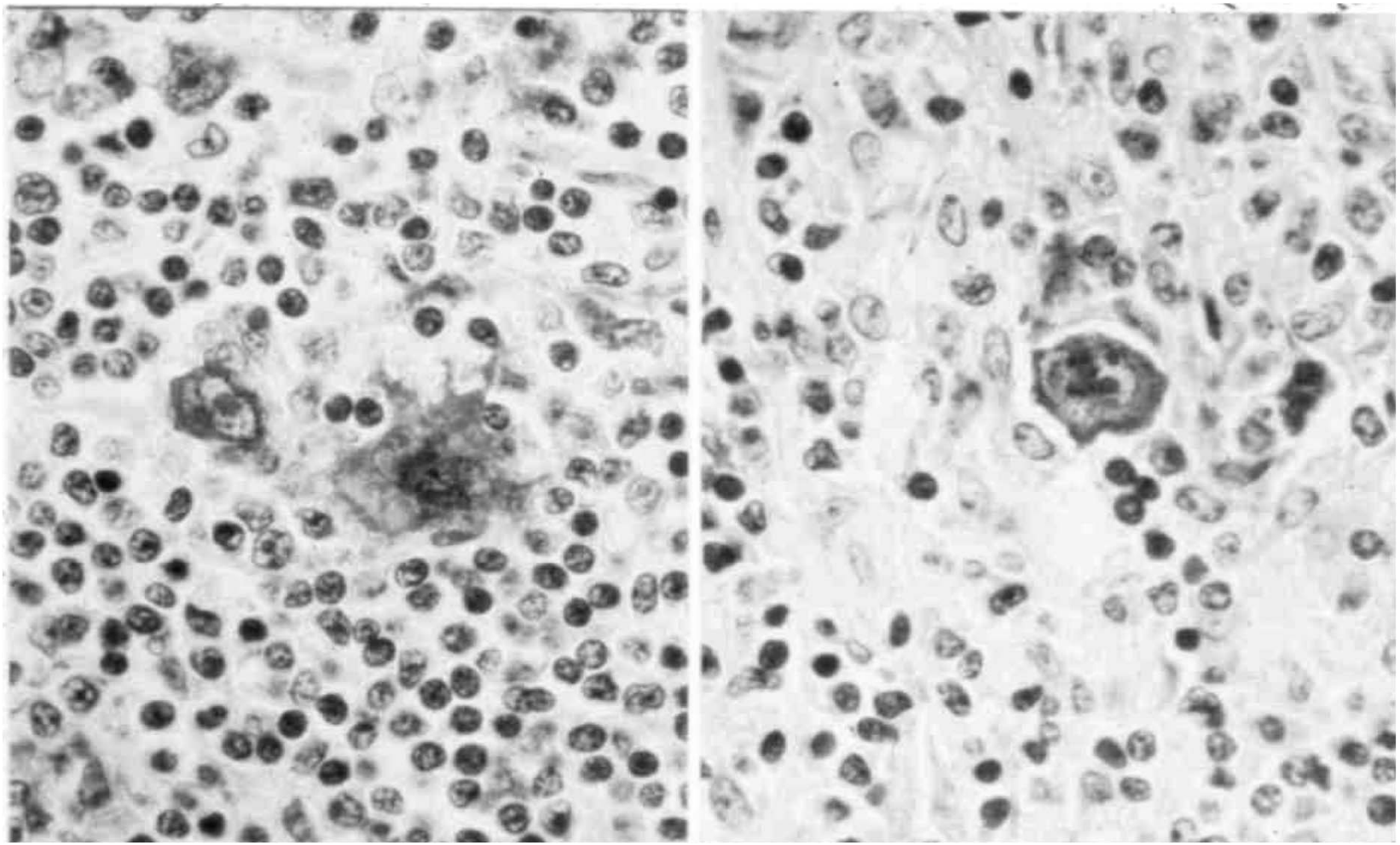

SGN-35 (Brentuximab vedotin)Mechanism of Action

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- **SGN-35 antibody-drug conjugate**

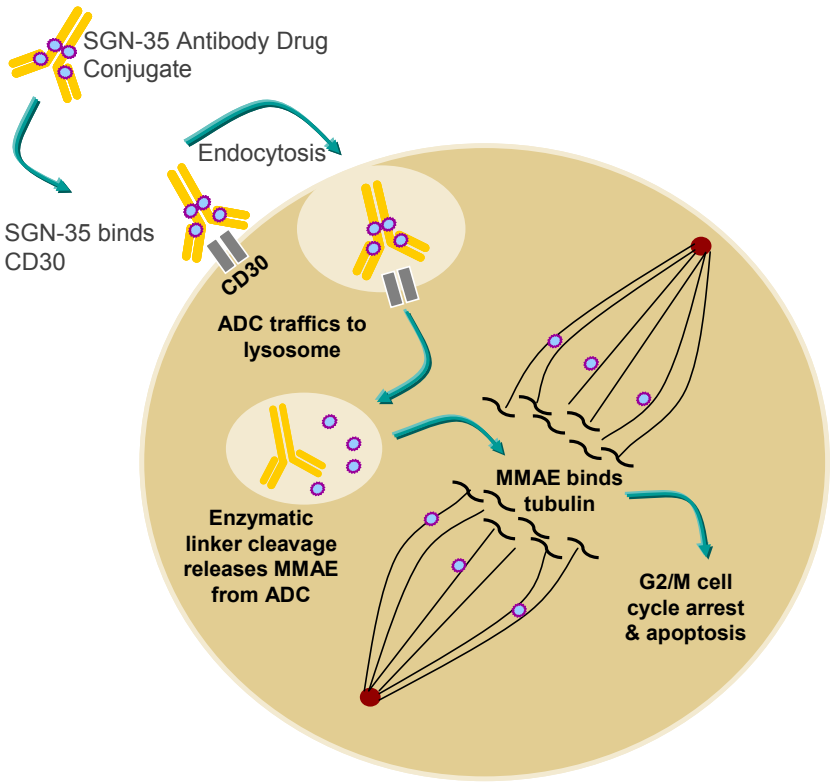
  CD30-targeted antibody (cAC10) conjugated to auristatin (MMAE), an anti-tubulin agent

- **Selectively induces apoptosis in HL and ALCL cells:**

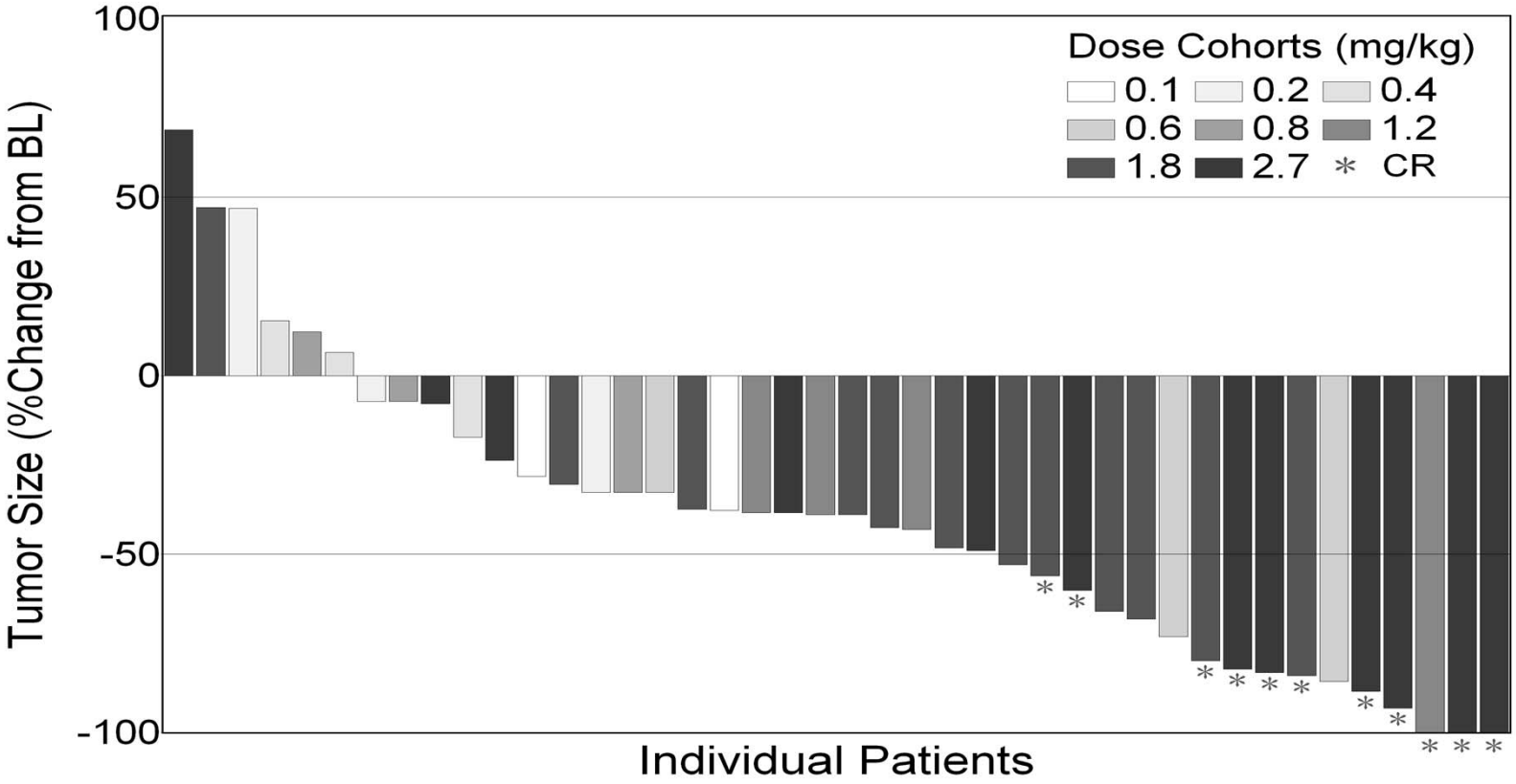
  Binds to CD30

  Becomes internalized

  Releases MMAE



Phase I of SGN35
Antitumor Activity



86% of patients achieved tumor reductions

*Significant correlation between investigator and IRF assessment

Younes et al, EHA 2009

Aktuelle Studienergebnisse
beim Hodgkin Lymphom

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Aktuelle Studienergebnisse
beim Hodgkin Lymphom

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- **2xABVD plus 20Gy IFRT in frühen Stadien**
- **2xBEACOPPesk + 2xABVD plus 30Gy IFRT neuer GHSG Standard für intermediäre Stadien**
- **8xBEACOPPesc für fortgeschrittene Stadien**
- **PET mit gutem NPV nach BEACOPP (HD15)**
- **HDCT für Patienten mit Rezidiv (2xDHAP+BEAM)**
- **Neue Substanzen in der Entwicklung**
- **Bessere Definition des individuellen Risikoprofils und Reduktion von Spättoxizitäten**

German Hodgkin Study Group (GHSG)

Chairman:
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Secretary:
P. Borchmann
Honory Chairman:
V. Diehl
Pathology:
H. Stein
Radiotherapy:
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D. Eichenauer, T. Halbsguth,
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Secretary:
M. Schumacher

Thanks to all participants!