Abstract selection for HL

I'm not Bruce Cheson…..

…however I will do my best.

The following abstracts were selected for oral presentation (three slides) by the chairmen of the session

- A 102 Pavlovsky A: Treatment of all stages of Hodgkin Lymphoma adapted to the results of PET-CT after 3 cycles of ABVD.

- A 112 Gallamini A: Multicenter clinical sudy with early treatment intensification in High-risk Hodgkin Lymphoma (HL) patients, with a positive FDG-PET scan after two ABVD courses.

- A 115 Borra A. Cost-effectiveness of interim PET response adapted therapy in ABVD-treated, advanced-stage Hodgkin Lymphoma.

A 104 Dann AJ

Tailored HL therapy based on predefined risk factors and interim PET/CT preliminary report on 191 patients on Israel National Hodgkin Study

Early favorable pts: ABVD x 2 →PET→(-): INRT

→PET→(+): ABVD x 2 + INRT

Early unfavorable pts: ABVD x 2 →PET→(-): ABVD x 2 + INRT

→PET→(+):ABVD x 4 – INRT

Advanced, IPS 0-2: ABVD x 2 →PET→(-): ABVD x 4 No Rt

ABVD x 2 →PET→(+): EB x2 + BB x 4 + Rt

Advanced, IPS 3-7: EB x 2 →PET→(-): ABVD x 4 No Rt

EB x 2 →PET→(+): EB x2 + BB x 4 + Rt

Advanced-stage Pts: 2-y PFS 88%; NPV of PET-2: 92%

-Interpretation key for interim-PET not validated on an observational cohort of pts.

-Specificity and PPV not very good.

A 105 Kobe C

Assessment of residual bulky tumor using FDG-PET in patients with advanced-stages after completion of chemotherapy. Final report of the GHSG HD 15 trial

2182 patients with advanced-stage HL treated with various BEACOPP containing regimens

740 showed a residual mass with a diameter ≥ 2.5 cm.

In 712/740 the follow-up was >than 12 months

All 740 patient underwent PET/CT scan . The scans were reviewed by an expert panel

548 (74%) were PET-negative, 192 (26%) PET-positive.

Only 31/548 PET-negative patients relapsed. The NPV of PET was 94%

- Low PPV for PET-positive patients.
- No mention on confirmatory biopsy for PET-positive pts.
- No mention on the number and location of the residual FDG-avid foci

A 107 Radford J.
UK NCRI RAPID trial in patients with clinical stage IA/IIA Hodgkin Lymphoma: an update following attainment of the recruitment target.

Patients with non-bulky stage IA/IIA HL a PET scan is performed after 3 ABVD cycles Patients with a negative interim scan (Deauville score 1 and 2) are randomized between IFRT or no further treatment.

Patients with a positive interim scan (Deauville score 3-5) are treated with a 4° ABVD cycle and IFRT

In 05/11 601 pts were registered

Patients with score 1 & 2 (Interim-PET negative) were 426 (74.6%);

Patients with score 3-% (Interim-PET negative) were 145 (25.4%)

420/426 PET-negative patients were randomized to IFRT or no further treatment

After a median of 34.1 months 389/420 (92.6%) are alive and progression-free

- No baseline PET scan
- Relative high number of interim PET positive patients (25.4%)

A 108 Markova J:
The role of FDG-PET in early and late therapy assessment of patients with advanced Hodgkin Lymphoma treated with BEACOPP

69 patients with advanced-stage HL treta4ed with 6/8 cycles of BEACOPP

PET/CT performed after 4 cycles (PET-4), at the end of the therapy (PET 6/8) and 3 months later, during follow-up ((PET-3m)

Median f-up 55 months

NPV for PET-4, PET 6/8, PET-3m were 98%, 95%, 97%.

4-y PFS for PET-4 neg and PET-4 pos were 96% and 78%

4-y PFS for PET6/8 neg. and PET6/8 pos were 95% and 78%

Patients with large mediastinal mass contributed to nearly all PET-4 and PET-8 positive patients

- Very low PPV (14% in the previous report)
- Criteria for PET positivity: residual FDG uptake higher than background.

A 109 Simoni Z.:
Interim PER-CT in Hodgkin's lymphoma. The Hungarian experience

89 patients enrolled in a prospective study between 2007 and 2011 in Debrecen University

47% in early stage , 41% asymptomatic

Therapy ABVD or EBVD x 6 ± consolidation or IF radiotherapy

Visual assessment: criteria: JCO 2007.

PET negative in 55%, MRU in 28%, positive in 17%.

EFS: 84% in the negative and 20% in the positive interim-PET patients

- No data on concordance rate among revieewers
- Overall predictive value very good; however subset analysis is needed

A 110 Mounier N.:
Early determination of treatment sensitivity in HIV-related HL by FDG-PET after two cycles of ABVD chemotherapy.

44 HIV-related HL patients enrolled in 9 European centers

Median CD4 values 394/mm^3

Viral load present in 7/44 patients

42 received concomitant HAART

20 early stage, 24 stage III and IV

Interim-PET scan interpretation Key: Deauville score (1-3 neg; 4-5 pos.)

Treatment ABVD x 6 ± consolidation Rt.

77% in CCR at a median FU of 18 months

39 (88%) patients with PET-2 negative, 5 (12%) with PET-2 positive

2-y EFS for PET-2 negative and positive 88% and 12%, respectively.

- Very good. but confirmatory results

Clinical abstracts selected for oral presentation

- Pavlovsky A

Treatment for all stages of Hodgkin Lymphoma adapted to the result of PET-CT after 3 cycles of ABVD

(A102) Treatment for all for all Stages of Hodgkin's adapted to the Result of PET-CT after 3 Cycles of ABVD. Preliminary Results in 193 Patients.

Pavlovsky Astrid, Pavlovsky S†, Fernandez I, Prates MV, Pavlovsky MA, Zoppegno L, Basqueira A, Milone G, Eleta M[1], Lastiri F. GATLA Grupo Argentino de Tratamiento de la Leucemia Aguda, [1]IMAXE, Argentina.

OBJECTIVES:

- Reduce therapy in patients who achieve early CR with negative PET-CT in all stages of HL.
- Intensify treatment, only in patients with positive PET-CT after 3 cycles of ABVD, improving their otherwise bad prognosis.
- Achieve CR, EFS and OS, as good as in our historical control, when we used 3 or 6 cycles of ABVD plus IFRT in all patients.

Patient´s characteristics at diagnosis

# = 193 evaluable		
Male / Female		84 / 109
Age yrs. median (range)		30 (16-80)
Stage I-II no B		125 (65%)
III-IV B		68 (35%)
Bulky (%)		33 (17 %)
IPS* N=172	0 - 1	85 (47%)
	2 - 3	75 (39%)
	>= 4	12 (14%)

Dr. A. Pavlovsky and co-authors have no conflicts of interest to declare.

(A102) Treatment for all for all Stages of Hodgkin's adapted to the Result of PET-CT after 3 Cycles of ABVD. Preliminary Results in 193 Patients.

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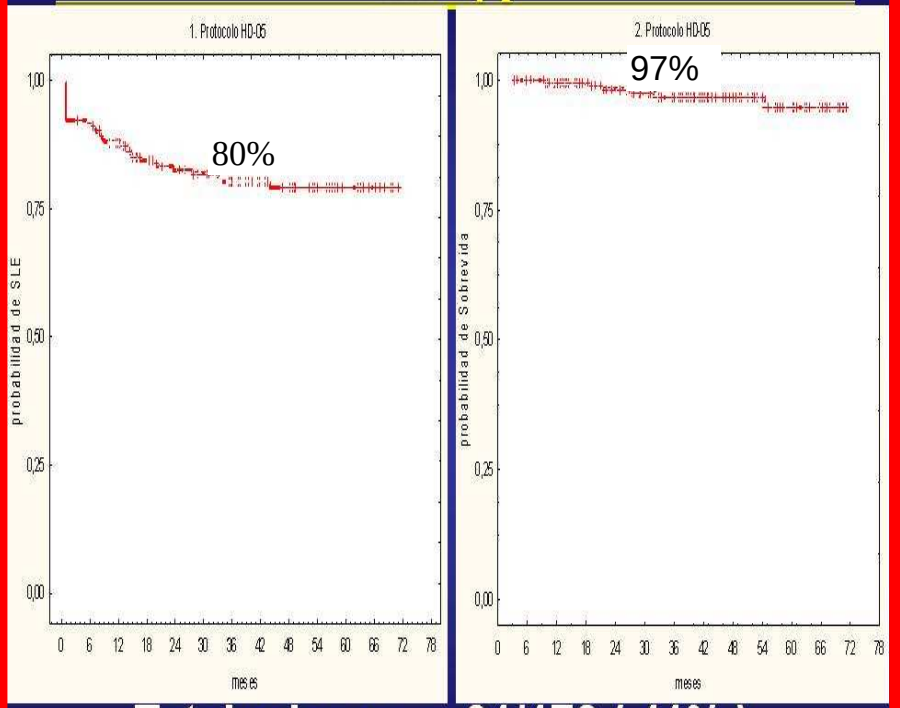
RESULTS:

ABVD x 3 (n=193) (100%)

- Negative PET (CR) (n=148) (77%) → END OF TREATMENT
- Positive PET (n=45) (23%)
  - PR (n=40) → ABVD X 3/ IFRT
  - PD (n=5) → ESHAP x 3

EFS and OS in HL with PET-TC adapted therapy



Total relapse = 21/178 (11%)

Median follow up 39 months (3 – 71)

Dr. A. Pavlovsky and co-authors have no conflicts of interest to declare.

(A102) Treatment for all for all Stages of Hodgkin's adapted to the Result of PET-CT after 3 Cycles of ABVD. Preliminary Results in 193 Patients.

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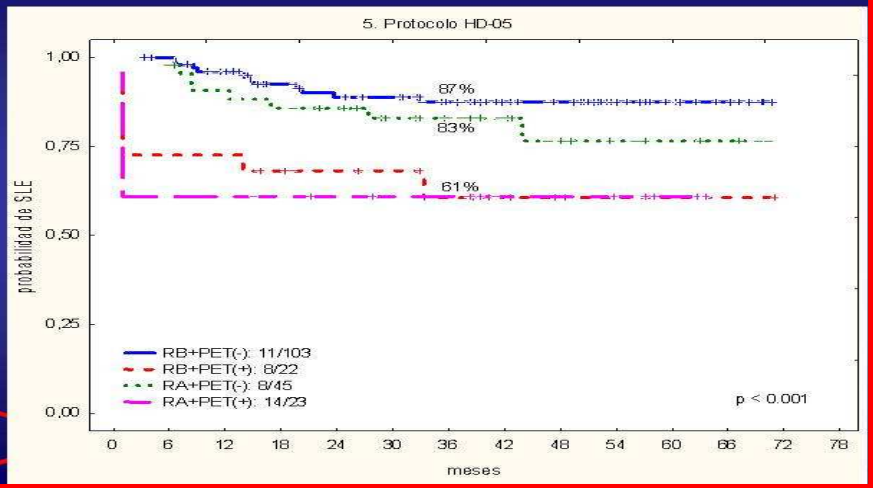
Multivariate analysis for EFS

	p
Age	0.046
Stage	0.17
Extra nodal areas	0.96
Bulky Disease	0.76
PET +3	0.001



Historic comparison

Clinical Trial	# pts	CR (%)	EFS (%) at 36 months	OS (%) at 36 months
HL - 96 [1]	584	91	75	93
HL - 05 [2]	193	92	80	97

[1] 61 % ABVD x 6, 100% IFRT.

[2] 23 % ABVD x 6, 23% IFRT.

5 pts received ESHAP/ASCT in 1st line.

[1] Pavlovsky S, Blood, 2008, 112: Abstract 2502
[2] Pavlovsky A, Blood, 2008, 112: Abstract 2592

CONCLUSIONS:

- With PET-CT adapted therapy after 3 cycles of ABVD, 148 pts (77%) received only 3 cycles of ABVD as initial therapy with an EFS and OS 83% and 97% at 36 months.
- The overall EFS and OS are comparable to our historical control with a significant reduction of chemo and radiotherapy.
- PET-CT +3 and age > 60 yrs. are the only significant factors for EFS.
- Three cycles of ABVD is an adequate treatment for patients who achieve early CR with a negative PET-TC+3.

Dr. A. Pavlovsky and co-authors have no conflicts of interest to declare.

Clinical abstracts selected for oral presentation

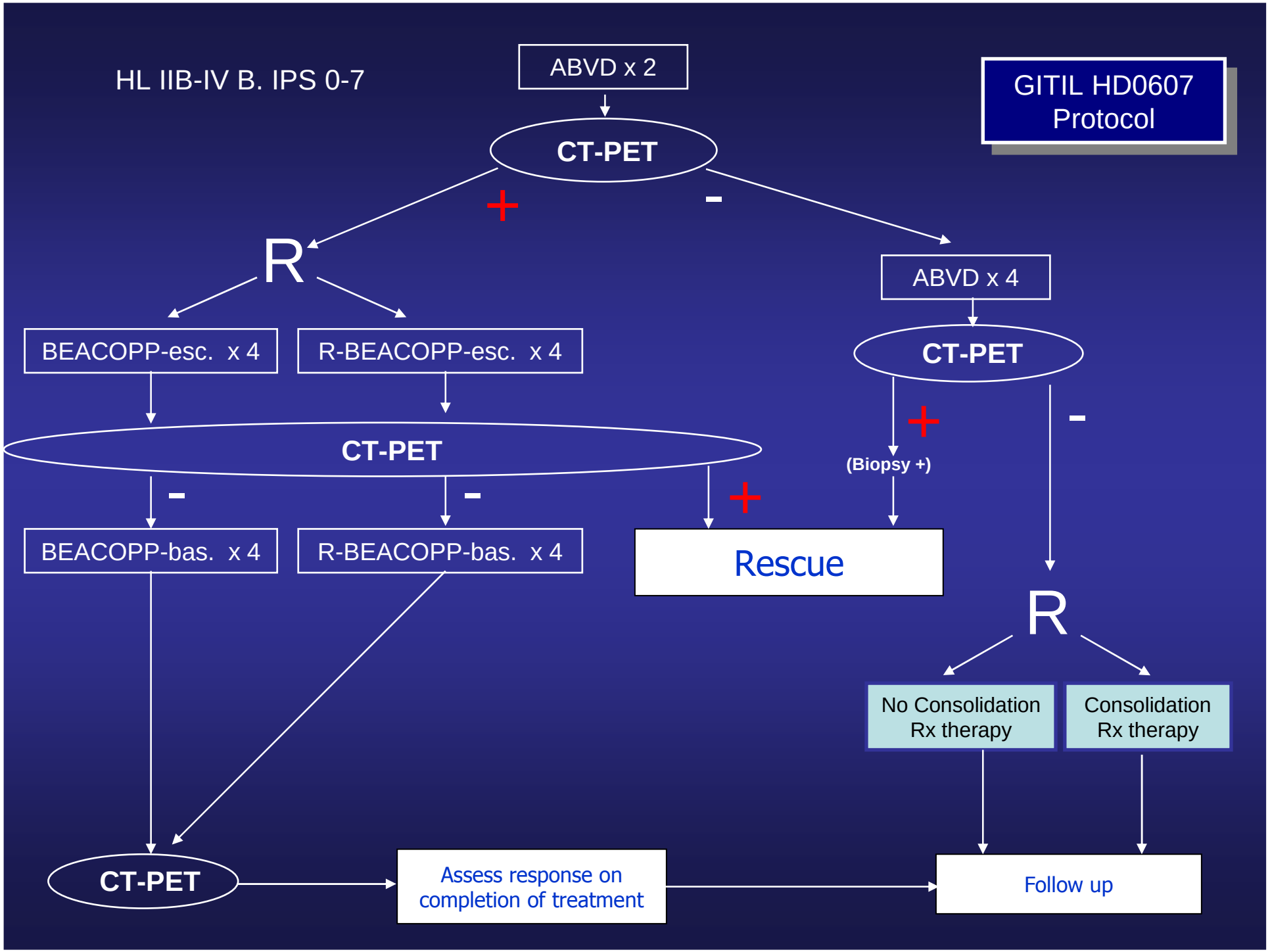
A 112 Gallamini A:

Multicenter clinical sudy with early treatment intensification in High-risk Hodgkin Lymphoma (HL) patients, with a positive FDG-PET scan after two ABVD courses.

Multicentre clinical study with early treatment intensification in high-risk Hodgkin Lymphoma (HL) patients, with a positive FDG-PET scan after two ABVD courses.

Gallamini A, Tarella C., Patti C., Gianni AM, Bolis S., Trentin L., Biggi A., Chauvie S., Mennitto MR, Rambaldi A.

Ann. Oncol 22, Suppl. 4 199; abstr. N°163.


HL IIB-IV B. IPS 0-7
ABVD x 2
CT-PET
+
-
R
BEACOPP-esc. x 4
R-BEACOPP-esc. x 4
CT-PET
-
-
+
BEACOPP-bas. x 4
R-BEACOPP-bas. x 4
Rescue
ABVD x 4
CT-PET
+
(Biopsy +)
-
R
No Consolidation Rx therapy
Consolidation Rx therapy
CT-PET
Assess response on completion of treatment
Follow up
GITIL HD0607 Protocol

PET-2 review results (130 / 337 pts.)

Overall, 130/337 non-negative PET-2 were uploaded & reviewed: 51/130 turned out positive (score 4-5) and 79/130 negative (score 1-3).

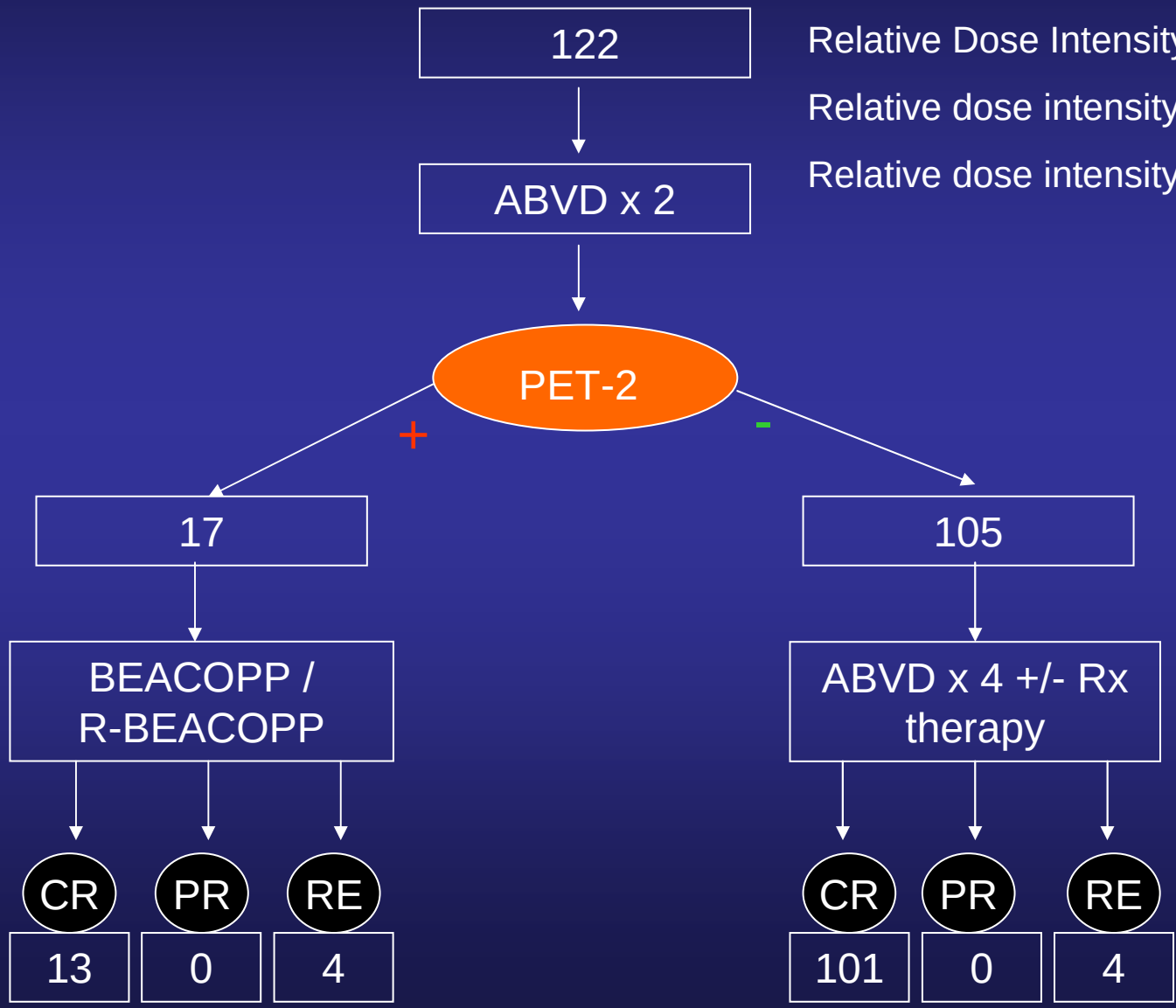
Percentage of PET-2 +: 51/337 (15.1%)

The median time from PET uploading in the website to review was 1.22 days.

The binary concordance rate (score 1-3 vs. 4-5) among reviewers was very good, and ranged from 0.75 to 0.92 (Cohen's k coefficient); overall concordance rate (1-3 vs. 4-5) was 0.83 (Krippendorf's alpha).

	Mean	Rev.1	Rev.2	Rev. 3	Rev.4	Rev.5	Rev. 6
Rev. 1	0.93	1	1.00	0.88	1.00	0.88	0.88
Rev. 2	0.95	1.00	1	0.94	0.92	0.94	0.94
Rev. 3	0.95	0.88	0.94	1	0.92	1.00	1.00
Rev. 4	0.93	1.00	0.92	0.92	1	0.92	0.90
Rev. 5	0.95	0.88	0.94	1.00	0.92	1	1.00
Rev.6	0.94	0.88	0.94	1.00	0.90	1.00	1

HD 0607 INTERIM ANALYSIS (13.05.2011) on a cohort of patients who completed the therapy with a mean f-up of 403 (± 163) days



Relative Dose Intensity for R-BEACOPP: 96.7%

Relative dose intensity for BEACOPP: 92.7%

Relative dose intensity for ABVD: 97.8%

Clinical abstracts selected for oral presentation

A 115 Borra A.

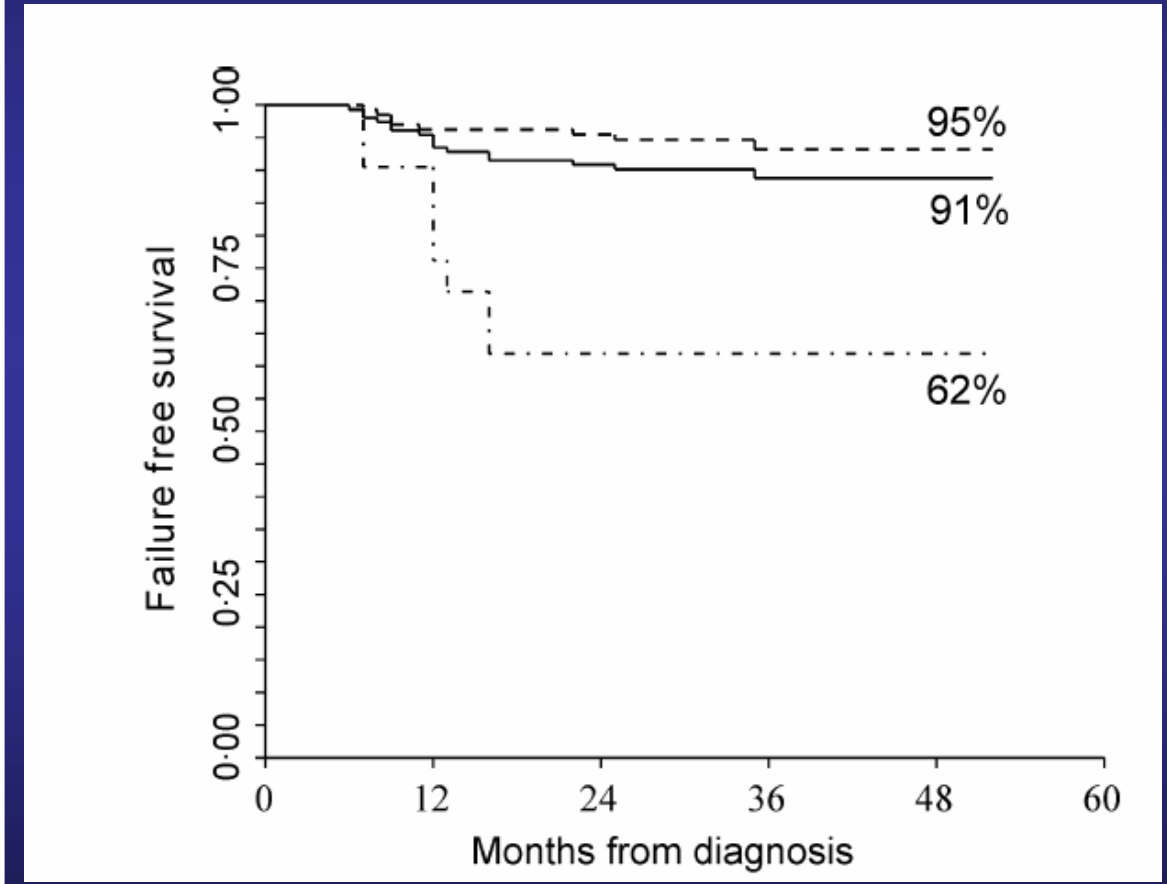
Cost-effectiveness of interim PET response adapted therapy in ABVD-treated, advanced-stage Hodgkin Lymphoma.

COST-EFFECTIVENESS OF INTERIM PET RESPONSE ADAPTED THERAPY IN ABVD-TREATED, ADVANCED-STAGE HODGKIN'S LYMPHOMA

[1]Borra A, [2]Marchetti M, [3]Biggi A, [4,5]Chauvie S, [4]Stancu A, [4]Cerello P, [1]Gallamini A

[1]Hematology Department, S. Croce e Carle Hospital, Cuneo, Italy
[2]Hematology Unit, Internal Medicine Department C. Massaia Hospital, Asti, Italy
[3] Nuclear Medicine Department, S. Croce e Carle Hospital, Cuneo, Italy
[4]National Institute of Nuclear Physics (INFN), Turin, Italy
[5]Medical Physics Unit, S. Croce e Carle Hospital, Cuneo, Italy

PET-2 response adapted treatment strategy for advanced-stage HL patients (Retrospective study N= 160)



PET-2 negative

ABVD → ABVD (N= 137)

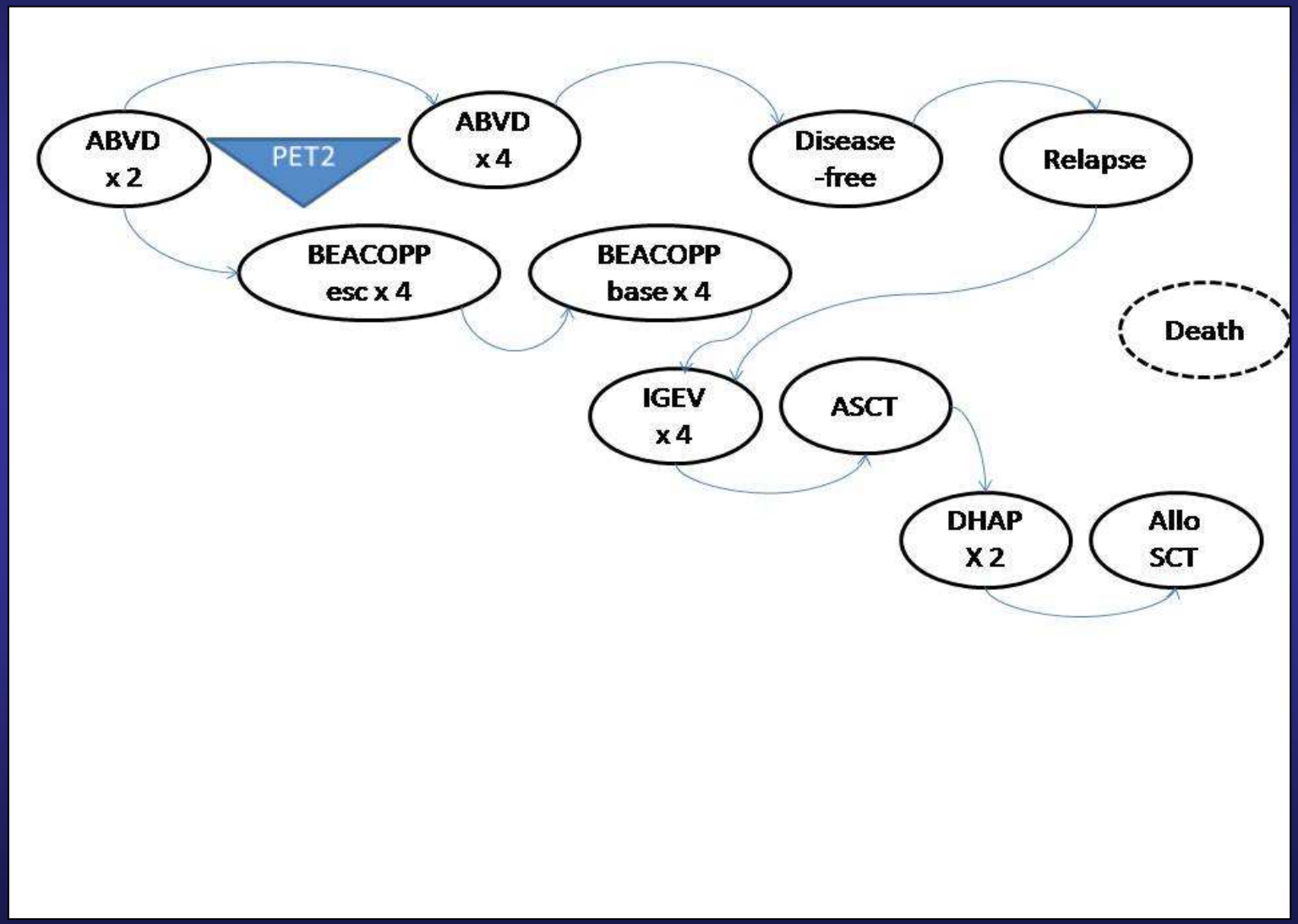
All patients

PET-2 positive

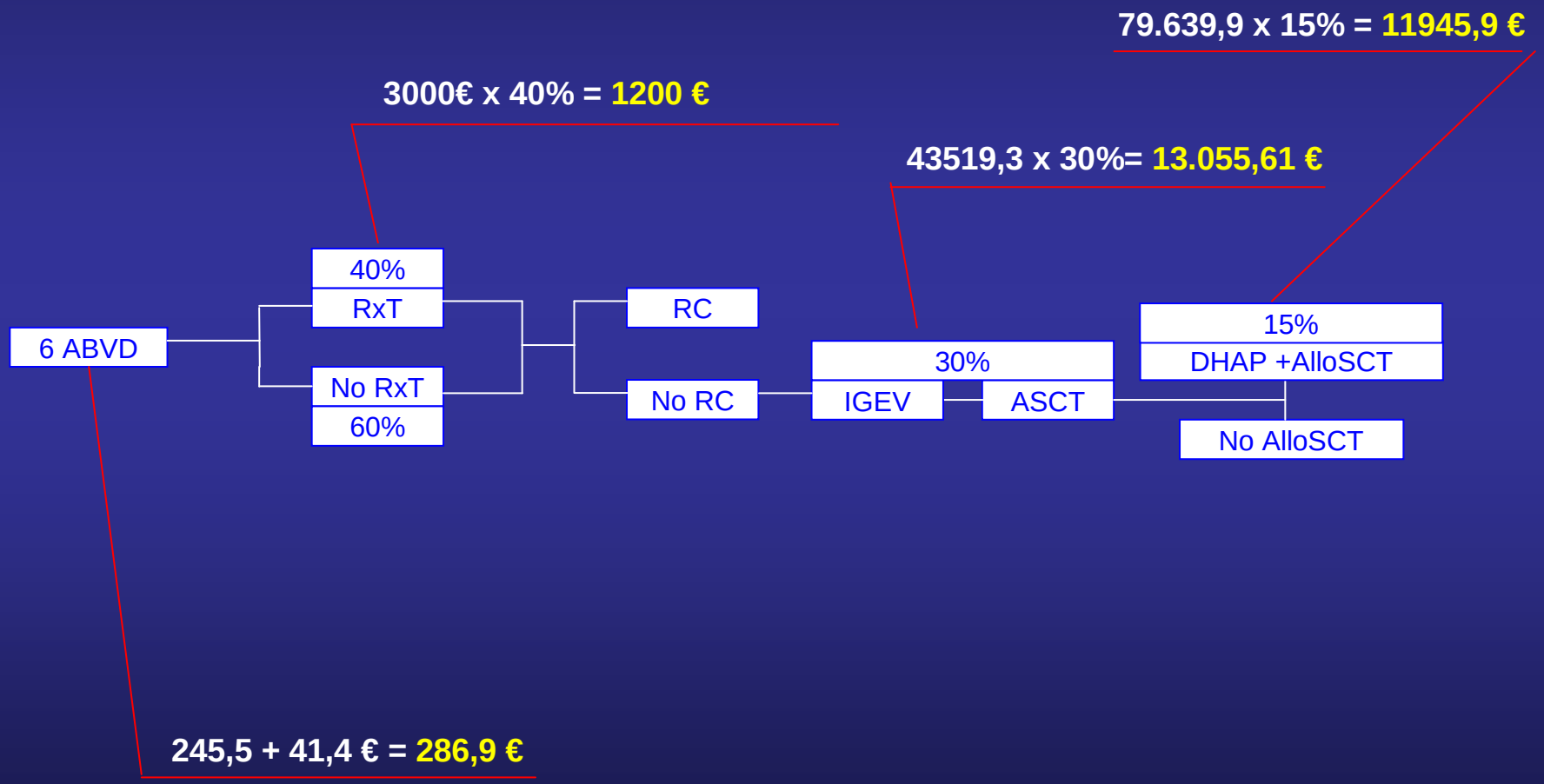
ABVD → eBEACOPP (N=23)

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

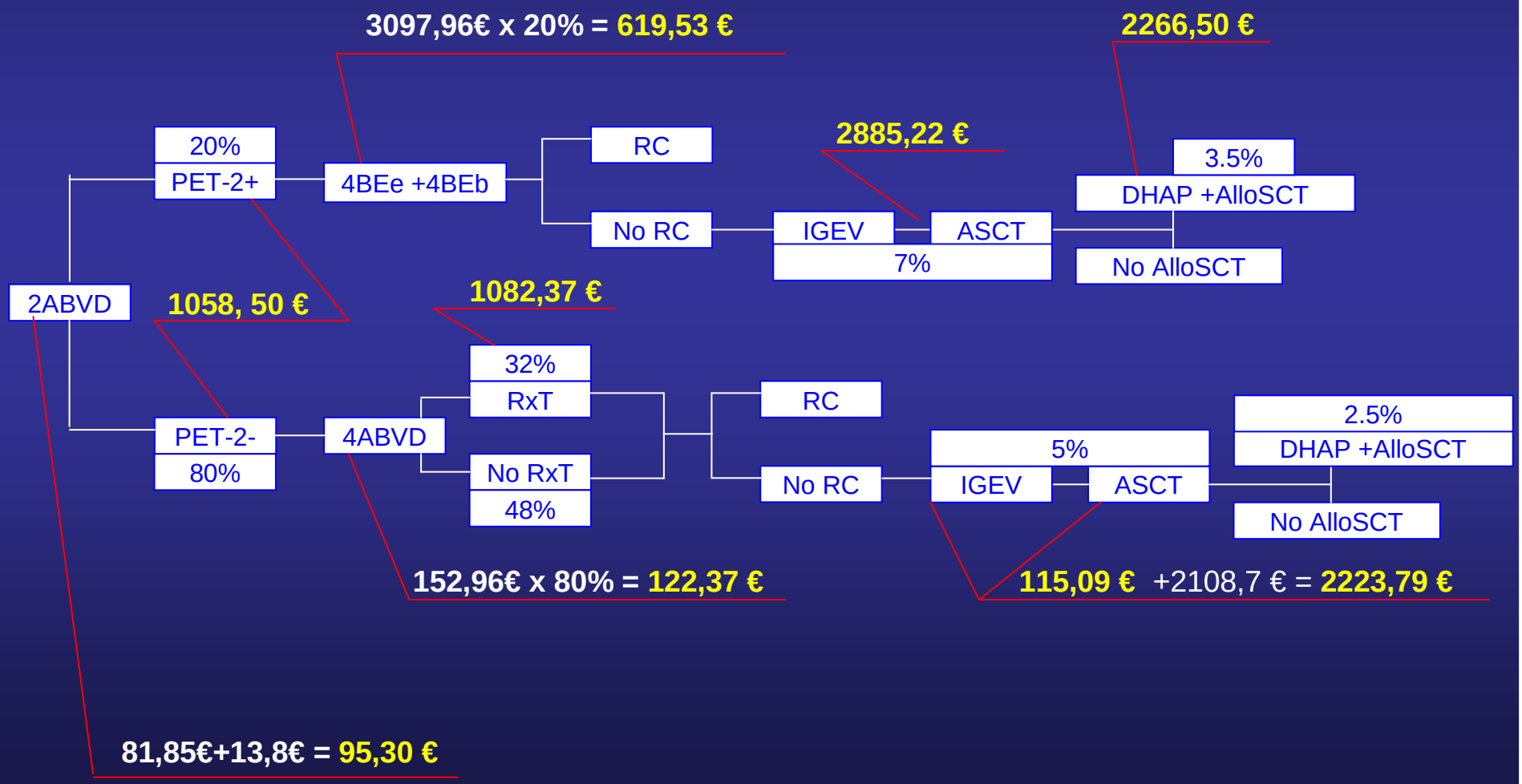
Markov model



Cost of the “classic” ABVD therapy (A-T)

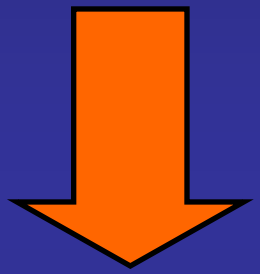


Cost of the PET-driven strategy (A/B-T)



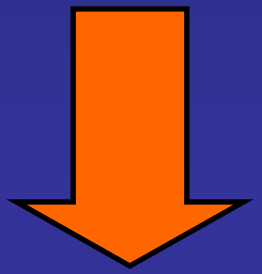
Results

ABVD “classical”



€ 29,050

ABVD. PET-adapted



€ 27,861

Cost saving € 1189 per patient !