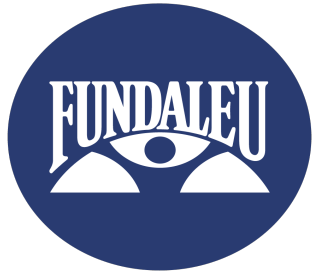


Mi experiencia en el tratamiento de LH en adultos mayores.

Abril 2025

Dr. Astrid Pavlovsky

astridp@intramed.net



LH en paciente adulto mayor



Quien es un adulto mayor en LH?

Por los riesgos asociados al tratamiento y su diferente pronóstico en LH, se considera adulto mayor al > 60 a.

LH en paciente adulto mayor



Como es el LH en adulto mayor?

- Aumento de la incidencia de Celularidad Mixta.
- Aumento de la incidencia de localización infradiafragmatica.
- Mayor asociación con EBV.
- Predominio de estadíos avan y sint B.
- Peor pronóstico.

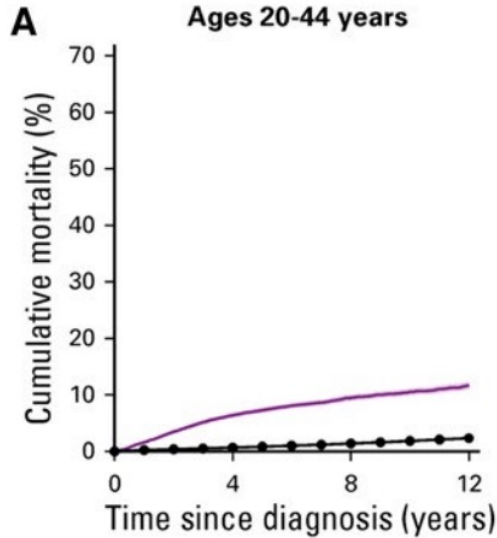
LH en paciente adulto mayor



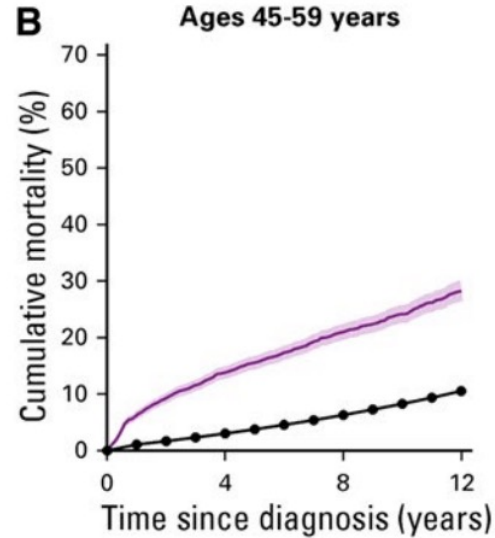
Quien tiene más posibilidad de curarse?

Objetivo?

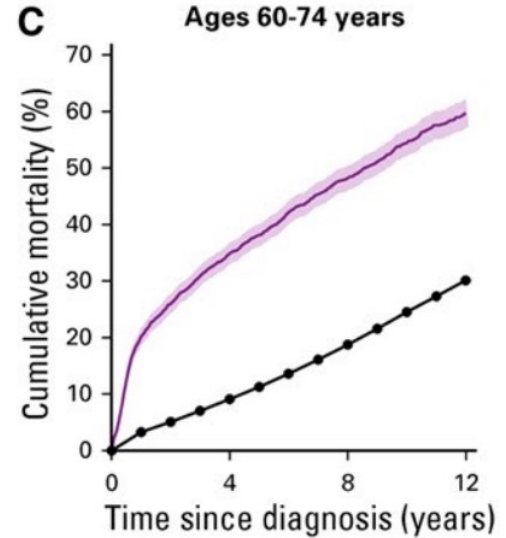
Sobrevida global en pts con LH



No. cHL at risk:
13195 9743 6382 3243



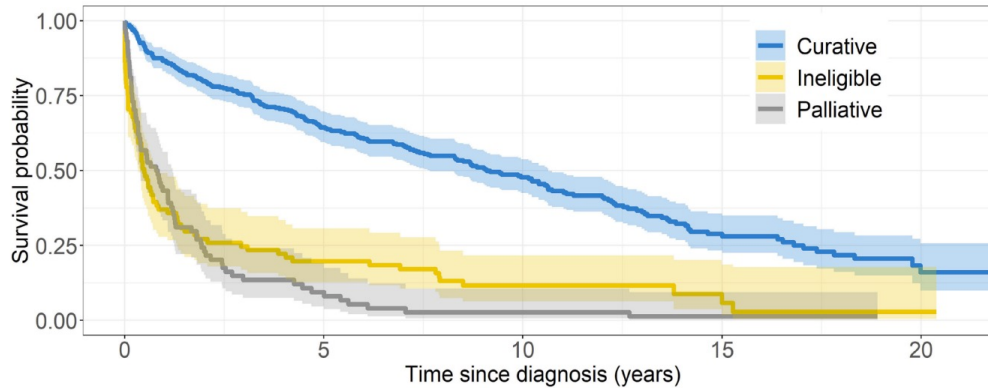
No. cHL at risk:
4105 2738 1636 744



No. cHL at risk:
2707 1329 685 256

Sobrevida global en pts con LH > 60 a.

Registro Noruego. 492 pts > 60 a. tratados 2000-2015- Mediana de edad 71 a.



Number at risk

Curative	337	217	107	37	7
Ineligible	81	16	8	2	1
Palliative	74	7	2	1	0

Figure 1. Overall survival according to treatment groups. Overall survival was analyzed by Kaplan-Meier statistics and groups compared using the log-rank test. Overall survival was significantly lower in the ineligible and palliative group compared to the curative group ($P < 0.001$ for both comparisons).

Sobrevida global en pts con LH > 60 a.

Tto de 1ra línea CHOP (74%), ABVD (30%)

Registro Noruego.

492 > pts 60 a.
tratados 2000-2015.

Grupos	Sin tto	Tto paliativo	Tto curativo	Matched population
Mediana SG	6 meses	9 meses	9.1 a.	14 a.

Causas de muerte:

30% LH

8% TRM

44% otras causa

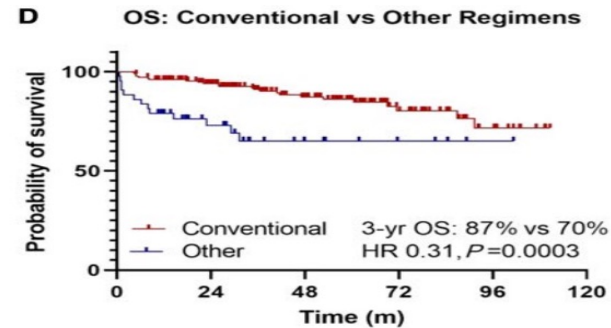
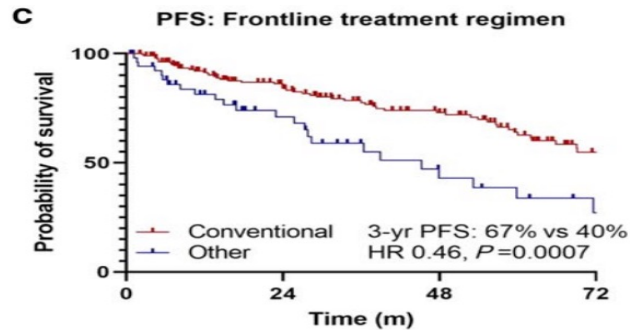
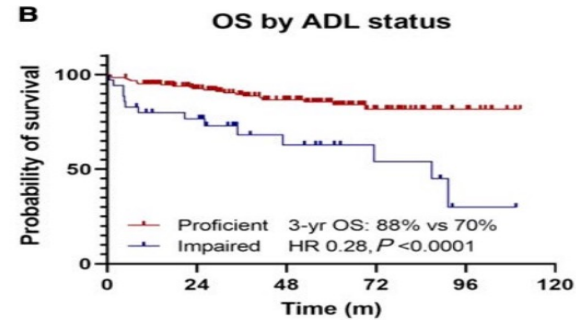
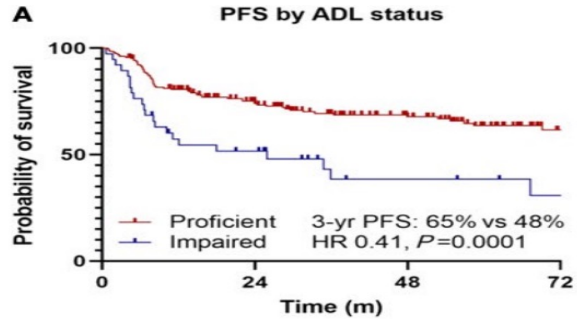
Porque le va peor al adulto mayor con LH?

- Multifactorial:
 - Generalmente tienen co-morbilidades.
 - Peor PS.
 - Mas frecuentemente estadíos avanzados.
 - Inhabilidad para tolerar qt intensiva en dosis e intervalos correctos.
 - Menor numero de pacientes tratados en centros academicos, incluidos en protocolos de investigación o tratados con modalidad combinada.
 - Mortalidad relacionada al tratamiento.

NO EXISTE UN TRATAMIENTO ESTANDAR PARA ESTOS PACIENTES.

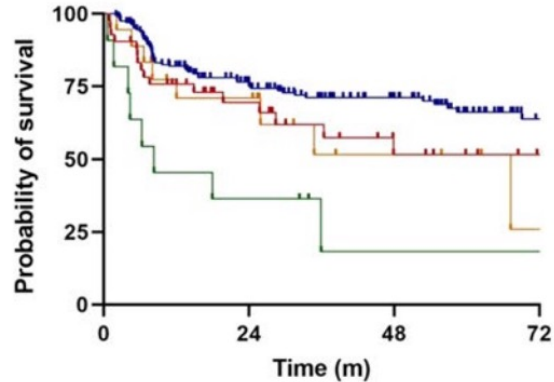
Solo 25% reciben tto con intención curativa y 25% no recibe tratamiento.

Porque le va peor al adulto mayor con LH?



Porque le va peor al adulto mayor con LH?

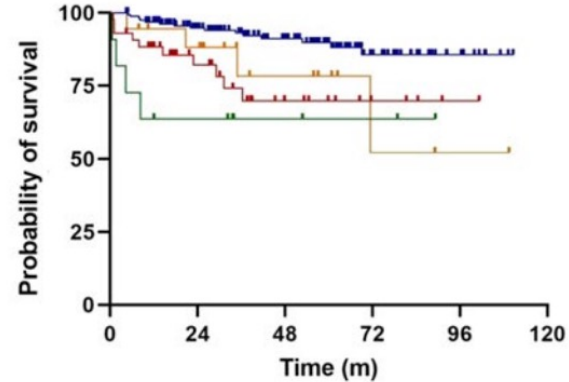
E PFS by ADL status and Frontline regimen



— Proficient ADL, Conv Tx — Impaired ADL, Conv Tx
— Proficient ADL, Other Tx — Impaired ADL, Other Tx

Proficient ADL, conventional vs other tx: HR 0.64, $P=0.12$
1+ impaired ADL, conventional vs other tx: HR 0.46, $P=0.11$
Conventional tx, proficient vs impaired ADL: HR 0.57, $P=0.14$
Other tx, proficient vs impaired ADL: HR 0.40, $P=0.03$ *

F OS by ADL status and Frontline regimen



— Proficient ADL, Conv Tx — Impaired ADL, Conv Tx
— Proficient ADL, Other Tx — Impaired ADL, Other Tx

Proficient ADL, conventional vs other tx: HR 0.31, $P=0.002$ **
1+ impaired ADL, conventional vs other tx: HR 0.49, $P=0.31$
Conventional tx, proficient vs impaired ADL: HR 0.37, 0.06
Other tx, proficient vs impaired ADL: HR 0.58, $P=0.35$

LH en paciente



Quien tiene mas posibilidad de curarse?
El que recibe un tratamiento de intensidad con
intension curativa.

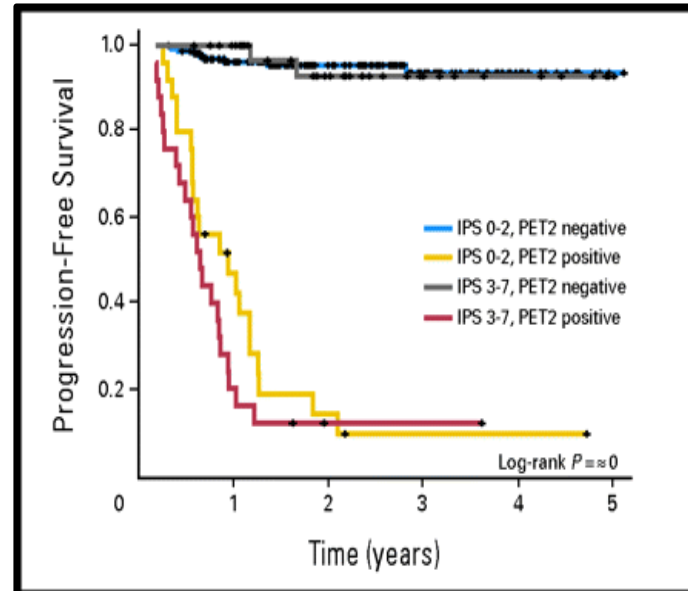
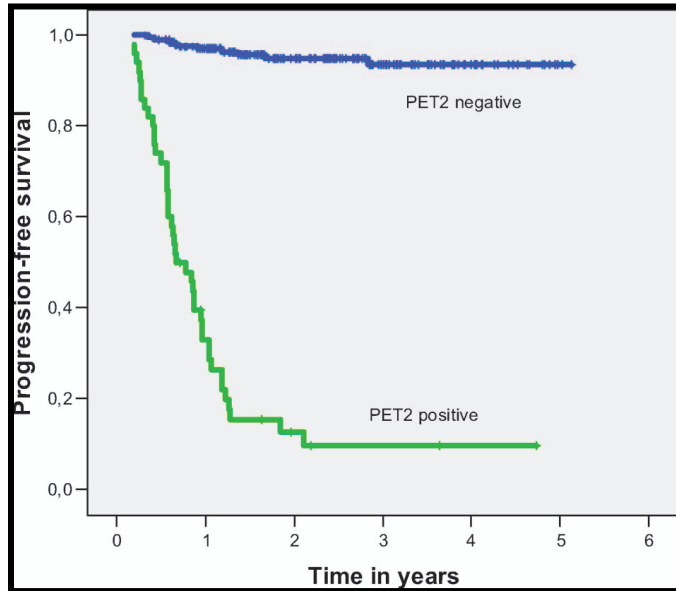
Objetivo? CURAR al paciente.

Un paciente > 60 a. *curado* de LH tiene SG similar a la población general.

Desafio: adaptar el mejor tratamiento
(el tto mas intensivo).

Famosas curvas en LH

FDG-PET scan was performed at baseline and after two courses of ABVD (PET-2). No treatment change was allowed on the basis of the PET-2 results.



Análisis uni y multivariable SLE

Estadio AA	P= 0.004
Edad	0.58
Enf. Bulky	0.069
Comp Extranodal	0.010
PET/TC temprano	0.001
Estadio AA	0.001
PET /TC temprano	0.00007

Tratamiento de LH ha cambiado

ANTES	2025	CAMBIOS
Estatificación con TAC	Estatificación con PET -TC	Up grade aprox 10%
Est Loc: ABVD y RT Est Avanz: ABVD-BEACOPP +- RT	Tratamiento adaptado a PETi	Menos quimio Menos RT
Evaluación de la respuesta con TAC	Evaluación de la respuesta con PET TC	Mayor % RC Menor falsos positivos Mejor pronostico en PET negativos.
Solo qt en recaidos	Nuevas drogas	Mejor pronostico

Se curan mas pacientes con menos tratamiento

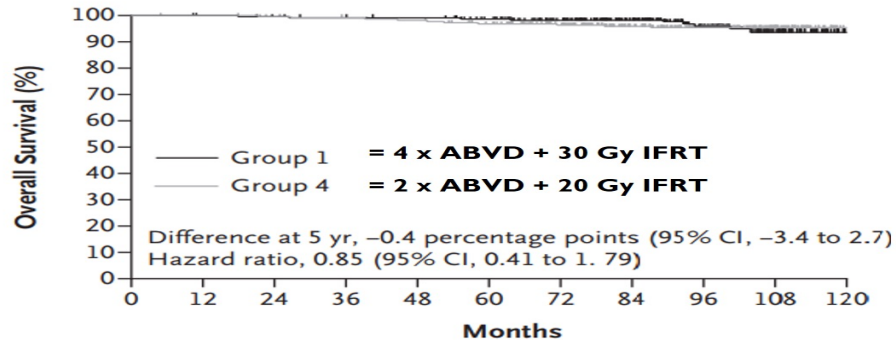
Puede mi paciente recibir ABVD?

GHSB: HD10 (ABVD x 2 +RT vs ABVD x 4 +RT)

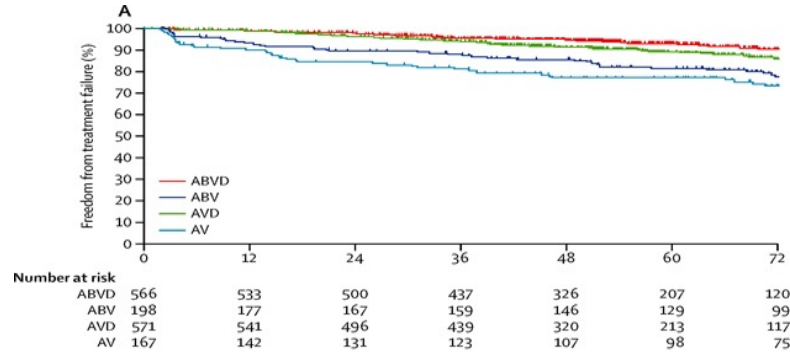
1370 pts LH estadio localizado

GHSB HD 10

- ▶ 2 x ABVD + 20 Gy IFRT (n=299)
 - ▶ 8-year FFTF 86%
 - ▶ 8-year OS 95%



GHSG: HD13 ABVD es superior a 3 drogas.



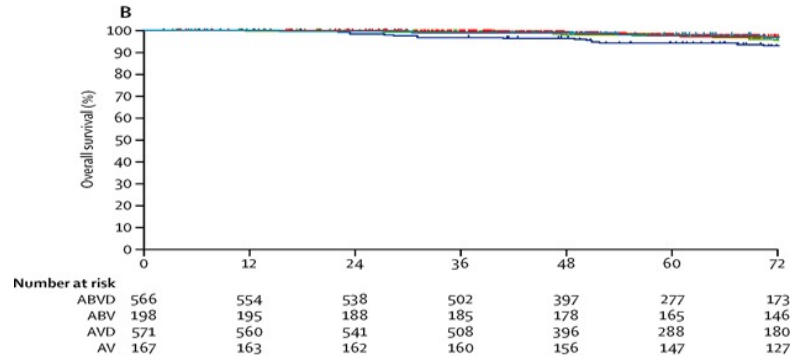
ABVD vs ABV vs AVD vs AV
Todos los pts recibieron RT.

ABVD VS AVD

Solo 4 % diferencia en FFTF.

Recaídas tardías 3.5 %vs 6.5%.

- *Era pre PET*



Toxicidad pulmonary por Bleomicina (BLT) GHSG

- . Las tasas de eventos adversos de grado III-IV fueron similares en los pacientes que recibieron 2×AVD y 2×ABVD (40 % y 39 %, respectivamente), pero considerablemente más altas en aquellos que recibieron 4×ABVD (65 %).
- La **BLT** fue 1.5% en los pacientes que recibieron 2×ABVD, pero 10 % en pacientes 4×ABVD, con 3 eventos letales.

Puede mi paciente recibir ABVD?

Aptos para Bleomicina? SI/NO

Factores de riesgo (???)

Dosis acumulada de Bleomicia.

Insuficiencia renal, ajustar dosis al clearance

Mayor edad.

Decidir usar Bleo en mayores de 60 a. de manera personalizada.

Pero:

- Con monitoreo continuo (Disminucion de DLCO >10% es predictiva).
- No mas de 2 ciclos.
- Evitar Filgrastim (??).
- Evitar el uso de Bleomicina en mayores 70a.

BV monoterapia en pts > 60 a. BREVITY TRIAL

31 pts
25.8% RCM
Median PFS 7.3 meses

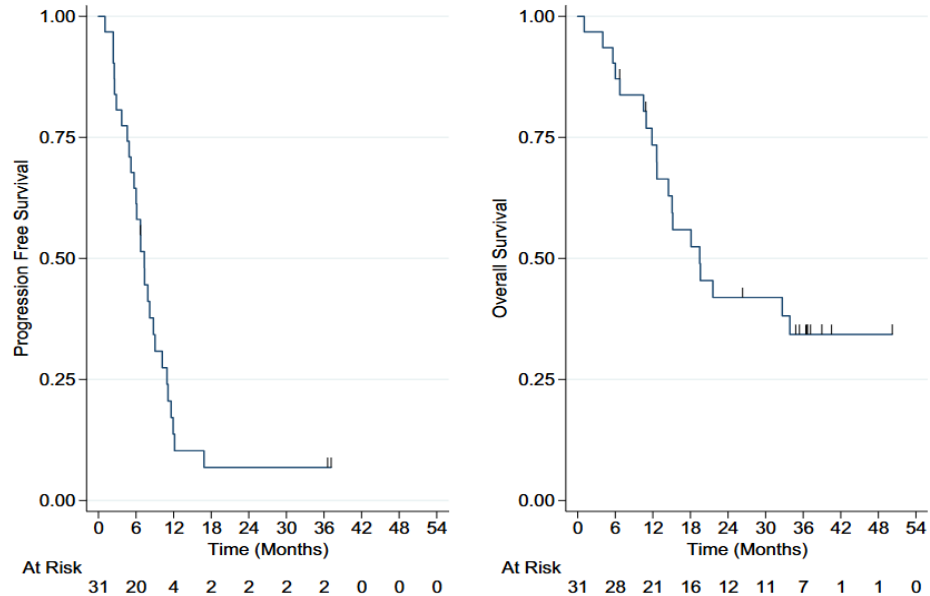
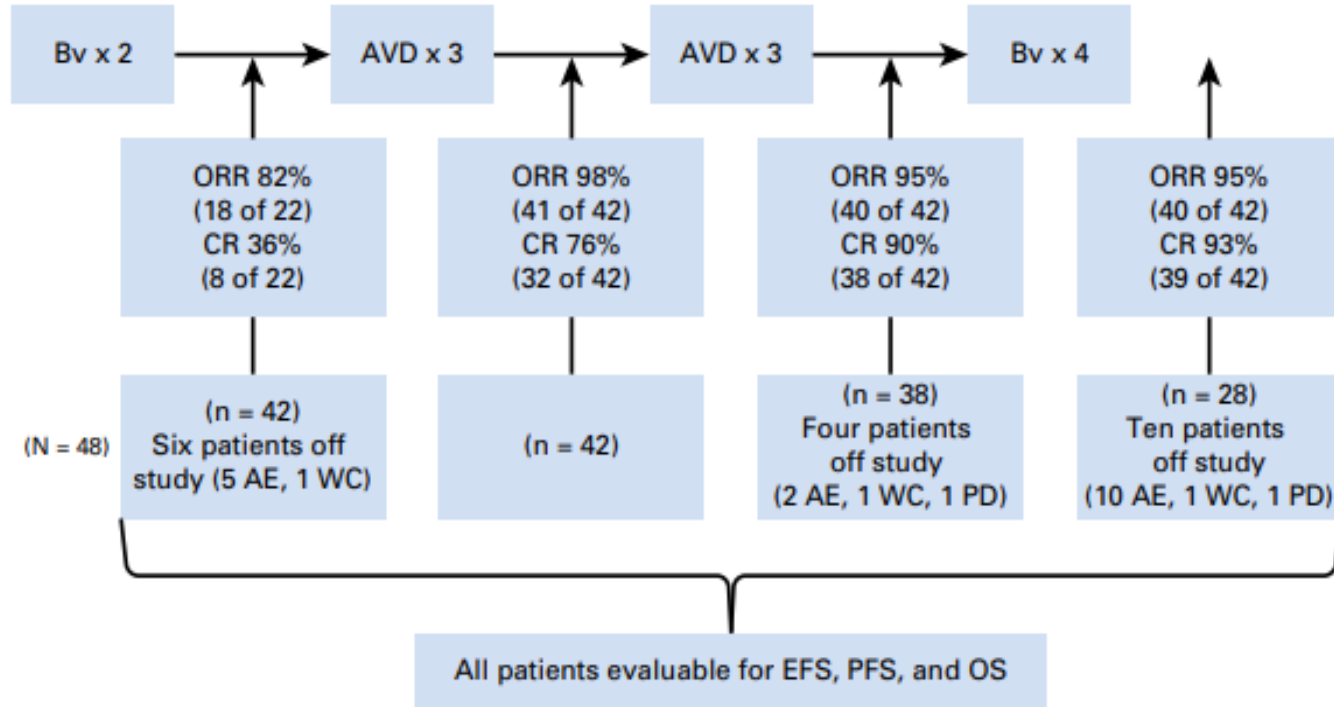
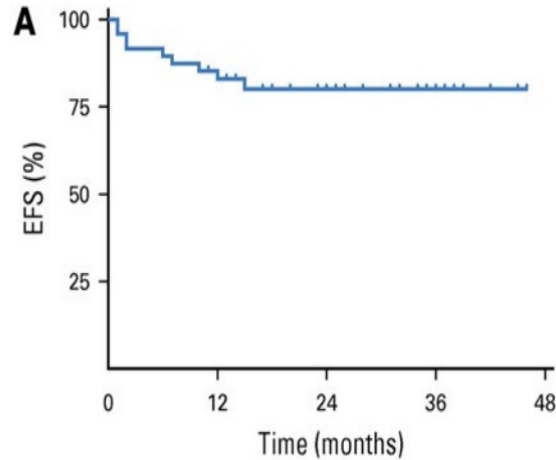


Fig 2. Kaplan–Meier progression-free (PFS) and overall survival (OS) curves. [Colour figure can be viewed at wileyonlinelibrary.com]

Nuevas drogas en LH en paciente adulto mayor.



Nuevas drogas en LH en paciente adulto mayor.



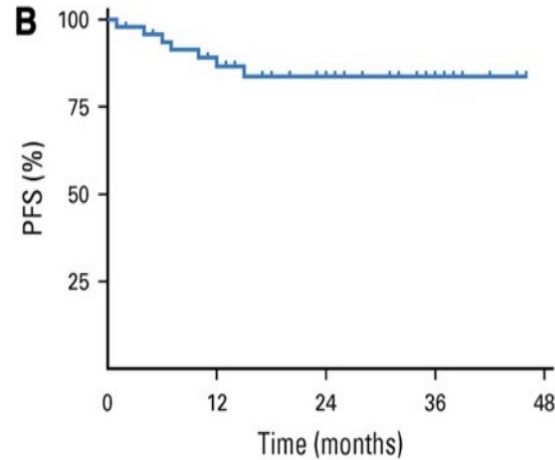
No. at risk 48

35

20

8

0



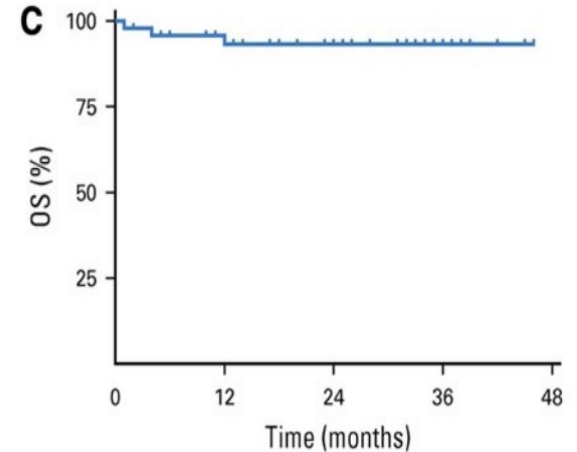
No. at risk 48

35

20

8

0



No. at risk 48

36

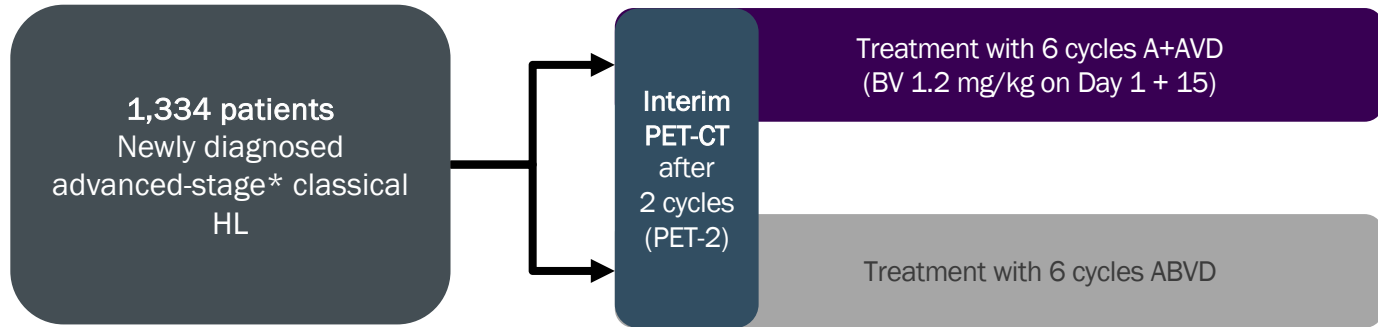
21

8

0

BV en 1L en LH estadios avanz.: ECHELON 1 trial

Phase III

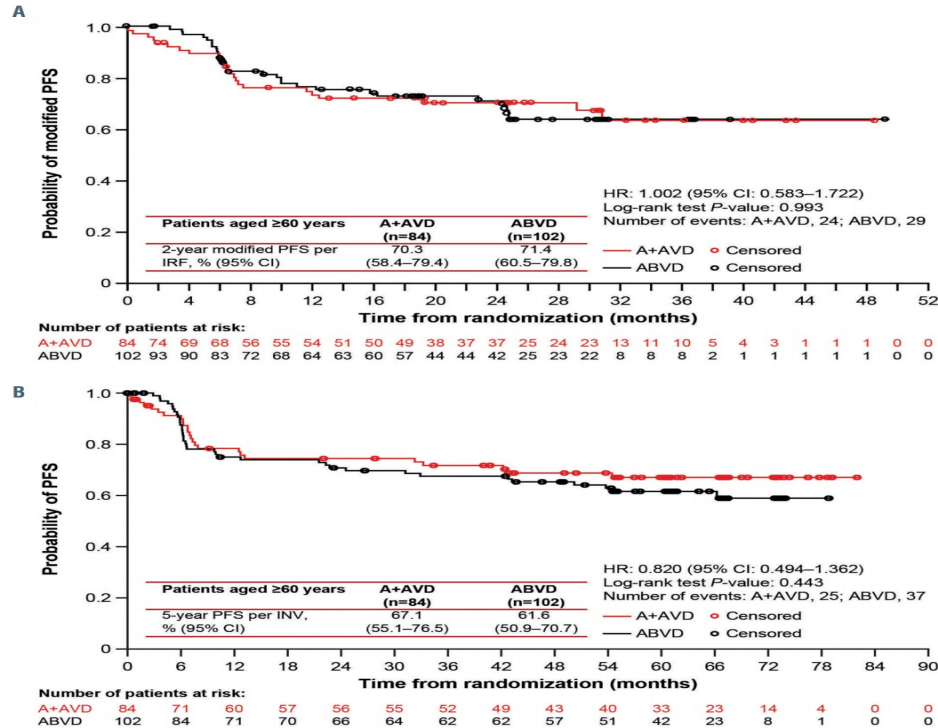


Primary endpoint: mPFS, time to progression, death or modified progression (evidence of non-complete response after completion of front-line therapy [by IRF] and use of subsequent anticancer therapy). Provides a superior assessment of treatment effectiveness

*Stage III-IV

†Results guided optional switch to alternative front-line therapy at physician's discretion for Deauville score of 5 (not considered a mPFS event)

ECHELON-1 en adultos mayores.



Pacientes que mas se beneficiarían con Bv + AVD

De acuerdo con la opinión del grupo de expertos, BV + AVD podría ser considerado como una nueva opción de tratamiento en los pacientes de mayor riesgo.

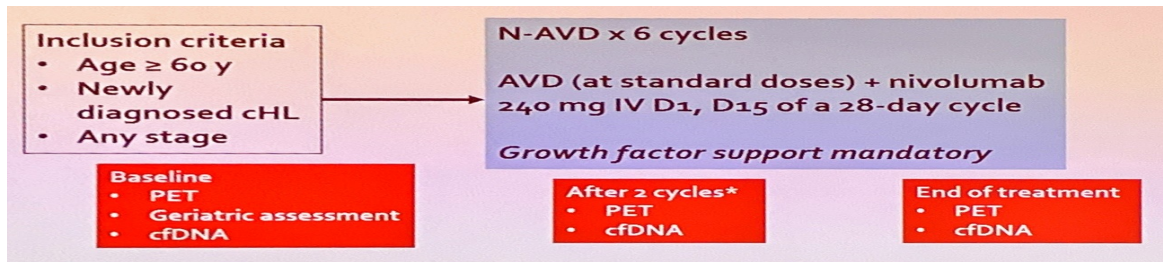
El análisis de subgrupos del estudio ECHELON-1, demostró que las ventajas más importantes del uso de BV + AVD vs. ABVD se dan en los pacientes con:

- **Estadio IV (HR: 0,48; IC95: 0,29 a 0,80),**
- **IPS 4-7 (HR: 0,48; IC95: 0,26 a 0,88),**
- **Compromiso de más de un sitio extranodal (HR: 0,30; IC95: 0,14 a 0,67).**
- **Menores 60 años**

Recomendación: consenso de expertos

Punto de buena práctica: la diferencia en la SG entre las terapias descritas en el estudio ECHELON-1, fue considerada por los expertos, tanto estadísticamente como clínicamente significativa.

Phase II trial Nivo-AVD



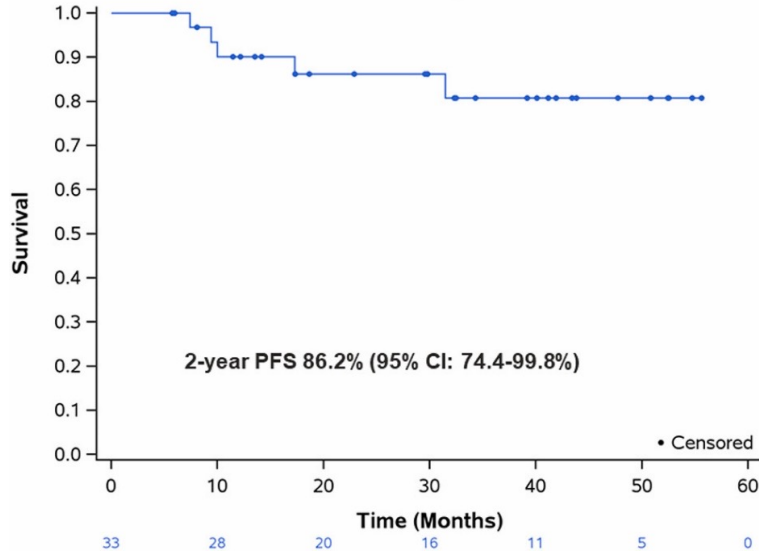
N= 40	n(%)
Median age (yrs; range)	66 (60-78)
Age ≥ 70	15 (38%)
Stage	
I/II	9(22%)
III/IV	31(78%)
IPSS	
0-2	13 (32%)
3-7	27 (68%)
B-symptoms	22 (55%)
Extranodal disease	17 (43%)

Response to therapy	End of treatment n (%)
ORR	33 (100)
• CR	32 (97)
• PR	1 (3)
SD	0
PD	0
NE	0
Duration of follow up (median)	37 months (5,7-55,6)

Phase II trial Nivo-AVD

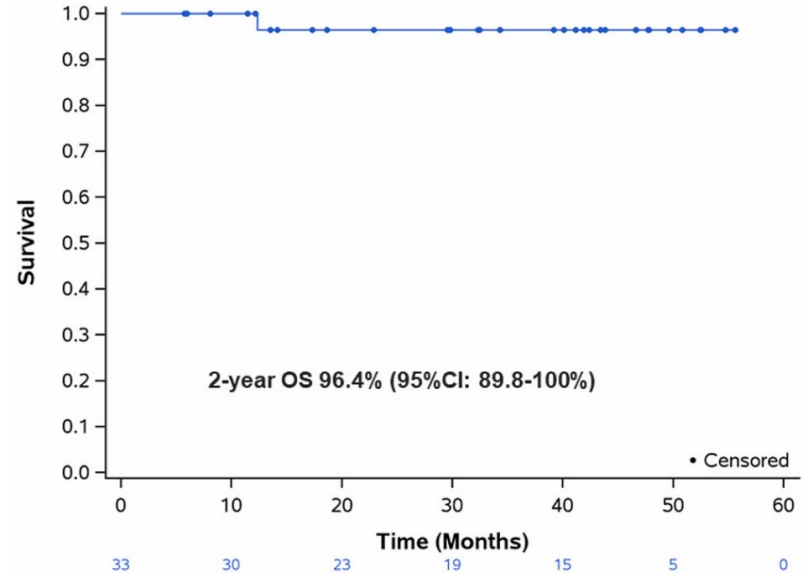
Progression-free survival in older adults with hodgkin lymphoma

With Number of Subjects at Risk



Overall survival in older adults with hodgkin lymphoma

With Number of Subjects at Risk



ACCRU phase II trial Nivo+BV older or chemo-ineligible pts

Primary endpoint: ORR.

Secondary objectives: CMR response, progression-free survival, and overall survival.

Total (n=46)

Cycle 8 metabolic rate	61% (45-75)
Complete metabolic response	22 (48%)
Partial metabolic response	6 (13%)
Progressive Metabolic Disease	7 (15%)
Off before cycle 8	11 (24%)
Best overall response rate (all cycles)	91% (79-98)
Complete metabolic response	30 (65%)
Partial metabolic response	12 (26%)
No metabolic response	1 (2%)
Progressive metabolic disease	1 (2%)
Not evaluated	2 (4%)

Median duration of response NR (11.1-NR)

Median overall survival NR (NR-NR)

Median progression-free survival (months) 18.3 (12.7 to NR)

Data are median or % (95% CI) or n (%), unless otherwise specified. NR=not reached.

Table 2: Patient outcomes and response to therapy

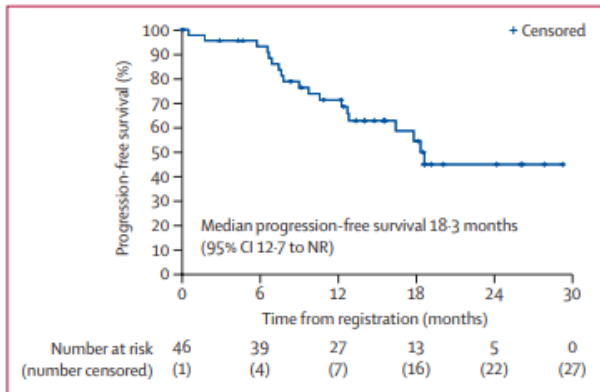
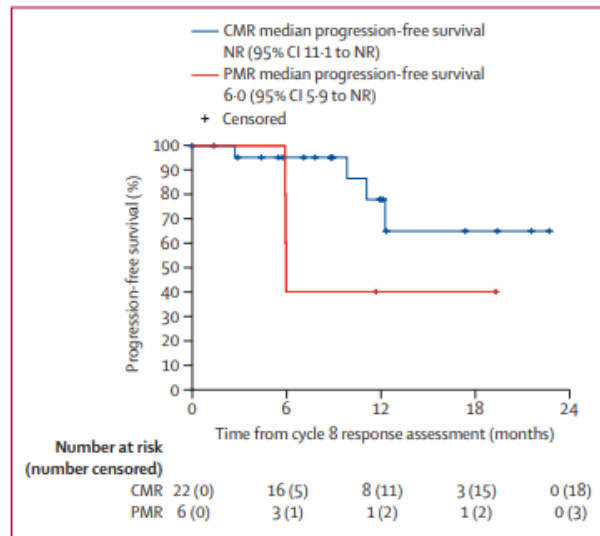


Figure 2: Progression-free survival
NR=not reached.



SWOG S1826: Diseño de estudio

- International, randomized, open-label phase III trial

Patients ≥ 12 yr of age with newly diagnosed stage III-IV cHL; CrCl ≥ 30 mL/min; LVEF $\geq 50\%$ (or SF $\geq 27\%$); Tbili ≤ 2 x ULN; AST and ALT ≤ 3 x ULN; no ILD/pneumonitis, active autoimmune disease, peripheral neuropathy grade ≥ 2 ; ECOG PS 0-2[†]
(N = 994)

*Stratified by age (12-17, 18-60, or >61 yr),
IPS (0-3 or 4-7), EOT RT intended (yes or no)*

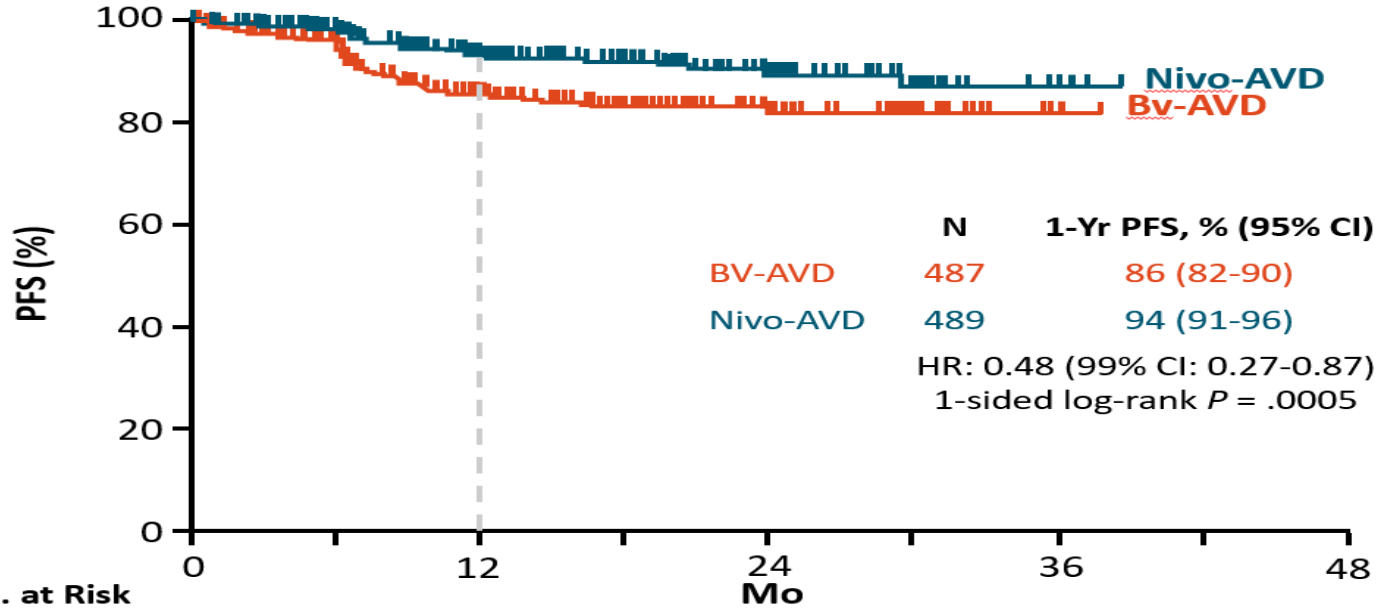
Nivolumab* 240 mg Days 1, 15
+
AVD D1, 15 x 6 28-day cycles
G-CSF optional
(n = 496)

BV 1.2 mg/kg Days 1, 15 +
AVD Days 1, 15 x 6 28-day cycles
G-CSF required
(n = 498)

- **Primary endpoint:** PFS
- **Secondary endpoints:** OS, EFS, safety

[†]Pediatric: Lansky score vs ECOG; CrCl/GFR ≥ 70 mL/min or SCr ≤ 1.5 ULN.

SWOG: 1826 SLP



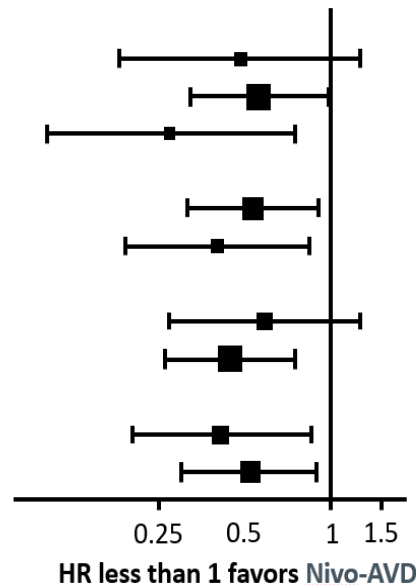
No. at Risk

	0	12	24	36	48
N-AVD	489	384	244	148	77
BV-AVD	487	359	218	130	71

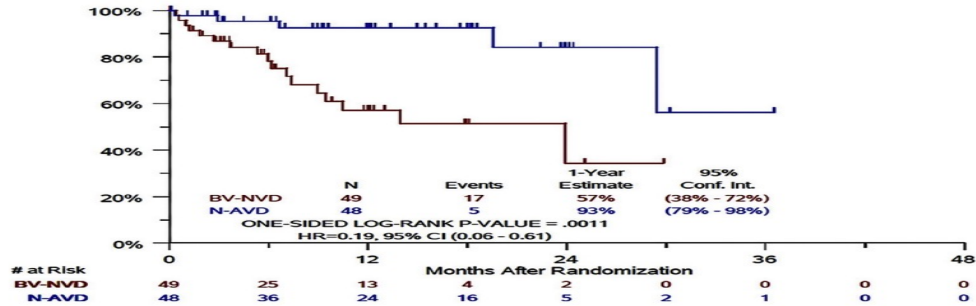
: 12.1 mo

SWOG: 1826 SLP Análisis de subgrupos

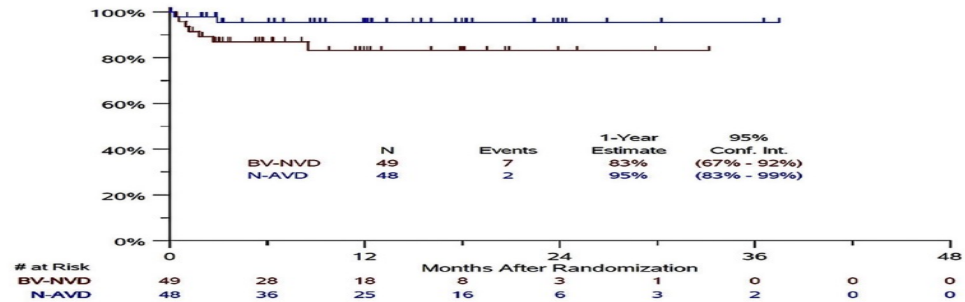
Subgroup	Nivo + AVD Events/N (%)	BV + AVD Events/N (%)	HR (95% CI)	P-Value
Age				
12-17 yr	6/120 (5.0)	12/117 (10.3)	0.48 (0.18, 1.27)	0.140
18-60 yr	19/323 (5.9)	32/323 (9.9)	0.56 (0.32, 0.98)	0.042
>60 yr	5/46 (10.9)	14/47 (29.8)	0.27 (0.10, 0.76)	0.013
IPS				
0-3	20/331 (6.0)	36/330 (10.9)	0.53 (0.31, 0.91)	0.023
4-7	10/158 (6.3)	22/157 (14.0)	0.40 (0.19, 0.84)	0.015
Stage				
III	11/187 (5.9)	15/167 (9.0)	0.58 (0.27, 1.27)	0.176
IV	19/301 (6.3)	43/317 (13.6)	0.44 (0.26, 0.75)	0.003
Symptoms				
A	10/202 (5.0)	24/210 (11.4)	0.41 (0.20, 0.86)	0.017
B	20/286 (7.0)	34/274 (12.4)	0.52 (0.30, 0.90)	0.020



SWOG: 1826 Pts > 60 años cohorte - EFS, SG



(b)



(c)

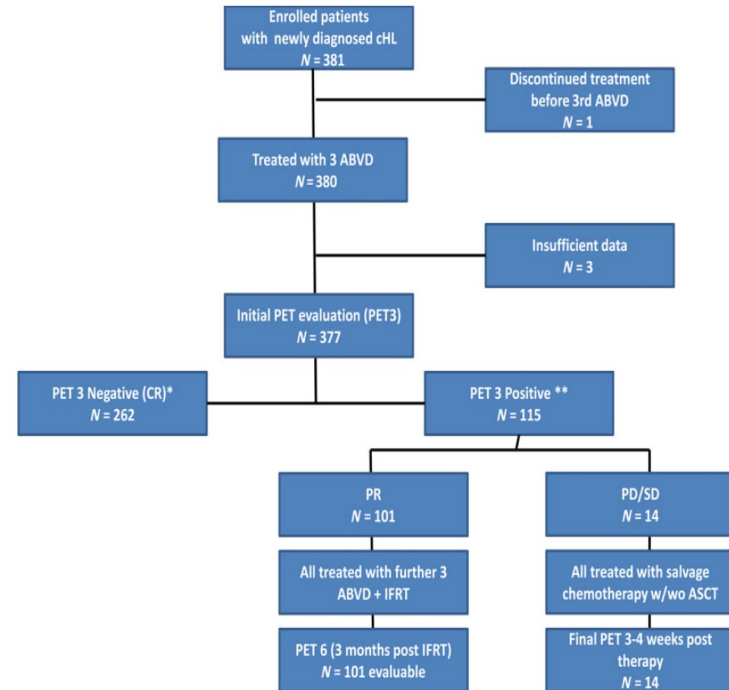
Nuevas opciones en el tratamiento de primera línea del linfoma de Hodgkin

- **SWOG study :**
- Se incluyeron 97 pacientes > 60 años
- Seguridad y mayor PFS con N-AVD vs. BV-AVD
- Reducción de la radioterapia (< 1%)
- Análisis de ctDNA y TMTV en curso
- ¿Necesitamos un seguimiento a largo plazo? Toxicidad a largo plazo.
- Esta combinación de tratamiento aún no ha sido aprobada.

PET-adapted therapy after three cycles of ABVD for all stages of Hodgkin lymphoma: GATLA LH-05 trial

Table I. Clinical characteristics of evaluable patients.

Characteristic	All evaluable patients (<i>n</i> = 377)
Median age (range), years	31 (18–89)
Male sex, <i>n</i> (%)	173 (46)
Performance status, <i>n</i> (%)	
0–1	362 (95)
2	6 (2)
≥3	3 (1)
Not available	6 (2)
Ann Arbor stage, <i>n</i> (%)	
Early (I to II non-bulky)	239 (63)
Advanced (II, bulky-III-IV)	138 (37)
Bulky disease, <i>n</i> (%)	66 (17)



L. FIAD, MV. PRATES, I. FERNANDEZ, N. KURGANSKY, A. CERUTTI, F. NEGRI ARENGUREN, L. GUANCHIALE, F. SACKMAN, J. MARADEI, A. ENRICO, P. NEGRI ARANGUREN and A. PAVLOVSKY. On behalf of GATLA, Argentina.

INTRODUCTION

Treatment for classic Hodgkin lymphoma (cHL) in older age population continues to be a challenge. Comorbidity prevalence, increase toxicity to the standard treatments and the lack of inclusion in clinical trials all contribute to this phenomenon. The obtained results are inferior in comparison to young adults and there is shortage of evidence regarding effective therapeutic strategies. Recently, GATLA has analyzed the long-term follow-up of the results of the PET/CT adapted strategy after 3 cycles of ABVD, regardless of the stage at diagnosis with no upper age limit.

OBJECTIVE

To assess the effectiveness and safety of this PET/CT adapted treatment in patients older than 60 years.

METHODS

- A retrospective analysis of the LH-05 database was performed. Patients were included \geq aged 60 with recent diagnosis of cHL stage I-IV and HIV negative.
- All patients received 3 cycles of ABVD and were evaluated with PET-TC (PET3).
- Those patients with negative PET (Deauville score 1 and 2) were considered to be in complete remission (CR) and they finalized the treatment.
- Patients with DS 3 and 4 completed 6 ABVD cycles and involved-field radiotherapy in hypermetabolic areas in interim PET3.
- Patients with DS 5 were considered to have progressive disease.
- Progression-free survival (PFS) and overall survival (OS) were evaluated.
- Kaplan-Meier method and Log-rank test were used for survival analysis.

RESULTS

Of a total of 490 patients included in the GATLA LH-05 protocol, 59 were 60 or older. Of this cohort, the mean age was of 66 years (range: 60-89), and 75% presented in localized stage (I-II), 90% presented a PS <2 . The most frequent histological subtype was Nodular Sclerosis (54%).

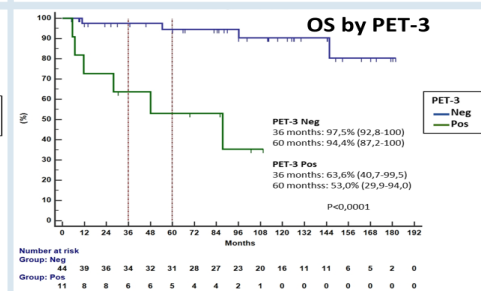
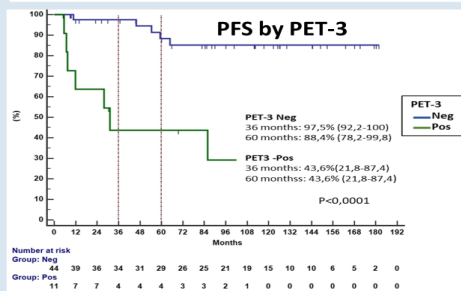
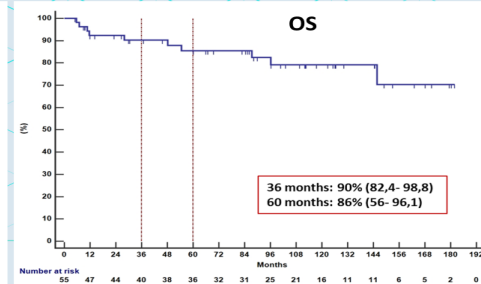
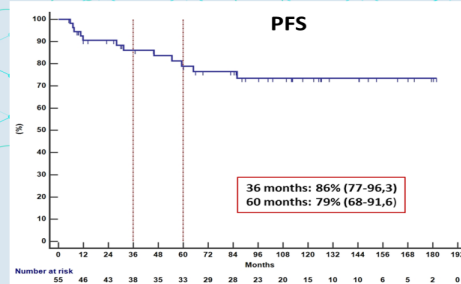
All patients received initial treatment with 3 cycles of ABVD and were evaluated by PET: 81% presented negative PET3 and 19% were PET 3 positive. No GIII-IV toxicity or treatment-related deaths were recorded.

With a median follow-up of 10 years, median PFS and OS were not reached. At 36 and 60 months, PFS was 86% and 78.9%, and OS was 90% and 85.5%, respectively.

Negative PET3 patients had a PFS of 85.4%, while positive PET3 patients had a PFS of 43% ($p=0,0001$).

In the multivariable analysis that included age (>60 vs <60), stage (localized vs. advanced), IPS (<2 vs. >2), extranodal areas, bulky disease and PET3 result, **only age and PET3 result had significant impact in PFS ($p=0,046$ and $p=0,001$ respectively)**. PFS of PET/TC- positive patients was significantly lower than in the cohort of patients younger than 60.

OS at 36 and 60 months in PET negative patients was 97.5% and 94.5% respectively, versus 63.6% and 53% in PET/CT positive patients.



CONCLUSIONS With the PET/TC adapted treatment after 3 cycles of ABVD in 59 patients > 60 years old, 81% of patients achieved negative PET and therefore received no further treatment. These patients had an excellent result with a PFS of 85.4% at 3 years, similar to the younger patient population. However, a significant reduction in PFS was observed in PET3 positive patients > 60 years old compared to younger ones. Implementation of this PET/TC guided strategy, regardless of stage at diagnosis, resulted in reduced exposure to chemotherapy and radiotherapy, contributing to the absence of severe treatment-related morbidity and mortality.

REFERENCES

- PET-adapted therapy after three cycles of ABVD for all stages of Hodgkin lymphoma: results of the GATLA LH05 trial. Pavlovsky A, et al. Br J Haematol. 2019;185(5):865-73.
- Risk-adapted therapy with three or six cycles of omorubicin/bloosomycin/vinblastine/ifosfamide plus involved-field radiation therapy in Hodgkin lymphoma, based on prognosis at diagnosis and early response: Results from the GATLA study. Pavlovsky S, et al. Clin Lymphoma, Myeloma Leuk. 2010;10(3):181-5.

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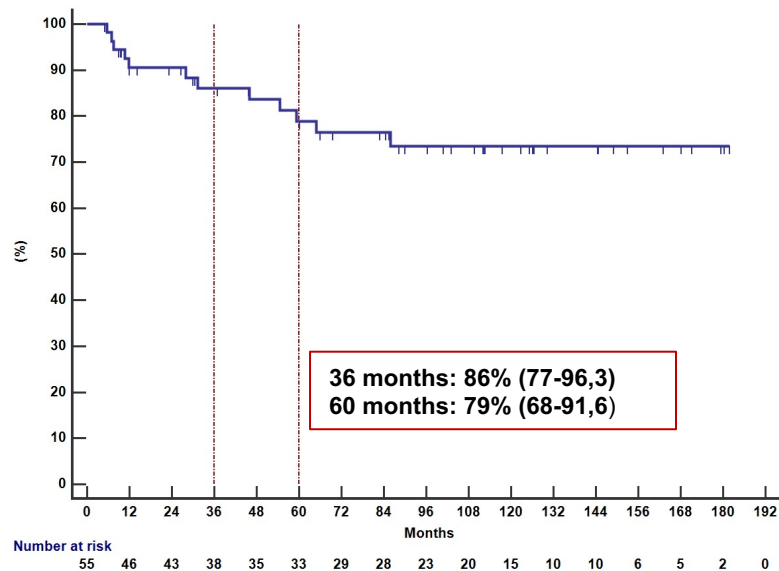
GATLA LH05 EN MAYORES DE 60 a.

Characteristics : n: 59	n (%)
Median Age (Range) ≥70 ys	66 (60-89)/ 20 (34%)
PS	
0	41 (69)
1	12 (20)
≥2	6 (11)
B symptoms	
Yes	36 (61)
No	23 (39)
Stage	
I-II	44 (75)
III-IV	15 (25)

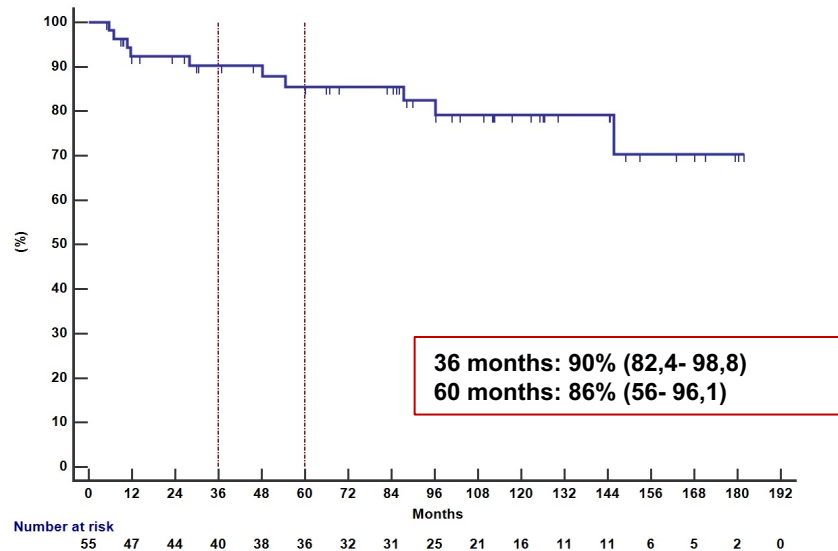
Characteristics	n (%)
Bulky	
Yes	5 (9)
No	54 (91)
Extranodal	
Yes	7 (12)
No	52 (88)
Histopathologic Subtypes	
Nodular sclerosis	34 (58)
Mixed cellularity	19 (32)
Lymphocyte-rich	6 (10)
Lymphocyte-depleted	0

GATLA LH05 EN MAYORES DE 60 a.

PFS

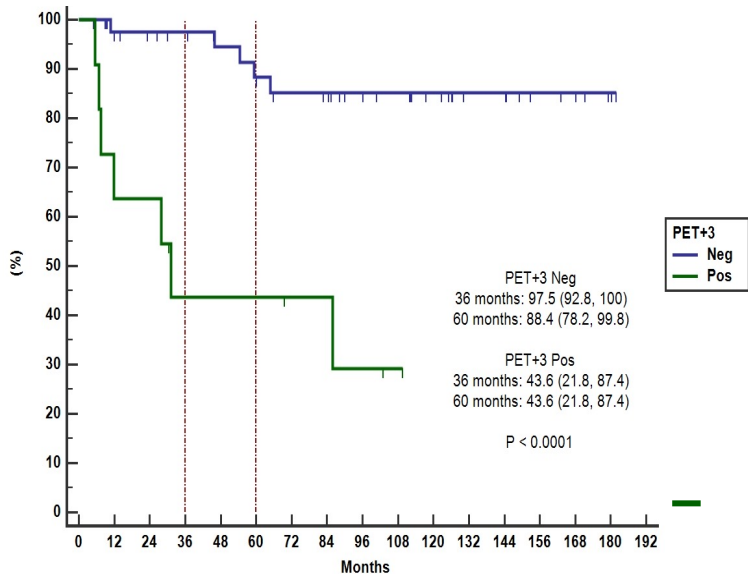


OS



GATLA LH05 EN MAYORES DE 60 a.

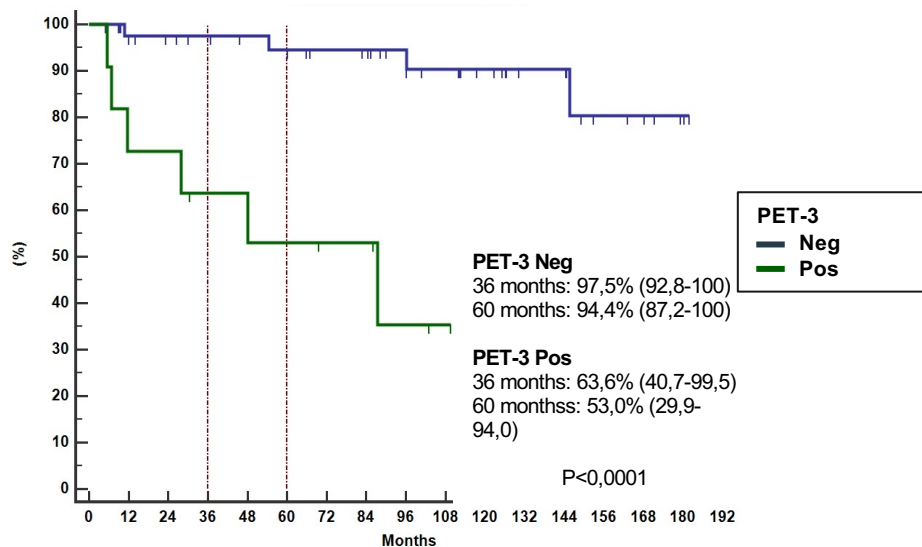
PFS by PET-3



Number at risk

Group: Neg	44	39	36	34	31	29	26	25	21	19	15	10	10	6	5	2	0
Group: Pos	11	7	7	4	4	4	3	3	2	1	0	0	0	0	0	0	0

OS by PET-3

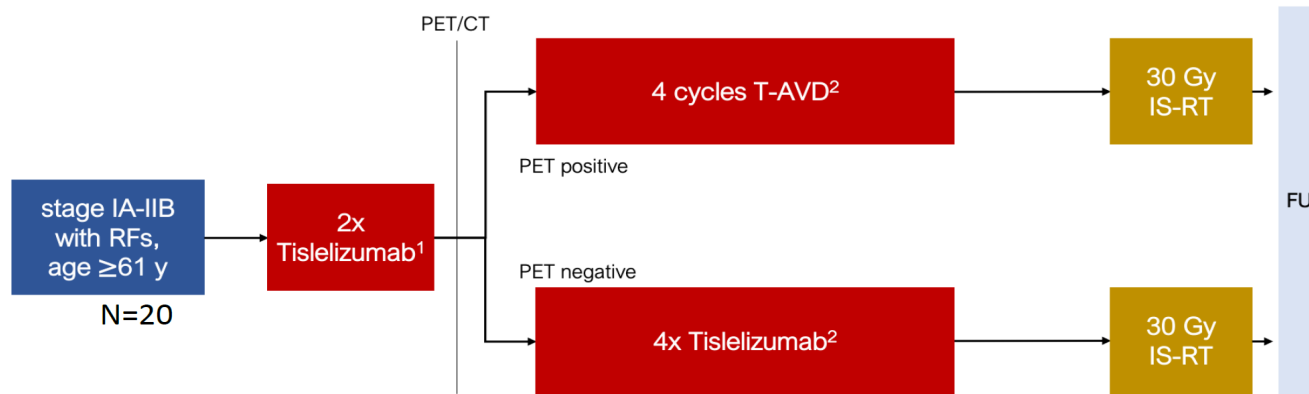


Number at risk

Group: Neg	44	39	36	34	32	31	28	27	23	20	16	11	11	6	5	2	0
Group: Pos	11	8	8	6	6	5	4	4	2	1	0	0	0	0	0	0	0

Tislelizumab en LH en adultos mayores

INDIE: Elderly Cohort



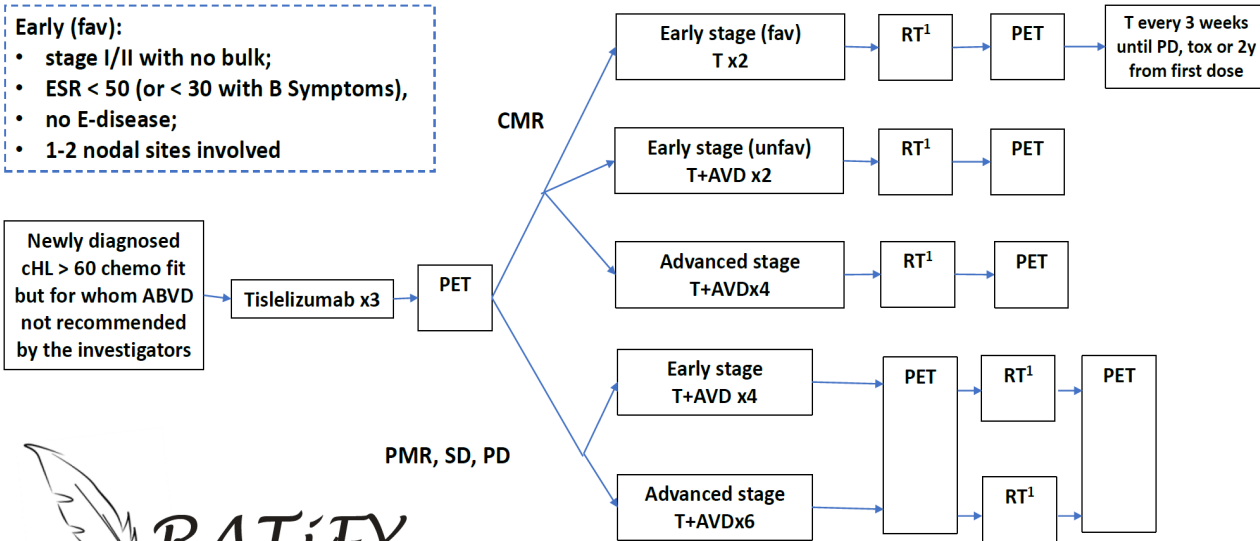
*chemotherapy should start as soon as central PET evaluation is available. Up to 1 further dose tislelizumab is allowed in case of severe delay of PET panel assessment.
¹Tislelizumab 200mg Q3W ²Tislelizumab 300mg Q4W, on day 1 of each 28-day AVD cycle if combined with AVD. RFs: GHSG risk factors for early-stage unfavorable; y: years

Supported with drug & funding by BeiGene. ¹ 200mg 3-weekly ² 400mg 4-weekly.
Abbreviations: RF: risk factors, y: years, T-AVD: tislelizumab and AVD, FU: follow-up




Tislelizumab en LH en adultos mayores

UK Older cHL Patient Study

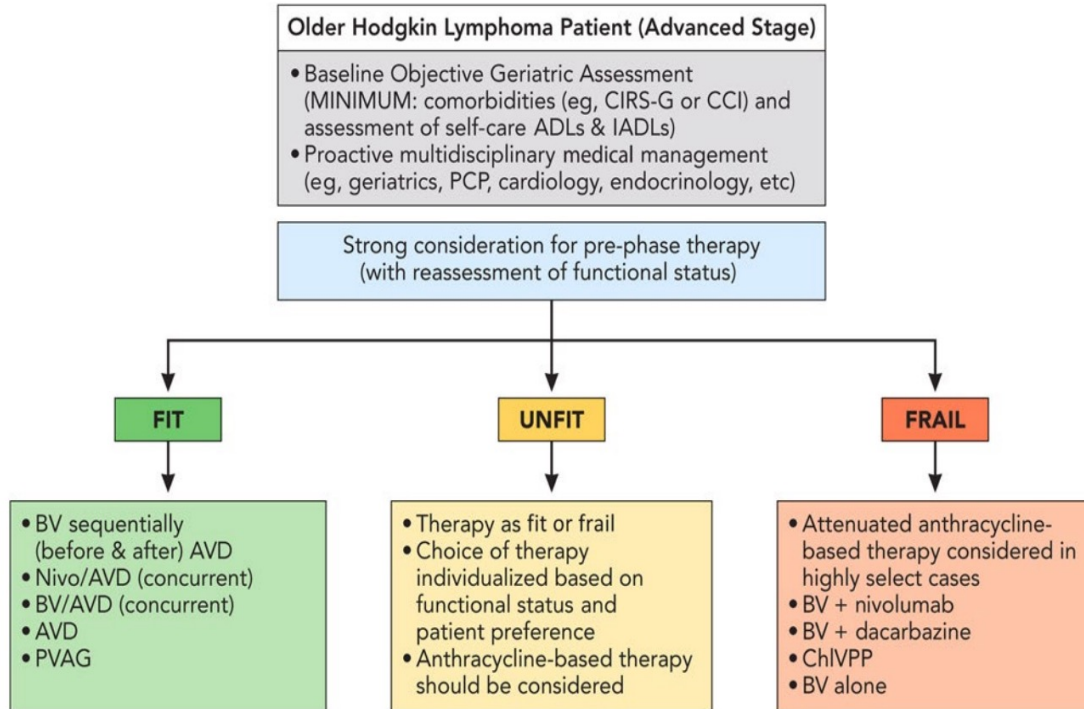


¹Radiotherapy integrated as per local recommendations





**El gran desafío:
Caminar por la cuerda floja entre
eficacia y toxicidad.**



Criteria	Fit	Unfit	Frail
ADL	6	5	≤4
IADL	8	6-7	≤5
CIRS-G	0 score of 3-4 and <5 of score 2	0 score of 3-4 and 5-8 of score 2	≥1 score of 3-4 and/or >8 of score 2
Age	<80 years	≥80 years FIT	≥80 years UNFIT

Como trato yo pacientes con LH adultos mayores

- **Estadios localizados y avanzados:**

- Categorización del pte según CIRS y ADL.
- Intento pensar en poder dar ABVD adaptado al resultado del PET.
 - Considero acortar el número de ciclos de qt. No más de 2-3 ciclos de Bleo.
 - Si Bleo está contraindicada y sin posibilidad de BV, AVD y evaluar la factibilidad de RT.
- No apto para ABVD:
 - CHOP? Resultados inferiores
- En caso de contraindicación a antraciclicos:
 - Considerar Adria Liposomal.
 - Omitir Adria.

Como *trataría* yo pacientes con LH adultos mayores

- A la espera de la aprobación de N-AVD
- Con la esperanza de la aprobación de N-AVD y resultados semejantes en la vida real.

LH recaído refractario en adultos mayores.

- No hay protocolos específicos para este grupo de pacientes.
- La incorporación de BV e iCP han mejorado el pronóstico.
- Es probable que el uso secuencial de nuevas drogas y qt adaptado al resultado del PET, sea la opción más atractiva.

El arte del equilibrio en pts > 60 a con LH.

- El manejo del linfoma de Hodgkin en adultos mayores requiere un ***equilibrio*** entre eficacia y tolerabilidad.
- Adaptar el tratamiento según la funcionalidad del paciente (usar scores!), utilizar esquemas ajustados a la respuesta y flexibilizar el número de ciclos y las dosis son claves para optimizar los resultados.
- A medida que avanzamos en la integración de nuevos agentes, podemos reducir la toxicidad sin comprometer la eficacia.

El arte del equilibrio en pts > 60 a con LH.

- El pronóstico de un paciente adulto mayor con LH es desfavorable con respecto al resto de los grupos etarios.
- Estudios recientes muestran protocolos con resultados superadores.



MUCHAS GRACIAS.

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