

A Case of Anaplastic Large Cell Lymphoma with DUSP22 Rearrangement

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Ankara

Umut Yılmaz, MD

Istanbul/Turkey



Turkish Society of Hematology

www.thd.org.tr

ALCL Case Presentation- Disclosures

Umut Yilmaz

Janssen Pharmaceuticals - Speaker

ALCL Case

Initial presentation and history (December 2020)

39 year-old male

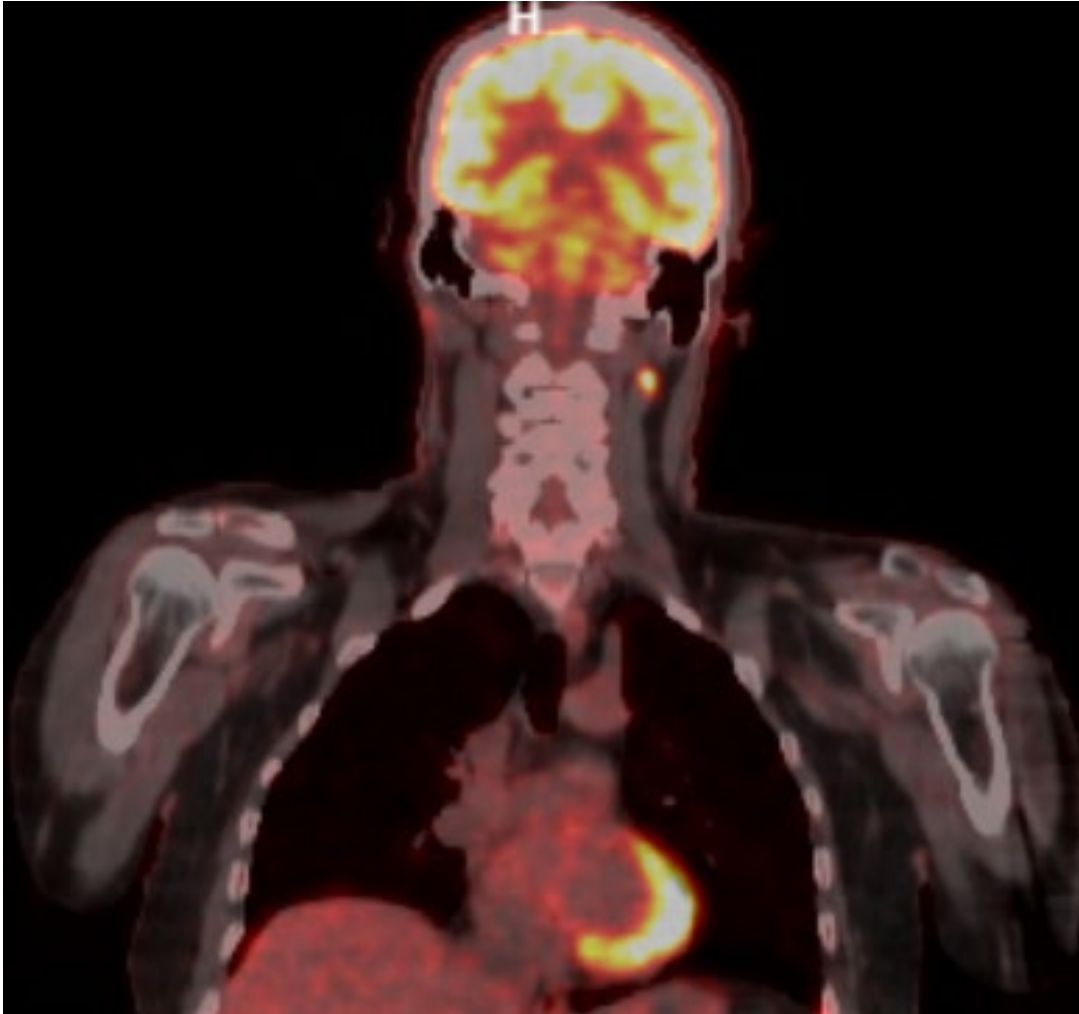
Annual follow-up (asymptomatic)

Papillary thyroid carcinoma (2016)

20 x 15mm cervical lymph node detected in neck US

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Initial PET/CT (December 2020) and excisional biopsy



Pathology Report

- Anaplastic Large T Cell Lymphoma (ALCL), ALK negative
- Ki-67= 80-90%
- 6p25.3 rearrangement in 48% of the cells on FISH (**DUSP22**)

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Pre-treatment evaluation

Bone marrow aspiration and biopsy: **No lymphoma involvement**

Thyroid cancer in long-term remission after thyroidectomy

Normal cardiac, renal, hepatic function, and normal LDH level

ECOG = 0

No tumor burden after diagnostic excision

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Pre-treatment evaluation (summary)

Stage 1, ECOG = 0

IPI= 0 / IPTCLP= 0

PIT= 0 /mPIT= 1

TMTV = low (none), DUSP22 mutated

Age 39, Excellent organ function

TMTV= total metabolic tumor volume

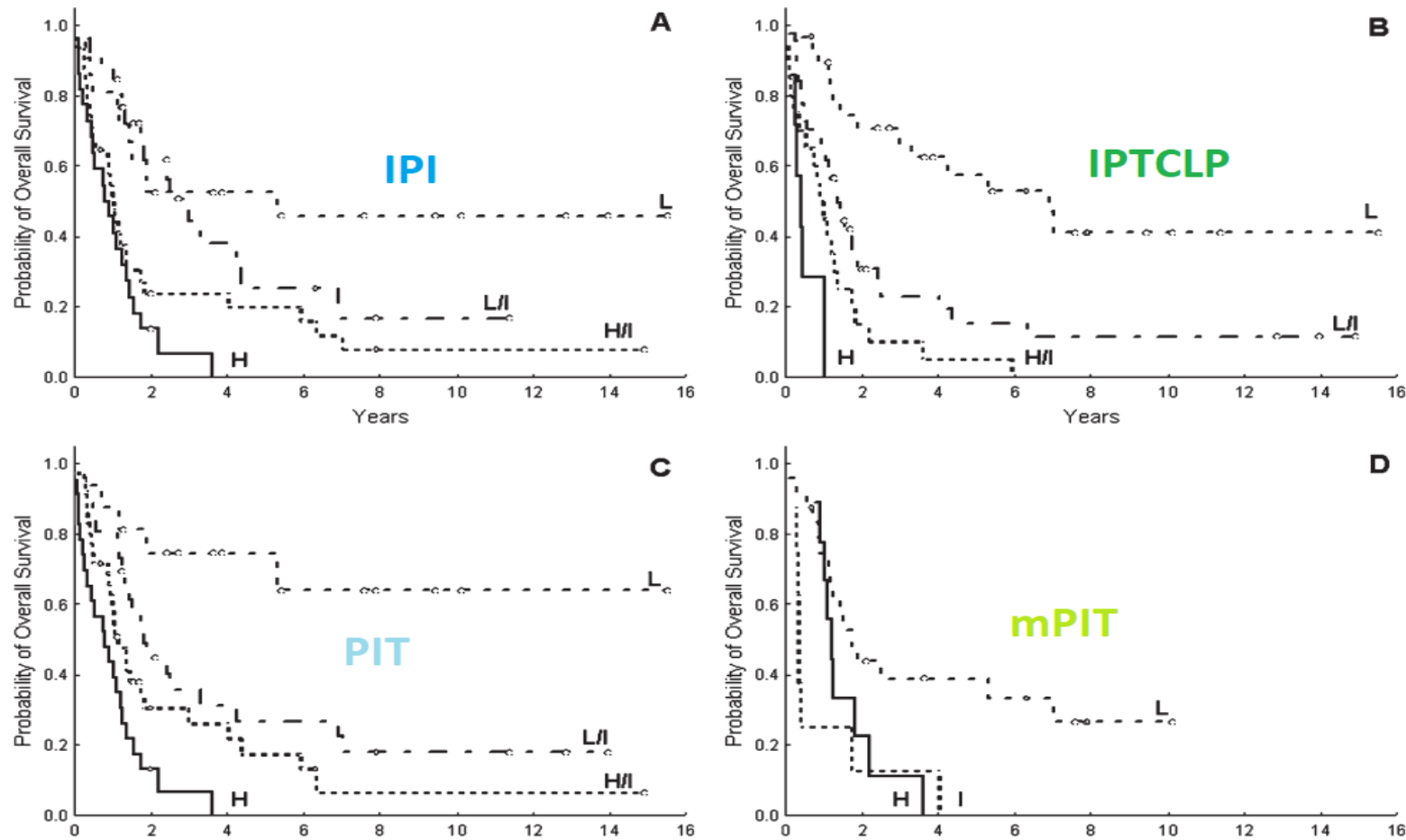
IPI= international prognostic index

IPTCLP=international peripheral T cell
lymphoma project score

PIT= prognostic index T cell lymphoma

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Prognostic data to take into account



Gutiérrez-García G, et al. *Ann Oncol.* 2011;22(2):397-404. doi:10.1093/annonc/mdq359

PIT [24]

- Age > 60
- Performance status ≥ 2
- LDH > ULN
- Bone marrow involvement

mPIT [25]

- Age > 60
- LDH > ULN
- Performance status ≥ 2
- Ki-67 $\geq 80\%$

International T-cell Index [26]

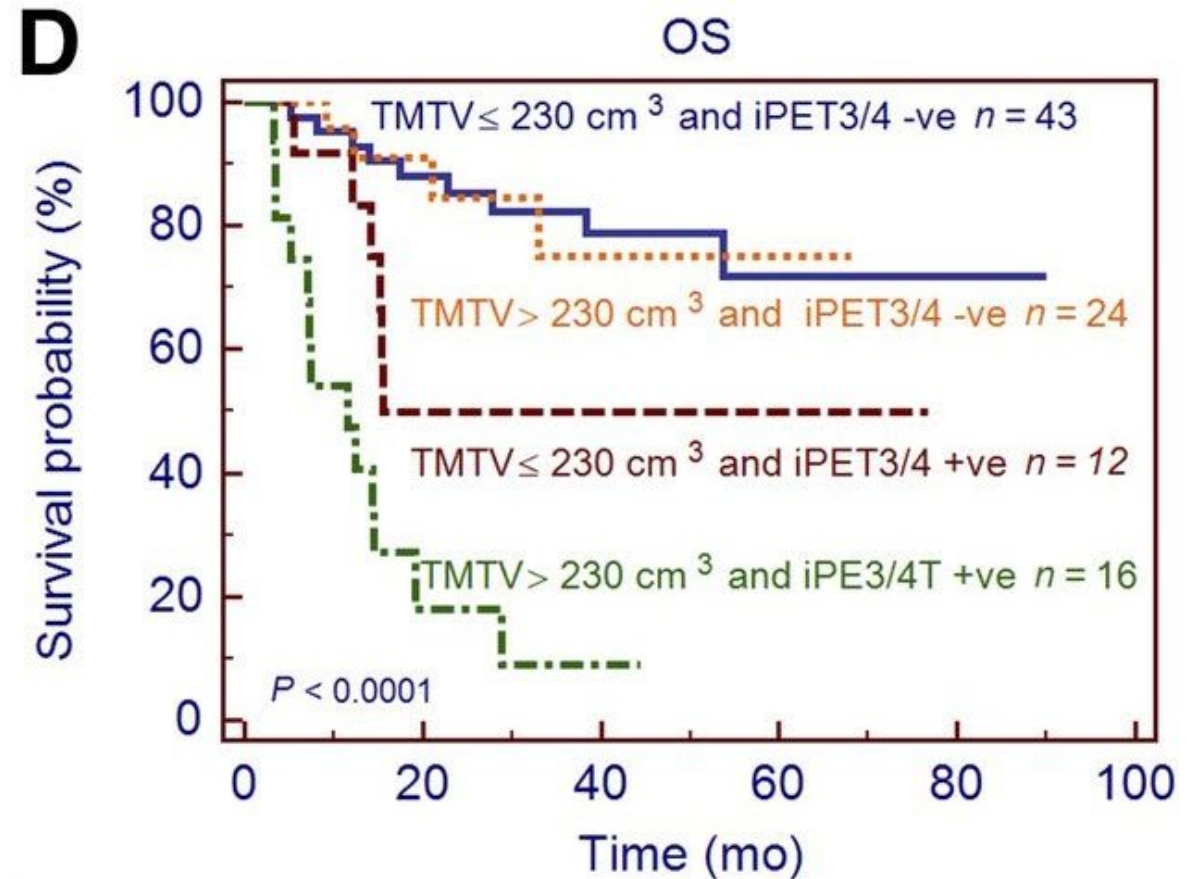
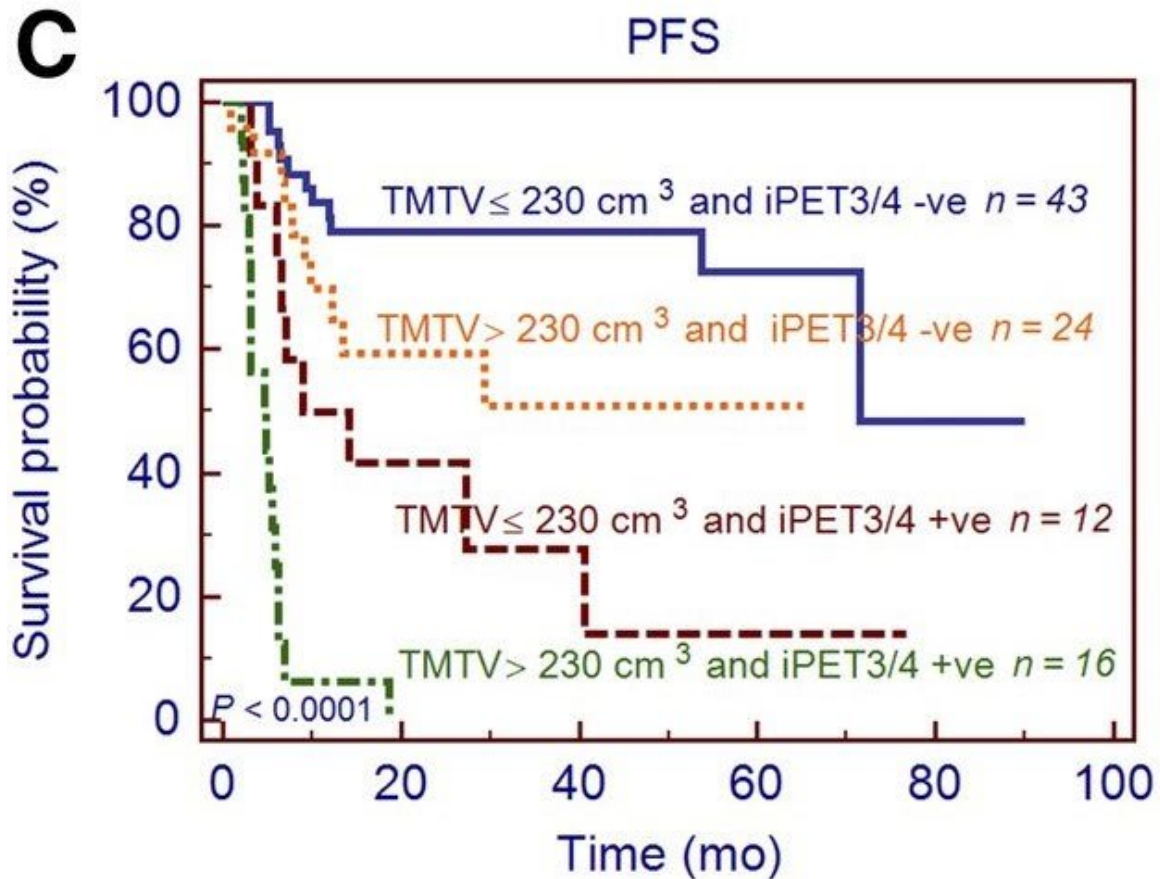
- Age > 60
- Performance status ≥ 2
- Platelets < 150K

T-cell Score [27]

- Albumin < 3.5 g/dL
- Performance status ≥ 2
- Stage 3 or 4
- ANC $\leq 6.5 \times 10^9/L$

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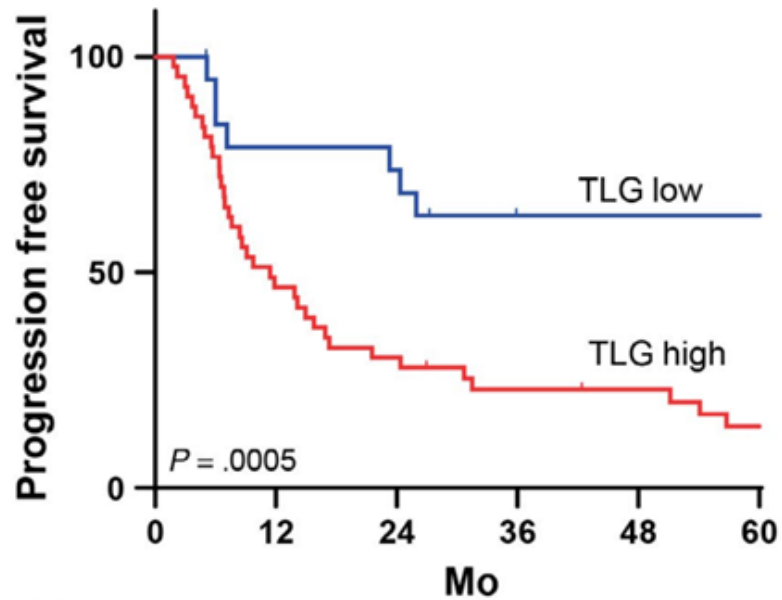
Prognostic data to take into account (TMTV and early response)



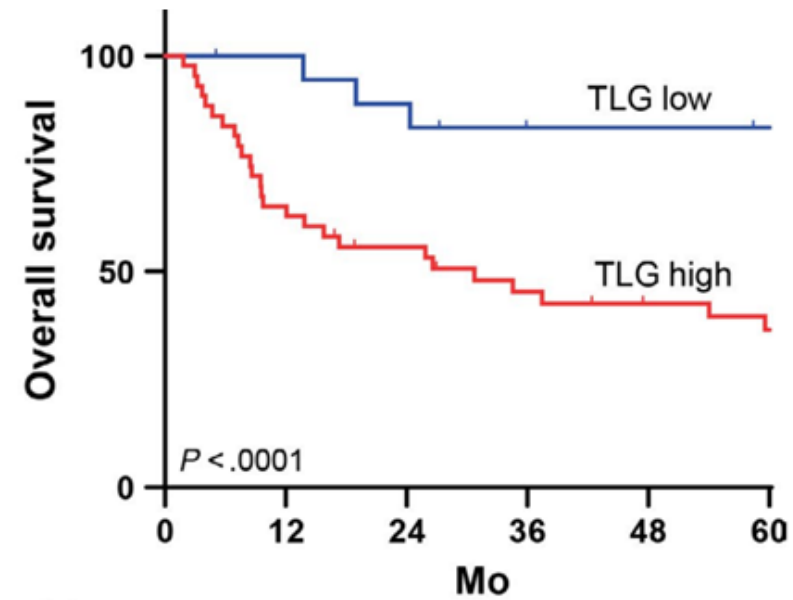
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Prognostic data to take into account (TLG)

Total Lesion Glycolysis (MTV x SUVmean)



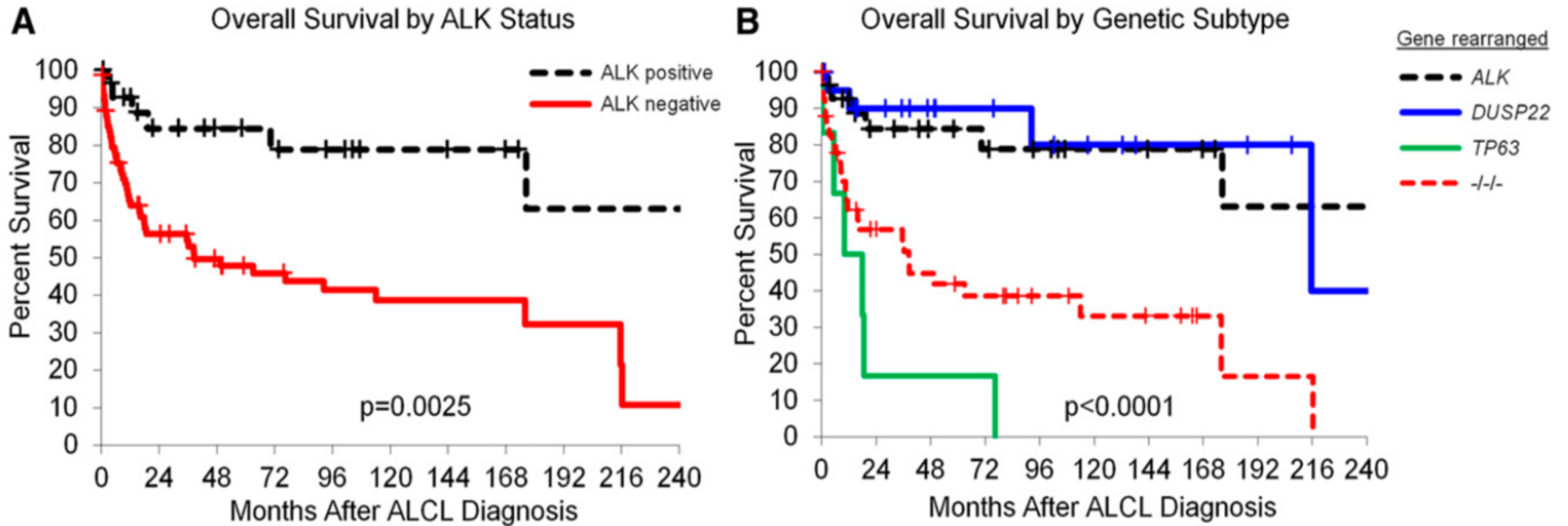
Number at risk	0	12	24	36	48	60
TLG low	21	16	15	11	11	11
TLG high	42	21	14	10	9	6



Number at risk	0	12	24	36	48	60
TLG low	21	20	17	14	14	13
TLG high	42	28	23	18	14	13

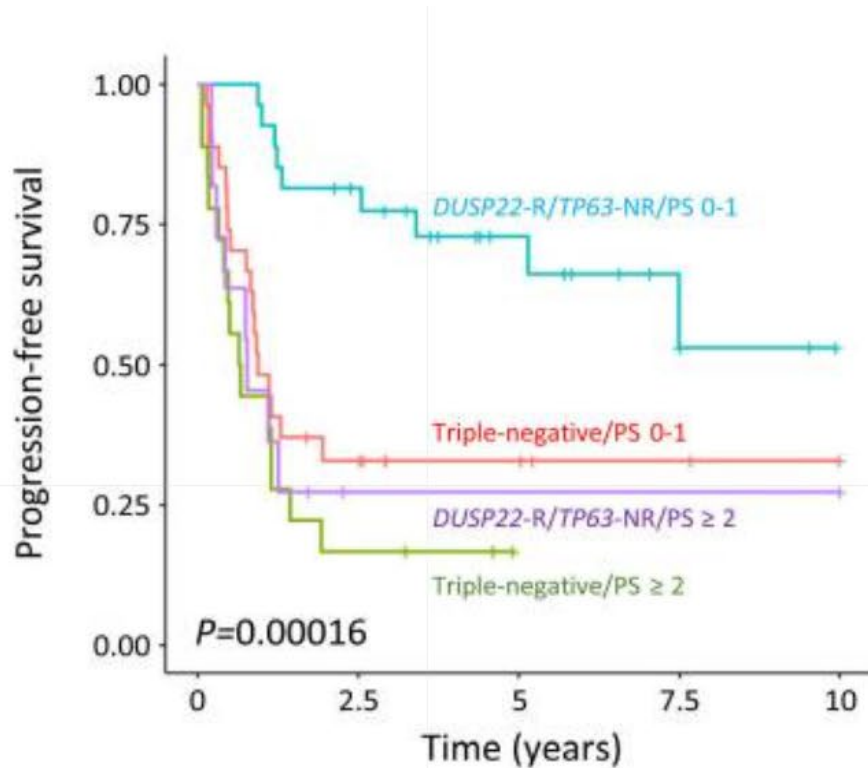
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Prognostic data to take into account (DUSP-22 rearrangement)

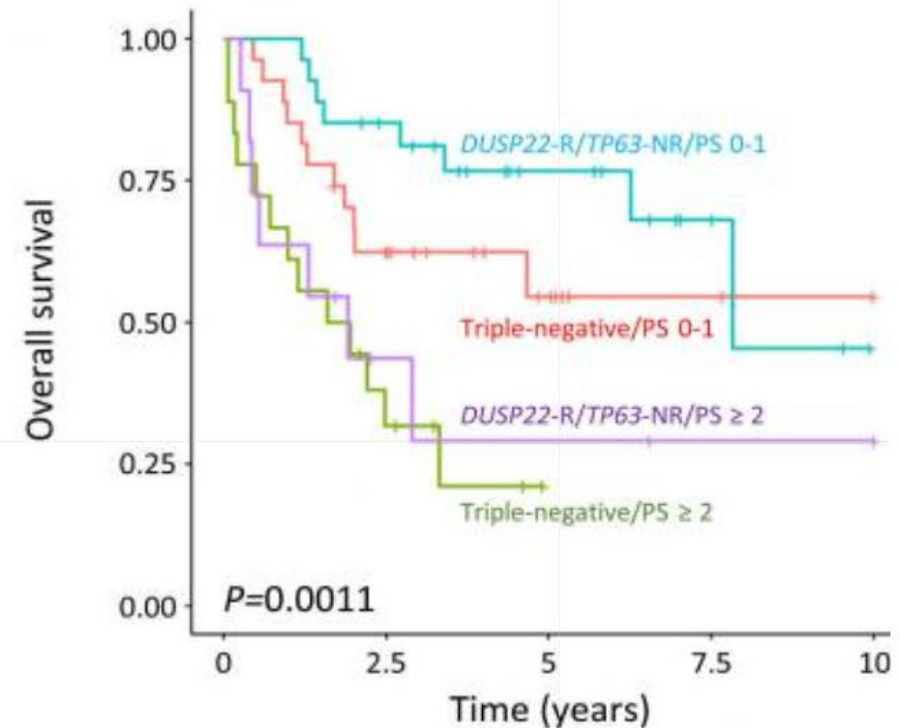


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Prognostic data to take into account (DUSP-22 and PS)



	Number at risk				
	0	2.5	5	7.5	10
Triple-negative/PS 0-1	27	8	4	2	0
Triple-negative/PS ≥ 2	18	3	0	0	0
DUSP22-R/TP63-NR/PS 0-1	27	20	11	4	0
DUSP22-R/TP63-NR/PS ≥ 2	11	1	1	1	0



	Number at risk				
	0	2.5	5	7.5	10
Triple-negative/PS 0-1	27	15	6	2	0
Triple-negative/PS ≥ 2	18	5	0	0	0
DUSP22-R/TP63-NR/PS 0-1	27	21	12	5	0
DUSP22-R/TP63-NR/PS ≥ 2	11	3	2	1	0

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Treatment

- **First step:** Detailed discussion with the patient regarding treatment options:
 - ✓ The patient prioritizes cure at the cost of over-treatment
- **Plan:** 6 cycles of CHOEP followed by ASCT
 - ✓ No significant complication during CHOEP
 - ✓ Uneventful ASCT
 - ✓ Remains in remission as of May, 2024 (3.5 years)
 - ✓ No long-term complications of treatment at this point



Thank You For Your Attention