



PROGNOSTIC ROLE OF CD30 FROM A RETROSPECTIVE REVIEW OF 295 PATIENTS WITH ANGIOIMMUNOBLASTIC T CELL LYMPHOMA

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OBJECTIVE

- To study the prognostic significance of CD30 expression in AITL
- To elucidate the prognostic implications of CD30 in AITL.

METHODS

- Patients newly diagnosed with AITL at our institution between 2000 and 2020.
- Along with CD30 receptor testing, variables such as date of diagnosis included age, gender, stage, LDH level, platelets, hemoglobin, bone marrow involvement, and EBV receptor positivity were collected. Treatment and progression data including response to frontline therapy, presence of consolidation stem cell transplant (SCT), and usage of brentuximab-based treatment.
- Endpoints were progression free survival (PFS) and OS;
- Univariate (UVA) and multivariate (MVA) Cox proportional hazard models were used to determine the significance of variables at diagnosis on PFS and OS.

Table 1 (Right) summarizes patient and disease characteristics.

Demographics	CD30 (+) (n=97)	CD30 (-) (n=32)
Median age (range in yr)	63 (29-83)	67 (42-83)
<65	53 (55%)	12 (38%)
>65	44 (45%)	20 (62%)
Gender (n=129)		
Female	53 (55%)	10 (31%)
Male	44 (45%)	22 (69%)
Stage (n=109)		
I-II	2 (2%)	3 (11%)
III-IV	79 (98%)	25 (89%)
LDH (n=72)		
Normal	25 (42%)	5 (38%)
High	34 (58%)	8 (62%)
Platelets (n=75)		
>=150 k	48 (80%)	9 (60%)
< 150 k	12 (20%)	6 (40%)
Anemia (n=76)		
Yes	31 (51%)	10 (67%)
No	30 (49%)	5 (33%)
Bone marrow involvement (n=117)		
Yes	31 (35%)	13 (46%)
No	58 (65%)	15 (54%)
EBER (n=122)		
Positive	71 (78%)	20 (65%)
Negative	20 (22%)	11 (35%)
Disease status (n=78)		
Complete response	75 (82%)	24 (83%)
Not in remission	17 (18%)	5 (17%)
Consolidation SCT (n=115)		
Yes	48 (56%)	14 (48%)
No	38 (44%)	15 (52%)
Brentuximab-based treatment (n=80)		
Yes	16 (20%)	0
No	64 (80%)	0

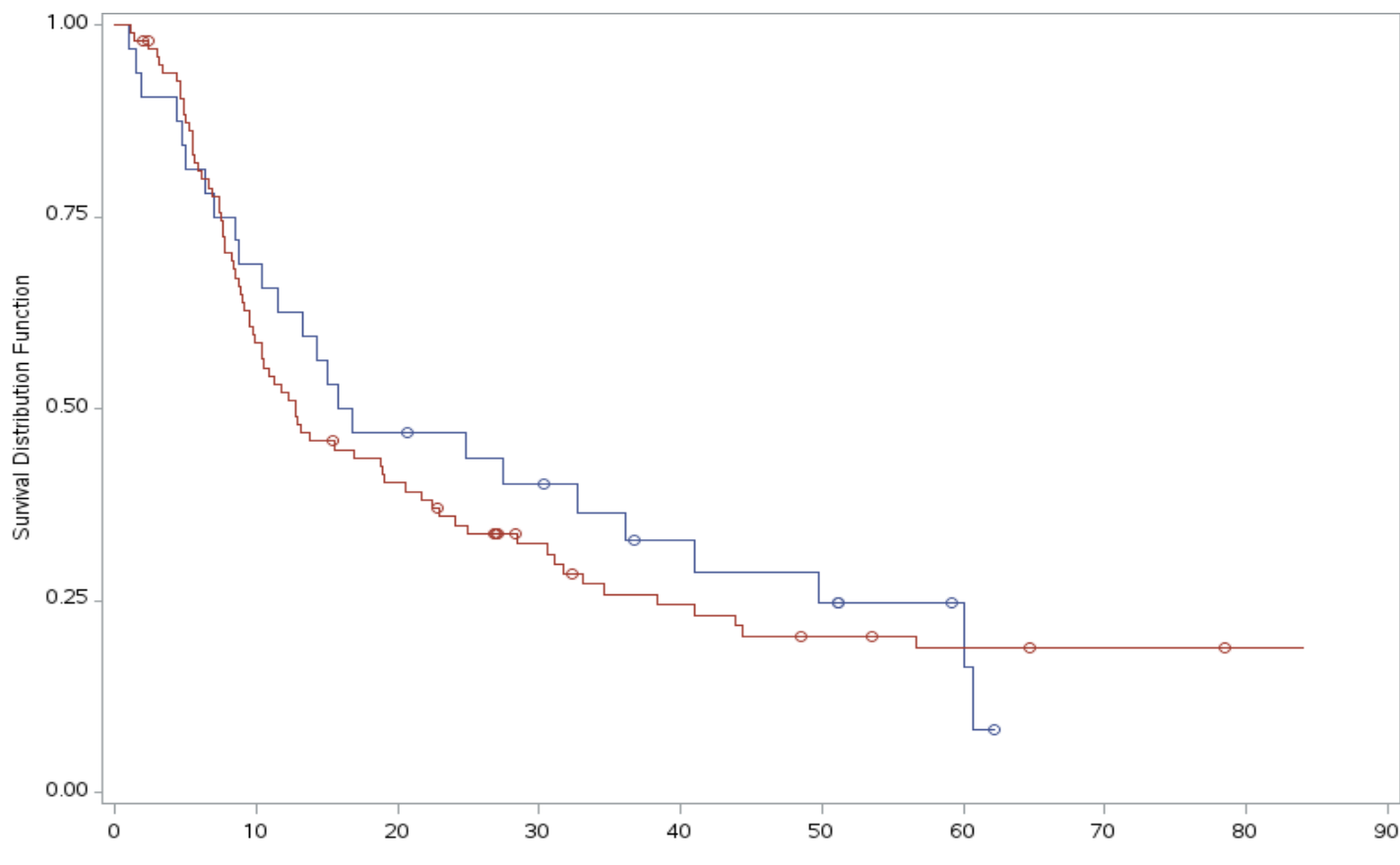


Figure 1: There is no significant difference between progression free survival in CD30 positive and negative individuals.

RESULTS (CONTINUED)

- Out of 295 individuals AITL,129 patients with CD30 testing who had response and survival data were included.
- Median age was 65 (range 29-83) years and 51% were male.
- Median follow up time was 40 (range 2-137) months,
- Three-year PFS and OS were 48% and 23%, respectively.
- Sixty-seven individuals died within the first three years of the study.
- The 3-year OS is 46% in CD30+ individuals, and 55% in those who are CD30- (p=0.578).
- PFS is 20% in CD30+ individuals, and 29% in those who are CD30- (p=0.675) ,
- SCT (p=0.0003) were statistically associated with improved survival..

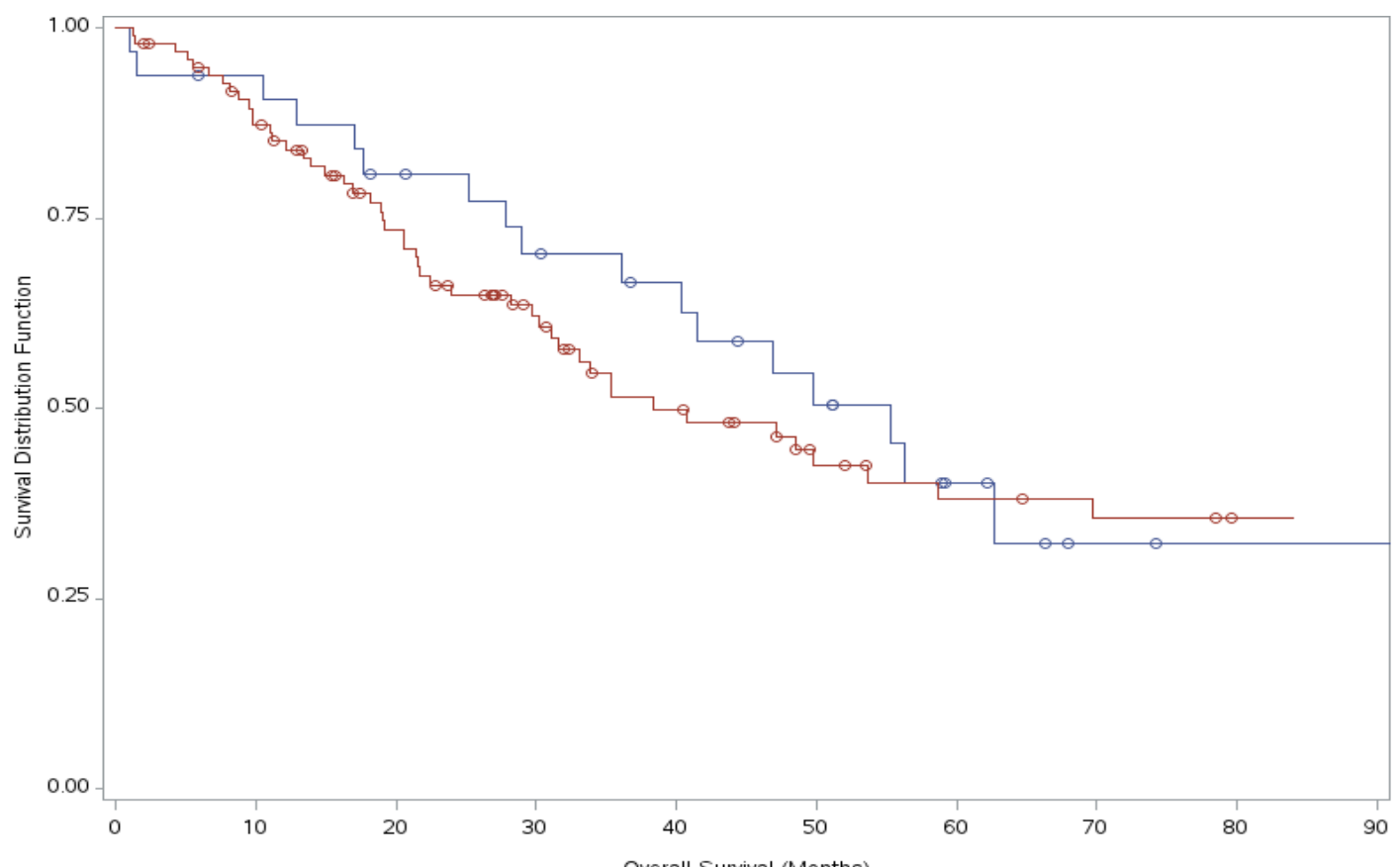


Figure 2: There is no significant difference between overall survival in CD30 positive and negative individuals.

RESULTS (CONTINUED)

- For OS, age >65 (HR 3.131, 95%CI: 1.545-6.344, p=0.0015), BM involvement (HR 2.134, 95% CI: 1.151-3.956, p=0.0161), incomplete remission (HR 2.208, 95% CI: 1-4.876, p=0.0499), male gender (HR 0.367, 95% CI: 0.199- 0.678, p=0.0014), no SCT (HR 4.085, 95% CI: 2.119-7.872, p=<0.0001) and positive CD30(HR 0.322, 95% CI: 0.158-0.656, p=0.0018) were associated with inferior OS

CONCLUSIONS

- Age <65, achieving CR to induction treatment, and upfront SCT proved to be strong predictors of improved OS.
- Only 20% of our patients received BV; nevertheless, unlike previous studies, individuals with CD30 positivity did not trend towards better OS.
- Additional work on CD30 biology in AITL is warranted.

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