

S1 Table. Univariate analysis of variables correlated to survival

| Endpoint | Factor | HR (95% CI) | p-value |
|----------|----------------------------------|---------------------|---------|
| OS | Age | 1.33 (0.90-1.98) | 0.157 |
| | Sex | 1.26 (0.80-1.97) | 0.317 |
| | T stage | 0.95 (0.72-1.25) | 0.710 |
| | N stage | 1.58 (1.21-2.05) | 0.001 |
| | Family history | 1.19 (0.67-2.14) | 0.553 |
| | Smoking | 1.33 (0.88-1.99) | 0.167 |
| | Pre-EBV DNA | 2.05 (1.38-3.06) | < 0.001 |
| | VCA-IgA | 0.74 (0.48-1.14) | 0.175 |
| | EA-IgA | 0.79 (0.53-1.20) | 0.268 |
| | Pre-ALC | 1.46 (0.95-2.26) | 0.085 |
| | Mini-ALC | 2.55 (1.36-4.78) | 0.003 |
| | Post-ALC | 1.54 (1.02-2.33) | 0.040 |
| | Post3m-ALC | 2.17 (1.44-3.26) | < 0.001 |
| | Min-ALC combined with post3m-ALC | 4.04 (2.00-8.14) | < 0.001 |
| PFS | ALC ^a | 0.996 (0.991-0.999) | 0.037 |
| | Age | 1.16 (0.82-1.64) | 0.411 |
| | Sex | 1.22 (0.83-1.80) | 0.310 |
| | T stage | 1.06 (0.83-1.37) | 0.624 |
| | N stage | 1.50 (1.20-1.89) | < 0.001 |
| | Family history | 1.11 (0.64-1.89) | 0.717 |
| | Smoking | 1.28 (0.90-1.84) | 0.172 |
| | Pre-EBV DNA | 2.13 (1.50-3.02) | < 0.001 |
| | VCA-IgA | 0.97 (0.65-1.45) | 0.870 |
| | EA-IgA | 1.01 (0.70-1.46) | 0.970 |
| | Pre-ALC | 1.45 (0.99-2.13) | 0.060 |
| | Mini-ALC | 2.02 (1.23-3.32) | 0.006 |
| | Post-ALC | 1.31 (0.92-1.864) | 0.137 |
| | Post3m-ALC | 2.06 (1.43-2.96) | < 0.001 |
| DMFS | Min-ALC combined with post3m-ALC | 3.14 (1.79-5.49) | < 0.001 |
| | ALC ^a | 0.993 (0.988-0.998) | 0.007 |
| | Age | 0.99 (0.64-1.53) | 0.961 |
| | Sex | 1.53 (0.92-2.56) | 0.104 |
| | T stage | 1.11 (0.82-1.52) | 0.501 |
| | N stage | 1.52 (1.14-2.02) | 0.004 |
| | Family history | 1.44 (0.78-2.66) | 0.242 |
| | Smoking | 1.14 (0.73-1.79) | 0.571 |
| | Pre-EBV DNA | 2.43 (1.57-3.76) | < 0.001 |
| | VCA-IgA | 0.95 (0.57-1.57) | 0.842 |
| | EA-IgA | 1.13 (0.71-1.81) | 0.613 |
| | Pre-ALC | 1.45 (0.89-2.34) | 0.133 |
| | Mini-ALC | 2.65 (1.32-5.29) | 0.006 |
| | Post-ALC | 1.59 (1.01-2.51) | 0.044 |
| | Post3m-ALC | 2.17 (1.38-3.40) | 0.001 |
| | Min-ALC combined with post3m-ALC | 4.28 (1.96-9.36) | < 0.001 |
| | ALC ^a | 0.993 (0.986-0.999) | 0.032 |

HR, hazard ratio; CI, confidence interval; OS, overall survival; EBV, Epstein-Barr virus; VCA, viral capsid antigen; EA, early antigen; pre-ALC, absolute lymphocyte counts before treatment; mini-ALC, minimum absolute lymphocyte counts during treatment; post-ALC, absolute lymphocyte counts after completion of treatment; post3m-ALC, absolute lymphocyte counts after 3 months completion of treatment; ALC, absolute lymphocyte counts; PFS, progression-free survival; DMFS, distant metastasis-free survival. ^aA Cox regression model using ALC as a time-dependent variable.