**Table e-1**:

Cox proportional hazard regression models on risk of CD19>1%, HR [CI]

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|  | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] |
| # of treatment | 0.903 |  |  |  |  | 0.857 | 0.634\*\*\* |
| cycle | [0.766,1.065] |  |  |  |  | [0.706,1.040] | [0.487,0.824] |
|  |  |  |  |  |  |  |  |
| Received |  | 1.653\* |  |  |  | 1.634\* | 1.020 |
| previous therapy |  | [1.066,2.563] |  |  |  | [1.051,2.541] | [0.599,1.738] |
|  |  |  |  |  |  |  |  |
| Female (vs. |  |  | 1.831\* |  |  | 1.874\* | 1.884 |
| male) |  |  | [1.063,3.156] |  |  | [1.077,3.261] | [0.843,4.211] |
|  |  |  |  |  |  |  |  |
| Age at first |  |  |  | 1.001 |  | 1.003 | 0.995 |
| treatment |  |  |  | [0.986,1.016] |  | [0.988,1.018] | [0.980,1.011] |
|  |  |  |  |  |  |  |  |
| BSA in cm2 |  |  |  |  | 1.005 |  | 1.015\* |
|  |  |  |  |  | [0.997,1.013] |  | [1.003,1.028] |
| N (observations) | 373 | 373 | 373 | 373 | 305 | 373 | 305 |
| N (patients) | 37 | 37 | 37 | 37 | 29 | 37 | 29 |
| N (events) | 87 | 87 | 87 | 87 | 79 | 87 | 79 |
| Chi-square | 1.457 | 5.213 | 5.348 | 0.0252 | 1.462 | 12.59 | 18.56 |
| P-value | 0.227 | 0.0224 | 0.0207 | 0.874 | 0.227 | 0.0134 | 0.00232 |

Hazard ratios (HR) with lower and upper bounds of 95% confidence intervals (CI). Models 1 to 5 present the unadjusted effects. Model 6 is partly adjusted, Model 7 is fully adjusted.

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table e-2**:

Cox proportional hazard regression models on risk of CD19>1%, HR [CI]: Missing values analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|  | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] | HR  [CI] |
| Missing value | 0.416\* | 0.277\*\* | 0.465\* | 0.491 | 0.416\* | 0.389\* |
| for BSA | [0.200,0.864] | [0.123,0.625] | [0.222,0.976] | [0.229,1.051] | [0.200,0.864] | [0.164,0.921] |
|  |  |  |  |  |  |  |
| # of treatment |  | 0.766\* |  |  |  | 0.778\* |
| cycle |  | [0.625,0.939] |  |  |  | [0.629,0.962] |
|  |  |  |  |  |  |  |
| Received |  |  | 1.491 |  |  | 1.441 |
| previous therapy |  |  | [0.955,2.330] |  |  | [0.916,2.266] |
|  |  |  |  |  |  |  |
| Female (vs. |  |  |  | 1.523 |  | 1.464 |
| male) |  |  |  | [0.864,2.684] |  | [0.814,2.631] |
|  |  |  |  |  |  |  |
| Age at first |  |  |  |  | 1.001 | 1.001 |
| treatment |  |  |  |  | [0.986,1.016] | [0.986,1.016] |
| N (observations) | 373 | 373 | 373 | 373 | 373 | 373 |
| N (patients) | 37 | 37 | 37 | 37 | 37 | 37 |
| N (events) | 87 | 87 | 87 | 87 | 87 | 87 |
| Chi-square | 6.995 | 13.92 | 10.16 | 9.277 | 7.006 | 18.03 |
| P-value | 0.00817 | 0951 | 0.00621 | 0.00967 | 0.0301 | 0.00291 |

*Note*. Hazard ratios (HR) with lower and upper bounds of 95% confidence intervals (CI). Adjusted for missing values of BSA. The models included a dummy variable indicating 1= missingness versus 0 = non-missingness of BSA. Significant HRs below 1 indicate lower risk for patients with missing values as compared to patients without missing values. Models 1 presents the unadjusted effect of BSA missingness. Models 2 to 5 present effects adjusted for BSA missingness. Model 6 is fully adjusted.

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table e-3**:

Random-effects models on time (in days after previous treatment), B (SE)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|  | B  (SE) | B  (SE) | B  (SE) | B  (SE) | B  (SE) | B  (SE) | B  (SE) |
| # of treatment | 3.408 |  |  |  |  | 3.252 | 3.533 |
| cycle | (3.212) |  |  |  |  | (3.241) | (3.140) |
|  |  |  |  |  |  |  |  |
| Received previous |  | -39.614 |  |  |  | -28.785 | 14.541 |
| therapy |  | (34.464) |  |  |  | (34.023) | (28.220) |
|  |  |  |  |  |  |  |  |
| Female (vs. male) |  |  | 50.625 |  |  | 45.117 | -39.372 |
|  |  |  | (38.736) |  |  | (38.559) | (38.461) |
|  |  |  |  |  |  |  |  |
| Age at first |  |  |  | 0.274 |  | 0.253 | -0.580 |
| treatment |  |  |  | (1.227) |  | (1.154) | (0.937) |
|  |  |  |  |  |  |  |  |
| BSA in cm2 |  |  |  |  | -0.919\* |  | -1.389\* |
|  |  |  |  |  | (0.422) |  | (0.554) |
|  |  |  |  |  |  |  |  |
| Intercept | 269.196\*\*\* | 301.428\*\*\* | 240.967\*\*\* | 266.256\*\*\* | 444.755\*\*\* | 240.663\*\*\* | 570.567\*\*\* |
|  | (18.620) | (26.082) | (33.424) | (59.186) | (82.022) | (69.145) | (130.906) |
| N (events) | 87 | 87 | 87 | 87 | 79 | 87 | 79 |
| N (patients) | 30 | 30 | 30 | 30 | 25 | 30 | 25 |
| Chi-square | 1.126 | 1.321 | 1.708 | 0.050 | 4.758 | 3.737 | 7.908 |
| P-value | 0.289 | 0.250 | 0.191 | 0.823 | 0.029 | 0.443 | 0.161 |

*Note*. Unstandardized coefficients (B) and standard errors (SE). Models 1 to 5 present the unadjusted effects. Model 6 is partly adjusted, Model 7 is fully adjusted.

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table e-4**:

Random-effects models on time (in days after previous treatment), B (SE): Missing values analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|  | B  (SE) | B  (SE) | B  (SE) | B  (SE) | B  (SE) | B  (SE) |
| Missing value for | 14.791 | 21.018 | 10.698 | 13.925 | 14.453 | 17.383 |
| BSA | (32.218) | (32.313) | (32.394) | (32.056) | (32.477) | (32.649) |
|  |  |  |  |  |  |  |
| # of treatment |  | 3.754 |  |  |  | 3.578 |
| cycle |  | (3.247) |  |  |  | (3.285) |
|  |  |  |  |  |  |  |
| Received previous |  |  | -38.320 |  |  | -26.388 |
| therapy |  |  | (34.823) |  |  | (34.678) |
|  |  |  |  |  |  |  |
| Female (vs. male) |  |  |  | 50.113 |  | 45.253 |
|  |  |  |  | (38.785) |  | (38.987) |
|  |  |  |  |  |  |  |
| Age at first treatment |  |  |  |  | 0.285 | 0.272 |
|  |  |  |  |  | (1.226) | (1.168) |
|  |  |  |  |  |  |  |
| Intercept | 276.065\*\*\* | 264.624\*\*\* | 298.762\*\*\* | 238.812\*\*\* | 263.109\*\*\* | 234.475\*\*\* |
|  | (18.051) | (20.003) | (27.391) | (33.806) | (59.566) | (70.776) |
| N (patients) | 30 | 30 | 30 | 30 | 30 | 30 |
| N (events) | 87 | 87 | 87 | 87 | 87 | 87 |
| Chi-square | 0.211 | 1.582 | 1.420 | 1.893 | 0.248 | 3.997 |
| P-value | 0.646 | 0.453 | 0.492 | 0.388 | 0.884 | 0.550 |

*Note*. Unstandardized coefficients (B) and standard errors (SE). Adjusted for missing values of BSA. The models included a dummy variable indicating 1= missingness versus 0 = non-missingness of BSA. Models 1 presents the unadjusted effect of BSA missingness. Models 2 to 5 present effects adjusted for BSA missingness. Model 6 is fully adjusted.

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001.

**Table e-5**:

Random-effects models, B (SE): lagged variable for starting value of CD19

|  |  |
| --- | --- |
|  | (1) |
|  | days after previous treatment |
| Treatment cycle | 5.872 |
|  | (3.427) |
|  |  |
| Received any therapy | -10.412 |
|  | (38.038) |
|  |  |
| Female | 0.415 |
|  | (53.811) |
|  |  |
| Age at first treatment | -0.286 |
|  | (1.269) |
|  |  |
| Starting value for CD 19 (at *t*-1) a | -3.688 |
|  | (2.513) |
|  |  |
| Body surface in cm2 | -0.395 |
|  | (0.689) |
|  |  |
| Constant | 344.788\* |
|  | (171.150) |
| Observations | 63 |
| Subjects | 19 |
| chi2 | 8.381 |
| p | 0.211 |

Note. a The lagged variable uses the last CD-19 value from the previous cycle. If there was no value prior to the first cycle, the initial starting value (prior to any therapy) was imputed.

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001