**S1 Table.** Analysis of factors affecting the development of acute severe lymphopenia[a)]

| Variable | Univariable analysis | | Multivariable analysis | |
|---|---|---|---|---|
| | OR (95% CI) | p-value | OR (95% CI) | p-value |
| Age > 60 yr (vs. ≤ 60 yr) | 0.33 (0.14-0.75) | 0.009 | - | - |
| Female (vs. male) | 0.91 (0.33-2.47) | 0.852 | - | - |
| Hepatitis viral infection (vs. no infection) | 1.22 (0.45-3.28) | 0.695 | 5.26 (0.86-32.02) | 0.072 |
| Multiple tumors (vs. single tumor) | 1.18 (0.53-2.66) | 0.683 | - | - |
| Liver cirrhosis (vs. no) | 2.42 (1.06-5.51) | 0.035 | - | - |
| Child-Pugh class B (vs. A) | 2.14 (0.63-7.3) | 0.224 | - | - |
| PVTT (vs. no) | 3.86 (1.65-9.01) | 0.002 | - | - |
| Previous treatment (vs. no) | 0.38 (0.16-0.87) | 0.022 | - | - |
| UICC stage III/IV (vs. I/II) | 2.63 (0.99-6.99) | 0.053 | - | - |
| AFP (per 1 ng/mL increase) | 1.00 (1.00-1.00) | 0.159 | - | - |
| PIVKA-II (per 1 mAU/mL increase) | 1.00 (1.00-1.00) | 0.012 | - | - |
| Baseline lymphopenia (≤ 1000 cells/μL; vs. no) | 11.55 (4.37-30.52) | < 0.001 | 30.13 (6.83-132.85) | < 0.001 |
| Combined therapy (vs. radiotherapy alone) | 4.89 (1.78-13.44) | 0.002 | - | - |
| Total radiation dose (per 1 Gy increase) | 1.03 (0.96-1.12) | 0.384 | - | - |
| Mean liver dose (per 1 Gy increase) | 1.04 (1.02-1.07) | < 0.001 | 1.10 (1.05-1.15) | < 0.001 |
| Pre-radiotherapy IL-7 (per 1 pg/mL increase) | 0.71 (0.54-0.94) | 0.015 | 0.51 (0.32-0.82) | 0.005 |

AFP, α-fetoprotein; CI, confidence interval; IL-7, interleukin-7; OR, odds ratio; PIVKA-II, protein induced by vitamin K absence-II; PVTT, portal vein tumor thrombosis; UICC, Union for International Cancer Control. [a)]Acute severe lymphopenia was defined as a total lymphocyte count of < 200 cells/μL during radiotherapy (i.e., grade 4 lymphopenia).