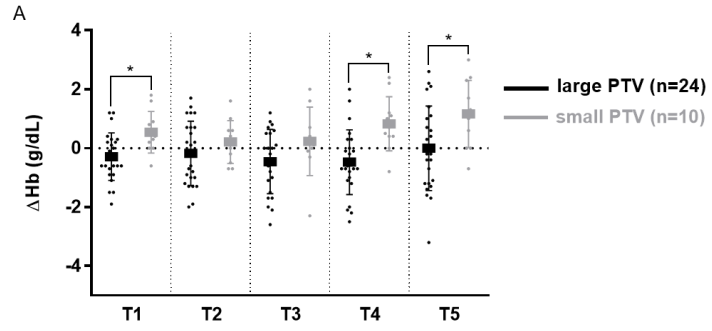
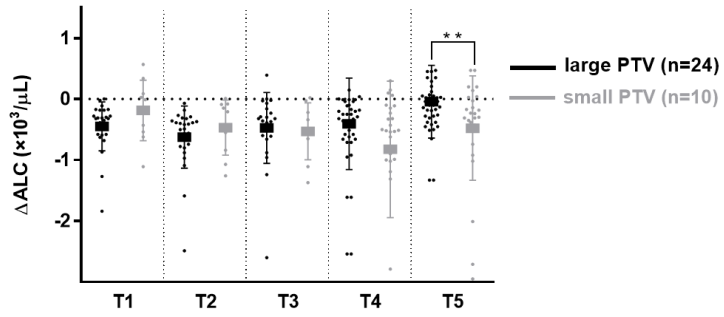
A



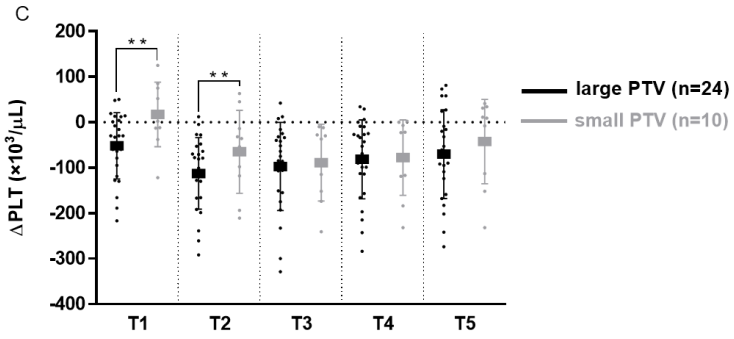
Mixed model analysis	P value
The trends of ΔHb over time between large PTV vs. small PTV	.700
ΔHb between large PTV vs. small PTV with the time variable fixed	.478

B



Mixed model analysis	P value
The trends of ΔALC over time between large PTV vs. small PTV	.538
ΔALC between large PTV vs. small PTV with the time variable fixed	.524

C



Mixed model analysis	P value
The trends of ΔPLT over time between large PTV vs. small PTV	.094
ΔPLT between large PTV vs. small PTV with the time variable fixed	.248

S7 Fig. Box plots and mixed analyses showing the comparison of changes in hemoglobin levels (ΔHb) (A), absolute lymphocyte counts (ΔALC) (B), and platelet counts (ΔPLT) (C)

from baseline values at each timepoint (*p < 0.05, **p < 0.01) according to the large and small planning target volume (PTV). The changes in hematological variables were calculated 1 and 2 weeks after the initiation of craniospinal irradiation (T1 and T2, respectively), 1 week before the completion of radiotherapy (T3), at the end of radiotherapy (T4), and 3-4 weeks after the completion of radiotherapy (T5). The small PTV was generally generated with expansion of clinical target volume by 0.5-0.7 cm. For patients in the growth age, however, the large PTV was generated by extension of small PTV to encompass the entire vertebral body when craniospinal irradiation with proton beam was applied to prevent radiation-induced kypholordosis according to the guideline from the European Society for Paediatric Oncology. The hematological outcomes were inconsistent showing the tendency of higher average ΔHb and average ΔPLT in small PTV group but higher average ΔALC in large PTV group.