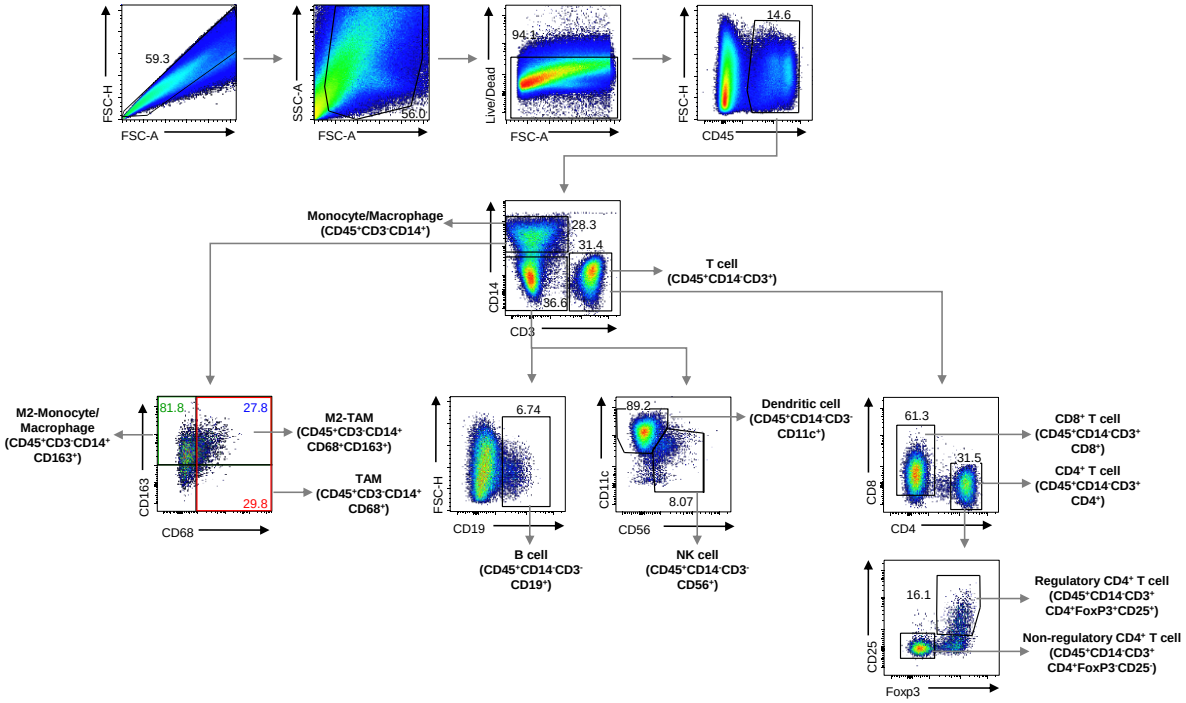
Absolute quantification of tumor-infiltrating immune cells in high-grade glioma identifies prognostic and radiomic values

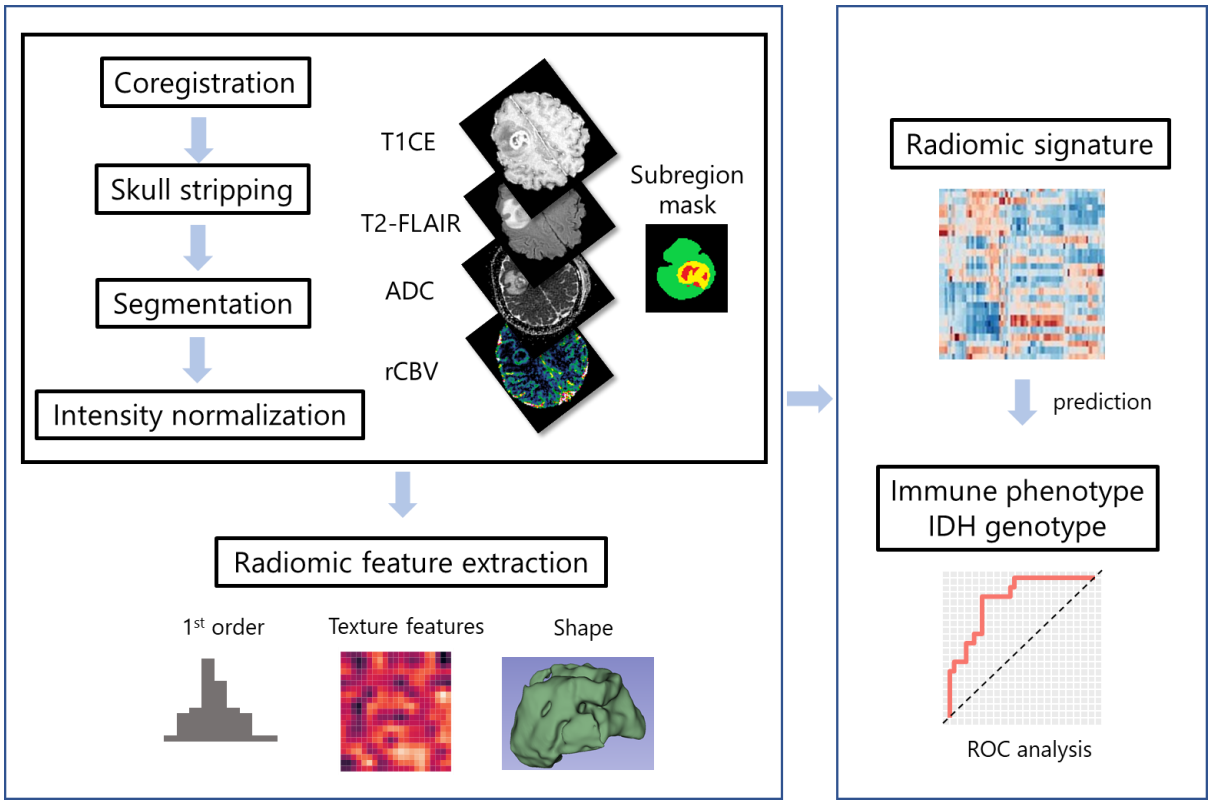
Supplementary Figures

Supplementary Figure 1. Gaiting strategy of flow cytometry for tumor-infiltrating immune cells in core area of high-grade gliomas.



Supplementary Figure 2. Processes for developing radiomic signatures of immune phenotypes: multimodal MRI images (T1CE, T2-FLAIR, ADC, and rCBV maps) were coregistered, isotropically resampled, skull-stripped, and subregional tumor masks were segmented using a convolutional neural network followed by manual correction. Radiomic features including first-order, gray-level non-uniformity, and shape features were extracted (107 features for each of 4 sequences), and radiomic signatures for immune phenotypes as well as IDH genotype were developed and validated.

Abbreviations: T1CE, T1-weighted contrast-enhanced; T2-FLAIR, T2-weighted fluid attenuated inversion recovery; ADC, apparent diffusion coefficient; IDH, isocitrate dehydrogenase; and relative cerebral blood volume, rCBV.



Supplementary Figure 3. A. The ratio of $CD4^+FoxP3^+CD25^+$ cells (Treg cells) and of $CD4^+$ cells (T4 cells) in $CD45^+$ cells were plotted and samples those outside the 95% confidence interval were defined as Treg high and Treg low. **B.** Treg high and Treg low group showed no survival differences (p=0.170). **C.** The ratio of $CD4^+FoxP3^+CD25^+$ cells (Treg cells) and of $CD8^+$ cells (T8 cells) in $CD45^+$ cells were plotted and samples those outside the 95% confidence interval were defined as Treg/Tc high and Treg/Tc low. **D.** Treg/Tc high and Treg/Tc low group showed no survival differences (p=0.320).