Meeting 8 (2018/6/25)

1. **Quantile regression data generation**

   - After data generation, compare estimated beta with true value beta.
   - Use data that exclude censoring data.

2. **Correct estimating equation notation**

$$\begin{aligned}\bar{S}(\beta) &= E_z[S(\beta + \Gamma^{\frac{1}{2}} D)] \\ &= \sum_{i=1}^{n} w_i I[Z_i > t_0] X_i (\tau - 1 + \Phi(\frac{\log(Z_i - t_0) - X_i^T \beta}{\sqrt{X_i^T \Gamma X_i}}))\end{aligned}$$

   where $D \sim N_P(0, I_P)$, $Z_i = min(T_i, C_i)$ and X_i is covariate.

3. **Replace w_i using Survfit function**

$$w_i = \frac{\delta_i}{1 - \hat{G}_K M(Z_i)}$$

   - Using survfit function and define censoring as event.

4. **Study the method of estimating variance (ISMB)**

   - Refer Fast accelerated failure time modeling for case-cohort data (Chiou et al., 2013)

5. **Data cleansing : The Impact of Temperature on Korean Baseabll League**