Establishment of PDX models from patients

The aim of the study is to figure out the factors affecting successful engraftment of PDX models of breast cancer.

Methods

The tumor tissues were implanted into the mammary fat pad of the six to twelve week old female NOG (NOD.Cg-Prkdcsid Il2rgtm1Sug) mice.

Factors affecting successful engraftment to be evaluated:

- Tumor size, nodal status, hormone receptor status, HER2 status, Ki67 level, histologic grade, age, treatment status, biopsy site, engraftment period, mouse type, and stages.

Results

Figure 1. Histopathological characteristics between PDX models and patients

Table 1. Analysis of PDX models from TNBC patients with neoadjuvant chemotherapy

Table 2. The multivariate analysis about relating factors of successful engraftment of PDX models.

Conclusions

- Establishment of PDX models from patients who received neoadjuvant chemotherapy and showing disease progression, patients with recurrent or metastatic disease may be the best candidates for PDX establishment.

- PDX models from patients who received neoadjuvant chemotherapy had shorter F1-F3 intervals than PDX models from adjuvant patients.

Figure 2. F1-F2 and F1-F3 intervals according to status of neoadjuvant chemotherapy