**Project Notes**

* The project has two TMAs, one is bladder cancer, one is prostate cancer
  + I normalized everything together 🡪 probably not ideal
  + Should check if the depth is much lower for one of the TMAs
* Study design is not ideal
  + Many examples of patients with 2-3 AOIs, but then others have 1 AOI
  + Not balanced
  + I have been simply using DESeq2 for DE analysis and modeling patient as a fixed effect, but I know that there may be better alternatives, like mixed modeling or pseudo-bulking
* The mean-dispersion trend has not been as expected
  + Maybe voom with quality weights is indicated here 🡪 should investigate it more
  + It seems better for the bladder project
* I did ssGSEA for one prostate comparison, because there was only 1 patient on one side of the comparison
  + This was for Intraductal\_spread vs Precursor