# ./data/

* **./TRef\_Data/**
  + Contains Datasets generated to construct variance weights
  + Validated Against TRef
* **./FlowCytometry/**
  + Contains Datasets generated by Dr. Sun for Cibersort Analysis
  + Corrected Cell Type labels and cleaned files
* **TRef\_Output\_Melanoma.txt**
  + contains the TRef matrix used by EPIC for the examination of the EPIC Melanoma Validation Dataset
* **SunMelanoma\_Exp\_Full\_032118.txt**
  + Contains the TPM normalized RNA-seq data for the PD1 immunotherapy trial
* Patient\_info.txt
  + Contains the Patient information for the PD1 immunotherapy trial
* Melanoma\_Exp\_Full.txt
  + Contains the TPM normalized RNA-seq data for the EPIC Melanoma Validation Dataset
* Gene\_lengths\_v27.rds + gencode.v27.genes.txt
  + Contains the gene lengths computed by Dr. Sun for the PD1 immunotherapy data
* CIBERSORT.Output\_SunMelExt:
  + Contains the CIBERSORT results for the PD1 immunotherapy data
* CIBERSORT.Output\_Rescale\_TRef:
  + Contains the CIBERSORT output for the EPIC melanoma validation dataset using the rescaled data and TRef
* CIBERSORT.Output\_FULL\_lm22.csv:
  + Contains the CIBERSORT output for the EPIC melanoma validation dataset when fit using the entire TPM matrix and LM22 reference matrix.

# ./programs/

* **./EPIC\_TitrationData/**
  + Code necessary to fit the EPIC melanoma Validation Dataset
* **./EPIC-Master/**
  + Contains the R library for the EPIC functions
* **./FlowCytometry/**
  + Code necessary to perform the fits to the Flow Cytometry Validation data
* **./Full Model – Versions 4 + 5 with Diff EM Weights/**
  + Contains the code necessary to run the ICeD-T Model
  + Supp Ref – used to indicate programs run with a supplied reference
  + Version 5 –Supp Ref/HS\_FullSim\_Test.R used to generate simulations
* **./Simulation\_Fits/**
  + Saved Output from Simulation Fitting
* ***EPIC\_Extract.R***
  + Contains the code necessary to save EPIC’s optimization pieces (design matrix, outcome data, etc) and output it to a list object
* Step3\_ProcessData\_and\_FitEpic\_ICeDT.R
  + Contains the code necessary to fit both models and produce the figures.
* Step3\_CIBERSORT\_SaveOut.R
  + Code necessary to generate the datasets used to fit the CIBERSORT model to the PD1 immunotherapy data

# ./figures/

* Contains the requested figures from EPIC and ICeD-T and these figures are labeled