# S4 Fig

## S4A Fig



PD-L1 IC staining as reported by the sponsor in the published study [(2)](https://paperpile.com/c/QI3NxB/AkjR) and outcome in our cohort were significantly associated in this sub-study ([n=29, Spearman rho=0.48 p=0.0083](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/PD-L1%20vs.%20Benefit.ipynb?hyper=pdl1_any_vs_benefit_spearmanr)).

## S4B Fig



ImmuneScore was associated with TIL proportion ([n=24, Spearman rho=0.47 p=0.022](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/ESTIMATE%20immune%20score.ipynb?hyper=estimate_tcellfraction_spearmanr)).

## S4C Fig



There was no association between ImmuneScore and DCB (DCB, [764.37 (range -1195.08-1509.65)](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/ESTIMATE%20immune%20score.ipynb?hyper=estimate_immune_score_benefit); no DCB [263.49 (range -1100.78-1734.28)](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/ESTIMATE%20immune%20score.ipynb?hyper=estimate_immune_score_no_benefit) ([n=26, Mann-Whitney p=0.33](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/ESTIMATE%20immune%20score.ipynb?hyper=estimate_immune_score_mw)).

##

##

## S4D Fig



PD-L1 expression as measured by RNA-seq was not associated with PD-L1 IC level ([n=26, Spearman rho=0.045 p=0.83](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/Kallisto%2BTximport%20Exhaustion%20Markers.ipynb?hyper=tumor_pdl1_vs_ic_level_spearmanr)). Tumor cell PD-L1 staining was not available.

S4E Fig

##

HLA Class I expression was not associated with DCB (HLA-A: [n=26, Mann-Whitney p=0.26](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/Kallisto%2BTximport%20HLA%20Expression.ipynb?hyper=HLA-A_mw), HLA-B: [n=26, Mann-Whitney p=0.36](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/Kallisto%2BTximport%20HLA%20Expression.ipynb?hyper=HLA-B_mw), HLA-C: [n=26, Mann-Whitney p=0.24](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/Kallisto%2BTximport%20HLA%20Expression.ipynb?hyper=HLA-C_mw)).

##

## S4F Fig



Expression of other inhibitory markers, in particular *HAVCR2* (also known as *TIM-3*) was higher in DCB patients in the IC2 group.

## S4G Fig



No association was found between TCGA RNA Subtype and response in this sub-study ([n=20, Fisher's Exact p=0.36](https://github.com/hammerlab/bladder-analyses/blob/master/analyses/notebooks/TCGA%20RNA%20Subtypes%20vs.%20Benefit.ipynb?hyper=four_clusters_fisher)).