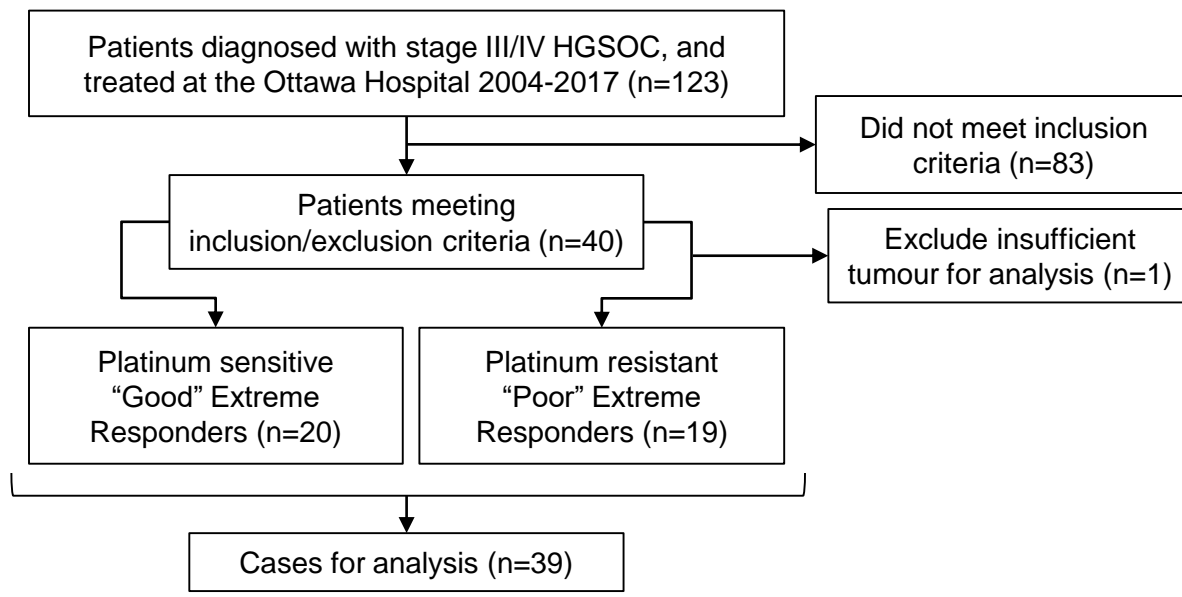
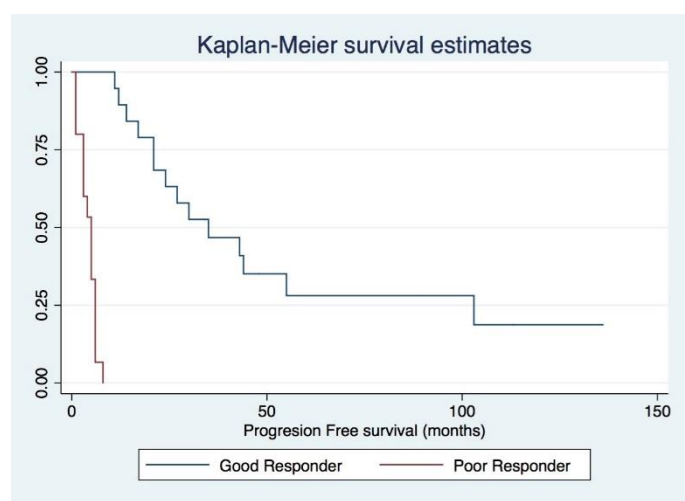
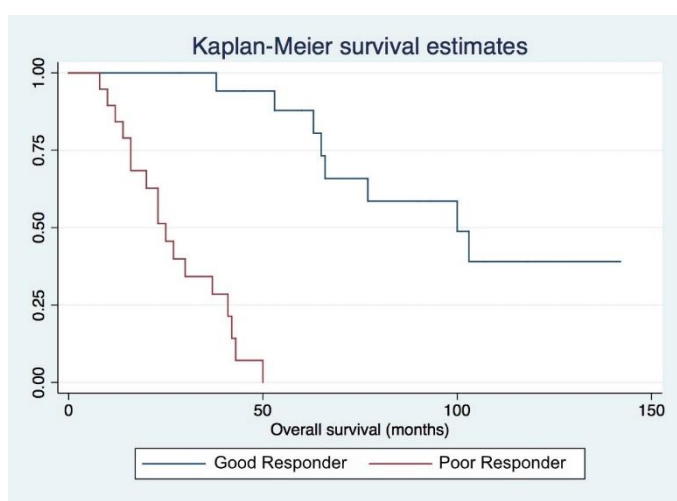
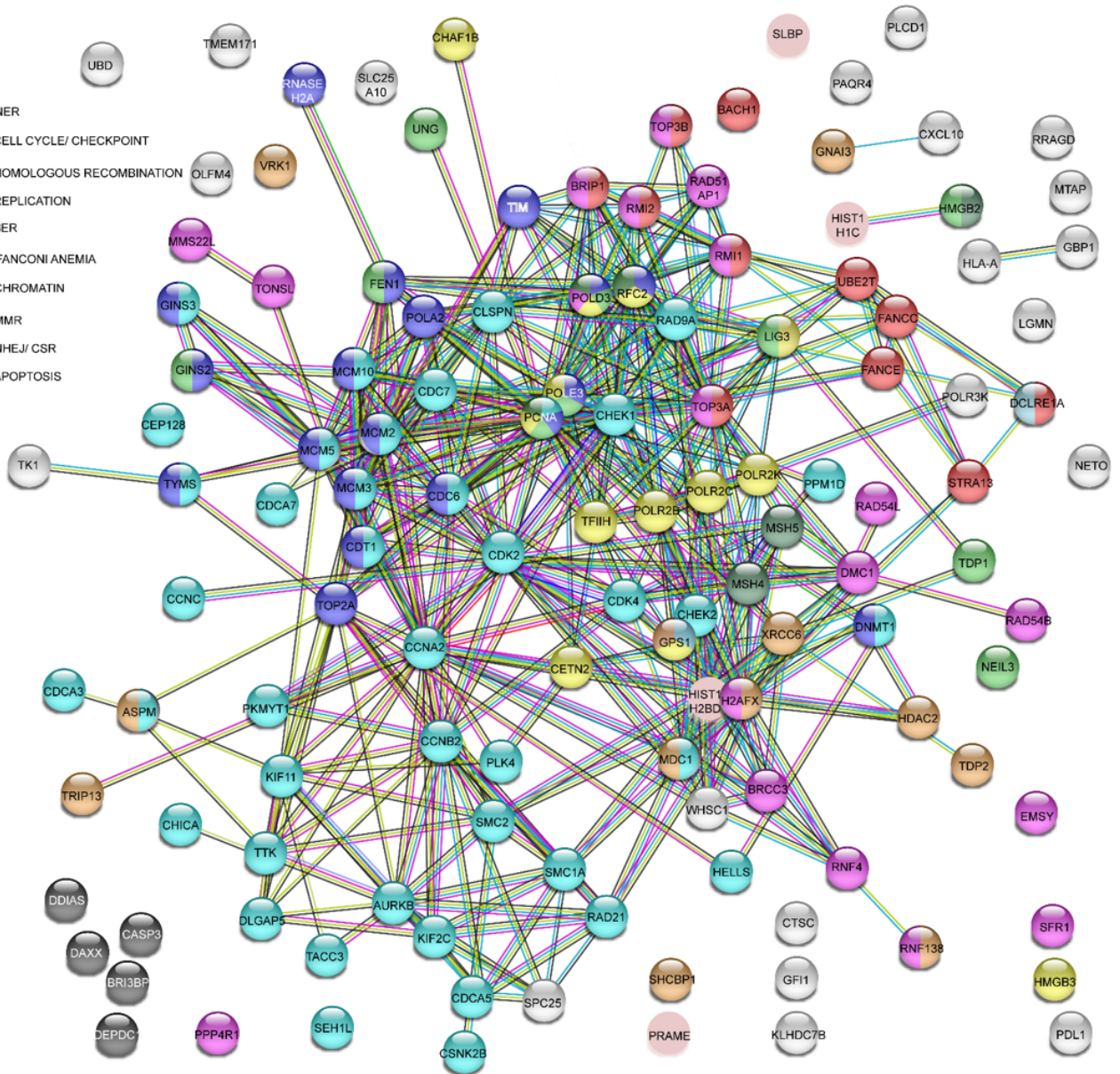


**A****B****C****Supplemental Figure 1**

**A**

- NER
- CELL CYCLE/ CHECKPOINT
- HOMOLOGOUS RECOMBINATION
- REPLICATION
- BER
- FANCONI ANEMIA
- CHROMATIN
- MMR
- NHEJ/ CSR
- APOPTOSIS



Pathway ID	Type	Description	False discovery rate
hsa04110	KEGG	cell cycle	4.15E-15
hsa03030	KEGG	DNA replication	1.96E-11
hsa03460	KEGG	Fanconi Anemia (FA)	7.30E-09
hsa03410	KEGG	Base excision repair (BER)	2.07E-07
hsa03420	KEGG	Nucleotide excision repair (NER)	1.72E-05
hsa3440	KEGG	Homologous recombination (HR)	2.40E-04
hsa03430	KEGG	Mismatch repair (MMR)	5.20E-03
hsa03450	KEGG	NHEJ	3.08E-02

**C**

Pathway ID	Type	Description	False discovery rate
hsa03420	KEGG	Nucleotide excision repair (NER)	1.69E-05
hsa03410	KEGG	Base excision repair (BER)	2.10E-04
hsa03030	KEGG	DNA replication	2.10E-04
hsa03020	KEGG	RNA polymerase	2.10E-04
hsa3440	KEGG	Homologous recombination (HR)	2.40E-04
hsa03430	KEGG	Mismatch repair (MMR)	4.10E-03

**B**

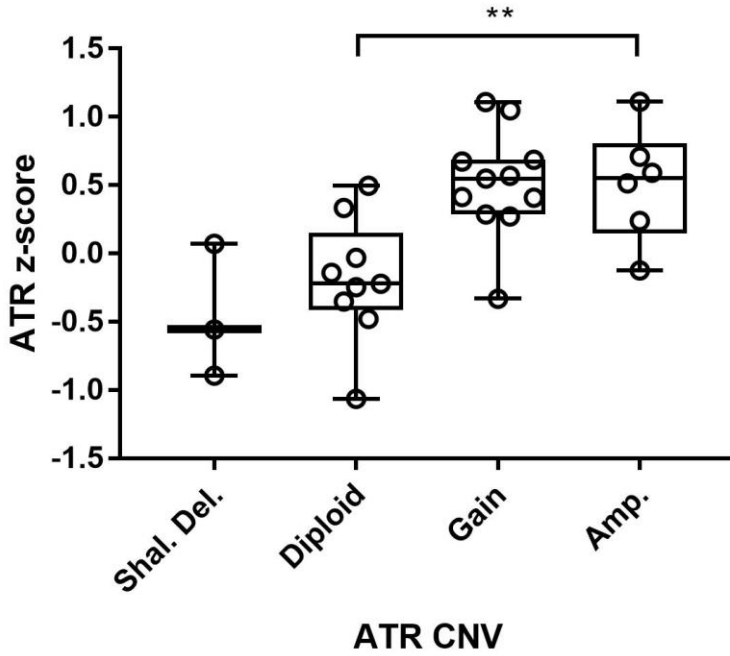
Pathway ID	Type	Description	False discovery rate
GO:0045786	Biological process (GO)	Negative regulation of cell cycle	9.43E-05
hsa05200	KEGG	Pathways in cancer	4.60E-04
hsa03420	KEGG	Nucleotide excision repair (NER)	3.40E-03

Pathway ID	Type	Description	False discovery rate
hsa03420	KEGG	Nucleotide excision repair (NER)	1.40E-04
hsa03410	KEGG	Base excision repair (BER)	1.00E-03
hsa03030	KEGG	DNA replication	1.00E-03
hsa03020	KEGG	RNA polymerase	1.00E-03
hsa3440	KEGG	Homologous recombination (HR)	1.10E-03
hsa04110	KEGG	Cell cycle	1.30E-03
hsa03460	KEGG	Fanconi Anemia pathway (FA)	1.70E-03
hsa03430	KEGG	Mismatch repair (MMR)	9.40E-03

**Supplemental Figure 2**

A

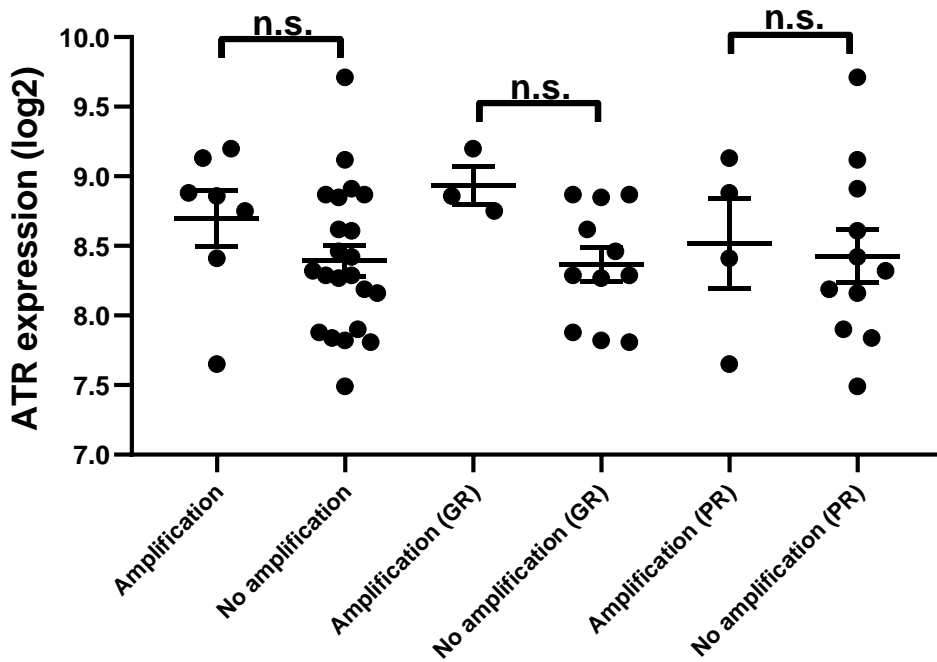
### ATR CNV vs z-score (n=29)



P= 0.0076  
Two-tailed Mann-Whitney

B

### Correlation of ATR expression with its amplification

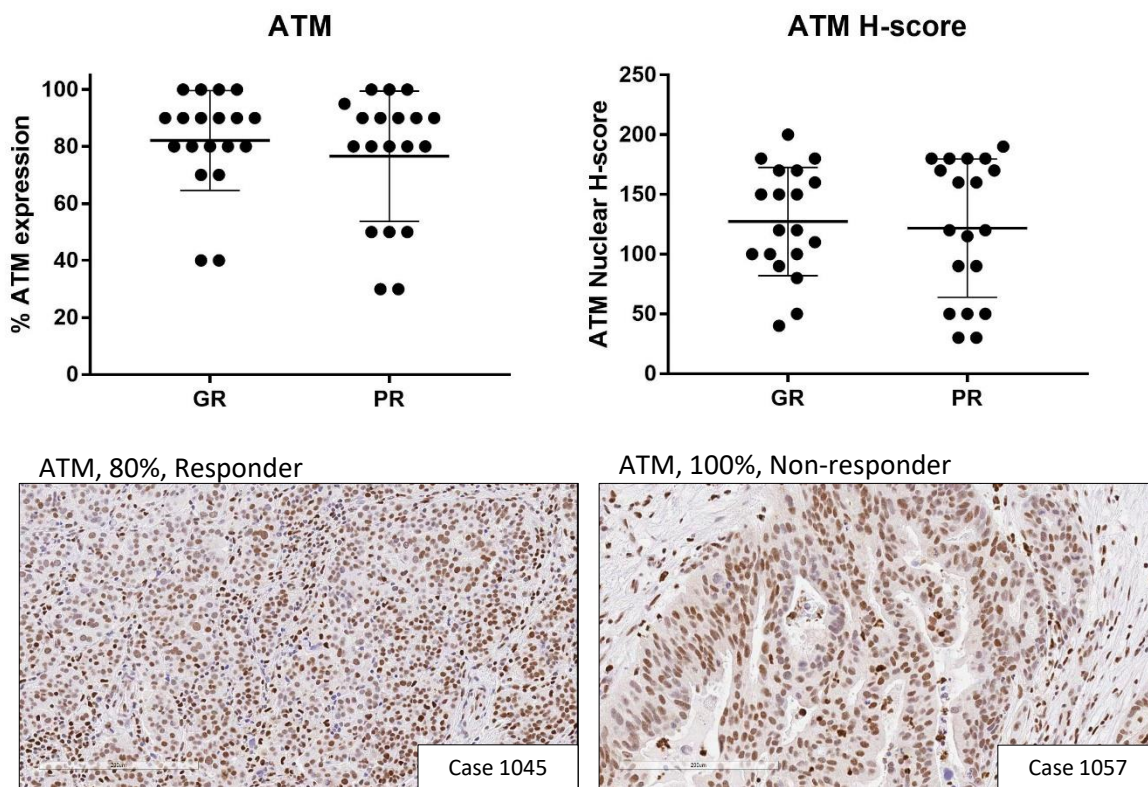


Total -> p = 0.1318

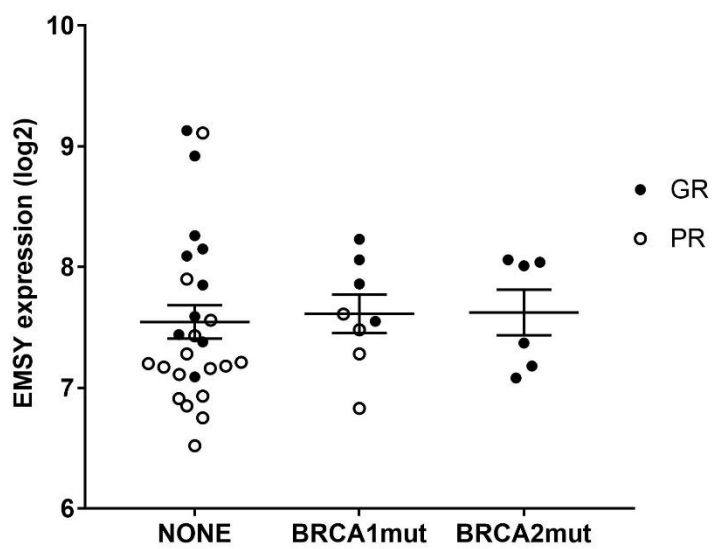
GR group -> p = 0.797

PR group -> p = 0.7531

A

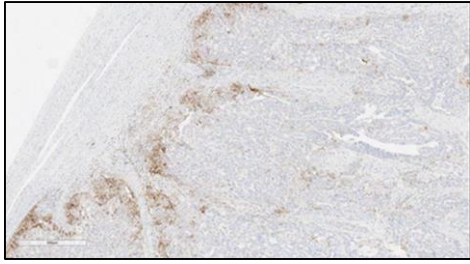


B

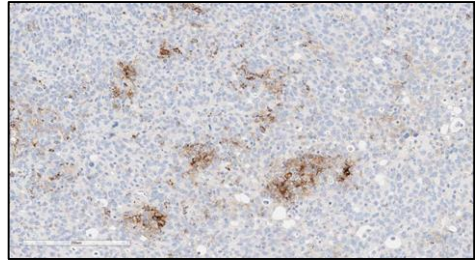


Supplemental Figure 4

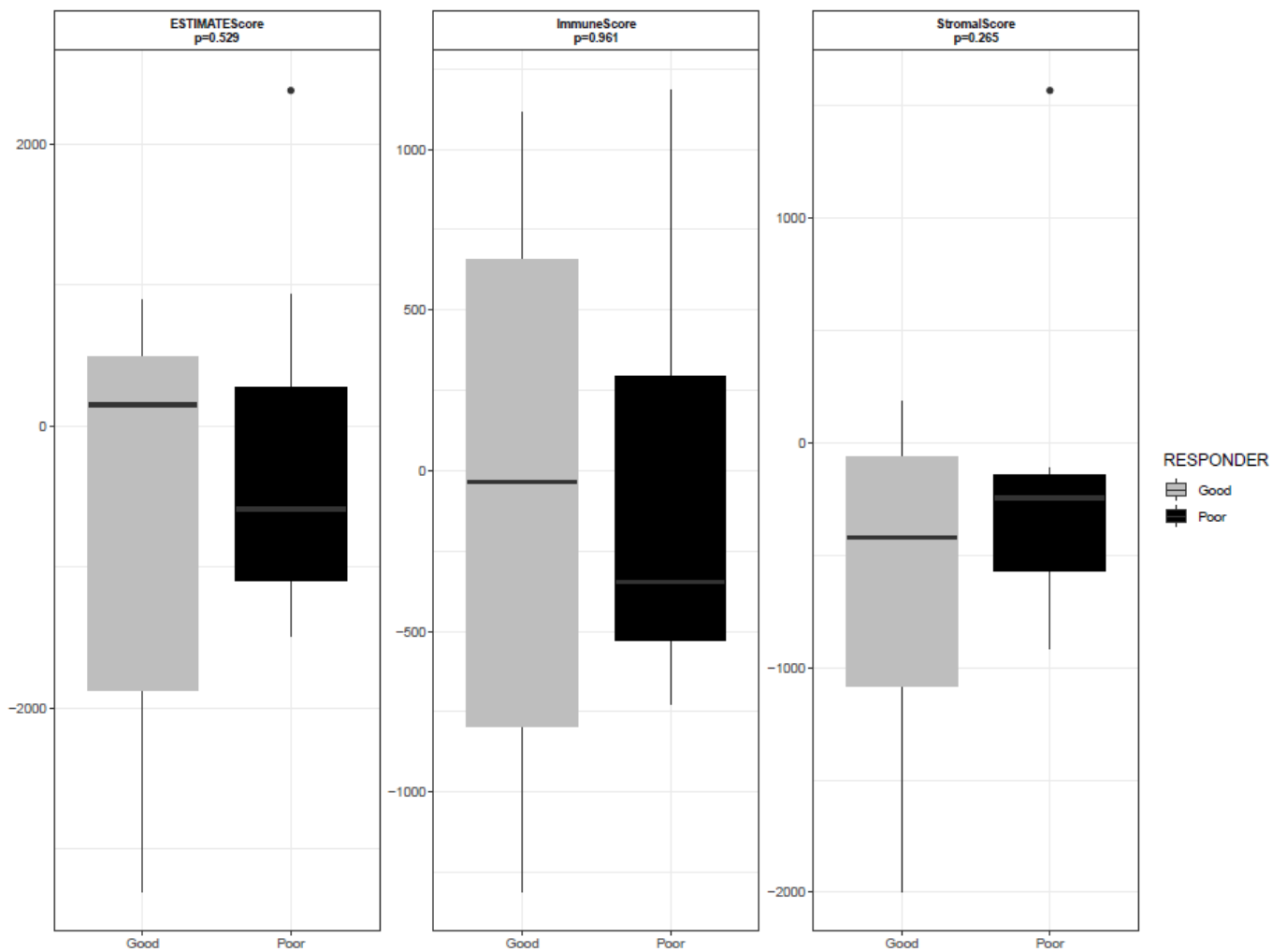
**A**



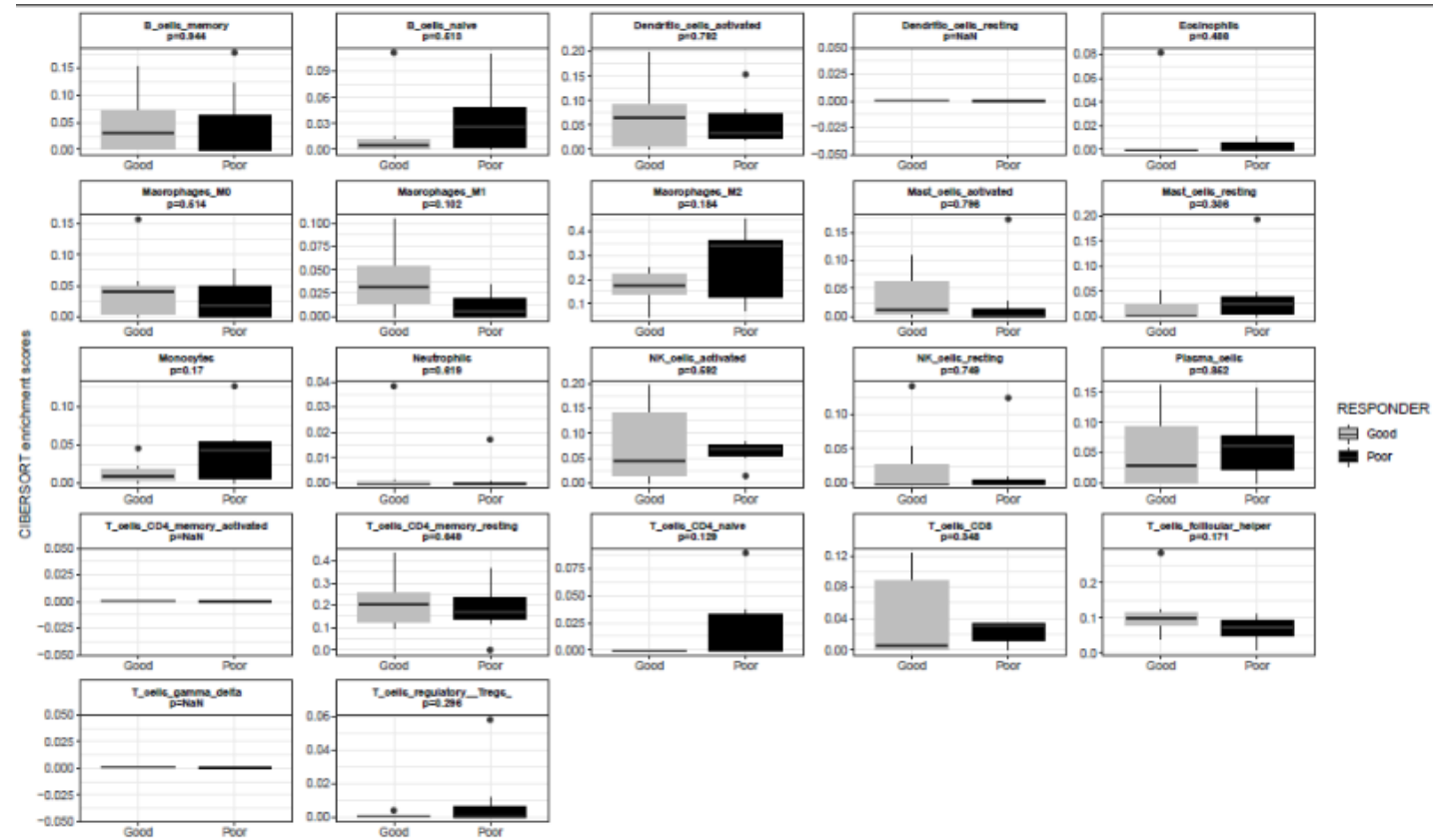
**B**



**Supplemental Figure 5**



Supplemental Figure 6



Supplemental Figure 7