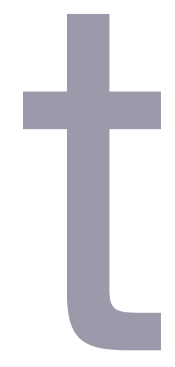
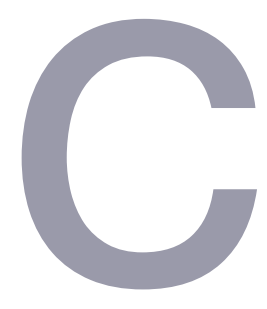
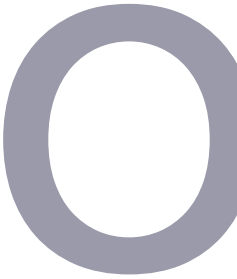
DVH Analytics







☑ Include this ind. var. in multi-var regression

< >

Select an Independent Variable (x-axis)

PTV Distance (Min)

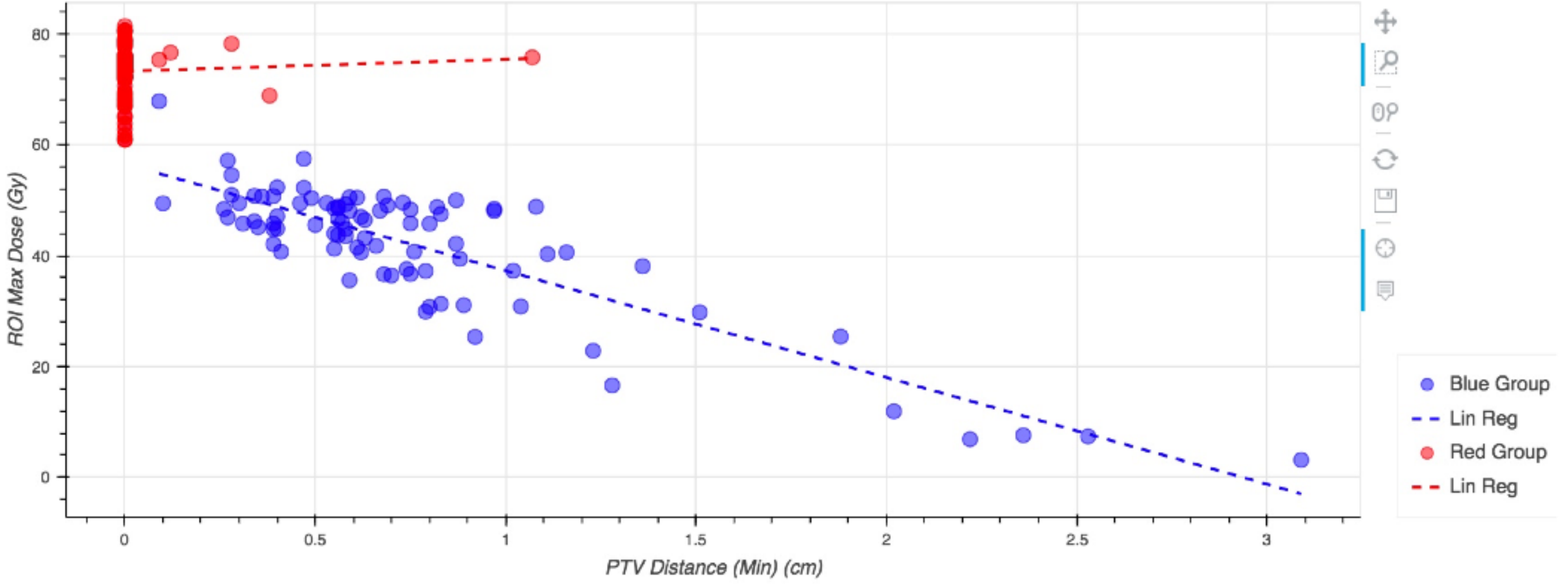
< >

Select a Dependent Variable (y-axis)

ROI Max Dose

Single-Var Regression	Blue Group	Red Group
slope	-19.25	2.149
y-intercept	56.533	73.248
R-squared	0.734	0.004
p-value	0	0.595
std. err.	1.249	4.029
sample size	88	75

Variables for Multi-Var Regression
PTV Distance (Mean)
PTV Distance (Min)
SSD (Max)

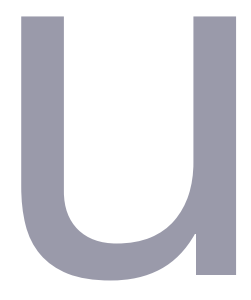


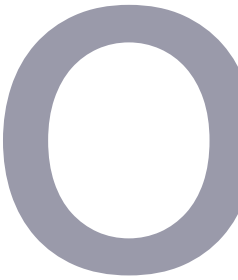
Regression Model	Independent Variable	Coefficient	p-value
Model 1 ($R^2 = 0.819$, $p = 0.000$)	Constant	-80.62	0.005
	PTV Distance (Mean)	-6.932	0.000
	PTV Distance (Min)	-8.028	0.005
	SSD (Max)	1.547	0.000

- Plot any variable available in correlation matrix against another
- Displays linear regression results using Statsmodels
- Select variables of interest to run in a multi-variable regression
- Precursor to future plans with respect to predictive modeling based on anatomy

Multi-Variable Regression

Results from multi-variable regressions for the maximum brainstem doses contained within the previous slide.





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Future Work