PHP 2550 - HW#2

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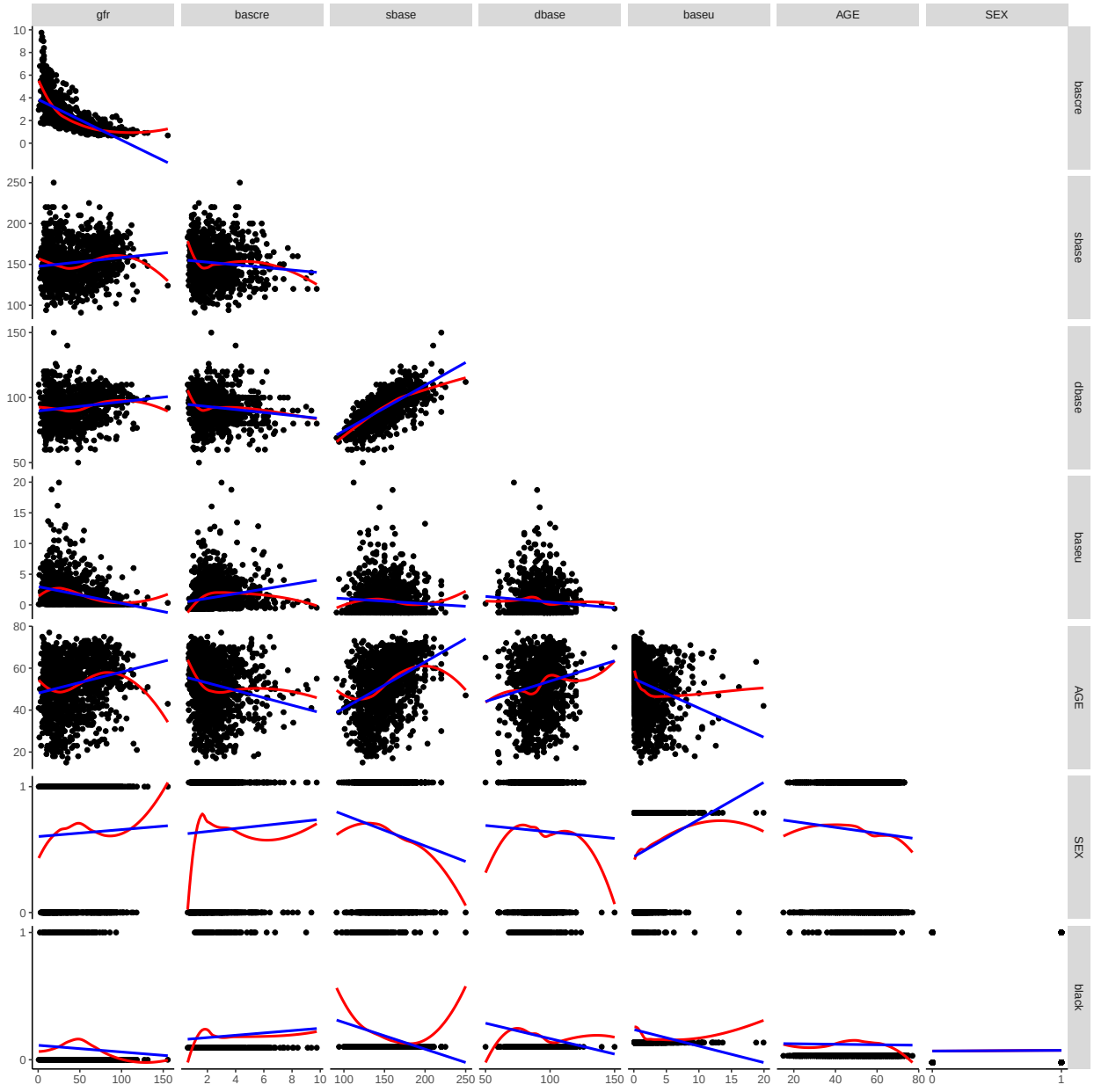
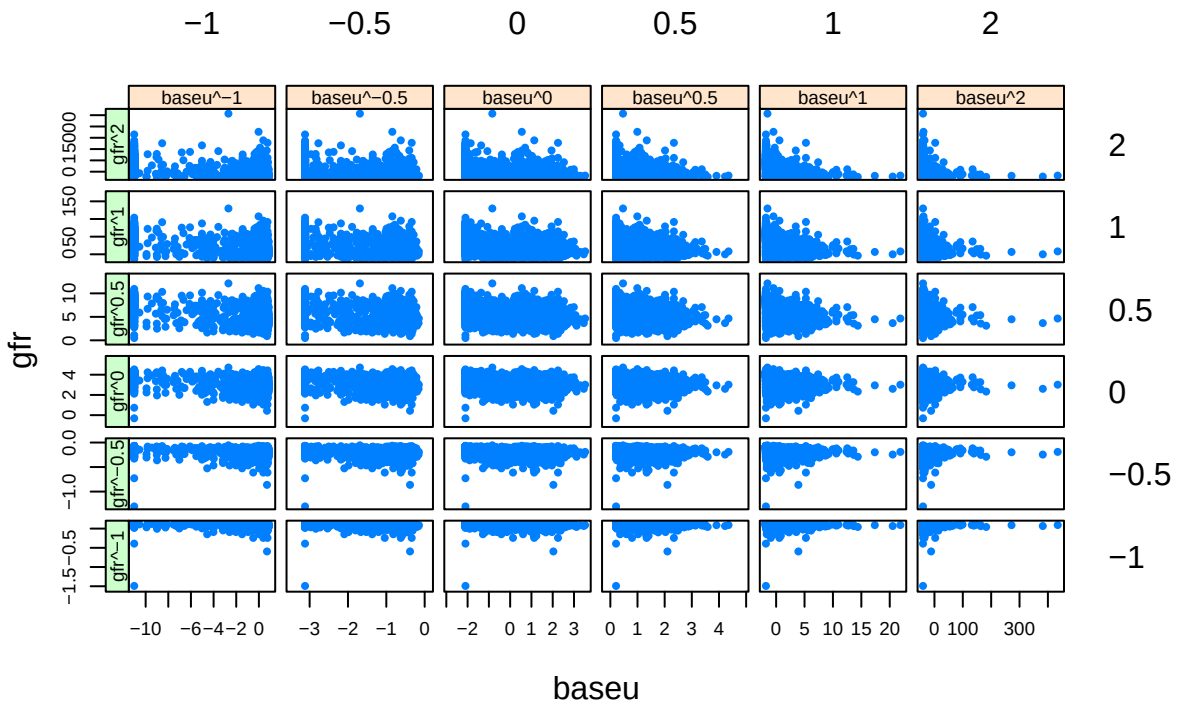
Part A

Table 1: Summary Statistics

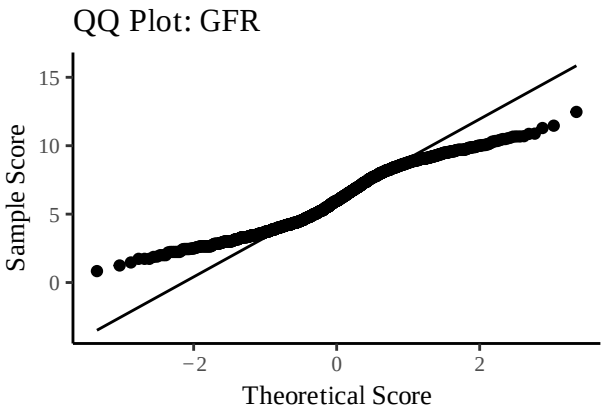
Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
gfr	1,249	42.59	28.38	0.70	17.93	66.00	155.50
bascre	1,249	2.33	1.40	0.60	1.26	3.00	9.75
sbase	1,249	152.18	23.08	91	135	169	250
dbase	1,249	92.73	11.54	50	85	100	150
baseu	1,249	1.82	2.31	0.10	0.10	2.68	19.93
AGE	1,249	52.40	13.10	15	43	62	77
SEX	1,249	0.63	0.48	0	0	1	1
black	1,249	0.09	0.29	0	0	0	1

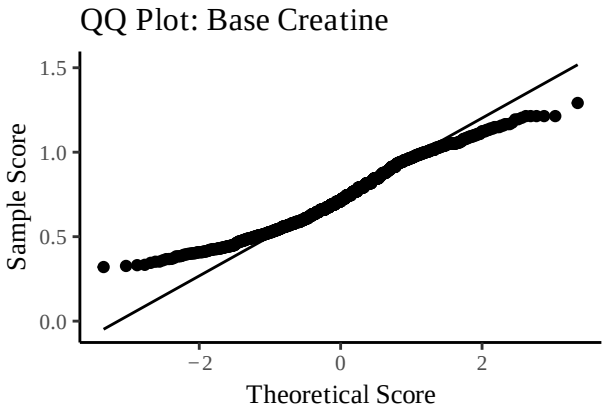

gfr
bascre
sbase
dbase
baseu
AGE
SEX
black

Ladders of Powers



Transformation Choices





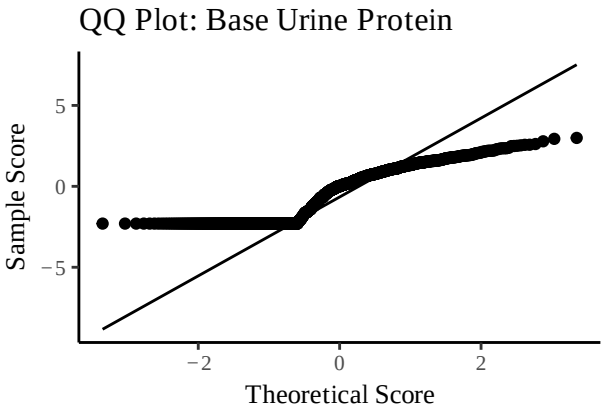
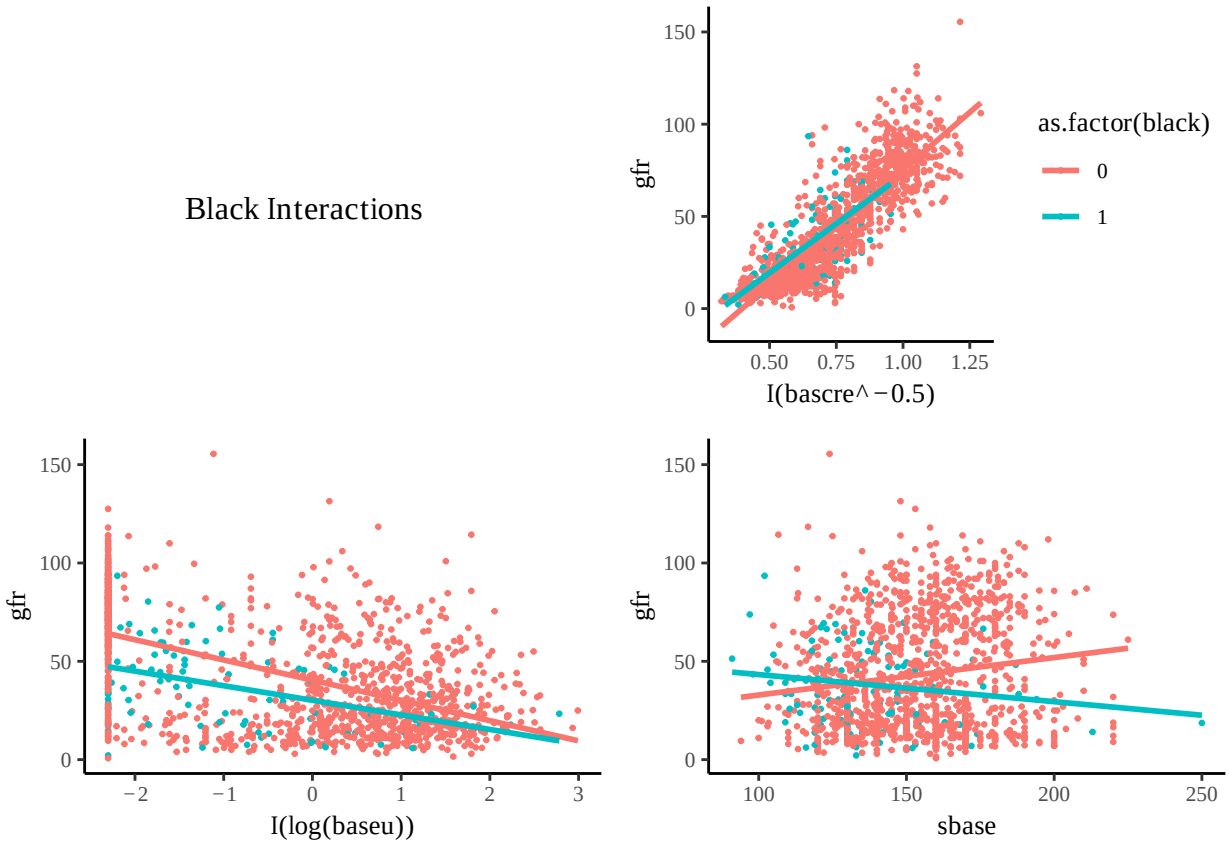


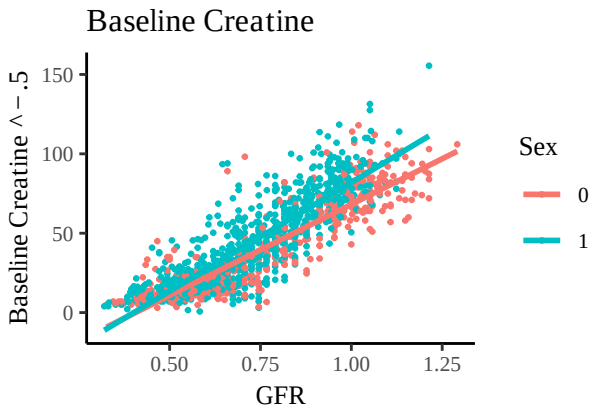
Table 2:

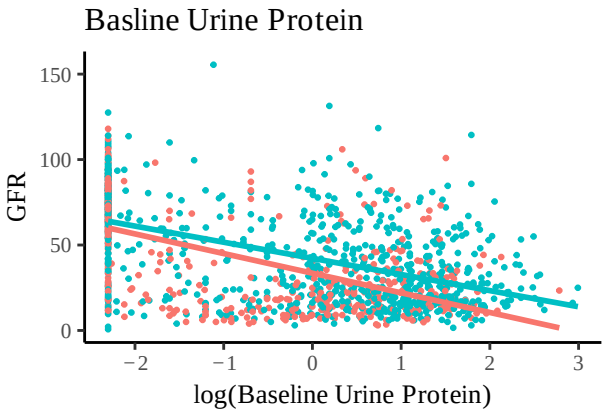
	Dependent variable:		
	gfr	I(gfr^0.5)	
	(1)	(2)	(3)
bascre	-13.614^{***}		
	(0.391)		
baseu	-2.391^{***}		
	(0.246)		
I(bascr^(-0.5))		9.607^{***}	10.123^{***}
		(0.179)	(0.159)
log(baseu)		-0.145^{***}	
		(0.025)	
sbase	0.055^{**}	0.0004	0.0003
	(0.025)	(0.001)	(0.001)
AGE	0.067	-0.008^{***}	-0.004
	(0.045)	(0.003)	(0.003)
as.factor(SEX)1	5.690^{***}	0.756^{***}	0.705^{***}
	(1.115)	(0.062)	(0.063)
as.factor(black)1	-3.393^{*}	0.272^{**}	0.423^{***}
	(1.889)	(0.108)	(0.106)
Constant	63.589^{***}	-1.122^{***}	-1.648^{***}
	(4.124)	(0.247)	(0.234)
Observations	1,249	1,249	1,249
R^2	0.570	0.783	0.777
Akaike Inf. Crit.	10,861.770	3,655.775	3,688.445
Note:			*p<0.1; **p<0.05; ***p<0.01

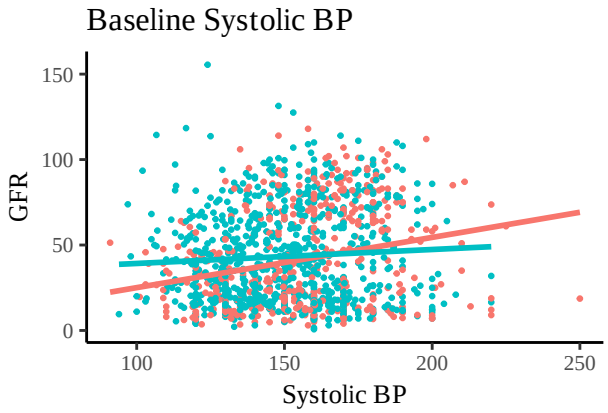
Black Interactions



Male Interactions








```
attach(baseline)

lm4 = lm(I(gfr^.5) ~ I(bascre^(-.5)) +
           log(baseu) +
           sbase + AGE +
           as.factor(SEX) + as.factor(black) +
           as.factor(black):sbase +
           as.factor(SEX):sbase)

lm4$AIC = AIC(lm4)

stargazer(lm4, keep.stat = c("aic", "rsq", "n"), header = FALSE)
```

```
detach(baseline)
```

Table 3:

	Dependent variable:
	I(gfrˆ0.5)
I(bascreˆ(-0.5))	9.589^{***}
	(0.179)
log(baseu)	-0.143^{***}
	(0.025)
sbase	0.004^{*}
	(0.002)
AGE	-0.008^{***}
	(0.003)
as.factor(SEX)1	1.487^{***}
	(0.407)
as.factor(black)1	0.924
	(0.621)
sbase:as.factor(black)1	-0.005
	(0.004)
sbase:as.factor(SEX)1	-0.005^{*}
	(0.003)
Constant	-1.617^{***}
	(0.350)
Observations	1,249
R^2	0.784
Akaike Inf. Crit.	3,655.586
Note:	*p<0.1; **p<0.05; ***p<0.01