1 . 4 > 5 6. 7. 9.

10 . **Model 1** 11 .

12 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

13 . 14 .

15 . //ANALYSIS B//

16 . reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==2,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 74
Model Residual	3161844.4 4577672.47	6 67	526974.066 68323.4697	R-squared	= 7.71 = 0.0000 = 0.4085
Total	7739516.87	73	106020.779	- Adj R-squared Root MSE	= 0.3556 = 261.39
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	-6.358199	73.58911	-0.09	0.931	0103999
Sex	34.42944	82.95157	0.42	0.679	.053055
w1Age	-8.401735	4.161038	-2.02	0.047	2520762
Race	0	(omitted)			•
PovStat	-226.0558	74.81627	-3.02	0.004	3412307
TIME_V1SCAN	.0225053	.0604604	0.37	0.711	.0397651
ICV_volM2	.0013043	.0003456	3.77	0.000	.4879405
_cons	2339	456.6844	5.12	0.000	•

17 . reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==2,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 74
M- d-1	2252044 26		F42007 27	F(6, 67)	= 8.27
Model	3252044.26	6	542007.37		= 0.0000
Residual	4393144.72	67	65569.3242	2 R-squared	= 0.4254
				 Adj R-squared 	= 0.3739
Total	7645188.98	73	104728.61	6 Root MSE	= 256.07
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	6.767405	72.09065	0.09	0.925	.0111373
Sex	19.79455	81.26247	0.24	0.808	.0306906
w1Age	-8.541307	4.076309	-2.10	0.040	2578399
Race	0	(omitted)			
PovStat	-202.953	73.29283	-2.77	0.007	3082413
TIME V1SCAN	.0437382	.0592293	0.74	0.463	.0777571
\overline{ICV} volM2	.001457	.0003386	4.30	0.000	.5483987
_cons	2339.15	447.3852	5.23	0.000	

18 . 19 . //ANALYSIS C//

note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 74
Model Residual	133.512749 602.62766	6 67	22.2521248 8.99444269	R-squared	= 2.47 = 0.0320 = 0.1814
Total	736.140409	73	10.0841152	- Adj R-squared 2 Root MSE	= 0.1081 = 2.9991
 LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	1.611988	.8443368	1.91	0.061	.2703534
Sex w1Age Race	.3198221 .0281886 0	.9517585 .0477424 (omitted)	0.34 0.59	0.738 0.557	.0505338 .0867186
PovStat TIME V1SCAN	10995 0008185	.8584169	-0.13 -1.18	0.898 0.242	0170178 1482991
ICV_volM2 _cons	4.70e-06 -2.967853	3.97e-06 5.239844	1.18 -0.57	0.240 0.573	.1801736

21 .

22 . 23 . **Model 2**

24 .

25 . use finaldata_imputed,clear

26 .

27 . 28 . //ANALYSIS B//

29 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

5	=	Imputations	Multiple-imputation estimates
74	=	Number of obs	Linear regression
0.0000	=	Average RVI	•
0.0000	=	Largest FMI	
66	=	Complete DF	
64.09	=	DF: min	DF adjustment: Small sample
64.09	=	avg	
64.09	=	max	
6.64	=	F(7, 64.1)	Model F test: Equal FMI
0.0000	=	Prob > F	Within VCE type: OLS

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1 Sex w1Age	-38.00275 26.38201 -6.711308	85.82275 83.98706 4.784625	-0.44 0.31 -1.40	0.659 0.754 0.166	-209.4489 -141.397 -16.26945	133.4434 194.1611 2.846829
Race PovStat TIME_V1SCAN w1BMI ICV_volM2 cons	0 -219.6944 .0206297 -4.225061 .0013171 2434.244	(omitted) 75.59615 .0607317 5.837316 .0003473 476.8322	-2.91 0.34 -0.72 3.79 5.11	0.005 0.735 0.472 0.000 0.000	-370.7112 1006926 -15.88613 .0006233 1481.687	-68.67769 .1419521 7.436013 .0020109 3386.801

30 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

ations = 5
er of obs = 74
ge RVI = 0.0000
st FMI = 0.0000
ete DF = 66
min = 64.09
avg = 64.09
max = 64.09
7, 64.1) = 7.29
> F = 0.0000
[95% conf. interval]
-207.8262 126.2767
-155.7741 171.1826
3 -15.31478 3.311487
-340.5416 -46.25019
20772921 .1591328
-17.70981 5.014519
.0008002 .0021522
1554.103 3410.383

31 .
32 . //ANALYSIS C//
33 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 & R

Multiple-imput Linear regress	cation estimates sion		Imputations Number of obs	=	5 74
J			Average RVI	=	0.0000
			Largest FMI	=	0.0000
			Complete DF	=	66
DF adjustment:	Small sample		DF: min	=	64.09
			avg	=	64.09
			max	=	64.09
Model F test:	Equal FMI		F(7, 64.1)	=	2.49
Within VCE typ	e: OLS		Prob > F	=	0.0252
LnLesion_V~e	Coefficient Std. err.	t	P> t [95% d	onf.	interval]

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.360651	.97191	2.43	0.018	.419088	4.302213
Sex	.5102121	.9511215	0.54	0.594	-1.389822	2.410246
w1Age	0118044	.0541841	-0.22	0.828	1200467	.0964379
Race	0	(omitted)				
PovStat	2604496	.8560977	-0.30	0.762	-1.970657	1.449758
TIME_V1SCAN	0007742	.0006878	-1.13	0.265	0021481	.0005998
w1BMI	.0999586	.0661054	1.51	0.135	0320986	.2320158
ICV_volM2	4.40e-06	3.93e-06	1.12	0.268	-3.46e-06	.0000123
_cons	-5.221191	5.399944	-0.97	0.337	-16.00854	5.566155

35 . save, replace

file finaldata_imputed.dta saved

36 . 37 .

38 .

39 .

42 . 43 . **Model 1**

44 .

45 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

46 .

47 .

48 . //ANALYSIS B//

49 . reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==1,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs F(6, 98)	= 105 = 11.99
Model Residual	6950409.51 9467057.41	6 98	1158401.59 96602.626	Prob > F R-squared	= 0.0000 = 0.4234 = 0.3880
Total	16417466.9	104	157860.259	- Adj R-squared B Root MSE	= 310.81
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	-103.6316	75.1092	-1.38	0.171	1296019
Sex	-95.27648	84.99091	-1.12	0.265	1195482
w1Age	-3.195228	4.38251	-0.73	0.468	0677443
Race	0	(omitted)			•
PovStat	-60.92969	73.79929	-0.83	0.411	0673458
TIME V1SCAN	.0241601	.0491332	0.49	0.624	.0397173
ICV volM2	.0019794	.0003001	6.59	0.000	.715584
_cons	1451.472	424.3795	3.42	0.001	•

50 . reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==1,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	105
				- F(6, 98)	=	15.39
Model	9555553.42	6	1592592.24	4 Prob > F	=	0.0000
Residual	10144073.9	98	103510.95	8 R-squared	=	0.4851
				- Adj R-squared	=	0.4535
Total	19699627.3	104	189419.49	4 Root MSE	=	321.73
Right_Hipp~s	Coefficient	Std. err.	t	P> t		Beta
LnNFLw1	-116.6859	77.74847	-1.50	0.137		1332175
Sex	-222.7057	87.97741	-2.53	0.013		2551013
w1Age	.6715583	4.536507	0.15	0.883		0129981
Race	0	(omitted)				
PovStat	-27.53293	76.39253	-0.36	0.719		0277816
TIME_V1SCAN	.0682891	.0508597	1.34	0.182		1024842
ICV_volM2	.0025951	.0003107	8.35	0.000		8564742
_cons	805.5914	439.2918	1.83	0.070		•

51 . 52 . //ANALYSIS C// note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 105
				F(6, 98)	= 1.95
Model	200.676736	6	33.4461226	Prob > F	= 0.0799
Residual	1678.91212	98	17.1317564	₽ R-squared	= 0.1068
				- Adj R-squared	= 0.0521
Total	1879.58886	104	18.0729698	B Root MSE	= 4.1391
 LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	2.666271	1.000229	2.67	0.009	.311634
Sex	.0420056	1.131824	0.04	0.970	.0049259
w1Age	0126647	.0583619	-0.22	0.829	0250951
Race	0	(omitted)			
PovStat	1.682622	.9827853	1.71	0.090	.173816
TIME V1SCAN	0006233	.0006543	-0.95	0.343	0957623
ICV_volM2	1.50e-06	4.00e-06	0.38	0.708	.0506524
cons	-2.659572	5.651462	-0.47	0.639	•

54 .

55 .

56 . **Model 2**

57 .

58 . use finaldata_imputed,clear

Multiple-imputation estimates

59 .

60 .

61 .

62 . //ANALYSIS B//

63 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

Imputations

			•			
sion			Number o	of obs	=	105
			Average	RVI	=	0.0000
			Largest	FMI	=	0.0000
			Complete	DF	=	97
: Small samp	le		DF:	min	=	95.06
				avg	=	95.06
				max	=	95.06
Equal F	MI		F(7 ,	95.1)	=	10.82
oe: O	LS		Prob > 1	=	=	0.0000
Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
-94.04136	74.7394	-1.26	0.211	-242.41	.66	54.33391
-83.36669	84.62714	-0.99	0.327	-251.37	14	84.63806
-2.818141	4.353396	-0.65	0.519	-11.460	65	5.824372
0	(omitted)					
-62.44051	73.20925	-0.85	0.396	-207.77	81	82.89704
.0356711	.049256	0.72	0.471	06211	.36	.1334557
7.814146	4.843935	1.61	0.110	-1.8022	.02	17.43049
.0019839	.0002977	6.66	0.000	.00139	29	.002575
:	Equal Foe: Coefficient -94.04136 -83.36669 -2.818141 0 -62.44051 .0356711 7.814146	Equal FMI De: OLS Coefficient Std. err. -94.04136 74.7394 -83.36669 84.62714 -2.818141 4.353396 0 (omitted) -62.44051 73.20925 .0356711 .049256 7.814146 4.843935	Equal FMI De: OLS Coefficient Std. err. t -94.04136 74.7394 -1.26 -83.36669 84.62714 -0.99 -2.818141 4.353396 -0.65 0 (omitted) -62.44051 73.20925 -0.85 .0356711 .049256 0.72 7.814146 4.843935 1.61	Number of Average Largest Complete	Number of obs Average RVI Largest FMI Complete DF DF: min avg max Equal FMI F(7, 95.1) De: OLS Prob > F Coefficient Std. err. t P> t [95% complete DF) Prob > F Coefficient Std. err. t P> t [95% complete DF) Prob > F	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI F(7, 95.1) = OE: OLS Prob > F = Coefficient Std. err. t P> t [95% conf. -94.04136 74.7394 -1.26 0.211 -242.4166 -83.36669 84.62714 -0.99 0.327 -251.3714 -2.818141 4.353396 -0.65 0.519 -11.46065 0 (omitted) -62.44051 73.20925 -0.85 0.396 -207.7781 .0356711 .049256 0.72 0.4710621136 7.814146 4.843935 1.61 0.110 -1.802202

64 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

Multiple-imputation estimates Linear regression				Imputat Number Average Largest	of obs RVI FMI	= = = =	5 105 0.0000 0.0000 97
DF adjustment:	: Small samp	ole		Complet DF:	min avg	= = =	95.06 95.06
Model F test:	Equal F	:мт		F(7 ,	max 95.1)	=	95.06 14.36
Within VCE typ	•)LS		Prob >	,	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% coi	nf.	interval]
LnNFLw1	-103.4927	76.56638	-1.35	0.180	-255.494	9	48.50955
Sex	-206.3216	86.69582	-2.38	0.019	-378.433	1	-34.21001
w1Age	1.190312	4.459813	0.27	0.790	-7.66346	3	10.04409
Race	0	(omitted)					
PovStat	-29.61134	74.99882	-0.39	0.694	-178.501	6	119.2789
TIME_V1SCAN	.0841246	.05046	1.67	0.099	016050	4	.1842996
w1BMI	10.74981	4.962343	2.17	0.033	.898398	6	20.60123
ICV_volM2	.0026014	.000305	8.53	0.000	.001995	9	.0032069
_cons	377.3324	474.3969	0.80	0.428	-564.456	8	1319.122

^{65 .}

^{67 .} mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 & R

					ons f obs RVI FMI DF	= 5 = 105 = 0.0000 = 0.0000 = 97
DF adjustment:	: Small samp	ole			min avg	= 95.06 = 95.06
					max	= 95.06
Model F test:	Equal F	-MI		F(7 ,	95.1)	= 1.70
Within VCE typ	pe: · (DLS		Prob > F	•	= 0.1175
 LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% cor	nf. interval]
LnNFLw1	2.709534	1.007055	2.69	0.008	.7102939	4.708774
Sex	.0957317	1.140284	0.08	0.933	-2.168	3 2.359464
w1Age	0109637	.0586586	-0.19	0.852	1274147	.1054874
Race	0	(omitted)				
PovStat	1.675807	.986437	1.70	0.093	2825025	3.634116
TIME_V1SCAN	0005714	.0006637	-0.86	0.391	0018889	
w1BMI	.0352503	.0652682	0.54	0.590	0943224	
ICV_volM2	1.52e-06	4.01e-06	0.38	0.706	-6.44e-06	9.48e-06
_cons	-4.063899	6.2396	-0.65	0.516	-16.45097	

^{66 . //}ANALYSIS C//

69 . save, replace
 file finaldata_imputed.dta saved

70 . 71 .

72 .

73 . //INTERACTION BY Race//

74 .

75 .

76 . //ANALYSIS B//

77 . mi estimate: reg Left_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fi

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	179
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
	Complete DF	=	169
DF adjustment: Small sample	DF: min	=	167.03
	avg	=	167.03
	max	=	167.03
Model F test: Equal FMI	F(9, 167.0)	=	15.67
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw1	-75.8096	65.60414	-1.16	0.250	-205.3297	53.71055
Race AfrAm	-260.2224	178.5799	-1.46	0.147	-612.7869	92.34212
Race#c.LnNFLw1 AfrAm	85.98341	88.37906	0.97	0.332	-88.50054	260.4674
Sex	-28.47875	60.53477	-0.47	0.639	-147.9906	91.03311
w1Age	-5.893159	3.070426	-1.92	0.057	-11.955	.1686843
Race	0	(omitted)				
PovStat	-136.3797	52.29295	-2.61	0.010	-239.6199	-33.13937
TIME_V1SCAN	.0196849	.0377044	0.52	0.602	0547536	.0941235
w1BMI	2.568116	3.608855	0.71	0.478	-4.55673	9.692962
ICV volM2	.001686	.000225	7.49	0.000	.0012418	.0021303
_cons	1860.42	333.881	5.57	0.000	1201.25	2519.591

78 . mi estimate: reg Right_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_f

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	179
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
	Complete DF	=	169
DF adjustment: Small sample	DF: min	=	167.03
	avg	=	167.03
	max	=	167.03
Model F test: Equal FMI	F(9, 167.0)	=	18.30
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw1	-63.75557	67.78397	-0.94	0.348	-197.5793	70.06815
Race AfrAm	-255.4588	184.5136	-1.38	0.168	-619.738	108.8204
Race#c.LnNFLw1 AfrAm	84.53142	91.31564	0.93	0.356	-95.75011	264.813
Sex	-104.7303	62.54617	-1.67	0.096	-228.2132	18.75262
w1Age Race	-4.274684 0	3.172447 (omitted)	-1.35	0.180	-10.53795	1.988576
PovStat TIME_V1SCAN	-109.3181 .0531392	54.03049 .0389572	-2.02 1.36	0.045 0.174	-215.9888 0237728	-2.647455 .1300511
w1BMI ICV volM2	2.95044 .0021162	3.728766 .0002325	0.79 9.10	0.430 0.000	-4.411143 .0016572	10.31202 .0025753
_cons	1470.063	344.9749	4.26	0.000	788.9905	2151.136

^{79 .}

^{81 .} mi estimate: reg LnLesion_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fin

Multiple-imputat Linear regression				Imputat: Number of Average Largest Complete	of obs RVI FMI	= = = =	5 179 0.0000 0.0000 169
DF adjustment:	Small sample			DF:	min	=	167.03
J	•				avg	=	167.03
					max	=	167.03
Model F test:	Equal FMI			F(9,	167.0)	=	2.51
Within VCE type:	: OLS			Prob >	F	=	0.0102
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.498087	.8311381	3.01	0.003	.857	1981	4.138977
Race AfrAm	1.937549	2.262426	0.86	0.393	-2.52	9087	6.404185
Race#c.LnNFLw1							
AfrAm	2929593	1.119673	-0.26	0.794	-2.50	3494	1.917576
Sex	.3602476	.7669144	0.47	0.639	-1.15	3847	1.874342
w1Age	.0021176	.0388992	0.05	0.957	074	6799	.078915
Race	0	(omitted)					
PovStat	.8212899	.6624987	1.24	0.217	486	6601	2.12924
TIME_V1SCAN	0006621	.0004777	-1.39	0.168	001	6051	.000281
w1BMI	.0586706	.0457205	1.28	0.201	03	1594	.1489352
ICV_volM2	2.06e-06	2.85e-06	0.72				7.69e-06
_cons	-4.820375	4.229934	-1.14	0.256	-13.	1714	3.530649

^{80 . //}ANALYSIS C//

```
Thursday March 30 18:51:48 2023 Page 9
82 .
83 . save, replace
  file finaldata_imputed.dta saved
84 .
88 . ********MODEL 3: MODEL 2+w1dxDiabetes w1Glucose*****
89 .
90 . //AFRICAN-AMERICAN//
92 . use finaldata_imputed,clear
93 .
94 .
95 .
96 . //ANALYSIS B//
97 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM
  Multiple-imputation estimates
                                           Imputations
```

Linear regression	Number of obs	= 74
	Average RVI	= 0.0087
	Largest FMI	= 0.0643
	Complete DF	= 64
DF adjustment: Small sample	DF: min	= 55.45
	avg :	= 61.08
	max :	= 62.05
Model F test: Equal FMI	F(9, 62.0)	= 6.03
Within VCE type: OLS	Prob > F	= 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-62.24114	87.73721	-0.71	0.481	-237.6261	113.1438
Sex	22.97723	82.50392	0.28	0.782	-141.969	187.9235
w1Age	-4.879436	4.907853	-0.99	0.324	-14.69028	4.931405
Race	0	(omitted)				
PovStat	-220.7932	73.57264	-3.00	0.004	-367.8603	-73.7261
TIME_V1SCAN	.0099781	.0595406	0.17	0.867	1090407	.1289969
w1BMI	-5.915442	5.739545	-1.03	0.307	-17.38862	5.557741
w1dxDiabetes	-80.73287	60.97053	-1.32	0.191	-202.8985	41.43275
w1Glucose	4.111424	1.746412	2.35	0.022	.6185759	7.604271
ICV_volM2	.0011746	.0003466	3.39	0.001	.0004816	.0018677
cons	2291.579	470.4509	4.87	0.000	1351.168	3231.99

98 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_vol

5

Multiple-imputati	lon estimates	Impu	Imputations		
Linear regression	1	Numb	er of obs	=	74
		Aver	age RVI	=	0.0020
		Larg	est FMI	=	0.0108
		Comp	lete DF	=	64
DF adjustment:	Small sample	DF:	min	=	61.41
			avg	=	61.89
			max	=	62.06
Model F test:	Equal FMI	F(9, 62.1)	=	7.95
Within VCE type:	OLS	Prob	> F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-48.72315	81.66978	-0.60	0.553	-211.9847	114.5384
Sex	-5.875064	76.56983	-0.08	0.939	-158.9409	147.1908
w1Age	-4.877442	4.567927	-1.07	0.290	-14.00903	4.254142
Race	0	(omitted)				
PovStat	-195.8194	68.43409	-2.86	0.006	-332.6144	-59.02439
TIME_V1SCAN	.0324939	.0553746	0.59	0.559	0781963	.1431842
w1BMI	-8.339839	5.341684	-1.56	0.124	-19.01794	2.338267
w1dxDiabetes	-57.56606	55.23857	-1.04	0.301	-168.0077	52.87555
w1Glucose	5.346139	1.610128	3.32	0.002	2.127413	8.564864
ICV_volM2	.0013264	.0003213	4.13	0.000	.000684	.0019687
_cons	2245.681	437.5157	5.13	0.000	1371.115	3120.246

100 . //ANALYSIS C//

101 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM2

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 74
	Average RVI	=	0.0020
	Largest FMI	=	0.0192
	Complete DF	=	64
DF adjustment: Small sample	DF: min	=	60.70
	avg	=	61.87
	max	=	62.09
Model F test: Equal FMI	F(9, 62.1)	=	1.90
Within VCE type: OLS	Prob > F	=	0.0689

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.366877	1.035944	2.28	0.026	.2960338	4.437719
Sex	.5347419	.9704888	0.55	0.584	-1.405185	2.474669
w1Age	01315	.0579338	-0.23	0.821	1289597	.1026597
Race	0	(omitted)				
PovStat	2580325	.8684206	-0.30	0.767	-1.993931	1.477866
TIME V1SCAN	0007638	.0007028	-1.09	0.281	0021686	.000641
w1BMI	.1028994	.0677294	1.52	0.134	032487	.2382858
w1dxDiabetes	.0673641	.7039412	0.10	0.924	-1.340392	1.47512
w1Glucose	0076459	.0204695	-0.37	0.710	0485685	.0332767
ICV volM2	4.59e-06	4.07e-06	1.13	0.264	-3.55e-06	.0000127
_cons	-4.864048	5.551723	-0.88	0.384	-15.96147	6.233373

102

103 . save, replace

file finaldata_imputed.dta saved

104 .

105 .

107 . //Whites//

108 .

109 . use finaldata_imputed,clear

Multiple-imputation estimates

110 .

111 .

112 . //ANALYSIS B//

113 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM

Imputations

F - F							_
Linear regress	sion			Number o	of obs	=	105
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complete	e DF	=	95
DF adjustment	: Small samp	ole		DF:	min	=	93.06
-	•				avg	=	93.06
					max	=	93.06
Model F test:	Equal F	MI		F(9,	93.1)	=	8.36
Within VCE typ	oe: · · ·	LS		Prob > 1	F	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% d	conf.	interval]
LnNFLw1	-111.6542	81.58549	-1.37	0.174	-273.66	555	50.35697
Sex	-93.54561	86.38106	-1.08	0.282	-265.07	798	77.98857
w1Age	-2.928006	4.437966	-0.66	0.511	-11.746	985	5.88484
Race	0	(omitted)					
PovStat	-69.29682	74.29012	-0.93	0.353	-216.8	321	78.22736
TIME_V1SCAN	.0434966	.0506754	0.86	0.393	05713	337	.144127
w1BMI	6.68633	5.094426	1.31	0.193	-3.4301	103	16.80276
w1dxDiabetes	28.8385	67.94456	0.42	0.672	-106.08	348	163.7618
w1Glucose	.291531	1.479706	0.20	0.844	-2.6468	346	3.229908
ICV_volM2	.001979	.0003029	6.53	0.000	.00137	775	.0025805
_cons	1189.39	496.9025	2.39	0.019	202.64	483	2176.131
_							

114 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_vol

Multiple-imputation estimates Linear regression					<pre>Imputations = Number of obs = Average RVI =</pre>	
				Largest		= 0.0000
				Complet		= 95
DF adjustment:	: Small samp	le		DF:	min	= 93.06
					~-8	= 93.06
						= 93.06
Model F test:	Equal F	MI		F(9 ,	93.1)	= 11.08
Within VCE typ	pe: O	LS		Prob >	F	= 0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw1	-128.7242	83.55112	-1.54	0.127	-294.6388	37.19031
Sex	-217.7574	88.46223	-2.46	0.016	-393.4243	-42.09045
w1Age	1.348028	4.54489	0.30	0.767	-7.677144	10.3732
Race	0	(omitted)				
PovStat	-35.67366	76.07999	-0.47	0.640	-186.7521	115.4048
TIME_V1SCAN	.0908903	.0518963	1.75	0.083	0121645	.1939451
w1BMI	9.666363	5.217166	1.85	0.067	6938048	20.02653
w1dxDiabetes	5.118204	69.58154	0.07	0.942	-133.0558	143.2922
w1Glucose	.8398709	1.515356	0.55	0.581	-2.1693	3.849042
ICV_volM2	.0026132	.0003102	8.42	0.000	.0019972	.0032292
_cons	361.6543	508.8743	0.71	0.479	-648.8605	1372.169

Model F test:

Within VCE type:

Equal FMI

OLS

```
115 .
116 . //ANALYSIS C//
117 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM2
    Multiple-imputation estimates
                                                    Imputations
    Linear regression
                                                    Number of obs
                                                                               105
                                                    Average RVI
                                                                            0.0000
                                                    Largest FMI
                                                                            0.0000
                                                                      =
                                                    Complete DF
                                                                                95
    DF adjustment:
                     Small sample
                                                            min
                                                                             93.06
                                                            avg
                                                                             93.06
                                                                             93.06
                                                            max
                                                                      =
    Model F test:
                                                    F( 9, 93.1)
                        Equal FMI
                                                                             1.42
    Within VCE type:
                              OLS
                                                    Prob > F
                                                                            0.1913
                   Coefficient Std. err.
                                                    P>|t|
                                                              [95% conf. interval]
    LnLesion_V~e
                                               t
         LnNFLw1
                     3.093677
                                1.097117
                                             2.82
                                                    0.006
                                                              .9150383
                                                                          5.272316
            Sex
                      .280786
                                1.161606
                                             0.24
                                                    0.810
                                                             -2.025912
                                                                          2.587484
           w1Age
                    -.0122684
                                .0596794
                                            -0.21
                                                    0.838
                                                             -.1307788
                                                                          .1062419
           Race
                           0 (omitted)
         PovStat
                     1.781186
                               .9990132
                                             1.78
                                                    0.078
                                                             -.2026388
                                                                          3.765011
     TIME_V1SCAN
                    -.0006898
                               .0006815
                                            -1.01
                                                    0.314
                                                             -.0020431
                                                                          .0006634
                                            0.78
           w1BMI
                    .0535974
                               .0685071
                                                    0.436
                                                             -.0824429
                                                                          .1896377
    w1dxDiabetes
                                .9136815
                                            -0.22
                    -.2038654
                                                    0.824
                                                              -2.01824
                                                                          1.610509
      w1Glucose
                    -.0113176
                                .0198983
                                            -0.57
                                                    0.571
                                                             -.0508313
                                                                          .0281961
       ICV volM2
                     1.41e-06
                                4.07e-06
                                            0.35
                                                    0.731
                                                             -6.68e-06
                                                                          9.49e-06
           _cons
                    -4.125121
                                6.682075
                                            -0.62
                                                    0.539
                                                             -17.39428
                                                                           9.14404
118 .
119 . save, replace
   file finaldata_imputed.dta saved
120 .
122 . //INTERACTION by Race//
123 .
124 .
125 .
126 . //ANALYSIS B//
127 . mi estimate: reg Left_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose
    Multiple-imputation estimates
                                                    Imputations
                                                                                 5
    Linear regression
                                                    Number of obs
                                                                               179
                                                    Average RVI
                                                                            0.0035
                                                    Largest FMI
                                                                            0.0379
                                                    Complete DF
                                                                               167
    DF adjustment:
                     Small sample
                                                            min
                                                                            150.90
```

avg

max

F(11, 165.0)

Prob > F

163.47 165.03

13.04

0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-110.9607	69.5279	-1.60	0.112	-248.2398	26.31852
Race AfrAm	-325.0225	183.3459	-1.77	0.078	-687.0286	36.98357
Race#c.LnNFLw1 AfrAm	121.2835	91.15676	1.33	0.185	-58.70038	301.2673
Sex w1Age	-40.89512 -5.706097	61.0508 3.131221	-0.67 -1.82	0.504 0.070	-161.4365 -11.88858	79.64629 .4763891
Race	0	(omitted)				
PovStat TIME V1SCAN	-142.0743 .0257788	52.34823 .038096	-2.71 0.68	0.007 0.500	-245.4329 0494398	-38.71577 .1009975
w1BMI w1dxDiabetes	1.373428 -1.742345	3.692523 45.79427	0.37 -0.04	0.710 0.970	-5.917257 -92.22309	8.664114 88.7384
w1Glucose	1.371714	1.115553	1.23	0.221	8312749	3.574702
ICV_volM2 _cons	.0016923 1825.685	.0002248 342.8773	7.53 5.32	0.000 0.000	.0012485 1148.684	.0021361 2502.686

128 . mi estimate: reg Right_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose

Multiple-imputat		i		Imputat:		=	5 179
Linear regression	Ш					=	0.0002
				Average Largest		=	0.0023
				Complete		_	167
DF adjustment:	Small sample			DF:	min	=	164.66
Dr aujustillent.	Siliati Saliipie	7		Dr.	avg	_	164.99
					max	_	165.04
Model F test:	Equal FM1			F(11 ,		_	15.67
Within VCE type:	•			Prob >	,	=	0.0000
within vce type.	, OLS	•		P1.00 > 1	7	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-113.5233	71.32109	-1.59	0.113	-254.	3428	27.29607
Race							
AfrAm	-350.7107	188.095	-1.86	0.064	-722.	0935	20.67209
Race#c.LnNFLw1							
AfrAm	136.092	93.52009	1.46	0.148	-48.5	5805	320.742
Sex	-123.3025	62.63051	-1.97	0.051	-246.	9629	.3578239
w1Age	-4.107155	3.210241	-1.28	0.203	-10.	4456	2.231285
Race	0	(omitted)					
PovStat	-117.6083	53.70646	-2.19	0.030	-223.	6486	-11.568
TIME_V1SCAN	.0626818	.0390762	1.60	0.111	014	4718	.1398355
w1BMI	1.175368	3.78797	0.31	0.757	-6.30	3761	8.654497
w1dxDiabetes	5.382747	46.16101	0.12	0.907	-85.7	6107	96.52656
w1Glucose	1.862021	1.136464	1.64	0.103	381	8764	4.105918
ICV_volM2	.0021253	.0002306	9.22	0.000	.0	0167	.0025806
_cons	1432.8	351.4862	4.08	0.000	738.	8099	2126.79

130 . //ANALYSIS C//

Multiple-imputation estimates

131 . mi estimate: reg LnLesion_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose I

Imputations

nareipie impacación escimaces				Impacae.	-05		_
Linear regression	n			Number o	of obs	=	179
				Average	RVI	=	0.0002
				Largest	FMI	=	0.0023
				Complete	e DF	=	167
DF adjustment:	Small sample	:		DF:	min	=	164.66
					avg	=	164.99
					max	=	165.04
Model F test:	Equal FMI	[F(11 ,	165.0)	=	2.15
Within VCE type:	OLS	5		Prob > I	F	=	0.0194
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.783001	.8840738	3.15	0.002	1.03	7448	4.528554
Race							
AfrAm	2.529013	2.331578	1.08	0.280	-2.07	4553	7.132579
711.7							
Race#c.LnNFLw1							
AfrAm	6093748	1.15925	-0.53	0.600	-2.89	8248	1.679499
Sex	.4776212	.7763645	0.62	0.539	-1.05	5266	2.010509
w1Age	.0024046	.0397926	0.06	0.952	076	1637	.0809729
Race	0	(omitted)					
PovStat	.8721799	.6657322	1.31	0.192	4	4227	2.18663
TIME_V1SCAN	0007282	.0004844	-1.50	0.135	001	6846	.0002282
w1BMI	.0698099	.0469552	1.49	0.139	022	9005	.1625203
w1dxDiabetes	1279618	.5722001	-0.22	0.823	-1.25	7757	1.001834
w1Glucose	0096899	.0140869	-0.69	0.493	037	5037	.018124
ICV_volM2	2.01e-06	2.86e-06	0.70	0.484	-3.64	e-06	7.65e-06
_cons	-4.757355	4.356876	-1.09	0.276	-13.3	5976	3.845053

132 .

133 . save, replace

file finaldata_imputed.dta saved

134 .

136 . *********MODEL 4: MODEL 2+liver/kidney disease*****

137 .

138 . //AFRICAN-AMERICAN//

139 .

140 . use finaldata_imputed,clear

141 .

142 .

143 .

144 . //ANALYSIS B//

145 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > 2

Multiple-imput Linear regress		Imputati Number d		5 74		
				Average	RVI =	0.1204
				Largest	FMI =	0.6234
				Complete	e DF =	61
DF adjustment:	: Small samp	le		DF:	min =	8.58
					avg =	50.67
					max =	58.69
Model F test:	Equal F	MI		F(11 ,	57.2) =	3.61
Within VCE typ	oe: O	LS		Prob > F	F =	0.0007
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw1	-32.38699	94.67995	-0.34	0.734	-222.3738	157.5998
Sex	22.24142	121.5399	0.18	0.856	-223.6394	268.1222
w1Age	-6.622047	5.648811	-1.17	0.246	-17.92809	4.683995
Race	0	(omitted)				
PovStat	-210.7129	79.67188	-2.64	0.011	-370.2246	-51.20116
TIME_V1SCAN	.0141827	.0662193	0.21	0.831	1186939	.1470593
w1BMI	-2.967164	6.591715	-0.45	0.654	-16.15861	10.22428
w1Creatinine	94.2276	234.1046	0.40	0.697	-439.2907	627.7459
w1USpecGrav	-4636.801	5259.011	-0.88	0.382	-15166.04	5892.439
w1BUN	.1933146	11.19181	0.02	0.986	-22.27704	22.66367
w1ALP	2406371	1.689214	-0.14	0.887	-3.624611	3.143336
w1UricAcid	-13.3002	30.02616	-0.44	0.660	-73.4603	46.85991
ICV_volM2	.0013231	.000388	3.41	0.001	.0005454	.0021007
_cons	7113.202	5353.017	1.33	0.189	-3601.87	17828.27

146 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	74
	Average RVI	=	0.0511
	Largest FMI	=	0.3820
	Complete DF	=	61
DF adjustment: Small sample	DF: min	=	18.37
	avg	=	54.05
	max	=	58.96
Model F test: Equal FMI	F(11 , 58.6)	=	4.37
Within VCE type: OLS	Prob > F	=	0.0001

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-45.41348	90.78748	-0.50	0.619	-227.3443	136.5173
Sex	-27.82467	112.6511	-0.25	0.806	-253.9398	198.2905
w1Age	-6.779229	5.458635	-1.24	0.219	-17.7021	4.143641
Race	0	(omitted)				
PovStat	-198.8452	76.72905	-2.59	0.012	-352.3927	-45.29771
TIME V1SCAN	.0505098	.0632553	0.80	0.428	076205	.1772246
w1BMI	-8.314222	6.394648	-1.30	0.199	-21.11091	4.482469
w1Creatinine	86.83815	185.7556	0.47	0.646	-302.8535	476.5298
w1USpecGrav	237.6194	5095.234	0.05	0.963	-9962.313	10437.55
w1BUN	11.17375	10.62459	1.05	0.297	-10.10673	32.45424
w1ALP	2767773	1.625345	-0.17	0.865	-3.530607	2.977052
w1UricAcid	-10.00655	28.81172	-0.35	0.730	-67.68159	47.66849
ICV volM2	.0015792	.0003726	4.24	0.000	.0008331	.0023253
_cons	2108.417	5192.726	0.41	0.686	-8285.296	12502.13

```
147 .
148 . //ANALYSIS C//
149 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
    Multiple-imputation estimates
                                                   Imputations
                                                                                5
    Linear regression
                                                                               74
                                                   Number of obs
                                                                     =
                                                    Average RVI
                                                                           0.0135
                                                   Largest FMI
                                                                           0.0595
                                                    Complete DF
                                                                                61
    DF adjustment: Small sample
                                                                            53.52
                                                    DF:
                                                           min
                                                                            57.99
                                                           avg
                                                                            58.87
                                                           max
    Model F test:
                        Equal FMI
                                                    F( 11,
                                                             59.0)
                                                                             1.83
    Within VCE type:
                             OLS
                                                    Prob > F
                                                                            0.0691
    LnLesion_V~e
                  Coefficient Std. err.
                                                   P>|t|
                                                             [95% conf. interval]
                                              t
         LnNFLw1
                     2.281103
                               1.030348
                                            2.21
                                                   0.031
                                                             .2188569
                                                                          4.343349
                     .415251
                               1.254183
                                                                         2.924993
                                            0.33
                                                   0.742
                                                            -2.094491
            Sex
           w1Age
                     .0008309
                               .0631389
                                            0.01
                                                   0.990
                                                             -.1255326
                                                                          .1271944
           Race
                           0 (omitted)
                    -.0767695
                                           -0.09
        PovStat
                               .8882236
                                                   0.931
                                                            -1.854647
                                                                         1.701108
                                                                          .0005067
    TIME_V1SCAN
                    -.0009447
                               .0007249
                                           -1.30
                                                   0.198
                                                            -.0023961
                     .111049
                                          1.50
                                                            -.0374906
          w1BMI
                               .0741995
                                                   0.140
                                                                          .2595887
    w1Creatinine
                    1.563545
                               1.789661
                                            0.87
                                                   0.386
                                                            -2.025254
                                                                          5.152344
    w1USpecGrav
                    -77.44488
                               58.49397
                                            -1.32
                                                   0.191
                                                            -194.5118
                                                                         39.62205
          w1BUN
                     .052385
                               .1208678
                                            0.43
                                                   0.666
                                                             -.1894951
                                                                          . 294265
          w1ALP
                               .0185981
                                            -0.57
                                                   0.568
                                                             -.047886
                    -.0106696
                                                                          .0265468
     w1UricAcid
                    -.3417972
                                .330931
                                            -1.03
                                                   0.306
                                                             -1.00411
                                                                          .3205155
      ICV volM2
                     4.80e-06
                               4.26e-06
                                            1.12
                                                    0.265
                                                            -3.74e-06
                                                                          .0000133
                     73.32848 59.73154
          _cons
                                            1.23
                                                   0.224
                                                            -46.21417
                                                                         192.8711
151 . save, replace
   file finaldata_imputed.dta saved
152 .
153 .
154 .
155 . //WHITES//
157 . use finaldata_imputed,clear
158 .
159 .
161 . //ANALYSIS B//
162 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
```

Multiple-imputation estimates Linear regression				Imputation Number of Average F Largest F Complete	= obs = RVI = FMI = DF =	5 105 0.0181 0.1121 92	
DF adjustment:	: Small sampl	Le			nin = avg =	66.00 84.22	
					iax =	89.96	
Model F test:	Equal FM	1I		F(11 ,	89.9) =	6.92	
Within VCE typ	oe: O L	.S		Prob > F	=	0.0000	
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]	
LnNFLw1	-105.9754	77.99683	-1.36	0.178	-260.9338	48.98304	
Sex	-97.94924	106.4054	-0.92	0.360	-309.3726	113.4742	
w1Age	-2.238842	4.535047	-0.49	0.623	-11.24856	6.770878	
Race	0 ((omitted)					
PovStat	-58.03509	74.78925	-0.78	0.440	-206.6217	90.55152	
TIME_V1SCAN	.035944	.0515303	0.70	0.487	06644	.138328	
w1BMI	6.971719	5.40487	1.29	0.200	-3.766268	17.70971	
w1Creatinine	-102.4406	204.994	-0.50	0.619	-511.7246	306.8434	
w1USpecGrav	-962.4941	6236.402	-0.15	0.878	-13401.96	11476.97	
w1BUN	12.27572	9.269335	1.32	0.189	-6.161691	30.71312	
w1ALP	-1.764376	1.539886	-1.15	0.255	-4.823747	1.294994	
w1UricAcid	.4020883	27.89109	0.01	0.989	-55.01329	55.81747	
ICV_volM2	.0020568	.0003148	6.53	0.000	.0014314	.0026823	
_cons	2096.997	6236.121	0.34	0.738	-10340.86	14534.86	

163 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =1

Multiple-impu		Imputati		=	5		
Linear regres	sion			Number o		=	105
				Average	RVI	=	0.0154
				Largest		=	0.1056
				Complete	DF	=	92
DF adjustment	: Small sam	ple		DF:	min	=	67.72
					avg	=	84.48
					max	=	90.05
Model F test:	Equal	FMI		F(11 ,	89.9)	=	9.03
Within VCE ty	pe:	OLS		Prob > F	· ·	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-127.2779	80.04171	-1.59	0.115	-286.2	961	31.74034
Sex	-203.6701	109.4009	-1.86	0.066	-421.	057	13.71677
w1Age	1.325301	4.654324	0.28	0.776	-7.921	253	10.57185
Race	0	(omitted)					
PovStat	-25.44553	` 76.7769	-0.33	0.741	-177.9	799	127.0889
TIME V1SCAN	.0784456	.052927	1.48	0.142	0267	144	.1836056
w1BMI	10.76364	5.547763	1.94	0.055	2581	084	21.7854
w1Creatinine	-19.0933	208.5684	-0.09	0.927	-434.9	803	396.7937
w1USpecGrav	-420.5493	6426.332	-0.07	0.948	-13245		12403.97
w1BUN	13.93673	9.479823	1.47	0.145	-4.913		32.78708
w1ALP	4492366	1.579983	-0.28	0.777	-3.5		2.689727
w1UricAcid	-16.10095	28.55975	-0.56	0.574	-72.83		40.63792
ICV volM2	.0026211	.0003231	8.11	0.000	.0019	-	.003263
101_101112	.0020211			0.000			

0.12 0.907

-12073.02

13585.11

_cons

756.0437 6428.794

```
Thursday March 30 18:51:52 2023 Page 18
164 .
165 . //ANALYSIS C//
166 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
   Multiple-imputation estimates
   Linear regression
   DF adjustment: Small sample
   Model F test:
                      Equal FMI
   Within VCE type:
                            OLS
   LnLesion_V~e | Coefficient Std. err. t
        LnNFLw1
                  2.757244 1.046557
                                       2.63
                   -.9435204 1.424352
-.0152744 .0608885
           Sex
                                          -0.66
          w1Age
                                         -0.25
                       0 (omitted)
          Race
                   1.442921 1.003492
        PovStat
                                         1.44
    TIME_V1SCAN
                  -.0006881 .0006907
                                       -1.00
          w1BMI
                   -.0121552 .0725226 -0.17
   w1Creatinine
                  -.4390173 2.671601
                                       -0.16
```

F(11 , Prob > F	90.0) =	1.42 0.1797
 P> t	[95% conf.	interval]
0.010	.678083	4.836405
0.509	-3.773322	1.886281
0.802	1362393	.1056904
0.154	550691	3.436533
0.322	0020603	.0006841
0.867	1562334	.1319229
0.870	-5.754168	4.876133

5

105

92 81.50

0.0052

89.03

90.04

= 0.0514

=

Imputations

Average RVI

Largest FMI

Complete DF

Number of obs

min

avg

max

1.46 0.147 -0.00 0.997 w1USpecGrav 117.3272 80.28242 -42.1999 276.8544 -.2435637 w1BUN -.0004007 .1223769 .2427623 .0206544 -0.31 0.757 w1ALP -.0064081 -.0474415 .0346254 -.0064081 .0206544 -0.31 0.757 .3831209 .3738775 1.02 0.308 2.41e-06 4.22e-06 0.57 0.570 w1UricAcid -.359668 1.12591 ICV_volM2 -5.98e-06 .0000108

_cons -122.555 80.34474 -1.53 0.131 -282.2073 37.09725

167 . 168 . save, replace

file finaldata_imputed.dta saved

170 . **INTERACTION by Race** 171 .

172 .

173 . //ANALYSIS B//

174 . mi estimate: reg Left_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGra

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	179
		Average RVI	=	0.0419
		Largest FMI	=	0.3870
		Complete DF	=	164
DF adjustment:	Small sample	DF: min	=	25.15
		avg	=	146.60
		max	=	161.92
Model F test:	Equal FMI	F(13 , 160.7)	=	10.33
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-85.3246	68.23129	-1.25	0.213	-220.0736	49.42441
Race AfrAm	-255.2646	187.9865	-1.36	0.177	-626.6587	116.1295
Race#c.LnNFLw1						
AfrAm	92.41925	91.69964	1.01	0.315	-88.7113	273.5498
Sex	-39.14595	77.77643	-0.50	0.616	-192.9277	114.6358
w1Age	-6.000881	3.281812	-1.83	0.069	-12.48159	.4798284
Race	0	(omitted)				
PovStat	-133.4207	53.14768	-2.51	0.013	-238.3732	-28.46806
TIME_V1SCAN	.0173688	.0383989	0.45	0.652	0584613	.093199
w1BMI	2.293407	4.012472	0.57	0.568	-5.630112	10.21693
w1Creatinine	12.83697	145.7066	0.09	0.930	-287.1578	312.8317
w1USpecGrav	-1609.84	3973.325	-0.41	0.686	-9462.591	6242.911
w1BUN	6.930816	6.892116	1.01	0.316	-6.692003	20.55363
w1ALP	843838	1.112092	-0.76	0.449	-3.039952	1.352276
w1UricAcid	-5.029264	19.96638	-0.25	0.801	-44.45916	34.40063
ICV_volM2	.0017142	.000234	7.32	0.000	.0012521	.0021764
cons	3489.774	4005.015	0.87	0.385	-4425.716	11405.26

175 . mi estimate: reg Right_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGr

Multiple-imputat Linear regressio			Imputations Number of obs Average RVI Largest FMI Complete DF			5 179 0.0137 0.1347 164	
DF adjustment:	Small sample	2		DF:	min	=	90.46
					avg	=	154.98
					max	=	161.92
Model F test:	Equal FM			F(13,	161.8)	=	12.66
Within VCE type:	OLS	5		Prob > F		=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-89.33034	69.95145	-1.28	0.203	-227.	4666	48.80597
Race							
AfrAm	-262.1329	191.2926	-1.37	0.172	-639.	9086	115.6428
Race#c.LnNFLw1							
AfrAm	99.5104	93.6196	1.06	0.289	-85.3	7038	284.3912
Sex	-113.4531	78.4062	-1.45	0.150	-268.	3086	41.40239
w1Age	-4.318645	3.375519	-1.28	0.203	-10.	9844	2.347108
Race	0	(omitted)					
PovStat	-107.7378	54.64795	-1.97	0.050	-215.		.1768221
TIME_V1SCAN	.0477365	.0394784	1.21	0.228	030		.1256978
w1BMI	2.584043	4.128896	0.63	0.532	-5.56	_	10.73752
w1Creatinine	57.8998	129.4466	0.45	0.656	-199.		315.0504
w1USpecGrav	759.0653	4068.835	0.19	0.852	-7280		8798.475
w1BUN	10.39532	6.968239	1.49	0.138	-3.36		24.1572
w1ALP	1490371	1.143985	-0.13	0.897	-2.40		2.110062
w1UricAcid	-16.09825	20.50247	-0.79	0.433	-56.5		24.38896
ICV_volM2	.00213	.0002407	8.85	0.000	.001		.0026054
_cons	660.1075	4099.61	0.16	0.872	-7440	.025	8760.24

177 . //ANALYSIS C//

Linear regression

Multiple-imputation estimates

Multiple-imputation estimates

Small sample

0LS

Linear regression

DF adjustment:

Within VCE type:

178 . mi estimate: reg LnLesion_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav

Imputations
Number of obs

Average RVI

Largest FMI

Complete DF

5

179

164

179

0.0424

0.3704

147.88

162.99

=

165 27.02

0.0013

0.0136

=

LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]	
LnNFLw1	2.421109	.8626664	2.81	0.006	.7175882	4.12463	
Race							
AfrAm	1.806318	2.352927	0.77	0.444	-2.840051	6.452687	
Race#c.LnNFLw1							
AfrAm	1739186	1.152704	-0.15	0.880	-2.450182	2.102345	
Sex	1422883	.9618345	-0.15	0.883	-2.041661	1.757084	
w1Age	0008986	.0416528	-0.02	0.983	0831515	.0813542	
Race	0	(omitted)				.=	
PovStat	.7757153	.6743955	1.15	0.252	5560244	2.107455	
TIME V1SCAN	0006854	.0004866	-1.41	0.161	0016463	.0002754	
w1BMI	.037666	.0509363	0.74	0.461	0629187	.1382507	
w1Creatinine	.402283	1.503444	0.27	0.789	-2.567041	3.371607	
w1USpecGrav	32.52181	49.45208	0.66	0.512	-65.13351	130.1771	
w1BUN	.0388398	.0855988	0.45	0.651	1301947	. 2078744	
w1ALP	0069481	.0141043	-0.49	0.623	0348003	.020904	
w1UricAcid	.1037808	.2528425	0.41	0.682	3955118	.6030733	
ICV_volM2	2.63e-06	2.97e-06	0.88	0.378	-3.24e-06	8.49e-06	
_cons	-37.96102	49.83764	-0.76	0.447	-136.3778	60.45574	

Imputations Number of obs

Average RVI

Largest FMI

Complete DF

F(12,

Prob > F

min

avg

max

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-46.08662	55.98793	-0.82	0.412	-156.6433	64.47007
Sex	-28.60585	76.77417	-0.37	0.710	-180.3579	123.1462
w1Age	-5.942988	3.282719	-1.81	0.072	-12.42523	.5392491
Race	-75.00867	55.08858	-1.36	0.175	-183.8047	33.78733
PovStat	-134.2964	53.15182	-2.53	0.012	-239.2525	-29.34037
TIME_V1SCAN	.0151062	.0383342	0.39	0.694	0605924	.0908048
w1BMI	2.035893	4.006237	0.51	0.612	-5.874987	9.946773
w1Creatinine	-6.016731	142.3017	-0.04	0.967	-297.985	285.9516
w1USpecGrav	-1914.674	3963.256	-0.48	0.630	-9747.328	5917.98
w1BUN	7.170885	6.876716	1.04	0.299	-6.419295	20.76107
w1ALP	782888	1.110225	-0.71	0.482	-2.975203	1.409427
w1UricAcid	-3.919335	19.93909	-0.20	0.844	-43.29354	35.45487
ICV_volM2	.0016723	.0002303	7.26	0.000	.0012175	.0021271
_cons	3846.925	3991.835	0.96	0.337	-4042.244	11736.09

185 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 179
	Average RVI	=	0.0134
	Largest FMI	=	0.1239
	Complete DF	=	165
	DF: min	=	96.70
	avg	=	155.96
DF adjustment: Small sample	max	=	162.95
	<u>F(12, .)</u>	=	•
Within VCE type: OLS	Prob > F	=	•

interval]	[95% conf.	P> t	t	Std. err.	Coefficient	Right_Hipp~s
66.62473	-160.7497	0.415	-0.82	57.5738	-47.06249	LnNFLw1
51.16746	-255.3695	0.190	-1.32	77.60912	-102.101	Sex
2.407069	-10.92222	0.209	-1.26	3.375131	-4.257574	w1Age
43.29327	-179.4235	0.229	-1.21	56.39321	-68.06511	Race
7490662	-216.6282	0.048	-1.99	54.66313	-108.6887	PovStat
.123129	0325132	0.252	1.15	.0394096	.0453079	TIME_V1SCAN
10.44604	-5.826324	0.576	0.56	4.12036	2.309858	w1BMI
290.0189	-214.7398	0.768	0.30	127.156	37.63954	w1Creatinine
8457.532	-7597.597	0.916	0.11	4062.779	429.9676	w1USpecGrav
24.40089	-3.097551	0.128	1.53	6.962272	10.65167	w1BUN
2.17282	-2.338006	0.942	-0.07	1.14218	0825929	w1ALP
25.54206	-55.34038	0.468	-0.73	20.48011	-14.89916	w1UricAcid
.0025528	.0016168	0.000	8.80	.000237	.0020848	ICV volM2
9115.64	-7050.071	0.801	0.25	4090.817	1032.785	cons

186 . 187 . //ANALYSIS C//

188 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	179
	Average RVI	=	0.0014
	Largest FMI	=	0.0131
	Complete DF	=	165
	DF: min	=	159.91
	avg	=	162.67
DF adjustment: Small sample	max	=	163.00
	F(12, .)	=	
Within VCE type: OLS	Prob > F	=	

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.347178	.7080767	3.31	0.001	.9489916	3.745365
Sex	162122	.9499113	-0.17	0.865	-2.037861	1.713617
w1Age	0010014	.0415235	-0.02	0.981	0829951	.0809923
Race	1.467206	.6927199	2.12	0.036	.0993423	2.835069
PovStat	.7774002	.6723053	1.16	0.249	5501508	2.104951
TIME V1SCAN	0006812	.0004843	-1.41	0.161	0016376	.0002752
w1BMI	.0381352	.0506855	0.75	0.453	0619497	.1382201
w1Creatinine	.4374598	1.479735	0.30	0.768	-2.484883	3.359803
w1USpecGrav	33.09921	49.15378	0.67	0.502	-63.96249	130.1609
w1BUN	.0384001	.0852878	0.45	0.653	1300125	.2068126
w1ALP	0070671	.0140413	-0.50	0.615	0347935	.0206593
w1UricAcid	.1016758	.2517083	0.40	0.687	3953542	.5987057
ICV volM2	2.71e-06	2.92e-06	0.93	0.355	-3.05e-06	8.46e-06
_cons	-39.96267	49.5063	-0.81	0.421	-137.7205	57.79519

190 . save, replace

file finaldata_imputed.dta saved

```
192 . *********MODEL 5: MODEL2+OXIDATIVE STRESS*****
```

193 .

194 . 195 . //AFRICAN-AMERICAN//

197 . use finaldata_imputed,clear

198 .

199 .

200 . //ANALYSIS B//

201 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 74
	Average RVI	=	0.0628
	Largest FMI	=	0.4272
	Complete DF	=	63
DF adjustment: Small sample	DF: min	=	16.04
	avg	=	56.31
	max	=	61.05
Model F test: Equal FMI	F(10 , 60.4)	=	4.66
Within VCE type: OLS	Prob > F	=	0.0001

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-40.09528	89.24444	-0.45	0.655	-218.6753	138.4847
Sex	15.02056	86.0511	0.17	0.862	-157.0548	187.0959
w1Age	-6.120342	4.851434	-1.26	0.212	-15.82206	3.581373
Race	0	(omitted)				
PovStat	-223.1669	76.48087	-2.92	0.005	-376.1336	-70.20017
TIME V1SCAN	.0358564	.0643448	0.56	0.579	0928969	.1646096
w1BMI	-2.685876	6.06748	-0.44	0.660	-14.81929	9.447539
w1TotalD	.1972855	6.016425	0.03	0.974	-12.55448	12.94905
w1Albumin	189.069	120.6495	1.57	0.122	-52.18522	430.3232
w1EosinPct	-2.303787	18.34376	-0.13	0.900	-38.9859	34.37833
ICV volM2	.0013265	.0003571	3.71	0.000	.0006121	.0020409
_cons	1528.11	755.009	2.02	0.047	18.40051	3037.82

202 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput Linear regress		tes		Imputat Number	ions of obs	=	5 74
				Average	RVI	=	0.0472
				Largest	: FMI	=	0.3479
				Complet	e DF	=	63
DF adjustment	: Small samp	ole		DF:	min	=	20.94
					avg	=	56.75
					max	=	60.97
Model F test:	Equal I	FMI		F(10 ,	60.6)	=	5.09
Within VCE typ	pe: (OLS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-32.77983	86.66376	-0.38	0.707	-206.1	238	140.5641
Sex	-8.317525	84.36264	-0.10	0.922	-177.0	423	160.4073
w1Age	-5.235692	4.755061	-1.10	0.275	-14.74	607	4.274686
Race	0	(omitted)					
PovStat	-200.2926	74.59413	-2.69	0.009	-349.4	701	-51.11518
TIME_V1SCAN	.0440126	.0627399	0.70	0.486	0815	097	.169535
w1BMI	-5.402471	5.946488	-0.91	0.367	-17.29	561	6.490667
w1TotalD	-2.911254	5.574358	-0.52	0.607	-14.5	057	8.683187
w1Albumin	156.6912	118.0972	1.33	0.190	-79.47	605	392.8584
w1EosinPct	-1.786181	17.93018	-0.10	0.921	-37.64	149	34.06913
ICV_volM2	.0015276	.0003497	4.37	0.000	.0008	279	.0022274
_cons	1737.949	738.3537	2.35	0.022	261.5	026	3214.395

203

204 . //ANALYSIS C//

205 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

Multiple-imputation estimates		Imputations	=	5
Linear regression		Number of obs	=	74
		Average RVI	=	0.0221
		Largest FMI	=	0.1898
		Complete DF	=	63
DF adjustment: S	Small sample	DF: min	=	36.72
		avg	=	58.67
		max	=	61.06
Model F test:	Equal FMI	F(10 , 60.9)	=	1.72
Within VCE type:	OLS	Prob > F	=	0.0962

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.372156	1.018809	2.33	0.023	.3346583	4.409653
Sex	.5656869	.9915413	0.57	0.570	-1.417091	2.548465
w1Age	0183154	.0558348	-0.33	0.744	1299659	.0933352
Race	0	(omitted)				
PovStat	2069948	.8782079	-0.24	0.814	-1.963167	1.549178
TIME_V1SCAN	0007603	.0007352	-1.03	0.305	0022307	.0007101
w1BMI	.0994516	.0697868	1.43	0.159	0400932	.2389965
w1TotalD	.0197658	.0600508	0.33	0.744	1019404	.1414721
w1Albumin	8098262	1.390903	-0.58	0.563	-3.591178	1.971526
w1EosinPct	.0773382	.2111043	0.37	0.715	3447854	.4994618
ICV volM2	4.05e-06	4.09e-06	0.99	0.326	-4.12e-06	.0000122
_cons	-1.658191	8.698848	-0.19	0.849	-19.05227	15.73589
	l					

207 . save, replace

file finaldata_imputed.dta saved

208 .

209 .

210 .

211 . //WHITE//

212 .

213 . use finaldata_imputed,clear

214 . 215 .

216 .

217 . //ANALYSIS B//

218 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 105
5	Average RVI	=	0.0106
	Largest FMI	=	0.0722
	Complete DF	=	94
DF adjustment: Small sample	DF: min	=	77.97
	avg	=	90.26
	max	=	92.04
Model F test: Equal FMI	F(10 , 92.0)	=	7.41
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-89.23056	79.81573	-1.12	0.267	-247.7647	69.30355
Sex	-101.3977	88.71359	-1.14	0.256	-277.5904	74.79514
w1Age	-2.650734	4.429923	-0.60	0.551	-11.44894	6.147473
Race	0	(omitted)				
PovStat	-62.19843	74.36378	-0.84	0.405	-209.8913	85.49448
TIME_V1SCAN	.0460839	.0512992	0.90	0.371	0558016	.1479695
w1BMI	9.367322	5.224711	1.79	0.076	-1.009532	19.74418
w1TotalD	.9347004	3.304023	0.28	0.778	-5.64314	7.512541
w1Albumin	106.3947	132.9422	0.80	0.426	-157.6443	370.4337
w1EosinPct	0279324	15.30368	-0.00	0.999	-30.44218	30.38632
ICV_volM2	.0019982	.0003018	6.62	0.000	.0013987	.0025976
_cons	573.9373	809.6411	0.71	0.480	-1034.079	2181.954

219 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

tation estimat	es		Imputati	ions	=	5
sion			Number o	of obs	=	105
			Average	RVI	=	0.0062
			Largest	FMI	=	0.0396
			Complete	DF	=	94
: Small samp	le		DF:	min	=	85.88
·				avg	=	91.18
				max	=	92.06
Equal F	MI		F(10 ,	92.0)	=	9.76
oe: C	LS		Prob > I	•	=	0.0000
Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
-94.19027	81.76229	-1.15	0.252	-256.57	787	68.19819
-216.9566	91.0654	-2.38	0.019	-397.81	L89	-36.0943
1.147118	4.547926	0.25	0.801	-7.8854	114	10.17965
0	(omitted)					
-33.23886	76.3394	-0.44	0.664	-184.85	546	118.3769
.0856228	.0526504	1.63	0.107	01894	152	.1901907
11.45713	5.362194	2.14	0.035	.80735	575	22.1069
5147437	3.312298	-0.16	0.877	-7.0962	263	6.066776
43.39869	136.432	0.32	0.751	-227.56	574	314.3648
8.198211	15.78352	0.52	0.605	-23.179	902	39.57544
.0026135	.0003099	8.43	0.000	.0019	998	.0032289
139.5006	831.1302	0.17	0.867	-1511.1	L84	1790.185
	Equal Foe: Coefficient -94.19027 -216.9566 1.147118 0 -33.23886 .0856228 11.457135147437 43.39869 8.198211 .0026135	Equal FMI De: OLS Coefficient Std. err. -94.19027 81.76229 -216.9566 91.0654 1.147118 4.547926 0 (omitted) -33.23886 76.3394 .0856228 .0526504 11.45713 5.3621945147437 3.312298 43.39869 136.432 8.198211 15.78352 .0026135 .0003099	Equal FMI De: OLS Coefficient Std. err. t -94.19027 81.76229 -1.15 -216.9566 91.0654 -2.38 1.147118 4.547926 0.25 0 (omitted) -33.23886 76.3394 -0.44 .0856228 .0526504 1.63 11.45713 5.362194 2.145147437 3.312298 -0.16 43.39869 136.432 0.32 8.198211 15.78352 0.52 .0026135 .0003099 8.43	Average Largest Complete DF: Equal FMI F(10, Prob > F) Coefficient Std. err. t P> t -94.19027 81.76229 -1.15 0.252 -216.9566 91.0654 -2.38 0.019 1.147118 4.547926 0.25 0.801 0 (omitted) -33.23886 76.3394 -0.44 0.664 .0856228 .0526504 1.63 0.107 11.45713 5.362194 2.14 0.0355147437 3.312298 -0.16 0.877 43.39869 136.432 0.32 0.751 8.198211 15.78352 0.52 0.605 .0026135 .0003099 8.43 0.000	Number of observation Number of observation Number of observation Average RVI	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI F(10, 92.0) = Prob > F = Coefficient Std. err. t P> t [95% conf. -94.19027 81.76229 -1.15 0.252 -256.5787 -216.9566 91.0654 -2.38 0.019 -397.8189 1.147118 4.547926 0.25 0.801 -7.885414 0 (omitted) -33.23886 76.3394 -0.44 0.664 -184.8546 .0856228 .0526504 1.63 0.1070189452 11.45713 5.362194 2.14 0.035 .8073575 5147437 3.312298 -0.16 0.877 -7.096263 43.39869 136.432 0.32 0.751 -227.5674 8.198211 15.78352 0.52 0.605 -23.17902 .0026135 .0003099 8.43 0.000 .001998

221 . //ANALYSIS C//

222 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

Imputations	=	5
Number of obs	=	105
Average RVI	=	0.0036
Largest FMI	=	0.0274
Complete DF	=	94
DF: min	=	88.31
avg	=	91.60
max	=	92.05
F(10 , 92.0)	=	1.56
Prob > F	=	0.1308
	Number of obs Average RVI Largest FMI Complete DF DF: min avg max F(10, 92.0)	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = F(10, 92.0) =

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	3.238409	1.059222	3.06	0.003	1.13458	5.342238
Sex	451512	1.178641	-0.38	0.703	-2.792419	1.889395
w1Age	0143142	.0588195	-0.24	0.808	1311341	.1025056
Race	0	(omitted)				
PovStat	1.551699	.9875645	1.57	0.120	4096866	3.513086
TIME_V1SCAN	0004341	.0006811	-0.64	0.525	0017869	.0009187
w1BMI	.0695025	.0693803	1.00	0.319	068294	.207299
w1TotalD	0328884	.0429195	-0.77	0.446	1181776	.0524009
w1Albumin	3.005376	1.766374	1.70	0.092	5028995	6.513652
w1EosinPct	.1177193	.2003027	0.59	0.558	2800979	.5155364
ICV_volM2	1.94e-06	4.01e-06	0.48	0.630	-6.03e-06	9.90e-06
_cons	-18.48264	10.75687	-1.72	0.089	-39.84693	2.881645

224 . save, replace
 file finaldata_imputed.dta saved

Multiple-imputation estimates

225 .

227 . **********INTERACTION by Race*********

228 .

229 .

230 .

231 . //ANALYSIS B//

Linear regression

232 . mi estimate: reg Left_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1E

5

179

0.0232

=

Imputations

Average RVI

Number of obs

				Average	KVI	=	0.0232
				Largest	FMI	=	0.2160
				Complete	e DF	=	166
DF adjustment:	Small sample	<u> </u>		DF:	min	=	57.22
					avg	=	154.75
					max	=	163.99
Model F test:	Equal FMI	Ī		F(12,	163.6)	=	11.67
Within VCE type:	OLS	i		Prob > F	=	=	0.0000
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-63.94436	67.86558	-0.94	0.347	-197.	9568	70.06811
Race							
AfrAm	-240.0652	180.7916	-1.33	0.186	-597.	0561	116.9258
Race#c.LnNFLw1							
AfrAm	78.95038	88.77252	0.89	0.375	-96.3	3412	254.2349
Sex	-44.78008	62.09262	-0.72	0.472	-167.	3843	77.82417
w1Age	-5.794361	3.077511	-1.88	0.061	-11.8	7102	.2822948
Race	0	(omitted)					
PovStat	-138.8538	52.69842	-2.63	0.009	-242.		-34.79674
TIME_V1SCAN	.0301085	.0389269	0.77	0.440	046		.1069752
w1BMI	4.152213	3.802676	1.09	0.276	-3.35		11.66079
w1TotalD	0014127	2.840772	-0.00	1.000	-5.68	-	5.686662
w1Albumin	138.8731	90.22485	1.54	0.126	-39.		317.027
w1EosinPct	-1.009412	11.64545	-0.09	0.931	-24.0	_	21.9946
ICV_volM2	.0016951	.000226	7.50	0.000		2489	.0021414
_cons	1176.235	561.9715	2.09	0.038	66.5	9724	2285.873

233 . mi estimate: reg Right_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	179
	Average RVI	=	0.0105
	Largest FMI	=	0.0768
	Complete DF	=	166
DF adjustment: Small sample	DF: min	=	126.19
	avg	=	159.94
	max	=	164.03
Model F test: Equal FMI	F(12 , 163.9)	=	13.61
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-42.83516	70.10333	-0.61	0.542	-181.2588	95.58851
Race AfrAm	-255.1394	187.2625	-1.36	0.175	-624.9083	114.6295
Race#c.LnNFLw1 AfrAm	77.84163	92.01202	0.85	0.399	-103.8416	259.5249
Sex	-119.6609	64.31368	-1.86	0.065	-246.6508	7.32906
w1Age	-4.283771	3.18874	-1.34	0.181	-10.58009	2.01255
Race	0	(omitted)				
PovStat	-115.7683	54.55185	-2.12	0.035	-223.4842	-8.05249
TIME_V1SCAN	.0546878	.0402488	1.36	0.176	0247865	.1341622
w1BMI	3.817789	3.936946	0.97	0.334	-3.955861	11.59144
w1TotalD	-2.362422	2.735952	-0.86	0.390	-7.776713	3.051869
w1Albumin	91.23837	93.37984	0.98	0.330	-93.14314	275.6199
w1EosinPct	4.152563	12.10541	0.34	0.732	-19.76448	28.0696
ICV_volM2	.0021363	.0002341	9.13	0.000	.0016741	.0025985
_cons	1053.314	581.8594	1.81	0.072	-95.58785	2202.216

235 . //ANALYSIS C//

236 . mi estimate: reg LnLesion_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1Eo

Multiple-imputat	tion estimates	5		Imputati	lons	=	5
Linear regression	on			Number o	of obs	=	179
				Average		=	0.0086
				Largest		=	0.0961
				Complete	DF	=	166
<pre>DF adjustment:</pre>	Small sample	2		DF:	min	=	113.75
					avg	=	159.97
					max	=	164.00
Model F test:	Equal FM	[F(12,	,	=	2.03
Within VCE type:	: OLS	5		Prob > F		=	0.0244
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.707045	.8604773	3.15	0.002	1.00	7904	4.406186
_							
Race							
AfrAm	2.147077	2.28957	0.94	0.350	-2.37	3764	6.667919
Race#c.LnNFLw1							
AfrAm	3454254	1.126332	-0.31	0.759	-2.56	0/12	1.878561
ATTAIII	5454254	1.120332	-0.31	0.755	-2.50	J412	1.878501
Sex	.1265717	.787667	0.16	0.873	-1.42	8705	1.681848
w1Age	.0015522	.0390445	0.04	0.968	075	5426	.078647
Race	0	(omitted)					
PovStat	.7657716	.6677929	1.15	0.253	552	8115	2.084355
TIME_V1SCAN	0005875	.000493	-1.19	0.235	00	1561	.0003861
w1BMI	.0758676	.048227	1.57	0.118	019	3586	.1710938
w1TotalD	0093309	.0338431	-0.28	0.783	076	3755	.0577136
w1Albumin	1.109665	1.144352	0.97	0.334	-1.14	9911	3.369241
w1EosinPct	.1576671	.1457878	1.08	0.281	130	1965	.4455307
ICV_volM2	2.26e-06	2.87e-06	0.79	0.432	-3.40	e-06	7.91e-06
_cons	-10.81038	7.127169	-1.52	0.131	-24.8	8322	3.262464

```
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237 .
238 . save, replace
   file finaldata_imputed.dta saved
239 .
240 .
242 . ********MODEL 6: MODEL 2+lifestyle/health-related factors******
243 .
244 .
245 .
246 . //AFRICAN-AMERICAN//
247 .
248 .
249 . use finaldata_imputed,clear
250 .
251 .
252 . //ANALYSIS B//
```

253 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	74
	Average RVI	=	0.0100
	Largest FMI	=	0.0345
	Complete DF	=	64
DF adjustment: Small sample	DF: min	=	59.17
	avg	=	61.50
	max	=	62.04
Model F test: Equal FMI	F(9, 62.0)	=	5.79
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-15.31509	87.36124	-0.18	0.861	-189.9636	159.3334
Sex	39.19211	82.9113	0.47	0.638	-126.5429	204.9271
w1Age	-7.789998	4.798895	-1.62	0.110	-17.38401	1.804011
Race	0	(omitted)				
PovStat	-237.6955	74.86483	-3.17	0.002	-387.3592	-88.03172
TIME_V1SCAN	.0297641	.0602608	0.49	0.623	0907194	.1502476
w1BMI	-4.497188	5.76386	-0.78	0.438	-16.01982	7.025442
w1currdrugs	-141.7197	72.0921	-1.97	0.054	-285.967	2.527545
w1SRH	-37.48104	40.82628	-0.92	0.362	-119.1024	44.1403
ICV_volM2	.0014031	.0003453	4.06	0.000	.0007129	.0020934
_cons	2447.419	468.6346	5.22	0.000	1510.643	3384.195

254 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	74
		Average RVI	=	0.0091
		Largest FMI	=	0.0258
		Complete DF	=	64
DF adjustment:	Small sample	DF: min	=	60.09
		avg	=	61.60
		max	=	62.04
Model F test:	Equal FMI	F(9, 62.0)	=	6.19
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-13.24875	85.47654	-0.15	0.877	-184.1261	157.6286
Sex	16.66617	81.15826	0.21	0.838	-145.5646	178.897
w1Age	-7.2385	4.694677	-1.54	0.128	-16.62389	2.146892
Race	0	(omitted)				
PovStat	-209.7918	73.24659	-2.86	0.006	-356.2173	-63.36625
TIME_V1SCAN	.0509192	.0590211	0.86	0.392	0670895	.1689278
w1BMI	-6.767531	5.640195	-1.20	0.235	-18.04278	4.507718
w1currdrugs	-135.5759	70.26884	-1.93	0.058	-276.1304	4.978615
w1SRH	-19.26605	39.96927	-0.48	0.631	-99.17468	60.64258
ICV_volM2	.0015407	.0003379	4.56	0.000	.0008653	.0022162
_cons	2485.84	458.7059	5.42	0.000	1568.912	3402.768

256 . //ANALYSIS C// 257 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if s

Multiple-imputation estimates		Imputations	=	5
Linear regression	1	Number of obs	=	74
		Average RVI	=	0.0025
		Largest FMI	=	0.0153
		Complete DF	=	64
DF adjustment:	Small sample	DF: min	=	61.05
		avg	=	61.95
		max	=	62.09
Model F test:	Equal FMI	F(9, 62.1)	=	2.27
Within VCE type:	OLS	Prob > F	=	0.0290

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	1.981343	.9996958	1.98	0.052	0169997	3.979685
Sex	.6243057	.9507441	0.66	0.514	-1.276155	2.524767
w1Age	.0027419	.0548717	0.05	0.960	106943	.1124269
Race	0	(omitted)				
PovStat	2295722	.8567047	-0.27	0.790	-1.942054	1.482909
TIME V1SCAN	0008693	.0006887	-1.26	0.212	002246	.0005073
w1BMI	.1090704	.0659671	1.65	0.103	022793	.2409338
w1currdrugs	.5528994	.8192201	0.67	0.502	-1.085206	2.191004
w1SRH	6780199	.4669501	-1.45	0.152	-1.611442	.2554017
ICV volM2	4.93e-06	3.95e-06	1.25	0.217	-2.97e-06	.0000128
cons	-4.827109	5.373347	-0.90	0.372	-15.56799	5.913768

258 .

259 . save, replace

file finaldata_imputed.dta saved

260 .

261 .

263 . //WHITES//

264 .

265 . use finaldata_imputed,clear

Multiple-imputation estimates

266 . 267 .

268 . //ANALYSIS B//

269 . mi estimate: reg Left_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Imputations

Murcipie-impu	cacion escimac	.63		Imputat	10113	_	,
Linear regress	Linear regression				of obs	=	105
J				Average	RVI	=	0.0097
				Largest		=	0.0620
				Complet		=	95
DF adjustment:	: Small samp	ole.		DF:	min	=	81.41
z. aajasemene	. J			·	avg	=	91.46
					max	=	92.91
Model F test:	Equal F	мт		F(9 ,			8.36
	•)LS		Prob >			0.0000
Within VCE typ	je. u)L3		PI'OD >	Г	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-106.9989	78.23763	-1.37	0.175	-262.3	3876	48.38991
Sex	-70.1245	86.69938	-0.81	0.421	-242.2	2963	102.0472
w1Age	-1.953686	4.504681	-0.43	0.666	-10.89	9996	6.992585
Race	0	(omitted)					
PovStat	-58.47529	76.64378	-0.76	0.447	-210.6	5824	93.7318
TIME V1SCAN	.0349178	.051812	0.67	0.502	0679		.1378234
w1BMI	8.478271	4.972724	1.70	0.092	-1.396		18.35328
w1currdrugs	89.2939	95.19371	0.94	0.351	-100.6		278.685
w1SRH	-12.19537	43.84029	-0.28	0.781	-99.25		74.8638
ICV volM2	.0020004	.0003011	6.64	0.000	.0014		.0025983
-							
_cons	1074.381	481.7663	2.23	0.028	117.6	7 34	2031.088

270 . mi estimate: reg Right_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imput Linear regress		ces		Number (Imputations = Number of obs = Average RVI =		5 105 0.0124
				Largest		=	0.0977
				Complet	e DF	=	95
DF adjustment:	: Small samp	ole		DF:	min	=	71.75
					avg	=	90.59
					max	=	92.98
Model F test:	Equal F	MI		F(9 ,	93.0)	=	11.02
Within VCE typ	oe: C	DLS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw1	-124.3378	80.01712	-1.55	0.124	-283.256	9	34.57519
Sex	-202.5507	88.80883	-2.28	0.025	-378.916	96	-26.19076
w1Age	2.205487	4.614349	0.48	0.634	-6.95853	88	11.36951
Race	0	(omitted)					
PovStat	-40.05518	78.49532	-0.51	0.611	-195.937	76	115.8273
TIME_V1SCAN	.0923899	.0529605	1.74	0.084	01278	88	.1975678
w1BMI	10.75805	5.09725	2.11	0.038	.635599	7	20.88051
w1currdrugs	53.19163	99.27556	0.54	0.594	-144.722	22	251.1055
w1SRH	-37.37031	44.90583	-0.83	0.407	-126.54	1 5	51.80438
ICV_volM2	.0026317	.0003084	8.53	0.000	.002019	94	.0032441
_cons	396.6329	493.9664	0.80	0.424	-584.325	55	1377.591

271 . 272 . //ANALYSIS C//

273 . mi estimate: reg LnLesion_Volume LnNFLw1 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if s

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	105
	Average RVI	=	0.0043
	Largest FMI	=	0.0117
	Complete DF	=	95
DF adjustment: Small sample	DF: min	=	91.78
	avg	=	92.72
	max	=	93.04
Model F test: Equal FMI	F(9, 93.0)	=	1.44
Within VCE type: OLS	Prob > F	=	0.1807

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.852127	1.050486	2.72	0.008	.7659285	4.938326
Sex	1239777	1.167011	-0.11	0.916	-2.441487	2.193532
w1Age	0222866	.0604609	-0.37	0.713	142351	.0977778
Race	0	(omitted)				
PovStat	1.584345	1.030042	1.54	0.127	4611244	3.629815
TIME V1SCAN	0005462	.0006964	-0.78	0.435	0019293	.0008368
w1BMI	.0238439	.0668757	0.36	0.722	1089571	.1566448
w1currdrugs	-1.380175	1.249801	-1.10	0.272	-3.862468	1.102117
w1SRH	.0958102	.5899314	0.16	0.871	-1.075683	1.267303
ICV volM2	1.34e-06	4.05e-06	0.33	0.742	-6.71e-06	9.39e-06
_cons	-2.85864	6.481316	-0.44	0.660	-15.72928	10.012

275 . save, replace

file finaldata_imputed.dta saved

278 .

279 .

280 . //ANALYSIS B//

281 . mi estimate: reg Left_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_v

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 179
	Average RVI	=	0.0045
	Largest FMI	=	0.0450
	Complete DF	=	167
DF adjustment: Small sample	DF: min	=	146.93
	avg	=	163.43
	max	=	165.03
Model F test: Equal FMI	F(11, 165.0)	=	12.78
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-83.03118	66.96676	-1.24	0.217	-215.2535	49.19116
Race AfrAm	-261.5352	179.3482	-1.46	0.147	-615.6493	92.57902
Race#c.LnNFLw1 AfrAm	88.81644	89.10396	1.00	0.320	-87.11592	264.7488
Sex w1Age	-30.65727 -5.796823	60.84957 3.147892	-0.50 -1.84	0.615 0.067	-150.8016 -12.01218	89.48707 .4185357
Race	9.730023	(omitted)	1.04	0.007	12.01210	.4103337
PovStat TIME V1SCAN	-146.5396 .0257932	53.41842 .0383648	-2.74 0.67	0.007 0.502	-252.0113 0499563	-41.06794 .1015427
w1BMI	2.143864	3.653787	0.59	0.558	-5.070395	9.358124
w1currdrugs w1SRH	-34.36175 -25.11726	59.21689 30.02815	-0.58 -0.84	0.563 0.404	-151.3886 -84.40636	82.6651 34.17184
ICV_volM2 _cons	.0017059 1920.897	.0002269 340.3473	7.52 5.64	0.000 0.000	.0012579 1248.893	.002154 2592.901

282 . mi estimate: reg Right_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_

Multiple-imputat	ion estimates	i		Imputati	.ons	=	5
Linear regression	n			Number o	of obs	=	179
				Average	RVI	=	0.0066
				Largest	FMI	=	0.0627
				Complete	P DF	=	167
DF adjustment:	Small sample	•		DF:	min	=	135.98
					avg	=	162.46
					max	=	165.03
Model F test:	Equal FMI	• •		F(11 ,	165.0)	=	15.00
Within VCE type:	OLS	;		Prob > F	:	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
							
LnNFLw1	-72.40033	69.06164	-1.05	0.296	-208.	7593	63.95867
Race							
AfrAm	-257.7413	184.9505	-1.39	0.165	-622.	9179	107.4352
Race#c.LnNFLw1							
AfrAm	88.88633	91.90159	0.97	0.335	-92.5	7081	270.3435
Sex	-107.9627	62.7557	-1.72	0.087	-231	.871	15.9457
w1Age	-4.198031	3.245489	-1.29	0.198	-10.6	0608	2.21002
Race	0	(omitted)					
PovStat	-122.7337	55.07723	-2.23	0.027	-231.	4806	-13.98677
TIME_V1SCAN	.0612293	.0395755	1.55	0.124	016	9112	.1393699
w1BMI	2.369787	3.767655	0.63	0.530	-5.06	9313	9.808886
w1currdrugs	-49.58124	61.59922	-0.80	0.422	-171.	3976	72.23509
w1SRH	-31.82383	30.97216	-1.03	0.306	-92.9	7718	29.32951
ICV_volM2	.0021415	.000234	9.15	0.000	.001	6795	.0026035
_cons	1550.74	350.9739	4.42	0.000	857	.752	2243.727

284 . //ANALYSIS C//

Linear regression

Multiple-imputation estimates

285 . mi estimate: reg LnLesion_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_vo

179

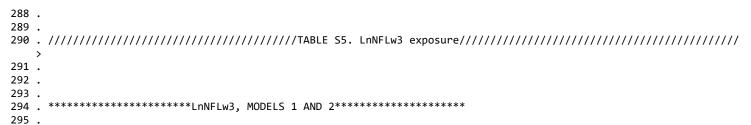
Imputations
Number of obs

Linear regressio	11			Number 6	,, 003	_	-,,
				Average	RVI	=	0.0005
				Largest	FMI	=	0.0058
				Complete	P DF	=	167
DF adjustment:	Small sample			DF:	min	=	163.92
ū					avg	=	164.93
					max	=	165.04
Model F test:	Equal FMI			F(11 ,	165.0)	=	2.07
Within VCE type:	OLS			Prob > F	:	=	0.0254
LnLesion Vol∼e	Coefficient	Std. err.	t	P> t	[Q5%	conf	interval]
	COCTITUTENC	Jea. Cir.		17[0]	[]]/0		Incci vaij
LnNFLw1	2.419459	.8500167	2.85	0.005	.741	1497	4.097769
Race							
AfrAm	1.951141	2.276281	0.86	0.393	-2.54	3246	6.445528
Race#c.LnNFLw1							
AfrAm	2948566	1.130543	-0.26	0.795	-2.52	7051	1.937338
Sex	.3540274	.7723401	0.46	0.647	-1.17	0914	1.878969
w1Age	.0045053	.039953	0.11	0.910	074	3797	.0833904
Race	0	(omitted)					
PovStat	.7452925	.6781116	1.10	0.273	593	6002	2.084185
TIME_V1SCAN	0006145	.0004869	-1.26	0.209	001	5759	.0003468
w1BMI	.0563146	.0463596	1.21	0.226	035	2199	.1478492
w1currdrugs	121404	.7372964	-0.16	0.869	-1.57		1.334419
w1SRH	2300037	.3811103	-0.60		982		.5224769
ICV_volM2	2.24e-06	2.88e-06	0.78	0.438	-3.45		7.93e-06
_cons	-4.41411	4.317815	-1.02	0.308	-12.	9394	4.111178

```
286 .
```

296 .

file finaldata_imputed.dta saved



^{287 .} save, replace

299 . **Model 1**

300 .

301 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

302 .

303 . //ANALYSIS B//

Source	SS	df	MS	Number of obs		
Model Residual	3370999.52 4368517.34	6 67	561833.25 65201.751	4 R-squared	= 8.62 = 0.0000 = 0.4356) }
Total	7739516.87	73	106020.77	— Adj R-squared '9 Root MSE	= 0.3850 = 255.35	
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta	-
LnNFLw3 Sex	-95.04325 64.41694	53.00145 80.73391	-1.79 0.80	0.077 0.428	1888127 .0992651	
w1Age Race	-5.588908 0	3.746774 (omitted)	-1.49	0.140	1676833	
PovStat TIME_V1SCAN	-203.3794 .0193721	74.02801 .0586691	-2.75 0.33	0.008 0.742	3070007 .034229	
ICV_volM2 _cons	.0012446 2404.049	.0003284 431.9859	3.79 5.57	0.000 0.000	.4656064	

305 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==2,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 74
Model Residual	3357210.42 4287978.56	6 67	559535.07 63999.6	8 R-squared	= 8.74 = 0.0000 = 0.4391
Total	7645188.98	73	104728.61	Adj R-squaredRoot MSE	= 0.3889 = 252.98
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-67.49723	52.5106	-1.29	0.203	1349145
Sex	44.07066	79.98624	0.55	0.583	.0683296
w1Age	-6.181877	3.712075	-1.67	0.101	1866148
Race	0	(omitted)			•
PovStat	-186.0157	73.34244	-2.54	0.014	2825172
TIME V1SCAN	.0403946	.0581258	0.69	0.489	.0718131
ICV_volM2	.0014009	.0003253	4.31	0.000	.5273009
_cons	2404.047	427.9853	5.62	0.000	•

307 . //ANALYSIS C//

308 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==2,beta note: Race omitted because of collinearity.

74	=	Number of obs		MS	df	SS	Source
1.79	=	F(6, 67)	_				
0.1146	=	Prob > F	52	16.945096	6	101.670577	Model
0.1381	=	R-squared	8	9.4696989	67	634.469831	Residual
0.0609	=	Adj R-squared	_				
3.0773	=	Root MSE	52	10.084115	73	736.140409	Total
Beta		t	P>	t	Std. err.	Coefficient	 LnLesion_V~e
.0410402		753	0.	0.32	.6387431	.2014758	LnNFLw3
.1071937		488	0.	0.70	.9729588	.6784156	Sex
.2260805		108	0.	1.63	.045154	.0734892	w1Age
•					(omitted)	0	Race
.0061879	-	964	0.	-0.04	.8921431	0399791	PovStat
.1758035	-	175	0.	-1.37	.000707	0009704	TIME_V1SCAN
.1108274		468	0.	0.73	3.96e-06	2.89e-06	ICV_volM2
		930	0	-0.09	5.206047	4563551	cons

309 .

310 .

311 . **Model 2**

312 .

313 . use finaldata_imputed,clear

314 .

315 .

316 . //ANALYSIS B//

Race

w1BMI

_cons

PovStat

TIME_V1SCAN

 ${\tt ICV_volM2}$

317 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

-345.8244

-.0969866

-14.42412

.0006277

1584.455

-48.37304

.137772

5.41764

.0019588

3327.875

Multiple-imputation estimates					ions	=	5
Linear regress	sion			Number	of obs	=	74
				Average	e RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	66
DF adjustment	: Small samp	le		DF:	min	=	64.09
					avg	=	64.09
					max	=	64.09
Model F test:	Equal F	MI		F(7	64.1) =	7.48
Within VCE typ	pe: 0	LS		Prob >	F	=	0.0000
	,						
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-103.2193	53.83238	-1.92	0.060	-210	.759	4.320459
Sex	49.6563	82.46382	0.60	0.549	-115.0	798	214.3924
w1Age	-4.609311	3.904193	-1.18	0.242	-12.40	9863	3.190006
•							

-2.65

0.35

-0.91

3.88

5.63

0.010

0.730

0.368

0.000

0.000

0 (omitted)

74.4493

.0587579

4.966207

.0003332

436.3617

-197.0987

.0203927

-4.503239

.0012933

2456.165

318 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

Multiple-imputation estimates					ions	=	
Linear regression				Number	of obs	=	74
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	66
DF adjustment:	Small samp	le		DF:	min	=	64.09
					avg	=	64.09
					max	=	64.09
Model F test:	Equal F	MI		F(7 ,	64.1)	=	7.78
Within VCE type:	0	LS		Prob >	F	=	0.0000
Right_Hipp~s Co	efficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw3 -	78.66373	53.03388	-1.48	0.143	-184.608	3	27.28086
Sex	23.91114	81.24063	0.29	0.769	-138.381	4	186.2037
w1Age -	4.843982	3.846282	-1.26	0.212	-12.5276	1	2.839648
Race	0	(omitted)					
PovStat -	177.4378	73.34499	-2.42	0.018	-323.957	5	-30.91817
TIME_V1SCAN	.0417884	.0578863	0.72	0.473	073849	8	.1574267
w1BMI	-6.15035	4.892543	-1.26	0.213	-15.9240	7	3.623373
ICV_volM2	.0014673	.0003282	4.47	0.000	.000811	7	.002123
_cons	2475.225	429.8892	5.76	0.000	1616.44	5	3334.005

320 . //ANALYSIS C//

w1Age

w1BMI

_cons

TIME_V1SCAN

ICV_volM2

Race PovStat .0687269

-.0705122

-.0009753

.0218924

2.65e-06

-.709717

.0472958

.9018876

.0007118

.0601612

4.04e-06

5.286137

0 (omitted)

321 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 & R

1.45 0.151 -.0257549

-1.872193

-.0023973

-.0982903

-5.41e-06

-11.26971

-0.08 0.938

0.175

0.717

0.513

0.894

-1.37

0.36

0.66

-0.13

.1632088

1.731168

.0004466

.1420751

.0000107

9.85028

Multiple-imputation estimates Linear regression				Imputations Number of obs			5 74
Linear regress	31011			Average		= =	0.0000
				Largest		=	0.0000
				Complete	DF	=	66
DF adjustment:	Small sample			DF:	min	=	64.09
					avg	=	64.09
					max	=	64.09
Model F test:	Equal FMI			F(7 ,	64.1) =	1.53
Within VCE typ	oe: OLS			Prob > F	:	=	0.1723
LnLesion_V~e	Coefficient Std	. err.	t	P> t	[95%	conf.	interval]
LnNFLw3 Sex		21318 89764	0.37 0.75	0.713 0.455	-1.06 -1.24	-	1.543972 2.745807

323 . save, replace

file finaldata_imputed.dta saved

324 . 325 .

326 .

327 .

328 .

330 .

331 . **Model 1**

332 .

333 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

334

335 . //ANALYSIS B//

Source	SS	df	MS	Number of obs	= 105
Model Residual	7328943.16 9088523.76	6 98	1221490.5 92740.038	4 R-squared	= 13.17 = 0.0000 = 0.4464
Total	16417466.9	104	157860.25	Adj R-squared 9 Root MSE	= 0.4125 = 304.53
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-164.9185	66.96786	-2.46	0.016	2105624
Sex	-90.09159	83.13769	-1.08	0.281	1130424
w1Age	-2.150193	4.006875	-0.54	0.593	0455878
Race	0	(omitted)			•
PovStat	-62.82257	72.22915	-0.87	0.387	069438
TIME_V1SCAN	.0313661	.0480798	0.65	0.516	.0515634
ICV_volM2	.0019895	.0002924	6.81	0.000	.7192659
_cons	1528.69	415.8821	3.68	0.000	

337 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==1,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 105
				- F(6, 98)	= 16.19
Model	9806726.29	6	1634454.38	B Prob > F	= 0.0000
Residual	9892901.06	98	100947.97	7 R-squared	= 0.4978
				- Adj R-squared	= 0.4671
Total	19699627.3	104	189419.494	4 Root MSE	= 317.72
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-153.0387	69.86852	-2.19	0.031	1783762
Sex	-216.5521	86.73875	-2.50	0.014	2480525
w1Age	.987417	4.18043	0.24	0.814	.0191115
Race	0	(omitted)			
PovStat	-27.91078	75.3577	-0.37	0.712	0281629
TIME_V1SCAN	.0728169	.0501623	1.45	0.150	.1092793
ICV_volM2	.0025926	.000305	8.50	0.000	.8556562
cons	882.5354	433.8957	2.03	0.045	•

339 . //ANALYSIS C//

340 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final==1 & Race==1,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 105
Model Residual	93.2021497 1786.38671	6 98	15.5336916 18.2284358	R-squared	= 0.85 = 0.5330 = 0.0496
Total	1879.58886	104	18.0729698	- Adj R-squared B Root MSE	= -0.0086 = 4.2695
 LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	.8303881	.9388743	0.88	0.379	.0990865
Sex	1243748	1.165572	-0.11	0.915	0145852
w1Age	.0504122	.0561755	0.90	0.372	.0998915
Race	0	(omitted)			_
PovStat	1.548068	1.012636	1.53	0.130	.1599165
TIME V1SCAN	0004339	.0006741	-0.64	0.521	0666691
ICV volM2	2.69e-06	4.10e-06	0.66	0.512	.0910431
_cons	-3.601003	5.830574	-0.62	0.538	•

341 .

342 .

343 . **Model 2**

344 .

345 . use finaldata_imputed,clear

Multiple-imputation estimates

346 .

347 .

348 . //ANALYSIS B//

349 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

5

Imputations

Multiple-impu	ultiple-imputation estimates				imputations		>
Linear regress	sion			Number	of obs	=	105
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	97
DF adjustment:	: Small samp	le		DF:	min	=	95.06
-					avg	=	95.06
					max	=	95.06
Model F test:	Equal F	MI		F(7 ,	95.1)	=	11.83
Within VCE type: OLS				Prob >	F	=	0.0000
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-158.1779	66.5747	-2.38	0.020	-290.34	43	-26.0115
Sex	-79.07338	82.77094	-0.96	0.342	-243.39	31	85.24637
w1Age	-1.665112	3.986912	-0.42	0.677	-9.5800	68	6.249844
Race	0	(omitted)					
PovStat	-64.55286	71.66933	-0.90	0.370	-206.83	33	77.72758
TIME V1SCAN	.0427804	.0482323	0.89	0.377	0529	72	.1385328
- w1BMI	7.586	4.741588	1.60	0.113	-1.8271	65	16.99916
ICV volM2	.0019965	.0002901	6.88	0.000	.00142	96	.0025724
-							
_cons	1222.01	454.965	2.69	0.009	318.79	78	2125.222

350 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 &

ıltiple-imputation estimates				Imputations		5
sion			Number	of obs	=	105
			Average	RVI	=	0.0000
			Largest	: FMI	=	0.0000
			Complet	e DF	=	97
: Small samp	le		DF:	min	=	95.06
				avg	=	95.06
				max	=	95.06
Equal F	MI		F(7,	95.1)	=	15.08
oe: 0	LS		Prob >	F	=	0.0000
Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
-143.5879	68.71574	-2.09	0.039	-280.004	18	-7.171013
-201.1037	85.43285	-2.35	0.021	-370.76	98	-31.49947
1.667537	4.115131	0.41	0.686	-6.50196	54	9.837038
0	(omitted)					
-30.33679	73.97421	-0.41	0.683	-177.19	93	116.5194
.0888207	.0497834	1.78	0.078	010011	L1	.1876525
10.63615	4.894077	2.17	0.032	.920261	L6	20.35205
.0026024	.0002994	8.69	0.000	.00200	98	.0031968
452.5459	469.5966	0.96	0.338	-479.71	36	1384.805
	Equal Foe: 0 Coefficient -143.5879 -201.1037 1.667537 0 -30.33679 .0888207 10.63615 .0026024	Equal FMI De: OLS Coefficient Std. err. -143.5879 68.71574 -201.1037 85.43285 1.667537 4.115131 0 (omitted) -30.33679 73.97421 .0888207 .0497834 10.63615 4.894077 .0026024 .0002994	Equal FMI De: OLS Coefficient Std. err. t -143.5879 68.71574 -2.09 -201.1037 85.43285 -2.35 1.667537 4.115131 0.41 0 (omitted) -30.33679 73.97421 -0.41 .0888207 .0497834 1.78 10.63615 4.894077 2.17 .0026024 .0002994 8.69	Number Average Largest Complet	Number of obs Average RVI Largest FMI Complete DF Small sample Equal FMI De: OLS Coefficient Std. err. Coefficient Std. err. Coefficient Std. err. The state of the stat	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI F(7, 95.1) = DE: OLS Prob > F = Coefficient Std. err. t P> t [95% conf. -143.5879 68.71574 -2.09 0.039 -280.0048 -201.1037 85.43285 -2.35 0.021 -370.708 1.667537 4.115131 0.41 0.686 -6.501964 0 (omitted) -30.33679 73.97421 -0.41 0.683 -177.193 .0888207 .0497834 1.78 0.0780100111 10.63615 4.894077 2.17 0.032 .9202616 .0026024 .0002994 8.69 0.000 .002008

^{351 .}

w1Age

Race PovStat

w1BMI

_cons

TIME_V1SCAN

ICV_volM2

353 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final==1 & R

0.92 0.360 -.060321

1.52 0.133 -.4770993

0.511

-.0017552

-.1084789

-5.46e-06

-17.43637

-0.58 0.564

-0.71 0.476

0.37 0.710

0.66

.1643586

3.561774

.0009629

.1587298

.0000109

8.202859

Multiple-impu		Imputati Number of Average Largest Complete	of obs RVI FMI	= = = =	5 105 0.0000 0.0000 97		
DF adjustment: Small sample				DF:	min avg	=	95.06 95.06
					max	=	95.06
Model F test:	Equal F	MI		F(7 ,	95.1) =	0.74
Within VCE typ	oe: 0	LS		Prob > I	=	=	0.6354
	I						
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3 Sex	.8527135 0878816	.9449183 1.174797	0.90 -0.07	0.369 0.941	-1.023 -2.42		2.728598 2.244367

.0520188 .0565877

0 (omitted)

1.542337 1.017228

2.72e-06 4.12e-06

-4.616753 6.457479

-.0003961

.0251254

.0006846

^{352 . //}ANALYSIS C//

355 . save, replace

file finaldata_imputed.dta saved

Multiple-imputation estimates

Race

PovStat

w1BMI

_cons

TIME_V1SCAN

ICV_volM2

356 . 357 .

358 .

359 . //INTERACTION by Race//

360 .

361 .

362 . //ANALYSIS B//

Linear regression

363 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fi

5 179

0.0000

0.0000

-29.90202

.0977812

8.530166

.0021039

2594.247

Imputations

Largest FMI

Number of obs Average RVI

					DF	=	169
DF adjustment:	Small sample			DF:	min	=	167.03
				į	avg	=	167.03
				1	nax	=	167.03
Model F test:	Equal FMI			F(9 ,	167.0)	=	17.13
Within VCE type:	OLS			Prob > F		=	0.0000
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-153.3897	59.75841	-2.57	0.011	-271.	3688	-35.41059
Race AfrAm	-230.8496	173.7777	-1.33	0.186	-573.	9334	112.2342
Race#c.LnNFLw3 AfrAm	57.24367	76.59076	0.75	0.456	-93.9	6701	208.4543
Sex	-14.13137	59.37244	-0.24	0.812	-131.	3485	103.0857
w1Age	-3.51857	2.759392	-1.28	0.204	-8.96	6349	1.92921

0 (omitted)

51.30034

.0369487

3.41784

.0002182

330.5868

-131.1826

.0248345

1.782435

.0016731

1941.581

364 . mi estimate: reg Right_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_f

-232.4632

-.0481121

-4.965296

.0012423

1288.914

-2.56 0.011

0.52 0.603

0.502

0.000

0.000

0.67

7.67

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	179
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
		Complete DF	=	169
DF adjustment:	Small sample	DF: min	=	167.03
		avg	=	167.03
		max	=	167.03
Model F test:	Equal FMI	F(9, 167.0)	=	19.18
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-125.2927	62.30239	-2.01	0.046	-248.2943	-2.291108
Race AfrAm	-214.9737	181.1756	-1.19	0.237	-572.6629	142.7156
Race#c.LnNFLw3 AfrAm	51.76928	79.85131	0.65	0.518	-105.8786	209.4172
Sex	-92.49017	61.89999	-1.49	0.137	-214.6973	29.71699
w1Age Race	-2.249194 0	2.876863 (omitted)	-0.78	0.435	-7.928892	3.430503
PovStat	-105.6278	53.48425	-1.97	0.050	-211.2201	035603
TIME_V1SCAN w1BMI	.056976 2.203241	.0385217 3.563341	1.48 0.62	0.141 0.537	0190761 -4.831749	.1330281 9.23823
ICV_volM2	.0021006	.0002275	9.23	0.000	.0016514	.0025497
_cons	1539.024	344.6603	4.47	0.000	858.5719	2219.475

^{365 .}

367 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fin

Multiple-imputat Linear regressio		5		Imputat: Number of Average Largest Complete	of obs RVI FMI	= = = =	5 179 0.0000 0.0000 169
DF adjustment:	Small sample	2		DF:	min	=	167.03
J					avg	=	167.03
					max	=	167.03
Model F test:	Equal FM	[F(9,	167.0)	=	1.20
Within VCE type:	: OLS	5		Prob >	F	=	0.2992
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.69982	.7978909	0.88	0.382	875	4303	2.27507
Race AfrAm	1.844749	2.32027	0.80	0.428	-2.73	6086	6.425584
Race#c.LnNFLw3							
AfrAm	3740454	1.022635	-0.37	0.715	-2.39	3002	1.644911
Sex	.3712739	.7927374	0.47	0.640	-1.19	3802	1.93635
w1Age	.0629548	.0368432	1.71	0.089	009	7836	.1356933
Race	0	(omitted)					
PovStat	.7389948	.6849592	1.08			-	2.091288
TIME_V1SCAN	0006244	.0004933	-1.27				.0003496
w1BMI	.0220064	.0456348	0.48			8089	.1121017
ICV_volM2	2.09e-06	2.91e-06	0.72				7.84e-06
_cons	-3.06025	4.413977	-0.69	0.489	-11.7	7462	5.654122

^{366 . //}ANALYSIS C//

381 . //ANALYSIS B//

382 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM

Multiple-imputation estimates		Imputatio	ns	=	5
Linear regression		Number of	obs	=	74
_		Average R	VI	=	0.0175
		Largest F	MI	=	0.1365
		Complete	DF	=	64
DF adjustment: Sma	all sample	DF: n	in	=	44.71
		ā	vg	=	59.07
		n	ax	=	62.07
Model F test:	Equal FMI	F(9 ,	62.0)	=	7.18
Within VCE type:	OLS	Prob > F		=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-136.5533	54.2624	-2.52	0.015	-245.1166	-27.98991
Sex	52.71921	79.98497	0.66	0.512	-107.2539	212.6923
w1Age	-2.289712	3.894999	-0.59	0.559	-10.07832	5.498899
Race	0	(omitted)				
PovStat	-193.2008	71.08337	-2.72	0.009	-335.2911	-51.11051
TIME_V1SCAN	.0083681	.0563728	0.15	0.882	1043208	.121057
w1BMI	-5.855158	4.79046	-1.22	0.226	-15.43155	3.721236
w1dxDiabetes	-107.1846	59.92643	-1.79	0.080	-227.9044	13.53532
w1Glucose	4.819073	1.714063	2.81	0.007	1.387049	8.251097
ICV_volM2	.0011268	.0003273	3.44	0.001	.0004722	.0017814
_cons	2264.604	422.6112	5.36	0.000	1419.813	3109.396

383 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_vol

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 74
Linear regression	Average RVI	=	0.0043
	Largest FMI	=	0.0283
	Complete DF	=	64
DF adjustment: Small sample	DF: min	=	59.83
	avg	=	61.54
	max	=	62.07
Model F test: Equal FMI	F(9, 62.1)	=	8.90
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-107.1643	50.62808	-2.12	0.038	-208.3882	-5.940476
Sex	17.4689	74.96176	0.23	0.817	-132.4053	167.3431
w1Age	-2.841612	3.654223	-0.78	0.440	-10.14691	4.46369
Race	0	(omitted)				
PovStat	-174.1491	67.01158	-2.60	0.012	-308.1002	-40.19797
TIME_V1SCAN	.0312296	.0531119	0.59	0.559	074938	.1373972
w1BMI	-8.29726	4.512695	-1.84	0.071	-17.3181	.7235758
w1dxDiabetes	-78.22302	53.52285	-1.46	0.149	-185.291	28.84494
w1Glucose	5.899523	1.584174	3.72	0.000	2.732238	9.066808
ICV_volM2	.0012889	.0003063	4.21	0.000	.0006765	.0019012
_cons	2224.824	398.3501	5.59	0.000	1428.534	3021.115

385 . //ANALYSIS C//

386 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM2

Multiple-imput Linear regress		Imputations Number of obs Average RVI Largest FMI Complete DF			5 74 0.0006 0.0050 64	
DF adjustment:	Small sample		DF: m:	in vg ax	= =	61.83 62.04 62.09
Model F test: Equal FMI Within VCE type: OLS			F(9 , Prob > F	62.1)	=	1.23 0.2953
LnLesion_V~e	Coefficient Std. err.	t	P> t	[95% co	onf.	interval]

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.1645616	.6862379	0.24	0.811	-1.207188	1.536311
Sex	.8235185	1.016251	0.81	0.421	-1.207909	2.854946
w1Age	.0740639	.0496334	1.49	0.141	0251496	.1732774
Race	0	(omitted)				
PovStat	0601447	.9122892	-0.07	0.948	-1.883734	1.763444
TIME_V1SCAN	0010018	.0007229	-1.39	0.171	0024469	.0004433
w1BMI	.0263103	.0613905	0.43	0.670	0964043	.149025
w1dxDiabetes	3600017	.7204704	-0.50	0.619	-1.800282	1.080279
w1Glucose	0026559	.0214826	-0.12	0.902	0455988	.040287
ICV_volM2	2.57e-06	4.15e-06	0.62	0.539	-5.74e-06	.0000109
_cons	496273	5.420498	-0.09	0.927	-11.33143	10.33888

387 . 388 . save, replace

file finaldata_imputed.dta saved

389 .

392 . //WHITE//

393 .

394 . use finaldata_imputed,clear

Multiple-imputation estimates

395 . 396 .

397 . //ANALYSIS B//

Linear regression

398 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM

105

Imputations
Number of obs

				Average		0.0000
				Largest	FMI =	0.0000
				Complete	DF =	95
DF adjustment	: Small samp	ole		DF:	min =	93.06
					avg =	93.06
					max =	93.06
Model F test:	Equal F	MI		F(9 ,	93.1) =	9.22
Within VCE ty	pe: C	DLS		Prob > F		0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-177.9378	70.82888	-2.51	0.014	-318.5887	-37.28693
Sex	-90.912	84.0197	-1.08	0.282	-257.757	75.93303
w1Age	-1.97255	4.048718	-0.49	0.627	-10.01243	6.067331
Race	0	(omitted)				
PovStat	-72.13965	72.50345	-0.99	0.322	-216.1159	71.83658
TIME_V1SCAN	.0516468	.04943	1.04	0.299	0465105	.1498042
w1BMI	6.232632	4.960293	1.26	0.212	-3.617442	16.0827
w1dxDiabetes	25.00529	66.41294	0.38	0.707	-106.8765	156.8871
w1Glucose	.6268315	1.423798	0.44	0.661	-2.200525	3.454188
ICV_volM2	.0019918	.000294	6.78	0.000	.001408	.0025756
cons	1264.038	485.3673	2.60	0.011	300.2032	2227.873

399 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_vol

Multiple-imput	Imputations :			5			
Linear regress	sion			Number of obs			105
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	95
DF adjustment:	Small samp	le		DF:	min	=	93.06
					avg	=	93.06
					max	=	93.06
Model F test:	Model F test: Equal FMI					=	11.70
Within VCE type: OLS				Prob >	93.1) F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-166.1073	73.14011	-2.27	0.025	-311.34	78	-20.86684
Sex	-212.313	86.76137	-2.45	0.016	-384.60	24	-40.02359
w1Age	1.543762	4.180832	0.37	0.713	-6.758	47	9.845993
Race	0	(omitted)					
PovStat	-36.29912	74.86932	-0.48	0.629	-184.97	35	112.3752
TIME_V1SCAN	.0957578	.051043	1.88	0.064	00560	25	.1971181
w1BMI	9.475766	5.122153	1.85	0.067	69572	66	19.64726
w1dxDiabetes	2.890782	68.58007	0.04	0.966	-133.29	45	139.076
w1Glucose	1.007495	1.470258	0.69	0.495	-1.9121	.22	3.927111
ICV volM2	.0026103	.0003036	8.60	0.000	.00200	75	.0032132
_cons	439.6294	501.2054	0.88	0.383	-555.65	66	1434.915

```
400 .
401 . //ANALYSIS C//
402 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM2
   Multiple-imputation estimates
                                                   Imputations
   Linear regression
                                                   Number of obs
                                                                             105
                                                   Average RVI
                                                                          0.0000
                                                   Largest FMI
                                                                          0.0000
                                                                    =
                                                   Complete DF
                                                                              95
   DF adjustment: Small sample
                                                           min
                                                                           93.06
                                                           avg
                                                                           93.06
                                                                           93.06
                                                           max
                                                                    =
   Model F test:
                                                   F( 9, 93.1)
                       Equal FMI
                                                                           0.58
   Within VCE type:
                             OLS
                                                   Prob > F
                                                                          0.8072
                  Coefficient Std. err.
                                                   P>|t| [95% conf. interval]
   LnLesion_V~e
                                              t
        LnNFLw3
                    .8885111
                               1.009881
                                            0.88
                                                   0.381
                                                            -1.116895
                                                                         2.893917
            Sex
                     -.041536
                               1.197956
                                           -0.03
                                                   0.972
                                                            -2.420419
                                                                         2.337347
          w1Age
                    .0550474
                               .0577268
                                           0.95
                                                   0.343
                                                            -.0595855
                                                                         .1696804
                         0 (omitted)
           Race
                             1.033757
        PovStat
                    1.585358
                                           1.53
                                                   0.129
                                                           -.4674616
                                                                        3.638177
    TIME_V1SCAN
                   -.0004467
                               .0007048
                                           -0.63
                                                   0.528
                                                           -.0018463
                                                                        .0009528
                                           0.45
          w1BMI
                    .0317438
                               .0707241
                                                  0.655
                                                            -.108699
                                                                        .1721865
   w1dxDiabetes
                   -.3246053
                               .9469185
                                           -0.34
                                                   0.733
                                                           -2.204981
                                                                        1.555771
      w1Glucose
                                                                        .0423742
                    .0020617
                               .0203006
                                           0.10
                                                   0.919
                                                           -.0382509
      ICV volM2
                    2.87e-06
                               4.19e-06
                                           0.69
                                                   0.495
                                                            -5.45e-06
                                                                         .0000112
          _cons
                   -5.356224 6.920387
                                           -0.77
                                                   0.441
                                                           -19.09862
                                                                         8.386175
404 . save, replace
   file finaldata_imputed.dta saved
405 .
407 . //INTERACTION by Race//
408 .
409 .
410 .
411 . //ANALYSIS B//
412 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose
                                                                                5
```

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	179
		Average RVI	=	0.0047
		Largest FMI	=	0.0508
		Complete DF	=	167
DF adjustment:	Small sample	DF: min	=	143.47
		avg	=	162.63
		max	=	165.03
Model F test:	Equal FMI	F(11 , 165.0)	=	14.44
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3	-189.3137	62.26003	-3.04	0.003	-312.2428	-66.38451
Race						
AfrAm	-289.745	176.6008	-1.64	0.103	-638.4346	58.94455
Race#c.LnNFLw3						
AfrAm	87.43318	78.16098	1.12	0.265	-66.89166	241.758
Sex	-25.47457	59.55569	-0.43	0.669	-143.0644	92.11528
w1Age	-3.27839	2.802109	-1.17	0.244	-8.811097	2.254318
Race	0	(omitted)				
PovStat	-137.0769	51.15739	-2.68	0.008	-238.0842	-36.06954
TIME_V1SCAN	.0304169	.0371562	0.82	0.414	0429462	.1037799
w1BMI	.5831693	3.486226	0.17	0.867	-6.30022	7.466558
w1dxDiabetes	-18.31765	45.16571	-0.41	0.686	-107.5939	70.95857
w1Glucose	1.852894	1.082548	1.71	0.089	2851155	3.990904
ICV_volM2	.0016737	.0002171	7.71	0.000	.001245	.0021023
_cons	1877.693	339.1008	5.54	0.000	1208.145	2547.241

413 . mi estimate: reg Right_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose

Multiple-imputat Linear regression				Imputat:		= =	5 179
				Average	RVI	=	0.0004
				Largest		=	0.0044
				Complete	e DF	=	167
DF adjustment:	Small sample			DF:	min	=	164.22
					avg	=	164.93
					max	=	165.04
Model F test:	Equal FMI			F(11 ,	,	=	16.60
Within VCE type:	OLS			Prob >	F	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-171.212	64.49289	-2.65	0.009	-298.	5495	-43.87445
Race							
AfrAm	-298.1564	182.9173	-1.63	0.105	-659.	3163	63.0034
Race#c.LnNFLw3							
AfrAm	93.63387	80.96184	1.16	0.249	-66.2	2068	253.4884
Sex	-108.9474	61.68393	-1.77	0.079	-230.	7388	12.84406
w1Age	-2.133402	2.899994	-0.74	0.463	-7.85	9283	3.592479
Race	0	(omitted)					
PovStat	-113.9296	53.00012	-2.15				-9.283936
TIME_V1SCAN	.0658217	.038485	1.71				.1418082
w1BMI	.4886608	3.610711	0.14				7.617805
w1dxDiabetes	-8.110189	45.72895	-0.18				82.18229
w1Glucose	2.212498	1.111204	1.99			4604	4.406535
ICV_volM2	.0021008	.0002249	9.34			6567	.0025449
_cons	1483.006	350.9266	4.23	0.000	790.	1203	2175.891

415 . //ANALYSIS C//

Multiple-imputation estimates

416 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose I

Imputations

Linear regression	Linear regression				of obs	=	179
				Average	RVI	=	0.0001
				Largest		=	0.0010
				Complete	DF	=	167
DF adjustment:	Small sample	<u> </u>		DF:	min	=	164.89
					avg	=	165.01
					max	=	165.03
Model F test:	Equal FMI	[F(11 ,	165.0)	=	1.02
Within VCE type:	: OLS	5		Prob > F	Ī	=	0.4323
 LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.7637657	.83932	0.91	0.364	893	4234	2.420955
2 2.1.3	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.03332	0.52	0.50	.025		21-120333
Race							
AfrAm	2.134036	2.38055	0.90	0.371	-2.56	6226	6.834298
Race#c.LnNFLw3							
AfrAm	5039657	1.053669	-0.48	0.633	-2.58	4375	1.576444
Sex	.4350274	.8028018	0.54		-1.1	5006	2.020115
w1Age	.0671681	.0377376	1.78	0.077	007	3425	.1416788
Race	0	(omitted)					
PovStat	.7693619	.689766	1.12	0.266	592		2.131265
TIME_V1SCAN	0006762	.0005009	-1.35	0.179	001		.0003127
w1BMI	.0284649	.0469898	0.61	0.546	064	3138	.1212436
w1dxDiabetes	3416657	.5941409	-0.58	0.566	-1.51	4771	.8314393
w1Glucose	.0005224	.0144524	0.04	0.971	028	0131	.029058
			0 70	0 470	2 67	- 00	7 00- 06
ICV_volM2	2.11e-06	2.93e-06	0.72	0.472	-3.67	e-06	7.89e-06

^{417 .}

file finaldata_imputed.dta saved

^{418 .} save, replace

^{419 .}

^{421 . *********}MODEL 4: MODEL 2+liver/kidney disease*****

^{422 .}

^{423 . //}AFRICAN-AMERICAN//

^{424 .}

^{425 .} use finaldata_imputed,clear

^{426 .}

^{427 . //}ANALYSIS B//

^{428 .} mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imput	tation estimat	es		Imputat:	ions	=	5
Linear regress	sion		Number of obs		of obs	=	74
				Average	RVI	=	0.1505
				Largest	FMI	=	0.6858
				Complete	e DF	=	61
DF adjustment:	: Small samp	ole		DF:	min	=	7.10
_					avg	=	50.05
					max	=	58.55
Model F test:	Equal F	MI		F(11 ,	56.4)	=	4.03
Within VCE typ	DLS		Prob >	F	=	0.0002	
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-115.9693	58.59667	-1.98	0.053	-233	.24	1.301397
Sex	53.77598	117.9691	0.46	0.651	-185.2	645	292.8165
w1Age	-5.040265	4.648016	-1.08	0.283	-14.35	779	4.277259
Race	0	(omitted)					
PovStat	-184.9634	78.43855	-2.36	0.022	-342.0	656	-27.8612
TIME_V1SCAN	.0143906	.0634794	0.23	0.822	1129	529	.1417441
w1BMI	-3.568123	6.024075	-0.59	0.556	-15.63	836	8.502114
w1Creatinine	95.88111	244.3581	0.39	0.706	-480.2	942	672.0564
w1USpecGrav	-5010.174	5116.935	-0.98	0.332	-15256	.55	5236.204
w1BUN	3.433965	10.96329	0.31	0.755	-18.58	168	25.4496
w1ALP	.6320617	1.68966	0.37	0.710	-2.751	639	4.015763
w1UricAcid	-9.8262	29.04461	-0.34	0.737	-68.12	239	48.46999
ICV_volM2	.0012943	.0003662	3.53	0.001	.0005	507	.0020278
_cons	7450.365	5204.535	1.43	0.158	-2969.	428	17870.16

429 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =2

Multiple-imput	tation estima	tes		Imputat	ions	=	5
Linear regress	sion			Number	of obs	=	74
J				Average	e RVI	=	0.0585
				Largest	FMI	=	0.4271
				Complet	e DF	=	61
DF adjustment	: Small sam	ple		DF:	min	=	15.83
J					avg	=	53.97
					max	=	58.92
Model F test:	Equal	FMI		F(11	, 58.5)	=	4.76
Within VCE typ	Within VCE type: OLS				F	=	0.0000
-							
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-99.33911	57.19733	-1.74	0.088	-213.7	94	15.1158
Sex	-5.649608	108.961	-0.05	0.959	-224.24	171	212.9479
w1Age	-6.088827	4.475284	-1.36	0.179	-15.04	178	2.870146
Race	0	(omitted)					
PovStat	-178.9088	75.84853	-2.36	0.022	-330.70	15	-27.11608
TIME_V1SCAN	.0525275	.0611601	0.86	0.394	06997	775	.1750324
w1BMI	-8.326425	5.836258	-1.43	0.159	-20.010	99	3.358141
w1Creatinine	90.42891	187.0555	0.48	0.635	-306.46	522	487.32
w1USpecGrav	-52.51731	4997.798	-0.01	0.992	-10058.	78	9953.744
w1BUN	13.68965	10.46063	1.31	0.196	-7.2596	83	34.63898
w1ALP	.4309292	1.641804	0.26	0.794	-2.8553	333	3.717192
w1UricAcid	-5.917094	27.89799	-0.21	0.833	-61.800	27	49.96608
ICV volM2	.0015714	.0003547	4.43	0.000	.00086	514	.0022814
_cons	2332.396	5088.056	0.46	0.648	-7853.3	373	12518.17

Model F test:

Within VCE type:

Equal FMI

OLS

```
430 .
431 . //ANALYSIS C//
432 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
   Multiple-imputation estimates
                                                   Imputations
                                                                                5
    Linear regression
                                                   Number of obs
                                                                               74
                                                   Average RVI
                                                                           0.0147
                                                   Largest FMI
                                                                           0.1031
                                                                     =
                                                   Complete DF
                                                                               61
   DF adjustment:
                    Small sample
                                                           min
                                                                            47.65
                                                                            57.63
                                                           avg
                                                                            58.84
                                                           max
                                                                     =
   Model F test:
                                                   F( 11, 59.0)
                       Equal FMI
                                                                            1.29
   Within VCE type:
                             OLS
                                                   Prob > F
                                                                           0.2503
                  Coefficient Std. err.
                                                   P>|t| [95% conf. interval]
   LnLesion_V~e
                                            t
        LnNFLw3
                     .2593107
                                .701819
                                            0.37
                                                   0.713
                                                            -1.145247
                                                                         1.663868
            Sex
                     .9462628
                               1.300039
                                            0.73
                                                   0.470
                                                            -1.656034
                                                                          3.54856
          w1Age
                     .0804206
                               .0545217
                                            1.48
                                                   0.146
                                                            -.0286967
                                                                         .1895379
           Race
                          0 (omitted)
                                            0.14
        PovStat
                    .1292784
                               .9307684
                                                   0.890
                                                            -1.733713
                                                                          1.99227
    TIME_V1SCAN
                    -.0011728
                               .0007404
                                           -1.58
                                                   0.119
                                                            -.0026548
                                                                         .0003092
          w1BMI
                      .04936
                               .0713297
                                           0.69
                                                   0.492
                                                             -.093435
                                                                          .192155
                              1.894791
                                                   0.497
                                                                         5.106025
   w1Creatinine
                    1.295571
                                            0.68
                                                            -2.514882
    w1USpecGrav
                    -80.31081
                               60.66289
                                           -1.32
                                                   0.191
                                                            -201.7065
                                                                         41.08485
          w1BUN
                    .0775405
                               .1264851
                                            0.61
                                                   0.542
                                                            -.1755764
                                                                         .3306574
          w1ALP
                    -.0076717
                                .019997
                                           -0.38
                                                   0.703
                                                            -.047688
                                                                         .0323446
      w1UricAcid
                    -.4888664
                               .3368877
                                           -1.45
                                                   0.152
                                                            -1.163077
                                                                         .1853441
      ICV_volM2
                    2.76e-06 4.33e-06
                                            0.64
                                                   0.526
                                                            -5.90e-06
                                                                         .0000114
          _cons
                    80.65796 61.88089
                                            1.30
                                                   0.198
                                                            -43.17658
                                                                         204.4925
433 .
434 . save, replace
   file finaldata_imputed.dta saved
435 .
436 .
437 .
438 . //WHITES//
440 . use finaldata_imputed,clear
441 .
442 .
443 . //ANALYSIS B//
444 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
   > 1
                                                                                5
   Multiple-imputation estimates
                                                   Imputations
   Linear regression
                                                   Number of obs
                                                                              105
                                                                           0.0248
                                                   Average RVI
                                                   Largest FMI
                                                                           0.1887
                                                   Complete DF
                                                                               92
                                                                           47.78
   DF adjustment:
                    Small sample
                                                   DF:
                                                           min
                                                           avg
                                                                            81.36
```

max

F(11, 89.8)

Prob > F

90.03

7.64

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-183.2738	71.01167	-2.58	0.011	-324.3545	-42.19314
Sex	-121.8029	105.0013	-1.16	0.249	-330.4942	86.88844
w1Age	-1.44628	4.084327	-0.35	0.724	-9.560469	6.667909
Race	0	(omitted)				
PovStat	-61.35343	72.90001	-0.84	0.402	-206.1865	83.47959
TIME V1SCAN	.0423898	.0504247	0.84	0.403	0578083	.1425878
w1BMI	5.831192	5.293382	1.10	0.274	-4.685119	16.3475
w1Creatinine	-49.49741	210.2842	-0.24	0.815	-472.3515	373.3567
w1USpecGrav	-1043.626	6152.148	-0.17	0.866	-13335.18	11247.92
w1BUN	14.25207	9.177836	1.55	0.125	-4.021577	32.52572
w1ALP	-1.360897	1.509782	-0.90	0.370	-4.36038	1.638587
w1UricAcid	7.766023	26.84689	0.29	0.773	-45.57057	61.10261
ICV volM2	.0021001	.0003074	6.83	0.000	.0014893	.0027109
cons	2193.267	6153.67	0.36	0.723	-10100.68	14487.22

445 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =1

Multiple-imput	tation estima	tes		Imputat	ions	=	5
Linear regress	sion			Number	of obs	=	105
				Average	RVI	=	0.0293
				Largest	: FMI	=	0.2245
				Complet	e DF	=	92
DF adjustment	: Small sam	ple		DF:	min	=	40.94
					avg	=	80.45
					max	=	89.95
Model F test:	Equal	FMI		F(11 ,	89.7)	=	9.53
Within VCE typ	oe: (DLS		Prob >	F	=	0.0000
 Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-179.926	73.6486	-2.44	0.017	-326.26	607	-33.5913
Sex	-225.5421	108.9791	-2.07	0.041	-442.18	359	-8.898241
w1Age	1.402984	4.225132	0.33	0.741	-6.9916	39	9.797007
Race	0	(omitted)					
PovStat	-27.41966	75.38608	-0.36	0.717	-177.19	21	122.3528
TIME V1SCAN	.0832346	.0522383	1.59	0.115	02057	' 59	.1870451
w1BMI	9.700234	5.481409	1.77	0.080	-1.1901	.08	20.59058
w1Creatinine	25.11687	221.6906	0.11	0.910	-422.61	.79	472.8516
w1USpecGrav	-505.014	6387.059	-0.08	0.937	-13274	04	12264.01
w1BUN	15.54302	9.439463	1.65	0.104	-3.2416	17	34.32766
w1ALP	0568524	1.564446	-0.04	0.971	-3.165	15	3.051445
w1UricAcid	-7.670829	27.77624	-0.28	0.783	-62.854	168	47.51302
ICV_volM2	.0026533	.0003178	8.35	0.000	.00202	19	.0032846
cons	857.4879	6391.134	0.13	0.894	-11919.	81	13634.78

```
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447 . //ANALYSIS C//
448 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
    Multiple-imputation estimates
                                                                                                 5
                                                               Imputations
                                                              Number of obs = 105
Average RVI = 0.0055
Largest FMI = 0.0552
Complete DF = 92
DF: min = 80.61
avg = 88.96
max = 90.03
F( 11, 90.0) = 0.77
                                                               Number of obs =
                                                                                             105
    Linear regression
    DF adjustment: Small sample
                                                              F( 11, 90.0) = 0.77
Prob > F = 0.6691
    Model F test:
                             Equal FMI
    Within VCE type:
                            OLS
```

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.6220908	1.011489	0.62	0.540	-1.387421	2.631602
Sex	-1.033748	1.483736	-0.70	0.488	-3.981593	1.914098
w1Age	.0542895	.0582348	0.93	0.354	0614044	.1699833
Race	0	(omitted)				
PovStat	1.32337	1.038125	1.27	0.206	7390484	3.385789
TIME V1SCAN	0005576	.0007155	-0.78	0.438	0019792	.000864
w1BMI	0144721	.0754273	-0.19	0.848	1643212	.1353771
w1Creatinine	.2803667	2.800264	0.10	0.920	-5.291687	5.85242
w1USpecGrav	118.6752	83.06201	1.43	0.157	-46.37251	283.7229
w1BUN	.02638	.1270688	0.21	0.836	2260957	.2788556
w1ALP	0072628	.0215174	-0.34	0.737	0500114	.0354857
w1UricAcid	.2308601	.3828253	0.60	0.548	5297049	.9914251
ICV volM2	3.30e-06	4.37e-06	0.75	0.452	-5.38e-06	.000012
_cons	-124.1783	83.13286	-1.49	0.139	-289.3687	41.01201

450 . save, replace

file finaldata_imputed.dta saved

451 .

452 . **INTERACTION by Race**

453 .

454 .

455 .

456 . //ANALYSIS B//

457 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGra

Multiple-imputation estimates	Imputations Number of obs	=	5 179
Linear regression	Average RVI	=	0.0614
	Largest FMI	=	0.4950
	Complete DF	=	164
DF adjustment: Small sample	DF: min	=	16.55
	avg	=	143.95
	max	=	161.96
Model F test: Equal FMI	F(13, 159.4)	=	11.24
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-174.3705	62.95387	-2.77	0.006	-298.7203	-50.02068
Race AfrAm	-226.9593	179.0605	-1.27	0.207	-580.6338	126.7152
Race#c.LnNFLw3						
AfrAm	66.3719	78.20796	0.85	0.397	-88.07877	220.8226
Sex	-36.61633	76.75469	-0.48	0.634	-188.5625	115.3299
w1Age	-4.175338	2.900759	-1.44	0.152	-9.90362	1.552943
Race	0	(omitted)				
PovStat	-127.1003	51.99055	-2.44	0.016	-229.7685	-24.43217
TIME_V1SCAN	.0229277	.037625	0.61	0.543	0513801	.0972354
w1BMI	.9251415	3.865173	0.24	0.811	-6.707556	8.557838
w1Creatinine	38.35774	154.2377	0.25	0.807	-287.7333	364.4488
w1USpecGrav	-2080.257	3887.671	-0.54	0.593	-9765.295	5604.781
w1BUN	9.900945	6.795449	1.46	0.147	-3.537771	23.33966
w1ALP	3066271	1.103187	-0.28	0.781	-2.485339	1.872085
w1UricAcid	-1.066364	19.20419	-0.06	0.956	-38.9907	36.85797
ICV_volM2	.0017241	.0002266	7.61	0.000	.0012765	.0021716
_cons	3977.295	3916.594	1.02	0.312	-3765.211	11719.8

458 . mi estimate: reg Right_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGr

Multiple-imputat	ultiple-imputation estimates				Imputations		
Linear regression	on			Number of obs			179
_				Average	RVI	=	0.0237
				Largest	FMI	=	0.2323
				Complete	DF	=	164
DF adjustment:	Small sample	}		DF:	min	=	52.13
					avg	=	151.29
					max	=	161.89
Model F test:	Equal FMI			F(13,	161.6)	=	13.40
Within VCE type:	OLS	;		Prob > F		=	0.0000
Right Hippoc~s	Coefficient	Std. err.	t	P> t	Γ95%	conf.	interval]
LnNFLw3	-161.1073	64.85378	-2.48	0.014	-289.	1861	-33.02841
Race							
AfrAm	-225.4071	184.3274	-1.22	0.223	-589.	4167	138.6026
Race#c.LnNFLw3							
AfrAm	69.60653	80.79618	0.86	0.390	-89.9	4563	229.1587
Sex	-111.0909	77.3961	-1.44	0.153	-263.	9899	41.80809
w1Age	-2.85325	3.008672	-0.95	0.344	-8.79	4756	3.088256
Race	0	(omitted)					
PovStat	-102.4905	53.85006	-1.90	0.059	-208.	8301	3.849146
TIME_V1SCAN	.0523913	.0389314	1.35	0.180	024	4938	.1292764
w1BMI	1.372177	4.010081	0.34	0.733	-6.54	6872	9.291226
w1Creatinine	78.62751	134.2696	0.59	0.561	-190.	7881	348.0432
w1USpecGrav	327.6576	4008.267	0.08	0.935	-7593	.231	8248.546
w1BUN	12.99593	6.897575	1.88	0.061	627	9784	26.61984
w1ALP	.3282369	1.142131	0.29	0.774	-1.92	7339	2.583813
w1UricAcid	-12.07779	19.87475	-0.61	0.544	-51.3	2548	27.16991
ICV_volM2	.002135	.0002349	9.09	0.000	.001	6713	.0025988
_cons	1105.547	4036.323	0.27	0.785	-687	0.83	9081.924

460 . //ANALYSIS C//

461 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav

Linear regression			Imputations Number of obs Average RVI Largest FMI			5 179 0.0044 0.0522	
				Complete		=	164
DF adjustment:	Small sample			DF:	min	=	140.24
J	•				avg	=	160.32
					max	=	161.99
Model F test:	Equal FMI			F(13,	162.0)	=	0.95
Within VCE type:	OLS			Prob > F	Ī.	=	0.5031
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.4927124	.8374696	0.59	0.557	-1.1	6108	2.146505
Race							
AfrAm	1.618041	2.383049	0.68	0.498	-3.08	7826	6.323908
Race#c.LnNFLw3							
AfrAm	1966237	1.045773	-0.19	0.851	-2.26	1732	1.868485
Sex	.0403035	.9916896	0.04	0.968	-1.91	8085	1.998692
w1Age	.0631243	.0389275	1.62	0.107	013	7476	.1399962
Race	0	(omitted)					
PovStat	.7185193	.697291	1.03	0.304	658	4361	2.095475
TIME_V1SCAN	0006685	.0005026	-1.33	0.185	00	1661	.0003241
w1BMI	.00764	.0518691	0.15	0.883	094	7874	.1100674
w1Creatinine	.5285514	1.583521	0.33	0.739	-2.60	2108	3.659211
w1USpecGrav	29.90748	50.98007	0.59	0.558	-70.7	6467	130.5796
w1BUN	.06956	.0886605	0.78	0.434	105	5225	. 2446425
w1ALP	0062523	.0147461	-0.42	0.672	035	3721	.0228675
w1UricAcid	0308046	.2572787	-0.12	0.905	538	8596	.4772504
ICV_volM2	2.44e-06	3.04e-06	0.80	0.424	-3.57	e-06	8.44e-06
_cons	-33.39449	51.33492	-0.65	0.516	-134.	7675	67.97849

462 .

file finaldata_imputed.dta saved

464 .

465 .

468 . //AFRICAN-AMERICAN//

^{463 .} save, replace

^{466 . ********}MODEL 5: MODEL2+OXIDATIVE STRESS*****

^{467 .}

⁴⁷⁰ . use finaldata_imputed,clear $\,$

472 .

473 . //ANALYSIS B//

474 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput Linear regress		es		Imputations Number of obs Average RVI Largest FMI		= 5 = 74 = 0.0662 = 0.4399
55 11 1		-		Complet		= 63
DF adjustment:		DF:	min	= 15.39		
					avg	= 56.07
	_				max .	= 60.98
Model F test:	Equal F	MI OLS		F(10 ,	•	= 5.37
Within VCE typ		Prob >	F	= 0.0000		
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% cor	nf. interval]
LnNFLw3	-115.6229	54.58097	-2.12	0.038	-224.801	1 -6.444672
Sex	38.86292	83.33794	0.47	0.643	-127.7868	8 205.5126
w1Age	-3.77613	4.008641	-0.94	0.350	-11.79469	9 4.242432
Race	0	(omitted)				
PovStat	-196.898	74.71508	-2.64	0.011	-346.3317	7 -47.4643
TIME V1SCAN	.0415256	.0623039	0.67	0.508	083204	4 .1662552
- w1BMI	-2.562019	5.17898	-0.49	0.623	-12.922	2 7.798165
w1TotalD	1.079754	5.830173	0.19	0.855	-11.3197	7 13.47928
w1Albumin	218.5903	117.4847	1.86	0.068	-16.34263	3 453.5233
w1EosinPct	.7925562	17.55167	0.05	0.964	-34.30443	1 35.88952
ICV volM2	.0012853	.0003383	3.80	0.000	.000608	.001962
_cons	1404.209	708.8406	1.98	0.052	-13.35392	

475 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput Linear regress DF adjustment:		i	f obs = RVI = FMI	5 74 0.0467 0.3499 63 20.80 56.61 60.98		
Model F test:		F(10,	60.6) =	5.49		
Within VCE typ		Prob > F	=	0.0000		
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	-83.96033	53.95406	-1.56	0.125	-191.8611	23.94045
Sex	8.4185	82.9323	0.10	0.919	-157.4415	174.2785
w1Age	-3.665944	3.98502	-0.92	0.361	-11.63812	4.306236
Race PovStat	-181.664	(omitted) 74.01332	-2.45	0.017	-329.6799	-33.6481
TIME_V1SCAN	.0484762	.0614295	0.79	0.433	0744398	.1713921
w1BMI	-5.185816	5.157262	-1.01	0.319	-15.50492	5.133287
w1TotalD	-2.287269	5.441936	-0.42	0.679	-13.61106	9.036519
w1Albumin	178.2903	116.7074	1.53	0.132	-55.09867	411.6792
w1EosinPct	.581556	17.41982	0.03	0.973	-34.25178	35.41489
ICV volM2	.0015007	.0003366	4.46	0.000	.0008274	.002174
_cons	1639.635	703.0979	2.33	0.023	233.5942	3045.676

483 .

484 . //WHITES//

486 . use finaldata_imputed,clear

487 . 488 .

489 .

490 . //ANALYSIS B//

491 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	105
		Average RVI	=	0.0089
		Largest FMI	=	0.0613
		Complete DF	=	94
DF adjustment:	Small sample	DF: min	=	80.77
		avg	=	90.70
		max	=	92.06
Model F test:	Equal FMI	F(10 , 92.0)	=	8.17
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-158.2224	67.3464	-2.35	0.021	-291.9776	-24.46731
Sex	-102.0385	86.77435	-1.18	0.243	-274.3791	70.30214
w1Age	-1.229334	4.05135	-0.30	0.762	-9.275598	6.816929
Race	0	(omitted)				
PovStat	-66.21706	72.7621	-0.91	0.365	-210.7289	78.2948
TIME_V1SCAN	.0548885	.0502059	1.09	0.277	0448251	.154602
w1BMI	9.281601	5.092812	1.82	0.072	8332463	19.39645
w1TotalD	.3906547	3.109355	0.13	0.900	-5.796249	6.577559
w1Albumin	132.9192	127.2712	1.04	0.299	-119.8522	385.6905
w1EosinPct	1122544	14.9252	-0.01	0.994	-29.76895	29.54444
ICV_volM2	.0020189	.0002941	6.87	0.000	.0014349	.002603
cons	543.0906	786.4413	0.69	0.492	-1018.845	2105.026

492 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput Linear regress			Imputations Number of obs		= 5 = 105	
_				Average	RVI =	0.0049
				Largest	FMI =	0.0338
				Complete	DF =	94
DF adjustment		DF:	min =	87.08		
					avg =	91.44
				1	max =	92.06
Model F test:	Equal F	MI		F(10 ,	92.0)	= 10.33
Within VCE typ	oe: 0	LS		Prob > F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf	f. interval]
LnNFLw3	-141.1878	69.66594	-2.03	0.046	-279.5493	-2.82631
Sex	-217.3228	89.76258	-2.42	0.017	-395.5977	-39.04781
w1Age	1.980728	4.19143	0.47	0.638	-6.343751	10.30521
Race	0	(omitted)				
PovStat	-36.27053	75.26017	-0.48	0.631	-185.7429	113.2019
TIME_V1SCAN	.0921837	.051927	1.78	0.079	0109474	.1953147
w1BMI	11.47704	5.267643	2.18	0.032	1.015021	21.93906
w1TotalD	-1.149429	3.143011	-0.37	0.715	-7.393159	5.094301
w1Albumin	71.98856	131.6586	0.55	0.586	-189.4959	333.473
w1EosinPct	8.169717	15.51305	0.53	0.600	-22.66374	39.00318
ICV_volM2	.0026248	.0003042	8.63	0.000	.0020206	.003229

493 .

494 . //ANALYSIS C//

_cons

93.26609

813.5894

495 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

-1522.587

1709.119

0.909

Multiple-imputation	n estimates	Imputatio	ns =	5
Linear regression		Number of	obs =	105
		Average R	VI =	0.0023
		Largest F	MI =	0.0235
		Complete	DF =	94
DF adjustment:	mall sample	DF: m	in =	89.01
		a	vg =	91.77
		m	ax =	92.06
Model F test:	Equal FMI	F(10 ,	92.1) =	0.66
Within VCE type:	OLS	Prob > F	=	0.7606

LnLesion_V~e	Coefficient	Std. err.	. t	P> t	[95% conf.	interval]
LnNFLw3	.8706028	.9544397	0.91	0.364	-1.024981	2.766187
Sex	4805308	1.229733	-0.39	0.697	-2.922866	1.961805
w1Age	.0596163	.0574236	1.04	0.302	054431	.1736636
Race	0	(omitted)				
PovStat	1.469983	1.031033	1.43	0.157	5777229	3.517689
TIME_V1SCAN	0002384	.0007114	-0.34	0.738	0016514	.0011745
w1BMI	.0518579	.0721581	0.72	0.474	091454	.1951698
w1TotalD	0013069	.0432555	-0.03	0.976	0872545	.0846408
w1Albumin	1.926225	1.803581	1.07	0.288	-1.655819	5.508269
w1EosinPct	.1096627	.2091176	0.52	0.601	3056608	.5249862
ICV_volM2	3.17e-06	4.17e-06	0.76	0.449	-5.11e-06	.0000114
_cons	-14.77016	11.14552	-1.33	0.188	-36.90598	7.36565

497 . save, replace

file finaldata_imputed.dta saved

Multiple-imputation estimates

498 .

499

500 . ********INTERACTION by Race********

501 .

502 .

503 . //ANALYSIS B//

504 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1E

Imputations

Murcipie-impucat	cion escimaces			Tillbacaci	.0113	_	,
Linear regression	on			Number o	of obs	=	179
				Average	RVI	=	0.0231
				Largest	FMI	=	0.2181
				Complete	DF	=	166
DF adjustment:	Small sample			DF:	min	=	56.57
					avg	=	154.88
					max	=	163.98
Model F test:	Equal FMI			F(12,	163.6)	=	12.86
Within VCE type:	: OLS			Prob > F		=	0.0000
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-153.7294	59.76309	-2.57	0.011	-271.	7338	-35.72499
Race							
AfrAm	-214.1365	177.3229	-1.21	0.229	-564.	2883	136.0153
Race#c.LnNFLw3							
AfrAm	52.52135	76.67012	0.69	0.494	-98.	8668	203.9095
Sex	-32.35467	60.66143	-0.53	0.595	-152.	1331	87.42372
w1Age	-3.033032	2.781404	-1.09	0.277	-8.52	5046	2.458981
Race	0	(omitted)					
PovStat	-133.7299	51.61973	-2.59	0.010	-235.	6573	-31.8025
TIME_V1SCAN	.0374342	.0380844	0.98	0.327	037	7689	.1126372
w1BMI	3.416133	3.589891	0.95	0.343	-3.67	2438	10.5047
w1TotalD	.1028411	2.728381	0.04	0.970	-5.36		5.567239
w1Albumin	155.5064	87.28549	1.78	0.077	-16.8	4238	327.8551
w1EosinPct	6846338	11.31774	-0.06	0.952	-23.0	3888	21.66961
ICV_volM2	.0016852	.0002187	7.70	0.000	.001	2533	.0021172
_cons	1181.218	545.2828	2.17	0.032	104.	5226	2257.914

505 . mi estimate: reg Right_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1

Multiple-imputat			Imputations Number of obs			=	5
Linear regression	on					=	179
				Average		=	0.0096
				Largest		=	0.0730
DE - 11 - 1 1 -	C			Complet		=	166
DF adjustment:	Small sample			DF:	min	=	128.67
					avg	=	160.29
				_,	max	=	164.03
Model F test:	Equal FMI			F(12 ,	,	=	14.31
Within VCE type:	OLS			Prob >	F	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-123.2444	62.57566	-1.97	0.051	-246	. 803	.3141101
Race							
AfrAm	-224.6643	185.2776	-1.21	0.227	-590.	5103	141.1817
ATTAIII	224.0045	103.2770	1.21	0.227	3301.	3103	141.1017
Race#c.LnNFLw3							
AfrAm	50.00832	80.26276	0.62	0.534	-108	.474	208.4906
Sex	-108.693	63.50036	-1.71	0.089	-234.0	2771	16.6911
w1Age	-1.716025	2.913163	-0.59				4.036212
Race	0	(omitted)			7		
PovStat	-112.4272	54.00084	-2.08	0.039	-219.0	2552	-5.799204
TIME V1SCAN	.0604448	.0397866	1.52				.139006
w1BMI	2.925458	3.752418	0.78				10.33477
w1TotalD	-2.181215	2.647481	-0.82				3.057019
w1Albumin	101.7301	91.33737	1.11				282.0787
w1EosinPct	4.095341	11.90118	0.34			-	27.607
ICV_volM2	.0021233	.0002289	9.27				.0025753
_cons	1084.153	570.3178	1.90				2210.268

Multiple-imputat Linear regressio		Imputations Number of obs Average RVI Largest FMI Complete DF			5 179 0.0040 0.0448 166		
DF adjustment:	Small sample			DF:	min	=	146.18
					avg max	=	162.58 164.01
Model F test:	Equal FMI			F(12,		=	0.96
Within VCE type:	OLS			Prob > F		=	0.4874
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.7040864	.803774	0.88	0.382	8829	9942	2.291167
Race AfrAm	2.18942	2.378809	0.92	0.359	-2.50	7671	6.88651
Race#c.LnNFLw3 AfrAm	4276578	1.031023	-0.41	0.679	-2.46	3448	1.608132
Sex	.2531934	.8157277	0.31	0.757	-1.35	7489	1.863876
w1Age	.0645088	.037399	1.72	0.086	009	3369	.1383546

^{507 . //}ANALYSIS C//

^{508 .} mi estimate: reg LnLesion_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1Eo

Race	0	(omitted)				
PovStat	.7398965	.6933544	1.07	0.287	6291584	2.108951
TIME_V1SCAN	0005419	.0005108	-1.06	0.290	0015506	.0004667
w1BMI	.0336212	.0482297	0.70	0.487	0616109	.1288534
w1TotalD	.0127873	.0335449	0.38	0.704	0535084	.0790831
w1Albumin	.5315905	1.173692	0.45	0.651	-1.785904	2.849085
w1EosinPct	.1168167	.1505849	0.78	0.439	1805194	.4141527
ICV_volM2	2.11e-06	2.94e-06	0.72	0.475	-3.70e-06	7.91e-06
_cons	-6.516711	7.327796	-0.89	0.375	-20.98572	7.952299

510 . save, replace

file finaldata_imputed.dta saved

511 .

512 . *********MODEL 6: MODEL 2+lifestyle/health-related factors******

513 .

514 . //AFRICAN-AMERICAN//

515 .

516 . use finaldata_imputed,clear

517 . 518 .

519 .

520 .

521 . //ANALYSIS B//

522 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	74
	Average RVI	=	0.0104
	Largest FMI	=	0.0494
	Complete DF	=	64
DF adjustment: Small sample	DF: min	=	57.40
	avg	=	61.31
	max	=	62.05
Model F test: Equal FMI	F(9, 62.0)	=	6.56
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-104.2676	52.7806	-1.98	0.053	-209.7775	1.242393
Sex	66.18522	81.10168	0.82	0.418	-95.93255	228.303
w1Age	-4.799761	3.829827	-1.25	0.215	-12.45607	2.856551
Race	0	(omitted)				
PovStat	-212.6881	73.30654	-2.90	0.005	-359.2371	-66.1391
TIME V1SCAN	.0275259	.0580426	0.47	0.637	0885352	.143587
- w1BMI	-5.524984	5.002617	-1.10	0.274	-15.52624	4.476273
w1currdrugs	-142.6411	69.15877	-2.06	0.044	-281.1081	-4.174109
w1SRH	-40.31973	39.27379	-1.03	0.309	-118.8376	38.19819
ICV volM2	.0013644	.0003305	4.13	0.000	.0007037	.0020251
_cons	2515.74	427.7788	5.88	0.000	1660.636	3370.845
	1					

523 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imput	Nultiple-imputation estimates				ions	=	5
Linear regress	sion			Number	of obs	=	74
_				Average	RVI	=	0.0092
				Largest	FMI	=	0.0392
				Complet	e DF	=	64
DF adjustment:	: Small samp	le		DF:	min	=	58.64
•	·				avg	=	61.45
					max	=	62.06
Model F test:	Equal F	MI		F(9,	62.0)	=	6.65
Within VCE typ	Within VCE type: OLS				F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-78.47796	52.29916	-1.50	0.139	-183.0	252	26.06929
Sex	36.75969	80.36799	0.46	0.649	-123.8	915	197.4109
w1Age	-5.052937	3.794515	-1.33	0.188	-12.6	386	2.532723
Race	0	(omitted)					
PovStat	-191.1671	72.61059	-2.63	0.011	-336.3	219	-46.0124
TIME_V1SCAN	.0494085	.0575316	0.86	0.394	0656	325	.1644496
w1BMI	-7.487438	4.953155	-1.51	0.136	-17.38	941	2.414539
w1currdrugs	-136.5243	68.19015	-2.00	0.050	-272.9	898	0588054
w1SRH	-21.28619	38.91926	-0.55	0.586	-99.09	543	56.52305
ICV_volM2	.0015128	.0003275	4.62	0.000	.0008	582	.0021674
cons	2533.941	423.8626	5.98	0.000	1686.	668	3381.213

525 . //ANALYSIS C//

526 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if s

Multiple-imput		tes		Imputat Number		5 74
Linear regress	51011			Average		0.0025
				Largest		0.0119
				Complet		64
DF adjustment	· Small samı	nle		DF:	min =	61.33
Di dajasemene	. 5	J10		ы.	avg =	61.95
					max =	62.08
Model F test:	Equal	FMT		F(9,		1.73
Within VCE typ	•	DLS		Prob >		0.1004
3,1						
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	.1736594	.641344	0.27	0.787	-1.108352	1.45567
Sex	.8314792	.9861788	0.84	0.402	-1.139814	2.802772
w1Age	.0716963	.0464945	1.54	0.128	0212444	.1646371
Race	0	(omitted)				
PovStat	0463916	.8897053	-0.05	0.959	-1.824855	1.732072
TIME_V1SCAN	0010606	.0007025	-1.51	0.136	002465	.0003437
w1BMI	.0500645	.0606797	0.83	0.412	0712316	.1713605
w1currdrugs	.8599327	.8259846	1.04	0.302	7915481	2.511413
w1SRH	8061611	.4762904	-1.69	0.096	-1.758253	.145931
ICV_volM2	3.58e-06	4.01e-06	0.89	0.376	-4.45e-06	.0000116
_cons	-1.17858	5.201916	-0.23	0.822	-11.57679	9.219633

```
527 .
```

528 . save, replace

file finaldata_imputed.dta saved

529 .

530 .

531 .

532 . //WHITES//

533 .

534 . use finaldata_imputed,clear

535 .

536 .

537 .

538 . //ANALYSIS B//

539 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imput Linear regress		Imputati Number o Average Largest Complete	f obs RVI FMI	= = =	5 105 0.0039 0.0229		
DF adjustment			DF:	min	=	90.05	
					avg max	=	92.59 93.03
Model F test:	Equal FMI			F(9 ,		=	9.12
Within VCE typ	oe: OLS			Prob > F		=	0.0000
Left_Hippo~s	Coefficient Std	l. err.	t	P> t	[95% cd	onf.	interval]
LnNFLw3	-157.5429 67.	13519	-2.35	0.021	-290.86	14	-24.22443

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval
LnNFLw3	-157.5429	67.13519	-2.35	0.021	-290.8614	-24.22443
Sex	-66.21608	85.00258	-0.78	0.438	-235.0193	102.5872
w1Age	-1.338338	4.040472	-0.33	0.741	-9.361884	6.685209
Race	0	(omitted)				
PovStat	-56.75501	74.85348	-0.76	0.450	-205.4028	91.89277
TIME V1SCAN	.038831	.0504353	0.77	0.443	0613351	.1389971
w1BMI	8.292882	4.87312	1.70	0.092	-1.384201	17.96997
w1currdrugs	73.31905	91.07356	0.81	0.423	-107.6132	254.2513
w1SRH	.023143	41.78233	0.00	1.000	-82.94806	82.99434
ICV volM2	.0019989	.0002928	6.83	0.000	.0014174	.0025803
_cons	1148.881	473.9316	2.42	0.017	207.7511	2090.011

540 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 105
Linear regression	Average RVI	=	0.0030
	Largest FMI	=	0.0244
	Complete DF	=	95
DF adjustment: Small sample	DF: min	=	89.79
	avg	=	92.66
	max	=	93.05
Model F test: Equal FMI	F(9, 93.0)	=	11.54
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-143.9577	69.35341	-2.08	0.041	-281.6792	-6.23607
Sex	-197.2471	87.77397	-2.25	0.027	-371.5493	-22.9449
w1Age	1.907259	4.175725	0.46	0.649	-6.384856	10.19937
Race	0	(omitted)				
PovStat	-35.66244	77.32696	-0.46	0.646	-189.22	117.8951
TIME V1SCAN	.0926752	.0519999	1.78	0.078	01059	.1959404
w1BMI	10.73205	5.036857	2.13	0.036	.7298119	20.7343
w1currdrugs	35.30985	94.19606	0.37	0.709	-151.833	222.4527
w1SRH	-22.63068	43.17695	-0.52	0.601	-108.3709	63.10955
ICV volM2	.0026135	.0003026	8.64	0.000	.0020126	.0032143
_cons	462.2879	489.9661	0.94	0.348	-510.6901	1435.266

542 . //ANALYSIS C//

543 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if s

Multiple-imput Linear regress		es		Imputat:		=	5 105
Linear regres.	31011			Average		_	0.0119
				Largest		=	0.0947
				Complete		=	95
DF adjustment	: Small samp	ole		DF:	min	=	72.57
z. aajasemene	·			2	avg	=	90.85
					max	=	93.06
Model F test:	Equal F	MI		F(9 ,	93.0)	=	0.66
Within VCE typ	•	LS		Prob >		=	0.7384
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
LnNFLw3	.8384743	.9513989	0.88	0.380	-1.05083	18	2.727767
Sex	293337	1.206075	-0.24	0.808	-2.6885	21	2.101827
w1Age	.0483808	.0573173	0.84	0.401	065443	18	.1622034
Race	0	(omitted)					
PovStat	1.333167	1.059901	1.26	0.212	771569	96	3.437904
TIME_V1SCAN	0002847	.0007129	-0.40	0.691	00170	2 5	.0011311
w1BMI	.0125266	.0691227	0.18	0.857	12474	93	.1497935
w1currdrugs	-1.011189	1.337649	-0.76	0.452	-3.67738	35	1.655006
w1SRH	2763866	.5924467	-0.47	0.642	-1.45287	74	.9001003
ICV_volM2	2.80e-06	4.15e-06	0.68	0.501	-5.44e-6	96	.000011

-0.45 0.652

-16.41255

10.31545

544 .

545 . save, replace

_cons

file finaldata_imputed.dta saved

-3.04855

546

551 . //ANALYSIS B//

552 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_v

Multiple-imputat				Imputati Number o		=	5 179
1111cai 1 cgi c551c	511			Average		=	0.0024
				Largest		=	0.0229
				Complete		=	167
DF adjustment:	Small sample	:		DF:	min	=	158.20
•					avg	=	164.40
					max	=	165.03
Model F test:	Equal FMI	• •		F(11 ,	165.0)	=	13.98
Within VCE type:	: OLS	3		Prob > F	=	=	0.0000
Left Hippoca~s	Coefficient	Std. err.	t	P> t	Г 9 5%	conf.	interval]
LnNFLw3	-154.4432	59.96591	-2.58	0.011	-272.	8425	-36.04383
Race							
AfrAm	-227.3718	174.4517	-1.30	0.194	-571.	8171	117.0735
Race#c.LnNFLw3							
AfrAm	57.98736	76.97151	0.75	0.452	-93.9	8862	209.9633
Sex	-16.23263	59.66032	-0.27	0.786	-134.	0287	101.5634
w1Age	-3.60028	2.777788	-1.30	0.197	-9.08	4877	1.884317
Race	0	(omitted)					
PovStat	-140.6944	52.3753	-2.69	0.008	-244.	1065	-37.2822
TIME_V1SCAN	.030428	.0375742	0.81		043		.1046166
w1BMI	1.432006	3.4821	0.41			4325	8.307263
w1currdrugs	-35.52133	56.62998	-0.63		-147.		76.32698
w1SRH	-22.48158	28.71336	-0.78		-79.1		34.21148
ICV_volM2	.0016895	.0002201	7.68			2549	.0021242
_cons	1994.892	336.8131	5.92	0.000	1329	.869	2659.915

553 . mi estimate: reg Right_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_

Multiple-imputat	ion estimates			Imputati	lons	=	5
Linear regression	n			Number o	of obs	=	179
_				Average	RVI	=	0.0038
				Largest	FMI	=	0.0355
				Complete	DF	=	167
DF adjustment:	Small sample			DF:	min	=	152.16
					avg	=	163.87
					max	=	165.03
Model F test:	Equal FMI			F(11,	165.0)	=	15.74
Within VCE type:	OLS			Prob > F	•	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-126.6761	62.39146	-2.03	0.044	-249.	8647	-3.487593
Race AfrAm	-210.2101	181.5183	-1.16	0.249	-568.	6087	148.1885
Race#c.LnNFLw3 AfrAm	52.83383	80.08301	0.66	0.510	-105.	2857	210.9533
Sex	-95.50187	62.08348	-1.54	0.126	-218.	0827	27.07893

w1Age	-2.362485	2.890044	-0.82	0.415	-8.068725	3.343755
Race	0	(omitted)				
PovStat	-118.4607	54.48985	-2.17	0.031	-226.0478	-10.87349
TIME_V1SCAN	.0645637	.0391103	1.65	0.101	0126583	.1417858
w1BMI	1.718411	3.622652	0.47	0.636	-5.434355	8.871177
w1currdrugs	-49.5227	59.28927	-0.84	0.405	-166.6592	67.61379
w1SRH	-29.96362	29.88442	-1.00	0.317	-88.96923	29.04199
ICV_volM2	.0021225	.000229	9.27	0.000	.0016703	.0025746
_cons	1611.421	350.4185	4.60	0.000	919.5351	2303.307

554

555 . //ANALYSIS C//

Linear regression

Multiple-imputation estimates

556 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_vo

5 179

Imputations

Number of obs

711					_	1/9
			Average	RVI	=	0.0052
			Largest	FMI	=	0.0553
			Complete	DF	=	167
Small sample	<u> </u>		DF:	min	=	140.71
				avg	=	162.89
				max	=	165.03
Equal FM	[F(11 ,	165.0)	=	1.13
OLS	5		Prob > F	=	=	0.3392
Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
.7040204	.7988592	0.88	0.379	873	32829	2.281324
1.957529	2.32393	0.84	0.401	-2.63	30942	6.545999
4288393	1.025505	-0.42	0.676	-2.45	3645	1.595966
.3843013	.7947526	0.48	0.629	-1.18	34893	1.953496
.0649802	.0370095	1.76	0.081	008	30932	.1380537
0	(omitted)					
.6312987	.698168	0.90	0.367	747	72096	2.009807
0005501	.0005007	-1.10	0.273	001	L5387	.0004385
.024784	.0464148	0.53	0.594	06	6861	.116429
.1919263	.7666495	0.25	0.803	-1.32	23715	1.707567
4907266	.3824306	-1.28	0.201	-1.24	15814	.2643606
2.49e-06	2.93e-06	0.85	0.397			8.28e-06
-2.779208	4.488362	-0.62	0.537	-11.6	54133	6.082914
	Equal FM1 OLS Coefficient .7040204 1.957529 4288393 .3843013 .0649802 0 .6312987 0005501 .024784 .1919263 4907266 2.49e-06	Equal FMI OLS Coefficient Std. err. .7040204 .7988592 1.957529 2.32393 4288393 1.025505 .3843013 .7947526 .0649802 .0370095 0 (omitted) .6312987 .6981680005501 .0005007 .024784 .0464148 .1919263 .76664954907266 .3824306 2.49e-06 2.93e-06	Equal FMI OLS Coefficient Std. err. t .7040204 .7988592 0.88 1.957529 2.32393 0.84 4288393 1.025505 -0.42 .3843013 .7947526 0.48 .0649802 .0370095 1.76 0 (omitted) .6312987 .698168 0.900005501 .0005007 -1.10 .024784 .0464148 0.53 .1919263 .7666495 0.254907266 .3824306 -1.28 2.49e-06 2.93e-06 0.85	Average Largest Complete DF: Equal FMI OLS F(11, Prob > F Coefficient Std. err. t P> t .7040204 .7988592 0.88 0.379 1.957529 2.32393 0.84 0.401 4288393 1.025505 -0.42 0.676 .3843013 .7947526 0.48 0.629 .0649802 .0370095 1.76 0.081 0 (omitted) .6312987 .698168 0.90 0.3670005501 .0005007 -1.10 0.273 .024784 .0464148 0.53 0.594 .1919263 .7666495 0.25 0.8034907266 .3824306 -1.28 0.201 2.49e-06 2.93e-06 0.85 0.397	Average RVI Largest FMI Complete DF Small sample Equal FMI OLS Coefficient Std. err. t P> t [95% .7040204 .7988592 0.88 0.379873 1.957529 2.32393 0.84 0.401 -2.63 4288393 1.025505 -0.42 0.676 -2.45 .3843013 .7947526 0.48 0.629 -1.18 .0649802 .0370095 1.76 0.081008 0 (omitted) .6312987 .698168 0.90 0.367747 0005501 .0005007 -1.10 0.2730005 .024784 .0464148 0.53 0.594066 .1919263 .7666495 0.25 0.803 -1.324907266 .3824306 -1.28 0.201 -1.24 2.490-06 2.93e-06 0.85 0.397 -3.36	Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI OLS

557 .

558 . save, replace

file **finaldata_imputed.dta** saved

559 .

560 .

561 .

562 .

563 .

564 . capture log close