10 . \*\*Model 1\*\* 11 .

1 .

13 .

12 . use HANDLS\_paper51\_NFLBRAINSCANFINALIZED,clear

SS

14 . 15 . //ANALYSIS B//

Source

Number of obs =

67

Model Residual	2862716.16 3859080.52	6 60	477119.361 64318.0087		= 7.42 = 0.0000 = 0.4259 = 0.3685
Total	6721796.69	66	101845.404		= 253.61
	Γ				
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	37.01924	85.37835	0.43	0.666	.0536969
Sex	94.35986	89.4878	1.05	0.296	.1469327
w1Age	-9.403321	4.137173	-2.27	0.027	2909126
Race	0	(omitted)			•
PovStat	-220.4509	79.69538	-2.77	0.008	3366095
TIME_V1SCAN	.0363506	.0606334	0.60	0.551	.0680281
ICV_volM2	.001177	.0003803	3.09	0.003	.4406397
_cons	2354.41	496.0454	4.75	0.000	•

MS

df

17 . reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN ICV\_volM2 if sample\_final2==1 & Race==2,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 67
Model Residual	3004910.22 3819277.05	6 60	500818.369 63654.617	6 R-squared	= 7.87 = 0.0000 = 0.4403
Total	6824187.27	66	103396.77	<ul><li>Adj R-squared</li><li>Root MSE</li></ul>	= 0.3844 = 252.3
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw1	51.49343	84.9369	0.61	0.547	.0741294
Sex	28.85917	89.0251	0.32	0.747	.0445997
w1Age	-9.461436	4.115782	-2.30	0.025	2905063
Race	0	(omitted)			•
PovStat	-229.4869	79.28332	-2.89	0.005	3477681
TIME_V1SCAN	.0697774	.0603199	1.16	0.252	.1296012
ICV_volM2	.0014927	.0003784	3.95	0.000	.5546154
_cons	2218.356	493.4806	4.50	0.000	•

note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	67
				- F(6, 60)	=	2.20
Model	127.853364	6	21.3088939	9  Prob > F	=	0.0552
Residual	580.947536	60	9.68245894	4 R-squared	=	0.1804
				<ul> <li>Adj R-squared</li> </ul>	=	0.0984
Total	708.8009	66	10.739407	6 Root MSE	=	3.1117
LnLesion_V~e	Coefficient	Std. err.	t	P> t		Beta
LnNFLw1	1.958856	1.047549	1.87	0.066		.2766971
Sex	.229464	1.09797	0.21	0.835		.0347958
w1Age	.0299782	.050761	0.59	0.557		.0903164
Race	0	(omitted)				•
PovStat	.1085031	.9778217	0.11	0.912		.0161338
TIME_V1SCAN	0009136	.0007439	-1.23	0.224	-	.1664951
ICV_volM2	6.07e-06	4.67e-06	1.30	0.198		.2213981
_cons	-5.402901	6.086224	-0.89	0.378		•

21 .

22 .

23 . \*\*Model 2\*\*

24 .

25 . use finaldata\_imputed\_final,clear

26 .

27 . 28 . //ANALYSIS B//

29 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

Multiple-imputation estimates	<pre>Imputations =</pre>	5
Linear regression	Number of obs =	67
	Average RVI =	0.0000
	Largest FMI =	0.0000
	Complete DF =	59
DF adjustment: Small sample	DF: min =	57.10
	avg =	57.10
	max =	57.10
Model F test: <b>Equal FMI</b>	F( 7, 57.1) =	6.25
Within VCE type: OLS	Prob  >  F  =	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	32.11934	99.4511	0.32	0.748	-167.0207	231.2594
Sex	93.04378	91.22105	1.02	0.312	-89.61652	275.7041
w1Age	-9.163247	4.832579	-1.90	0.063	-18.83996	.5134698
Race	0	(omitted)				
PovStat	-219.571	80.85708	-2.72	0.009	-381.4786	-57.66346
TIME_V1SCAN	.0359795	.0612562	0.59	0.559	0866794	.1586384
w1BMI	5734885	5.827083	-0.10	0.922	-12.24159	11.09462
ICV_volM2	.0011788	.0003839	3.07	0.003	.00041	.0019475
_cons	2368.469	520.1887	4.55	0.000	1326.848	3410.091

30 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1

Multiple-imput Linear regress			Imputat Number Average Largest Complet	of obs RVI FMI	= = = =	5 67 0.0000 0.0000 59	
DF adjustment:	Small sam	ple		DF:	e Dr min	=	57.10
_					avg	=	57.10
					max	=	57.10
Model F test:	Equal	FMI		F( 7,	<b>57.1</b> )	=	6.71
Within VCE typ	e: (	OLS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% coi	nf.	interval]
LnNFLw1	24.64736	98.69839	0.25	0.804	-172.985	5	222.2802
Sex	21.64849	90.53064	0.24	0.812	-159.629	3	202.9263
w1Age	-8.146095	4.796003	-1.70	0.095	-17.7495	7	1.457383
Race	0	(omitted)					
PovStat	-224.6663	80.24511	-2.80	0.007	-385.348	4	-63.98412
TIME_V1SCAN	.0677444	.0607926	1.11	0.270	053986	2	.189475
w1BMI	-3.142084	5.78298	-0.54	0.589	-14.7218	8	8.437709
ICV_volM2	.0015023	.000381	3.94	0.000	.000739	4	.0022653
cons	2295.383	516.2516	4.45	0.000	1261.64	5	3329.121

31 . 32 . //ANALYSIS C// 33 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

Multiple-impu	ation estimates		Imputatio	ns =	5
Linear regress	sion		Number of	obs =	67
_			Average R	VI =	0.0000
			Largest F	MI =	0.0000
			Complete	DF =	59
DF adjustment	Small sample		DF: m	in =	57.10
•			a	vg =	57.10
			m	ax =	57.10
Model F test:	Equal FMI		F( <b>7</b> ,	<b>57.1</b> ) =	2.32
Within VCE ty	oe: OLS		Prob > F		0.0370
 LnLesion V∼e	Coefficient Std.	err. t	P> t	[05% conf	intervall
	Coefficient 5tu.	err. c		[ 55% COIII .	
LnNEL u1	2 0200 1 103	22/7 2 /6	0 017	EEGZEGG	E 220110

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.9399	1.193347	2.46	0.017	.5503509	5.329448
Sex	.4929658	1.094592	0.45	0.654	-1.698836	2.684768
w1Age	0180887	.0579877	-0.31	0.756	1342029	.0980255
Race	0	(omitted)				
PovStat	0676591	.9702312	-0.07	0.945	-2.010442	1.875124
TIME_V1SCAN	0008393	.000735	-1.14	0.258	0023111	.0006325
w1BMI	.114822	.0699211	1.64	0.106	0251875	.2548315
ICV_volM2	5.72e-06	4.61e-06	1.24	0.219	-3.50e-06	.0000149
_cons	-8.217721	6.241919	-1.32	0.193	-20.71649	4.281046

35 . save, replace

file finaldata\_imputed\_final.dta saved

36 . 37 .

38 .

39 . 40 .

42 .

43 . \*\*Model 1\*\*

44 .

45 . use HANDLS\_paper51\_NFLBRAINSCANFINALIZED,clear

46 .

47 .

48 . //ANALYSIS B//

Source	SS	df	MS	Number - F(6, 89			96
Model Residual	6697729.79 9105486.1	6 89	1116288. 102308.83	3 Prob > 3 R-squar	F ed	= 0.00 = 0.42	00 38
Total	15803215.9	95	166349.64	— Adj R-s ∤1 Root MS	•	= 0.38 = 319.	_
Left_Hippo~s	Coefficient	Std. err.	t	P> t		Be	ta
LnNFLw1	-110.6991	83.62192	-1.32	0.189		13582	12
Sex	-80.57232	92.62782	-0.87	0.387		09823	15
w1Age	-3.120432	4.72964	-0.66	0.511		06649	01
Race	0	(omitted)					
PovStat	-93.39347	81.673	-1.14	0.256		09967	36
TIME V1SCAN	.0315047	.055119	0.57	0.569		.04948	04
ICV volM2	.0019464	.0003206	6.07	0.000		.69659	27
_cons	1516.627	448.738	3.38	0.001			

50 . reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN ICV\_volM2 if sample\_final2==1 & Race==1,beta note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	96
				- F(6, 89)	=	14.43
Model	9177736.02	6	1529622.6	<b>7</b> Prob > F	=	0.0000
Residual	9437133.54	89	106035.20	<b>8</b> R-squared	=	0.4930
				<ul> <li>Adj R-squared</li> </ul>	=	0.4589
Total	18614869.6	95	195945.99	5 Root MSE	=	325.63
Right_Hipp~s	Coefficient	Std. err.	t	P> t		Beta
LnNFLw1	-118.779	85.13118	-1.40	0.166		1342784
Sex	-217.8354	94.29961	-2.31	0.023		2447012
w1Age	.1076977	4.815003	0.02	0.982		0021144
Race	0	(omitted)				
PovStat	-63.14471	83.14708	-0.76	0.450		0620931
TIME_V1SCAN	.0787172	.0561138	1.40	0.164		1139121
ICV_volM2	.0025709	.0003263	7.88	0.000		.847794
_cons	891.1715	456.837	1.95	0.054		•

51 . 52 . //ANALYSIS C// 53 . reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN ICV\_volM2 if sample\_final2==1 & Race==1,beta note: Race omitted because of collinearity.

SS	df	MS	Number of obs	=	96
			- F(6, 89)	=	2.31
252.302212	6	42.0503686	6 Prob > F	=	0.0403
1618.45205	89	18.184854	5 R-squared	=	0.1349
			<ul> <li>Adj R-squared</li> </ul>	=	0.0765
1870.75426	95	19.692150	2 Root MSE	=	4.2644
Coefficient	Std. err.	t	P> t		Beta
3.223887	1.114855	2.89	0.005	.:	3635531
1040416	1.234923	-0.08	0.933	6	2116583
0242348	.063056	-0.38	0.702	6	9474621
0	(omitted)				
2.241165	1.088872	2.06	0.042	.:	2198375
0010892	.0007349	-1.48	0.142		.157232
1.88e-06	4.27e-06	0.44	0.661	. 6	<b>2618132</b>
-3.457764	5.982617	-0.58	0.565		
	252.302212 1618.45205 1870.75426 Coefficient 3.223887 1040416 0242348 0 2.241165 0010892 1.88e-06	252.302212 6 1618.45205 89  1870.75426 95  Coefficient Std. err.  3.223887 1.1148551040416 1.2349230242348 .063056 0 (omitted) 2.241165 1.0888720010892 .0007349 1.88e-06 4.27e-06	252.302212 6 42.0503688 1618.45205 89 18.1848549 1870.75426 95 19.6921503 Coefficient Std. err. t 3.223887 1.114855 2.89 1040416 1.234923 -0.08 0242348 .063056 -0.38 0 (omitted) 2.241165 1.088872 2.06 0010892 .0007349 -1.48 1.88e-06 4.27e-06 0.44	F(6, 89)	F(6, 89) =  252.302212

54 .

55 .

56 . \*\*Model 2\*\*

57 .

58 . use finaldata\_imputed\_final,clear

59 .

60 .

61 .

62 . //ANALYSIS B//

63 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

					ons of obs RVI FMI	= = =	5 96 0.0000 0.0000
DF adjustment:	: Small samp		Complete DF:	e DF min avg max	= = =	88 86.07 86.07 86.07	
Model F test: Within VCE typ	Equal Foe: 0	MI DLS		F( <b>7</b> , Prob > F	86.1)	=	10.00
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw1 Sex w1Age Race	-103.3641 -65.76058 -2.40705	82.78595 91.97635 4.694167 (omitted)	-1.25 -0.71 -0.51	0.215 0.477 0.609	-267.935 -248.601 -11.7386	.5	61.20711 117.0804 6.924544
PovStat TIME_V1SCAN w1BMI ICV_vo1M2 cons	-93.35708 .0443127 8.998849 .0019486 1153.817	80.7521 .0549901 5.159918 .0003169 490.0292	-1.16 0.81 1.74 6.15 2.35	0.251 0.423 0.085 0.000 0.021	-253.885 065002 -1.25861 .001318 179.681	.7 .7 .5	67.17103 .1536282 19.25632 .0025786 2127.952

64 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1

Multiple-imput	Nultiple-imputation estimates				Imputations		
Linear regress	sion			Number	of obs	=	96
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	88
DF adjustment:	: Small samp	le		DF:	min	=	86.07
					avg	=	86.07
					max	=	86.07
Model F test:	Equal F	MI		F( <b>7</b> ,	86.1)	=	13.76
Within VCE typ	oe: 0	LS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
LnNFLw1	-108.9208	83.19112	-1.31	0.194	-274.297	75	56.45589
Sex	-197.9284	92.42651	-2.14	0.035	-381.664	42	-14.19259
w1Age	1.066484	4.717142	0.23	0.822	-8.31078	31	10.44375
Race	0	(omitted)					
PovStat	-63.0958	81.14732	-0.78	0.439	-224.409	96	98.21798
TIME_V1SCAN	.0959312	.0552592	1.74	0.086	013919	93	.2057817
w1BMI	12.09447	5.185172	2.33	0.022	1.78686	<b>32</b>	22.40214
ICV_volM2	.0025739	.0003185	8.08	0.000	.00194	98	.0032071
_cons	403.5543	492.4275	0.82	0.415	-575.348	85	1382.457

<sup>65 .</sup> 

Race PovStat

w1BMI

\_cons

TIME\_V1SCAN

ICV\_volM2

67 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

4.413531

.000451

.1816953

.0000104

7.994336

Multiple-imput		Imputations =			5		
Linear regress	sion			Number of obs		=	96
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
		Complet	e DF	=	88		
DF adjustment:	DF:	min	=	86.07			
					avg	=	86.07
					max	=	86.07
Model F test:	Equal F	MI		F( <b>7</b> ,	86.1	) =	2.02
Within VCE typ	oe: <b>0</b>	LS		Prob >	F	=	0.0613
<del></del> ,							
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1 Sex w1Age	3.258852 0334366 0208342	1.120222 1.244582 .0635193	2.91 -0.03 -0.33	0.005 0.979 0.744	1.031 -2.507 1471	7557	5.485754 2.440684 .1054366

2.241338 1.092701 2.05 0.043 .0691453

-.0010282 .0007441 -1.38 0.171 -.0025074

0.44 0.661

-0.78 0.436

0.61 0.541 -.0959034

-6.64e-06

-18.36877

0 (omitted)

.042896 .0698217

1.89e-06 4.29e-06

-5.187217 6.630852

<sup>66 . //</sup>ANALYSIS C//

69 . save, replace

file finaldata\_imputed\_final.dta saved

70 .

71 . 72 .

73 . //INTERACTION BY Race//

Multiple-imputation estimates

74 .

75 .

76 . //ANALYSIS B//

Linear regression

TIME\_V1SCAN

ICV\_volM2

w1BMI

\_cons

77 . mi estimate: reg Left\_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_fi

5

163

0.0000

0.0000

.1103471

11.46658

.0021111

2557.579

Imputations

Number of obs

Average RVI

Largest FMI

				Lui gest	1 1 1 1 1	_	0.0000
				Complete	DF	=	153
DF adjustment:	Small sample	9		DF:	min	=	151.04
•	•				avg	=	151.04
					max	=	151.04
Model F test:	Equal FM1	[		F( 9,	151.0)	=	14.47
Within VCE type:	OLS	5		Prob > F		=	0.0000
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-68.73342	70.0454	-0.98	0.328	-207.	1288	69.66192
Race							
AfrAm	-343.9779	201.1103	-1.71	0.089	-741.	3307	53.37476
Race#c.LnNFLw1							
AfrAm	130.601	101.6276	1.29	0.201	-70.1	9421	331.3963
Sex	7.732182	65.36653	0.12	0.906	-121.	4187	136.883
w1Age	-6.750437	3.199107	-2.11	0.036	-13.0	7122	4296572
Race	0	(omitted)					
PovStat	-154.5487	56.86605	-2.72	0.007	-266.	9044	-42.1931

78 . mi estimate: reg Right\_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_f

-.0493372

-3.267191

.0011588

1175.271

0.75 0.451

1.10 0.273

5.34 0.000

0.000

6.78

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	163
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
	Complete DF	=	153
DF adjustment: Small sample	DF: min	=	151.04
	avg	=	151.04
	max	=	151.04
Model F test: <b>Equal FMI</b>	F( 9, <b>151.0</b> )	=	17.67
Within VCE type: OLS	Prob > F	=	0.0000

.0404101

3.728568

349.8105

.000241

.030505

4.099695

.0016349

1866.425

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-57.60923	71.70715	-0.80	0.423	-199.2879	84.06939
Race AfrAm	-351.6203	205.8814	-1.71	0.090	-758.3998	55.15916
Race#c.LnNFLw1	424 0742	404 0206	4 27	0 207	72 50450	227 5220
AfrAm	131.9743	104.0386	1.27	0.207	-73.58459	337.5332
Sex	-96.11667	66.91728	-1.44	0.153	-228.3315	36.09815
w1Age	-5.261155	3.275003	-1.61	0.110	-11.73189	1.209578
Race	0	(omitted)				
PovStat	-143.8443	58.21513	-2.47	0.015	-258.8654	-28.8231
TIME_V1SCAN	.0702371	.0413688	1.70	0.092	0114992	.1519734
w1BMI	4.542201	3.817024	1.19	0.236	-2.999456	12.08386
ICV_volM2	.002138	.0002467	8.67	0.000	.0016506	.0026255
_cons	1430.48	358.1094	3.99	0.000	722.9293	2138.031

<sup>79</sup> 

<sup>81 .</sup> mi estimate: reg LnLesion\_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_fin

Multiple-imputat		S		Imputat:		=	5 163
				Average		=	0.0000
				Largest		=	0.0000
				Complete		=	153
DF adjustment:	Small sample	e		DF:	min	=	151.04
3	•				avg	=	151.04
					max	=	151.04
Model F test:	Equal FM	I		F( 9,	151.0)	=	2.70
Within VCE type:	OL:	S		Prob >	F	=	0.0061
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.942815	.9103623	3.23	0.002	1.14	4126	4.741505
Race							
AfrAm	2.016693	2.61378	0.77	0.442	-3.:	1476	7.180985
711.7		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• • • • • • • • • • • • • • • • • • • •	••••		•	
Race#c.LnNFLw1							
AfrAm	1995138	1.320828	-0.15	0.880	-2.80	9199	2.410171
Sex	.4055111	.8495522	0.48	0.634	-1.2	7303	2.084052
w1Age	0029972	.041578	-0.07	0.943	085	1468	.0791524
Race	0	(omitted)					
PovStat	1.258428	.7390736	1.70	0.091	20	<b>9183</b>	2.718686
TIME_V1SCAN	0009928	.0005252	-1.89	0.061	0020	<b>0305</b>	.0000449
w1BMI	.071419	.0484593	1.47	0.143	024	3266	.1671645
ICV_volM2	2.29e-06	3.13e-06	0.73	0.465	-3.89	e-06	8.48e-06
_cons	-6.252933	4.546399	-1.38	0.171	-15.2	3568	2.729819

<sup>80 . //</sup>ANALYSIS C//

Multiple-imputation estimates In	mputations	=	5
Linear regression No.	umber of obs	=	67
Av	verage RVI	=	0.0164
La	argest FMI	=	0.1253
Co	omplete DF	=	57
DF adjustment: Small sample DI	F: min	=	41.97
	avg	=	53.12
	max	=	55.09
Model F test: <b>Equal FMI</b> F	( 9, 55.0)	=	6.00
Within VCE type: OLS Pr	rob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	27.57398	100.9642	0.27	0.786	-174.7721	229.9201
Sex	89.7543	88.69411	1.01	0.316	-88.04906	267.5577
w1Age	-7.858919	4.943509	-1.59	0.118	-17.76709	2.049252
Race	0	(omitted)				
PovStat	-219.2906	77.69705	-2.82	0.007	-374.9931	-63.58816
TIME V1SCAN	.0253018	.0596667	0.42	0.673	0942781	.1448818
w1BMI	-2.028054	5.647142	-0.36	0.721	-13.34489	9.288785
w1dxDiabetes	-71.87158	62.14995	-1.16	0.254	-197.2977	53.55455
w1Glucose	4.414071	1.713515	2.58	0.013	.9748508	7.853291
ICV_volM2	.0010397	.000379	2.74	0.008	.0002798	.0017996
_cons	2168.669	508.8516	4.26	0.000	1148.9	3188.439
	1					

98 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_vol

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	67
		Average RVI	=	0.0026
		Largest FMI	=	0.0204
		Complete DF	=	57
DF adjustment:	Small sample	DF: min	=	53.83
		avg	=	54.86
		max	=	55.09
Model F test:	Equal FMI	F( 9, 55.1)	=	8.25
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw1	54.60756	93.74221	0.58	0.563	-133.2546	242.4697
Sex	4.277919	82.03501	0.05	0.959	-160.1292	168.6851
w1Age	-8.176434	4.584903	-1.78	0.080	-17.36485	1.011978
Race	0	(omitted)				
PovStat	-230.5519	72.22949	-3.19	0.002	-375.2975	-85.80626
TIME V1SCAN	.0640296	.0553883	1.16	0.253	0469683	.1750275
w1BMI	-4.51549	5.249891	-0.86	0.393	-15.03628	6.005299
w1dxDiabetes	-36.65939	54.83794	-0.67	0.507	-146.6109	73.29211
w1Glucose	5.584811	1.563191	3.57	0.001	2.451745	8.717876
ICV_volM2	.0013837	.0003499	3.95	0.000	.0006824	.0020849
_cons	1953.098	472.6847	4.13	0.000	1005.844	2900.353

100 . //ANALYSIS C//

101 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_volM2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	67
-	Average RVI	=	0.0022
	Largest FMI	=	0.0211
	Complete DF	=	57
DF adjustment: Small sample	DF: min	=	53.77
	avg	=	54.89
	max	=	55.10
Model F test: <b>Equal FMI</b>	F( <b>9, 55.1</b> )	=	1.75
Within VCE type: OLS	Prob > F	=	0.0988

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.89967	1.284212	2.26	0.028	.3260503	5.473289
Sex	.5167441	1.122068	0.46	0.647	-1.731851	2.765339
w1Age	0172117	.0628062	-0.27	0.785	1430796	.1086561
Race	0	(omitted)				
PovStat	0608365	.9893367	-0.06	0.951	-2.043434	1.921761
TIME_V1SCAN	0008425	.0007586	-1.11	0.272	0023628	.0006778
w1BMI	.1157294	.0718939	1.61	0.113	0283447	.2598035
w1dxDiabetes	0066401	.7513362	-0.01	0.993	-1.513124	1.499844
w1Glucose	0040859	.0214158	-0.19	0.849	0470096	.0388378
ICV_volM2	5.77e-06	4.79e-06	1.21	0.233	-3.82e-06	.0000154
_cons	-7.910819	6.47296	-1.22	0.227	-20.88241	5.060769

102

103 . save, replace

file finaldata\_imputed\_final.dta saved

104 .

105 .

107 . //Whites//

108 .

109 . use finaldata\_imputed\_final,clear

Multiple-imputation estimates

110 . 111 .

112 . //ANALYSIS B//

Linear regression

113 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_volM

Imputations
Number of obs

_				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complete	DF	=	86
DF adjustment:	: Small samp	ole		DF:	min	=	84.07
					avg	=	84.07
				1	max	=	84.07
Model F test:	Equal F	MI		F( <b>9</b> ,	84.1)	) =	7.75
Within VCE typ	oe: C	DLS		Prob > F		=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-123.8929	92.36556	-1.34	0.183	-307.5	698	59.78402
Sex	-77.02312	94.23851	-0.82	0.416	-264.4	1245	110.3783
w1Age	-2.491293	4.800416	-0.52	0.605	-12.03	3733	7.054749
Race	0	(omitted)					
PovStat	-104.7637	82.39317	-1.27	0.207	-268.6	6996	59.08227
TIME_V1SCAN	.0558711	.0570041	0.98	0.330	0574	1865	.1692286
w1BMI	7.692351	5.425955	1.42	0.160	-3.09	763	18.48233
w1dxDiabetes	43.92692	71.05203	0.62	0.538	-97.36	619	185.22
w1Glucose	.0784974	1.551457	0.05	0.960	-3.006	708	3.163703
ICV_volM2	.0019313	.0003239	5.96	0.000	.0012	2871	.0025755
_cons	1244.756	528.6952	2.35	0.021	193.3	3998	2296.112

114 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_vol

	Multiple-imputation estimates Linear regression				of obs RVI	= 5 = 96 = 0.0000
DF adjustment:	: Small samp	ole		Largest Complete DF:	e DF min	= 0.0000 = 86 = 84.07 = 84.07
Model F test: <b>Equal FMI</b> Within VCE type: <b>OLS</b>				F( <b>9</b> , Prob >	max <b>84.1</b> )	= 84.07 = 10.61 = 0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw1 Sex	-137.7472 -211.5965	92.86167 94.74468	-1.48 -2.23	0.142 0.028	-322.4107 -400.0045	
w1Age Race	1.285309	4.8262 (omitted)	0.27	0.791	-8.312006	
PovStat TIME V1SCAN	-72.97775 .1065101	82.83571 .0573102	-0.88 1.86	0.381 0.067	-237.7037 0074562	
w1BMI w1dxDiabetes	10.83657	5.455099 71.43367	1.99	0.057 0.050 0.779	0113665 -121.9471	21.6845
w1Glucose ICV_volM2	.613148 .0025772	1.55979 .0003257	0.39 7.91	0.695 0.000	-2.488629 .0019295	3.714925
_cons	425.8567	531.5349	0.80	0.425	-631.1464	1482.86

DF adjustment:

Model F test:

Within VCE type:

Small sample

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
                                                                                5
    Linear regression
                                                    Number of obs
                                                                                96
                                                    Average RVI
                                                                           0.0000
                                                    Largest FMI
                                                                           0.0000
                                                                     =
                                                    Complete DF
                                                                                86
    DF adjustment:
                     Small sample
                                                           min
                                                                            84.07
                                                            avg
                                                                            84.07
                                                           max
                                                                     =
                                                                            84.07
    Model F test:
                                                    F( 9, 84.1)
                                                                            1.73
                        Equal FMI
    Within VCE type:
                              OLS
                                                    Prob > F
                                                                            0.0938
                  Coefficient Std. err.
                                                              [95% conf. interval]
    LnLesion_V~e
                                                    P>|t|
                                              t
         LnNFLw1
                      3.87942
                               1.244273
                                            3.12
                                                    0.002
                                                              1.405076
                                                                          6.353763
            Sex
                     .2517441
                               1.269504
                                            0.20
                                                    0.843
                                                             -2.272773
                                                                          2.776262
           w1Age
                    -.0269683
                               .0646673
                                            -0.42
                                                    0.678
                                                             -.1555648
                                                                          .1016281
                          0 (omitted)
           Race
                                            2.19
        PovStat
                    2.428172
                              1.109933
                                                    0.031
                                                             .2209747
                                                                          4.635369
    TIME_V1SCAN
                    -.0012321
                               .0007679
                                            -1.60
                                                    0.112
                                                            -.0027591
                                                                          .000295
                    .0675411
                                            0.92
          w1BMI
                                .073094
                                                   0.358
                                                            -.0778127
                                                                          .2128948
    w1dxDiabetes
                               .9571545
                                            -0.27
                                                                          1.646107
                    -.2572773
                                                    0.789
                                                            -2.160662
                     -.015323
      w1Glucose
                               .0208999
                                            -0.73
                                                    0.466
                                                            -.0568843
                                                                          .0262384
       ICV volM2
                    1.70e-06
                               4.36e-06
                                            0.39
                                                    0.697
                                                             -6.98e-06
                                                                          .0000104
          _cons
                    -5.222371 7.122147
                                            -0.73
                                                    0.465
                                                             -19.38538
                                                                          8.940632
118 .
119 . save, replace
   file finaldata_imputed_final.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
                                                                               163
                                                    Average RVI
                                                                           0.0049
                                                    Largest FMI
                                                                           0.0527
```

Complete DF

Prob > F

min

avg

max

F( 11, 149.0)

151

129.71

146.89 149.03

12.07

0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw1	-110.1863	75.05246	-1.47	0.144	-258.4913	38.11869
Race AfrAm	-429.5323	207.4129	-2.07	0.040	-839.3823	-19.68219
Race#c.LnNFLw1						
AfrAm	176.9895	105.2934	1.68	0.095	-31.07138	385.0503
Sex	-8.617715	66.02812	-0.13	0.896	-139.0899	121.8545
w1Age	-6.560636	3.265468	-2.01	0.046	-13.01336	1079129
Race	0	(omitted)				
PovStat	-163.1121	57.01902	-2.86	0.005	-275.7823	-50.44194
TIME_V1SCAN	.0397647	.0409715	0.97	0.333	0411958	.1207252
w1BMI	2.765434	3.812394	0.73	0.469	-4.767899	10.29877
w1dxDiabetes	7.322901	47.33238	0.15	0.877	-86.32051	100.9663
w1Glucose	1.318741	1.146854	1.15	0.252	9481399	3.585622
ICV_volM2	.0016472	.0002407	6.84	0.000	.0011715	.0021229
_cons	1843.712	359.8379	5.12	0.000	1132.651	2554.772

128 . mi estimate: reg Right\_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose

Multiple-imputa		;		Imputati		=	5
Linear regression	on			Number o		=	163
				Average		=	0.0004
				Largest		=	0.0049
				Complete	P DF	=	151
DF adjustment:	Small sample	•		DF:	min	=	148.23
					avg	=	148.93
					max	=	149.04
Model F test:	Equal FMI			F( <b>11</b> ,	149.0)	=	15.31
Within VCE type	: OLS	<b>;</b>		Prob > F	=	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-117.0335	76.08086	-1.54	0.126	-26	7.37	33.3031
Race							
AfrAm	-478.3406	210.2951	-2.27	0.024	-893.	8856	-62.79561
Race#c.LnNFLw1							
AfrAm	200.25	106.7596	1.88	0.063	-10.7	0798	411.2079
Sex	-120.716	66.94753	-1.80	0.073	-253.	0049	11.57301
w1Age	-5.101126	3.307698	-1.54	0.125	-11.6	3718	1.434928
Race	0	(omitted)					
PovStat	-156.8257	57.81109	-2.71	0.007	-271.	0609	-42.59045
TIME_V1SCAN	.0847632	.0415279	2.04	0.043	.002	7037	.1668227
w1BMI	2.540065	3.865264	0.66	0.512	-5.09	7733	10.17786
w1dxDiabetes	19.6694	46.86877	0.42	0.675	-72.9	4784	112.2866
w1Glucose	1.794413	1.151876	1.56	0.121	481	7437	4.07057
ICV_volM2	.0021553	.0002441	8.83	0.000	.001	6729	.0026376
_cons	1412.663	364.4111	3.88	0.000	692.	5809	2132.744

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

Hartrare Impacac	.ion cocimaces			Impacae.			_
Linear regression	n			Number o	of obs	=	163
				Average	RVI	=	0.0003
				Largest	FMI	=	0.0029
				Complete	e DF	=	151
DF adjustment:	Small sample	1		DF:	min	=	148.60
-					avg	=	148.98
					max	=	149.04
Model F test:	Equal FMI			F( <b>11</b> ,	149.0)	=	2.34
Within VCE type:	OLS	;		Prob > I	=	=	0.0109
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	3.328633	.9787989	3.40	0.001	1.39	4518	5.262749
_							
Race							
AfrAm	2.867036	2.705561	1.06	0.291	-2.47	9178	8.213249
Dana#a LaNEL1							
Race#c.LnNFLw1	CEE0EE1	4 272522	0.40	0.634	2.2	CO1 F	2 05004
AfrAm	6550551	1.373523	-0.48	0.634	-3.3	9912	2.05904
Sex	.5720412	.8613361	0.66	0.508	-1.12	9968	2.27405
w1Age	0033038	.0425512	-0.08	0.938	087	3854	.0807777
Race	0	(omitted)					
PovStat	1.34744	.7437707	1.81	0.072	122	2578	2.817137
TIME_V1SCAN	0010952	.0005343	-2.05	0.042	002	1509	0000394
w1BMI	.0849648	.0497301	1.71	0.090	013	3024	.183232
w1dxDiabetes	1862715	.6024231	-0.31	0.758	-1.37	6694	1.004151
w1Glucose	0110455	.0148125	-0.75		040	3153	.0182244
ICV volM2	2.19e-06	3.14e-06	0.70	0.487	-4.02	e-06	8.39e-06
_cons	-6.232661	4.687831	-1.33	0.186	-15.4	9587	3.030545

<sup>132 .</sup> 

<sup>133 .</sup> save, replace file finaldata\_imputed\_final.dta saved

<sup>134 .</sup> 

<sup>136 . \*\*\*\*\*\*\*\*\*</sup>MODEL 4: MODEL 2+liver/kidney disease\*\*\*\*\*

<sup>137 .</sup> 

<sup>138 . //</sup>AFRICAN-AMERICAN//

<sup>139 .</sup> 

<sup>140 .</sup> use finaldata\_imputed\_final,clear

<sup>141 .</sup> 

<sup>142 .</sup> 

<sup>143 .</sup> 

144 . //ANALYSIS B//

145 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =?

	Multiple-imputation estimates Linear regression			Imputat Number Average Largest	of obs	= = = =	5 67 0.1519 0.6805
DE adjustment	: Small samp	10		Complet		=	54 6.94
DF adjustment:	. Siliatt Saliip	ore.		Dr.		=	43.83
					avg max	=	51.31
Model F test:	Equal F	мт		F( <b>11</b> ,			3.27
Within VCE typ	•	LS		Prob >	,	_	0.0020
Within ver ey				1100 /			0.0020
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	31.31216	108.9617	0.29	0.775	-187.	977	250.6013
Sex	88.75671	139.1344	0.64	0.529	-196.4	954	374.0088
w1Age	-9.364348	5.722181	-1.64	0.108	-20.85	044	2.121748
Race	0	(omitted)					
PovStat	-211.0051	85.65077	-2.46	0.017	-383.0	037	-39.00648
TIME_V1SCAN	.0311153	.0673775	0.46	0.646	1045	944	.166825
w1BMI	.3359013	6.752444	0.05	0.961	-13.22	146	13.89327
w1Creatinine	75.86168	255.0798	0.30	0.775	-528.3	132	680.0366
w1USpecGrav	-4044.527	5416.196	-0.75	0.459	-1492	1.7	6832.649
w1BUN	2.856216	12.36908	0.23	0.818	-22.02		27.74094
w1ALP	2069154	1.894391	-0.11	0.913	-4.018	774	3.604943
w1UricAcid	-12.79206	30.35379	-0.42	0.675	-73.73		48.14608
ICV_volM2	.001195	.0004309	2.77	0.008	.0003		.0020623
_cons	6441.024	5495.116	1.17	0.247	-4591.	112	17473.16

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	=	67
	Average RVI	=	0.0691
	Largest FMI	=	0.4626
	Complete DF	=	54
DF adjustment: Small sample	DF: min	=	13.43
	avg	=	46.95
	max	=	51.92
Model F test: <b>Equal FMI</b>	F( <b>11</b> , <b>51.4</b> )	=	3.95
Within VCE type: OLS	Prob > F	=	0.0004

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	22.5495	106.2862	0.21	0.833	-191.0599	236.1589
Sex	-13.83137	128.3357	-0.11	0.915	-272.9352	245.2725
w1Age	-9.417839	5.621484	-1.68	0.100	-20.69856	1.862885
Race	0	(omitted)				
PovStat	-226.2517	83.78526	-2.70	0.009	-394.399	-58.10436
TIME V1SCAN	.0759641	.0652912	1.16	0.250	0552487	.2071769
w1BMI	-5.512912	6.623236	-0.83	0.409	-18.80538	7.779555
w1Creatinine	77.0417	203.6084	0.38	0.711	-361.392	515.4754
w1USpecGrav	495.1447	5334.673	0.09	0.926	-10216.26	11206.55
w1BUN	12.61985	12.0222	1.05	0.299	-11.52783	36.76753
w1ALP	8189551	1.843442	-0.44	0.659	-4.522531	2.88462
w1UricAcid	-8.057853	29.862	-0.27	0.788	-67.99459	51.87889
ICV volM2	.0015899	.0004174	3.81	0.000	.0007513	.0024285
_cons	1726.251	5420.034	0.32	0.751	-9154.361	12606.86

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 Number of obs 67 = 0.0174 Average RVI Largest FMI 0.0609 Complete DF 54 DF adjustment: Small sample 47.33 min 50.93 avg 51.83 max Model F test: Equal FMI F( **11**, 52.0) 1.77 Within VCE type: OLS Prob > F 0.0844 LnLesion\_V~e Coefficient Std. err. P>|t| [95% conf. interval] t LnNFLw1 2.761894 1.257469 2.20 0.033 .2368788 5.286909 .0500653 1.454933 2.96994 0.03 0.973 -2.86981 Sex w1Age -.013687 .0673831 -0.20 0.840 -.1489327 .1215587 Race 0 (omitted) .1641041 0.16 PovStat 1.00657 0.871 -1.8567 2.184908 -.0010469 .0007762 -1.35 .0005122 TIME\_V1SCAN 0.183 -.002606 0.152 -.0439907 .276014 w1BMI .1160117 .0796852 1.46 w1Creatinine 1.817668 1.921414 0.95 -2.047014 5.68235 0.349 w1USpecGrav -92.65687 63.32568 -1.46 0.149 -219.7528 34.43912 w1BUN .0930521 .1418008 0.66 0.515 -.1915148 .3776191 w1ALP -.0160679 .0217053 -0.74 0.462 -.0596284 .0274926 w1UricAcid -.3029564 .356058 -0.85 0.399 -1.017532 .4116192 ICV volM2 6.94e-06 4.94e-06 1.40 0.166 -2.98e-06 .0000169 85.55495 -43.92282 \_cons 64.51275 1.33 0.191 215.0327 150 . 151 . save, replace file finaldata\_imputed\_final.dta saved 152 . 153 . 154 . 155 . //WHITES// 157 . use finaldata\_imputed\_final,clear 158 .

161 . //ANALYSIS B//
162 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imput	ltiple-imputation estimates			Imputatio			5	
Linear regress	sion			Number o	of obs	=	96	
				Average	RVI	=	0.0246	
				Largest	FMI	=	0.1582	
				Complete	DF	=	83	
DF adjustment:	: Small samp	le		DF:	min	=	50.59	
					avg	=	74.96	
					max	=	80.68	
Model F test:	Equal F	MI		F( <b>11</b> ,	80.8)	=	6.35	
Within VCE typ	oe: C	DLS		Prob > F	:	=	0.0000	
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% (	conf.	interval]	
LnNFLw1	-115.2075	86.79175	-1.33	0.188	-287.96	<b>275</b>	57.49254	
Sex	-61.66019	115.6685	-0.53	0.595	-291.84	438	168.5234	
w1Age	-1.91687	4.889486	-0.39	0.696	-11.64	599	7.812251	
Race	0	(omitted)						
PovStat	-84.25708	83.48796	-1.01	0.316	-250.38	899	81.87571	
TIME_V1SCAN	.0500404	.0576882	0.87	0.388	0647	566	.1648374	
w1BMI	8.75071	5.912594	1.48	0.143	-3.0147	739	20.51616	
w1Creatinine	-151.9538	219.3072	-0.69	0.492	-592.33	179	288.4102	
w1USpecGrav	-4253.308	7204.487	-0.59	0.557	-18650	.02	10143.41	
w1BUN	13.53303	9.916906	1.36	0.177	-6.2269	934	33.29299	
w1ALP	-1.74819	1.600526	-1.09	0.278	-4.932	299	1.43661	
w1UricAcid	1189352	29.60479	-0.00	0.997	-59.036	507	58.7982	
ICV_volM2	.0020432	.0003375	6.05	0.000	.00137	716	.0027148	
_cons	5406.102	7165.996	0.75	0.453	-8911.9	985	19724.19	

163 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > ==1

Multiple-imput Linear regress		Imputati Number o Average Largest Complete	of obs = RVI = FMI =	5 96 0.0141 0.0992 83		
DF adjustment:	: Small samp	ole		DF:	min =	63.47
					avg = max =	77.00 80.99
Model F test: <b>Equal FMI</b>				F( <b>11</b> ,		8.58
Within VCE type: OLS				Prob > F	· =	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw1	-128.7651	87.44133	-1.47	0.145	-302.7462	45.2159
Sex	-172.8187	116.5285	-1.48	0.142	-404.6953	59.0578
w1Age	1.188878	4.928726	0.24	0.810	-8.617853	10.99561
Race	0	(omitted)				
PovStat	-51.42835	84.29024	-0.61	0.543	-219.1587	116.302
TIME_V1SCAN	.098482	.0581	1.70	0.094	0171244	.2140884
w1BMI	12.93121	5.961185	2.17	0.033	1.069606	24.79281
w1Creatinine	-85.35259	211.4704	-0.40	0.688	-507.0608	336.3556
w1USpecGrav	-5287.928	7266.107	-0.73	0.469	-19805.97	9230.113
w1BUN	14.38847	9.936938	1.45	0.152	-5.399843	34.17679
w1ALP	5440909	1.612437	-0.34	0.737	-3.752373	2.664191
w1UricAcid	-14.14524	29.75184	-0.48	0.636	-73.34443	45.05394
ICV_volM2	.0026285	.0003403	7.72	0.000	.0019513	.0033058
_cons	5654.709	7228.582	0.78	0.437	-8787.002	20096.42

165 . //ANALYSIS C//

166 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w > 1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	96
	Average RVI	=	0.0051
	Largest FMI	=	0.0463
	Complete DF	=	83
DF adjustment: Small sample	DF: min	=	74.72
	avg	=	80.13
	max	=	81.06
Model F test: <b>Equal FMI</b>	F( <b>11</b> , <b>81.0</b> )	=	1.62
Within VCE type: OLS	Prob > F	=	0.1093

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	3.332854	1.166845	2.86	0.005	1.011222	5.654485
Sex	9915705	1.552591	-0.64	0.525	-4.080811	2.09767
w1Age	03091	.0657649	-0.47	0.640	1617609	.0999409
Race	0	(omitted)				
PovStat	1.855333	1.121758	1.65	0.102	3766175	4.087284
TIME_V1SCAN	0011752	.0007755	-1.52	0.134	0027183	.0003678
w1BMI	017829	.0794107	-0.22	0.823	1758296	.1401715
w1Creatinine	1321446	2.794296	-0.05	0.962	-5.699013	5.434724
w1USpecGrav	147.9057	93.23416	1.59	0.117	-37.66983	333.4811
w1BUN	0090264	.1310413	-0.07	0.945	2697975	.2517446
w1ALP	0054664	.0215098	-0.25	0.800	0482639	.0373311
w1UricAcid	.3766383	.3969915	0.95	0.346	4132685	1.166545
ICV_volM2	1.97e-06	4.53e-06	0.43	0.665	-7.05e-06	.000011
_cons	-153.1878	92.84882	-1.65	0.103	-337.9999	31.62429

167 .

168 . save, replace

file finaldata\_imputed\_final.dta saved

169 .

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	=	163
		Average RVI	=	0.0472
		Largest FMI	=	0.4175
		Complete DF	=	148
DF adjustment:	Small sample	DF: min	=	21.72
		avg	=	131.77
		max	=	145.86
Model F test:	Equal FMI	F( <b>13, 144.7</b> )	=	9.50
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw1	-78.13312	72.88165	-1.07	0.285	-222.1907	65.92443
Race AfrAm	-327.7662	210.8175	-1.55	0.122	-744.5455	89.01303
Race#c.LnNFLw1						
AfrAm	132.0209	105.1994	1.25	0.212	-75.92422	339.966
Sex	9.440869	84.52827	0.11	0.911	-157.9098	176.7916
w1Age	-6.979155	3.400895	-2.05	0.042	-13.70066	2576517
Race	0	(omitted)				
PovStat	-148.1104	58.1629	-2.55	0.012	-263.0627	-33.15806
TIME_V1SCAN	.0270208	.0412054	0.66	0.513	0544173	.1084588
w1BMI	4.183868	4.237365	0.99	0.325	-4.190799	12.55854
w1Creatinine	-14.83592	153.8345	-0.10	0.924	-334.1038	304.432
w1USpecGrav	-2690.205	4331.346	-0.62	0.536	-11259.02	5878.61
w1BUN	8.330645	7.458977	1.12	0.266	-6.429811	23.0911
w1ALP	8702712	1.172184	-0.74	0.459	-3.186949	1.446407
w1UricAcid	-7.802457	20.88108	-0.37	0.709	-49.07221	33.4673
ICV_volM2	.0016621	.0002505	6.64	0.000	.001167	.0021571
_cons	4594.718	4346.649	1.06	0.292	-4004.54	13193.97

175 . mi estimate: reg Right\_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGr > 1

Multiple-imputat	tion estimates	5		Imputati	.ons	=	5
Linear regression				Number o		=	163
J				Average	RVI	=	0.0143
				Largest	FMI	=	0.1450
				Complete	DF	=	148
DF adjustment:	Small sample	<u> </u>		DF:	min	=	79.92
					avg	=	139.60
					max	=	145.99
Model F test:	Equal FM	[		F( 13,	145.9)	=	12.04
Within VCE type:	: OLS	5		Prob > F		=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-77.55402	74.26887	-1.04	0.298	-224.	3382	69.23019
	77755.02	,		0.250			0212022
Race							
AfrAm	-344.0239	214.0884	-1.61	0.110	-767.	1621	79.1143
Race#c.LnNFLw1							
AfrAm	140.221	107.1399	1.31	0.193	-71.	5322	351.9741
Sex	-86.65018	84.408	-1.03	0.306	-253	. 504	80.20367
w1Age	-5.505767	3.475724	-1.58	0.115	-12	. 375	1.363469
Race	0	(omitted)					
PovStat	-139.7752	59.48671	-2.35	0.020	-257.	3427	-22.20761
TIME_V1SCAN	.0648142	.0421259	1.54	0.126	018	4416	.14807
w1BMI	4.487506	4.331923	1.04	0.302	-4.07	3894	13.04891
w1Creatinine	13.98497	133.8706	0.10	0.917	-25	2.43	280.3999
w1USpecGrav	-674.1969	4407.885	-0.15	0.879	-9391	. 375	8042.981
w1BUN	10.47654	7.478566	1.40	0.163	-4.3	0594	25.25903
w1ALP	2996477	1.198927	-0.25	0.803	-2.66	9161	2.069866
w1UricAcid	-15.68806	21.34347	-0.74	0.464	-57.8	7073	26.49462
ICV_volM2	.0021416	.0002563	8.36	0.000	.001	6351	.0026481
_cons	2101.2	4421.181	0.48	0.635	-6642	.153	10844.55

177 . //ANALYSIS C//

Multiple-imputation estimates

178 . mi estimate: reg LnLesion\_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav

Imputations

Murcipic impucat	TOIL COLLINGUES			Impucac.	LUIIS	_	,
Linear regression	n			Number o	of obs	=	163
				Average	RVI	=	0.0021
				Largest	FMI	=	0.0209
				Complete	e DF	=	148
DF adjustment:	Small sample	<b>!</b>		DF:	min	=	141.02
					avg	=	145.52
					max	=	145.99
Model F test:	Equal FMI	:		F( <b>13</b> ,	,	=	1.93
Within VCE type:	OLS	;		Prob > 1	=	=	0.0311
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.846291	.9455554	3.01	0.003	.977	5454	4.715037
Race							
AfrAm	1.958821	2.721048	0.72	0.473	-3.41	8916	7.336558
Race#c.LnNFLw1							
AfrAm	1204022	1.363091	-0.09	0.930	-2.81	4342	2.573538
Sex	0787653	1.06863	-0.07	0.941	-2.19	0788	2.033257
w1Age	0077999	.0443152	-0.18	0.861	095	3825	.0797827
Race	0	(omitted)					
PovStat	1.213717	.7577952	1.60	0.111	283		2.711383
TIME_V1SCAN	0010234	.0005371	-1.91	0.059	002		.0000381
w1BMI	.047329	.0552184	0.86	0.393	06		.1564599
w1Creatinine	.4983881	1.602625	0.31	0.756	-2.66		3.666663
w1USpecGrav	29.81575	55.31305	0.54	0.591	-79.5		139.1369
w1BUN	.0488246	.0948005	0.52	0.607	138	5362	.2361855
w1ALP	0077929	.0152805	-0.51	0.611	037	9927	.0224069
w1UricAcid	.0993798	. 2718459	0.37	0.715	437	8821	.6366417
ICV_volM2	2.72e-06	3.27e-06	0.83	0.407	-3.74	e-06	9.17e-06
				0.513		.058	73.30615

<sup>179 .</sup> 

file finaldata\_imputed\_final.dta saved

181 .

182 .

183 . //ANALYSIS B//

184 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	163
	Average RVI	=	0.0478
	Largest FMI	=	0.4003
	Complete DF	=	149
	DF: min	=	23.29
	avg	=	132.51
DF adjustment: Small sample	max	=	146.95
	F(12, .)	=	•
Within VCE type: OLS	Prob > F	=	•

<sup>180 .</sup> save, replace

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-32.40472	63.09187	-0.51	0.608	-157.0957	92.28622
Sex	16.56706	84.2657	0.20	0.844	-150.2148	183.3489
w1Age	-6.921567	3.409534	-2.03	0.044	-13.65985	1832824
Race	-74.48022	58.24245	-1.28	0.203	-189.6032	40.64276
PovStat	-150.299	58.27167	-2.58	0.011	-265.4604	-35.13749
TIME_V1SCAN	.0237475	.0412189	0.58	0.565	0577132	.1052081
w1BMI	3.707083	4.232274	0.88	0.383	-4.657177	12.07134
w1Creatinine	-29.64916	151.471	-0.20	0.847	-342.7714	283.4731
w1USpecGrav	-3246.446	4317.722	-0.75	0.453	-11787.98	5295.091
w1BUN	8.693811	7.445537	1.17	0.245	-6.035887	23.42351
w1ALP	7784001	1.17191	-0.66	0.508	-3.094395	1.537595
w1UricAcid	-5.152986	20.8226	-0.25	0.805	-46.30508	35.99911
ICV_volM2	.0016125	.0002478	6.51	0.000	.0011228	.0021022
_cons	5203.48	4330.085	1.20	0.232	-3362.542	13769.5

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	=	5 163
	Average RVI	=	0.0140
	Largest FMI	=	0.1291
	Complete DF	=	149
	DF: min	=	87.64
	avg	=	140.65
DF adjustment: <b>Small sample</b>	max	=	146.95
	F( 12, .)	=	•
Within VCE type: OLS	Prob > F	=	

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-28.97278	64.46471	-0.45	0.654	-156.3718	98.42628
Sex	-79.09067	84.28693	-0.94	0.350	-245.6875	87.50621
w1Age	-5.445201	3.4844	-1.56	0.120	-12.33121	1.440812
Race	-75.02136	59.26204	-1.27	0.208	-192.14	42.0973
PovStat	-142.1054	59.61801	-2.38	0.018	-259.9263	-24.2845
TIME V1SCAN	.0613439	.0421461	1.46	0.148	0219472	.1446349
w1BMI	3.982628	4.325233	0.92	0.359	-4.565067	12.53032
w1Creatinine	-1.678794	132.3599	-0.01	0.990	-264.7313	261.3737
w1USpecGrav	-1265.032	4399.772	-0.29	0.774	-9966.28	7436.215
w1BUN	10.85956	7.4797	1.45	0.149	-3.92368	25.6428
w1ALP	2016149	1.199127	-0.17	0.867	-2.571378	2.168148
w1UricAcid	-12.8714	21.29289	-0.60	0.546	-54.95199	29.20919
ICV_volM2	.0020889	.0002537	8.23	0.000	.0015875	.0025902
_cons	2743.68	4410.826	0.62	0.535	-5979.269	11466.63

186 . 187 . //ANALYSIS C//

188 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w

Multiple-impu	tation estimates		Imputati	ions	=	5
Linear regress	sion		Number o	of obs	=	163
			Average	RVI	=	0.0022
			Largest	FMI	=	0.0204
			Complete	e DF	=	149
			DF:	min	=	142.13
				avg	=	146.49
DF adjustment	: Small sample			max	=	146.99
			F( 12,	.)	=	•
Within VCE typ	oe: OLS		Prob > F	=	=	•
LnLesion V~e	Coefficient Std. err.	t	P> t	Г95% с	onf.	intervall

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.804553	.8164754	3.43	0.001	1.191002	4.418104
Sex	0851462	1.062453	-0.08	0.936	-2.18484	2.014548
w1Age	0078514	.0441634	-0.18	0.859	095129	.0794262
Race	1.727926	.7500707	2.30	0.023	.2456086	3.210244
PovStat	1.215721	.754926	1.61	0.109	2761897	2.707632
TIME_V1SCAN	0010204	.0005342	-1.91	0.058	0020762	.0000354
w1BMI	.0477581	.0548161	0.87	0.385	0605717	.1560878
w1Creatinine	.5110439	1.588149	0.32	0.748	-2.628403	3.650491
w1USpecGrav	30.32698	54.82682	0.55	0.581	-78.027	138.681
w1BUN	.0485099	.0944029	0.51	0.608	1380545	.2350744
w1ALP	0078791	.0151996	-0.52	0.605	0379173	.0221591
w1UricAcid	.0969624	.2695579	0.36	0.720	4357474	.6296722
ICV_volM2	2.76e-06	3.21e-06	0.86	0.392	-3.59e-06	9.11e-06
_cons	-38.59463	54.98325	-0.70	0.484	-147.2579	70.0686

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189 .
190 . save, replace
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191 .
192 . *********MODEL 5: MODEL2+OXIDATIVE STRESS******
193 .
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195 . //AFRICAN-AMERICAN//

196

197 . use finaldata\_imputed\_final,clear

198 .

199 .

200 . //ANALYSIS B//

201 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

on estimates	Ιι	nputatio	ons	=	5
1	Ni	umber o	f obs	=	67
	A	/erage	RVI	=	0.0776
	La	argest	MI	=	0.4804
	Co	omplete	DF	=	56
Small sample	D	=: ı	nin	=	12.90
			avg	=	49.78
		ı	nax	=	54.07
Equal FMI	F	( 10,	53.3)	=	4.65
OLS	P	rob > F		=	0.0001
	•	Nu Av Av La CC Small sample DF	Number of Average F Largest F Complete  Small sample DF: T F Complete  Equal FMI F( 10,	Number of obs Average RVI Largest FMI Complete DF  Small sample DF: min avg max Equal FMI F( 10, 53.3)	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI = F( 10, 53.3) =

file finaldata\_imputed\_final.dta saved

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	36.30603	99.74988	0.36	0.717	-163.6875	236.2996
Sex	73.55961	91.77815	0.80	0.426	-110.4665	257.5857
w1Age	-7.960351	4.890602	-1.63	0.110	-17.77264	1.851938
Race	0	(omitted)				
PovStat	-227.3851	81.00615	-2.81	0.007	-389.8727	-64.89755
TIME_V1SCAN	.0478154	.0631374	0.76	0.452	0788249	.1744556
w1BMI	1.405133	5.98963	0.23	0.815	-10.6056	13.41586
w1TotalD	-3.26744	6.598714	-0.50	0.629	-17.53409	10.99921
w1Albumin	236.8032	118.5245	2.00	0.051	8174974	474.4238
w1EosinPct	.9793661	17.98365	0.05	0.957	-35.08199	37.04072
ICV volM2	.001196	.0003796	3.15	0.003	.0004348	.0019571
cons	1265.636	775.2004	1.63	0.108	-288.6195	2819.891

202 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput	tation estimat	es		Imputat:	ions	=	5
Linear regress	sion			Number o	of obs	=	67
				Average	RVI	=	0.0693
				Largest	FMI	=	0.4030
				Complete	e DF	=	56
DF adjustment	: Small samp	le		DF:	min	=	16.48
					avg	=	49.20
					max	=	53.68
Model F test:	Equal F	MI		F( <b>10</b> ,	53.4)	=	5.01
Within VCE typ	oe: O	LS		Prob > 1	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
LnNFLw1	37.86082	99.81636	0.38	0.706	-162.38	27	238.1043
Sex	1.2276	91.8891	0.01	0.989	-183.14	36	185.5988
w1Age	-6.790289	4.920786	-1.38	0.174	-16.677	96	3.096482
Race	0	(omitted)					
PovStat	-238.046	80.4381	-2.96	0.005	-399.41	32	-76.67876
TIME_V1SCAN	.0673943	.0628448	1.07	0.288	05869	77	.1934864
w1BMI	-1.792092	5.999167	-0.30	0.766	-13.830	65	10.24646
w1TotalD	-6.594437	6.184456	-1.07	0.302	-19.67	37	6.484824
w1Albumin	198.2644	117.924	1.68	0.099	-38.196	18	434.725
w1EosinPct	0752789	17.85883	-0.00	0.997	-35.890	98	35.73952
ICV_volM2	.00154	.0003786	4.07	0.000	.00078	<b>27</b>	.0022993
_cons	1417.157	769.7638	1.84	0.071	-126.33	83	2960.653
	l .						

203

204 . //ANALYSIS C//

205 . mi estimate: reg LnLesion\_Volume LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

estimates	Imputations	=	5
Linear regression		=	67
	Average RVI	=	0.0428
	Largest FMI	=	0.3170
	Complete DF	=	56
ll sample	DF: min	=	21.88
	avg	=	50.90
	max	=	54.06
Equal FMI	F( <b>10</b> , <b>53.8</b> )	=	1.61
OLS	Prob > F	=	0.1289
	ll sample Equal FMI	Number of obs Average RVI Largest FMI Complete DF DF: min avg max Equal FMI  Number of obs Average RVI Largest FMI Complete DF F: min avg F( 10, 53.8)	Number of obs =  Average RVI =  Largest FMI =  Complete DF =  Il sample DF: min =  avg =  max =  Equal FMI F( 10, 53.8) =

		Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.992127	1.239615	2.41	0.019	.5065155	5.477739
Sex	.520834	1.136686	0.46	0.649	-1.758174	2.799842
w1Age	0284392	.0599904	-0.47	0.637	1487154	.0918369
Race	0	(omitted)				
PovStat	.0314257	1.000608	0.03	0.975	-1.975121	2.037972
TIME_V1SCAN	0007856	.0007808	-1.01	0.319	0023515	.0007803
w1BMI	.1185421	.0739976	1.60	0.115	0298106	.2668948
w1TotalD	.0366782	.073305	0.50	0.622	1153952	.1887516
w1Albumin	681179	1.477045	-0.46	0.647	-3.643121	2.280762
w1EosinPct	.096941	.2223343	0.44	0.665	3488118	.5426938
ICV volM2	5.55e-06	4.70e-06	1.18	0.243	-3.88e-06	.000015
_cons	-5.87532	9.606006	-0.61	0.543	-25.13412	13.38347

207 . save, replace

file finaldata\_imputed\_final.dta saved

208 .

209 .

210 .

211 . //WHITE//

212 .

213 . use finaldata\_imputed\_final,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	2pu cu c205	=	5 96
	Average RVI	=	0.0094
	Largest FMI	=	0.0547
	Complete DF	=	85
DF adjustment: <b>Small sample</b>	DF: min	=	74.81
	avg	=	81.78
	max	=	83.05
Model F test: <b>Equal FMI</b>	F( <b>10</b> , 83.0)	=	6.90
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-108.5322	87.59078	-1.24	0.219	-282.7624	65.69791
Sex	-74.36698	95.78041	-0.78	0.440	-264.8737	116.1398
w1Age	-2.121924	4.760867	-0.45	0.657	-11.59101	7.347163
Race	0	(omitted)				
PovStat	-99.26752	81.94869	-1.21	0.229	-262.2596	63.72456
TIME_V1SCAN	.0592094	.0574544	1.03	0.306	0550662	.173485
w1BMI	10.37773	5.518464	1.88	0.064	5983849	21.35385
w1TotalD	1.423663	3.529573	0.40	0.688	-5.607903	8.455228
w1Albumin	117.2072	143.4163	0.82	0.416	-168.042	402.4563
w1EosinPct	-8.75352	17.37749	-0.50	0.616	-43.34637	25.83934
ICV_volM2	.0019343	.0003222	6.00	0.000	.0012934	.0025752
_cons	597.1638	849.3409	0.70	0.484	-1092.141	2286.468

219 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput	tation estimat	es		Imputat	ions	=	5
Linear regress	sion			Number	of obs	=	96
				Average	RVI	=	0.0062
				Largest		=	0.0460
				Complet	e DF	=	85
DF adjustment:	: Small samp	le		DF:	min	=	76.55
					avg	=	82.29
					max	=	83.07
Model F test:	Equal F	MI		F( <b>10</b> ,	83.0)	=	9.27
Within VCE typ	pe: C	LS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-100.5367	88.29022	-1.14	0.258	-276.1	428	75.06941
Sex	-204.1276	96.70638	-2.11	0.038	-396.4	709	-11.78438
w1Age	.9263571	4.81123	0.19	0.848	-8.642	909	10.49562
Race	0	(omitted)					
PovStat	-62.66367	82.79079	-0.76	0.451	-227.3	293	102.002
TIME_V1SCAN	.093876	.0580382	1.62	0.110	0215	593	.2093114
w1BMI	12.31838	5.573649	2.21	0.030	1.232	679	23.40407
w1TotalD	5644763	3.500397	-0.16	0.872	-7.528	701	6.399749
w1Albumin	11.91062	144.9716	0.08	0.935	-276.4	346	300.2558
w1EosinPct	6.134827	17.64951	0.35	0.729	-29.01	312	41.28278
ICV_volM2	.0025871	.0003255	7.95	0.000	.0019	396	.0032345
_cons	325.782	858.043	0.38	0.705	-1380.	815	2032.379

221 . //ANALYSIS C//

222 . 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	=	96
	Average RVI	=	0.0053
	Largest FMI	=	0.0427
	Complete DF	=	85
DF adjustment: Small sample	DF: min	=	77.18
	avg	=	82.40
	max	=	83.03
Model F test: <b>Equal FMI</b>	F( <b>10</b> , 83.0)	=	1.78
Within VCE type: OLS	Prob > F	=	0.0777

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	3.814196	1.168	3.27	0.002	1.490938	6.137453
Sex	586569	1.278231	-0.46	0.648	-3.128975	1.955837
w1Age	0255853	.0635362	-0.40	0.688	1519557	.1007851
Race	0	(omitted)				
PovStat	2.157509	1.093518	1.97	0.052	01745	4.332468
TIME_V1SCAN	0009577	.0007666	-1.25	0.215	0024825	.000567
w1BMI	.0745778	.0736466	1.01	0.314	0719045	.2210602
w1TotalD	0363943	.0468167	-0.78	0.439	1296148	.0568262
w1Albumin	2.644161	1.915314	1.38	0.171	-1.165423	6.453746
w1EosinPct	.2122303	.2279734	0.93	0.355	2411977	.6656584
ICV_volM2	2.49e-06	4.30e-06	0.58	0.565	-6.06e-06	.000011
_cons	-18.28714	11.3402	-1.61	0.111	-40.84278	4.268492

224 . save, replace

file finaldata\_imputed\_final.dta saved

Multiple-imputation estimates

225 .

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

163

0.0202

Imputations

Average RVI

Number of obs

DF adjustment: Model F test:	Small sample				DF = min = avg = max =	0.1877 150 63.68 140.58 148.03 11.01
Within VCE type:	OLS	<b>;</b>		Prob > F	=	0.0000
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw1	-62.35507	72.10955	-0.86	0.389	-204.8638	80.15368
Race AfrAm	-325.1355	202.6539	-1.60	0.111	-725.6123	75.34124
Race#c.LnNFLw1 AfrAm	122.8714	101.5897	1.21	0.228	-77.88195	323.6247
Sex	-6.264278	66.76217	-0.09	0.925	-138.1953	125.6667
w1Age	-6.460062	3.198093	-2.02	0.045	-12.77988	1402465
Race	0	(omitted)				
PovStat	-161.0974	56.96206	-2.83		-273.6617	
TIME_V1SCAN	.0450444	.0414505	1.09	0.279	0368698	
w1BMI	5.853108	3.906757	1.50		-1.867148	
w1TotalD	.0486938	3.005004	0.02		-5.955073	
w1Albumin	172.0237	93.84433	1.83		-13.4247	
w1EosinPct	-6.582044	12.5078	-0.53		-31.31272	
ICV_volM2 _cons	.0016293 1063.055	.0002413 581.5429	6.75 1.83	0.070	.0011525 -86.15287	
_co.is		55-15-125	05	2.070	55115107	========

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	=	163
	Average RVI	=	0.0118
	Largest FMI	=	0.0879
	Complete DF	=	150
DF adjustment: Small sample	DF: min	=	109.70
	avg	=	144.02
	max	=	148.02
Model F test: <b>Equal FMI</b>	F( <b>12</b> , <b>147.9</b> )	=	13.16
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	-37.99035	74.03085	-0.51	0.609	-184.2859	108.3052
Race AfrAm	-350.8357	208.673	-1.68	0.095	-763.2059	61.53451
Race#c.LnNFLw1						
AfrAm	123.2762	104.65	1.18	0.241	-83.52562	330.078
Sex	-111.7972	68.77744	-1.63	0.106	-247.7114	24.11706
w1Age	-5.111729	3.29733	-1.55	0.123	-11.62778	1.404323
Race	0	(omitted)				
PovStat	-149.955	58.70598	-2.55	0.012	-265.9671	-33.94287
TIME_V1SCAN	.073931	.0426363	1.73	0.085	0103244	.1581864
w1BMI	5.596536	4.022713	1.39	0.166	-2.352839	13.54591
w1TotalD	-2.478355	2.938736	-0.84	0.401	-8.30242	3.34571
w1Albumin	108.0911	96.62506	1.12	0.265	-82.85164	299.0339
w1EosinPct	2.005477	12.91759	0.16	0.877	-23.53952	27.55048
ICV_volM2	.0021505	.0002485	8.65	0.000	.0016594	.0026416
_cons	946.4097	598.6911	1.58	0.116	-236.6775	2129.497

235 . //ANALYSIS C//

236 . mi estimate: reg LnLesion\_Volume c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1Eo

Multiple-imputat Linear regressio		3		Imputat: Number of Average	of obs	= = =	5 163 0.0124
				Largest		=	0.1360
				Complete		=	150
DF adjustment:	Small sample	<u> </u>		DF:	min	=	84.74
J	•				avg	=	142.95
					max	=	148.01
Model F test:	Equal FM	[		F( 12,	147.9)	=	2.22
Within VCE type:	. OLS	5		Prob > 1	· ·	=	0.0133
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	3.221716	.9407389	3.42	0.001	1.36	2535	5.080898
Race							
AfrAm	2.331373	2.640797	0.88	0.379	-2.88	7189	7.549935
7117411	21332373	2.0.0757	0.00	013/3	2.00	, 205	,,,,,,,,,
Race#c.LnNFLw1							
AfrAm	2881495	1.325061	-0.22	0.828	-2.90	6635	2.330336
Sex	.1149757	.870463	0.13	0.895	-1.60	5168	1.83512
w1Age	0046348	.041714	-0.11	0.912	087	0668	.0777971
Race	0	(omitted)					
PovStat	1.252518	.7427596	1.69	0.094	215	2665	2.720303
TIME_V1SCAN	0009393	.0005403	-1.74	0.084	002	0071	.0001285
w1BMI	.0906974	.0509455	1.78	0.077	009	9773	.1913722
w1TotalD	010538	.0381417	-0.28	0.783	086	3774	.0653014
w1Albumin	1.060189	1.224067	0.87	0.388	-1.35	8731	3.47911
w1EosinPct	.2201863	.1605874	1.37	0.172	09	7154	.5375265
ICV_volM2	2.66e-06	3.15e-06	0.85	0.398	-3.55	e-06	8.88e-06
_cons	-12.50045	7.58252	-1.65	0.101	-27.4	8448	2.483575

```
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237 .
238 . save, replace
   file finaldata_imputed_final.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_final,clear
250 .
```

252 . //ANALYSIS B//

253 . mi estimate: reg Left\_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	=	67
		Average RVI	=	0.0154
		Largest FMI	=	0.0361
		Complete DF	=	57
DF adjustment:	Small sample	DF: min	=	52.48
		avg	=	54.33
		max	=	55.05
Model F test:	Equal FMI	F( <b>9, 55.0</b> )	=	6.28
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	74.99735	96.61668	0.78	0.441	-118.6824	268.6771
Sex	117.3653	86.94483	1.35	0.183	-56.87213	291.6028
w1Age	-10.70044	4.682835	-2.29	0.026	-20.08768	-1.313202
Race	0	(omitted)				
PovStat	-252.5875	77.84717	-3.24	0.002	-408.6284	-96.5467
TIME_V1SCAN	.0517961	.0589245	0.88	0.383	0663421	.1699342
w1BMI	.0956579	5.598126	0.02	0.986	-11.12491	11.31623
w1currdrugs	-172.2387	70.84428	-2.43	0.018	-314.3673	-30.1102
w1SRH	-77.79206	40.90639	-1.90	0.063	-159.7873	4.203213
ICV_volM2	.0013883	.0003732	3.72	0.000	.0006404	.0021363
_cons	2269.196	494.5586	4.59	0.000	1278.075	3260.317

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	=	67
		Average RVI	=	0.0129
		Largest FMI	=	0.0291
		Complete DF	=	57
DF adjustment:	Small sample	DF: min	=	53.12
		avg	=	54.50
		max	=	55.05
Model F test:	Equal FMI	F( 9, 55.0)	=	6.17
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	63.79713	97.63284	0.65	0.516	-131.9002	259.4944
Sex	41.01308	88.01055	0.47	0.643	-135.3602	217.3864
w1Age	-9.621027	4.732012	-2.03	0.047	-19.10589	1361618
Race	0	(omitted)				
PovStat	-253.3766	78.7006	-3.22	0.002	-411.1169	-95.63629
TIME_V1SCAN	.0823097	.05962	1.38	0.173	0372196	.2018389
w1BMI	-2.788634	5.661509	-0.49	0.624	-14.13569	8.558424
w1currdrugs	-156.7845	71.46944	-2.19	0.033	-300.1267	-13.44229
w1SRH	-56.86568	41.39254	-1.37	0.175	-139.8338	26.10242
ICV_volM2	.0016718	.0003773	4.43	0.000	.0009156	.0024279
_cons	2214.483	500.5032	4.42	0.000	1211.459	3217.507

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	Number of obs	=	67
	Average RVI	=	0.0027
	Largest FMI	=	0.0183
	Complete DF	=	57
DF adjustment: Small sample	DF: min	=	53.99
	avg	=	54.96
	max	=	55.10
Model F test: <b>Equal FMI</b>	F( <b>9, 55.1</b> )	=	2.27
Within VCE type: OLS	Prob > F	=	0.0301

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	2.803407	1.198671	2.34	0.023	.4012838	5.20553
Sex	.6486831	1.084853	0.60	0.552	-1.525332	2.822698
w1Age	0073106	.0580973	-0.13	0.900	1237361	.1091148
Race	0	(omitted)				
PovStat	0794055	.9670824	-0.08	0.935	-2.017407	1.858596
TIME_V1SCAN	0008906	.0007302	-1.22	0.228	0023539	.0005728
w1BMI	.1337017	.0696158	1.92	0.060	0058066	.27321
w1currdrugs	.4859082	.8766218	0.55	0.582	-1.271617	2.243434
w1SRH	899396	.5084854	-1.77	0.082	-1.918418	.1196256
ICV_volM2	6.80e-06	4.64e-06	1.47	0.148	-2.49e-06	.0000161
_cons	-8.690457	6.167022	-1.41	0.164	-21.04896	3.668048

258 .

259 . save, replace

file finaldata\_imputed\_final.dta saved

260 .

261 .

263 . //WHITES//

264 .

265 . use finaldata\_imputed\_final,clear

Multiple-imputation estimates

266 . 267 .

268 . //ANALYSIS B//

Linear regression

\_cons

1108.072 509.7383

269 . mi estimate: reg Left\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_volM2 if

Imputations
Number of obs

DF adjustment:	: Small samp	le			FMI =	9.0583 86 74.89
					max =	
Model F test:	Equal F	MI		F( <b>9</b> ,	84.0) =	7.69
Within VCE typ	pe: C	OLS		Prob > F	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw1	-115.4004	86.40246	-1.34	0.185	-287.2375	56.43669
Sex	-54.40018	94.33568	-0.58	0.566	-242.0006	133.2002
w1Age	-1.537082	4.860597	-0.32	0.753	-11.20379	8.129627
Race	0	(omitted)				
PovStat	-88.72919	84.78126	-1.05	0.298	-257.3392	79.88081
TIME V1SCAN	.0444088	.0577504	0.77	0.444	0704531	.1592707
w1BMI	9.583449	5.289914	1.81	0.074	9363131	20.10321
w1currdrugs	80.49263	101.2528	0.79	0.429	-121.2182	282.2035
w1SRH	-17.10642	46.38265	-0.37	0.713	-109.3443	75.13148
ICV volM2	.0019595	.0003208	6.11	0.000	.0013215	.0025974

270 . mi estimate: reg Right\_Hippocampus LnNFLw1 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_volM2 if

94.38015

2121.765

2.17 0.033

Multiple-imput		ces		Imputati Number d		=	5 96
				Average	RVI	=	0.0119
				Largest	FMI	=	0.0976
				Complete	e DF	=	86
DF adjustment	: Small samp	ole		DF:	min	=	65.84
					avg	=	82.00
					max	=	84.04
Model F test:	Equal F	MI		F( <b>9</b> ,	84.0)	=	10.65
Within VCE typ	oe: C	LS		Prob > F	=	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw1	-134.4057	86.39015	-1.56	0.124	-306.20	74	37.39592
Sex	-198.8199	94.4826	-2.10	0.038	-386.71	17	-10.92807
w1Age	2.188169	4.86609	0.45	0.654	-7.4892	68	11.86561
Race	0	(omitted)					
PovStat	-79.14296	84.88374	-0.93	0.354	-247.95	39	89.66799
TIME_V1SCAN	.1086779	.0576904	1.88	0.063	00605	28	.2234086
w1BMI	11.93797	5.301699	2.25	0.027	1.3945	81	22.48135
w1currdrugs	33.50753	103.4266	0.32	0.747	-172.99	97	240.0147
w1SRH	-51.67947	46.449	-1.11	0.269	-144.04	86	40.68967
ICV_volM2	.0026075	.0003212	8.12	0.000	.00196	89	.0032462
_cons	467.9493	510.9674	0.92	0.362	-548.21	14	1484.11
	I						

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	=	96
	Average RVI	=	0.0045
	Largest FMI	=	0.0230
	Complete DF	=	86
DF adjustment: <b>Small sample</b>	DF: min	=	81.44
	avg	=	83.68
	max	=	84.04
Model F test: <b>Equal FMI</b>	F( 9, 84.0)	=	1.62
Within VCE type: OLS	Prob > F	=	0.1218

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw1	3.335409	1.167774	2.86	0.005	1.013078	5.657739
Sex	2195479	1.277798	-0.17	0.864	-2.760683	2.321587
w1Age	0296904	.065612	-0.45	0.652	1601663	.1007854
Race	0	(omitted)				
PovStat	2.123013	1.144798	1.85	0.067	1535272	4.399553
TIME V1SCAN	0009993	.0007796	-1.28	0.203	0025496	.000551
w1BMI	.0333278	.0715569	0.47	0.643	10897	.1756256
w1currdrugs	-1.133341	1.346983	-0.84	0.403	-3.813194	1.546512
w1SRH	.0790458	.6276754	0.13	0.900	-1.169153	1.327244
ICV volM2	1.86e-06	4.34e-06	0.43	0.669	-6.77e-06	.0000105
_cons	-4.24625	6.895574	-0.62	0.540	-17.95883	9.466329
	1					

275 . save, replace

file finaldata\_imputed\_final.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-imputat:	ion estimates	Imputations	=	5
Linear regression	า	Number of obs	=	163
		Average RVI	=	0.0042
		Largest FMI	=	0.0381
		Complete DF	=	151
DF adjustment:	Small sample	DF: min	=	136.90
		avg	=	147.90
		max	=	149.02
Model F test:	Equal FMI	F( <b>11</b> , <b>149.0</b> )	=	12.00
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw1	-82.25534	71.14354	-1.16	0.249	-222.8372	58.32651
Race AfrAm	-359.4647	201.329	-1.79	0.076	-757.295	38.36553
Race#c.LnNFLw1 AfrAm	141.7461	102.0495	1.39	0.167	-59.90721	343.3994
Sex w1Age	5.597262 -6.577967	65.43952 3.264759	0.09 -2.01	0.932 0.046	-123.7124 -13.0292	134.9069 1267302
Race	0	(omitted)	2.01			
PovStat TIME_V1SCAN	-172.0476 .0405102	58.11169 .0410123	-2.96 0.99	0.004 0.325	-286.877 0405314	-57.21816 .1215517
w1BMI	3.695695	3.758626	0.98	0.327	-3.731465	11.12286
w1currdrugs w1SRH	-45.65031 -40.46064	61.18473 31.35595	-0.75 -1.29	0.457 0.199	-166.6397 -102.4208	75.33907 21.49952
ICV_volM2 _cons	.0016749 1946.292	.0002424 354.2498	6.91 5.49	0.000 0.000	.0011959 1246.283	.002154 2646.301

282 . mi estimate: reg Right\_Hippocampus c.LnNFLw1##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_

Multiple-imputation estimates				Imputations			5
Linear regression	n			Number o	of obs	=	163
				Average	RVI	=	0.0066
				Largest	FMI	=	0.0562
				Complete	e DF	=	151
DF adjustment:	Small sample	•		DF:	min	=	127.83
					avg	=	147.05
					max	=	149.01
Model F test:	Equal FMI	•		F( <b>11</b> ,	149.0)	=	14.89
Within VCE type:	OLS	<b>;</b>		Prob > F	=	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	-75.44621	72.47385	-1.04	0.300	-218.	6582	67.76579
Race							
AfrAm	-372.2716	205.0339	-1.82	0.071	-777.	4246	32.88148
Race#c.LnNFLw1							
AfrAm	146.9995	103.9445	1.41	0.159	-58.3	9999	352.399
Sex	-99.16925	66.6538	-1.49	0.139	-230.	8793	32.54077
w1Age	-5.045128	3.324031	-1.52	0.131	-11.6	1349	1.523231
Race	0	(omitted)					
PovStat	-167.4265	59.16716	-2.83	0.005	-284.	3415	-50.51147
TIME_V1SCAN	.0837749	.0417908	2.00	0.047	.001	1938	.166356
w1BMI	3.99171	3.82714	1.04	0.299	-3.57	0846	11.55427
w1currdrugs	-63.01321	62.86108	-1.00	0.318	-187.	3962	61.36974
w1SRH	-53.86712	31.9441	-1.69	0.094	-116.	9902	9.255918
ICV_volM2	.0021915	.0002469	8.88	0.000	.001	7037	.0026793
_cons	1537.761	360.7162	4.26	0.000	824.	9731	2250.549

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

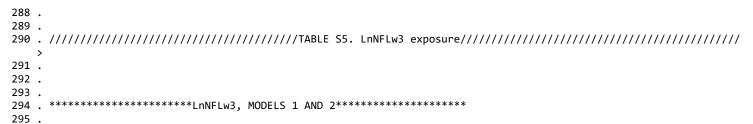
163

Imputations
Number of obs

DF adjustment:  Model F test: Within VCE type:	Small sample  Equal FMI OLS			Average Largest Complete DF:  F( 11, Prob > F	FMI e DF min avg max 149.0)	= = = = = =	0.0008 0.0091 151 147.31 148.88 149.04 2.23 0.0155
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw1	2.825975	.9293135	3.04	0.003	.989	6423	4.662308
Race AfrAm	1.940699	2.630575	0.74	0.462	-3.2	5734	7.138739
Race#c.LnNFLw1 AfrAm	1675759	1.332908	-0.13	0.900	-2.80	1415	2.466264
Sex	.4122861	.855106	0.48	0.630	-1.27	7411	2.101983
w1Age	.0013345	.0426629	0.03	0.975	082	9681	.085637
Race		(omitted)					
PovStat	1.179436	.7595684	1.55	0.123	321		2.680353
TIME_V1SCAN	0009403	.0005358	-1.75	0.081	00		.0001184
w1BMI	.0714095	.0491	1.45	0.148	025		.1684317
w1currdrugs w1SRH	.0353268 3002708	.7883472 .4096453	0.04		-1.52		1.593258 .5091921
ICV volM2	3002708 2.56e-06	3.17e-06	-0.73 0.81	0.465	-1.10 -3.70	_	8.82e-06
_cons	-5.926825	4.627419	-1.28	0.202	-15.0		3.217007

```
286 .
```

file finaldata\_imputed\_final.dta saved



<sup>287 .</sup> save, replace

299 . \*\*Model 1\*\*

300 .

301 . use HANDLS\_paper51\_NFLBRAINSCANFINALIZED,clear

302 .

303 . //ANALYSIS B//

Source	SS	df	MS	Number of obs	= 67
Model Residual	2850651.04 3871145.65	6 60	475108.507 64519.0942		= 7.36 = 0.0000 = 0.4241
Total	6721796.69	66	101845.404	- Adj R-squared 1 Root MSE	= 0.3665 = 254.01
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	1.528393	75.12293	0.02	0.984	.0023537
Sex	100.3292	89.33881	1.12	0.266	.1562279
w1Age	-8.48243	3.984451	-2.13	0.037	2624228
Race	0	(omitted)			
PovStat	-220.1136	79.86311	-2.76	0.008	3360945
TIME_V1SCAN	.0339187	.0604872	0.56	0.577	.0634769
ICV_volM2	.0011359	.0003717	3.06	0.003	.425254
_cons	2425.804	478.5251	5.07	0.000	•

Source	SS	d <del>f</del>	MS	Number of obs	=	67
				F(6, 60)	=	7.76
Model	2981580.83	6	496930.138	B Prob > F	=	0.0000
Residual	3842606.44	60	64043.4407	7 R-squared	=	0.4369
				- Adj R-squared	=	0.3806
Total	6824187.27	66	103396.777	7 Root MSE	=	253.07
Right_Hipp~s	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	-2.412905	74.84551	-0.03	0.974	_	.0036879
Sex	37.91454	89.00888	0.43	0.672		.0585941
w1Age	-8.065539	3.969736	-2.03	0.047	-	.2476463
Race	0	(omitted)				
PovStat	-228.8497	79.56818	-2.88	0.006	-	.3468025
TIME V1SCAN	.0664729	.0602638	1.10	0.274		.1234636
ICV_volM2	.0014325	.0003703	3.87	0.000		.5322439
_cons	2324.002	476.758	4.87	0.000		•

note: Race omitted because of collinearity.

Source	SS	df	MS Number of obs		= 67
Model Residual	111.125287 597.675613	6 60	18.5208812 9.96126022	2 R-squared	= 1.86 = 0.1028 = 0.1568
Total	708.8009	66	10.7394070	- Adj R-squared 6 Root MSE	= 0.0725 = 3.1561
LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	1.224016	.9334382	1.31	0.195	.1835627
Sex	.3559267	1.110077	0.32	0.750	.0539725
w1Age	.0497567	.0495087	1.01	0.319	.149904
Race	0	(omitted)			
PovStat	.0840337	.9923371	0.08	0.933	.0124954
TIME V1SCAN	001062	.0007516	-1.41	0.163	1935391
ICV volM2	4.67e-06	4.62e-06	1.01	0.317	.1700727
_cons	-3.221315	5.945902	-0.54	0.590	•

309 .

310 .

311 . \*\*Model 2\*\*

312 .

313 . use finaldata\_imputed\_final,clear

314 .

315 .

316 . //ANALYSIS B//

317 . mi estimate: reg Left\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	67
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
	Complete DF	=	59
DF adjustment: <b>Small sample</b>	DF: min	=	57.10
	avg	=	57.10
	max	=	57.10
Model F test: <b>Equal FMI</b>	F( <b>7, 57.1</b> )	=	6.23
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-5.254991	78.85848	-0.07	0.947	-163.1606	152.6506
Sex	95.43171	91.42489	1.04	0.301	-87.63674	278.5002
w1Age	-7.992473	4.320735	-1.85	0.070	-16.64428	.6593322
Race	0	(omitted)				
PovStat	-217.5332	80.91108	-2.69	0.009	-379.5489	-55.51746
TIME V1SCAN	.0338874	.0609491	0.56	0.580	0881566	.1559315
w1BMI	-1.613874	5.259483	-0.31	0.760	-12.14542	8.917673
ICV volM2	.001152	.0003782	3.05	0.004	.0003947	.0019093
_cons	2447.452	487.3123	5.02	0.000	1471.661	3423.242

318 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1

Multiple-imputation estimates				Imputations		=	
Linear regression				Number	Number of obs		67
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	59
DF adjustment:	Small samp	le		DF:	min	=	57.10
-					avg	=	57.10
					max	=	57.10
Model F test:	Equal F	MI		F( 7,	<b>57.1</b> )	=	6.71
Within VCE typ	oe: 0	LS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-20.24968	78.19237	-0.26	0.797	-176.82	15	136.3221
Sex	25.0366	90.65263	0.28	0.783	-156.48	55	206.5587
w1Age	-6.777205	4.284239	-1.58	0.119	-15.355	93	1.801519
Race	0	(omitted)					
PovStat	-222.0645	80.22764	-2.77	0.008	-382.71	17	-61.41735
TIME_V1SCAN	.0663908	.0604343	1.10	0.277	05462	24	.187404
w1BMI	-4.243651	5.215057	-0.81	0.419	-14.686	24	6.198937
ICV_volM2	.0014748	.000375	3.93	0.000	.00072	39	.0022257
_cons	2380.923	483.1961	4.93	0.000	1413.3	76	3348.471

320 . //ANALYSIS C//

321 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1 &

Multiple-imput Linear regress	cation estimates sion		Imputations Number of ob Average RVI Largest FMI Complete DF			5 67 0.0000 0.0000 59
DF adjustment	Small sample		DF: m	in vg ax	= =	57.10 57.10 57.10
Model F test: Within VCE tyμ	Equal FMI De: OLS		F( <b>7</b> , Prob > F	57.1)		1.69 0.1292
LnLesion_V~e	Coefficient Std. err.	t	P> t	[95%	conf.	interval]

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1.458819	.974554	1.50	0.140	4926203	3.410258
Sex	.5254511	1.129853	0.47	0.644	-1.736957	2.78786
w1Age	.0327971	.0533968	0.61	0.542	0741242	.1397184
Race	0	(omitted)				
PovStat	0052864	.9999206	-0.01	0.996	-2.007519	1.996947
TIME_V1SCAN	0010609	.0007532	-1.41	0.164	0025691	.0004474
w1BMI	.0558632	.0649981	0.86	0.394	0742885	.1860148
ICV_volM2	4.11e-06	4.67e-06	0.88	0.383	-5.25e-06	.0000135
_cons	-3.970627	6.022335	-0.66	0.512	-16.0297	8.088448

323 . save, replace

file finaldata\_imputed\_final.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		= 96
Model Residual	7090034.51 8713181.38	6 89	1181672.42 97900.9144	4 R-squared	= 12.07 = 0.0000 = 0.4486
Total	15803215.9	95	166349.641	- Adj R-squared 1 Root MSE	= 0.4115 = 312.89
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-170.359	70.50397	-2.42	0.018	2182497
Sex	-81.78409	90.41972	-0.90	0.368	0997089
w1Age	-2.080153	4.237946	-0.49	0.625	0443239
Race	0	(omitted)			•
PovStat	-87.03177	79.47628	-1.10	0.276	0928841
TIME_V1SCAN	.0356349	.0531762	0.67	0.505	.0559671
ICV_volM2	.0019737	.0003123	6.32	0.000	.7063658
_cons	1574.553	438.4112	3.59	0.001	•

Source	SS	df	MS	Number of obs	= 9	96
				- F(6, 89)	= 15.2	25
Model	9436896.24	6	1572816.04	<b>4</b> Prob > F	= 0.000	90
Residual	9177973.31	89	103123.29	6 R-squared	= 0.507	70
				<ul> <li>Adj R-squared</li> </ul>	= 0.473	37
Total	18614869.6	95	195945.99	5 Root MSE	= 321.1	13
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Bet	ta
LnNFLw3	-153.7509	72.36001	-2.12	0.036	181488	84
Sex	-217.1897	92.80005	-2.34	0.021	243975	58
w1Age	.4287187	4.349511	0.10	0.922	.00841	17
Race	0	(omitted)				
PovStat	-55.4599	81.56851	-0.68	0.498	054536	63
TIME_V1SCAN	.0795744	.0545761	1.46	0.148	.115152	26
ICV_volM2	.0025848	.0003206	8.06	0.000	.852369	95
_cons	949.066	449.9525	2.11	0.038		•

339 . //ANALYSIS C//

note: Race omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 96
Model	114.875343	6	19.1458905	- F(6, 89) 5 Prob > F	= 0.97 = 0.4500
Residual	1755.87892	89	19.7289767		= 0.0614
	1755.07052		13.7203707	- Adj R-squared	= -0.0019
Total	1870.75426	95	19.6921502		= 4.4417
 LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	.8621437	1.000858	0.86	0.391	.1015156
Sex	343412	1.283577	-0.27	0.790	0384809
w1Age	.0577058	.0601609	0.96	0.340	.1130124
Race	0	(omitted)			•
PovStat	1.934682	1.128227	1.71	0.090	.1897743
TIME V1SCAN	000705	.0007549	-0.93	0.353	1017688
ICV_volM2	3.26e-06	4.43e-06	0.74	0.464	.1072708
_cons	-4.543555	6.223585	-0.73	0.467	•

341 .

342 .

343 . \*\*Model 2\*\*

345 . use finaldata\_imputed\_final,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\_final2==1 &

**Imputations** 

Linear regress	Number of obs			=	96		
				Average	RVI	=	0.0000
				Largest		=	0.0000
				Complet	e DF	=	88
DF adjustment:	: Small samp	ole		DF:	min	=	86.07
Ţ.	·				avg	=	86.07
					max	=	86.07
Model F test:	Equal F	MI		F( <b>7</b> ,	86.1)	=	10.96
Within VCE typ	oe: O	LS		Prob >	F	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-161.8023	69.98795	-2.31	0.023	-300.93	23	-22.6724
Sex	-67.90344	89.90148	-0.76	0.452	-246.61	97	110.8128
w1Age	-1.416793	4.214367	-0.34	0.738	-9.7945	85	6.961
Race	0	(omitted)					
PovStat	-87.45554	78.68426	-1.11	0.269	-243.8	73	68.96189
TIME_V1SCAN	.0476895	.0531364	0.90	0.372	0579	41	.1533199
w1BMI	8.471505	5.061193	1.67	0.098	-1.5897	03	18.53271
ICV_volM2	.0019752	.0003092	6.39	0.000	.00136	<b>0</b> 5	.0025899
_cons	1229.694	480.4577	2.56	0.012	274.58	64	2184.802

350 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_final2==1

Multiple-imput Linear regress		tes		Imputat Number		=	5 96
				Average	RVI	=	0.0000
				Largest	FMI	=	0.0000
				Complet	e DF	=	88
DF adjustment:	DF adjustment: Small sample					=	86.07
_	·				avg	=	86.07
					max	=	86.07
Model F test:		F( <b>7</b> ,	86.1)	=	14.43		
Within VCE typ	e: (	OLS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
LnNFLw3	-141.9437	70.90092	-2.00	0.048	-282.88	86	9988993
Sex	-198.0361	91.07422	-2.17	0.032	-379.08	37	-16.98854
w1Age	1.344073	4.269342	0.31	0.754	-7.1430	94	9.831151
Race	0	(omitted)					
PovStat	-56.04465	79.71067	-0.70	0.484	-214.50	25	102.4132
TIME V1SCAN	.0962083	.0538295	1.79	0.077	01080	<b>01</b>	.2032166
w1BMI	11.68962	5.127214	2.28	0.025	1.4971	64	21.88207
ICV volM2	.0025869	.0003133	8.26	0.000	.00196	41	.0032096
TC 4 40T112	.0023003						

<sup>351 .</sup> 

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\_final2==1 &

1.00 0.321 -.0599989

1.71 0.092 -.3193653

0.465

-.0021728

-.1075367

-5.58e-06

-19.81532

-0.85 0.397

0.51 0.610

-0.88 0.383

0.73

.1812567

4.184994

.000869

.1821963

.0000121

7.688965

Multiple-imput	Imputations			=	5		
Linear regress	sion			Number of obs			96
				Average		=	0.0000
				Largest	FMI	=	0.0000
				Complete DF			88
DF adjustment: Small sample				DF:	min	=	86.07
					avg	=	86.07
					max	=	86.07
Model F test:	Equal FMI			F( <b>7</b> ,	86.1	) =	0.86
Within VCE type: OLS				Prob > F		=	0.5396
 LnLesion_V~e	Coefficient Std	l. err.	t	P> t	[95%	conf.	interval]
LnNFLw3 Sex		07723 194449	0.89 -0.22	0.374 0.828	-1.103 -2.85		2.903114 2.291004

.0606289 .0606807

0 (omitted)

1.932815 1.132937

-.0006519 .0007651

.0373298 .0728737

-6.063178 6.917882

4.45e-06

3.27e-06

<sup>352 . //</sup>ANALYSIS C//

355 . save, replace

file finaldata\_imputed\_final.dta saved

356 . 357 .

358 .

359 . //INTERACTION by Race//

Multiple-imputation estimates

Sex

w1Age

6.853257

-5.106859

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

163

0.0000

134.4773

.7456136

Imputations

Average RVI

Number of obs

				Largest	FMI	=	0.0000
				Complet	e DF	=	153
DF adjustment:	Small sample			DF:	min	=	151.04
					avg	=	151.04
					max	=	151.04
Model F test:	Equal FMI			F( 9,	<b>151.0</b> )	=	15.16
Within VCE type:	: OLS			Prob >		=	0.0000
 Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-141.1056	62.47048	-2.26	0.025	-264.	5344	-17.67673
Race							
AfrAm	-406.7475	204.9369	-1.98	0.049	-811.	6608	-1.834173
Race#c.LnNFLw3							
AfrAm	140.878	93.83657	1.50	0.135	-44.5	2382	326.2798

Race 0 (omitted) PovStat -2.76 0.007 -265.1864 -43.69541 -154.4409 56.05111 TIME\_V1SCAN .0332122 .0398687 0.83 0.406 -.0455602 .1119847 w1BMI 3.007528 3.60238 0.83 0.405 -4.110036 10.12509 ICV\_volM2 .0016405 .0002365 6.94 0.000 .0011733 .0021077 \_cons 1987.761 348.0687 5.71 0.000 1300.048 2675.473

64.59379

2.962085

364 . mi estimate: reg Right\_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI ICV\_volM2 if sample\_f

-120.7708

-10.95933

0.11 0.916

-1.72 0.087

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	163
		Average RVI	=	0.0000
		Largest FMI	=	0.0000
		Complete DF	=	153
DF adjustment:	Small sample	DF: min	=	151.04
		avg	=	151.04
		max	=	151.04
Model F test:	Equal FMI	F( 9, <b>151.0</b> )	=	18.03
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3	-115.2859	64.31878	-1.79	0.075	-242.3666	11.79485
Race AfrAm	-345.327	211.0004	-1.64	0.104	-762.2205	71.5664
Race#c.LnNFLw3						
AfrAm	109.7947	96.61289	1.14	0.258	-81.0926	300.6819
Sex	-95.41671	66.50492	-1.43	0.153	-226.8168	35.98337
w1Age	-3.593809	3.049724	-1.18	0.240	-9.619438	2.431819
Race	0	(omitted)				
PovStat	-144.9366	57.70948	-2.51	0.013	-258.9587	-30.91455
TIME_V1SCAN	.0722886	.0410483	1.76	0.080	0088145	.1533917
w1BMI	3.43669	3.708963	0.93	0.356	-3.891461	10.76484
ICV volM2	.0021308	.0002435	8.75	0.000	.0016498	.0026119
cons	1532.738	358.3669	4.28	0.000	824.6788	2240.798

<sup>365 .</sup> 

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				Imputation Number of Average Largest Complete	of obs RVI FMI	= = = =	5 163 0.0000 0.0000 153
DF adjustment:	Small sample	!		DF:	min	=	151.04
_					avg	=	151.04
					max	=	151.04
Model F test:	Equal FMI			, ,	<b>151.0</b> )	=	1.42
Within VCE type:	OLS	1		Prob >	F	=	0.1859
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.9161609	.8488533	1.08	0.282	76	0999	2.593321
Race AfrAm	.3648593	2.784697	0.13	0.896	-5.13	7131	5.86685
Race#c.LnNFLw3							
AfrAm	.454785	1.275058	0.36	0.722	-2.06	4468	2.974038
Sex	. 2513491	.877705	0.29	0.775	-1.48	2816	1.985514
w1Age	.0520767	.040249	1.29	0.198			.1316005
Race	0	(omitted)		0.120	.027	, _	.1310003
PovStat	1.064234	.7616264	1.40	0.164	440	5835	2.569052
TIME_V1SCAN	000871	.0005417	-1.61	0.110	001	9414	.0001994
w1BMI	.0394205	.0489494	0.81	0.422	057	2935	.1361345
ICV_volM2	2.72e-06	3.21e-06	0.85	0.398	-3.63	e-06	9.07e-06
_cons	-4.263838	4.729582	-0.90	0.369	-13.60	0852	5.080846

<sup>366 . //</sup>ANALYSIS C//

Multiple-imputation estimates
Linear regression

Number of obs = 67
Average RVI = 0.0222
Largest FMI = 0.1602
Complete DF = 57
DF adjustment: Small sample

DF: min = 37.60
avg = 51.84
max = 55.08

 $\begin{array}{rclrcl} & & & & & & & \\ \text{Model F test:} & & & & & \\ \text{Equal FMI} & & & & & \\ \text{Within VCE type:} & & & & \\ \text{OLS} & & & & \\ \end{array} \begin{array}{rcl} & & & & \\ \text{F(9, 55.0)} & = & \\ \text{6.03} & & \\ \text{Prob > F} & = & \\ \text{0.0000} & & \\ \end{array}$ 

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-49.14096	80.80847	-0.61	0.546	-211.3152	113.0332
Sex	98.17902	88.96271	1.10	0.275	-80.219	276.577
w1Age	-5.366701	4.421875	-1.21	0.230	-14.235	3.501597
Race	0	(omitted)				
PovStat	-213.7063	77.43324	-2.76	0.008	-368.8811	-58.53154
TIME_V1SCAN	.0219647	.0587869	0.37	0.710	0958513	.1397807
w1BMI	-3.716082	5.082104	-0.73	0.468	-13.90057	6.468409
w1dxDiabetes	-87.96662	63.22089	-1.39	0.172	-215.9949	40.06169
w1Glucose	4.685141	1.761168	2.66	0.010	1.146991	8.223292
ICV_volM2	.0009829	.0003731	2.63	0.011	.0002345	.0017313
_cons	2294.209	471.1676	4.87	0.000	1349.871	3238.546

383 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_vol

Multiple-imputation estimates		Imputatio	าร	=	5
Linear regression		Number of	obs	=	67
		Average R	/I	=	0.0046
		Largest FI	ΊI	=	0.0306
		Complete [	)F	=	57
DF adjustment:	Small sample	DF: m:	in	=	52.98
		a	/g	=	54.58
		ma	ЭX	=	55.09
Model F test:	Equal FMI	F( <b>9</b> ,	<b>55.1</b> )	=	8.29
Within VCE type:	OLS	Prob > F		=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-55.09952	74.06593	-0.74	0.460	-203.567	93.36799
Sex	15.59873	82.17961	0.19	0.850	-149.1189	180.3163
w1Age	-4.588166	4.075643	-1.13	0.265	-12.75697	3.580643
Race	0	(omitted)				
PovStat	-222.7262	72.04856	-3.09	0.003	-367.1097	-78.3427
TIME_V1SCAN	.0581674	.0546345	1.06	0.292	0513202	.167655
w1BMI	-7.080264	4.729022	-1.50	0.140	-16.55719	2.396658
w1dxDiabetes	-58.5007	55.13594	-1.06	0.293	-169.0904	52.089
w1Glucose	5.912763	1.597788	3.70	0.001	2.709981	9.115544
ICV_volM2	.0013	.0003439	3.78	0.000	.0006107	.0019892
_cons	2145.064	437.7397	4.90	0.000	1267.795	3022.334

385 . //ANALYSIS C//

386 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_volM2

Multiple-imput	tation estimates		Imputatio	ns	=	5
Linear regress	sion		Number of	obs	=	67
J			Average R	VI	=	0.0008
			Largest F	MI	=	0.0079
			Complete	DF	=	57
DF adjustment	: Small sample		DF: m	nin	=	54.70
•	·		a	ıvg	=	55.04
			m	ıax	=	55.10
Model F test:	Equal FMI		F( 9,	55.1	) =	1.33
Within VCE typ	oe: OLS		Prob > F	·	=	0.2435
			- 1.1			
LnLesion V∼e	Coefficient Std. err.	t	P> t	95%	conf.	interval]

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1.404899	1.039071	1.35	0.182	6773866	3.487184
Sex	.5932177	1.154347	0.51	0.609	-1.720058	2.906494
w1Age	.0356059	.0572947	0.62	0.537	0792121	.150424
Race	0	(omitted)				
PovStat	.0234379	1.015855	0.02	0.982	-2.012298	2.059174
TIME_V1SCAN	0010848	.0007701	-1.41	0.165	0026281	.0004586
w1BMI	.0600602	.0666668	0.90	0.372	0735378	.1936582
w1dxDiabetes	187817	.768931	-0.24	0.808	-1.728976	1.353342
w1Glucose	0072259	.0224391	-0.32	0.749	0521957	.0377439
ICV_volM2	4.16e-06	4.83e-06	0.86	0.392	-5.51e-06	.0000138
_cons	-3.503549	6.1646	-0.57	0.572	-15.8572	8.850103

387 . 388 . save, replace

file finaldata\_imputed\_final.dta saved

389 .

390 .

392 . //WHITE//

393 .

394 . use finaldata\_imputed\_final,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

Imputations

Number of obs

				Average		0.000
				Largest		= 0.0000
		_		Complete		
DF adjustment	: Small samp	ole		DF:	min =	
					avg =	84.07
					max =	<b>84.07</b>
Model F test:	Equal F	MI		F( <b>9</b> ,	84.1) =	= 8.53
Within VCE typ	pe: O	LS		Prob > F	=	9.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf	f. interval]
LnNFLw3	-179.8155	74.93459	-2.40	0.019	-328.8294	-30.80161
Sex	-80.78401	91.58924	-0.88	0.380	-262.9171	101.3491
w1Age	-1.773304	4.283436	-0.41	0.680	-10.29129	6.744679
Race	0	(omitted)				
PovStat	-97.29622	79.90756	-1.22	0.227	-256.1993	61.60686
TIME V1SCAN	.0583018	.0545818	1.07	0.289	0502389	.1668425
w1BMI	6.995737	5.303622	1.32	0.191	-3.550974	17.54245
w1dxDiabetes	36.91038	69.58166	0.53	0.597	-101.4588	175.2795
w1Glucose	.3914494	1.483548	0.26	0.793	-2.558713	3.341612
ICV_volM2	.0019604	.0003152	6.22	0.000	.0013336	.0025871
_ cons	1306.485	515.6749	2.53	0.013	281.0209	2331.949
<b>-</b>		-		_		

399 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV\_vol

Multiple-imput Linear regress		Imputations Number of obs Average RVI			5 96 0.0000		
DE addustment		.1.		Largest FMI Complete DF			0.0000 86
DF adjustment:	: Small samp	эте		DF:	min avg	=	84.07 84.07
			max	_	84.07		
Model F test:	F( 9,		=	11.16			
Within VCE typ	Prob >	F	=	0.0000			
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw3	-162.505	76.00197	-2.14	0.035	-313.641	5	-11.36849
Sex	-210.9234	92.89385	-2.27	0.026	-395.650	8	-26.19594
w1Age	1.180823	4.34445	0.27	0.786	-7.45849	1	9.820138
Race	0	(omitted)					
PovStat	-63.09688	81.04577	-0.78	0.438	-224.263	-	98.06965
TIME_V1SCAN	.1044727	.0553593	1.89	0.063	005614	1	.2145594
w1BMI	10.41958	5.379168	1.94	0.056	277356	1	21.11652
w1dxDiabetes	14.91953	70.57279	0.21	0.833	-125.420		155.2596
w1Glucose	.7402367	1.50468	0.49	0.624	-2.25194		3.732422
ICV_volM2	.002588	.0003197	8.10	0.000	.001952		.0032237
_cons	492.8709	523.0202	0.94	0.349	-547.	2	1532.942

DF adjustment:

Model F test:

Within VCE type:

Small sample

Equal FMI

**OLS** 

```
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
                                                                                 5
    Linear regression
                                                    Number of obs
                                                                                96
                                                    Average RVI
                                                                            0.0000
                                                    Largest FMI
                                                                            0.0000
                                                                      =
                                                    Complete DF
                                                                                86
    DF adjustment:
                     Small sample
                                                            min
                                                                             84.07
                                                                             84.07
                                                            avg
                                                            max
                                                                      =
                                                                             84.07
    Model F test:
                                                    F( 9, 84.1)
                        Equal FMI
                                                                             0.67
    Within VCE type:
                              OLS
                                                    Prob > F
                                                                            0.7298
                   Coefficient Std. err.
                                                           [95% conf. interval]
    LnLesion_V~e
                                                    P>|t|
                                              t
         LnNFLw3
                     .9301248
                                1.084098
                                             0.86
                                                    0.393
                                                             -1.225697
                                                                          3.085946
            Sex
                    -.2403099
                                1.325045
                                            -0.18
                                                    0.857
                                                             -2.875276
                                                                          2.394656
           w1Age
                     .0639516
                               .0619696
                                            1.03
                                                    0.305
                                                             -.0592802
                                                                          .1871834
           Race
                          0 (omitted)
                    1.996075
                                            1.73
         PovStat
                               1.156043
                                                    0.088
                                                             -.3028162
                                                                          4.294966
                                                                          .0008575
     TIME_V1SCAN
                    -.0007127
                               .0007896
                                            -0.90
                                                    0.369
                                                             -.002283
                     .0444425
                                            0.58
          w1BMI
                                .0767288
                                                    0.564
                                                             -.1081394
                                                                          .1970244
    w1dxDiabetes
                                            -0.36
                                                             -2.367976
                    -.3661548
                                1.006655
                                                    0.717
                                                                          1.635666
      w1Glucose
                     .0026212
                               .0214629
                                             0.12
                                                    0.903
                                                             -.0400595
                                                                          .045302
       ICV volM2
                     3.49e-06
                                4.56e-06
                                            0.77
                                                    0.446
                                                             -5.57e-06
                                                                          .0000126
          _cons
                    -6.952054
                                7.460399
                                            -0.93
                                                    0.354
                                                             -21.7877
                                                                          7.883593
404 . save, replace
   file finaldata_imputed_final.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
    Multiple-imputation estimates
                                                    Imputations
                                                                                 5
    Linear regression
                                                    Number of obs
                                                                               163
                                                    Average RVI
                                                                            0.0043
```

Largest FMI

Complete DF

Prob > F

min

avg

max

F( 11, 149.0)

0.0467

132.75

147.20 149.04

12.78

0.0000

151

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-177.0605	65.45262	-2.71	0.008	-306.396	-47.72499
Race AfrAm	-470.8188	207.5339	-2.27	0.025	-880.9089	-60.72869
Race#c.LnNFLw3 AfrAm	173.3039	95.22846	1.82	0.071	-14.86876	361.4766
Sex w1Age	-8.771197 -4.980036	64.91988 3.019056	-0.14 -1.65	0.893 0.101	-137.0536 -10.94584	119.5112 .9857648
Race PovStat	0 -161.8968	(omitted) <b>56.0105</b>	-2.89	0.004	-272.5741	-51.2194
TIME_V1SCAN w1BMI	.0410463 1.595738	.040198 3.673549	1.02 0.43	0.309 0.665	0383857 -5.663241	.1204782 8.854717
w1dxDiabetes w1Glucose	7002073 1.586994	46.82194 1.116525	-0.01 1.42	0.988 0.157	-93.31381 6198548	91.91339 3.793843
ICV_volM2 _cons	.001645 1952.692	.0002355 357.3623	6.98 5.46	0.000 0.000	.0011796 1246.525	.0021103 2658.858

413 . mi estimate: reg Right\_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose

Multiple-imputat	tiple-imputation estimates			Imputations			5
Linear regression	on			Number	of obs	=	163
				Average	RVI	=	0.0003
				Largest	FMI	=	0.0031
				Complete	e DF	=	151
DF adjustment:	Small sample	<b>!</b>		DF:	min	=	148.57
					avg	=	148.98
					max	=	149.04
Model F test:	Equal FMI	•		F( 11,	149.0)	=	15.70
Within VCE type:	OLS	3		Prob >	F	=	0.0000
Right Hippoc~s	Coefficient	Std. err.	t	P> t	Γ95%	conf.	interval]
0				- 1 - 1			
LnNFLw3	-162.2377	66.79819	-2.43	0.016	-294.	2316	-30.24386
Race							
AfrAm	-437.1091	211.8127	-2.06	0.041	-855.	6528	-18.56533
Race#c.LnNFLw3							
AfrAm	155.6431	97.19654	1.60	0.111	-36.4	1812	347.7044
Sex	-117.5574	66.26492	-1.77	0.078	-248.	4975	13.3827
w1Age	-3.600681	3.07846	-1.17	0.244	-9.68	3749	2.482387
Race	0	(omitted)					
PovStat	-155.8038	57.17274	-2.73	0.007	-268.	7777	-42.82997
TIME_V1SCAN	.0842267	.0410219	2.05	0.042	.003	1671	.1652862
w1BMI	1.452286	3.749517	0.39	0.699	-5.95	6795	8.861366
w1dxDiabetes	11.82312	46.77331	0.25	0.801	-80.6		104.25
w1Glucose	1.95626	1.129659	1.73		275		4.188501
ICV_volM2	.0021357	.0002404	8.88			6606	.0026107
_cons	1508.048	364.3884	4.14	0.000	788.	0116	2228.083

415 . //ANALYSIS C//

Linear regression

Multiple-imputation estimates

416 . mi estimate: reg LnLesion\_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1dxDiabetes w1Glucose I

Number of obs

163

Imputations

DF adjustment: <b>S</b> i				Largest	EMT		
DF adjustment: <b>S</b> i				Lu. Bese	LIST	=	0.0029
DF adjustment: Si				Complete	DF	=	151
	mall sample			DF:	min	=	148.59
					avg	=	148.98
					max	=	149.04
Model F test:	Equal FMI			F( <b>11</b> ,	149.0)	=	1.19
Within VCE type:	OLS			Prob > F	:	=	0.2990
LnLesion_Vol~e Co	oefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.9946109	.8979368	1.11	0.270	779	7207	2.768943
Race AfrAm	.6896191	2.847371	0.24	0.809	-4.93	5814	6.316053
Race#c.LnNFLw3 AfrAm	.3048273	1.306604	0.23	0.816	-2.27	7035	2.88669
Sex	.3228415	.8908104	0.36	0.718	-1.43	7409	2.083092
w1Age	.0560338	.0413817	1.35		025	7368	.1378045
Race	0	(omitted)					
PovStat	1.110649	.7685566	1.45	0.151	408	8026	2.629325
TIME V1SCAN	000931	.0005514	-1.69	0.093	0020	<b>206</b>	.0001587
w1BMI	.0458902	.0504031	0.91	0.364	053	7068	.1454872
w1dxDiabetes	3160763	.6287176	-0.50	0.616	-1.558	3459	.926306
w1Glucose	0005545	.0151856	-0.04	0.971	030	5617	.0294527
ICV_volM2	2.76e-06	3.23e-06	0.85	0.395	-3.63	e-06	9.14e-06
_cons	-4.726864	4.89848	-0.96	0.336	-14.40	9633	4.952599

<sup>417 .</sup> 

<sup>418 .</sup> save, replace

file finaldata\_imputed\_final.dta saved

<sup>419 .</sup> 

<sup>420 .</sup> 

<sup>421 . \*\*\*\*\*\*\*\*\*</sup>MODEL 4: MODEL 2+liver/kidney disease\*\*\*\*\*

<sup>422 .</sup> 

<sup>423 . //</sup>AFRICAN-AMERICAN//

<sup>424 .</sup> 

<sup>425 .</sup> use finaldata\_imputed\_final,clear

<sup>426 .</sup> 

<sup>427 . //</sup>ANALYSIS B//

<sup>428 .</sup> mi estimate: reg Left\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > =2

Multiple-imput	tation estimat	es		<pre>Imputations =</pre>		5	
Linear regress	sion			Number o	of obs	=	67
				Average	RVI	=	0.1377
				Largest	FMI	=	0.6657
				Complete	DF	=	54
DF adjustment:	: Small samp	le		DF:	min	=	7.26
					avg	=	44.86
					max	=	51.54
Model F test:	Equal F	MI		F( <b>11</b> ,	50.1)	=	3.30
Within VCE typ	oe: 0		Prob > F	=	=	0.0018	
	T						
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-13.95594	87.21063	-0.16	0.873	-188.9	942	161.0823
Sex	95.59773	137.3404	0.70	0.492	-184.8	257	376.0212
w1Age	-8.140242	5.154889	-1.58	0.120	-18.48	833	2.207843
Race	0	(omitted)					
PovStat	-207.3694	85.47359	-2.43	0.019	-378.9	915	-35.74727
TIME_V1SCAN	.0284821	.0661283	0.43	0.669	1045	389	.1615031
w1BMI	724773	6.425114	-0.11	0.911	-13.6	405	12.19096
w1Creatinine	74.35231	250.6608	0.30	0.775	-514.0	469	662.7515
w1USpecGrav	-4188.499	5410.191	-0.77	0.442	-15055	.88	6678.885
w1BUN	3.643435	12.35182	0.29	0.769	-21.18	424	28.47111
w1ALP	0446226	1.930171	-0.02	0.982	-3.923	443	3.834198
w1UricAcid	-13.40582	30.29201	-0.44	0.660	-74.22	461	47.41296
ICV_volM2	.0011633	.0004205	2.77	0.008	.000	318	.0020086
_cons	6663.433	5474.044	1.22	0.229	-4329.	525	17656.39

429 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > ==2

Multiple-imput	ltiple-imputation estimates				ions =		5
Linear regress	sion			Number o	of obs	=	67
				Average	RVI	=	0.0588
				Largest	FMI	=	0.4317
				Complete	DF	=	54
DF adjustment:	: Small samp	le		DF:	min	=	14.79
					avg	=	47.66
					max	=	51.97
Model F test:	Equal F	MI		F( <b>11</b> ,	51.5)	=	4.01
Within VCE typ	pe: 0	DLS		Prob > F		=	0.0003
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-38.93951	85.61216	-0.45	0.651	-210.7	355	132.8565
Sex	-4.123882	126.8679	-0.03	0.974	-259.	791	251.5432
w1Age	-7.907982	5.054397	-1.56	0.124	-18.0	514	2.23544
Race	0	(omitted)					
PovStat	-221.3507	83.48471	-2.65	0.011	-388.8	863	-53.81509
TIME_V1SCAN	.0746189	.0642457	1.16	0.251	0544	297	.2036674
w1BMI	-6.793294	6.255357	-1.09	0.283	-19.35	439	5.767799
w1Creatinine	76.57835	198.9112	0.38	0.706	-347.9	058	501.0625
w1USpecGrav	376.0752	5316.492	0.07	0.944	-10300	.78	11052.93
w1BUN	13.84096	12.0041	1.15	0.254	-10.25	918	37.9411
w1ALP	5298462	1.881907	-0.28	0.779	-4.308	348	3.248656
w1UricAcid	-8.133584	29.74346	-0.27	0.786	-67.83	729	51.57012
ICV_volM2	.0015537	.0004082	3.81	0.000	.0007	341	.0023734
_cons	1929.993	5385.394	0.36	0.722	-8883.	723	12743.71

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
                                                                               67
                                                    Average RVI
                                                                           0.0208
                                                   Largest FMI
                                                                           0.1100
                                                                     =
                                                    Complete DF
                                                                               54
    DF adjustment:
                    Small sample
                                                           min
                                                                            41.83
                                                                            50.20
                                                           avg
                                                                            51.86
                                                           max
                                                                     =
    Model F test:
                                                   F( 11, 52.0)
                        Equal FMI
                                                                            1.49
    Within VCE type:
                             OLS
                                                    Prob > F
                                                                           0.1639
                  Coefficient Std. err.
                                                   P>|t|
                                                          [95% conf. interval]
    LnLesion_V~e
                                            t
        LnNFLw3
                    1.649326
                               1.055735
                                            1.56
                                                   0.124
                                                             -.4704674
                                                                          3.769119
            Sex
                     .1186905
                               1.518896
                                            0.08
                                                   0.938
                                                             -2.934751
                                                                          3.172132
          w1Age
                     .0322536
                               .0618104
                                            0.52
                                                   0.604
                                                             -.0917987
                                                                          .156306
           Race
                          0 (omitted)
                                            0.25
        PovStat
                    .2521672
                              1.025299
                                                   0.807
                                                            -1.806062
                                                                         2.310396
    TIME_V1SCAN
                    -.0013191
                               .0007787
                                           -1.69
                                                   0.096
                                                            -.0028822
                                                                         .0002441
                                            0.95
          w1BMI
                    .0724991
                               .0766506
                                                   0.349
                                                            -.0814605
                                                                          .2264587
                                                                         5.883564
    w1Creatinine
                    1.823648
                              2.011527
                                            0.91
                                                   0.370
                                                            -2.236268
                                                            -233.9207
    w1USpecGrav
                    -104.8768
                               64.30116
                                           -1.63
                                                   0.109
                                                                         24.16706
          w1BUN
                      .094464
                               .1456808
                                            0.65
                                                   0.520
                                                            -.1978939
                                                                          .386822
          w1ALP
                    -.0193877
                               .0228705
                                            -0.85
                                                   0.401
                                                             -.0652917
                                                                          .0265162
      w1UricAcid
                    -.3987618
                               .3617585
                                            -1.10
                                                   0.275
                                                            -1.124729
                                                                          .3272052
                    5.57e-06
      ICV_volM2
                                                   0.273
                                                            -4.53e-06
                                                                          .0000157
                               5.03e-06
                                            1.11
          _cons
                    101.7825 65.30566
                                            1.56
                                                   0.125
                                                            -29.28377
                                                                         232.8487
433 .
434 . save, replace
    file finaldata_imputed_final.dta saved
435 .
436 .
437 .
438 . //WHITES//
440 . use finaldata_imputed_final,clear
441 .
442 .
443 . //ANALYSIS B//
444 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
    > =1
    Multiple-imputation estimates
                                                                                5
                                                   Imputations
    Linear regression
                                                    Number of obs
                                                                               96
                                                                           0.0286
                                                   Average RVI
                                                    Largest FMI
                                                                           0.2089
                                                    Complete DF
                                                                               83
                                                                            41.12
    DF adjustment:
                    Small sample
                                                   DF:
                                                           min
                                                           avg
                                                                            72.98
```

max

F( 11, 80.8)

Prob > F

80.90

7.00

0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-183.752	75.31367	-2.44	0.017	-333.6138	-33.89023
Sex	-94.97325	114.6321	-0.83	0.410	-323.1435	133.197
w1Age	-1.371368	4.329982	-0.32	0.752	-9.987103	7.244367
Race	0	(omitted)				
PovStat	-77.74981	81.15291	-0.96	0.341	-239.2353	83.73568
TIME_V1SCAN	.0525803	.0559684	0.94	0.350	0588026	.1639631
w1BMI	7.13657	5.807241	1.23	0.223	-4.418639	18.69178
w1Creatinine	-100.9116	222.4487	-0.45	0.652	-550.1174	348.2942
w1USpecGrav	-4620.509	7121.31	-0.65	0.519	-18877.02	9636.004
w1BUN	15.26648	9.818031	1.55	0.125	-4.320534	34.85349
w1ALP	-1.329169	1.569534	-0.85	0.400	-4.452108	1.79377
w1UricAcid	8.952385	28.56843	0.31	0.755	-47.89221	65.79698
ICV_volM2	.0021049	.0003308	6.36	0.000	.0014466	.0027632
_cons	5780.882	7085.472	0.82	0.418	-8402.552	19964.32

445 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN > ==1

Number of obs	Multiple-imput	tation estimat	es		Imputati	ons =	5
Largest FMI	Linear regress	sion			Number o	f obs =	96
DF adjustment: Small sample					Average	RVI =	0.0223
DF adjustment: Small sample    DF: min					Largest	FMI =	0.1588
Avg					Complete	DF =	83
Model F test: Equal FMI F( 11, 80.9) = 9.02 Within VCE type: OLS F( 11, 80.9) = 9.02 Prob > F = 0.0000	DF adjustment:	: Small samp	le		DF:	min =	50.47
Model F test: Equal FMI						avg =	74.17
Within VCE type: OLS Prob > F = 0.0000  Right_Hipp~s Coefficient Std. err. t P> t  [95% conf. interval]  LnNFLw3					1	max =	81.03
Right_Hipp~s	Model F test:	Equal F	MI		F( <b>11</b> ,	80.9) =	9.02
LnNFLw3	Within VCE typ	pe: 0	LS		Prob > F	. =	0.0000
LnNFLw3							
Sex         -201.4306         116.5952         -1.73         0.088         -433.4996         30.63839           w1Age         1.007386         4.401611         0.23         0.820         -7.750494         9.765267           Race         0 (omitted)         0         0.600         -207.8851         120.9286           TIME_V1SCAN         .0983139         .056908         1.73         0.088        0149335         .2115614           w1BMI         11.45981         5.912171         1.94         0.056        3042755         23.22389           w1Creatinine         -45.40891         220.5234         -0.21         0.838         -488.2401         397.4223           w1USpecGrav         -5585.605         7241.88         -0.77         0.444         -20081.38         8910.173           w1BUN         15.6447         9.902222         1.58         0.118         -4.09145         35.38086           w1ALP        1567457         1.597418         -0.10         0.922         -3.335161         3.02167           w1UricAcid         -4.790662         29.03722         -0.16         0.869         -62.5653         52.98398           ICV_volM2         .0026748         .0003364         7.95         0.0	Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
w1Age         1.007386         4.401611         0.23         0.820         -7.750494         9.765267           Race         0 (omitted)         0         -0.53         0.600         -207.8851         120.9286           TIME_V1SCAN         .0983139         .056908         1.73         0.088        0149335         .2115614           w1BMI         11.45981         5.912171         1.94         0.056        3042755         23.22389           w1Creatinine         -45.40891         220.5234         -0.21         0.838         -488.2401         397.4223           w1USpecGrav         -5585.605         7241.88         -0.77         0.444         -20081.38         8910.173           w1BUN         15.6447         9.902222         1.58         0.118         -4.09145         35.38086           w1ALP        1567457         1.597418         -0.10         0.922         -3.335161         3.02167           w1UricAcid         -4.790662         29.03722         -0.16         0.869         -62.5653         52.98398           ICV_volM2         .0026748         .0003364         7.95         0.000         .0020055         .0033442	LnNFLw3	-169.9476	76.5165	-2.22	0.029	-322.1931	-17.70207
Race PovStat -43.47824 82.62032 -0.53 0.600 -207.8851 120.9286 TIME_V1SCAN .0983139 .056908 1.73 0.0880149335 .2115614 w1BMI 11.45981 5.912171 1.94 0.0563042755 23.22389 w1Creatinine -45.40891 220.5234 -0.21 0.838 -488.2401 397.4223 w1USpecGrav -5585.605 7241.88 -0.77 0.444 -20081.38 8910.173 w1BUN 15.6447 9.902222 1.58 0.118 -4.09145 35.38086 w1ALP1567457 1.597418 -0.10 0.922 -3.335161 3.02167 w1UricAcid -4.790662 29.03722 -0.16 0.869 -62.5653 52.98398 ICV_volM2 .0026748 .0003364 7.95 0.000 .0020055 .0033442	Sex	-201.4306	116.5952	-1.73	0.088	-433.4996	30.63839
PovStat         -43.47824         82.62032         -0.53         0.600         -207.8851         120.9286           TIME_V1SCAN         .0983139         .056908         1.73         0.088        0149335         .2115614           w1BMI         11.45981         5.912171         1.94         0.056        3042755         23.22389           w1Creatinine         -45.40891         220.5234         -0.21         0.838         -488.2401         397.4223           w1USpecGrav         -5585.605         7241.88         -0.77         0.444         -20081.38         8910.173           w1BUN         15.6447         9.902222         1.58         0.118         -4.09145         35.38086           w1ALP        1567457         1.597418         -0.10         0.922         -3.335161         3.02167           w1UricAcid         -4.790662         29.03722         -0.16         0.869         -62.5653         52.98398           ICV_volM2         .0026748         .0003364         7.95         0.000         .0020055         .0033442	w1Age	1.007386	4.401611	0.23	0.820	-7.750494	9.765267
TIME_V1SCAN	Race	0	(omitted)				
w1BMI         11.45981         5.912171         1.94         0.056        3042755         23.22389           w1Creatinine         -45.40891         220.5234         -0.21         0.838         -488.2401         397.4223           w1USpecGrav         -5585.605         7241.88         -0.77         0.444         -20081.38         8910.173           w1BUN         15.6447         9.902222         1.58         0.118         -4.09145         35.38086           w1ALP        1567457         1.597418         -0.10         0.922         -3.335161         3.02167           w1UricAcid         -4.790662         29.03722         -0.16         0.869         -62.5653         52.98398           ICV_volM2         .0026748         .0003364         7.95         0.000         .0020055         .0033442	PovStat	-43.47824	82.62032	-0.53	0.600	-207.8851	120.9286
w1Creatinine         -45.40891         220.5234         -0.21         0.838         -488.2401         397.4223           w1USpecGrav         -5585.605         7241.88         -0.77         0.444         -20081.38         8910.173           w1BUN         15.6447         9.902222         1.58         0.118         -4.09145         35.38086           w1ALP        1567457         1.597418         -0.10         0.922         -3.335161         3.02167           w1UricAcid         -4.790662         29.03722         -0.16         0.869         -62.5653         52.98398           ICV_volM2         .0026748         .0003364         7.95         0.000         .0020055         .0033442	TIME_V1SCAN	.0983139	.056908	1.73	0.088	0149335	.2115614
w1USpecGrav       -5585.605       7241.88       -0.77       0.444       -20081.38       8910.173         w1BUN       15.6447       9.902222       1.58       0.118       -4.09145       35.38086         w1ALP      1567457       1.597418       -0.10       0.922       -3.335161       3.02167         w1UricAcid       -4.790662       29.03722       -0.16       0.869       -62.5653       52.98398         ICV_volM2       .0026748       .0003364       7.95       0.000       .0020055       .0033442	w1BMI	11.45981	5.912171	1.94	0.056	3042755	23.22389
w1BUN       15.6447       9.902222       1.58       0.118       -4.09145       35.38086         w1ALP      1567457       1.597418       -0.10       0.922       -3.335161       3.02167         w1UricAcid       -4.790662       29.03722       -0.16       0.869       -62.5653       52.98398         ICV_volM2       .0026748       .0003364       7.95       0.000       .0020055       .0033442	w1Creatinine	-45.40891	220.5234	-0.21	0.838	-488.2401	397.4223
w1ALP      1567457       1.597418       -0.10       0.922       -3.335161       3.02167         w1UricAcid       -4.790662       29.03722       -0.16       0.869       -62.5653       52.98398         ICV_volM2       .0026748       .0003364       7.95       0.000       .0020055       .0033442	w1USpecGrav	-5585.605	7241.88	-0.77	0.444	-20081.38	8910.173
w1UricAcid -4.790662 29.03722 -0.16 0.869 -62.5653 52.98398 ICV_volM2 .0026748 .0003364 7.95 0.000 .0020055 .0033442	w1BUN	15.6447	9.902222	1.58	0.118	-4.09145	35.38086
ICV_volM2 .0026748 .0003364 7.95 0.000 .0020055 .0033442	w1ALP	1567457	1.597418	-0.10	0.922	-3.335161	3.02167
	w1UricAcid	-4.790662	29.03722	-0.16	0.869	-62.5653	52.98398
cons   5964.779 7206.571 0.83 0.411 -8459.35 20388.91	ICV_volM2	.0026748	.0003364	7.95	0.000	.0020055	.0033442
	_cons	5964.779	7206.571	0.83	0.411	-8459.35	20388.91

447 . //ANALYSIS C//

448 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w > 1

Multiple-imputation	on estimates	Imputations	=	5
Linear regression		Number of obs	=	96
		Average RVI	=	0.0069
		Largest FMI	=	0.0622
		Complete DF	=	83
DF adjustment: 5	Small sample	DF: min	=	71.58
		avg	=	79.85
		max	=	81.04
Model F test:	Equal FMI	F( <b>11</b> , <b>81.0</b> )	=	0.84
Within VCE type:	OLS	Prob > F	=	0.6015

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.6826397	1.085617	0.63	0.531	-1.477459	2.842738
Sex	-1.168372	1.643269	-0.71	0.479	-4.438203	2.101458
w1Age	.0567597	.0624528	0.91	0.366	0675042	.1810236
Race	0	(omitted)				
PovStat	1.580389	1.168387	1.35	0.180	7443485	3.905126
TIME_V1SCAN	0008631	.0008053	-1.07	0.287	0024655	.0007394
w1BMI	0151189	.0837439	-0.18	0.857	1817459	.1515081
w1Creatinine	.7278194	2.978421	0.24	0.808	-5.210146	6.665784
w1USpecGrav	144.603	97.43424	1.48	0.142	-49.32267	338.5287
w1BUN	.0288744	.1371707	0.21	0.834	2440834	.3018322
w1ALP	0068634	.0226621	-0.30	0.763	0519553	.0382285
w1UricAcid	.2134188	.4124278	0.52	0.606	6072172	1.034055
ICV_volM2	3.12e-06	4.75e-06	0.66	0.513	-6.33e-06	.0000126
_cons	-150.6212	97.04077	-1.55	0.125	-343.768	42.52562

449 .

450 . save, replace

file finaldata\_imputed\_final.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	=	5
Linear regression	Number of obs	=	163
	Average RVI	=	0.0505
	Largest FMI	=	0.4390
	Complete DF	=	148
DF adjustment: <b>Small sample</b>	DF: min	=	19.99
	avg	=	131.36
	max	=	145.90
Model F test: <b>Equal FMI</b>	F( <b>13</b> , <b>144.5</b> )	=	10.01
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3	-156.8173	65.94733	-2.38	0.019	-287.1825	-26.45213
Race AfrAm	-384.9854	210.5618	-1.83	0.070	-801.1762	31.20543
Race#c.LnNFLw3						
AfrAm	141.2915	95.59468	1.48	0.142	-47.64358	330.2265
Sex	-4.953963	84.26199	-0.06	0.953	-171.8597	161.9518
w1Age	-5.792269	3.104299	-1.87	0.064	-11.92753	.3429943
Race	0	(omitted)				
PovStat	-146.4719	57.29163	-2.56	0.012	-259.702	-33.24166
TIME_V1SCAN	.0293617	.0407059	0.72	0.472	0510918	.1098152
w1BMI	2.519949	4.154221	0.61	0.545	-5.690391	10.73029
w1Creatinine	10.71996	155.3967	0.07	0.946	-313.444	334.884
w1USpecGrav	-3079.483	4259.146	-0.72	0.471	-11505.81	5346.844
w1BUN	10.32121	7.390746	1.40	0.165	-4.304906	24.94733
w1ALP	5951224	1.172811	-0.51	0.613	-2.913134	1.72289
w1UricAcid	-3.613574	20.40919	-0.18	0.860	-43.94963	36.72248
ICV_volM2	.001689	.0002466	6.85	0.000	.0012015	.0021764
_cons	5061.51	4272.041	1.18	0.238	-3390.556	13513.58

458 . mi estimate: reg Right\_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGr > 1

Multiple-imputat				Imputati		5
Linear regression	on			Number o		163
				Average		0.0152 0.1533
				Largest Complete		148
DF adjustment:	Small sample			DF:	min =	76.38
Dr aujustillelit.	Sillati Sallipte			Dr.	avg =	139.17
					max =	145.93
Model F test:	Equal FMI			F( <b>13</b> ,		12.40
Within VCE type:	•			Prob > F	,	0.0000
within ver type.	. 013			F1 00 / 1	_	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw3	-140.321	67.37953	-2.08	0.039	-273.4915	-7.150459
LIINI LWJ	140.521	07.57555	2.00	0.055	-2/3.4313	7.150455
Race						
AfrAm	-327.3126	215.6893	-1.52	0.131	-753.5973	98.97213
7117111	32, 13220	22510055		0.151	,,,,,,,,	30137223
Race#c.LnNFLw3						
AfrAm	114.007	98.16126	1.16	0.247	-79.99483	308.0089
711.7				• • • • • • • • • • • • • • • • • • • •	72722.02	2001000
Sex	-97.93548	84.27188	-1.16	0.247	-264.5314	68.66042
w1Age	-4.324168	3.190397	-1.36	0.177	-10.62952	1.981186
Race	0	(omitted)				
PovStat	-138.9176	`58.88965	-2.36	0.020	-255.305	-22.53017
TIME V1SCAN	.0666438	.0417956	1.59		0159605	.1492481
w1BMI	2.856563	4.269984	0.67	0.505	-5.582489	11.29561
w1Creatinine	34.64506	134.3906	0.26	0.797	-232.9955	302.2856
w1USpecGrav	-1158.846	4357.405	-0.27	0.791	-9776.644	7458.952
w1BUN	12.42319	7.447849	1.67	0.097	-2.298911	
w1ALP	0121788	1.204515	-0.01	0.992	-2.392784	2.368426
w1UricAcid	-11.28841	20.9818	-0.54	0.591	-52.7559	30.17908
ICV_volM2	.0021547	.0002537	8.49	0.000	.0016534	.0026561
_cons	2646.681	4368.467	0.61	0.546	-5992.939	

460 . //ANALYSIS C//

Multiple-imputation estimates

461 . mi estimate: reg LnLesion\_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1Creatinine w1USpecGrav

Imputations

arcipic impacac	TON COCIMACCO	*		Impacae.	-05		_
Linear regression	on			Number o	of obs	=	163
				Average	RVI	=	0.0061
				Largest	FMI	=	0.0639
				Complete	e DF	=	148
DF adjustment:	Small sample	•		DF:	min	=	121.52
					avg	=	144.00
					max	=	145.94
Model F test:	Equal FMI			F( 13,	146.0)	=	1.09
Within VCE type:	OLS	5		Prob > I	F	=	0.3706
LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	.7097223	.8939373	0.79	0.429	-1.05	7063	2.476508
Race							
AfrAm	.1714671	2.861075	0.06	0.952	-5.48	3054	5.825989
Race#c.LnNFLw3							
AfrAm	.6099839	1.303009	0.47	0.640	-1.96	5236	3.185204
Sex	1316446	1.112204	-0.12	0.906	-2.32		2.066644
w1Age	.050134	.0423982	1.18	0.239	03	3662	.13393
Race	0	(omitted)					
PovStat	1.067768	.781395	1.37	0.174	476		2.612083
TIME_V1SCAN	0009403	.0005547	-1.70	0.092	002	0366	.000156
w1BMI	.0208918	.0567021	0.37	0.713	091	1735	.132957
w1Creatinine	.8482105	1.704066	0.50	0.620	-2.52	5292	4.221713
w1USpecGrav	25.15049	56.83514	0.44	0.659	-87.1	7696	137.4779
w1BUN	.0741195	.0983541	0.75	0.452	120	2691	.268508
w1ALP	0090086	.0159875	-0.56	0.574	040	6064	.0225892
w1UricAcid	0259788	.2784517	-0.09	0.926	576	2975	.5243399
ICV volM2	3.02e-06	3.37e-06	0.90	0.371	-3.63	e-06	9.67e-06

462 .

file finaldata\_imputed\_final.dta saved

464 .

465 .

466 . \*\*\*\*\*\*\*\*\*MODEL 5: MODEL2+OXIDATIVE STRESS\*\*\*\*\*

467 .

468 . //AFRICAN-AMERICAN// 469 .

470 . use finaldata\_imputed\_final,clear

<sup>463 .</sup> save, replace

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 DF adjustment		Imputat Number Average Largest Complet DF:	of obs RVI FMI	= = = = =	5 67 0.0813 0.4949 56 12.33		
3	: Small samp				avg	=	49.59
					max	=	54.07
Model F test:	Equal F			F( 10,	,	=	4.61
Within VCE typ	pe: C	DLS		Prob >	F	=	0.0001
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw3	2.309218	80.54678	0.03	0.977	-159.291	1	163.9095
Sex	75.95349	91.94049	0.83	0.412	-108.397	4	260.3043
w1Age	-6.895857	4.340972	-1.59	0.118	-15.6034	2	1.811703
Race	0	(omitted)					
PovStat	-225.4855	81.27969	-2.77	0.008	-388.536	2	-62.43489
TIME_V1SCAN	.0455976	.0632353	0.72	0.474	081262	2	.1724574
w1BMI	.3750498	5.395867	0.07	0.945	-10.4450	5	11.19515
w1TotalD	-3.094804	6.776269	-0.46	0.656	-17.8151	1	11.6255
w1Albumin	236.1765	118.652	1.99	0.052	-1.69935	4	474.0523
w1EosinPct	.2600267	17.87802	0.01	0.988	-35.5883		36.1084
ICV_volM2	.0011698	.0003743	3.13	0.003	.000419	3	.0019203
_cons	1342.88	750.4681	1.79	0.079	-161.783	9	2847.545

475 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput	tation estimates		Imputatio	ns	=	5
Linear regress			Number of	obs	=	67
J			Average R	VI	=	0.0683
			Largest F	MI	=	0.4087
			Complete	DF	=	56
DF adjustment	: Small sample		DF: m	in	=	16.18
			a	vg	=	49.31
			m	ax	=	53.69
Model F test:	Equal FMI		F( <b>10</b> ,	53.4)	) =	4.99
Within VCE typ	oe: OLS		Prob > F		=	0.0000
Right_Hipp~s	Coefficient Std. err.	t	P> t	[95%	conf.	interval]

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	4935807	79.72105	-0.01	0.995	-160.4158	159.4287
Sex	3.983069	92.11036	0.04	0.966	-180.837	188.8032
w1Age	-5.607216	4.34813	-1.29	0.203	-14.3364	3.121973
Race	0	(omitted)				
PovStat	-235.7211	80.69716	-2.92	0.005	-397.6184	-73.82387
TIME_V1SCAN	.0652647	.0628973	1.04	0.304	0609489	.1914784
w1BMI	-2.911942	5.387973	-0.54	0.591	-13.72126	7.897376
w1TotalD	-6.348695	6.303915	-1.01	0.329	-19.70007	7.002677
w1Albumin	197.5953	118.0451	1.67	0.100	-39.10414	434.2947
w1EosinPct	8361844	17.77721	-0.05	0.963	-36.48838	34.81601
ICV_volM2	.0015114	.0003738	4.04	0.000	.0007615	.0022613
cons	1501.119	745.3498	2.01	0.049	6.584086	2995.654

477 . //ANALYSIS C//

478 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	67
		Average RVI	=	0.0227
		Largest FMI	=	0.1867
		Complete DF	=	56
DF adjustment:	Small sample	DF: min	=	33.99
		avg	=	52.07
		max	=	54.04
Model F test:	Equal FMI	F( <b>10, 54.0</b> )	=	1.17
Within VCE type:	OLS	Prob > F	=	0.3290

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1.370227	1.02394	1.34	0.186	6829629	3.423417
Sex	.5995378	1.176447	0.51	0.612	-1.759146	2.958222
w1Age	.0270665	.0552027	0.49	0.626	0836111	.137744
Race	0	(omitted)				
PovStat	.088103	1.034651	0.09	0.932	-1.986524	2.16273
TIME V1SCAN	0010327	.0008041	-1.28	0.205	002645	.0005796
w1BMI	.053681	.0689232	0.78	0.439	0845014	.1918635
w1TotalD	.0350445	.0714728	0.49	0.627	1102078	.1802968
w1Albumin	7380766	1.525932	-0.48	0.631	-3.797799	2.321646
w1EosinPct	.0362559	.2284835	0.16	0.875	4218186	.4943303
ICV_volM2	3.91e-06	4.79e-06	0.82	0.418	-5.69e-06	.0000135
_cons	9513746	9.609194	-0.10	0.921	-20.21638	18.31363

479 .

480 . save, replace

file finaldata\_imputed\_final.dta saved

481 . 482 . 483 .

484 . //WHITES//

485

486 . use finaldata\_imputed\_final,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-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	96
•	Average RVI	=	0.0085
	Largest FMI	=	0.0544
	Complete DF	=	85
DF adjustment: Small sample	DF: min	=	74.86
	avg	=	81.97
	max	=	83.05
Model F test: <b>Equal FMI</b>	F( <b>10</b> , <b>83.0</b> )	=	7.57
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-162.5973	70.80629	-2.30	0.024	-303.4268	-21.7677
Sex	-81.18148	93.81229	-0.87	0.389	-267.7717	105.4088
w1Age	-1.133418	4.286961	-0.26	0.792	-9.659974	7.393139
Race	0	(omitted)				
PovStat	-94.38516	79.90172	-1.18	0.241	-253.3052	64.53484
TIME_V1SCAN	.0625553	.055488	1.13	0.263	0478077	.1729183
w1BMI	9.989599	5.401111	1.85	0.068	7530146	20.73221
w1TotalD	.6761437	3.368228	0.20	0.841	-6.033913	7.3862
w1Albumin	137.921	139.1635	0.99	0.325	-138.8673	414.7094
w1EosinPct	-7.44841	16.85033	-0.44	0.660	-40.98374	26.08692
ICV_volM2	.0019667	.0003151	6.24	0.000	.0013399	.0025935
cons	586.0086	829.3514	0.71	0.482	-1063.527	2235.544

492 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imput Linear regress			Imputati Number o Average Largest	f obs = RVI = FMI =	5 96 0.0056 0.0405	
DE adjustment	. Small camp	10		Complete DF:	DF = min =	85 77.58
DF adjustment:	: Small samp	Te				82.41
					avg = max =	83.06
Model F test:	Equal F	мт		F( <b>10</b> ,		9.79
Within VCE typ	•	LS		Prob > F		0.0000
within tel ey				1100 / 1		0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-139.8136	72.04969	-1.94	0.056	-283.1159	3.488655
Sex	-209.7056	95.41163	-2.20	0.031	-399.4735	-19.93762
w1Age	1.55369	4.361686	0.36	0.723	-7.121438	10.22882
Race	0	(omitted)				
PovStat	-57.83545	81.30187	-0.71	0.479	-219.5398	103.8689
TIME_V1SCAN	.0957126	.0564644	1.70	0.094	0165925	.2080177
w1BMI	12.0177	5.496106	2.19	0.032	1.086158	22.94924
w1TotalD	-1.269844	3.360135	-0.38	0.706	-7.954624	5.414937
w1Albumin	31.26356	141.7092	0.22	0.826	-250.5937	313.1208
w1EosinPct	7.419679	17.25058	0.43	0.668	-26.92655	41.76591
ICV_volM2	.0026116	.0003206	8.15	0.000	.0019741	.0032492

493 .

494 . //ANALYSIS C//

\_cons

495 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct I

-1368.207

1989.542

0.37 0.714

Multiple-imputation	on estimates	Imputatio	1s =	5
Linear regression		Number of	obs =	96
		Average R	/I =	0.0027
		Largest F	= IP	0.0272
		Complete	OF =	85
DF adjustment: 9	Small sample	DF: m	in =	79.85
		a	vg =	82.76
		m	ax =	83.07
Model F test:	Equal FMI	F( <b>10</b> ,	83.1) =	0.72
Within VCE type:	OLS	Prob > F	=	0.7013

310.6675 844.0984

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.9321029	1.018852	0.91	0.363	-1.094328	2.958534
Sex	658704	1.349191	-0.49	0.627	-3.342161	2.024753
w1Age	.0667643	.0616807	1.08	0.282	0559149	.1894435
Race	0	(omitted)				
PovStat	1.850578	1.149697	1.61	0.111	4360961	4.137252
TIME_V1SCAN	0005177	.0007983	-0.65	0.518	0021056	.0010701
w1BMI	.0621805	.0777034	0.80	0.426	0923674	.2167284
w1TotalD	0037842	.0478222	-0.08	0.937	0989561	.0913876
w1Albumin	1.83407	2.002507	0.92	0.362	-2.148797	5.816936
w1EosinPct	.1335969	.2392239	0.56	0.578	3422052	.6093989
ICV_volM2	3.75e-06	4.53e-06	0.83	0.411	-5.27e-06	.0000128
_cons	-15.73248	11.93393	-1.32	0.191	-39.46839	8.003422

497 . save, replace

file finaldata\_imputed\_final.dta saved

Multiple-imputation estimates

498 .

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

narcipie-impacat	LIUN ESCIMACES			Tillbacaci	10113	_	,
Linear regression	on			Number o	of obs	=	163
				Average	RVI	=	0.0225
				Largest	FMI	=	0.2109
				Complete	DF	=	150
DF adjustment:	Small sample			DF:	min	=	56.21
					avg	=	140.09
					max	=	148.01
Model F test:	Equal FMI			F( 12,	<b>147.</b> 7)	=	11.54
Within VCE type:	: OLS			Prob > F	=	=	0.0000
Loft Hinnosa s	Coefficient	C+d onn	+	P> t	[05%	conf	intonvall
Left_Hippoca~s	Coefficient	Std. err.	t	Pyltl	[95%	COIII.	interval]
LnNFLw3	-141.1489	62.3245	-2.26	0.025	-264.	3097	-17.98814
				****			
Race							
AfrAm	-405.3498	209.5812	-1.93	0.055	-819.	5534	8.853669
Race#c.LnNFLw3							
AfrAm	140.9647	93.83577	1.50	0.135	-44.4	6904	326.3985
Sex	-8.565918	66.02059	-0.13	0.897	-139.	0318	121.9
w1Age	-4.680746	2.972368	-1.57	0.117	-10.5	5457	1.193082
Race	0	(omitted)					
PovStat	-161.6891	56.12592	-2.88	0.005	-272.	6015	-50.77666
TIME_V1SCAN	.0484543	.0408627	1.19	0.238	03	2298	.1292066
w1BMI	4.754365	3.763115	1.26	0.208	-2.68	2093	12.19082
w1TotalD	1487366	2.970861	-0.05	0.960	-6.09	9596	5.802122
w1Albumin	177.8222	92.2297	1.93	0.056	-4.43	5015	360.0794
w1EosinPct	-6.646752	12.2307	-0.54	0.588	-30.	8262	17.5327
ICV_volM2	.0016397	.0002368	6.92	0.000	.001	1718	.0021076
_cons	1166.625	571.3517	2.04	0.043	37.	5475	2295.703
_							

505 . mi estimate: reg Right\_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1

Multiple-imputat Linear regression				Imputat Number Average Largest	of obs RVI FMI	= = = =	5 163 0.0125 0.0977
DF adjustment:	Small sample	<b>!</b>		Complet DF:	e DF min	=	150 104.29
•					avg	=	143.58
					max	=	148.03
Model F test:	Equal FMI			F( 12,	,	=	13.45
Within VCE type:	: OLS			Prob >	F	=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-112.7264	64.62516	-1.74	0.083	-240.	4347	14.9819
Race							
AfrAm	-374.7742	216.6565	-1.73	0.086	-802.	9334	53.38496
Race#c.LnNFLw3							
AfrAm	114.9894	97.22541	1.18	0.239	-77.	1419	307.1208
Sex	-112.5385	68.44604	-1.64	0.102	-247.	7983	22.72133
w1Age	-3.090001	3.084942	-1.00	0.318	-9.18	6473	3.00647
Race	0	(omitted)					
PovStat	-152.2838	58.2108	-2.62	0.010		_	-37.24973
TIME_V1SCAN	.0773633	.0422975	1.83	0.069			.1609491
w1BMI	4.32386	3.897637	1.11	0.269			12.02607
w1TotalD	-2.501039	2.901624	-0.86	0.391		-	3.2528
w1Albumin	111.1831	95.57404	1.16	0.247			300.0488
w1EosinPct	1.476301	12.73336	0.12	0.908			26.6555
ICV_volM2	.0021498	.0002454	8.76	0.000			.0026347
_cons	1052.563	591.6938	1.78	0.077	-116.	6978	2221.824

507 . //ANALYSIS C//

508 . mi estimate: reg LnLesion\_Volume c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1TotalD w1Albumin w1Eo

Multiple-imputat Linear regressio				Imputation Number of Average F Largest F Complete	F obs RVI FMI	= = = =	5 163 0.0052 0.0599 150
DF adjustment:	Small sample			•	nin	=	125.10
				ā	avg	=	146.19
	- 1			==	nax	=	148.02
Model F test:	Equal FMI			F( 12,	148.0)	=	1.14
Within VCE type:  LnLesion Vol~e	OLS Coefficient	Std. err.	t	Prob > F 	[OE%	=	<b>0.3329</b> interval
Lillesion_voi~e	Coefficient	stu. err.		P> L	[95%	COIII.	Interval
LnNFLw3	.9384552	.8552994	1.10	0.274	75	5172	2.62863
Race AfrAm	.6870004	2.865143	0.24	0.811	-4.974	4976	6.348977
Race#c.LnNFLw3 AfrAm	.4114173	1.286671	0.32	0.750	-2.131	1203	2.954038
Sex	.0731734	.9055375	0.08	0.936	-1.716	5279	1.862626
w1Age	.0534559	.040771	1.31	0.192	027	1129	.1340246

Race	0	(omitted)				
PovStat	1.072973	.769992	1.39	0.166	4486272	2.594574
TIME_V1SCAN	0007991	.0005598	-1.43	0.156	0019054	.0003072
w1BMI	.0521946	.0516313	1.01	0.314	049836	.1542251
w1TotalD	.0092121	.0377024	0.24	0.807	065405	.0838292
w1Albumin	.6517833	1.265677	0.51	0.607	-1.849349	3.152916
w1EosinPct	.1468579	.1657153	0.89	0.377	1806165	.4743322
ICV_volM2	2.94e-06	3.25e-06	0.91	0.367	-3.48e-06	9.36e-06
_cons	-8.47381	7.835496	-1.08	0.281	-23.95775	7.010131

510 . save, replace

file finaldata\_imputed\_final.dta saved

511 .

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

513 .

514 . //AFRICAN-AMERICAN//

515 .

516 . use finaldata\_imputed\_final,clear

517 . 518 .

519 . 520 .

521 . //ANALYSIS B//

\_cons

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	=	67
	Average RVI	=	0.0150
	Largest FMI	=	0.0528
	Complete DF	=	57
DF adjustment: Small sample	DF: min	=	50.80
	avg	=	54.26
	max	=	55.06
Model F test: <b>Equal FMI</b>	F( 9, 55.0)	=	6.16
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	19.93781	75.93833	0.26	0.794	-132.2556	172.1312
Sex	119.4362	87.43058	1.37	0.177	-55.77449	294.6469
w1Age	-8.862388	4.139197	-2.14	0.037	-17.15871	5660685
Race	0	(omitted)				
PovStat	-248.7042	78.10688	-3.18	0.002	-405.2634	-92.14498
TIME_V1SCAN	.0457975	.0588247	0.78	0.440	0721524	.1637474
w1BMI	-1.596521	5.159467	-0.31	0.758	-11.93808	8.745037
w1currdrugs	-162.8414	70.53284	-2.31	0.025	-304.4555	-21.22735
w1SRH	-78.78655	41.44908	-1.90	0.063	-161.866	4.292949
ICV_volM2	.0013377	.0003685	3.63	0.001	.000599	.0020763

5.15 0.000

1467.143

3334.016

2400.579 465.7878

523 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_volM2 if

Linear regression  Number of obs =  Average RVI =	67 0.0130 0.0470
· · · · · · · · · · · · · · · · · · ·	
	0 0170
Largest FMI =	0.04/0
Complete DF =	57
DF adjustment: <b>Small sample</b> DF: min =	51.40
avg =	54.39
max =	55.07
Model F test: Equal FMI F( 9, 55.0) =	6.08
Within VCE type: OLS Prob > F =	0.0000
Right_Hipp~s Coefficient Std. err. t P> t  [95% conf. in	terval]
LnNFLw3 -1.111244 76.75595 -0.01 0.989 -154.9395	152.717
Sex 44.18365 88.41861 0.50 0.619 -133.0073 2	21.3746
w1Age -7.537321 4.182185 -1.80 0.077 -15.91941 .	8447687
Race 0 (omitted)	
PovStat -248.6738 78.89458 -3.15 0.003 -406.8016	-90.546
TIME V1SCAN .0774382 .0594441 1.30 0.1980417477 .	1966241
w1BMI -4.580977 5.211035 -0.88 0.383 -15.02518 5	.863224
w1currdrugs -147.9294 71.13087 -2.08 0.043 -290.7033 -5	.155517
§	7.62433
	0023648
<del>-</del>	298.593

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		= 5	
Linear regress	sion			Number		= 67
				Average		= 0.0027
				Largest		= 0.0118
				Complet	e DF	= 57
DF adjustment:	: Small sam	ple		DF:	min	= 54.46
					avg	= 54.99
					max	= 55.10
Model F test:	Equal	FMI		F( 9,	<b>55.1</b> )	= 1.94
Within VCE typ	oe:	0LS		Prob >	F	= 0.0651
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw3	1.672095	.9606003	1.74	0.087	2529467	3.597137
Sex	.654228	1.107658	0.59	0.557	-1.565488	2.873945
w1Age	.0346818	.0522817	0.66	0.510	0700908	.1394544
Race	0	(omitted)				
PovStat	0069924	.9854927	-0.01	0.994	-1.981894	1.967909
TIME_V1SCAN	0011274	.0007395	-1.52	0.133	0026095	.0003548
w1BMI	.0884207	.0651351	1.36	0.180	0421099	.2189513
w1currdrugs	.7860412	.8762569	0.90	0.374	9704107	2.542493
w1SRH	-1.005078	.5235133	-1.92	0.060	-2.054215	.0440582
ICV volM2	5.44e-06	4.65e-06	1.17	0.248	-3.89e-06	.0000148
_cons	-5.236261	5.900927	-0.89	0.379	-17.06152	

```
Thursday March 30 18:57:20 2023 Page 61
527 .
528 . save, replace
   file finaldata_imputed_final.dta saved
529 .
530 .
531 .
532 . //WHITES//
533 .
534 . use finaldata_imputed_final,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-imputation	n estimates	Imputations Number of obs	=	5
Linear regression		Average RVI	=	96 0.0037
		Largest FMI	=	0.0221
		Complete DF	=	86
DF adjustment: Si	mall sample	DF: min	=	81.57
		avg	=	83.67
		max	=	84.04
Model F test:	Equal FMI	F( 9, 84.0)	=	8.40
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex w1Age	-160.8951 -56.12398 -1.066883	70.68714 92.40839 4.283174	-2.28 -0.61 -0.25	0.025 0.545 0.804	-301.465 -239.8935 -9.584389	-20.32515 127.6456 7.450623
Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2cons	0 -78.69411 .0440509 9.082712 67.72412 -2.897696 .0019729 1170.859	(omitted) 82.28505 .055382 5.194017 97.3007 44.16078 .0003125 500.4826	-0.96 0.80 1.75 0.70 -0.07 6.31 2.34	0.342 0.429 0.084 0.488 0.948 0.000 0.022	-242.3317 0660953 -1.24615 -125.8531 -90.7157 .0013514 175.6012	84.94352 .1541971 19.41157 261.3014 84.92031 .0025944 2166.116

540 . mi estimate: reg Right\_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_volM2 if

Multiple-imputation estimates		Imputations	=	5
Linear regression		Number of obs	=	96
		Average RVI	=	0.0026
		Largest FMI	=	0.0226
		Complete DF	=	86
DF adjustment:	Small sample	DF: min	=	81.50
		avg	=	83.76
		max	=	84.06
Model F test:	Equal FMI	F( <b>9, 84.1</b> )	=	11.09
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-141.9562	71.51526	-1.98	0.050	-284.1708	.2584787
Sex	-197.2273	93.44347	-2.11	0.038	-383.0495	-11.40518
w1Age	1.525537	4.335239	0.35	0.726	-7.095492	10.14657
Race	0	(omitted)				
PovStat	-65.7863	83.23254	-0.79	0.432	-231.3046	99.73196
TIME V1SCAN	.1028118	.0558925	1.84	0.069	0083382	.2139618
w1BMI	11.60981	5.257525	2.21	0.030	1.154653	22.06497
w1currdrugs	19.98699	98.50984	0.20	0.840	-175.9983	215.9723
w1SRH	-34.93767	44.69341	-0.78	0.437	-123.8145	53.93914
ICV_volM2	.0025993	.0003162	8.22	0.000	.0019704	.0032282
_cons	522.7933	506.7082	1.03	0.305	-484.8511	1530.438

542 . //ANALYSIS C//

543 . mi estimate: reg LnLesion\_Volume LnNFLw3 Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_volM2 if s

-18.88819

9.782248

96 0.0160
0.1297
86
58.27
81.31
84.03
0.74
0.6733
interval]
2.909997
2.178961
.1794747
4.046032
.0010391
.1754025
2.082457
.9149528
.0000124

-0.63

0.529

544 .

545 . save, replace

\_cons

file finaldata\_imputed\_final.dta saved

-4.55297

546 .

7.208257

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		=	5 163
· ·				Average	RVI	=	0.0021
				Largest		=	0.0169
				Complete	DF	=	151
DF adjustment:	Small sample	!		DF:	min	=	145.18
_					avg	=	148.63
					max	=	149.04
Model F test:	Equal FMI	•		F( <b>11</b> ,	149.0)	=	12.55
Within VCE type:	: OLS	;		Prob > F		=	0.0000
	1						
Left_Hippoca~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-141.7513	62.50147	-2.27	0.025	-265.	2549	-18.2476
Race							
AfrAm	-414.8302	205.1136	-2.02	0.045	-820.	1377	-9.522794
Race#c.LnNFLw3							
AfrAm	148.4327	94.03451	1.58	0.117	-37.3	8068	334.2461
Sex	5.246742	64.71788	0.08	0.935	-122.	6366	133.1301
w1Age	-5.289736	2.981576	-1.77		-11.1		.6019151
Race	0	(omitted)		0.070		0233	.0023232
PovStat	-170.2923	57.29563	-2.97	0.003	-283.	5095	-57.07518
TIME V1SCAN	.0415331	.0404116	1.03		038		.121388
w1BMI	2.721197	3.653124	0.74		-4.49		9.93986
w1currdrugs	-45.82645	59.50186	-0.77	0.442	-163.	4283	71.77538
w1SRH	-36.21542	30.60267	-1.18	0.239	-96.6	8692	24.25608
ICV_volM2	.001673	.0002378	7.03	0.000	.001	2031	.0021429
cons	2055.745	352.6015	5.83	0.000	1358	.996	2752.494

553 . mi estimate: reg Right\_Hippocampus c.LnNFLw3##Race Sex w1Age Race PovStat TIME\_V1SCAN w1BMI w1currdrugs w1SRH ICV\_

Multiple-imputat	tion estimates			Imputati	ons	=	5
Linear regression	on			Number o	f obs	=	163
				Average	RVI	=	0.0036
				Largest	FMI	=	0.0291
				Complete	DF	=	151
DF adjustment:	Small sample			DF:	min	=	140.79
					avg	=	148.23
					max	=	149.03
Model F test:	Equal FMI			F( <b>11</b> ,	149.0)	=	15.16
Within VCE type:	: OLS			Prob > F		=	0.0000
Right_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-116.0375	64.02369	-1.81	0.072	-242.	5493	10.47419
Race AfrAm	-356.2282	210.1231	-1.70	0.092	-771.4	4354	58.97912
Race#c.LnNFLw3 AfrAm	119.9964	96.32157	1.25	0.215	-70.3	3638	310.3291
Sex	-97.62209	66.30947	-1.47	0.143	-228.	6511	33.40695

w1Age	-3.82984	3.05384	-1.25	0.212	-9.86428	2.204599
Race	0	(omitted)				
PovStat	-166.5269	58.68468	-2.84	0.005	-282.4887	-50.56501
TIME_V1SCAN	.0837417	.0414244	2.02	0.045	.0018842	.1655992
w1BMI	3.067963	3.741393	0.82	0.414	-4.325105	10.46103
w1currdrugs	-61.40198	61.31691	-1.00	0.318	-182.6229	59.8189
w1SRH	-50.24106	31.36095	-1.60	0.111	-112.2115	11.72934
ICV_volM2	.0021758	.0002436	8.93	0.000	.0016945	.0026572
_cons	1624.432	361.1352	4.50	0.000	910.8219	2338.043

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

163

Imputations

Number of obs

				Average	RVI =	0.0072
				Largest	FMI =	0.0756
				Complete	DF =	151
DF adjustment:	Small sample	<u> </u>		DF:	min =	117.18
					avg =	146.21
					max =	149.04
Model F test:	Equal FM3	[		F( <b>11</b> ,	149.0) =	1.33
Within VCE type:	: OLS	5		Prob > F	=	0.2130
 LnLesion_Vol~e	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	.9305506	.84923	1.10	0.275	747538	2.608639
Race						
AfrAm	.2653347	2.786727	0.10	0.924	-5.241271	5.77194
Race#c.LnNFLw3						
AfrAm	.4984934	1.277809	0.39	0.697	-2.026477	3.023464
Sex	.282963	.8792868	0.32	0.748	-1.454517	2.020443
w1Age	.0545651	.0405291	1.35	0.180	0255217	.1346519
Race	0	(omitted)				
PovStat	.9599106	.7796134	1.23	0.220	5806603	2.500482
TIME_V1SCAN	0008023	.0005492	-1.46	0.146	0018876	.000283
w1BMI	.0444857	.0496784	0.90	0.372	0536815	.1426529
w1currdrugs	.2463729	.8324521	0.30	0.768	-1.402228	1.894974
w1SRH	5670996	.4156818	-1.36	0.175	-1.388491	.2542919
ICV_volM2	3.17e-06	3.23e-06	0.98	0.329	-3.22e-06	9.55e-06
_cons	-3.999426	4.7935	-0.83	0.405	-13.47159	5.472734

557 .

558 . save, replace

file finaldata\_imputed\_final.dta saved

559 .

560 .

561 .

562 **.** 563 **.** 

564 . capture log close