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8 . **ANALYSES A-C, TOTAL POPULATION**

9.

10 . **Model 1**

11 .

12 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

13 .

14 . //ANALYSIS A//

15 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta

Source	SS	df	MS	Number of obs	=	213
				F(6, 206)	=	27.13
Model	1.3400e+12	6	2.2334e+11	Prob > F	=	0.0000
Residual	1.6955e+12	206	8.2307e+09	R-squared	=	0.4414
				Adj R-squared	=	0.4252
Total	3.0355e+12	212	1.4319e+10	Root MSE	=	90723
TOTALBRAIN	Coefficient	Std. err.	t I	P> t		Beta
LnNFLw3	-4981.216	12124.39	-0.41	0.682	-	.0248201
Sex	134955.7	12754.88	10.58	0.000		.5619351
w1Age	-1844.292	810.5277	-2.28	0.024	-	.1412264
Race	-69558.16	13288.05	-5.23	0.000	-	.2878153
PovStat	-4144.574	14731.18	-0.28	0.779	-	.0161849
TIME_V1SCAN	-22.59913	9.89046	-2.28	0.023	-	.1266663
_cons	1197258	54086.08	22.14	0.000		•

16 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta

Source	SS	df	MS	Number of obs	=	213
				F(6, 206)	=	28.57
Model	4.2115e+11	6	7.0192e+10	Prob > F	=	0.0000
Residual	5.0616e+11	206	2.4571e+09	R-squared	=	0.4542
				Adj R-squared	=	0.4383
Total	9.2731e+11	212	4.3741e+09	Root MSE	=	49569
GM	Coefficient	Std. err.	t F	P> t		Beta
LnNFLw3	-7038.028	6624.468	-1.06	3.289		063449
Sex	68737.83	6968.95	9.86	0.000		.5178412
w1Age	-1686.702	442.8522	-3.81	0.000	_	.2336846
Race	-48264.91	7260.259	-6.65	0.000	_	.3613294
PovStat	-1474.801	8048.749	-0.18	0.855	_	.0104201
TIME V1SCAN	-10.26623	5.403902	-1.90	0.059	_	.1041085
-	720720 2	20551 20	24 60 (2 000		

17 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta

Source	SS	df	MS	Number of obs	= 213 = 18.38
Model Residual	2.1155e+11 3.9525e+11	6 206	3.5259e+10 1.9187e+09	Prob > F R-squared	= 0.0000 = 0.3486
Total	6.0680e+11	212	2.8623e+09	- Adj R-squared Root MSE	= 0.3297 = 43803
WM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN _cons	-730.6776 55748.93 -515.5662 -19191.71 -6111.101 -10.54662 460690.7	5853.843 6158.252 391.3352 6415.673 7112.437 4.775266 26113.59	9.05 -1.32 -2.99 -0.86 -2.21	0.901 0.000 0.189 0.003 0.391 0.028 0.000	0081431 .5191913 0883012 1776133 053376 1322144

18 .

19 . //ANALYSIS B//

20 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 ,beta

Source	SS	df	MS	Number of obs	= 213 = 26.01
Model Residual	15577401.3 17542101.3	7 205	2225343.05 85571.2259	Frob > F R-squared	= 0.0000 = 0.4703
Total	33119502.6	212	156224.069	- Adj R-squared • Root MSE	= 0.4523 = 292.53
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-115.243	39.0945	-2.95	0.004	1738436
Sex	-28.36787	54.04536	-0.52	0.600	03576
w1Age	-3.533937	2.613485	-1.35	0.178	0819259
Race	-60.35169	46.28436	-1.30	0.194	0756017
PovStat	-98.11719	47.51394	-2.07	0.040	1159984
TIME_V1SCAN	009188	.0321556	-0.29	0.775	0155908
ICV_volM2	.0017547	.0001975	8.88	0.000	.6411886
_cons	1898.465	304.9054	6.23	0.000	•

21 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 ,beta

	Source	SS	df	MS	Number of obs	=	213
-					F(7, 205)	=	29.79
	Model	19243178.6	7	2749025.52	Prob > F	=	0.0000
	Residual	18916674.5	205	92276.461	R-squared	=	0.5043
-					Adj R-squared	=	0.4874
	Total	38159853.1	212	179999.307	Root MSE	=	303.77

Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-75.72912	40.59731	-1.87	0.064	1064255
_					
Sex	-82.11941	56.12288	-1.46	0.145	0964396
w1Age	-3.093175	2.713949	-1.14	0.256	0668044
Race	-56.02866	48.06356	-1.17	0.245	0653869
PovStat	-77.39229	49.3404	-1.57	0.118	0852399
TIME_V1SCAN	.0117322	.0333917	0.35	0.726	.0185466
ICV_volM2	.002144	.0002051	10.45	0.000	.7298842
_cons	1561.142	316.6261	4.93	0.000	•

23 . //ANALYSIS C//

24 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 , beta

Source	SS	df	MS	Number of obs	=	209
Model Residual	143.0494 3131.43476	7 201	20.4356285 15.5792774	R-squared	= = =	1.31 0.2463 0.0437
Total	3274.48416	208	15.7427123	- Adj R-squared B Root MSE	=	0.0104 3.9471
LnLesion_V~e	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	.3321878	.5401326	0.62	0.539		.0490727
Sex	.1197849	.7339493	0.16	0.871		.0150393
w1Age	.0769581	.0359844	2.14	0.034		.1762324
Race	.6094322	.6320866	0.96	0.336		.0760177
PovStat	.1219654	.6506785	0.19	0.852		.0143805
TIME_V1SCAN	0001764	.0004348	-0.41	0.685		030088
ICV_volM2	1.50e-06	2.67e-06	0.56	0.576		.0546972
_cons	-1.58836	4.130742	-0.38	0.701		•

25 . 26 .

27 .

28 . **Model 2: BMI-Adjusted**

29 .

30 . use finaldata_imputed,clear

31 .

33 . //ANALYSIS A//

34 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	213
		Average RVI	=	0.0121
		Largest FMI	=	0.0912
		Complete DF	=	205
DF adjustment: Small sample		DF: min	=	137.33
		avg	=	193.23
		max	=	203.01
Model F test:	Equal FMI	F(7, 202.6)	=	22.99
Within VCE type:	OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-3389.052	12312.63	-0.28	0.783	-27666.64	20888.54
Sex	136404.9	12907.72	10.57	0.000	110954.4	161855.5
w1Age	-1888.133	813.161	-2.32	0.021	-3491.46	-284.8053
Race	-69907.85	13308.55	-5.25	0.000	-96148.64	-43667.06
PovStat	-3626.597	14760.62	-0.25	0.806	-32730.38	25477.18
TIME_V1SCAN	-22.20774	9.914138	-2.24	0.026	-41.75569	-2.659782
w1BMI	780.9548	1024.295	0.76	0.447	-1244.473	2806.383
_cons	1169882	64954.31	18.01	0.000	1041765	1297999

35 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0174
	Largest FMI	=	0.1263
	Complete DF	=	205
DF adjustment: Small sample	DF: min	=	109.45
	avg	=	188.76
	max	=	203.01
Model F test: Equal FMI	F(7 , 202.2)	=	24.26
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-5748.345	6719.133	-0.86	0.393	-18997.06	7500.368
Sex	69926.91	7040.027	9.93	0.000	56045.83	83807.98
w1Age	-1722.53	443.4523	-3.88	0.000	-2596.895	-848.1642
Race	-48545.68	7258.966	-6.69	0.000	-62858.41	-34232.96
PovStat	-1047.739	8049.065	-0.13	0.897	-16918.23	14822.75
TIME_V1SCAN	-9.94249	5.408114	-1.84	0.067	-20.60586	.7208757
w1BMI	637.0088	568.6576	1.12	0.265	-489.9997	1764.017
_cons	707406.5	35597.44	19.87	0.000	637176.6	777636.4

36 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputation estimates Imputations		outations	=	5	
Linear regression		Num	ber of obs	=	213
		Ave	erage RVI	=	0.0087
		Lar	gest FMI	=	0.0672
		Com	plete DF	=	205
DF adjustment: Small sample		DF:	min	=	158.51
			avg	=	196.42
			max	=	203.00
Model F test:	Equal FMI	F(7, 202.8)	=	15.54
Within VCE type:	OLS	Pro	b > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI	-425.4224 56013.72 -523.688 -19259.48 -6017.242 -10.47862 145.7654	5948.619 6240.532 393.1235 6433.041 7136.498 4.792291 489.2822	-0.07 8.98 -1.33 -2.99 -0.84 -2.19 0.30	0.943 0.000 0.184 0.003 0.400 0.030 0.766	-12154.57 43709.07 -1298.818 -31943.63 -20088.41 -19.92768 -820.5881	11303.72 68318.37 251.4417 -6575.325 8053.924 -1.029563 1112.119
_cons	455580.6	31302.35	14.55	0.000	393847.1	517314.2

37 . 38 . //ANALYSIS B//

39 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imput		Imputati	.ons	=	5		
Linear regress	sion			Number o	of obs	=	213
				Average	RVI	=	0.0232
				Largest	FMI	=	0.1862
				Complete	P DF	=	204
DF adjustment:	Small samp	le		DF:	min	=	74.41
					avg	=	186.74
					max	=	201.96
Model F test:	Equal F	MI		F(8,	200.8)	=	22.06
Within VCE typ	oe: 0	LS		Prob > F	=	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-114.912	39.80022	-2.89	0.004	-193.39	25	-36.43151
Sex	-28.01044	54.90005	-0.51	0.610	-136.26	_	80.24383
w1Age	-3.54018	2.626396	-1.35	0.179	-8.7188		1.638515
0-							
Race	-60.78022	46.46422	-1.31	0.192	-152.39	76	30.83717
Race PovStat	-60.78022 -98.25743	46.46422 47.67886	-1.31 -2.06	0.192 0.041	-152.39 -192.26		30.83717 -4.245177
PovStat						97	
	-98.25743	47.67886	-2.06	0.041	-192.26	97 37	-4.245177
PovStat TIME_V1SCAN	-98.25743 0090553	47.67886 .0322594	-2.06 -0.28	0.041 0.779	-192.26 07266	97 37 17	-4.245177 .0545531

40 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0253
	Largest FMI	=	0.2007
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	68.11
	avg	=	185.93
	max	=	201.95
Model F test: Equal FMI	F(8, 200.6)	=	25.23
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-74.3155	41.33851	-1.80	0.074	-155.8298	7.198816
Sex	-80.34781	57.01562	-1.41	0.160	-192.7741	32.07847
w1Age	-3.130175	2.727121	-1.15	0.252	-8.507482	2.247132
Race	-56.888	48.24956	-1.18	0.240	-152.0258	38.24982
PovStat	-77.18143	49.50466	-1.56	0.121	-174.7937	20.43087
TIME_V1SCAN	.0120998	.0334962	0.36	0.718	0539474	.078147
w1BMI	.664474	3.643313	0.18	0.856	-6.605427	7.934375
ICV_volM2	.0021402	.000206	10.39	0.000	.0017339	.0025464
cons	1543.062	335.7266	4.60	0.000	880.9358	2205.188

42 . //ANALYSIS C//

43 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	209
	Average RVI	=	0.0489
	Largest FMI	=	0.3373
	Complete DF	=	200
DF adjustment: Small sample	DF: min	=	32.76
	avg	=	176.65
	max	=	197.87
Model F test: Equal FMI	F(8, 193.5)	=	1.11
Within VCE type: OLS	Prob > F	=	0.3592

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.3676558	.5495713	0.67	0.504	7162044	1.451516
Sex	.1671199	.7465598	0.22	0.823	-1.305228	1.639467
w1Age	.0758747	.0361486	2.10	0.037	.0045882	.1471613
Race	.602223	.6339139	0.95	0.343	6478723	1.852318
PovStat	.138031	.6523179	0.21	0.833	-1.148357	1.424419
TIME_V1SCAN	0001694	.000436	-0.39	0.698	0010291	.0006903
w1BMI	.0192634	.0515334	0.37	0.711	0856107	.1241375
ICV_volM2	1.44e-06	2.68e-06	0.54	0.592	-3.85e-06	6.72e-06
_cons	-2.19639	4.421165	-0.50	0.620	-10.92117	6.528393

44 .

45 . save, replace

file finaldata_imputed.dta saved

48 .

49 . **Model 1**

51 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

53 . //ANALYSIS A//

54 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	S = =	95 4.88
Model Residual	2.7085e+11 9.8848e+11	5 89	5.4171e+16 1.1107e+16	Prob > F R-squared	=	0.0005 0.2151 0.1710
Total	1.2593e+12	94	1.3397e+16	- Adj R-squared Root MSE	d = =	1.1e+05
TOTALBRAIN	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3 Sex	-13942.19 0	18869.9 (omitted)	-0.74	0.462	-	.0781548
w1Age	-2091.126	1388.237	-1.51	0.136	-	.1616415
Race	-89298.15	23262.47	-3.84	0.000	-	.3815363
PovStat	10509.56	27268.38	0.39	0.701		.0391005
TIME_V1SCAN	-35.59424	16.95326	-2.10	0.039		202798
_cons	1535369	89022.09	17.25	0.000		•

55 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta
note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 95
Model Residual	1.2328e+11 2.8446e+11	5 89	2.4656e+1 3.1962e+0	9 R-squared	= 7.71 = 0.0000 = 0.3023
Total	4.0774e+11	94	4.3377e+0	— Adj R-squared 9 Root MSE	= 0.2632 = 56535
GM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	-9941.73 0	10122.73 (omitted)	-0.98	0.329	0979411
w1Age	-2251.474	`744.7178	-3.02	0.003	3058565
Race	-58710.21	12479.12	-4.70	0.000	4408445
PovStat	5974.411	14628.08	0.41	0.684	.0390635
TIME_V1SCAN	-17.68759	9.094548	-1.94	0.055	177105
_cons	921321.8	47755.76	19.29	0.000	•

56 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta
note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	95
Model Residual	3.5966e+10 2.2854e+11	5 89	7.1931e+09 2.5679e+09	R-squared	= = =	2.80 0.0214 0.1360 0.0874
Total	2.6451e+11	94	2.8139e+09	- Adj R-squared P Root MSE	=	50674
WM	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3 Sex	-6431.106 0	9073.38 (omitted)	-0.71	0.480	•	.0786613
w1Age	-409.0684	667.5183	-0.61	0.542		.0689953
Race	-28487.26	11185.5	-2.55	0.013		.2655798
PovStat	-3303.478	13111.69	-0.25	0.802		0268176
TIME_V1SCAN	-16.25369	8.151782	-1.99	0.049		202063
_cons	601303.6	42805.27	14.05	0.000		•

57 .

58 .

59 . //ANALYSIS B//

60 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==2,beta note: Sex omitted because of collinearity.

	Source	SS	df	MS	Number of obs	=	95
_					F(6, 88)	=	13.84
	Model	9008502.37	6	1501417.06	Prob > F	=	0.0000
	Residual	9546505.14	88	108483.013	R-squared	=	0.4855
_					Adj R-squared	=	0.4504
	Total	18555007.5	94	197393.697	Root MSE	=	329.37

Left_Hippo∼s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-154.1592	59.15658	-2.61	0.011	2251306
Sex	0	(omitted)			ě
w1Age	-4.341722	4.339255	-1.00	0.320	0874329
Race	26.6877	80.44855	0.33	0.741	.0297061
PovStat	-176.0936	85.26756	-2.07	0.042	1706795
TIME_V1SCAN	0343596	.0539102	-0.64	0.526	0510002
ICV_volM2	.0020748	.0003026	6.86	0.000	.6006324
_cons	1533.561	579.2925	2.65	0.010	•

61 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==2,beta note: **Sex** omitted because of collinearity.

Source	SS	df	MS	Number of obs - F(6, 88)	= 95 = 14.55
Model Residual	10103109.5 10183368.7	6 88	1683851.5 115720.09	8 Prob > F 9 R-squared	= 0.0000 = 0.4980
Total	20286478.2	94	215813.59	Adj R-squaredRoot MSE	= 0.4638 = 340.18
Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex w1Age	-109.0851 0 -4.98442	61.09794 (omitted) 4.481658	-1.79 -1.11	0.078 0.269	1523553 0959964
Race PovStat TIME V1SCAN	13.72325 -160.5514 0090344	83.08866 88.06582 .0556794	0.17 -1.82 -0.16	0.869 0.072 0.871	.0146089 1488261 0128248
ICV_volM2 _cons	.0023636 1294.411	.0003125 598.3033	7.56 2.16	0.000 0.033	.654403

62 .
63 . //ANALYSIS C//
64 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==2,beta

Source	SS	df	MS	Number of obs	=	93
				- F(6, 86)	= 0	. 19
Model	17.3508512	6	2.89180853	B Prob > F	= 0.9	792
Residual	1317.44955	86	15.3191808	R-squared	= 0.0	130
				- Adj R-squared	= -0.0	559
Total	1334.8004	92	14.5087		= 3.9	914
LnLesion_V~e	Coefficient	Std. err.	t	P> t	Ве	eta
LnNFLw3	1117761	.7232794	-0.15	0.878	0187	745
Sex	0	(omitted)				
w1Age	.0316926	.053391	0.59	0.554	.0736	853
Race	.1883807	.9614687	0.20	0.845	.0244	433
PovStat	6016125	1.026998	-0.59	0.560	0685	141
TIME V1SCAN	.0000173	.0006409	0.03	0.978	.0030	335
ICV volM2	-1.02e-06	3.60e-06	-0.28	0.778	0346	103
_cons	6.566197	6.90009	0.95	0.344		

66 . 67 . **Model 2**

68 .

69 . use finaldata_imputed,clear

70 .

71 .

72 . //ANALYSIS A//

73 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Multiple-imputation estimates Linear regression	<pre>Imputations = Number of obs =</pre>	5 95
Ç	Average RVI =	0.0085
	Largest FMI =	0.0512
	Complete DF =	88
DF adjustment: Small sample	DF: min =	78.10
	avg =	84.64
	max =	86.03
Model F test: Equal FMI	F(6, 86.0) =	4.18
Within VCE type: OLS	Prob > F =	0.0010

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-13071.05	18909.13	-0.69	0.491	-50661.44	24519.34
Sex w1Age	0 -2373.466	(omitted) 1422.182	-1.67	0.099	-5200.657	453.7262
Race PovStat	-92003.02 12503.04	23467.33 27387.95	-3.92 0.46	0.000 0.649	-138655.9 -41942.26	-45350.17 66948.33
TIME_V1SCAN	-36.73238	17.01	-2.16	0.034	-70.5472	-2.917564
w1BMI cons	2020.28 1493681	2174.079 99767.36	0.93 14.97	0.356 0.000	-2307.888 1295303	6348.448 1692059
_						

74 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0138
	Largest FMI	=	0.0804
	Complete DF	=	88
DF adjustment: Small sample	DF: min	=	71.41
	avg	=	83.53
	max	=	86.01
Model F test: Equal FMI	F(6, 85.9)	=	6.66
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3	-9325.69	10100.67	-0.92	0.358	-29405.45	10754.07
Sex	0	(omitted)				
w1Age	-2458.604	760.1477	-3.23	0.002	-3969.759	-947.4492
Race	-60690.18	12546.15	-4.84	0.000	-85632.72	-35747.64
PovStat	7402.92	14626.98	0.51	0.614	-21674.49	36480.33
TIME V1SCAN	-18.48961	9.083827	-2.04	0.045	-36.54767	431544
w1BMI	1472.778	1177.947	1.25	0.215	-875.7512	3821.306
_cons	891041.3	53410.02	16.68	0.000	784827.9	997254.7
_						

75 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
•	Average RVI	=	0.0101
	Largest FMI	=	0.0671
	Complete DF	=	88
DF adjustment: Small sample	DF: min	=	74.55
	avg	=	84.11
	max	=	86.01
Model F test: Equal FMI	F(6, 86.0)	=	2.33
Within VCE type: OLS	Prob > F	=	0.0389
IJM Coofficient Std onn t	D> +	C	intonvall

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-6191.076 0	9122.486 (omitted)	-0.68	0.499	-24325.97	11943.82
w1Age	-481.787	686.839	-0.70	0.485	-1847.205	883.6307
Race	-29178.24	11318.25	-2.58	0.012	-51678.44	-6678.053
PovStat	-2757.278	13216.58	-0.21	0.835	-29030.9	23516.35
TIME V1SCAN	-16.57417	8.208053	-2.02	0.047	-32.89125	2570945
w1BMI	525.457	1057.405	0.50	0.621	-1581.208	2632.122
_cons	590382	48185.96	12.25	0.000	494564.8	686199.2

77 . 78 . //ANALYSIS B//

79 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0403
	Largest FMI	=	0.2405
	Complete DF	=	87
DF adjustment: Small sample	DF: min	=	37.09
	avg	=	78.68
	max	=	84.98
Model F test: Equal FMI	F(7, 84.3)	=	11.33
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-152.8143	59.44763	-2.57	0.012	-271.0124	-34.61608
Sex	0	(omitted)				
w1Age	-4.695945	4.479479	-1.05	0.297	-13.6037	4.211813
Race	20.67702	81.97659	0.25	0.801	-142.3362	183.6903
PovStat	-174.0383	85.96821	-2.02	0.046	-344.9669	-3.109621
TIME_V1SCAN	0363166	.0543822	-0.67	0.506	1444461	.0718128
w1BMI	2.814903	7.553873	0.37	0.712	-12.48945	18.11926
ICV volM2	.0020603	.0003056	6.74	0.000	.0014527	.0026679
_cons	1498.593	590.0933	2.54	0.013	325.2354	2671.952

80 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

tation estimates		Imputati	ons	=	5
				=	95
		Average	RVI	=	0.0385
		_		=	0.2271
		_		=	87
: Small sample				=	39.21
			avg	=	78.95
			_	=	85.04
Equal FMI		F(7 ,	84.4)	=	12.12
-		, ,	•	=	0.0000
Coefficient Std. e	rr. t	P> t	[95% co	onf.	interval]
		0.085	-228.30	74	15.01078
,	,	0 200	-14 000	ο0	3.324009
					169.5436
-154.8648 88.4278		0.083	-330.68		20.95205
		0.003		_ /	20.33203
	36 -0 24	0 813	- 12454	48	0979619
0132915 .05595		0.813 0.421	12454 -9 3333		.0979619
	64 0.81	0.813 0.421 0.000	12454 -9.3333 .00170	32	.0979619 21.87482 .0029606
	Coefficient Std. e -106.6483 61.187 0 (omittee -5.83344 4.6052 1.587025 84.458	Equal FMI pe: OLS Coefficient Std. err. t -106.6483 61.18784 -1.74 0 (omitted) -5.83344 4.605214 -1.27 1.587025 84.45828 0.02	Number of Average Largest Complete	Number of obs Average RVI Largest FMI Complete DF	Number of obs

<sup>81 .
82 . //</sup>ANALYSIS C//
83 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	93
		Average RVI	=	0.2288
		Largest FMI	=	0.6769
		Complete DF	=	85
DF adjustment:	Small sample	DF: min	=	7.97
		avg	=	70.94
		max	=	82.97
Model F test:	Equal FMI	F(7, 71.5)	=	0.21
Within VCE type:	OLS	Prob > F	=	0.9813

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1273497	.7203547	-0.18	0.860	-1.560114	1.305414
Sex	0	(omitted)				
w1Age	.0400171	.0554504	0.72	0.473	0704253	.1504596
Race	.3229853	.987053	0.33	0.744	-1.642414	2.288385
PovStat	6620259	1.03167	-0.64	0.523	-2.714273	1.390221
TIME V1SCAN	.0000587	.0006433	0.09	0.928	0012211	.0013384
w1BMI	0686115	.1274663	-0.54	0.605	3627143	.2254913
ICV volM2	-7.01e-07	3.63e-06	-0.19	0.847	-7.92e-06	6.52e-06
_cons	7.488988	7.083298	1.06	0.294	-6.612608	21.59058

85 . save, replace

file finaldata_imputed.dta saved

86 . 87 .

88 .

89 . 90 .

94 .

95 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

96

97 . //ANALYSIS A//

98 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of ob	s =	118
				F(5, 112)	=	4.48
Model	1.3323e+11	5	2.6647e+16	Prob > F	=	0.0009
Residual	6.6658e+11	112	5.9516e+09	R-squared	=	0.1666
				- Adj R-square	d =	0.1294
Total	7.9982e+11	117	6.8360e+09	Root MSE	=	77147
TOTALBRAIN	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	7439.995	16556.35	0.45	0.654		.0491068
Sex	0	(omitted)				•
w1Age	-1999.241	968.9494	-2.06	0.041		.2265335
Race	-55805.95	15212.09	-3.67	0.000	-	.3357892
PovStat	-15778.06	16881.21	-0.93	0.352	-	.0930862
ΓIME_V1SCAN	-9.46051	11.76166	-0.80	0.423	-	.0780659
cons	1282365	57273.3	22.39	0.000		

99 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta note: $\bf Sex$ omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	118
				F(5, 112)	=	6.96
Model	6.4319e+10	5	1.2864e+10	Prob > F	=	0.0000
Residual	2.0697e+11	112	1.8479e+09	R-squared	=	0.2371
				- Adj R-squared	=	0.2030
Total	2.7129e+11	117	2.3187e+09	Root MSE	=	42987
GM	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	-4220.428	9225.455	-0.46	0.648	_	.0478307
Sex	0	(omitted)				
w1Age	-1369.391	539.9138	-2.54	0.013	_	.2664258
Race	-41606.22	8476.412	-4.91	0.000		429859
PovStat	-7939.774	9406.476	-0.84	0.400	-	.0804306
TIME V1SCAN	-3.018902	6.553783	-0.46	0.646	-	.0427738
_cons	761962.2	31913.57	23.88	0.000		•

100 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta
note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 118
Model Residual	1.4523e+10 1.5703e+11	5 112	2.9047e+09 1.4021e+09	R-squared	= 2.07 = 0.0742 = 0.0847
Total	1.7156e+11	117	1.4663e+09	- Adj R-squared P Root MSE	= 0.0438 = 37445
WM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	9464.468	8035.906 (omitted)	1.18	0.241	.1348823
w1Age	-846.5553	470.2962	-1.80	0.075	2071155
Race	-11835.77	7383.446	-1.60	0.112	1537704
PovStat	-7963.77	8193.586	-0.97	0.333	1014472
TIME_V1SCAN	-5.258754	5.708724	-0.92	0.359	0936957
_cons	491393.4	27798.57	17.68	0.000	•

102 .

103 . //ANALYSIS B//

104 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==1,beta
note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 118
Model Residual	3268831.35 6964316.48	6 111	544805.225 62741.5899	R-squared	= 8.68 = 0.0000 = 0.3194
Total	10233147.8	117	87462.802	Adj R-squared Root MSE	= 0.2826 = 250.48
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV volM2	-5.467951 0 -5.577494 -123.5938 -46.07589 .0131579 .0013145	54.00083 (omitted) 3.153189 52.51341 54.96867 .0382497 .0002565	-0.10 -1.77 -2.35 -0.84 0.34 5.13	0.920 0.080 0.020 0.404 0.731 0.000	0100898 1766839 2079091 075969 .0303546 .4411006
_cons	2257.655	403.1755	5.60	0.000	.4411000

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

	Source	SS	df	MS	Number of obs	=	118
_					F(6, 111)	=	11.70
	Model	5022145.99	6	837024.331	Prob > F	=	0.0000
	Residual	7940500.86	111	71536.0438	R-squared	=	0.3874
_					Adj R-squared	=	0.3543
	Total	12962646.9	117	110791.853	Root MSE	=	267.46

Beta	P> t	t	Std. err.	Coefficient	Right_Hipp~s
.0289846	0.760	0.31	57.6614	17.67871	LnNFLw3
•			(omitted)	0	Sex
1088121	0.253	-1.15	3.366935	-3.865998	w1Age
1573827	0.063	-1.88	56.07314	-105.2985	Race
0252136	0.770	-0.29	58.69484	-17.20503	PovStat
.0545605	0.516	0.65	.0408425	.0266185	TIME_V1SCAN
.5498929	0.000	6.73	.0002739	.0018443	ICV_volM2
•	0.000	3.83	430.5057	1648.555	_cons

107 . //ANALYSIS C//

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

Source	SS	df	MS	Number of obs	= 116
M . J . 7	204 205200		22 540240	- F(6, 109)	= 2.12
Model	201.295309	6	33.549218		= 0.0569
Residual	1726.56254	109	15.840023	3 R-squared	= 0.1044
				 Adj R-squared 	= 0.0551
Total	1927.85785	115	16.763981	Root MSE	= 3.98
LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	1.036071	.8768778	1.18	0.240	.1346558
Sex	0	(omitted)			
w1Age	.1038047	.0502776	2.06	0.041	.2354836
Race	1.038382	.8479202	1.22	0.223	.1261385
PovStat	1.070467	.89166	1.20	0.233	.1274088
TIME_V1SCAN	0005077	.0006102	-0.83	0.407	085217
ICV_volM2	4.61e-06	4.08e-06	1.13	0.261	.1126294
cons	-9.411623	6.457405	-1.46	0.148	

109 .

110 .

111 . **Model 2**

112

113 . use finaldata_imputed,clear

114 .

115 .

116 . //ANALYSIS A//

117 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0086
	Largest FMI	=	0.0569
	Complete DF	=	111
DF adjustment: Small sample	DF: min	=	95.83
	avg	=	106.60
	max	=	109.05
Model F test: Equal FMI	F(6, 108.9)	=	3.83
Within VCE type: OLS	Prob > F	=	0.0017

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	11664.53	17242.98	0.68	0.500	-22512.76	45841.82
Sex	0	(omitted)				
w1Age	-2042.299	970.9964	-2.10	0.038	-3966.787	-117.8112
Race	-55634.88	15226.41	-3.65	0.000	-85813.03	-25456.73
PovStat	-15069.95	16913.38	-0.89	0.375	-48591.55	18451.65
TIME_V1SCAN	-8.022996	11.88621	-0.67	0.501	-31.58147	15.53547
w1BMI	942.2224	1063.187	0.89	0.378	-1168.237	3052.681
_cons	1242711	72695.35	17.09	0.000	1098587	1386835

118 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imputati	Imputations	=	5	
Linear regression		Number of obs	=	118
		Average RVI	=	0.0112
		Largest FMI	=	0.0714
		Complete DF	=	111
DF adjustment:	Small sample	DF: min	=	91.00
		avg	=	105.71
		max	=	109.04
Model F test:	Equal FMI	F(6, 108.9)	=	6.03
Within VCE type:	OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-962.4555	9583.947	-0.10	0.920	-19959.37	18034.45
Sex	0	(omitted)				
w1Age	-1402.329	539.2793	-2.60	0.011	-2471.171	-333.4868
Race	-41469.05	8455.69	-4.90	0.000	-58227.94	-24710.16
PovStat	-7386.172	9391.892	-0.79	0.433	-26000.52	11228.18
TIME V1SCAN	-1.909788	6.603058	-0.29	0.773	-14.99721	11.17763
w1BMI	727.7466	594.6157	1.22	0.224	-453.3844	1908.878
_cons	731318.6	40449.87	18.08	0.000	651115.9	811521.2

119 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 118
· ·	Average RVI	=	0.0054
	Largest FMI	=	0.0370
	Complete DF	=	111
DF adjustment: Small sample	DF: min	=	101.81
	avg	=	107.69
	max	=	109.05
Model F test: Equal FMI	F(6, 109.0)	=	1.76
Within VCE type: OLS	Prob > F	=	0.1142

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	10732.89	8379.69 (omitted)	1.28	0.203	-5875.967	27341.75
w1Age	-859.6054	472.3231	-1.82	0.072	-1795.733	76.52207
Race PovStat	-11786.88 -7756.315	7407.452 8228.514	-1.59 -0.94	0.114 0.348	-26468.14 -24064.88	2894.38 8552.246
TIME_V1SCAN	-4.828531	5.780349	-0.84	0.405	-16.28507	6.628005
w1BMI _cons	282.092 479529.5	512.1829 35258.03	0.55 13.60	0.583 0.000	-733.8436 409636.8	1298.028 549422.2

122 .

123 . //ANALYSIS B//

Multiple-imputation estimates

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

Imputations

Linear regress	510n		Number Average Largest	RVI	= = =	0.0080 0.0549
DF adjustment	: Small sample		Complet DF:	e DF min avg	= = =	110 95.65 106.35
Model F test: Within VCE ty	Equal FMI De: OLS		F(7 , Prob >	max 108.0) F	= =	108.05 7.36 0.0000
 Left_Hippo~s	Coefficient Std	. err. t	P> t	[95% co	nf.	interval]
LnNFLw3 Sex		52328 0.03 tted)	0.973	-110.125	3	113.9659
w1Age Race PovStat	-124.2706 52.	.1693 -1.79 71846 -2.36 20893 -0.82	0.077 0.020 0.415	-11.9448 -228.767 -154.584	4	.6193188 -19.77377 64.28196
TIME_V1SCAN w1BMI	.0154596 .03	87215 0.40 75508 0.45	0.690 0.650	061293 -5.31887	8	.0922129 8.479439
ICV_volM2 _cons		02588 5.03 .2316 5.27	0.000 0.000	.000788 1378.10		.0018147 3040.126

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

Multiple-imputation estimates			Imputations			5
Linear regression			Number	of obs	=	118
			Average	RVI	=	0.0107
			Largest	FMI	=	0.0733
			Complet	e DF	=	110
DF adjustment:	Small samp	le	DF:	min	=	89.61
				avg	=	105.55
				max	=	108.05
Model F test:	Equal F	MI	F(7,	107.9)	=	9.84
Within VCE type:	0	LS	Prob >	F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	21.17232	60.42983	0.35	0.727	-98.61894	140.9636
Sex	0	(omitted)				
w1Age	-3.910295	3.386482	-1.15	0.251	-10.62287	2.802284
Race	-105.7767	56.32989	-1.88	0.063	-217.4317	5.87842
PovStat	-16.88906	58.99684	-0.29	0.775	-133.8305	100.0524
TIME V1SCAN	.0276748	.0413806	0.67	0.505	0543495	.1096991
w1BMI	.7271053	3.747972	0.19	0.847	-6.719334	8.173545
ICV volM2	.0018377	.0002765	6.65	0.000	.0012896	.0023857
_cons	1627.584	448.4437	3.63	0.000	738.6445	2516.524

127 . //ANALYSIS C//

128 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==1

Multiple-imputation estimates		Imputations	=	5
Linear regression		Number of obs	=	116
		Average RVI	=	0.0021
		Largest FMI	=	0.0054
		Complete DF	=	108
DF adjustment: S	imall sample	DF: min	=	105.46
		avg	=	105.86
		max	=	105.98
Model F test:	Equal FMI	F(7, 106.0)	=	2.14
Within VCE type:	OLS	Prob > F	=	0.0455

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	1.392058	.9060765 (omitted)	1.54	0.127	4043562	3.188472
w1Age	.0995718	.0501182	1.99	0.050	.0002074	.1989362
Race	1.028254	.8442942	1.22	0.226	6456619	2.702171
PovStat	1.103203	.8876343	1.24	0.217	6566228	2.863028
TIME_V1SCAN	0003924	.0006125	-0.64	0.523	0016067	.0008219
w1BMI	.0786151	.0536299	1.47	0.146	0277178	.1849479
ICV_volM2	4.05e-06	4.08e-06	0.99	0.324	-4.05e-06	.0000121
_cons	-11.91116	6.651226	-1.79	0.076	-25.09802	1.275692

129 .

130 . save, replace

file finaldata_imputed.dta saved

131 . 132 .

133 .

134 . //INTERACTION BY Sex//

135 . use finaldata_imputed,clear

136 .

137 .

138 . //ANALYSIS A//

139 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputat:	Multiple-imputation estimates		=	5
Linear regression		Number of obs	=	213
		Average RVI	=	0.0102
		Largest FMI	=	0.0848
		Complete DF	=	204
DF adjustment:	Small sample	DF: min	=	142.31
		avg	=	193.81
		max	=	202.00
Model F test:	Equal FMI	F(8, 201.8)	=	20.31
Within VCE type:	OLS	Prob > F	=	0.0000

Sex#c.LnNFLw3

Men

w1Age

PovStat

w1BMI

_cons

TIME_V1SCAN

Race

Sex

-14440.84

-1808.416

-48592.6

471.8879

-9.517853

772.0843

755813.3

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	10527.74	18183.8	0.58	0.563	-25328.24	46383.71
Sex						
Men	188830	51937.03	3.64	0.000	86419.54	291240.5
Sex#c.LnNFLw3						
Men	-23298.76	22348.75	-1.04	0.298	-67366.25	20768.73
Cov		(amittad)				
Sex	0	(omitted)	2.46	0.015	2654 400	402 2422
w1Age	-2026.701	823.8668	-2.46	0.015	-3651.188	-402.2132
Race	-69983.28	13307.17	-5.26	0.000	-96222.17	-43744.4
PovStat	-1174.602	14943.84	-0.08	0.937	-30640.51	28291.31
TIME V1SCAN	-21.523	9.935045	-2.17	0.031	-41.11279	-1.933201
w1BMI	998.8974	1044.002	0.96	0.340	-1064.859	3062.654
_cons	1271565	69659.39	18.25	0.000	1134165	1408965

140 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

	S		U			_	
Multiple-imputa	ation estimates	S		Imputati	ons	=	5
Linear regress:	ion			Number o	of obs	=	213
				Average	RVI	=	0.0146
				Largest	FMI	=	0.1173
				Complete	DF	=	204
DF adjustment:	Small sample	e		DF:	min	=	115.78
					avg	=	189.97
					max	=	202.02
Model F test: Equal FMI				F(8,	201.5)	=	21.52
Within VCE type	e: OL !	S		Prob > F	:	=	0.0000
	I						
GM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	2877.268	9918.185	0.29	0.772	-16686	ð.45	22434.99
Sex Men	102420.6	28314.98	3.62	0.000	46588	3.08	158253.2

-1.19

-4.03

-6.70

0.06

-1.76

1.34

19.82

0.237

0.000

0.000

0.954

0.080

0.184

0.000

-38462.84

-2693.667

-62893.96

-15582.87

-20.19696

-373.3423

680582.2

9581.161

-923.1651

-34291.23

16526.64

1.161252

1917.511

831044.4

12182.63

448.9588

7252.976

8142.28

5.415916

578.3039

38132.49

0 (omitted)

141 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputation estimates		Imputations	=	5
Linear regression	1	Number of obs	=	213
		Average RVI	=	0.0075
		Largest FMI	=	0.0648
		Complete DF	=	204
DF adjustment:	Small sample	DF: min	=	160.01
		avg	=	196.20
		max	=	201.98
Model F test:	Equal FMI	F(8, 201.9)	=	13.77
Within VCE type:	OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	6423.689	8784.241	0.73	0.465	-10897.41	23744.79
Sex						
Men	81814.29	25104.93	3.26	0.001	32311.97	131316.6
Sex#c.LnNFLw3						
Men	-11466.2	10802.71	-1.06	0.290	-32767.05	9834.655
Sex	0	(omitted)				
w1Age	-591.8866	398.2602	-1.49	0.139	-1377.169	193.396
Race	-19296.19	6431.435	-3.00	0.003	-31977.56	-6614.824
PovStat	-4810.075	7224.89	-0.67	0.506	-19055.96	9435.813
TIME_V1SCAN	-10.14187	4.801548	-2.11	0.036	-19.60947	6742771
w1BMI	253.0881	499.6394	0.51	0.613	-733.6502	1239.826
_cons	494504	33587.91	14.72	0.000	428260.1	560747.9

^{142 .}

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

Multiple-imputa Linear regressi			Imputations Number of obs			5 213	
				Average		=	0.0216
				Largest		=	0.1738
	Small sampl		Complete DF			=	203
DF adjustment:		DF: min			80.20		
					avg	=	187.42
					max	=	200.91
Model F test:	Equal FM	II		F(9 ,	200.3)	=	20.58
Within VCE type		Prob > F		=	0.0000		
Left Hippoc~s	Coefficient	Std. err.	t	P> t	Γ 95%	conf	interval]
	Coefficient	Ju. en.				COIII.	
LnNFLw3	-21.48788	58.49279	-0.37	0.714	-136.	8407	93.86492
Sex							
Men	329.6794	173.492	1.90	0.059	-12.4	5084	671.8096
Sex#c.LnNFLw3							
Men	-156.381	71.89298	-2.18	0.031	-298.	1508	-14.6113
Sex	Ø	(omitted)					
w1Age	-4.474496	2.638531	-1.70	0.091	-9.67	7305	.7283121
Race	-64.17513	46.08519	-1.39	0.165	-155.0	0484	26.69811
PovStat	-81.97587	47.83514	-1.71	0.088	-176.	2992	12.34748

^{143 .}

^{144 .}

^{145 . //}ANALYSIS B//

TIME_V1SCAN	0051153	.0320219	-0.16	0.873	0682575	.0580268
w1BMI	1.615788	3.508434	0.46	0.646	-5.365946	8.597523
ICV_volM2	.0017205	.0001973	8.72	0.000	.0013315	.0021095
_cons	1681.436	350.8802	4.79	0.000	989.4599	2373.412

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

Multiple-imputa Linear regressi		25		Imputati Number o Average Largest	of obs RVI	= = =	5 213 0.0240 0.1904
				Complete		=	203
DF adjustment:	Small sampl	Le		DF:	min	=	72.35
					avg	=	186.40
	_				max .	=	200.90
Model F test:	Equal FM			` ,	200.1)	=	23.33
Within VCE type	e: OL	.S		Prob > F	-	=	0.0000
	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	16.67719	60.8641	0.27	0.784	-103.3	3546	136.7089
Sex Men	268.0335	180.5008	1.48	0.139	-87.92	2366	623.9906
Sex#c.LnNFLw3 Men	-152.311	74.7841	-2.04	0.043	-299.7	7832	-4.838708
Sex	0	(omitted)					
w1Age	-4.040172	2.743733	-1.47	0.142	-9.450	3432	1.370088
Race	-60.19645	47.92551	-1.26	0.211	-154.6		34.30582
PovStat	-61.32502	49.73793	-1.23	0.219	-159.4	-	36.75033
TIME_V1SCAN	.0159377	.0332983	0.48	0.633	0497		.0815967
w1BMI	2.119381	3.680508	0.58	0.567	-5.21		9.455736
ICV volM2	.0021086	.0002051	10.28	0.000		1704	.0025131
_cons	1280.35	365.0812	3.51	0.001	560.3		2000.346

^{148 .}

^{150 .} mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputatio	n estimates	Imputations	=	5
Linear regression		Number of obs	=	209
		Average RVI	=	0.0523
		Largest FMI	=	0.3533
		Complete DF	=	199
DF adjustment: S	mall sample	DF: min	=	30.41
		avg	=	174.34
		max	=	196.86
Model F test:	Equal FMI	F(9, 193.4)	=	1.29
Within VCE type:	OLS	Prob > F	=	0.2427

^{149 . //}ANALYSIS C//

Coefficient Std. err.

1.365678 .8191359

LnLesion_Vo~e

LnNFLw3

Sex

Sex						
Men	3.977181	2.424542	1.64	0.103	8061338	8.760496
Sex#c.LnNFLw3						
Men	-1.673007	1.008973	-1.66	0.099	-3.663308	.3172933
Sex	0	(omitted)				
w1Age	.0674144	.0363774	1.85	0.065	0043268	.1391557
Race	.5880599	.6310862	0.93	0.353	6564973	1.832617
PovStat	.325845	.6598178	0.49	0.622	9753989	1.627089
TIME V1SCAN	1		-0.31	0.757	0009918	.0007223
w1BMI	1	.0529782	0.65	0.520	0736903	.1425797
ICV volM2	1.11e-06	2.68e-06	0.42	0.679	-4.17e-06	6.39e-06
_cons	-4.121911	4.869601	-0.85	0.398	-13.73332	5.489498
. save, replace file finaldate	a_imputed.dta **********TABL MODEL 3: MODEL	.E S3: LnNFL . 2+w1dxDiab				******
	: reg TOTALBRA		Sex w1Age	Imputat: Number o Average Largest	ions = of obs = RVI = FMI =	5 213 0.0318 0.1689
		_		Complete		203
DF adjustment	: Small samp	эте		DF:	min =	82.74
					avg =	169.44
				-/ -	max =	201.02
Model F test:	Equal F			, ,	199.2) =	17.50
Within VCE ty	pe: C	DLS		Prob > 1	F =	0.0000
TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LaNEL	F7F7 0F4	12607 45	0.46	0.640	20010 01	10103.3
LnNFLw3	-5757.854	12607.45	-0.46	0.648	-30618.91	19103.2
Sex	135894.5	13012.03	10.44	0.000	110235.8	161553.1
w1Age	-1803.022	830.2443 13356.09	-2.17	0.031	-3440.167	-165.878
Race	-69315.21	14456 00	-5.19	0.000		-42979.12
PovStat	2004 000				-95651.3	
TIME_V1SCAN	-3801.062	14810.03	-0.26	0.798	-33004	25401.88
	-22.05414	14810.03 9.980787	-0.26 -2.21	0.798 0.028	-33004 -41.73478	25401.88 -2.373492
w1BMI	-22.05414 682.8137	14810.03 9.980787 1047.492	-0.26 -2.21 0.65	0.798 0.028 0.516	-33004 -41.73478 -1389.301	25401.88 -2.373492 2754.929
w1dxDiabetes	-22.05414 682.8137 -5515.587	14810.03 9.980787 1047.492 12734.63	-0.26 -2.21 0.65 -0.43	0.798 0.028 0.516 0.666	-33004 -41.73478 -1389.301 -30746.8	25401.88 -2.373492 2754.929 19715.62
	-22.05414 682.8137	14810.03 9.980787 1047.492	-0.26 -2.21 0.65	0.798 0.028 0.516	-33004 -41.73478 -1389.301	25401.88 -2.373492 2754.929

P>|t|

1.67 0.097

t

[95% conf. interval]

2.981814

-.2504585

166 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose

on estimates	Imputations	=	5
	Number of obs	=	213
	Average RVI	=	0.0416
	Largest FMI	=	0.1922
	Complete DF	=	203
Small sample	DF: min	=	71.59
	avg	=	164.63
	max	=	200.95
Equal FMI	F(9, 198.1)	=	18.55
OLS	Prob > F	=	0.0000
	Small sample Equal FMI	Number of obs Average RVI Largest FMI Complete DF Small sample DF: min avg max Equal FMI F(9, 198.1)	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI F(9, 198.1) =

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-7410.248	6868.762	-1.08	0.282	-20955.3	6134.805
Sex	69863.13	7081.867	9.87	0.000	55898.26	83828.01
w1Age	-1630.407	451.9955	-3.61	0.000	-2521.694	-739.1202
Race	-48139.39	7268.645	-6.62	0.000	-62471.99	-33806.78
PovStat	-992.867	8061.706	-0.12	0.902	-16889.26	14903.52
TIME V1SCAN	-10.10167	5.437923	-1.86	0.065	-20.82463	.6212926
- w1BMI	611.8394	578.0268	1.06	0.292	-533.622	1757.301
w1dxDiabetes	-6841.73	6958.251	-0.98	0.328	-20635.94	6952.476
w1Glucose	188.9569	164.1744	1.15	0.254	-138.3508	516.2645
_cons	690991.4	38498.29	17.95	0.000	614950.2	767032.5

167 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0371
	Largest FMI	=	0.2066
	Complete DF	=	203
DF adjustment: Small sample	DF: min	=	65.63
	avg	=	166.13
	max	=	200.99
Model F test: Equal FMI	F(9, 198.6)	=	11.74
Within VCE type: OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-1374.618	6108.618	-0.23	0.822	-13421.04	10671.8
Sex	55594	6291.393	8.84	0.000	43187.83	68000.17
w1Age	-513.1436	401.9665	-1.28	0.203	-1305.797	279.5094
Race	-19011.65	6458.6	-2.94	0.004	-31747.04	-6276.258
PovStat	-6212.988	7159.898	-0.87	0.387	-20331.14	7905.164
TIME_V1SCAN	-10.22052	4.823563	-2.12	0.035	-19.73185	7092005
w1BMI	74.90136	502.3127	0.15	0.882	-917.8939	1067.697
w1dxDiabetes	-41.30539	6354.667	-0.01	0.995	-12697.3	12614.69
w1Glucose	97.31136	146.9666	0.66	0.510	-196.1476	390.7704
_cons	449376.2	33832.13	13.28	0.000	382605.7	516146.8

169 .

170 . //ANALYSIS B//
171 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose ICV_volM

Multiple-imput		Imputat		=	5		
Linear regress	sion			Number		=	213
				Average		=	0.0395
				Largest	FMI	=	0.2109
				Complet	e DF	=	202
DF adjustment:	: Small samp	le		DF:	min	=	63.83
					avg	=	174.96
					max	=	199.92
Model F test:	Equal F	MI		F(10 ,	198.1)	=	18.15
Within VCE typ	•	LS		Prob >	,	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% co	nf.	interval]
LnNFLw3	-129.9173	40.20254	-3.23	0.001	-209.192	9	-50.64167
Sex	-29.68932	54.79992	-0.54	0.589	-137.762	2	78.38353
w1Age	-3.310029	2.655018	-1.25	0.214	-8.54558	5	1.925528
Race	-59.51979	46.13577	-1.29	0.199	-150.494	9	31.45537
PovStat	-101.0969	47.38545	-2.13	0.034	-194.536	5	-7.657266
TIME V1SCAN	0063017	.0322459	-0.20	0.845	069890	7	.0572872
w1BMI	9792613	3.561589	-0.27	0.784	-8.09472	6	6.136203
w1dxDiabetes	-6.726973	40.67393	-0.17	0.869	-87.2989	5	73.845
w1Glucose	1.582172	.9005496	1.76	0.081	195786	7	3.36013
ICV volM2	.0017297	.0001975	8.76	0.000	.001340		.0021192
_cons	1823.286	328.6894	5.55	0.000	1174.87	_	2471.695

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

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0450
	Largest FMI	=	0.2204
	Complete DF	=	202
DF adjustment: Small sample	DF: min	=	60.39
	avg	=	172.08
	max	=	199.97
Model F test: Equal FMI	F(10 , 197.6)	=	20.62
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-91.03629	41.77912	-2.18	0.031	-173.4216	-8.65094
Sex	-81.05059	56.8934	-1.42	0.156	-193.2514	31.15019
w1Age	-2.724918	2.760628	-0.99	0.325	-8.168862	2.719025
Race	-55.49427	47.90417	-1.16	0.248	-149.9564	38.96788
PovStat	-79.46076	49.2157	-1.61	0.108	-176.5097	17.58819
TIME V1SCAN	.0139851	.0335022	0.42	0.677	052082	.0800521
w1BMI	3660046	3.717791	-0.10	0.922	-7.801711	7.069702
w1dxDiabetes	-21.35157	42.78608	-0.50	0.619	-106.2675	63.56437
w1Glucose	1.805422	.9419475	1.92	0.057	0553719	3.666217
ICV volM2	.0021149	.0002052	10.31	0.000	.0017103	.0025194
_cons	1448.964	340.5528	4.25	0.000	777.217	2120.71

174 . //ANALYSIS C//

175 . 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	=	209
		Average RVI	=	0.0663
		Largest FMI	=	0.2855
		Complete DF	=	198
DF adjustment:	Small sample	DF: min	=	42.09
		avg	=	162.34
		max	=	195.93
Model F test:	Equal FMI	F(10 , 191.2)	=	0.90
Within VCE type:	OLS	Prob > F	=	0.5341

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.3067908	.5710518	0.54	0.592	8198977	1.433479
Sex	.1877671	.7489504	0.25	0.802	-1.28932	1.664854
w1Age	.0795692	.0371824	2.14	0.034	.006225	.1529134
Race	.6179106	.637877	0.97	0.334	6401153	1.875937
PovStat	.1422397	.6551944	0.22	0.828	-1.149899	1.434379
TIME V1SCAN	0001792	.0004399	-0.41	0.684	0010468	.0006884
w1BMI	.0200525	.0510573	0.39	0.696	0829785	.1230836
w1dxDiabetes	2758588	.572848	-0.48	0.631	-1.415067	.8633497
w1Glucose	.006084	.0128036	0.48	0.636	0192712	.0314392
ICV volM2	1.37e-06	2.69e-06	0.51	0.611	-3.94e-06	6.69e-06
_cons	-2.705365	4.460899	-0.61	0.545	-11.50389	6.093161

176 .

177 . save, replace

file finaldata_imputed.dta saved

178 .

179 .

180 . //Males//

181 .

182 . use finaldata_imputed,clear

183 .

184 .

185 . //ANALYSIS A//

186 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0322
	Largest FMI	=	0.1664
	Complete DF	=	86
DF adjustment: Small sample	DF: min	=	50.19
	avg	=	76.63
	max	=	83.85
Model F test: Equal FMI	F(8, 83.5)	=	3.03
Within VCE type: OLS	Prob > F	=	0.0049

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-13111.86	19415.62	-0.68	0.501	-51725.16	25501.44
Sex	0	(omitted)				
w1Age	-2461.515	1454.455	-1.69	0.094	-5353.935	430.904
Race	-92450.68	23759.92	-3.89	0.000	-139701.8	-45199.54
PovStat	13725.4	27850.54	0.49	0.623	-41660.98	69111.77
TIME_V1SCAN	-35.73247	17.771	-2.01	0.048	-71.07609	3888638
w1BMI	1886.382	2303.291	0.82	0.415	-2701.66	6474.424
1dxDiabetes	10089.07	21647.45	0.47	0.643	-33120.65	53298.79
w1Glucose	-126.9793	466.4767	-0.27	0.787	-1063.839	809.8809
_cons	1507139	110588	13.63	0.000	1287020	1727258

187 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0342
	Largest FMI	=	0.1753
	Complete DF	=	86
DF adjustment: Small sample	DF: min	=	48.38
	avg	=	77.26
	max	=	83.99
Model F test: Equal FMI	F(8, 83.5)	=	4.79
Within VCE type: OLS	Prob > F	=	0.0001

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-9054.708	10373.91	-0.87	0.385	-29685.48	11576.07
Sex	0	(omitted)				
w1Age	-2479.829	777.1486	-3.19	0.002	-4025.276	-934.3824
Race	-60841.93	12713.74	-4.79	0.000	-86126.22	-35557.65
PovStat	7266.198	14875.03	0.49	0.626	-22314.59	36846.99
TIME V1SCAN	-18.73901	9.501222	-1.97	0.052	-37.63526	.1572448
w1BMI	1524.429	1232.426	1.24	0.220	-930.6571	3979.515
w1dxDiabetes	308.0679	11277.94	0.03	0.978	-22142.46	22758.59
w1Glucose	-33.09231	250.595	-0.13	0.895	-536.846	470.6614
cons	894125.7	59757.08	14.96	0.000	775077.3	1013174
_						

188 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==2

Multiple-imputation estimates Linear regression	Imputations Number of obs	= =	5 95
Ç	Average RVI	=	0.0427
	Largest FMI	=	0.1846
	Complete DF	=	86
DF adjustment: Small sample	DF: min	=	46.53
	avg	=	73.75
	max	=	83.74
Model F test: Equal FMI	F(8, 83.2)	=	1.77
Within VCE type: OLS	Prob > F	=	0.0957

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-6800.049	9334.319	-0.73	0.468	-25363.69	11763.6
Sex	0	(omitted)				
w1Age	-522.7577	701.1761	-0.75	0.458	-1917.283	871.7673
Race	-29273.45	11427.68	-2.56	0.012	-51999.66	-6547.241
PovStat	-1561.742	13411.31	-0.12	0.908	-28234.1	25110.61
TIME_V1SCAN	-15.11442	8.548667	-1.77	0.081	-32.11653	1.887679
w1BMI	313.8916	1123.097	0.28	0.781	-1926.593	2554.376
w1dxDiabetes	8217.459	10825.57	0.76	0.451	-13531.72	29966.63
w1Glucose	-41.4881	226.5079	-0.18	0.855	-497.2842	414.308
_cons	595741	52838.08	11.27	0.000	490614.6	700867.4

189 . 190 .

191 . //ANALYSIS B//

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

Multiple-imput	Multiple-imputation estimates			Imputations		
Linear regression			Number of	obs	=	95
			Average R	VI	=	0.0555
			Largest F	MI	=	0.2570
			Complete	DF	=	85
DF adjustment:	: Small sample		DF: m	in	=	34.23
Ţ.	•		a	vg	=	72.37
			m	ax	=	83.00 9.01
Model F test:	Equal FMI		F(9 ,	82.1)	=	
Within VCE typ	pe: OLS		Prob > F	·	=	0.0000
 Left_Hippo~s	Coefficient Std. err.	t	P> t	[95%	conf.	interval]
			• •	-		

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-166.3579	60.12098	-2.77	0.007	-285.9397	-46.77605
Sex	0	(omitted)				
w1Age	-4.613417	4.508643	-1.02	0.309	-13.58178	4.354946
Race	21.62876	81.75435	0.26	0.792	-140.9803	184.2378
PovStat	-162.6074	86.29968	-1.88	0.063	-334.2654	9.050584
TIME_V1SCAN	0155783	.0560265	-0.28	0.782	1270343	.0958777
w1BMI	3043228	7.943323	-0.04	0.970	-16.44314	15.8345
w1dxDiabetes	66.25472	70.69265	0.94	0.354	-76.14978	208.6592
w1Glucose	.5585663	1.386112	0.40	0.688	-2.206727	3.32386
ICV_volM2	.0020437	.0003051	6.70	0.000	.0014369	.0026505
_cons	1490.428	616.9483	2.42	0.018	262.6862	2718.169

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

Multiple-imputation estimates		Imputations	=	5
Linear regression	l .	Number of obs	=	95
		Average RVI	=	0.0396
		Largest FMI	=	0.2342
		Complete DF	=	85
DF adjustment: Small sample		DF: min	=	37.58
		avg	=	76.51
		max	=	82.94
Model F test:	Equal FMI	F(9, 82.5)	=	9.71
Within VCE type:	OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-121.9761	61.91948	-1.97	0.052	-245.1327	1.180534
Sex	0	(omitted)				
w1Age	-5.44461	4.654844	-1.17	0.246	-14.70443	3.815209
Race	5.848511	84.36318	0.07	0.945	-161.957	173.654
PovStat	-146.3257	88.95753	-1.64	0.104	-323.2714	30.62001
TIME_V1SCAN	.0081094	.0576448	0.14	0.888	1065581	.1227769
w1BMI	3.138077	8.082559	0.39	0.700	-13.23025	19.5064
w1dxDiabetes	41.05562	68.69681	0.60	0.552	-95.96211	178.0734
w1Glucose	1.116143	1.387286	0.80	0.423	-1.644359	3.876646
ICV volM2	.0023309	.0003149	7.40	0.000	.0017047	.0029572
_cons	1128.175	631.8473	1.79	0.078	-128.8055	2385.156

195 . //ANALYSIS C//

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

Multiple-imputation estimates Linear regression			Imputation Number of Average I Largest I Complete	f obs RVI FMI	= = =	5 93 0.2277 0.6250 83
DF adjustment:	Small sample		DF: i	nin avg max	= =	9.31 60.65 80.31
Model F test: Equal FMI Within VCE type: OLS			F(9 , Prob > F	72.5)	=	0.20 0.9937
LnLesion_V~e	Coefficient Std. err.	t	P> t	[95% co	onf.	interval]

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1464707	.7473837	-0.20	0.845	-1.634188	1.341246
Sex	0	(omitted)				
w1Age	.0445334	.0577164	0.77	0.443	0707184	.1597853
Race	.3728113	1.012409	0.37	0.714	-1.646263	2.391886
PovStat	7159634	1.045139	-0.69	0.495	-2.795834	1.363907
TIME_V1SCAN	.0000347	.0006762	0.05	0.959	0013117	.0013811
w1BMI	0607543	.1265601	-0.48	0.642	3455888	.2240803
w1dxDiabetes	4943011	.8769491	-0.56	0.577	-2.2743	1.285698
w1Glucose	.0076952	.0185987	0.41	0.682	0301974	.0455877
ICV_volM2	-5.44e-07	3.68e-06	-0.15	0.883	-7.87e-06	6.78e-06
_cons	6.359243	7.317683	0.87	0.387	-8.202552	20.92104

197 .

198 . save, replace

file finaldata_imputed.dta saved

199 .

200 .

202 . //Females//

203 .

204 . use finaldata_imputed,clear

205 . 206 .

207 . //ANALYSIS A//

208 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0317
	Largest FMI	=	0.1111
	Complete DF	=	109
DF adjustment: Small sample	DF: min	=	76.07
	avg	=	98.70
	max	=	106.65
Model F test: Equal FMI	F(8, 106.4)	=	3.11
Within VCE type: OLS	Prob > F	=	0.0034
TOTAL BRAIN Coefficient 5td on	+ D) + [OE% c		intonvall

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	3301.224	18080.31	0.18	0.855	-32546.83	39149.28
Sex	0	(omitted)				
w1Age	-1715.331	997.291	-1.72	0.088	-3692.418	261.7557
Race	-54841.94	15239.44	-3.60	0.000	-85053.81	-24630.08
PovStat	-13614.92	17018.97	-0.80	0.426	-47355.01	20125.18
TIME V1SCAN	-10.63188	12.00377	-0.89	0.378	-34.42892	13.16515
w1BMI	770.9382	1078.334	0.71	0.476	-1370.235	2912.111
w1dxDiabetes	-19305.32	15316.82	-1.26	0.211	-49810.98	11200.34
w1Glucose	554.2466	375.6284	1.48	0.144	-192.3301	1300.823
_cons	1204963	77263.01	15.60	0.000	1051669	1358258

209 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0423
	Largest FMI	=	0.1514
	Complete DF	=	109
DF adjustment: Small sample	DF: min	=	63.26
	avg	=	94.97
	max	=	106.58
Model F test: Equal FMI	F(8, 105.9)	=	4.89
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-6365.793 0	10009.12 (omitted)	-0.64	0.526	-26212.87	13481.28
w1Age	-1172.413	550.9311	-2.13	0.036	-2264.619	-80.20682
Race	-40986.16	8419.648	-4.87	0.000	-57678.13	-24294.2
PovStat TIME V1SCAN	-6197.676 -3.666616	9413.95 6.637212	-0.66 -0.55	0.512 0.582	-24861.74 -16.82512	12466.39 9.491885
w1BMI	632.6241	601.5041	1.05	0.296	-562.9296	1828.178
w1dxDiabetes	-13882.87	8635.282	-1.61	0.113	-31137.73	3371.985
w1Glucose	358.1794	210.8081	1.70	0.093	-61.64391	778.0027
_cons	705974.4	42790.18	16.50	0.000	621059.4	790889.3

210 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if Sex==1

Multiple-imputation estimates Linear regression			Imputation Number of Average Largest	f obs RVI FMI	= = = =	5 118 0.0226 0.0817
DF adjustment:	Small sample		Complete DF:	DF min	=	109 86.03
J	·			avg	=	100.76
			1	nax	=	106.97
Model F test:	Equal FMI		F(8,	106.7)) =	1.42
Within VCE typ	oe: OLS		Prob > F		=	0.1953
WM	Coefficient Std. err.	t	P> t	[95%	conf.	interval]

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	7853.371 0	8841.351 (omitted)	0.89	0.376	-9675.996	25382.74
w1Age	-747.9886	488.2381	-1.53	0.128	-1715.909	219.9319
Race	-11482.18	7453.211	-1.54	0.126	-26257.75	3293.385
PovStat	-7282.855	8315.504	-0.88	0.383	-23767.62	9201.906
TIME_V1SCAN	-5.688642	5.866186	-0.97	0.334	-17.31771	5.940429
w1BMI	224.4638	521.824	0.43	0.668	-810.7872	1259.715
w1dxDiabetes	-6527.248	7386.14	-0.88	0.379	-21210.33	8155.834
w1Glucose	188.7634	183.8836	1.03	0.307	-176.7292	554.2561
_cons	466623.8	37730.96	12.37	0.000	391773.8	541473.8

212 .

213 . //ANALYSIS B//

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

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0486
	Largest FMI	=	0.2135
	Complete DF	=	108
DF adjustment: Small sample	DF: min	=	46.99
	avg	=	92.39
	max	=	105.13
Model F test: Equal FMI	F(9, 105.1)	=	6.45
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-39.17455	58.03875	-0.67	0.501	-154.2686	75.91953
Sex	0	(omitted)	4.54		40 =0004	
w1Age	-4.180934	3.197208	-1.31	0.194	-10.52031	2.158446
Race	-128.0939	52.15234	-2.46	0.016	-231.5206	-24.66718
PovStat	-40.39224	54.84175	-0.74	0.463	-149.1506	68.36612
TIME_V1SCAN	.0003641	.0388804	0.01	0.993	0767567	.077485
w1BMI	.6366943	3.49911	0.18	0.856	-6.319913	7.593301
w1dxDiabetes	-92.02602	52.22781	-1.76	0.085	-197.0952	13.04312
w1Glucose	2.979595	1.254927	2.37	0.020	.4745712	5.484619
ICV_volM2	.0011911	.0002598	4.58	0.000	.0006758	.0017065
_cons	2164.035	413.6887	5.23	0.000	1343.698	2984.372

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

Multiple-imput Linear regress		es		Imputat Number		=	5 118
Linear regress	31011			Average		=	0.0618
				Largest		=	0.3191
				Complet		=	108
DF adjustment:	: Small samp	ole		DF:	min	=	29.50
z. aajasemene				•	avg	=	88.28
					max	=	104.50
Model F test:	Equal F	MI		F(9,		=	7.98
Within VCE typ	•	DLS		Prob >	,	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-15.36583	62.71146	-0.25	0.807	-139.74	36	109.0119
Sex	0	(omitted)					
w1Age	-2.466734	3.456396	-0.71	0.477	-9.3209	47	4.387478
Race	-109.4016	56.00595	-1.95	0.053	-220.45	72	1.654038
PovStat	-10.65059	59.04469	-0.18	0.857	-127.74	19	106.4407
TIME_V1SCAN	.0136645	.0418721	0.33	0.745	069	39	.0967191
w1BMI	00903	3.792768	-0.00	0.998	-7.5550	58	7.536998
w1dxDiabetes	-91.98449	59.77077	-1.54	0.134	-214.14	02	30.17122
w1Glucose	2.658793	1.403395	1.89	0.064	16317	35	5.480759
ICV_volM2	.0017367	.0002793	6.22	0.000	.00118	28	.0022906
_cons	1583.774	445.9033	3.55	0.001	699.52	97	2468.018

217 . //ANALYSIS C//

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

Multiple-imput Linear regress		ces		Imputat Number	of obs =	5 116
				Average		0.0121
				Largest		0.0700
				Complet	e DF =	106
DF adjustment	: Small samp	ole		DF:	min =	87.71
					avg =	101.72
					max =	103.93
Model F test:	Equal F	MI		F(9,	103.9) =	1.63
Within VCE typ	oe: C	DLS		Prob >	F =	0.1159
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	1.438796	.9621064	1.50	0.138	4693167	3.34691
Sex	0	(omitted)				
w1Age	.0968356	.0518243	1.87	0.065	0059359	.199607
Race	1.031372	.8537506	1.21	0.230	6617056	2.724449
PovStat	1.09023	.8994909	1.21	0.228	6935081	2.873968
TIME_V1SCAN	0003829	.000625	-0.61	0.542	0016223	.0008566
w1BMI	.0779404	.0549404	1.42	0.159	0310168	.1868976
w1dxDiabetes	.1982241	.7738182	0.26	0.798	-1.33692	1.733368
w1Glucose	0026048	.0198195	-0.13	0.896	0419936	.036784
ICV volM2	4.18e-06	4.19e-06	1.00	0.320	-4.12e-06	.0000125
_cons	-11.85805	6.723875	-1.76	0.081	-25.19197	1.475868

220 . save, replace

file finaldata_imputed.dta saved

221 . 222 .

223 . //INTERACTION BY Sex//

224 .

225 .

226 .

227 . //ANALYSIS A//

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

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0295
	Largest FMI	=	0.1817
	Complete DF	=	202
DF adjustment: Small sample	DF: min	=	76.18
	avg	=	170.87
	max	=	199.98
Model F test: Equal FMI	F(10, 198.7)	=	15.87
Within VCE type: OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	7280.971	18751.39	0.39	0.698	-29700.15	44262.09
Sex						
Men	184055.4	52652.96	3.50	0.001	80219.4	287891.4
Sex#c.LnNFLw3						
Men	-21395.45	22632.13	-0.95	0.346	-66026.62	23235.71
Sex	0	(omitted)				
w1Age	-1944.02	844.2137	-2.30	0.022	-3608.78	-279.2608
Race	-69445.1	13360.19	-5.20	0.000	-95790.09	-43100.12
PovStat	-1566.74	15001.18	-0.10	0.917	-31147.52	28014.04
TIME_V1SCAN	-21.4107	10.00508	-2.14	0.034	-41.13982	-1.681581
w1BMI	888.7534	1069.634	0.83	0.407	-1226.597	3004.103
w1dxDiabetes	-4512.39	12830.97	-0.35	0.726	-29947.06	20922.28
w1Glucose	228.5324	302.0722	0.76	0.452	-373.0731	830.1378
_cons	1256500	73548.67	17.08	0.000	1111325	1401676

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

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 213
5	Average RVI	=	0.0383
	Largest FMI	=	0.2102
	Complete DF	=	202
DF adjustment: Small sample	DF: min	=	64.10
	avg	=	166.33
	max	=	199.94
Model F test: Equal FMI	F(10 , 197.8)	=	16.87
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	429.0647	10219.79	0.04	0.967	-19727.38	20585.51
Sex						
Men	98817.4	28675.66	3.45	0.001	42264.9	155369.9
Sex#c.LnNFLw3						
Men	-12862.79	12324.24	-1.04	0.298	-37167.1	11441.51
Sex	0	(omitted)				
w1Age	-1715.156	459.4477	-3.73	0.000	-2621.179	-809.1337
Race	-48218.69	7267.758	-6.63	0.000	-62550	-33887.39
PovStat	349.7533	8161.063	0.04	0.966	-15743.04	16442.55
TIME_V1SCAN	-9.714917	5.44894	-1.78	0.076	-20.45993	1.030093
w1BMI	735.5738	589.8518	1.25	0.215	-432.9031	1904.051
w1dxDiabetes	-6240.954	6990.083	-0.89	0.374	-20100.33	7618.425
w1Glucose	171.3546	166.87	1.03	0.308	-161.9961	504.7054
_cons	743200.7	40247.07	18.47	0.000	663723.1	822678.2

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

Multiple-imputa Linear regressi		Imputati Number o Average Largest Complete	f obs RVI FMI	= = = =	5 213 0.0348 0.2164 202		
DF adjustment:	Small sampl	le		•	min	=	61.82
-					avg	=	167.43
					max	=	199.90
Model F test:	Equal F	IN		F(10 ,	198.2)	=	10.69
Within VCE type	e: O I	LS		Prob > F		=	0.0000
WM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	5258.377	9093.472	0.58	0.564	-12677	7.62	23194.37
Sex							
Men	80096.41	25476.23	3.14	0.002	29853	3.63	130339.2
Sex#c.LnNFLw3							
Men	-10885.13	10951.24	-0.99	0.321	-32481	L.88	10711.62
Sex	9	(omitted)					
w1Age	-584.8956	408.8671	-1.43	0.154	-1391	. 202	221.4108
Race	-19076.34	6458.447	-2.95	0.004	-3181	L1.8	-6340.882
PovStat	-5075.464	7251.405	-0.70	0.485	-19374	1.53	9223.598
TIME_V1SCAN	-9.893027	4.834124	-2.05	0.042	-19.42	2545	3606036
w1BMI	179.7579	513.9079	0.35	0.727	-835.9	9372	1195.453
w1dxDiabetes	472.0442	6421.436	0.07	0.942	-12333	3.21	13277.3
w1Glucose	82.4686	148.7585	0.55	0.581	-214.9	9131	379.8503
_cons	490017.9	35313.9	13.88	0.000	42034	10.8	559694.9

233 . //ANALYSIS B//

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

	Multiple-imputation estimates Linear regression				ons of obs RVI	= =	5 213 0.0353
				Largest		=	0.1956
				Complete		=	201
DF adjustment:	Small sampl	.e		DF:	min	=	69.83
ū					avg	=	174.06
					max	=	198.90
Model F test:	Equal FM	II		F(11 ,	197.6)	=	17.20
Within VCE type	e: OL	.S		Prob > F		=	0.0000
Left_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-40.77163	59.37705	-0.69	0.493	-157.	8693	76.32604
Sex							
Men	304.8514	174.1695	1.75	0.082	-38.6	8335	648.3861
Sex#c.LnNFLw3							
Men	-146.3963	72.1329	-2.03	0.044	-288.	6573	-4.135344
Sex	0	(omitted)					
w1Age	-4.275242	`2.675297	-1.60	0.112	-9.55	0907	1.000424
Race	-62.8885	45.80919	-1.37	0.171	-153.	2225	27.44551
PovStat	-85.96221	47.59692	-1.81	0.072	-179.	8217	7.897271
TIME_V1SCAN	0024598	.0320357	-0.08	0.939	065	6356	.060716
w1BMI	.4495209	3.590124	0.13	0.901	-6.71	1055	7.610097
w1dxDiabetes	0393604	40.68047	-0.00	0.999	-80.6	7317	80.59445
w1Glucose	1.390005	.9094299	1.53	0.129	407	_	3.187302
ICV_volM2	.0017017	.0001965	8.66	0.000	.001		.0020892
_cons	1631.68	354.4212	4.60	0.000	932.	5499	2330.811

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

Multiple-imputa Linear regress		Imputati Number o Average Largest	f obs RVI	= = =	= 213 = 0.0390		
DF adjustment:	Small sampl	.e		Complete DF:		= = =	201 64.21 171.81
Model F test: Within VCE type	II .S		F(11 , Prob > F	,	= = =	198.91 19.40 0.0000	
Right_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-6.01363	61.90403	-0.10	0.923	-128.1	1021	116.0748
Sex Men	238.0156	181.4722	1.31	0.191	-119.9	9463	595.9775
Sex#c.LnNFLw3 Men	-139.6256	75.14724	-1.86	0.065	-287.8	3385	8.587237
Sex w1Age	0 -3.64532	(omitted) 2.787395	-1.31	0.192	-9.142	2208	1.851569

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Race	-58.71383	47.64576	-1.23	0.219	-152.6695	35.24181
PovStat	-65.02953	49.51058	-1.31	0.191	-162.6628	32.60374
TIME_V1SCAN	.0176493	.033344	0.53	0.597	0481074	.0834059
w1BMI	.9956517	3.762749	0.26	0.792	-6.520826	8.51213
w1dxDiabetes	-14.98971	42.62047	-0.35	0.726	-99.55979	69.58037
w1Glucose	1.622339	.9496929	1.71	0.090	255289	3.499968
ICV_volM2	.0020881	.0002045	10.21	0.000	.0016849	.0024913
_cons	1213.522	368.0619	3.30	0.001	487.5292	1939.515

236 .

237 . //ANALYSIS C//
238 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose IC

	Multiple-imputation estimates Linear regression				Imputations Number of obs Average RVI Largest FMI		5 209 0.0654 0.3017	
				Complete		=	197	
DF adjustment:	Small sampl	Le		DF:	min	=	38.74	
					avg	=	157.98	
	_				max .	=	194.75	
Model F test:	Equal FM			, ,	190.8)	=	1.05	
Within VCE type	e: OL	_S		Prob > F		=	0.4045	
 LnLesion_Vo~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]	
LnNFLw3	1.303054	.8553305	1.52	0.130	385	9213	2.99203	
Sex								
Men	3.907587	2.454058	1.59	0.113	934	9582	8.750132	
C#- L-NEL2								
Sex#c.LnNFLw3	4 635556	4 004400	4 60	0.440	2.65		2056076	
Men	-1.635556	1.024409	-1.60	0.112	-3.65	5809	.3856976	
Sex	ø	(omitted)						
w1Age	.0702367	.0376307	1.87	0.064	0040	2054	.1444789	
Race	.6013494	.635136	0.95	0.345	651	3035	1.854002	
PovStat	.3256949	.6629828	0.49	0.624	981	8675	1.633257	
TIME_V1SCAN	0001434	.000439	-0.33	0.744	001	2091	.0007224	
w1BMI	.0351026	.0524929	0.67	0.508	071	971	.1413023	
w1dxDiabetes	195557	.5837953	-0.33	0.739	-1.36	2645	.9695308	
w1Glucose	.0039673	.0128441	0.31	0.758	021	4733	.0294079	
ICV_volM2	1.08e-06	2.69e-06	0.40	0.689	-4.23	e-06	6.38e-06	
_cons	-4.41734	4.877429	-0.91	0.366	-14.0	3871	5.204035	
	L							

239 .

240 . save, replace

file finaldata_imputed.dta saved

241 .

```
242 .
243 .
244 .
245 . ********MODEL 4: MODEL 2+liver/kidney disease*****
247 . //Overall//
248 .
249 . use finaldata_imputed,clear
250 .
251 .
252 . //ANALYSIS A//
253 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP
```

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
_	Average RVI	=	0.1279
	Largest FMI	=	0.5093
	Complete DF	=	200
DF adjustment: Small sample	DF: min	=	16.22
	avg	=	131.21
	max	=	193.83
Model F test: Equal FMI	F(12, 184.0)	=	13.01
will the same	D -		0 0000

OLS Within VCE type: Prob > F 0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-2028.474	12921.68	-0.16	0.875	-27520.3	23463.35
Sex	157737.5	16587.87	9.51	0.000	124858.9	190616.1
w1Age	-1652.497	828.9442	-1.99	0.048	-3287.428	-17.56521
Race	-62935.45	14084.54	-4.47	0.000	-90717.16	-35153.74
PovStat	-422.5785	14741.68	-0.03	0.977	-29497.27	28652.12
TIME_V1SCAN	-24.14032	9.943117	-2.43	0.016	-43.75285	-4.527786
w1BMI	1920.463	1100.498	1.75	0.083	-257.3042	4098.23
w1Creatinine	2872.527	32269.39	0.09	0.930	-65461.71	71206.76
w1USpecGrav	-421359.6	1163390	-0.36	0.718	-2731779	1889060
w1BUN	1645.95	1813.314	0.91	0.366	-1937.401	5229.302
w1ALP	247.5874	327.4793	0.76	0.453	-407.8327	903.0075
w1UricAcid	-15832.91	5385.119	-2.94	0.004	-26513.29	-5152.535
_cons	1553568	1166995	1.33	0.186	-762198.5	3869335

254 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates		Imputations	=	5
Linear regression	1	Number of obs	=	213
_		Average RVI	=	0.1828
		Largest FMI	=	0.5754
		Complete DF	=	200
DF adjustment:	Small sample	DF: min	=	12.85
		avg	=	113.75
		max	=	194.45
Model F test:	Equal FMI	F(12 , 173.8)	=	13.00
Within VCE type:	OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-6934.827	7181.918	-0.97	0.336	-21118.39	7248.735
Sex	79717.13	9337.339	8.54	0.000	61119.53	98314.73
w1Age	-1671.378	455.6378	-3.67	0.000	-2570.221	-772.5344
Race	-44480.52	7737.348	-5.75	0.000	-59745.72	-29215.33
PovStat	802.3586	8051.115	0.10	0.921	-15076.36	16681.08
TIME_V1SCAN	-10.81805	5.444896	-1.99	0.048	-21.55877	0773372
w1BMI	1160.149	605.5503	1.92	0.058	-39.19857	2359.496
w1Creatinine	5930.284	18722.23	0.32	0.757	-34563.96	46424.53
w1USpecGrav	-442930.9	640245.8	-0.69	0.491	-1715892	830029.7
w1BUN	1307.797	1038.567	1.26	0.211	-757.786	3373.381
w1ALP	178.4268	200.5955	0.89	0.383	-235.7814	592.635
w1UricAcid	-7446.982	3017.43	-2.47	0.016	-13456.63	-1437.333
_cons	1127129	641754	1.76	0.082	-147610.7	2401869

255 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates Linear regression		Imputations Number of obs	=	5 213
· ·		Average RVI	=	0.1018
		Largest FMI	=	0.4508
		Complete DF	=	200
DF adjustment:	Small sample	DF: min	=	20.21
		avg	=	135.12
		max	=	195.87
Model F test:	Equal FMI	F(12 , 188.3)	=	9.04
Within VCE type:	OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	879.4883	6221.363	0.14	0.888	-11390.57	13149.55
Sex	66464.66	7888.216	8.43	0.000	50868.52	82060.81
w1Age	-406.7152	400.9958	-1.01	0.312	-1197.539	384.1084
Race	-15950.06	6900.176	-2.31	0.022	-29566.79	-2333.321
PovStat	-4574.545	7170.943	-0.64	0.524	-18718.76	9569.671
TIME_V1SCAN	-11.2992	4.819304	-2.34	0.020	-20.80478	-1.793619
w1BMI	674.6326	532.962	1.27	0.208	-379.7993	1729.065
w1Creatinine	-3081.446	14948.9	-0.21	0.839	-34243.63	28080.73
w1USpecGrav	-159350.4	563234.4	-0.28	0.778	-1277505	958804.4
w1BUN	665.6854	910.8664	0.73	0.467	-1142.284	2473.655
w1ALP	95.06878	149.8762	0.63	0.527	-201.7899	391.9275
w1UricAcid	-7239.861	2602.401	-2.78	0.006	-12398.24	-2081.478
_cons	600164.5	565041.4	1.06	0.291	-520736.8	1721066

256

257 . //ANALYSIS B//

258 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.2693
	Largest FMI	=	0.7550
	Complete DF	=	199
	DF: min	=	7.21
	avg	=	117.77
DF adjustment: Small sample	max	=	194.22
	<u>F(12, .)</u>	=	
Within VCE type: OLS	Prob > F	=	

Left_Hippo∼s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-130.301	42.38149	-3.07	0.002	-213.927	-46.67509
Sex	-30.06289	68.66345	-0.44	0.662	-166.0829	105.9571
w1Age	-4.075942	2.703878	-1.51	0.133	-9.408675	1.256791
Race	-47.9566	51.59747	-0.93	0.355	-150.1364	54.22316
PovStat	-92.78277	48.19174	-1.93	0.056	-187.8338	2.26829
TIME_V1SCAN	0109479	.0329136	-0.33	0.740	0758781	.0539823
w1BMI	.3385112	3.755103	0.09	0.928	-7.131838	7.80886
w1Creatinine	45.24236	141.7979	0.32	0.759	-288.1131	378.5978
w1USpecGrav	-2535.906	3885.159	-0.65	0.516	-10281.27	5209.459
w1BUN	8.78768	6.395104	1.37	0.175	-4.00541	21.58077
w1ALP	1556517	1.174797	-0.13	0.896	-2.565284	2.253981
w1UricAcid	-6.643573	17.27739	-0.38	0.701	-40.76626	27.47911
ICV_volM2	.0017359	.0002055	8.45	0.000	.0013305	.0021414
_cons	4424.582	3913.62	1.13	0.262	-3373.827	12222.99

259 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Imputations Number of obs	=	5 213
Average RVI	=	0.2412
Largest FMI	=	0.7040
Complete DF	=	199
DF: min	=	8.45
avg	=	113.06
max	=	194.98
<u>F(12, .)</u>	=	
Prob > F	=	•
	Number of obs Average RVI Largest FMI Complete DF DF: min avg max F(12, .)	<pre>Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = F(12, .) =</pre>

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-99.95482	44.15448	-2.26	0.025	-187.096	-12.81361
Sex	-99.63282	71.32325	-1.40	0.165	-240.9337	41.66805
w1Age	-3.922096	2.812824	-1.39	0.165	-9.470002	1.625809
Race	-49.39746	53.38112	-0.93	0.357	-155.063	56.26812
PovStat	-76.34661	49.88626	-1.53	0.128	-174.7326	22.03934
TIME V1SCAN	.0125874	.0340562	0.37	0.712	0545883	.0797631
w1BMI	157064	3.944904	-0.04	0.968	-8.022378	7.70825
w1Creatinine	45.30676	135.6973	0.33	0.747	-264.7129	355.3264
w1USpecGrav	-200.2113	4213.644	-0.05	0.962	-8681.879	8281.456
w1BUN	7.619219	6.733573	1.13	0.263	-5.893311	21.13175
w1ALP	.848485	1.206786	0.70	0.488	-1.618757	3.315727
w1UricAcid	5.789295	17.99347	0.32	0.748	-29.7569	41.33549
ICV volM2	.0021399	.0002129	10.05	0.000	.0017198	.00256
_cons	1638.038	4235.562	0.39	0.701	-6878.285	10154.36

260 . 261 . //ANALYSIS C//

263 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 209
Linear regression	Average RVI	=	0.2912
	Largest FMI	=	0.7599
	Complete DF	=	195
	DF: min	=	7.08
	avg	=	105.26
DF adjustment: Small sample	max	=	189.75
	<u>F(12, .)</u>	=	•
Within VCE type: OLS	Prob > F	=	•

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.3042569	.5854487	0.52	0.604	8516868	1.460201
Sex	.0182388	1.023488	0.02	0.986	-2.035463	2.07194
w1Age	.0757563	.0381093	1.99	0.048	.0005613	.1509512
Race	.7703424	.6967635	1.11	0.271	6070164	2.147701
PovStat	.1249254	.6638427	0.19	0.851	-1.184611	1.434461
TIME_V1SCAN	0002141	.0004441	-0.48	0.630	0010901	.0006619
w1BMI	.0038223	.0567768	0.07	0.947	1114964	.119141
w1Creatinine	2038481	1.987805	-0.10	0.921	-4.893327	4.485631
w1USpecGrav	33.36908	57.34734	0.58	0.564	-82.86763	149.6058
w1BUN	.0649979	.091475	0.71	0.480	1183891	.2483848
w1ALP	0084134	.0150832	-0.56	0.580	0387978	.0219709
w1UricAcid	001949	.2454046	-0.01	0.994	4866892	.4827913
ICV volM2	1.71e-06	2.80e-06	0.61	0.542	-3.81e-06	7.23e-06
_cons	-35.93583	57.61104	-0.62	0.537	-152.5776	80.70595

264 .

265 . save, replace

file finaldata_imputed.dta saved

266 .

267 . //Males//

268 .

269 . use finaldata_imputed,clear

270 .

271 .

272 . //ANALYSIS A//

273 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP

Multiple-imputation estimates		Imputations	=	5
Linear regression		Number of obs	=	95
		Average RVI	=	0.1689
		Largest FMI	=	0.5828
		Complete DF	=	83
DF adjustment:	Small sample	DF: min	=	10.63
		avg	=	60.07
		max	=	80.05
Model F test:	Equal FMI	F(11 , 75.9)	=	2.43
Within VCE type:	OLS	Prob > F	=	0.0119

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-17142.52	20060.62	-0.85	0.395	-57064.03	22778.98
Sex	0	(omitted)				
w1Age	-2413.059	1483.131	-1.63	0.108	-5368.187	542.0701
Race	-82914.3	25808.93	-3.21	0.002	-134340.2	-31488.43
PovStat	15482.47	28371.43	0.55	0.587	-41052.37	72017.31
TIME_V1SCAN	-34.79962	17.59112	-1.98	0.052	-69.83656	.2373137
w1BMI	3530.762	2453.563	1.44	0.156	-1396.293	8457.817
w1Creatinine	-20909.51	62199.41	-0.34	0.743	-158393.5	116574.5
w1USpecGrav	-2307027	1989710	-1.16	0.250	-6280040	1665985
w1BUN	2976.191	3136.946	0.95	0.347	-3329.362	9281.744
w1ALP	779.9127	661.436	1.18	0.248	-570.5987	2130.424
w1UricAcid	-12985.16	9585.571	-1.35	0.180	-32101.99	6131.678
_cons	3797494	2013950	1.89	0.064	-221726	7816714

274 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
•	Average RVI	=	0.2010
	Largest FMI	=	0.5315
	Complete DF	=	83
DF adjustment: Small sample	DF: min	=	12.53
	avg	=	53.07
	max	=	78.07
Model F test: Equal FMI	F(11, 74.4)	=	3.59
Within VCE type: OLS	Prob > F	=	0.0004

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-13067.08	10758.08	-1.21	0.228	-34484.47	8350.316
Sex	0	(omitted)				
w1Age	-2496.933	791.0362	-3.16	0.002	-4073.31	-920.5562
Race	-55916.47	13701.74	-4.08	0.000	-83211.2	-28621.74
PovStat	9971.35	15019.26	0.66	0.509	-19942.67	39885.37
TIME_V1SCAN	-17.06753	9.353038	-1.82	0.072	-35.6945	1.559432
w1BMI	2283.195	1329.094	1.72	0.093	-395.2996	4961.69
w1Creatinine	-5426.481	31575.94	-0.17	0.866	-73904.82	63051.86
w1USpecGrav	-1500843	1108268	-1.35	0.182	-3730786	729099.1
w1BUN	1759.988	1739.676	1.01	0.319	-1769.355	5289.331
w1ALP	444.998	395.4348	1.13	0.277	-394.0806	1284.076
w1UricAcid	-6159.329	5289.546	-1.16	0.249	-16761.95	4443.297
_cons	2383088	1120621	2.13	0.039	130762.7	4635413

275 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.1603
	Largest FMI	=	0.5819
	Complete DF	=	83
DF adjustment: Small sample	DF: min	=	10.66
	avg	=	62.67
	max	=	78.96
Model F test: Equal FMI	F(11 , 76.3)	=	1.51
Within VCE type: OLS	Prob > F	=	0.1449

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-7256.972	9760.5	-0.74	0.459	-26684.92	12170.97
Sex	0	(omitted)				
w1Age	-538.4321	718.0117	-0.75	0.456	-1969.016	892.1515
Race	-25266.94	12650.96	-2.00	0.050	-50505.42	-28.45918
PovStat	-1341.8	13901.26	-0.10	0.923	-29075.29	26391.69
TIME_V1SCAN	-15.64036	8.521658	-1.84	0.070	-32.61358	1.33286
w1BMI	1220.566	1181.89	1.03	0.306	-1150.427	3591.558
w1Creatinine	-14343.74	30101.82	-0.48	0.643	-80854.25	52166.77
w1USpecGrav	-1212992	946390.2	-1.28	0.204	-3098986	673001.2
w1BUN	1180.921	1526.848	0.77	0.443	-1891.406	4253.247
w1ALP	364.7028	293.8218	1.24	0.220	-223.5411	952.9467
w1UricAcid	-5284.417	4650.677	-1.14	0.260	-14561.29	3992.453
_cons	1807918	957811.4	1.89	0.063	-100093.7	3715929

277 . 278 . //ANALYSIS B//

279 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imput		Imputati Number o		= 5 = 95		
Linear regress	2011			Average		= 0.3095
				Largest		= 0.7574
				Complete		= 82
DF adjustment:	: Small samp	ole		•		= 6.15
						= 53.60
					•	= 78.68
Model F test:	Equal F	MI		F(11 ,	>	= 5.40
Within VCE typ	•	LS		Prob > F	,	= 0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% con	f. interval]
LnNFLw3	-159.7069	65.85956	-2.42	0.018	-291.0372	-28.37666
Sex	0	(omitted)				
w1Age	-3.564483	4.711491	-0.76	0.452	-12.95001	5.82104
Race	3.771831	90.89678	0.04	0.967	-177.5439	185.0876
PovStat	-167.3844	89.64616	-1.87	0.066	-345.9013	11.13247
TIME_V1SCAN	0332105	.0569031	-0.58	0.561	1465307	.0801096
w1BMI	3.422625	8.795902	0.39	0.701	-14.72253	21.56778
w1Creatinine	110.7246	250.8306	0.44	0.674	-499.4295	720.8787
w1USpecGrav	-967.1017	6794.076	-0.14	0.888	-14690.65	12756.44
w1BUN	2.313671	10.49389	0.22	0.827	-19.00386	23.6312
w1ALP	8090174	2.167939	-0.37	0.712	-5.259567	3.641532
w1UricAcid	-15.61624	30.09861	-0.52	0.605	-75.52987	44.29739
ICV_volM2	.0020216	.000321	6.30	0.000	.0013824	.0026609
_cons	2498.115	6996.53	0.36	0.723	-11639.29	16635.52

280 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imput		Imputation		=	5 95		
Linear regress	21011					=	95 0.2076
				Average I		=	0.5959
				Largest		=	82 82
DE		1.		Complete		=	
DF adjustment:	: Small samp	те			min	=	10.17
					avg	=	52.18
M. J. J. E. L L.	F1 F				max	=	78.61
Model F test:	Equal F			F(11,	73.2)	=	6.52
Within VCE typ	be: 0	LS		Prob > F		=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% con	nf.	interval]
LnNFLw3	-130.7226	67.1067	-1.95	0.055	-264.4674	1	3.022167
Sex	0	(omitted)					
w1Age	-5.341986	4.790702	-1.12	0.268	-14.88021	l	4.196234
Race	12.77713	92.48753	0.14	0.891	-171.5766	5	197.1309
PovStat	-146.5641	91.31736	-1.60	0.113	-328.3439	€	35.21562
TIME_V1SCAN	0133081	.0578913	-0.23	0.819	1285468	3	.1019305
w1BMI	6.022555	9.175715	0.66	0.518	-13.01361	l	25.05872
w1Creatinine	71.8274	207.3992	0.35	0.736	-389.2545	5	532.9093
w1USpecGrav	3168.542	7245.575	0.44	0.665	-11615.84	4	17952.92
w1BUN	5.04815	10.9853	0.46	0.649	-17.39547	7	27.49177
w1ALP	1.94063	2.200217	0.88	0.385	-2.562979	9	6.444238
w1UricAcid	2.540544	31.47644	0.08	0.936	-60.20484	4	65.28593
ICV_volM2	.0022812	.0003323	6.87	0.000	.0016191	1	.0029432
cons	-2237.826	7423.575	-0.30	0.765	-17370.49	•	12894.84

281

282 . //ANALYSIS C//

Linear regression

Multiple-imputation estimates

283 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w

5

93

Imputations

Number of obs

Largest FMI	0.9035 80 3.55 37.59 75.08 0.21
DF adjustment: Small sample DF: min = avg = max =	3.55 37.59 75.08 0.21
avg = max =	37.59 75.08 0.21
max =	75.08 0.21
	0.21
Model F test: Equal FMI F(11 , 46.9) =	
Within VCE type: OLS Prob > F =	0.9962
LnLesion_V~e Coefficient Std. err. t P> t [95% conf. in	terval]
LnNFLw30658323 .7471413 -0.09 0.930 -1.554187 1	.422523
Sex 0 (omitted)	
w1Age .0477617 .0572003 0.83 0.4070666569 .	1621803
Race .5148132 1.081601 0.48 0.636 -1.655051 2	.684677
PovStat5760326 1.048178 -0.55 0.584 -2.666668 1	.514602
TIME_V1SCAN .0001028 .0006892 0.15 0.88200128 .	0014855
	2532602
w1Creatinine1489211 4.503415 -0.03 0.975 -13.29601 1	2.99817
w1USpecGrav 28.18938 106.3513 0.27 0.797 -210.813 2	67.1917
w1BUN .0011193 .1529447 0.01 0.9943315639 .	3338025
w1ALP0310914 .0304111 -1.02 0.3290980257 .	0358429
w1UricAcid .111167 .362056 0.31 0.760610527	.832861
	.91e-06
=	21.2748

```
284 .
285 . save, replace
    file finaldata_imputed.dta saved

286 .
287 .
288 .
289 . //Females//
290 .
291 . use finaldata_imputed,clear

292 .
293 .
294 . //ANALYSIS A//
295 . mi estimate: reg TOTALBRAIN LnI

Multiple-imputation estimates
Linear regression
```

295 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP

Multiple-imputation estimates	Imputations	=	5
Linear regression	ramber or obs	=	118
	Average RVI	=	0.1207
	Largest FMI	=	0.3341
	Complete DF	=	106
DF adjustment: Small sample	DF: min	=	27.53
	avg	=	67.24
	max	=	102.35
Model F test: Equal FMI	F(11 , 99.5)	=	2.94
Within VCE type: OLS	Prob > F	=	0.0021

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	25135.19	18199.28	1.38	0.170	-10980.75	61251.14
Sex	0	(omitted)				
w1Age	-1335.989	1016.891	-1.31	0.192	-3352.905	680.9268
Race	-48352.83	16581.32	-2.92	0.004	-81291.03	-15414.63
PovStat	-8399.69	16990.78	-0.49	0.622	-42108.69	25309.31
TIME_V1SCAN	-11.49147	11.81237	-0.97	0.333	-34.92253	11.93958
w1BMI	2414.392	1174.642	2.06	0.043	78.05938	4750.725
w1Creatinine	17346.94	32899.91	0.53	0.602	-50096.82	84790.69
w1USpecGrav	986035.2	1412715	0.70	0.489	-1868623	3840693
w1BUN	-770.7956	2548.197	-0.30	0.764	-5912.753	4371.161
w1ALP	-151.9498	370.7313	-0.41	0.684	-900.46	596.5604
w1UricAcid	-17530.48	6677.773	-2.63	0.012	-31034.94	-4026.015
_cons	213975.3	1426806	0.15	0.882	-2667890	3095840

296 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.1314
	Largest FMI	=	0.3949
	Complete DF	=	106
DF adjustment: Small sample	DF: min	=	21.67
	avg	=	67.94
	max	=	103.01
Model F test: Equal FMI	F(11 , 98.8)	=	3.58
Within VCE type: OLS	Prob > F	=	0.0003

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	3449.098	10419.66	0.33	0.741	-17247.47	24145.67
Sex	0	(omitted)				
w1Age	-1145.879	576.8394	-1.99	0.050	-2290.125	-1.633833
Race	-38188.07	9245.71	-4.13	0.000	-56534.29	-19841.85
PovStat	-4622.973	9548.061	-0.48	0.629	-23560.26	14314.31
TIME_V1SCAN	-3.689913	6.65274	-0.55	0.580	-16.88404	9.50421
w1BMI	1347.942	668.2231	2.02	0.047	17.96651	2677.917
w1Creatinine	13225.25	19355.84	0.68	0.502	-26951.3	53401.8
w1USpecGrav	409837.7	790253	0.52	0.607	-1182702	2002378
w1BUN	10.14964	1426.391	0.01	0.994	-2861.112	2881.412
w1ALP	-18.73753	212.8243	-0.09	0.930	-450.019	412.544
w1UricAcid	-8005.495	3705.674	-2.16	0.036	-15465.25	-545.7456
_cons	298845.9	798463.7	0.37	0.710	-1309726	1907418

297 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w1UricAc

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.1470
	Largest FMI	=	0.5049
	Complete DF	=	106
DF adjustment: Small sample	DF: min	=	14.59
	avg	=	66.60
	max	=	103.35
Model F test: Equal FMI	F(11 , 97.9)	=	1.96
Within VCE type: OLS	Prob > F	=	0.0406

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	18055.98	8728.014	2.07	0.041	742.042	35369.93
Sex	0	(omitted)				
w1Age	-512.9589	489.3715	-1.05	0.297	-1483.473	457.5548
Race	-7275.359	8128.963	-0.89	0.373	-23449.47	8898.752
PovStat	-4393.116	8258.956	-0.53	0.596	-20785.19	11998.96
TIME_V1SCAN	-6.692617	5.730383	-1.17	0.246	-18.06204	4.676803
w1BMI	1009.182	559.0957	1.81	0.074	-101.226	2119.59
w1Creatinine	2491.692	17945.28	0.14	0.891	-35851.14	40834.53
w1USpecGrav	573456.2	679905.2	0.84	0.404	-799359.9	1946272
w1BUN	-175.2452	1221.079	-0.14	0.887	-2634.789	2284.298
w1ALP	-115.3214	179.1564	-0.64	0.523	-477.1344	246.4915
w1UricAcid	-8901.135	3201.191	-2.78	0.008	-15363.48	-2438.795
_cons	-112461.1	686489.9	-0.16	0.871	-1497875	1272953

298 .

299

300 . //ANALYSIS B//

301 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imputation	Imputations	=	5	
Linear regression		Number of obs	=	118
		Average RVI	=	0.0712
		Largest FMI	=	0.3512
		Complete DF	=	105
DF adjustment: Sma	ll sample	DF: min	=	25.61
		avg	=	84.80
		max	=	102.42
Model F test:	Equal FMI	F(12, 101.6)	=	4.35
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-7.39902	61.73656	-0.12	0.905	-129.8639	115.0658
Sex	0	(omitted)				
w1Age	-7.67017	3.447279	-2.22	0.028	-14.51013	8302152
Race	-91.54935	57.36657	-1.60	0.114	-205.3399	22.24116
PovStat	-40.23665	56.90409	-0.71	0.481	-153.1084	72.63508
TIME_V1SCAN	.0033376	.0396843	0.08	0.933	0753721	.0820473
w1BMI	1.672962	3.965729	0.42	0.674	-6.201075	9.546999
w1Creatinine	7.71015	112.8045	0.07	0.946	-224.3329	239.7532
w1USpecGrav	-3585.88	4477.592	-0.80	0.426	-12514.78	5343.025
w1BUN	14.41989	7.941639	1.82	0.073	-1.373706	30.21349
w1ALP	3468105	1.169465	-0.30	0.768	-2.676982	1.983361
w1UricAcid	-14.77603	21.44147	-0.69	0.493	-57.46976	27.91769
ICV_volM2	.0012911	.0002745	4.70	0.000	.0007465	.0018357
_cons	5858.993	4517.766	1.30	0.199	-3151.636	14869.62

302 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

Multiple-imput Linear regress DF adjustment:	ā	F obs = RVI = F obs =	118 0.1156 0.4401 105 18.28			
Model F test: Within VCE typ	Equal Foe: 0	MI DLS		F(12, Prob > F	10X = 99.7) = =	5.23
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf	f. interval]
LnNFLw3 Sex	.7240587 0	67.24811 (omitted)	0.01	0.991	-132.7407	134.1888
w1Age	-5.641823	3.781779	-1.49	0.139	-13.15457	1.870929
Race	-94.3187	62.20085	-1.52	0.133	-217.7258	29.08842
PovStat	-21.13148	61.34794	-0.34	0.731	-142.8153	100.5524
TIME_V1SCAN	.0226825	.0430777	0.53	0.600	0627787	.1081436
w1BMI	6784688	4.294427	-0.16	0.875	-9.207921	7.850984
w1Creatinine	13.0773	129.3287	0.10	0.921	-258.3367	284.4913
w1USpecGrav	-2124.161	5011.993	-0.42	0.673	-12185.78	7937.461
w1BUN	8.740933	8.872255	0.99	0.328	-8.992677	26.47454
w1ALP	0457973	1.314295	-0.03	0.972	-2.683281	2.591686
w1UricAcid	6.608908	23.12336	0.29	0.776	-39.43168	52.6495
ICV_volM2	.0018887	.0002953	6.40	0.000	.001303	.0024745
_cons	3737.99	5045.207	0.74	0.462	-6387.95	13863.93

303 .

304 . //ANALYSIS C//

.0873298 .0633383

30.52582 68.77585

.1119311 .1244087

-41.82949 69.09331

1.59303

.0182355

.3567285

4.41e-06

-.1654085

.0045796

-.3002799

3.04e-06

305 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w

Multiple-imputation Linear regression	Imputati Number o Average	of obs	= = =	5 116 0.0233			
				Largest		=	0.1356
				Complete	P DF	=	103
DF adjustment: S	Small samp	le		DF:	min	=	65.30
					avg	=	96.20
					max	=	100.96
Model F test:	Equal F	MI		F(12 ,	100.8)	=	1.37
Within VCE type:	. 0	LS		Prob > F	:	=	0.1930
LnLesion V~e Coe	efficient	Std. err.	t	P> t	[95% cc	n-f	intervall
	CITICICITE	Jea. Cir.		17 6	[33/0 66		incervary
LnNFLw3 1 Sex	1.296187 0	.9851986 (omitted)	1.32	0.191	658191	L 7	3.250566
w1Age .	.0941068	.0544831	1.73	0.087	013975	4	.2021889
Race 1	1.176653	.9289157	1.27	0.208	666115	1	3.01942
PovStat 1	1.169709	.920166	1.27	0.207	655671	. 8	2.99509
TIME V1SCAN	.0005145	.0006347	-0.81	0.420	001773	16	.0007446

1.38 0.171

-0.84

0.69

-0.10 0.918

-0.61 0.546

0.44 0.658 -105.9397

0.90 0.370 -.1348738

0.25 0.802 -.0316116

0.402

0.493

306 .

307 . save, replace

file finaldata_imputed.dta saved

308 .

309 . **INTERACTION BY Sex**

w1BMI

w1BUN

w1ALP

_cons

w1Creatinine

w1USpecGrav

w1UricAcid

ICV_volM2

310 .

311 .

312 . //ANALYSIS A//

313 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN

-.038359

-3.346633

-1.009355

-5.72e-06

-178.9235

.2130186

3.015816

166.9913

.3587361

.0407708

.4087948

.0000118

95.26452

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.1199
	Largest FMI	=	0.4883
	Complete DF	=	199
DF adjustment: Small sample	DF: min	=	17.50
	avg	=	139.81
	max	=	194.45
Model F test: Equal FMI	F(13 , 185.6)	=	12.25
Within VCE type: OLS	Prob > F	=	0.0000

f. interval]	[95% conf.	D. I±I				
		P> t	t	Std. err.	Coefficient	TOTALBRAIN
52218.59	-21957.44	0.422	0.80	18803.39	15130.57	LnNFLw3
						Sex
327941	115024.8	0.000	4.11	53948.83	221482.9	Men
						Sex#c.LnNFLw3
16074.59	-71978.41	0.212	-1.25	22322.33	-27951.91	Men
				(omitted)	0	Sex
-151.1393	-3453.319	0.033	-2.15	837.0884	-1802.229	w1Age
-35208.29	-90644.19	0.000	-4.48	14052.26	-62926.24	Race
31926.52	-26781.34	0.863	0.17	14883.56	2572.589	PovStat
-3.768729	-43.00249	0.020	-2.35	9.945073	-23.38561	TIME_V1SCAN
4447.705	10.03566	0.049	1.99	1122.035	2228.87	w1BMI
69322.44	-64215.43	0.937	0.08	31716.33	2553.504	w1Creatinine
1853383	-2777260	0.693	-0.40	1165331	-461938.4	w1USpecGrav
5202.431	-1992.444	0.379	0.88	1819.691	1604.994	w1BUN
889.62	-439.586	0.500	0.68	331.2618	225.017	w1ALP
-5604.339	-27181.17	0.003	-3.02	5433.952	-16392.75	w1UricAcid
4039942	-613860	0.147	1.46	1172158	1713041	_cons

314 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w

Multiple-imputa			Imputat		=		
Linear regressi	ion			Number	of obs	=	213
				Average		=	0.1773
				Largest		=	0.5630
				Complet	e DF	=	199
DF adjustment:	Small sampl	Le		DF:	min	=	13.40
					avg	=	125.31
					max	=	194.99
Model F test:	Equal FM	1I		F(13 ,	176.0)	=	12.24
Within VCE type		Prob >	F	=	0.0000		
GM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	2994.053	10311.74	0.29	0.772	-17347	7.69	23335.79
Sex							
Men	116609	29818.34	3.91	0.000	57721	L.47	175496.5
Sex#c.LnNFLw3							
Men	-16177.89	12243.51	-1.32	0.188	-40328	3.93	7973.144
Sex	0	(omitted)					
w1Age	-1758.006	460.0798	-3.82	0.000	-2665.	692	-850.3192
Race	-44474.95	7722.689	-5.76	0.000	-59711	L.65	-29238.24
PovStat	2535.714	8124.252	0.31	0.755	-13486	5.97	18558.4
TIME_V1SCAN	-10.38112	5.442844	-1.91	0.058	-21.11	L802	.3557785
w1BMI	1338.538	617.5335	2.17	0.032	116.3	3092	2560.767
w1Creatinine	5759.718	18490.38	0.31	0.760	-34065	5.69	45585.13
w1USpecGrav	-466448.3	642100.3	-0.73	0.470	-1744	1101	811204.5
w1BUN	1284.45	1049.303	1.22	0.225	-806.		3375.722
w1ALP	165.3236	203.586	0.81	0.426	-257.	.027	587.6742
w1UricAcid	-7771.94	3062.013	-2.54	0.014	-13885	5.73	-1658.147
_cons	1207881	645552.1	1.87	0.065	-75352	2.38	2491114

315 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w1ALP w

Multiple-imputa Linear regressi		es		Imputati Number o Average Largest	of obs RVI	= = =	5 213 0.0912 0.4264
DF adjustment:	Small sampl	Le		Complete DF:		= = =	199 22.25 144.03
Model F test:	Equal FM	ΑΤ		F(13 ,	max 189.8)	=	196.10 8.57
Within VCE type	•		Prob > F	,	=	0.0000	
		-					
WM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	9334.977	9090.39	1.03	0.306	-8593	.344	27263.3
Sex Men	97873	25840.16	3.79	0.000	46908	3.71	148837.3
Sex#c.LnNFLw3 Men	-13769.28	10786.32	-1.28	0.203	-35041	1.35	7502.792
Sex	0	(omitted)					
w1Age	-480.5651	404.5975	-1.19	0.236	-1278	.519	317.3891
Race	-15943.21	6877.58	-2.32	0.022	-29514		-2372.028
PovStat	-3097.99	7241.797	-0.43	0.669	-17381		11185.68
TIME_V1SCAN	-10.92748	4.818944	-2.27	0.024	-20.43		-1.422419
w1BMI w1Creatinine	826.8185 -3266.076	544.2391 14681.59	1.52 -0.22	0.131 0.826	-249.3 -33693		1903.028 27161.68
w1USpecGrav	-179509.1	563021.5	-0.22	0.826	-33693		938370.4
w1BUN	645.5441	905.3774	0.71	0.477	-1150		2441.141
w1ALP	84.00461	150.3898	0.56	0.578	-213.9		381.9986
w1UricAcid	-7514.867	2611.139	-2.88	0.005	-12691	L.44	-2338.297
_cons	667655.4	566515.2	1.18	0.241	-45629	97.2	1791608

^{316 .} 317 .

^{319 .} mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav

Multiple-imputati	on estimates	Imputations	=	5
Linear regression)	Number of obs	=	213
		Average RVI	=	0.2516
		Largest FMI	=	0.7493
		Complete DF	=	198
DF adjustment:	Small sample	DF: min	=	7.33
		avg	=	123.86
		max	=	192.90
Model F test:	Equal FMI	F(13 , 161.7)	=	11.54
Within VCE type:	OLS	Prob > F	=	0.0000

^{318 . //}ANALYSIS B//

Left_Hippoc~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-35.01077	62.15676	-0.56	0.574	-157.7064	87.68483
Sex						
Men	331.0683	186.9644	1.77	0.079	-38.35953	700.4961
Sex#c.LnNFLw3						
Men	-154.8945	73.57847	-2.11	0.037	-300.088	-9.700981
Sex	0	(omitted)				
w1Age	-4.895831	2.70839	-1.81	0.072	-10.23769	.4460306
Race	-51.36147	50.97796	-1.01	0.316	-152.2701	49.54713
PovStat	-76.33172	48.32095	-1.58	0.116	-171.6374	18.97391
TIME_V1SCAN	0076616	.0326701	-0.23	0.815	0721148	.0567916
w1BMI	2.133982	3.812936	0.56	0.577	-5.444595	9.712559
w1Creatinine	43.79676	139.2974	0.31	0.762	-282.5777	370.1712
w1USpecGrav	-2752.587	3845.756	-0.72	0.476	-10417	4911.83
w1BUN	8.55756	6.233011	1.37	0.174	-3.866427	20.98155
w1ALP	2736074	1.198401	-0.23	0.821	-2.75226	2.205045
w1UricAcid	-10.3485	17.32886	-0.60	0.551	-44.59334	23.89634
ICV_volM2	.0016961	.0002047	8.29	0.000	.0012922	.0021
_cons	4451.596	3891.442	1.14	0.256	-3301.256	12204.45

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

Multiple-imputa Linear regressi		Imputati Number o Average Largest Complete	of obs = RVI = FMI =	5 213 0.2267 0.6996 198		
DF adjustment:	Small samp	Le		DF:	min =	8.57
					avg =	119.41
Model F test:	Equal E	AT.		E/ 13	max =	194.04 13.38
Within VCE type	Equal FM :: OI			F(13 , Prob > F	,	0.0000
within ver type	:. UI	-3		PI'OU > F	-	0.0000
Right_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-14.19604	64.62179	-0.22	0.826	-141.7445	113.3524
Sex						
Men	225.3094	194.3107	1.16	0.248	-158.5693	609.1881
Sex#c.LnNFLw3						
Men	-139.3775	76.47811	-1.82	0.070	-290.279	11.52408
Sex	0	(omitted)				
w1Age	-4.659645	` 2.82557	-1.65	0.101	-10.23294	.9136468
Race	-52.48523	52.88578	-0.99	0.323	-157.1251	52.15467
PovStat	-61.55085	50.22519	-1.23	0.222	-160.6082	37.50655
TIME_V1SCAN	.0155437	.0338899	0.46	0.647	0513064	.0823938
w1BMI	1.458392	4.029507	0.36	0.718	-6.572213	9.488996
w1Creatinine	44.00464	134.1984	0.33	0.751	-261.9303	349.9396
w1USpecGrav	-393.457	4181.105	-0.09	0.925	-8805.314	8018.4
w1BUN	7.406361	6.607987	1.12	0.267	-5.813501	20.62622
w1ALP	.7424127	1.227076	0.61	0.551	-1.782085	3.266911
w1UricAcid	2.46353	18.15918	0.14	0.892	-33.44527	38.37233
ICV_volM2	.0021041	.0002129	9.88	0.000	.0016841	.0025241
_cons	1588.07	4220.223	0.38	0.708	-6893.78	10069.92

322 . //ANALYSIS C//

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

Multiple-imputa Linear regressi		Imputati Number o Average Largest	of obs RVI	= = =	5 209 0.2911 0.7812		
				Complete		=	194
DF adjustment:	Small sampl	le		DF:	min	=	6.62
					avg	=	105.99
					max	=	187.58
Model F test:	Equal FM	1 I		F(13,	152.3)	=	0.85
Within VCE type	Within VCE type: OLS					=	0.6105
 LnLesion Vo~e	Coefficient	Std. err.	t	P> t	Г95%	conf.	interval]
LnNFLw3	1.356036	.8879071	1.53	0.129	4019	9164	3.113989
Sex							
Men	3.998615	2.728329	1.47	0.146	-1.425	5785	9.423015
Sex#c.LnNFLw3							
Men	-1.715101	1.045877	-1.64	0.103	-3.781	L258	.3510563
Sex	0	(omitted)					
w1Age	.0683577	.0382653	1.79	0.076	0071	L557	.1438711
Race	.7538778	.6964831	1.08	0.281	6235	5722	2.131328
PovStat	.3227801	.6751161	0.48	0.633	-1.009	9352	1.654912
TIME V1SCAN	0001833	.000443	-0.41	0.679	0016	9572	.0006905
- w1BMI	.023041	.0594646	0.39	0.701	0985	5549	.144637
w1Creatinine	243036	2.062715	-0.12	0.910	-5.177	7861	4.691789
w1USpecGrav	30.55201	57.70129	0.53	0.600	-86.74	1324	147.8473
w1BUN	.0620427	.0907195	0.68	0.497	1196	5509	.2437363
w1ALP	0099576	.0146307	-0.68	0.499	0392	2346	.0193194
w1UricAcid	038973	.2467449	-0.16	0.875	5266	5394	.4486935
ICV_volM2	1.29e-06	2.79e-06	0.46	0.644	-4.226	e-06	6.80e-06
_cons	-34.94422	57.99354	-0.60	0.551	-152.6	5085	82.72008

^{324 .}

file **finaldata_imputed.dta** saved

326 .

327 . *********MODEL 5: MODEL 2+oxidative stress*****

328 .

329 . //Overall//

330

331 . use finaldata_imputed,clear

332 .

^{325 .} save, replace

333 . 334 . //ANALYSIS A 335 . mi estimate:		AIN LnNFLw3	Sex w1Ag	e Race Po	ovStat TI	ME_V1	SCAN w1BMI	w1TotalD w1Albumin w1EosinPct
Multiple-imput	ation estimat	ies		Imputat	ions	=	5	
Linear regress				Number		=	213	
-8				Average	RVI	=	0.0611	
				U	FMI		0.3533	
				Complet		=	202	
DF adjustment:	Small samp	ole		DF:	min	=	30.52	
					avg	=	161.15	
					max	=	199.83	
Model F test:	Equal F	-MI		F(10	194.9)	-	15.32	
Within VCE typ	•	DLS		Prob >	•	=	0.0000	
TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]	
LnNFLw3	-3683.4 138658.1	12380.54 13265.89	-0.30 10.45	0.766 0.000	-28098 11249		20731.54	

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD	-3683.4	12380.54	-0.30	0.766	-28098.34	20731.54
	138658.1	13265.89	10.45	0.000	112498.6	164817.7
	-1991.65	820.1705	-2.43	0.016	-3608.95	-374.3506
	-64092.01	16114.73	-3.98	0.000	-95968.89	-32215.13
	-2565.888	14933.79	-0.17	0.864	-32015.14	26883.37
	-22.60949	10.19316	-2.22	0.028	-42.71156	-2.507425
	693.4597	1062.551	0.65	0.515	-1407.112	2794.032
	654.514	852.8923	0.77	0.449	-1086.09	2395.118
w1Albumin	-23132.93	24364.44	-0.95	0.344	-71255.9	24990.04
w1EosinPct	-880.2193	3351.057	-0.26	0.793	-7491.335	5730.897
cons	1254027	139248.8	9.01	0.000	978628.6	1529426
				2.200		

336 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputation estimates			5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0540
	Largest FMI	=	0.2800
	Complete DF	=	202
DF adjustment: Small sample	DF: min	=	43.53
	avg	=	160.96
	max	=	199.78
Model F test: Equal FMI	F(10 , 195.9)	=	16.31
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-5954.053	6754.597	-0.88	0.379	-19274.21	7366.106
Sex	70206.05	7239.726	9.70	0.000	55929.83	84482.27
w1Age	-1745.94	447.7973	-3.90	0.000	-2628.956	-862.9245
Race	-45630.44	8726.936	-5.23	0.000	-62878.47	-28382.41
PovStat	-940.5717	8154.021	-0.12	0.908	-17020.25	15139.11
TIME_V1SCAN	-9.913372	5.543834	-1.79	0.075	-20.84555	1.018804
w1BMI	627.8865	587.2384	1.07	0.287	-534.6864	1790.459
w1TotalD	236.2807	445.2	0.53	0.598	-661.2332	1133.795
w1Albumin	-9318.372	13454.85	-0.69	0.490	-35923.09	17286.35
w1EosinPct	1361.433	1830.29	0.74	0.458	-2249.523	4972.389
_cons	735961.3	75635.9	9.73	0.000	586453.3	885469.4

337 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputati	on estimates	Imputations	=	5
Linear regression		Number of obs	=	213
		Average RVI	=	0.0602
		Largest FMI	=	0.3451
		Complete DF	=	202
DF adjustment:	Small sample	DF: min	=	31.68
		avg	=	160.14
		max	=	199.91
Model F test:	Equal FMI	F(10 , 195.0)	=	10.49
Within VCE type:	OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-565.4481	5974.673	-0.09	0.925	-12347.73	11216.83
Sex	56997.58	6441.68	8.85	0.000	44293.16	69702.01
w1Age	-577.9816	395.7677	-1.46	0.146	-1358.397	202.4333
Race	-16099.11	7757.721	-2.08	0.040	-31440.41	-757.8049
PovStat	-5080.076	7203.113	-0.71	0.481	-19284.37	9124.213
TIME_V1SCAN	-10.39759	4.940323	-2.10	0.037	-20.14174	6534331
w1BMI	141.8561	509.1594	0.28	0.781	-864.0057	1147.718
w1TotalD	391.7732	409.5066	0.96	0.346	-442.6986	1226.245
w1Albumin	-6726.629	11856.85	-0.57	0.571	-30163.63	16710.38
w1EosinPct	-1476.596	1604.636	-0.92	0.359	-4641.3	1688.108
_cons	475722.4	67879.76	7.01	0.000	341311.8	610133

338 **.** 339 **.**

340 . //ANALYSIS B//

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

Multiple-imputation estimates Linear regression		Imputations Number of obs	=	5 213
		Average RVI	=	0.0809
		Largest FMI	=	0.2258
		Complete DF	=	201
DF adjustment: S	mall sample	DF: min	=	58.43
		avg	=	143.41
		max	=	198.96
Model F test:	Equal FMI	F(11 , 192.7)	=	15.13
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-115.3311	40.04443	-2.88	0.004	-194.3018	-36.36031
Sex	-37.72404	56.60478	-0.67	0.506	-149.3537	73.90565
w1Age	-3.30551	2.661059	-1.24	0.216	-8.553236	1.942216
Race	-62.50038	53.55712	-1.17	0.245	-168.1986	43.19787
PovStat	-97.85218	48.32916	-2.02	0.044	-193.1593	-2.545092
TIME_V1SCAN	0041601	.0333635	-0.12	0.901	0699643	.061644
w1BMI	.7383587	3.707671	0.20	0.843	-6.682196	8.158913
w1TotalD	3857536	2.565063	-0.15	0.881	-5.51937	4.747863
w1Albumin	71.96804	85.58072	0.84	0.404	-99.07566	243.0117
w1EosinPct	.283609	11.39621	0.02	0.980	-22.31081	22.87803
ICV_volM2	.0017688	.0002007	8.81	0.000	.0013731	.0021645
_cons	1548.636	558.9903	2.77	0.007	436.0041	2661.269

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

Multiple-imput	tation estimat	es		Imputat	ions	=	5
Linear regress	sion			Number	of obs	=	213
				Average	RVI	=	0.0745
				Largest		=	0.2522
				Complet	e DF	=	201
DF adjustment	: Small samp	le		DF:	min	=	50.40
					avg	=	147.17
					max	=	198.59
Model F test:	Equal F	MI		F(11 ,	193.5)	=	17.53
Within VCE typ	oe: 0	LS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-73.19743	41.44309	-1.77	0.079	-154.9	236	8.528741
Sex	-82.90951	59.0093	-1.41	0.162	-199.2	991	33.48011
w1Age	-2.869049	2.75388	-1.04	0.299	-8.299	649	2.56155
Race	-81.91416	55.01774	-1.49	0.138	-190.4	431	26.61479
PovStat	-84.27567	50.01911	-1.68	0.094	-182.9	124	14.36109
TIME_V1SCAN	.0090515	.0344891	0.26	0.793	0589	667	.0770696
w1BMI	.2437766	3.901596	0.06	0.950	-7.591	267	8.07882
w1TotalD	-2.678437	2.456939	-1.09	0.277	-7.533	224	2.17635
w1Albumin	3.410568	88.82355	0.04	0.969	-174.1	496	180.9707
w1EosinPct	4.889791	12.25643	0.40	0.691	-19.56	502	29.3446
ICV_volM2	.0021499	.0002089	10.29	0.000	.001	738	.0025618
_cons	1613.309	587.8198	2.74	0.008	440.1	147	2786.503

343

344 . //ANALYSIS C//

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

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 209
	Average RVI	=	0.0632
	Largest FMI	=	0.3067
	Complete DF	=	197
DF adjustment: Small sample	DF: min	=	37.79
	avg	=	159.68
	max	=	194.44
Model F test: Equal FMI	F(11, 191.1)	=	1.00
Within VCE type: OLS	Prob > F	=	0.4491

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.3321304	.5506286	0.60	0.547	7538893	1.41815
Sex	0536557	.7731762	-0.07	0.945	-1.578938	1.471627
w1Age	.0785047	.0364791	2.15	0.033	.0065591	.1504503
Race	.9435373	.7222878	1.31	0.193	4813221	2.368397
PovStat	.1776378	.6577883	0.27	0.787	-1.119679	1.474954
TIME_V1SCAN	0000421	.0004466	-0.09	0.925	0009228	.0008386
w1BMI	.0374934	.0528068	0.71	0.482	0694276	.1444143
w1TotalD	.0202611	.0318433	0.64	0.525	0426158	.083138
w1Albumin	1.158919	1.122028	1.03	0.304	-1.064229	3.382067
w1EosinPct	.1334542	.1510234	0.88	0.378	1651694	.4320778
ICV volM2	1.64e-06	2.71e-06	0.61	0.546	-3.70e-06	6.98e-06
_cons	-9.350913	7.418115	-1.26	0.210	-24.03756	5.335733

```
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346 .
347 . save, replace
   file finaldata_imputed.dta saved
348 .
349 .
350 . //Males//
351 .
352 .
353 . use finaldata_imputed,clear
354 .
355 .
356 . //ANALYSIS A//
357 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Se
```

Multiple-imputation estimates Linear regression		Imputations Number of obs	=	5 95
J		Average RVI	=	0.0848
		Largest FMI	=	0.4048
		Complete DF	=	85
DF adjustment:	Small sample	DF: min	=	19.42
		avg	=	68.42
		max	=	82.53
Model F test:	Equal FMI	F(9, 80.8)	=	2.71
Within VCE type:	OLS	Prob > F	=	0.0083

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-11320.71	19183.79	-0.59	0.557	-49479.74	26838.32
Sex	0	(omitted)				
w1Age	-2620.181	1531.667	-1.71	0.091	-5667.338	426.976
Race	-79510.41	30175.48	-2.63	0.011	-139993.7	-19027.11
PovStat	12159.03	28217.64	0.43	0.668	-43974.57	68292.63
TIME_V1SCAN	-37.9061	17.61908	-2.15	0.034	-72.95749	-2.854717
w1BMI	2037.054	2293.1	0.89	0.377	-2530.181	6604.289
w1TotalD	1352.12	1693.709	0.80	0.434	-2187.693	4891.933
w1Albumin	-35265.97	47057.15	-0.75	0.456	-129028.1	58496.18
w1EosinPct	-78.95019	6762.877	-0.01	0.991	-13605.41	13447.51
_cons	1610535	281444.9	5.72	0.000	1049481	2171589

358 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Sex==2

Multiple-imputation estimates	Imputatio	ns =	5
Linear regression	Number of	obs =	95
	Average F	RVI =	0.0656
	Largest F	MI =	0.3047
	Complete	DF =	85
DF adjustment: Small sample	DF: n	nin =	28.28
	ā	ıvg =	69.83
	n	nax =	82.86
Model F test: Equal FMI	F(9 ,	81.6) =	4.15
Within VCE type: OLS	Prob > F	=	0.0002

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-8917.737	10297.79	-0.87	0.389	-29400.14	11564.66
Sex	0	(omitted)				
w1Age	-2458.281	823.8987	-2.98	0.004	-4097.4	-819.1625
Race	-56757.38	15926.93	-3.56	0.001	-88586.77	-24927.98
PovStat	7710.167	15142.68	0.51	0.612	-22410.84	37831.17
TIME_V1SCAN	-18.68521	9.442843	-1.98	0.051	-37.46824	.0978317
w1BMI	1469.892	1266.967	1.16	0.250	-1061.462	4001.246
w1TotalD	377.3957	854.1379	0.44	0.662	-1371.457	2126.248
w1Albumin	-7400.965	24957.1	-0.30	0.768	-57072.88	42270.95
w1EosinPct	925.8939	3653.943	0.25	0.801	-6387.963	8239.751
_cons	905778.7	149679.4	6.05	0.000	607708.5	1203849

359 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Sex==2

Multiple-imputation estimates Linear regression		Imputations Number of obs	=	5 95
Linear regression		Average RVI	=	0.0945
		Largest FMI	=	0.4024
		Complete DF	=	85
DF adjustment:	Small sample	DF: min	=	19.59
-		avg	=	68.03
		max	=	82.35
Model F test:	Equal FMI	F(9, 80.4)	=	1.70
Within VCE type:	OLS	Prob > F	=	0.1017

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-5161.806 0	9208.938 (omitted)	-0.56	0.577	-23480.16	13156.54
w1Age	-635.2397	736.7263	-0.86	0.391	-2101.118	830.6389
Race	-20678.79	14408.46	-1.44	0.157	-49535.75	8178.169
PovStat	-2789.897	13552.24	-0.21	0.837	-29751.1	24171.31
TIME_V1SCAN	-17.02237	8.452802	-2.01	0.047	-33.83855	2061885
w1BMI	595.46	1090.323	0.55	0.587	-1574.71	2765.63
w1TotalD	905.5238	811.0491	1.12	0.278	-788.5761	2599.624
w1Albumin	-19172.54	22719.84	-0.84	0.402	-64473.25	26128.17
w1EosinPct	-440.3944	3292.374	-0.13	0.894	-7041.962	6161.173
_cons	647214.3	134528	4.81	0.000	379128.9	915299.7

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363 . //ANALYSIS B//

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

Multiple-imputation estimates		Imputations	=	5
Linear regression	n	Number of obs	=	95
		Average RVI	=	0.0952
		Largest FMI	=	0.2110
		Complete DF	=	84
DF adjustment:	Small sample	DF: min	=	41.07
		avg	=	63.76
		max	=	81.65
Model F test:	Equal FMI	F(10 , 80.0)	=	7.45
Within VCE type:	OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-152.1982	60.54052	-2.51	0.014	-272.646	-31.75037
Sex	0	(omitted)				
w1Age	-4.894189	4.918712	-1.00	0.323	-14.6955	4.907125
Race	45.1698	99.23228	0.46	0.651	-153.0856	243.4252
PovStat	-171.5903	88.88404	-1.93	0.057	-348.4421	5.261495
TIME_V1SCAN	0276591	.0564065	-0.49	0.625	1398848	.0845667
w1BMI	4.461815	7.76088	0.57	0.568	-11.1644	20.08803
w1TotalD	2.469897	4.764267	0.52	0.607	-7.15126	12.09105
w1Albumin	61.32776	159.6823	0.38	0.703	-260.7694	383.4249
w1EosinPct	-12.0475	22.08766	-0.55	0.588	-56.52528	32.43028
ICV_volM2	.0020656	.0003116	6.63	0.000	.0014457	.0026855
cons	1104.978	1060.47	1.04	0.301	-1013.576	3223.532

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

Multiple-imput		ces		Imputation		
· ·				Average	RVI =	0.0686
				Largest	FMI =	0.1794
				Complete		84
DF adjustment:	Small samp	ole			min =	46.79
3	•				avg =	69.27
					max =	81.56
Model F test:	Equal F	MI		F(10 ,	80.9) =	8.25
Within VCE typ	•	DLS		Prob > F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	-101.5405	62.08867	-1.64	0.106	-225.0667	21.98578
Sex	0	(omitted)				
w1Age	-7.654545	4.932768	-1.55	0.125	-17.46873	2.159642
Race	-31.80637	98.91666	-0.32	0.749	-228.8096	165.1968
PovStat	-175.1708	90.95671	-1.93	0.058	-356.1274	5.785849
TIME_V1SCAN	0225905	.0579212	-0.39	0.698	1378338	.0926528
w1BMI	4.891708	7.93418	0.62	0.541	-11.0717	20.85511
w1TotalD	-2.047903	4.797085	-0.43	0.671	-11.69574	7.599932
w1Albumin	-122.7585	157.8886	-0.78	0.440	-438.9293	193.4123
w1EosinPct	-17.53924	21.67661	-0.81	0.421	-60.84645	25.76797
ICV_volM2	.0023451	.0003199	7.33	0.000	.0017086	.0029816
_cons	2041.684	1088.198	1.88	0.065	-132.2772	4215.645

366

367 . //ANALYSIS C//

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

Multiple-imputation estimates Imputation		=	5
Linear regression	Number of obs	=	93
_	Average RVI	=	0.2382
	Largest FMI	=	0.6294
	Complete DF	=	82
DF adjustment: Small sample	DF: min	=	9.16
	avg	=	53.14
	max	=	79.85
Model F test: Equal FMI	F(10 , 72.0)	=	0.34
Within VCE type: OLS	Prob > F	=	0.9670

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	2244543	.7309177	-0.31	0.760	-1.679068	1.230159
Sex	0	(omitted)				
w1Age	.0593429	.0597631	0.99	0.324	0596793	.1783652
Race	1.072859	1.179077	0.91	0.367	-1.285595	3.431313
PovStat	3587388	1.070969	-0.33	0.739	-2.491589	1.774111
TIME_V1SCAN	.0002123	.0006626	0.32	0.750	0011066	.0015312
w1BMI	0355568	.1269535	-0.28	0.786	3219799	.2508662
w1TotalD	.059869	.0578004	1.04	0.307	0575161	.1772542
w1Albumin	1.48168	2.095198	0.71	0.486	-2.827776	5.791135
w1EosinPct	.1288924	.2677433	0.48	0.633	4124849	.6702698
ICV_volM2	-1.02e-06	3.67e-06	-0.28	0.782	-8.33e-06	6.29e-06
cons	-3.71049	14.50147	-0.26	0.800	-33.46555	26.04457

370 . save, replace

file finaldata_imputed.dta saved

371 . 372 .

373 .

374 . //Females//

376 . use finaldata_imputed,clear

377 .

378 .

379 . //ANALYSIS A//

380 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Se

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0688
	Largest FMI	=	0.2075
	Complete DF	=	108
DF adjustment: Small sample	DF: min	=	48.33
	avg	=	85.07
	max	=	105.76
Model F test: Equal FMI	F(9, 103.7)	=	2.43
Within VCE type: OLS	Prob > F	=	0.0150

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	10910.17	17472.09	0.62	0.534	-23733.68	45554.03
Sex	0	(omitted)				
w1Age	-1995.513	995.5228	-2.00	0.048	-3969.286	-21.74008
Race	-54923.42	17723.36	-3.10	0.003	-90085.46	-19761.38
PovStat	-13591.34	17422.13	-0.78	0.437	-48136.81	20954.12
TIME_V1SCAN	-9.441778	12.37879	-0.76	0.447	-33.98568	15.10213
w1BMI	774.6814	1114.691	0.69	0.489	-1440.351	2989.713
w1TotalD	182.9741	864.3302	0.21	0.833	-1552.674	1918.622
w1Albumin	-17917.33	27576.9	-0.65	0.518	-72927.03	37092.38
w1EosinPct	-1707.911	4151.506	-0.41	0.683	-10053.59	6637.769
_cons	1323916	152401.4	8.69	0.000	1020178	1627655

381 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Sex==1

Multiple-impu	tation estimates		Imputations	=	5
Linear regres	sion		Number of obs	=	118
			Average RVI	=	0.0588
			Largest FMI	=	0.1604
			Complete DF	=	108
DF adjustment	: Small sample		DF: min	=	60.25
_			avg	=	85.51
			max	=	105.69
Model F test:	Equal FMI		F(9, 104.3)	=	3.91
Within VCE ty	pe: OLS		Prob > F	=	0.0003
GM	Coefficient Std. err.	t	P> t [95% c	onf.	interval]

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-1482.204 0	9701.657 (omitted)	-0.15	0.879	-20720.44	17756.03
w1Age	-1428.783	551.5546	-2.59	0.011	-2522.331	-335.2356
Race	-40038.97	9785.664	-4.09	0.000	-59449.45	-20628.49
PovStat	-8117.949	9689.747	-0.84	0.404	-27334.39	11098.49
TIME_V1SCAN	-2.031178	6.868014	-0.30	0.768	-15.64937	11.58701
w1BMI	664.9775	623.4148	1.07	0.289	-575.1717	1905.127
w1TotalD	84.842	463.2332	0.18	0.855	-839.6411	1009.325
w1Albumin	-13306.2	15514.9	-0.86	0.394	-44337.97	17725.57
w1EosinPct	1290.287	2233.525	0.58	0.566	-3173.665	5754.239
_cons	786596.5	85844.23	9.16	0.000	615039.6	958153.3

382 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if Sex==1

Multiple-imputation	Imputations	=	5	
Linear regression		Number of obs	=	118
		Average RVI	=	0.0738
		Largest FMI	=	0.2333
		Complete DF	=	108
DF adjustment: Si	mall sample	DF: min	=	42.92
		avg	=	84.86
		max	=	105.71
Model F test:	Equal FMI	F(9, 103.4)	=	1.26
Within VCE type:	OLS	Prob > F	=	0.2685

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	10653.49	8452.497	1.26	0.210	-6105.494	27412.48
Sex	0	(omitted)				
w1Age	-809.3877	482.3819	-1.68	0.096	-1765.787	147.0117
Race	-12333.38	8606.199	-1.43	0.155	-29410.17	4743.416
PovStat	-6130.484	8417.083	-0.73	0.468	-22818.85	10557.88
TIME V1SCAN	-5.527896	6.007088	-0.92	0.360	-17.43904	6.383252
- w1BMI	237.0961	536.8688	0.44	0.660	-829.13	1303.322
w1TotalD	75.9917	425.2697	0.18	0.859	-780.8975	932.8809
w1Albumin	525.0466	13251.31	0.04	0.969	-25875.83	26925.92
w1EosinPct	-2309.728	2039.527	-1.13	0.264	-6423.044	1803.588
_cons	480514.8	73704.31	6.52	0.000	333657.7	627371.9

385 . //ANALYSIS B//

Multiple-imputation estimates

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

Imputations

sion					=	118
			Average	RVI	=	0.0804
			Largest	FMI	=	0.2828
			Complete	DF	=	107
: Small samp	ole		DF:	min	=	34.28
				avg	=	82.84
				max	=	104.57
Equal F	MI		F(10 ,	102.8)	=	4.85
oe: O	DLS		Prob > F	•	=	0.0000
C C C	Std. err.	t	P> t	[95% co	nf.	interval]
Coefficient	Stu. em.		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	[
5.893168	57.07074	0.10	0.918	-107.276		119.0626
5.893168	57.07074				52	
5.893168	57.07074 (omitted)	0.10	0.918	-107.276	52 35	119.0626
5.893168 0 -5.508423	57.07074 (omitted) 3.255217	0.10 -1.69	0.918 0.094	-107.276	52 35 53	119.0626
5.893168 0 -5.508423 -143.4996	57.07074 (omitted) 3.255217 61.22706	0.10 -1.69 -2.34	0.918 0.094 0.021	-107.276 -11.9638 -265.145	52 35 53 74	119.0626 .9470036 -21.85395
5.893168 0 -5.508423 -143.4996 -52.72232	57.07074 (omitted) 3.255217 61.22706 56.9896	0.10 -1.69 -2.34 -0.93	0.918 0.094 0.021 0.357	-107.276 -11.9638 -265.145 -165.757	52 35 53 74 38	119.0626 .9470036 -21.85395 60.31279
5.893168 0 -5.508423 -143.4996 -52.72232 .0170265	57.07074 (omitted) 3.255217 61.22706 56.9896 .0407544	0.10 -1.69 -2.34 -0.93 0.42	0.918 0.094 0.021 0.357 0.677	-107.276 -11.9638 -265.145 -165.757 063828	52 35 53 74 38	119.0626 .9470036 -21.85395 60.31279 .0978818
5.893168 0 -5.508423 -143.4996 -52.72232 .0170265 1.848577 -2.132457 58.2383	57.07074 (omitted) 3.255217 61.22706 56.9896 .0407544 3.704376 2.948699 89.43443	0.10 -1.69 -2.34 -0.93 0.42 0.50 -0.72 0.65	0.918 0.094 0.021 0.357 0.677 0.619	-107.276 -11.9638 -265.145 -165.757 063828 -5.53099	52 35 53 74 38 94	119.0626 .9470036 -21.85395 60.31279 .0978818 9.228148
5.893168 0 -5.508423 -143.4996 -52.72232 .0170265 1.848577 -2.132457	57.07074 (omitted) 3.255217 61.22706 56.9896 .0407544 3.704376 2.948699	0.10 -1.69 -2.34 -0.93 0.42 0.50 -0.72	0.918 0.094 0.021 0.357 0.677 0.619 0.474 0.517 0.884	-107.276 -11.9638 -265.145 -165.757063828 -5.53099 -8.12314	52 35 53 74 38 94 17	119.0626 .9470036 -21.85395 60.31279 .0978818 9.228148 3.858233
5.893168 0 -5.508423 -143.4996 -52.72232 .0170265 1.848577 -2.132457 58.2383	57.07074 (omitted) 3.255217 61.22706 56.9896 .0407544 3.704376 2.948699 89.43443	0.10 -1.69 -2.34 -0.93 0.42 0.50 -0.72 0.65	0.918 0.094 0.021 0.357 0.677 0.619 0.474 0.517	-107.276 -11.9638 -265.145 -165.757063828 -5.53099 -8.12314 -119.905	52 35 53 74 38 94 17 58 28	119.0626 .9470036 -21.85395 60.31279 .0978818 9.228148 3.858233 236.3824
	sion Small samp Equal Foe:	sion Small sample Equal FMI De: OLS	sion Small sample Equal FMI De: OLS	Sion Number of Average Largest Complete Small sample Equal FMI De: OLS Prob > F	Number of obs Average RVI Largest FMI Complete DF F Small sample Equal FMI DE: 0LS Number of obs Average RVI Largest FMI Complete DF min avg max F(10, 102.8) Prob > F	Average RVI = Largest FMI = Complete DF = DF: min = avg = max = Equal FMI F(10, 102.8) = Prob > F =

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

Multiple-imput	cation estimates		Imputations	=	5
Linear regress	sion		Number of obs	=	118
			Average RVI	=	0.0516
			Largest FMI	=	0.1677
			Complete DF	=	107
DF adjustment:	: Small sample		DF: min	=	57.89
			avg	=	89.28
			max	=	103.97
Model F test:	Equal FMI		F(10, 104.0)	=	6.84
Within VCE type: OLS			Prob > F	=	0.0000
Right Hipp~s	Coefficient Std. err.	t	P> t [95% (onf.	interval]

rval]	interva	[95% conf.	P> t	t	Std. err.	Coefficient	Right_Hipp~s
.7385	146.73	-94.70357	0.670	0.43	60.87168	26.01747	LnNFLw3
					(omitted)	0	Sex
94844	2.9948	-10.71712	0.267	-1.12	3.457301	-3.861135	w1Age
26651	-1.266	-255.2559	0.048	-2.00	64.00466	-128.2612	Race
30779	88.007	-151.6255	0.600	-0.53	60.41567	-31.80884	PovStat
57434	.11674	0549367	0.477	0.71	.0432697	.0309033	TIME V1SCAN
47443	8.9474	-6.810458	0.788	0.27	3.952841	1.068492	w1BMI
53621	2.7636	-8.786908	0.302	-1.04	2.893455	-3.011644	w1TotalD
.7519	242.75	-131.1206	0.554	0.59	93.9855	55.81564	w1Albumin
19653	39.196	-17.05971	0.434	0.79	14.05141	11.06841	w1EosinPct
24329	.00243	.0013149	0.000	6.65	.0002819	.0018739	ICV_volM2
5.587	2746.5	58.49873	0.041	2.07	676.3611	1402.543	_cons
92	.00	.0013149	0.000	6.65	.0002819	.0018739	ICV_volM2

389 . //ANALYSIS C//

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

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	116
_	Average RVI	=	0.0112
	Largest FMI	=	0.0553
	Complete DF	=	105
DF adjustment: Small sample	DF: min	=	91.42
	avg	=	100.92
	max	=	102.97
Model F test: Equal FMI	F(10, 103.0)	=	1.52
Within VCE type: OLS	Prob > F	=	0.1437

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1.430809	.9196974	1.56	0.123	3932567	3.254874
Sex	0	(omitted)				
w1Age	.100156	.0515828	1.94	0.055	0021489	.2024608
Race	.9186454	.958928	0.96	0.340	9836171	2.820908
PovStat	1.003487	.9153556	1.10	0.276	8119121	2.818885
TIME_V1SCAN	0003524	.00064	-0.55	0.583	0016217	.000917
w1BMI	.0846586	.0563146	1.50	0.136	0270472	.1963644
w1TotalD	0201774	.0414663	-0.49	0.628	1025399	.0621852
w1Albumin	.7626852	1.38336	0.55	0.583	-1.981935	3.507305
w1EosinPct	.0625295	.1955097	0.32	0.750	3253038	.4503628
ICV volM2	4.51e-06	4.19e-06	1.08	0.284	-3.80e-06	.0000128
_cons	-15.55812	9.988901	-1.56	0.122	-35.37239	4.256157

391

392 . save, replace

file finaldata_imputed.dta saved

393 .

394

395 . *********INTERACTION BY Sex*********

396 .

397 .

398 . //ANALYSIS A//

399 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	179
	Average RVI	=	0.0102
	Largest FMI	=	0.0957
	Complete DF	=	167
DF adjustment: Small sample	DF: min	=	114.53
	avg	=	159.66
	max	=	165.00
Model F test: Equal FMI	F(11 , 164.9) =	12.84
Within VCE type: OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	8864.402	20112.18	0.44	0.660	-30846.38	48575.18
Sex						
Men	189193.3	59139.76	3.20	0.002	72423.5	305963.1
Sex#c.LnNFLw3						
Men	-21805.05	25412.39	-0.86	0.392	-71980.77	28370.66
Sex	ø	(omitted)				
w1Age	-2408.241	885.2491	-2.72	0.007	-4156.126	-660.356
Race	-65597.71	16556.69	-3.96	0.000	-98300.62	-32894.8
PovStat	1214.976	16443.93	0.07	0.941	-31252.9	33682.85
TIME V1SCAN	-19.61752	11.82432	-1.66	0.099	-42.96459	3.729539
w1BMI	873.5489	1139.419	0.77	0.444	-1376.186	3123.284
w1TotalD	734.2074	800.0044	0.92	0.361	-850.5171	2318.932
w1Albumin	-4982.539	27272.74	-0.18	0.855	-58831.09	48866.01
w1EosinPct	-2549.023	3528.177	-0.72	0.471	-9516.235	4418.189
_cons	1292618	154645.3	8.36	0.000	987271.5	1597964

400 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if sam

Multiple-imputation estimates Linear regression				Number o	Imputations Number of obs Average RVI Largest FMI		5 179 0.0058 0.0580	
				Complete		=	167	
DF adjustment:		DF:	min	=	139.01			
3	Small samp				avg	=	162.31	
					max	=	165.02	
Model F test:	Equal FM	1I		F(11 ,	165.0)	=	14.57	
Within VCE type	e: OI	_S		Prob > F		=	0.0000	
GM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]	
LnNFLw3	2553.107	10786.72	0.24	0.813	-1874	4.78	23850.99	
Sex								
Men	101736.7	31711.29	3.21	0.002	39124	4.17	164349.2	
Sex#c.LnNFLw3								
Men	-13289.4	13629.48	-0.98	0.331	-40200	9.11	13621.31	
Sex	0	(omitted)						
w1Age	-2026.976	474.7863	-4.27	0.000	-2964	.416	-1089.536	
Race	-47710.18	8833.193	-5.40	0.000	-65153	3.79	-30266.57	
PovStat	-621.841	8819.699	-0.07	0.944	-1803	5.91	16792.22	
TIME_V1SCAN	-6.825065	6.339286	-1.08	0.283	-19.3	3418	5.691669	
w1BMI	746.9153	611.1789	1.22	0.223	-459.8	3282	1953.659	
w1TotalD	220.4692	421.1415	0.52	0.601	-612.2	2021	1053.141	
w1Albumin	3975.288	14631.07	0.27	0.786	-24912		32863.52	
w1EosinPct	384.965	1887.858	0.20	0.839	-3342		4112.713	
_cons	738320.3	82912.67	8.90	0.000	57463	11.6	902029.1	

401 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1EosinPct if sam

179 0.0119 0.1043 167 109.14 158.84
0.1043 167 109.14 158.84 164.97
167 109.14 158.84 164.97
109.14 158.84 164.97
158.84 164.97
164.97
8.73
0.0000
terval]
3924.53
38302.1
3539.78
8.88715
49.8709
3368.59
8667245
353.771
258.302
25626.3
1237.91
40569.7

^{402 .}

Multiple-imputation estimates

Imputations

Linear regress:	.5		Number	=	213		
				Average	RVI	=	0.0703
				_	FMI	=	0.2270
				Complet	e DF	=	200
DF adjustment:	Small sampl	.e		DF:	min	=	57.91
					avg	=	148.12
					max	=	197.88
Model F test:	Equal FM	II		F(12 ,	193.5)	=	14.65
Within VCE type	e: OL	.S		Prob >	F	=	0.0000
Left_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-20.05507	59.17707	-0.34	0.735	-136.	7731	96.66298
-							
Sex	226 2007	175 0051	1 05	0.005	20.7	7022	C72 200C
Men	326.3097	175.9851	1.85	0.065	-20.7	/033	673.3896
Sex#c.LnNFLw3							
Men	-158.9645	72.78057	-2.18	0.030	-302.	5012	-15.42783
ricii	150.5045	72.70037	2.10	0.050	502.	5012	13.42703
Sex	0	(omitted)					
w1Age	-4.241267	` ,	-1.59	0.114	-9.50	7424	1.02489
	· ·						

^{403 .} 404 . //ANALYSIS B//

^{405 .} mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1Eo

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Race	-70.78066	53.13308	-1.33	0.185	-175.6376	34.07625
PovStat	-81.85631	48.42371	-1.69	0.093	-177.3526	13.63994
TIME_V1SCAN	0009994	.033043	-0.03	0.976	0661708	.064172
w1BMI	2.138546	3.745129	0.57	0.570	-5.358394	9.635486
w1TotalD	7820167	2.530733	-0.31	0.758	-5.839091	4.275058
w1Albumin	72.66634	84.2308	0.86	0.391	-95.45347	240.7861
w1EosinPct	-1.712649	11.30836	-0.15	0.880	-24.12615	20.70085
ICV_volM2	.0017386	.0001993	8.72	0.000	.0013456	.0021316
_cons	1339.206	580.2771	2.31	0.023	185.4213	2492.991

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

Multiple-imputa	ation estimate	es		Imputati	.ons	=	5
Linear regressi	lon			Number o	of obs	=	213
				Average	RVI	=	0.0694
				Largest	FMI	=	0.2504
				Complete	DF	=	200
DF adjustment:	Small samp	le		DF:	min	=	50.82
					avg	=	149.78
					max	=	197.53
Model F test:	Equal F	ΝI		F(12 ,	193.7)	=	16.77
Within VCE type	e: OI	LS		Prob > F	:	=	0.0000
Right_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	21.62023	61.2676	0.35	0.725	-99.2	1284	142.4533
Sex							
Men	279.3688	182.5932	1.53	0.128	-80.	7415	639.479
ricii	275.5000	102.3332	1.55	0.120	-00.	,413	055.475
Sex#c.LnNFLw3							
Men	-158.1895	75.52586	-2.09	0.038	-307.	1401	-9.238975
11611	25012055	,,,,,,,,,,	2.05	0.050	307 .	- 10-	31230373
Sex	0	(omitted)					
w1Age	-3.800708	2.766839	-1.37	0.171	-9.25	7043	1.655628
Race	-90.18179	54.75171	-1.65	0.101	-198.	1936	17.83003
PovStat	-68.36198	50.18031	-1.36	0.175	-167.	3199	30.59597
TIME_V1SCAN	.0121813	.0342226	0.36	0.722	055	3129	.0796755
w1BMI	1.637482	3.938103	0.42	0.679	-6.26	9287	9.544251
w1TotalD	-3.075141	2.462422	-1.25	0.214	-7.94	4546	1.794265
w1Albumin	4.03653	87.20304	0.05	0.963	-169.	9272	178.0003
w1EosinPct	2.897503	12.34129	0.23	0.815	-21.7	8564	27.58065
ICV_volM2	.0021198	.0002076	10.21	0.000	.001	7104	.0025293
_cons	1359.931	610.0842	2.23	0.029	144.	0014	2575.861

^{407 .}

^{409 .} mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1TotalD w1Albumin w1Eos

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	209
	Average RVI	=	0.0599
	Largest FMI	=	0.3080
	Complete DF	=	196
DF adjustment: Small sample	DF: min	=	37.51
	avg	=	160.83
	max	=	193.30
Model F test: Equal FMI	F(12 , 190.8)	=	1.12
Within VCE type: OLS	Prob > F	=	0.3439

^{408 . //}ANALYSIS C//

Coefficient Std. err.

LnLesion Vo~e

TIME_V1SCAN

w1currdrugs

w1BMI

w1SRH

_cons

-23.97286

685.4178

15316.55

1144793

-12748.66

9.976131

1032.911

16435.8

8117.939

68122.17

-2.40

0.66

-0.78

1.89

16.81

0.017

0.508

0.439

0.061

0.000

-43.6449

-1357.596

-45219.13

-690.7422

1010410

LnNFLw3	1.28782	.8221813	1.57	0.119	3341573	2.90979
Sex						
Men	3.583576	2.44416	1.47	0.144	-1.238277	8.4054
Sex#c.LnNFLw3						
Men	-1.596321	1.014107	-1.57	0.117	-3.596694	.404052
ricii	1.330321	1.014107	1.57	0.11,	3.330034	.404032
Sex	0	(omitted)				
w1Age	.0705663	.0366883	1.92	0.056	0017946	
Race	.885024	.7210413	1.23	0.221	5374629	
PovStat TIME V1SCAN	.3522671	.6651591 .0004454	0.53 -0.03	0.597 0.973	9596517 0008933	
w1BMI	.0510911		0.95	0.347	0574871	
w1TotalD	.0166832		0.52		0463567	
w1Albumin	1.191074		1.07		-1.022111	
w1EosinPct	.1137878	.1511661	0.75	0.453	1851505	.412726
ICV_volM2	1.35e-06	2.71e-06	0.50	0.617	-3.98e-06	
_cons	-11.35366	7.78397	-1.46	0.147	-26.75676	4.04943
//ANALYSIS A	ca_imputed,cle		Say w1Aga	. Race Poy	vStat TIME V	15CAN w1RMT
	_		Jex Winge			
Multiple-imput		es		Imputati Number o		
Linear regress	PIUI			Average		
				Largest		
				Complete		
DF adjustment:	Small samp	ole		DF:	min =	
					avg =	187.76
					max =	200.90
Model F test:	Equal F			F(9,		
thin VCE typ	oe: C	OLS		Prob > I	=	0.0000
TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf	. interval]
LnNFLw3	-1619.519	12283.24	-0.13	0.895	-25840.64	22601.6
Sex	132864	12951.79	10.26	0.000	107324.9	158403.1
w1Age	-1972.763	812.9192	-2.43	0.016	-3575.717	-369.8089
Race	-68463.2	13370.18	-5.12	0.000	-94827.37	-42099.02
PovStat	-785.0102	14883.42	-0.05	0.958	-30132.92	28562.9
TIME VACCAN	22 07200	0 076134	2 40	0.017	42 6440	4 30000

t

P>|t|

[95% conf. interval]

-4.300807

2728.432

19721.82

31323.85

1279176

423 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH

on estimates	Imputations	=	5
ı	Number of obs	=	213
	Average RVI	=	0.0230
	Largest FMI	=	0.1389
	Complete DF	=	203
Small sample	DF: min	=	100.25
	avg	=	184.50
	max	=	200.64
Equal FMI	F(9, 200.0)	=	20.21
OLS	Prob > F	=	0.0000
	Small sample Equal FMI	Number of obs Average RVI Largest FMI Complete DF Small sample DF: min avg max Equal FMI F(9, 200.0)	Number of obs = Average RVI = Largest FMI = Complete DF = Small sample DF: min = avg = max = Equal FMI F(9, 200.0) =

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI	-4575.559	6643.292	-0.69	0.492	-17675.56	8524.444
	67337.42	6998.892	9.62	0.000	53536.6	81138.24
	-1802.672	439.4707	-4.10	0.000	-2669.248	-936.0971
	-47032.98	7228.92	-6.51	0.000	-61287.55	-32778.41
	508.7688	8047.819	0.06	0.950	-15360.49	16378.03
	-10.96704	5.415175	-2.03	0.044	-21.64643	2876476
	529.9832	570.9307	0.93	0.355	-602.6923	1662.659
w1currdrugs	-13278.55	8813.862	-1.51	0.134	-30680.01	4122.902
w1SRH	10274.62	4391.096	2.34	0.020	1615.944	18933.29
_cons	693621.1	37008.66	18.74	0.000	620594.6	766647.6

424 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0152
	Largest FMI	=	0.0902
	Complete DF	=	203
DF adjustment: Small sample	DF: min	=	137.12
	avg	=	189.33
	max	=	200.99
Model F test: Equal FMI	F(9, 200.6)	=	12.11
Within VCE type: OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	110.3053	5975.99	0.02	0.985	-11673.5	11894.11
Sex	55236.92	6306.663	8.76	0.000	42801.08	67672.76
w1Age	-520.0453	395.765	-1.31	0.190	-1300.432	260.3415
Race	-19498.31	6510.006	-3.00	0.003	-32335.15	-6661.473
PovStat	-4768.807	7245.72	-0.66	0.511	-19056.25	9518.637
TIME V1SCAN	-11.18334	4.846636	-2.31	0.022	-20.74014	-1.626549
w1BMI	170.2521	495.6845	0.34	0.732	-808.7476	1149.252
w1currdrugs	1996.151	8077.001	0.25	0.805	-13975.43	17967.74
w1SRH	4478.081	3952.198	1.13	0.259	-3315.011	12271.17
_cons	444544.4	33055.56	13.45	0.000	379346.1	509742.6

426 . //ANALYSIS B//

_cons

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

Multiple-imputation estimates Linear regression					Imputations Number of obs Average RVI		= 5 = 213 = 0.0261	
		_		Largest Complet	e DF	= =	0.1949 202	
DF adjustment:	: Small samp	le		DF:	min	=	70.25	
					avg	=	184.17 199.99	
Model F test:	Equal F	мт		F(10 ,	max 199.1)	=	17.48	
Within VCE typ	•	LS		Prob >	,	_	0.0000	
within ver ey,	. .			1100 /	•		0.0000	
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% cor	ıf.	interval]	
LnNFLw3	-114.8344	40.12788	-2.86	0.005	-193.9659	9	-35.70281	
Sex	-28.01741	55.17409	-0.51	0.612	-136.8187	7	80.78391	
w1Age	-3.568406	2.652266	-1.35	0.180	-8.798419	9	1.661607	
Race	-60.48925	47.04719	-1.29	0.200	-153.2628	3	32.28428	
PovStat	-98.2908	48.55586	-2.02	0.044	-194.0384	4	-2.543182	
TIME_V1SCAN	0091911	.0327784	-0.28	0.779	0738267	7	.0554444	
w1BMI	.0690994	3.556723	0.02	0.985	-7.024109	€	7.162308	
w1currdrugs	-4.212293	53.20789	-0.08	0.937	-109.2516	5	100.8271	
w1SRH	1.172722	26.68103	0.04	0.965	-51.43951	L	53.78495	
ICV_volM2	.0017506	.0002012	8.70	0.000	.0013539		.0021473	
_cons	1900.784	330.6897	5.75	0.000	1248.5	5	2553.067	

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

2247.908

892.7695

Multiple-imput		es		Imputat		=	5
Linear regress	sion			Number		=	213
				Average		=	0.0266
				Largest	FMI	=	0.2159
				Complete	e DF	=	202
DF adjustment:	: Small samp	le		DF:	min	=	62.01
					avg	=	185.15
					max	=	200.01
Model F test:	Equal F	MI		F(10 ,	199.1)	=	20.06
Within VCE typ	oe: 0	LS		Prob >	F	=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% co	onf.	interval]
LnNFLw3	-75.02788	41.66439	-1.80	0.073	-157.190	91	7.134343
Sex	-80.32539	57.26406	-1.40	0.162	-193.248	31	32.59733
w1Age	-3.241643	2.752346	-1.18	0.240	-8.66899	94	2.185709
Race	-54.3217	48.82801	-1.11	0.267	-150.60	59	41.96348
PovStat	-80.06899	50.38021	-1.59	0.114	-179.41	37	19.27574
TIME_V1SCAN	.013517	.0340326	0.40	0.692	053592	21	.0806261
w1BMI	.4314104	3.733678	0.12	0.908	-7.0320	78	7.894899
w1currdrugs	-22.6731	54.48602	-0.42	0.678	-130.15	23	84.80615
w1SRH	-4.919119	27.68951	-0.18	0.859	-59.5199	_	49.6817
ICV_volM2	.0021395	.0002088	10.25	0.000	.00172	_	.0025512
cons	1570 339	343 4969	4 57	0.000	892 769		2247 908

1570.339 343.4969 4.57 0.000

5 Imputations Number of obs 209

Average RVI 0.0787 Largest FMI 0.3373 Complete DF 198 = DF: min 32.69 avg 163.11

max 195.79 = 1.13

F(10, 189.5) Equal FMI OLS Prob > F 0.3411

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.2974223	.5494743	0.54	0.589	7862967	1.381141
Sex	.1694529	.7453452	0.23	0.820	-1.300626	1.639532
w1Age	.0764052	.0363168	2.10	0.037	.0047809	.1480294
Race	.6791526	.6390866	1.06	0.289	5813059	1.939611
PovStat	003784	.6589474	-0.01	0.995	-1.303364	1.295796
TIME V1SCAN	0000695	.0004394	-0.16	0.874	0009362	.0007971
- w1BMI	.0144649	.0520617	0.28	0.783	0914933	.1204232
w1currdrugs	2930349	.822545	-0.36	0.724	-1.959319	1.373249
w1SRH	5873791	.3596521	-1.63	0.104	-1.296673	.1219146
ICV volM2	1.91e-06	2.70e-06	0.71	0.479	-3.41e-06	7.23e-06
_cons	-1.342561	4.502681	-0.30	0.766	-10.2321	7.54698

432 .

433 . save, replace

file finaldata_imputed.dta saved

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436 . //Males//

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439 . use finaldata_imputed,clear

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442 . //ANALYSIS A//

443 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==2

Multiple-imputation estimates	Imputations Number of obs	=	5
Linear regression	Number of obs Average RVI	=	95 0.0178
	3		
	Largest FMI	=	0.0893
	Complete DF	=	86
DF adjustment: Small sample	DF: min	=	67.82
	avg	=	81.05
	max	=	84.03
Model F test: Equal FMI	F(8, 83.9)	=	3.09
Within VCE type: OLS	Prob > F	=	0.0042

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-12255.28	19511.07	-0.63	0.532	-51055.36	26544.8
Sex	0	(omitted)				
w1Age	-2329.579	1438.698	-1.62	0.109	-5190.572	531.4134
Race	-89024.65	24684.42	-3.61	0.001	-138118.4	-39930.88
PovStat	11957.08	27846.25	0.43	0.669	-43418.57	67332.73
TIME_V1SCAN	-37.50351	17.45574	-2.15	0.035	-72.21733	-2.789681
w1BMI	1894.005	2210.8	0.86	0.394	-2509.483	6297.492
w1currdrugs	-11659.75	30928.96	-0.38	0.707	-73380.57	50061.08
w1SRH	6892.082	15121.6	0.46	0.650	-23179.5	36963.66
_cons	1477648	106655.1	13.85	0.000	1265515	1689782

444 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==2

Multiple-imputation of Linear regression	estimates	Imputations Number of obs	=	5 95
S		Average RVI	=	0.0232
		Largest FMI	=	0.0898
		Complete DF	=	86
DF adjustment: Sma l	ll sample	DF: min	=	67.70
		avg	=	80.24
		max	=	84.01
Model F test:	Equal FMI	F(8, 83.8)	=	5.19
Within VCE type:	OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-8108.423 0	10322.68 (omitted)	-0.79	0.434	-28636.16	12419.32
w1Age	-2398.921	762.6193	-3.15	0.002	-3915.545	-882.2977
Race	-57287.18	13071.22	-4.38	0.000	-83284.61	-31289.76
PovStat	6598.515	14739.83	0.45	0.656	-22713.65	35910.67
TIME V1SCAN	-19.61075	9.246852	-2.12	0.037	-38.00041	-1.221101
w1BMI	1318.567	1190.616	1.11	0.272	-1057.462	3694.596
w1currdrugs	-12866.31	16296.69	-0.79	0.432	-45370.14	19637.52
w1SRH	9043.693	8008.286	1.13	0.262	-6882.395	24969.78
_cons	869819.4	56565.47	15.38	0.000	757301.2	982337.5

445 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0222
	Largest FMI	=	0.1205
	Complete DF	=	86
DF adjustment: Small sample	DF: min	=	60.43
	avg	=	79.73
	max	=	84.00
Model F test: Equal FMI	F(8, 83.8)	=	1.70
Within VCE type: OLS	Prob > F	=	0.1114

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-6307.25	9436.613	-0.67	0.506	-25073.3	12458.8
Sex w1Age	0 -489.6349	(omitted) 696.0593	-0.70	0.484	-1873.848	894.5779
Race PovStat	-29562.07 -2727.258	11950.44 13459.68	-2.47 -0.20	0.015 0.840	-53331.11 -29493.29	-5793.029 24038.77
TIME_V1SCAN w1BMI	-16.4336 541.0353	8.435509 1078.472	-1.95 0.50	0.055 0.617	-33.20885 -1609.016	.3416639 2691.086
w1currdrugs	1309.239	15189.65	0.09	0.932	-29070.19	31688.67
w1SRH _cons	-946.7809 592736	7306.704 51602.97	-0.13 11.49	0.897 0.000	-15477.01 490096	13583.45 695376

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448 . //ANALYSIS B//

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

Multiple-imput Linear regress DF adjustment:	sion				F obs = = = = = = = = = = = = = = = = = = =	= 5 = 95 = 0.0504 = 0.2500 = 85 = 35.21 = 75.10
Model F test:	Equal F	MI		r F(9,	nax = 82.3) =	= 82.93 = 10.64
Within VCE typ	•	LS		Prob > F	•	= 0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf	f. interval]
LnNFLw3	-126.8838	58.08132	-2.18	0.032	-242.4067	-11.36097
Sex	0	(omitted)				
w1Age	-3.799372	4.289323	-0.89	0.378	-12.33194	4.733197
Race	49.25601	81.30095	0.61	0.546	-112.4954	211.0075
PovStat	-192.9757	82.75395	-2.33	0.022	-357.5731	-28.37827
TIME_V1SCAN	0570563	.0528074	-1.08	0.283	1620953	.0479827
w1BMI	.8539367	7.298677	0.12	0.908	-13.95998	15.66785
w1currdrugs	-86.53048	94.14197	-0.92	0.362	-275.1281	102.0671
w1SRH	136.1781	44.94795	3.03	0.003	46.77252	225.5837
ICV_volM2	.0020695	.0002921	7.08	0.000	.0014884	.0026505
_cons	1166.035	573.9706	2.03	0.045	24.35276	2307.717

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

Multiple-imputati	on estimates	Imputations	; =	5
Linear regression		Number of o	bs =	95
		Average RV	=	0.0444
		Largest FM	=	0.2507
		Complete DF	=	85
DF adjustment:	Small sample	DF: min	ı =	35.12
		avę	g =	76.44
		max	(=	83.01
Model F test:	Equal FMI	F(9, 8	32.4) =	10.26
Within VCE type:	OLS	Prob > F		0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-91.82405	61.41967	-1.50	0.139	-213.9851	30.33699
Sex	0	(omitted)				
w1Age	-5.21705	4.537557	-1.15	0.254	-14.24338	3.809277
Race	31.39387	86.2315	0.36	0.717	-140.1894	202.9771
PovStat	-165.0132	87.5189	-1.89	0.063	-339.086	9.059584
TIME_V1SCAN	0258522	.055859	-0.46	0.645	1369603	.0852559
w1BMI	4.728047	7.725053	0.61	0.544	-10.95278	20.40887
w1currdrugs	-103.3368	96.55875	-1.07	0.288	-295.9142	89.24072
w1SRH	93.52223	47.59105	1.97	0.053	-1.14351	188.188
ICV_volM2	.002344	.0003094	7.58	0.000	.0017285	.0029594
_cons	979.9899	606.762	1.62	0.110	-226.8835	2186.863

452 . //ANALYSIS C//

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

Multiple-imputation estimates		Imputatio	ons	=	5
Linear regression	n	Number of	obs	=	93
		Average F	RVI	=	0.2493
		Largest F	MI	=	0.6695
		Complete	DF	=	83
DF adjustment:	Small sample	DF: r	nin	=	8.11
		ä	avg	=	63.87
		r	ıax	=	80.30
Model F test:	Equal FMI	F(9 ,	71.3)	=	0.29
Within VCE type:	OLS	Prob > F		=	0.9763

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	3133013	.7424552	-0.42	0.674	-1.79075	1.164147
Sex	0	(omitted)				
w1Age	.0374717	.0556678	0.67	0.503	0734707	.1484141
Race	.3437174	1.049481	0.33	0.744	-1.75229	2.439725
PovStat	5015446	1.04307	-0.48	0.632	-2.577319	1.57423
TIME V1SCAN	.0001838	.0006542	0.28	0.780	0011182	.0014857
w1BMI	0628055	.1273032	-0.49	0.635	3556554	.2300444
w1currdrugs	2511967	1.434617	-0.18	0.863	-3.301544	2.799151
w1SRH	6465561	.5640637	-1.15	0.255	-1.769186	.4760739
ICV volM2	-7.25e-07	3.63e-06	-0.20	0.842	-7.95e-06	6.50e-06
cons	8.957583	7.170662	1.25	0.215	-5.318433	23.2336

454 .

455 . save, replace

file finaldata_imputed.dta saved

456 .

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459 . //Females//

460 .

461 . use finaldata_imputed,clear

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464 . //ANALYSIS A//

465 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0153
	Largest FMI	=	0.0737
	Complete DF	=	109
DF adjustment: Small sample	DF: min	=	88.76
-	avg	=	102.41
	max	=	107.00
Model F test: Equal FMI	F(8, 106.8)	=	3.55
Within VCE type: OLS	Prob > F	=	0.0011
	F(8, 106.8)	=	3.55

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	14788.79	17065.89	0.87	0.388	-19044.28	48621.86
Sex	0	(omitted)				
w1Age	-2304.816	976.2193	-2.36	0.020	-4240.116	-369.5161
Race	-55154.06	15023.78	-3.67	0.000	-84936.96	-25371.17
PovStat	-7158.933	17646.74	-0.41	0.686	-42141.92	27824.05
TIME_V1SCAN	-10.782	11.9172	-0.90	0.368	-34.40742	12.84343
w1BMI	885.1111	1078.524	0.82	0.414	-1257.438	3027.66
w1currdrugs	-11360.91	18679.82	-0.61	0.545	-48478.67	25756.86
w1SRH	19522.81	9334.171	2.09	0.039	1018.895	38026.72
_cons	1205744	78631.52	15.33	0.000	1049776	1361711

466 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==1

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	118
	Average RVI	=	0.0226
	Largest FMI	=	0.0991
	Complete DF	=	109
DF adjustment: Small sample	DF: min	=	80.11
	avg	=	99.80
	max	=	106.94
Model F test: Equal FMI	F(8, 106.7)	=	5.24
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3 Sex	820.2941 0	9486.924 (omitted)	0.09	0.931	-17988.58	19629.17
w1Age	-1598.461	542.3234	-2.95	0.004	-2673.622	-523.2987
Race	-41145.79	8338.428	-4.93	0.000	-57675.85	-24615.72
PovStat	-4889.417	9795.584	-0.50	0.619	-24308.43	14529.6
TIME V1SCAN	-2.753398	6.626613	-0.42	0.679	-15.89127	10.38447
w1BMI	614.4043	607.6107	1.01	0.315	-594.7534	1823.562
w1currdrugs	-12813.98	10484.99	-1.22	0.225	-33675.99	8048.033
w1SRH	9112.029	5185.136	1.76	0.082	-1167.193	19391.25
_cons	721693.7	43920.05	16.43	0.000	634539.5	808848

467 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if Sex==1

Multiple-imputation estimates			Imputations	=	5
Linear regress	ion	Number of obs Average RVI Largest FMI Complete DF			118 0.0075 0.0415
					109
DF adjustment:	Small sample		DF: min	=	98.78
			avg	=	105.31
			max	=	107.03
Model F test:	Equal FMI		F(8, 107.0)	=	1.83 0.0793
Within VCE typ	oe: OLS		Prob > F	=	
WM	Coefficient Std. err.	t	P> t [95%	conf.	interval]

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	11726.58 0	8329.464 (omitted)	1.41	0.162	-4785.764	28238.93
w1Age	-881.4955	476.8232	-1.85	0.067	-1826.745	63.75435
Race	-11700.91	7345.019	-1.59	0.114	-26261.51	2859.695
PovStat	-2548.833	8626.691	-0.30	0.768	-19650.34	14552.67
TIME_V1SCAN	-6.678976	5.818081	-1.15	0.254	-18.21266	4.854711
w1BMI	372.0029	517.2157	0.72	0.474	-653.9059	1397.912
w1currdrugs	4861.329	8988.861	0.54	0.590	-12975.01	22697.67
w1SRH	8917.635	4565.687	1.95	0.053	-133.3936	17968.66
_cons	452457.3	38120.25	11.87	0.000	376875.4	528039.2

468

469 . //ANALYSIS B//

470 . 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	=	118
	Average RVI	=	0.0337
	Largest FMI	=	0.2023
	Complete DF	=	108
DF adjustment: Small sample	DF: min	=	49.52
	avg	=	98.13
	max	=	105.98
Model F test: Equal FMI	F(9, 105.5)	=	6.71
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-15.11531	55.5494	-0.27	0.786	-125.2585	95.02788
Sex	0	(omitted)				
w1Age	-4.660823	3.169174	-1.47	0.144	-10.9448	1.62315
Race	-113.073	51.54147	-2.19	0.030	-215.2592	-10.88686
PovStat	-80.87272	57.06028	-1.42	0.159	-194.019	32.27355
TIME_V1SCAN	.0301318	.0384359	0.78	0.435	0460751	.1063387
w1BMI	1.247648	3.478252	0.36	0.721	-5.662008	8.157304
w1currdrugs	19.20693	64.62157	0.30	0.768	-110.6204	149.0342
w1SRH	-84.41559	30.89395	-2.73	0.007	-145.6665	-23.16469
ICV volM2	.0014856	.0002622	5.67	0.000	.0009658	.0020055
_cons	2152.627	423.8832	5.08	0.000	1312.06	2993.194

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

Multiple-imputation estimates				Imputat	ions	=	5
Linear regress		Number	of obs	=	118		
				Average	RVI	=	0.0294
				Largest	FMI	=	0.1583
				Complet	e DF	=	108
DF adjustment:		DF:	min	=	60.85		
J	Small samp				avg	=	98.83
					max	=	106.02
Model F test:	Equal F	MI		F(9,	105.6) =	8.17
Within VCE typ	oe: C	LS		Prob >		=	0.0000
,							
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	7.552388	60.24179	0.13	0.900	-111.8	3963	127.001
Sex	0	(omitted)					
w1Age	-3.165905	3.430979	-0.92	0.358	-9.968	3694	3.636883
Race	-96.65552	55.86517	-1.73	0.087	-207.4	1133	14.1023
PovStat	-48.06488	61.76424	-0.78	0.438	-170.5	5321	74.40238
TIME_V1SCAN	.0404533	.0416528	0.97	0.334	042	2131	.1230376
w1BMI	.3551116	3.803537	0.09	0.926	-7.207	7652	7.917875
w1currdrugs	6.967873	68.44129	0.10	0.919	-129	. 896	143.8317
w1SRH	-70.33153	33.48859	-2.10	0.038	-136.7	7264	-3.936621
ICV_volM2	.0019858	.0002839	6.99	0.000	.0014	1229	.0025487
_cons	1595.979	459.3801	3.47	0.001	685	.032	2506.925

473 . //ANALYSIS C//

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

Multiple-imputation estimates Linear regression				Imputations Number of obs		=	5 116
				Average		=	0.0106
				Largest		=	0.0744
		_		Complet		=	106
DF adjustment:	: Small samp	ole		DF:	min	=	86.32
					avg	=	101.94
					max	=	103.91
Model F test:	Equal F			F(9,	•	=	1.84
Within VCE typ	oe: C	DLS		Prob >	F	=	0.0691
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	1.296971	.9134239	1.42	0.159	5144	638	3.108406
Sex	0	(omitted)					
w1Age	.1056509	.0513227	2.06	0.042	.0038	726	.2074292
Race	1.11338	.8476624	1.31	0.192	5675	838	2.794344
PovStat	.8019424	.9324511	0.86	0.392	-1.047	267	2.651151
TIME_V1SCAN	00027	.0006225	-0.43	0.665	0015	045	.0009645
w1BMI	.073039	.0548399	1.33	0.186	0357	158	.1817937
w1currdrugs	1004575	.9807013	-0.10	0.919	-2.049	924	1.849009
w1SRH	6670543	.5033507	-1.33	0.188	-1.66	525	.3311414
ICV_volM2	5.37e-06	4.24e-06	1.27	0.208	-3.04e	-06	.0000138
_cons	-12.02203	6.868578	-1.75	0.083	-25.64	344	1.599383

475 . 476 . save, replace

file finaldata_imputed.dta saved

479 .

480 .

481 . //ANALYSIS A//

482 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0149
	Largest FMI	=	0.0901
	Complete DF	=	202
DF adjustment: Small sample	DF: min	=	136.73
	avg	=	189.01
	max	=	199.83
Model F test: Equal FMI	F(10 , 199.6)	=	16.74
Within VCE type: OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	10848.03	18122.46	0.60	0.550	-24889.35	46585.41
Sex Men	180244.9	52139.9	3.46	0.001	77427.78	283061.9
Sex#c.LnNFLw3 Men	-21019.57	22394.3	-0.94	0.349	-65179.66	23140.52
Sex	9	(omitted)				
w1Age	-2102.242	824.675	-2.55	0.012	-3728.424	-476.0597
Race	-68404.68	13373.8	-5.11	0.000	-94776.8	-42032.56
PovStat	1162.677	15033.03	0.08	0.938	-28481.17	30806.52
TIME_V1SCAN	-23.2107	10.01695	-2.32	0.022	-42.96402	-3.457368
w1BMI	870.8919	1051.51	0.83	0.409	-1208.434	2950.218
w1currdrugs	-13867.16	16407.62	-0.85	0.399	-46269.11	18534.79
w1SRH	14604.66	8158.071	1.79	0.075	-1482.321	30691.65
_cons	1248691	71903.59	17.37	0.000	1106846	1390537

483 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH

Average RVI = 0.020 Largest FMI = 0.133 Complete DF = 20 DF adjustment: Small sample DF: min = 103.4 avg = 185.4 max = 199.7 Model F test: Equal FMI F(10, 199.4) = 18.3	Multiple-imputati	on estimates	Imputations	=	5
Largest FMI	Linear regression		Number of obs	=	213
Complete DF			Average RVI	=	0.0202
DF adjustment: Small sample DF: min = 103.4 avg = 185.4 max = 199.7 Model F test: Equal FMI F(10, 199.4) = 18.3			Largest FMI	=	0.1336
avg = 185.4 max = 199.7 Model F test: Equal FMI F(10, 199.4) = 18.3			Complete DF	=	202
max = 199.7 Model F test: Equal FMI F(10, 199.4) = 18.3	DF adjustment:	Small sample	DF: min	=	103.46
Model F test: Equal FMI F(10, 199.4) = 18.3			avg	=	185.40
, , , ,			max	=	199.70
Within VCE type: OLS $Prob > F = 0.000$	Model F test:	Equal FMI	F(10, 199.4)	=	18.39
	Within VCE type:	OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	3367.029	9808.389	0.34	0.732	-15976.12	22710.18
Sex Men	97522.04	28200.28	3.46	0.001	41910.79	153133.3
Sex#c.LnNFLw3 Men	-13390.99	12111.02	-1.11	0.270	-37273.81	10491.83
Sex	0	(omitted)				
w1Age	-1885.158	445.3771	-4.23	0.000	-2763.404	-1006.913
Race	-46995.83	7225.049	-6.50	0.000	-61243.21	-32748.45
PovStat	1748.878	8121.623	0.22	0.830	-14266.41	17764.17
TIME_V1SCAN	-10.48084	5.436355	-1.93	0.055	-21.20271	.2410308
w1BMI	648.0817	580.4875	1.12	0.267	-503.1177	1799.281
w1currdrugs	-13993.64	8789.979	-1.59	0.113	-31342.24	3354.969
w1SRH	9820.79	4411.248	2.23	0.027	1122.001	18519.58
_cons	742508.4	39092.77	18.99	0.000	665360.7	819656.2

484 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH

Multiple-imputa Linear regressi		es		Imputat: Number of Average Largest	of obs RVI	= = =	5 213 0.0129 0.0814
				Complete		=	202
DF adjustment:	Small sampl	le		DF:	min	=	144.15
					avg	=	190.36
					max	=	200.00
Model F test:	Equal FM			F(10 ,	,	=	11.01
Within VCE type	e: O L	_S		Prob >	F	=	0.0000
WM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	6202.249	8810.381	0.70	0.482	-1117	1.27	23575.77
Sex							
Men	78388.75	25368.55	3.09	0.002	2836	3.96	128413.6
Sex#c.LnNFLw3							
Men	-10270.47	10897.35	-0.94	0.347	-31759	9.11	11218.18
i ieii	20270147	20037.33	0.5-	0.5.7	52,5.		
Sex	0	(omitted)					
w1Age	-583.3143	` 401.538	-1.45	0.148	-1375	.109	208.4804
Race	-19469.54	6511.298	-2.99	0.003	-3230	99.3	-6629.786
PovStat	-3815.726	7318.116	-0.52	0.603	-1824	5.36	10614.91
TIME_V1SCAN	-10.81181	4.864232	-2.22	0.027	-20.4	4036	-1.220022
w1BMI	261.0126	505.2131	0.52	0.606	-736.	7434	1258.769
w1currdrugs	1454.533	8067.238	0.18	0.857	-1449	0.83	17399.9
w1SRH	4130.893	3970.256	1.04	0.299	-3698	8.04	11959.83
_cons	485621.2	34867.44	13.93	0.000	41684	49.3	554393.1

486 . //ANALYSIS B//

Multiple-imputation estimates

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

Multiple-imputa	ation estimate	S		Imputati	.ons	=	5
Linear regressi	ion			Number o	of obs	=	213
				Average	RVI	=	0.0212
				Largest		=	0.1827
				Complete	. DF	=	201
DF adjustment:	Small sampl	.e		DF:	min	=	75.52
					avg	=	186.05
					max	=	199.01
Model F test:	Equal FM	I		F(11 ,	198.5)	=	16.69
Within VCE type	e: OL	.S		Prob > F		=	0.0000
Left_Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-20.80565	58.85653	-0.35	0.724	-136.	8826	95.27131
Sex							
Men	334.3568	175.3299	1.91	0.058	-11.4	1676	680.1304
Sex#c.LnNFLw3							
Men	-158.4047	72.6952	-2.18	0.031	-301.	7646	-15.04485
Sex	0	(omitted)					
w1Age	-4.550921	2.666768	-1.71	0.089	-9.80	9713	.7078716
Race	-62.69334	46.63261	-1.34	0.180	-154.		29.26577
PovStat	-83.67906	48.56432	-1.72	0.086	-179.	4461	12.08798
TIME_V1SCAN	0041176	.0325729	-0.13	0.900	068	3504	.0601152
- w1BMI	1.494145	3.573991	0.42	0.677	-5.62	4809	8.6131
w1currdrugs	-13.02743	52.37117	-0.25	0.804	-116.	3557	90.30082
w1SRH	-3.699007	26.52725	-0.14	0.889	-56.0	0 958	48.61157
ICV_volM2	.0017204	.0001999	8.61	0.000	.001	3262	.0021146
cons	1696.167	356.4207	4.76	0.000	993.	1865	2399.147

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

Imputations

Linear regressi	ion			Number c	f obs	=	213
				Average	RVI	=	0.0229
				Largest	FMI	=	0.2066
				Complete	DF	=	201
DF adjustment:	Small samp	Le		DF:	min	=	65.34
•					avg	=	185.68
					max	=	198.96
Model F test:	Equal FM	1I		F(11 ,	198.4)	=	19.00
Within VCE type	e: Ol	_S		Prob > F		=	0.0000
Right_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	18.59786	61.25258	0.30	0.762	-102	.211	139.4068
Sex							
Men	280.4936	182.436	1.54	0.126	-79.30	2017	640.2967
nen	280.4930	102.430	1.54	0.120	-/2.3	0347	040.2307
Sex#c.LnNFLw3							
Men	-157.7247	75.62662	-2.09	0.038	-306.8	8703	-8.57905
11611	23717247	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.05	0.050	500.	0,05	0.57.505
Sex	ø	(omitted)					
w1Age		2.770116	-1.52	0.129	-9.68	2519	1.24265
Race	-56.51798		-1.17	0.245	-152.0		39.02142
Nace	50.51756	-0.77011	-1.1/	0.275	-152.	J, -	JJ. 02142

PovStat	-65.52413	50.44242	-1.30	0.195	-164.9945	33.94625
TIME_V1SCAN	.0185709	.0338654	0.55	0.584	0482115	.0853533
w1BMI	1.850345	3.760955	0.49	0.624	-5.660053	9.360743
w1currdrugs	-31.46573	53.87022	-0.58	0.560	-137.7098	74.77835
w1SRH	-9.772362	27.56442	-0.35	0.723	-64.12836	44.58364
ICV_volM2	.0021094	.0002077	10.16	0.000	.0016999	.0025189
_cons	1314.191	370.7317	3.54	0.000	582.9533	2045.429

490 . //ANALYSIS C//

Multiple-imputation estimates

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

5

Imputations

Linear regress:	ion			Number o	f obs	=	209
				Average	RVI	=	0.0732
				Largest	FMI	=	0.3436
				Complete	DF	=	197
DF adjustment:	Small sampl	е		DF:	min	=	31.71
					avg	=	163.78
					max	=	194.68
Model F test:	Equal FM	I		F(11 ,	189.9)	=	1.35
Within VCE type	e: OL	S		Prob > F		=	0.1995
LnLesion_Vo~e	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	1.423116	.8144611	1.75	0.082	183	5428	3.029875
Sex							
Men	4.495317	2.425514	1.85	0.065	289	6592	9.280293
Sex#c.LnNFLw3							
Men	-1.899671	1.010771	-1.88	0.062	-3.89	3481	.0941395
_	_						
Sex	ł .	(omitted)					
w1Age	.0664304	.0365134	1.82	0.070	005		.1384466
Race	.6797753	.634938	1.07	0.286	572		1.932092
PovStat	.1857294	.6627687	0.28	0.780	-1.12		1.492906
TIME_V1SCAN	0000162	.0004377	-0.04	0.971	000		.000847
w1BMI	.0304461	.0529163	0.58	0.569	077		.1382715
w1currdrugs	4083535	.8182199	-0.50	0.621	-2.06	_	1.248025
w1SRH	6553968	.3591787	-1.82	0.070	-1.36	3781	.0529875
ICV_volM2	1.58e-06	2.69e-06	0.59	0.558	-3.72	e-06	6.87e-06
_cons	-3.377185	4.891345	-0.69	0.491	-13.0	3272	6.278347

492 .

493 . save, replace

file finaldata_imputed.dta saved

494 .

495 .

```
496 .
501 . **ANALYSES A-C, TOTAL POPULATION**
502 .
503 . **Model 1**
505 . use HANDLS paper51 NFLBRAINSCANFINALIZED, clear
507 . //ANALYSIS A//
508 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta
                                             Number of obs
                    SS
                               df
                                      MS
                                                                 213
        Source
                                                          =
                                             F(6, 206)
                                                          =
                                                               27.13
        Model
                1.3400e+12
                                  2.2334e+11
                                             Prob > F
                                                               0.0000
                                6
      Residual
                1.6955e+12
                              206
                                  8.2307e+09
                                             R-squared
                                                               0.4414
                                             Adj R-squared =
                                                               0.4252
                3.0355e+12
                              212 1.4319e+10
         Total
                                             Root MSE
                                                               90723
    TOTALBRAIN
               Coefficient Std. err.
                                           P>|t|
                                                                Beta
       LnNFLw3
                -4981.216
                          12124.39
                                    -0.41
                                           0.682
                                                            -.0248201
                 134955.7
                          12754.88
                                    10.58
                                           0.000
                                                             .5619351
          Sex
         w1Age
                -1844.292
                          810.5277
                                    -2.28
                                           0.024
                                                            -.1412264
                -69558.16
         Race
                          13288.05
                                    -5.23
                                           0.000
                                                            -.2878153
       PovStat
                -4144.574
                          14731.18
                                    -0.28
                                           0.779
                                                            -.0161849
    TIME V1SCAN
                -22.59913
                           9.89046
                                    -2.28
                                           0.023
                                                            -.1266663
         cons
                  1197258
                          54086.08
                                    22.14
                                           0.000
509 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta
                    SS
                               df
                                             Number of obs
        Source
                                      MS
                                                                 213
                                             F(6, 206)
                                                          =
                                                               28.57
                                6 7.0192e+10
        Model
                4.2115e+11
                                             Prob > F
                                                               0.0000
                                                           =
      Residual
                5.0616e+11
                              206 2.4571e+09
                                             R-squared
                                                               0.4542
                                             Adj R-squared
                                                               0.4383
        Total
                9.2731e+11
                              212 4.3741e+09
                                             Root MSE
                                                               49569
           GM
               Coefficient Std. err.
                                           P>|t|
                                                                Beta
       LnNFLw3
                                    -1.06
                -7038.028
                          6624.468
                                           0.289
                                                             -.063449
                 68737.83
                          6968.95
                                    9.86
                                           0.000
                                                             .5178412
          Sex
         w1Age
                -1686.702
                          442.8522
                                    -3.81
                                           0.000
                                                            -.2336846
         Race
                -48264.91
                          7260.259
                                    -6.65
                                           0.000
                                                            -.3613294
                          8048.749
       PovStat
                -1474.801
                                    -0.18
                                           0.855
                                                            -.0104201
    TIME V1SCAN
                -10.26623
                          5.403902
                                    -1.90
                                           0.059
                                                            -.1041085
         _cons
                 729738.2
                          29551.29
                                    24.69
                                           0.000
```

510 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ,beta

Source	SS	df	MS	Number of obs	= 213
Model Residual	2.1155e+11 3.9525e+11	6 206	3.5259e+10 1.9187e+09	R-squared	= 18.38 = 0.0000 = 0.3486
Total	6.0680e+11	212	2.8623e+09	- Adj R-squared • Root MSE	= 0.3297 = 43803
WM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCANcons	-730.6776 55748.93 -515.5662 -19191.71 -6111.101 -10.54662 460690.7	5853.843 6158.252 391.3352 6415.673 7112.437 4.775266 26113.59	-0.12 9.05 -1.32 -2.99 -0.86 -2.21	0.901 0.000 0.189 0.003 0.391 0.028 0.000	0081431 .5191913 0883012 1776133 053376 1322144

512 . //ANALYSIS B//

513 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 ,beta

Source	SS	df	MS	Number of obs F(7, 205)	= 213 = 26.01
Model Residual	15577401.3 17542101.3	7 205	2225343.05 85571.2259	Prob > F R-squared	= 0.0000 = 0.4703
Total	33119502.6	212	156224.069	- Adj R-squared Root MSE	= 0.4523 = 292.53
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-115.243	39.0945	-2.95	0.004	1738436
Sex	-28.36787	54.04536	-0.52	0.600	03576
w1Age	-3.533937	2.613485	-1.35	0.178	0819259
Race	-60.35169	46.28436	-1.30	0.194	0756017
PovStat	-98.11719	47.51394	-2.07	0.040	1159984
TIME_V1SCAN	009188	.0321556	-0.29	0.775	0155908
ICV_volM2	.0017547	.0001975	8.88	0.000	.6411886
_cons	1898.465	304.9054	6.23	0.000	•

514 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 ,beta

	Source	SS	df	MS	Number of obs	=	213
-					F(7, 205)	=	29.79
	Model	19243178.6	7	2749025.52	Prob > F	=	0.0000
	Residual	18916674.5	205	92276.461	R-squared	=	0.5043
-					Adj R-squared	=	0.4874
	Total	38159853.1	212	179999.307	Root MSE	=	303.77

Right_Hipp~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-75.72912	40.59731	-1.87	0.064	1064255
Sex	-82.11941	56.12288	-1.46	0.145	0964396
w1Age	-3.093175	2.713949	-1.14	0.256	0668044
Race	-56.02866	48.06356	-1.17	0.245	0653869
PovStat	-77.39229	49.3404	-1.57	0.118	0852399
TIME_V1SCAN	.0117322	.0333917	0.35	0.726	.0185466
ICV_volM2	.002144	.0002051	10.45	0.000	.7298842
_cons	1561.142	316.6261	4.93	0.000	•

516 . //ANALYSIS C//

517 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 ,beta

Source	SS	df	MS	Number of obs	= 209 = 1.31
Model Residual	143.0494 3131.43476	7 201	20.4356285 15.5792774	Prob > F R-squared	= 0.2463 = 0.0437
Total	3274.48416	208	15.7427123	- Adj R-squared B Root MSE	= 0.0104 = 3.9471
LnLesion_V~e	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	.3321878	.5401326	0.62	0.539	.0490727
Sex	.1197849	.7339493	0.16	0.871	.0150393
w1Age	.0769581	.0359844	2.14	0.034	.1762324
Race	.6094322	.6320866	0.96	0.336	.0760177
PovStat	.1219654	.6506785	0.19	0.852	.0143805
TIME_V1SCAN	0001764	.0004348	-0.41	0.685	030088
ICV_volM2	1.50e-06	2.67e-06	0.56	0.576	.0546972
_cons	-1.58836	4.130742	-0.38	0.701	•

518 .

519 .

520 . **Model 2**

521 .

522 . use finaldata_imputed,clear

523 .

524 .

525 . //ANALYSIS A//

526 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates Linear regression	2pucuc205	= =	5 213
G	Average RVI	=	0.0015
	Largest FMI	=	0.0134
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	197.71
	avg	=	201.50
	max	=	202.02
Model F test: Equal FMI	F(8, 202.0)	=	446.97
Within VCE type: OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-3888.774	3833.722	-1.01	0.312	-11448.03	3670.478
Sex	-13497.29	5290.956	-2.55	0.011	-23929.89	-3064.695
w1Age	-1778.365	253.5502	-7.01	0.000	-2278.31	-1278.421
Race	4541.76	4486.244	1.01	0.313	-4304.108	13387.63
PovStat	909.7666	4604.085	0.20	0.844	-8168.459	9987.992
TIME_V1SCAN	-5.182184	3.115292	-1.66	0.098	-11.32484	.9604763
w1BMI	-34.5637	307.8658	-0.11	0.911	-641.6858	572.5584
ICV_volM2	.8357852	.0191543	43.63	0.000	.7980171	.8735532
_cons	140053.5	30952.11	4.52	0.000	79022.42	201084.6

527 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 213
	Average RVI	=	0.0083
	Largest FMI	=	0.0697
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	155.66
	avg	=	196.57
	max	=	202.01
Model F test: Equal FMI	F(8, 201. 8)	=	167.61
Within VCE type: OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-5997.777	3306.789	-1.81	0.071	-12518.12	522.5628
Sex	-4970.972	4562.866	-1.09	0.277	-13968.03	4026.082
w1Age	-1667.691	218.5219	-7.63	0.000	-2098.568	-1236.814
Race	-11347.37	3868.065	-2.93	0.004	-18974.38	-3720.357
PovStat	1218.831	3967.645	0.31	0.759	-6604.479	9042.141
TIME_V1SCAN	-1.435645	2.68542	-0.53	0.594	-6.730715	3.859425
w1BMI	229.6488	272.8487	0.84	0.401	-309.315	768.6127
ICV_volM2	.4175966	.0165139	25.29	0.000	.3850347	.4501585
_cons	192853.2	26720.62	7.22	0.000	140164.3	245542.2

528 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estima	tes	Imputations	=	5
Linear regression		Number of obs	=	213
		Average RVI	=	0.0142
		Largest FMI	=	0.1173
		Complete DF	=	204
DF adjustment: Small sam	ple	DF: min	=	115.73
		avg	=	191.85
		max	=	201.96
Model F test: Equal	FMI	F(8, 201.5)	=	146.31
Within VCE type:	OLS	Prob > F	=	0.0000

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-649.4409	2829.084	-0.23	0.819	-6227.862	4928.981
Sex	-11122.81	3904.541	-2.85	0.005	-18821.84	-3423.784
w1Age	-474.5218	186.9309	-2.54	0.012	-843.1091	-105.9345
Race	14084.23	3308.421	4.26	0.000	7560.718	20607.74
PovStat	-3985.543	3393.939	-1.17	0.242	-10677.64	2706.556
TIME_V1SCAN	-2.853504	2.297481	-1.24	0.216	-7.383657	1.676649
w1BMI	-219.5718	239.0684	-0.92	0.360	-693.0885	253.945
ICV_volM2	.3743214	.0141249	26.50	0.000	.3464701	.4021727
_cons	-5643.35	22916.81	-0.25	0.806	-50834.42	39547.72

530 . //ANALYSIS B//

531 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates				Imputat Number		=	5 213
Linear regress	21011					=	_
				Average		=	0.0232
				Largest	: FMI	=	0.1862
				Complet	e DF	=	204
DF adjustment:	: Small sampl	Le		DF:	min	=	74.41
_					avg	=	186.74
					max	=	201.96
Model F test:	Equal FM	1I		F(8,	200.8)	=	22.06
Within VCE typ	pe: OL	.S		Prob >	F	=	0.0000
 Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3 Sex	-114.912 -28.01044	39.80022 54.90005	-2.89 -0.51	0.004 0.610	-193.3 -136.2	_	-36.43151 80.24383
w1Age	-3.54018	2.626396	-1.35	0.179	-8.718		1.638515

сетс_нтрро~s	Coefficient	sta. err.	L	ווןלץ	[95% CONT.	. Incerval
LnNFLw3	-114.912	39.80022	-2.89	0.004	-193.3925	-36.43151
Sex	-28.01044	54.90005	-0.51	0.610	-136.2647	80.24383
w1Age	-3.54018	2.626396	-1.35	0.179	-8.718876	1.638515
Race	-60.78022	46.46422	-1.31	0.192	-152.3976	30.83717
PovStat	-98.25743	47.67886	-2.06	0.041	-192.2697	-4.245177
TIME_V1SCAN	0090553	.0322594	-0.28	0.779	0726637	.0545531
w1BMI	.1220003	3.481604	0.04	0.972	-6.814617	7.058618
ICV_volM2	.001753	.0001984	8.84	0.000	.0013617	.0021442
_cons	1896.691	323.1714	5.87	0.000	1259.339	2534.044

532 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0253
	Largest FMI	=	0.2007
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	68.11
	avg	=	185.93
	max	=	201.95
Model F test: Equal FMI	F(8, 200.6)	=	25.23
Within VCE type: OLS	Prob > F	=	0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-74.3155	41.33851	-1.80	0.074	-155.8298	7.198816
Sex	-80.34781	57.01562	-1.41	0.160	-192.7741	32.07847
w1Age	-3.130175	2.727121	-1.15	0.252	-8.507482	2.247132
Race	-56.888	48.24956	-1.18	0.240	-152.0258	38.24982
PovStat	-77.18143	49.50466	-1.56	0.121	-174.7937	20.43087
TIME_V1SCAN	.0120998	.0334962	0.36	0.718	0539474	.078147
w1BMI	.664474	3.643313	0.18	0.856	-6.605427	7.934375
ICV_volM2	.0021402	.000206	10.39	0.000	.0017339	.0025464
_cons	1543.062	335.7266	4.60	0.000	880.9358	2205.188

534 . //ANALYSIS C//

535 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2

Multiple-imputati Linear regression		Imputations Number of obs	=	5 209
		Average RVI	=	0.0489
		Largest FMI	=	0.3373
		Complete DF	=	200
DF adjustment:	Small sample	DF: min	=	32.76
		avg	=	176.65
		max	=	197.87
Model F test:	Equal FMI	F(8, 193.5)	=	1.11
Within VCE type:	OLS	Prob > F	=	0.3592

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	.3676558	.5495713	0.67	0.504	7162044	1.451516
Sex	.1671199	.7465598	0.22	0.823	-1.305228	1.639467
w1Age	.0758747	.0361486	2.10	0.037	.0045882	.1471613
Race	.602223	.6339139	0.95	0.343	6478723	1.852318
PovStat	.138031	.6523179	0.21	0.833	-1.148357	1.424419
TIME_V1SCAN	0001694	.000436	-0.39	0.698	0010291	.0006903
w1BMI	.0192634	.0515334	0.37	0.711	0856107	.1241375
ICV_volM2	1.44e-06	2.68e-06	0.54	0.592	-3.85e-06	6.72e-06
cons	-2.19639	4.421165	-0.50	0.620	-10.92117	6.528393

536 .

537 . save, replace

file finaldata_imputed.dta saved

540 .

541 . **Model 1**

542 .

543 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

544 .

545 . //ANALYSIS A//

546 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 95
Model Residual	2.7085e+11 9.8848e+11	5 89	5.4171e+16 1.1107e+16	R-squared	= 4.88 = 0.0005 = 0.2151
Total	1.2593e+12	94	1.3397e+16	- Adj R-squared Root MSE	= 0.1710 = 1.1e+05
TOTALBRAIN	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN _cons	-13942.19 0 -2091.126 -89298.15 10509.56 -35.59424 1535369	18869.9 (omitted) 1388.237 23262.47 27268.38 16.95326 89022.09	-0.74 -1.51 -3.84 0.39 -2.10 17.25	0.462 0.136 0.000 0.701 0.039 0.000	0781548 1616415 3815363 .0391005 202798

547 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta note: **Sex** omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 95
Model Residual	1.2328e+11 2.8446e+11	5 89	2.4656e+10 3.1962e+09	9 R-squared	= 7.71 = 0.0000 = 0.3023
Total	4.0774e+11	94	4.3377e+09	- Adj R-squared 9 Root MSE	= 0.2632 = 56535
GM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	-9941.73 0	10122.73 (omitted)	-0.98	0.329	0979411
w1Age	-2251.474	744.7178	-3.02	0.003	3058565
Race	-58710.21	12479.12	-4.70	0.000	4408445
PovStat	5974.411	14628.08	0.41	0.684	.0390635
TIME_V1SCAN	-17.68759	9.094548	-1.94	0.055	177105
_cons	921321.8	47755.76	19.29	0.000	•

548 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==2,beta note: Sex omitted because of collinearity.

	Source	SS	df	MS	Number of obs	=	95
_					F(5, 89)	=	2.80
	Model	3.5966e+10	5	7.1931e+09	Prob > F	=	0.0214
	Residual	2.2854e+11	89	2.5679e+09	R-squared	=	0.1360
					Adj R-squared	=	0.0874
	Total	2.6451e+11	94	2.8139e+09	Root MSE	=	50674

WM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-6431.106	9073.38	-0.71	0.480	0786613
Sex	0	(omitted)			
w1Age	-409.0684	667.5183	-0.61	0.542	0689953
Race	-28487.26	11185.5	-2.55	0.013	2655798
PovStat	-3303.478	13111.69	-0.25	0.802	0268176
TIME_V1SCAN	-16.25369	8.151782	-1.99	0.049	202063
cons	601303.6	42805.27	14.05	0.000	•

550 . //ANALYSIS B//

551 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==2,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of ob	-
Model Residual	9008502.37 9546505.14	6 88	1501417.00 108483.01	3 R-squared	= 13.84 = 0.0000 = 0.4855
Total	18555007.5	94	197393.69	– Adj R-square 7 Root MSE	d = 0.4504 = 329.37
Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	-154.1592 0	59.15658 (omitted)	-2.61	0.011	2251306
w1Age	-4.341722	4.339255	-1.00	0.320	0874329
Race	26.6877	80.44855	0.33	0.741	.0297061
PovStat	-176.0936	85.26756	-2.07	0.042	1706795
TIME_V1SCAN	0343596	.0539102	-0.64	0.526	0510002
ICV_volM2	.0020748	.0003026	6.86	0.000	.6006324
_cons	1533.561	579.2925	2.65	0.010	•

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

Source	SS	df	MS	Number of obs	=	95
				F(6, 88)	=	14.55
Model	10103109.5	6	1683851.58	Prob > F	=	0.0000
Residual	10183368.7	88	115720.099	R-squared	=	0.4980
				- Adj R-squared	=	0.4638
Total	20286478.2	94	215813.598	Root MSE	=	340.18
Right_Hipp~s	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	-109.0851	61.09794	-1.79	0.078	-	.1523553
Sex	0	(omitted)				•
w1Age	-4.98442	4.481658	-1.11	0.269	-	.0959964
Race	13.72325	83.08866	0.17	0.869		.0146089
PovStat	-160.5514	88.06582	-1.82	0.072	-	.1488261
TIME_V1SCAN	0090344	.0556794	-0.16	0.871	-	.0128248
ICV_volM2	.0023636	.0003125	7.56	0.000		.654403
_cons	1294.411	598.3033	2.16	0.033		•
	1					

553 . 554 . //ANALYSIS C//

555 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==2,beta note: **Sex** omitted because of collinearity.

93	=	Number of obs		MS	df	SS	Source
0.19	=	F(6, 86)	_				
0.9792	=	Prob > F	53	2.8918085	6	17.3508512	Model
0.0130	=	R-squared	98	15.319186	86	1317.44955	Residual
-0.0559	=	Adj R-squared	_				
3.914	=	Root MSE	37	14.508	92	1334.8004	Total
Beta		t 	P>	t	Std. err.	Coefficient	LnLesion_V~e
.0187745	-	78	0.8	-0.15	.7232794	1117761	LnNFLw3
					(omitted)	0	Sex
.0736853		54	0.5	0.59	.053391	.0316926	w1Age
.0244433		45	0.8	0.20	.9614687	.1883807	Race
.0685141	-	60	0.5	-0.59	1.026998	6016125	PovStat
.0030335		78	0.9	0.03	.0006409	.0000173	TIME_V1SCAN
.0346103	-	78	0.7	-0.28	3.60e-06	-1.02e-06	ICV_volM2
		44	0.3	0.95	6.90009	6.566197	_cons

556 .

557 .

558 . **Model 2**

559 .

560 . use finaldata_imputed,clear

561 .

563 . //ANALYSIS A//

564 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	95
	Average RVI	=	0.0085
	Largest FMI	=	0.0512
	Complete DF	=	88
DF adjustment: Small sample	DF: min	=	78.10
	avg	=	84.64
	max	=	86.03
Model F test: Equal FMI	F(6, 86.0)	=	4.18
Within VCE type: OLS	Prob > F	=	0.0010

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	. interval]
LnNFLw3 Sex	-13071.05 0	18909.13 (omitted)	-0.69	0.491	-50661.44	24519.34
w1Age	-2373.466	1422.182	-1.67	0.099	-5200.657	453.7262
Race	-92003.02	23467.33	-3.92	0.000	-138655.9	-45350.17
PovStat	12503.04	27387.95	0.46	0.649	-41942.26	66948.33
TIME V1SCAN	-36.73238	17.01	-2.16	0.034	-70.5472	-2.917564
w1BMI	2020.28	2174.079	0.93	0.356	-2307.888	6348.448
_cons	1493681	99767.36	14.97	0.000	1295303	1692059

565 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Linear regres:	tation estima† sion	tes		Imputat Number		=	5 95
Linear regres	31011			Average		=	0.0138
				Largest		=	0.0804
				Complet		=	88
DF adjustment	: Small sam	nle		DF:	min	=	71.41
or adjustment	. 5	P -C		D	avg	=	83.53
					max	=	86.01
Model F test:	Equal I	FMI		F(6 ,		=	6.66
Within VCE ty	•	OLS		Prob >	•	=	0.0000
GM	Coefficient	Std. err.	t	P> t	[95% (conf.	interval]
LnNFLw3	-9325.69	10100.67	t -0.92	P> t 0.358	[95% d		interval]
					-		
LnNFLw3	-9325.69	10100.67			-	.45	10754.07
LnNFLw3 Sex	-9325.69 0	10100.67 (omitted)	-0.92	0.358	-29405	.45 759	10754.07
LnNFLw3 Sex w1Age	-9325.69 0 -2458.604	10100.67 (omitted) 760.1477	-0.92	0.358	-29405 -3969.7	.45 759 .72	
LnNFLw3 Sex w1Age Race	-9325.69 0 -2458.604 -60690.18	10100.67 (omitted) 760.1477 12546.15	-0.92 -3.23 -4.84	0.358 0.002 0.000	-29405 -3969.7 -85632	.45 759 .72 .49	10754.07 -947.4492 -35747.64
LnNFLw3 Sex w1Age Race PovStat	-9325.69 0 -2458.604 -60690.18 7402.92	10100.67 (omitted) 760.1477 12546.15 14626.98	-0.92 -3.23 -4.84 0.51	0.358 0.002 0.000 0.614	-29405 -3969.7 -85632 -21674	.45 759 .72 .49 767	10754.07 -947.4492 -35747.64 36480.33

566 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==2

Multiple imputation estimates	Tmnutations =	5
Multiple-imputation estimates	Impacacions	-
Linear regression	Number of obs =	95
	Average RVI =	0.0101
	Largest FMI =	0.0671
	Complete DF =	88
DF adjustment: Small sample	DF: min =	74.55
	avg =	84.11
	max =	86.01
Model F test: Equal FMI	F(6, 86.0) =	2.33
Within VCE type: OLS	Prob > F =	0.0389

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-6191.076	9122.486	-0.68	0.499	-24325.97	11943.82
Sex	0	(omitted)				
w1Age	-481.787	686.839	-0.70	0.485	-1847.205	883.6307
Race	-29178.24	11318.25	-2.58	0.012	-51678.44	-6678.053
PovStat	-2757.278	13216.58	-0.21	0.835	-29030.9	23516.35
TIME V1SCAN	-16.57417	8.208053	-2.02	0.047	-32.89125	2570945
w1BMI	525.457	1057.405	0.50	0.621	-1581.208	2632.122
cons	590382	48185.96	12.25	0.000	494564.8	686199.2
_						

568 . //ANALYSIS B//

569 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

Multiple-impu	tation estimat	tes		Imputat	cions	=	5
Linear regres	sion			Number	of obs	=	95
_				Average	e RVI	=	0.0403
				Largest	FMI	=	0.2405
				Complet	e DF	=	87
DF adjustment	: Small samp	ole		DF:	min	=	37.09
					avg	=	78.68
					max	=	84.98
Model F test:	Equal I	FMI		F(7,	, 84.3)	=	11.33
Within VCE ty	pe: (OLS		Prob >	F	=	0.0000
Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% c	onf.	interval]
LnNFLw3	-152.8143	59.44763	-2.57	0.012	-271.01	L24	-34.61608
Sex	0	(omitted)					
w1Age	-4.695945	4.479479	-1.05	0.297	-13.60	37	4.211813
Race	20.67702	81.97659	0.25	0.801	-142.33	362	183.6903
PovStat	-174.0383	85.96821	-2.02	0.046	-344.96	669	-3.109621
TIME_V1SCAN	0363166	.0543822	-0.67	0.506	14444	161	.0718128
w1BMI	2.814903	7.553873	0.37	0.712	-12.489	945	18.11926
ICV_volM2	.0020603	.0003056	6.74	0.000	.00145	527	.0026679
cons	1498.593	590.0933	2.54	0.013	325.23	854	2671.952

570 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

Multiple-imputati		utatio ber of		=	5 95	
· ·		Ave	rage R	VI	=	0.0385
		Lar	gest F	MI	=	0.2271
		Com	plete	DF	=	87
DF adjustment:	Small sample	DF:	m	in	=	39.21
			a	vg	=	78.95
			m	ax	=	85.04
Model F test:	Equal FMI	F(7,	84.4)	=	12.12
Within VCE type:	OLS	Pro	b > F		=	0.0000
	•	`	7,		=	12.12

Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	-106.6483	61.18784	-1.74	0.085	-228.3074	15.01078
Sex	0	(omitted)				
w1Age	-5.83344	4.605214	-1.27	0.209	-14.99089	3.324009
Race	1.587025	84.45828	0.02	0.985	-166.3696	169.5436
PovStat	-154.8648	88.42783	-1.75	0.083	-330.6817	20.95205
TIME_V1SCAN	0132915	.0559536	-0.24	0.813	1245448	.0979619
w1BMI	6.270742	7.715864	0.81	0.421	-9.333332	21.87482
ICV_volM2	.0023351	.0003146	7.42	0.000	.0017095	.0029606
_cons	1212.647	606.8757	2.00	0.049	5.943328	2419.351

572 . //ANALYSIS C//

573 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==2

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	93
	Average RVI	=	0.2288
	Largest FMI	=	0.6769
	Complete DF	=	85
DF adjustment: Small sample	DF: min	=	7.97
	avg	=	70.94
	max	=	82.97
Model F test: Equal FMI	F(7, 71.5)	=	0.21
Within VCE type: OLS	Prob > F	=	0.9813

LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	1273497 0	.7203547 (omitted)	-0.18	0.860	-1.560114	1.305414
w1Age	.0400171	.0554504	0.72	0.473	0704253	.1504596
Race	.3229853	.987053	0.33	0.744	-1.642414	2.288385
PovStat	6620259	1.03167	-0.64	0.523	-2.714273	1.390221
TIME V1SCAN	.0000587	.0006433	0.09	0.928	0012211	.0013384
w1BMI	0686115	.1274663	-0.54	0.605	3627143	.2254913
ICV volM2	-7.01e-07	3.63e-06	-0.19	0.847	-7.92e-06	6.52e-06
_cons	7.488988	7.083298	1.06	0.294	-6.612608	21.59058

574 .

575 . save, replace

file finaldata_imputed.dta saved

576 .577 .

579 .

580 . **Model 1**

581 .

582 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

583 .

584 . //ANALYSIS A//

585 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	=	118
Model Residual	1.3323e+11 6.6658e+11	5 112	2.6647e+16 5.9516e+09	R-squared	= =	4.48 0.0009 0.1666
Total	7.9982e+11	117	6.8360e+09	- Adj R-squared B Root MSE	=	0.1294 77147
TOTALBRAIN	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3 Sex	7439.995 0	16556.35 (omitted)	0.45	0.654		.0491068
w1Age	-1999.241	968.9494	-2.06	0.041		.2265335
Race PovStat	-55805.95 -15778.06	15212.09 16881.21	-3.67 -0.93	0.000 0.352		.3357892
TIME_V1SCAN	-9.46051	11.76166	-0.80	0.423		.0780659
_cons	1282365	57273.3	22.39	0.000		•

586 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta note: Sex omitted because of collinearity.

Source	SS	df	MS	Number of obs	= 118
Model Residual	6.4319e+10 2.0697e+11	5 112	1.2864e+10	9 R-squared	= 6.96 = 0.0000 = 0.2371 = 0.2030
Total	2.7129e+11	117	2.3187e+0	Adj R-squaredRoot MSE	= 0.2030 = 42987
GM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	-4220.428 0	9225.455 (omitted)	-0.46	0.648	0478307
w1Age	-1369.391	`539.9138	-2.54	0.013	2664258
Race	-41606.22	8476.412	-4.91	0.000	429859
PovStat	-7939.774	9406.476	-0.84	0.400	0804306
TIME_V1SCAN	-3.018902	6.553783	-0.46	0.646	0427738
cons	761962.2	31913.57	23.88	0.000	•

587 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if Sex==1,beta note: **Sex** omitted because of collinearity.

Source	SS	df	MS	Number of obs F(5, 112)	= 118 = 2.07
Model Residual	1.4523e+10 1.5703e+11	5 112	2.9047e+09 1.4021e+09	Prob > F R-squared	= 0.0742 = 0.0847 = 0.0438
Total	1.7156e+11	117	1.4663e+09	- Adj R-squared P Root MSE	= 37445
WM	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3 Sex	9464.468 0	8035.906 (omitted)	1.18	0.241	.1348823
w1Age Race	-846.5553 -11835.77	470.2962 7383.446	-1.80 -1.60	0.075 0.112	2071155 1537704
PovStat TIME_V1SCAN	-7963.77 -5.258754 491393.4	8193.586 5.708724 27798.57	-0.97 -0.92 17.68	0.333 0.359 0.000	1014472 0936957
_cons	491393.4	2//38.3/	17.08	0.000	•

589

590 . //ANALYSIS B//

591 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==1,beta note: Sex omitted because of collinearity.

	Source	SS	df	MS	Number of obs	=	118
_					F(6, 111)	=	8.68
	Model	3268831.35	6	544805.225	Prob > F	=	0.0000
	Residual	6964316.48	111	62741.5899	R-squared	=	0.3194
_					Adj R-squared	=	0.2826
	Total	10233147.8	117	87462.802	Root MSE	=	250.48

Left_Hippo~s	Coefficient	Std. err.	t	P> t	Beta
LnNFLw3	-5.467951	54.00083	-0.10	0.920	0100898
Sex	0	(omitted)			•
w1Age	-5.577494	3.153189	-1.77	0.080	1766839
Race	-123.5938	52.51341	-2.35	0.020	2079091
PovStat	-46.07589	54.96867	-0.84	0.404	0759969
TIME_V1SCAN	.0131579	.0382497	0.34	0.731	.0303546
ICV_volM2	.0013145	.0002565	5.13	0.000	.4411006
_cons	2257.655	403.1755	5.60	0.000	•

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

Source	SS	df	MS	Number of obs - F(6, 111)	=	118 11.70
Model Residual	5022145.99 7940500.86	6 111	837024.33 71536.043	1 Prob > F 8 R-squared	=	0.0000 0.3874
Total	12962646.9	117	110791.85	Adj R-squaredRoot MSE	=	0.3543 267.46
Right_Hipp~s	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3 Sex	17.67871 0	57.6614 (omitted)	0.31	0.760		.0289846
w1Age	-3.865998	3.366935	-1.15	0.253	_	.1088121
Race	-105.2985	56.07314	-1.88	0.063	-	.1573827
PovStat	-17.20503	58.69484	-0.29	0.770	-	.0252136
TIME_V1SCAN	.0266185	.0408425	0.65	0.516		.0545605
ICV_volM2	.0018443	.0002739	6.73	0.000		.5498929
_cons	1648.555	430.5057	3.83	0.000		•

593 .
594 . //ANALYSIS C//
595 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if Sex==1,beta

Source	SS	df	MS	Number of obs	=	116
Model	201.295309	6	33.5492182	- F(6, 109) 2 Prob > F	=	2.12 0.0569
Residual	1726.56254	109	15.840023		_	0.1044
NC31dda1	1720.30234		15.040025.	- Adj R-squared	_	0.0551
Total	1927.85785	115	16.763981		=	3.98
 LnLesion_V~e	Coefficient	Std. err.	t	P> t		Beta
LnNFLw3	1.036071	.8768778	1.18	0.240		.1346558
Sex	0	(omitted)				•
w1Age	.1038047	.0502776	2.06	0.041		.2354836
Race	1.038382	.8479202	1.22	0.223		.1261385
PovStat	1.070467	.89166	1.20	0.233		.1274088
TIME_V1SCAN	0005077	.0006102	-0.83	0.407		085217
ICV volM2	4.61e-06	4.08e-06	1.13	0.261		.1126294
_cons	-9.411623	6.457405	-1.46	0.148		•
	1					

597 . 598 . **Model 2**

599 .

600 . use finaldata_imputed,clear

601 . 602 .

603 . //ANALYSIS A//

604 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imputation estimates	Imputations =	= 5
Linear regression	Number of obs =	118
	Average RVI =	0.0086
	Largest FMI =	0.0569
	Complete DF =	111
DF adjustment: Small sample	DF: min =	95.83
	avg =	106.60
	max =	109.05
Model F test: Equal FMI	F(6, 108.9) =	3.83
Within VCE type: OLS	Prob > F =	0.0017

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	11664.53 0	17242.98 (omitted)	0.68	0.500	-22512.76	45841.82
w1Age Race PovStat TIME_V1SCAN w1BMI	-2042.299 -55634.88 -15069.95 -8.022996 942.2224	970.9964 15226.41 16913.38 11.88621 1063.187	-2.10 -3.65 -0.89 -0.67 0.89	0.038 0.000 0.375 0.501 0.378	-3966.787 -85813.03 -48591.55 -31.58147 -1168.237	-117.8112 -25456.73 18451.65 15.53547 3052.681
_cons	1242711	72695.35	17.09	0.000	1098587	1386835

605 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imputation	on estimates	Imputations	=	5
Linear regression		Number of obs	=	118
		Average RVI	=	0.0112
		Largest FMI	=	0.0714
		Complete DF	=	111
DF adjustment:	Small sample	DF: min	=	91.00
		avg	=	105.71
		max	=	109.04
Model F test:	Equal FMI	F(6, 108.9)	=	6.03
Within VCE type:	OLS	Prob > F	=	0.0000

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3 Sex	-962.4555 0	9583.947 (omitted)	-0.10	0.920	-19959.37	18034.45
w1Age	-1402.329	539.2793	-2.60	0.011	-2471.171	-333.4868
Race	-41469.05	8455.69	-4.90	0.000	-58227.94	-24710.16
PovStat	-7386.172	9391.892	-0.79	0.433	-26000.52	11228.18
TIME_V1SCAN	-1.909788	6.603058	-0.29	0.773	-14.99721	11.17763
w1BMI	727.7466	594.6157	1.22	0.224	-453.3844	1908.878
_cons	731318.6	40449.87	18.08	0.000	651115.9	811521.2

606 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if Sex==1

Multiple-imput		Imputations		=	5		
Linear regress	sion			Number	of obs	=	118
				Average	RVI	=	0.0054
				Largest	FMI	=	0.0370
				Complet	e DF	=	111
DF adjustment:	: Small samp	le		DF:	min	=	101.81
-					avg	=	107.69
					max	=	109.05
Model F test:	Equal F	MI		F(6 ,	109.0)	=	1.76
Within VCE typ	oe: O	LS		Prob >	F	=	0.1142
WM	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	10732.89	8379.69	1.28	0.203	-5875.	967	27341.75
Sex	0	(omitted)					
w1Age	-859.6054	472.3231	-1.82	0.072	-1795.	733	76.52207
Race	-11786.88	7407.452	-1.59	0.114	-26468	.14	2894.38
PovStat	-7756.315	8228.514	-0.94	0.348	-24064	.88	8552.246
TIME_V1SCAN	-4.828531	5.780349	-0.84	0.405	-16.28	507	6.628005
w1BMI	282.092	512.1829	0.55	0.583	-733.8	436	1298.028
_cons	479529.5	35258.03	13.60	0.000	40963	6.8	549422.2

608 . //ANALYSIS B//

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

Multiple-imputation estimates Linear regression	Imputations Number of obs	=	5 118
	Average RVI	=	0.0080
	Largest FMI	=	0.0549
	Complete DF	=	110
DF adjustment: Small sample	DF: min	=	95.65
	avg	=	106.35
	max	=	108.05
Model F test: Equal FMI	F(7, 108.0)	=	7.36
Within VCE type: OLS	Prob > F	=	0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	1.920339	56.52328	0.03	0.973	-110.1253	113.9659
Sex	0	(omitted)				
w1Age	-5.662778	3.1693	-1.79	0.077	-11.94488	.6193188
Race	-124.2706	52.71846	-2.36	0.020	-228.7674	-19.77377
PovStat	-45.15114	55.20893	-0.82	0.415	-154.5842	64.28196
TIME V1SCAN	.0154596	.0387215	0.40	0.690	0612938	.0922129
w1BMI	1.580283	3.475508	0.45	0.650	-5.318872	8.479439
ICV volM2	.0013017	.0002588	5.03	0.000	.0007888	.0018147
_cons	2209.116	419.2316	5.27	0.000	1378.107	3040.126

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

Linear regress	tation estimat sion	es		Imputati Number o Average Largest	of obs RVI	= = = =	5 118 0.0107 0.0733
		_		Complete		=	110
DF adjustment	: Small samp	ole		DF:	min	=	89.61
					avg	=	105.55
					max	=	108.05
Model F test:	Equal F	MI		F(7 ,	107.9)	=	9.84
Within VCE typ	pe: O	DLS		Prob > F		=	0.0000
Right_Hipp~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
Right_Hipp~s LnNFLw3 Sex	Coefficient 21.17232 0	60.42983	t 0.35	P> t 0.727	[95% - 98.61		interval]
LnNFLw3 Sex	21.17232				-	894	
LnNFLw3	21.17232	60.42983 (omitted)	0.35	0.727	-98.61	894 287	140.9636
LnNFLw3 Sex w1Age	21.17232 0 -3.910295	60.42983 (omitted) 3.386482	0.35	0.727 0.251	-98.61 -10.62	894 287 317	140.9636
LnNFLw3 Sex w1Age Race PovStat	21.17232 0 -3.910295 -105.7767	60.42983 (omitted) 3.386482 56.32989	0.35 -1.15 -1.88	0.727 0.251 0.063	-98.61 -10.62 -217.4	894 287 317 305	140.9636 2.802284 5.87842
LnNFLw3 Sex w1Age Race	21.17232 0 -3.910295 -105.7767 -16.88906	60.42983 (omitted) 3.386482 56.32989 58.99684	0.35 -1.15 -1.88 -0.29	0.727 0.251 0.063 0.775	-98.61 -10.62 -217.4 -133.8	894 287 317 305 495	140.9636 2.802284 5.87842 100.0524
LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN	21.17232 0 -3.910295 -105.7767 -16.88906 .0276748	60.42983 (omitted) 3.386482 56.32989 58.99684 .0413806	0.35 -1.15 -1.88 -0.29 0.67	0.727 0.251 0.063 0.775 0.505	-98.61 -10.62 -217.4 -133.8 0543	894 287 317 305 495 334	140.9636 2.802284 5.87842 100.0524 .1096991

612 . //ANALYSIS C//

ICV_volM2

_cons

Multiple-imputation estimates

613 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if Sex==1

Imputations

.0000121

1.275692

cg. cs.	sion			Number o	f obs	=	116
				Average	RVI	=	0.0021
				Largest	FMI	=	0.0054
				Complete	DF	=	108
DF adjustment	: Small sampl	le		DF:	min	=	105.46
					avg	=	105.86
					max	=	105.98
Model F test:	Equal FM	1I		F(7 ,	106.0)	=	2.14
Within VCE ty	pe: OL	.S		Prob > F		=	0.0455
LnLesion_V~e	Coefficient	Std. err.	t	P> t	[95% cor	nf.	interval]
LnLesion_V~e LnNFLw3 Sex	1.392058	Std. err9060765 (omitted)	t 1.54	P> t 0.127	[95% cor		interval] 3.188472
LnNFLw3	1.392058	.9060765				2	
LnNFLw3 Sex	1.392058 0 (.0995718	.9060765 (omitted)	1.54	0.127	4043562	2 4	3.188472
LnNFLw3 Sex w1Age	1.392058 0 (.0995718 1.028254	.9060765 (omitted) .0501182	1.54	0.127 0.050	4043562	2 4 9	3.188472
LnNFLw3 Sex w1Age Race	1.392058 0 (.0995718 1.028254 1.103203	.9060765 (omitted) .0501182 .8442942	1.54 1.99 1.22	0.127 0.050 0.226	4043562 .0002074 6456619	2 4 9	3.188472 .1989362 2.702171
LnNFLw3 Sex w1Age Race PovStat	1.392058 0 (.0995718 1.028254 1.103203	.9060765 (omitted) .0501182 .8442942 .8876343	1.54 1.99 1.22 1.24	0.127 0.050 0.226 0.217	4043562 .0002074 6456619	2 4 9 8 7	3.188472 .1989362 2.702171 2.863028

0.99 0.324

-4.05e-06

-25.09802

4.05e-06 4.08e-06

-11.91116 6.651226 -1.79 0.076

615 . save, replace
 file finaldata_imputed.dta saved

616 . 617 .

618 .

619 . //INTERACTION BY Sex//

620 .

621 .

622 . //ANALYSIS A//

623 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
_	Average RVI	=	0.0102
	Largest FMI	=	0.0848
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	142.31
	avg	=	193.81
	max	=	202.00
Model F test: Equal FMI	F(8, 201. 8)	=	20.31
Within VCE type: OLS	Prob > F	=	0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	10527.74	18183.8	0.58	0.563	-25328.24	46383.71
Sex Men	188830	51937.03	3.64	0.000	86419.54	291240.5
Sex#c.LnNFLw3 Men	-23298.76	22348.75	-1.04	0.298	-67366.25	20768.73
Sex	ø	(omitted)				
w1Age	-2026.701	`823.8668	-2.46	0.015	-3651.188	-402.2132
Race	-69983.28	13307.17	-5.26	0.000	-96222.17	-43744.4
PovStat	-1174.602	14943.84	-0.08	0.937	-30640.51	28291.31
TIME_V1SCAN	-21.523	9.935045	-2.17	0.031	-41.11279	-1.933201
w1BMI	998.8974	1044.002	0.96	0.340	-1064.859	3062.654
_cons	1271565	69659.39	18.25	0.000	1134165	1408965

624 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

<pre>Imputations =</pre>	. 5
Number of obs =	213
Average RVI =	0.0146
Largest FMI =	0.1173
Complete DF =	204
DF: min =	115.78
avg =	189.97
max =	202.02
F(8, 201.5) =	21.52
Prob > F =	0.0000
	Number of obs = Average RVI = Largest FMI = Complete DF = DF: min = avg = max = F(8, 201.5) =

GM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	2877.268	9918.185	0.29	0.772	-16680.45	22434.99
Sex Men	102420.6	28314.98	3.62	0.000	46588.08	158253.2
Sex#c.LnNFLw3 Men	-14440.84	12182.63	-1.19	0.237	-38462.84	9581.161
Sex	0	(omitted)				
w1Age	-1808.416	448.9588	-4.03	0.000	-2693.667	-923.1651
Race	-48592.6	7252.976	-6.70	0.000	-62893.96	-34291.23
PovStat	471.8879	8142.28	0.06	0.954	-15582.87	16526.64
TIME_V1SCAN	-9.517853	5.415916	-1.76	0.080	-20.19696	1.161252
w1BMI	772.0843	578.3039	1.34	0.184	-373.3423	1917.511
_cons	755813.3	38132.49	19.82	0.000	680582.2	831044.4

625 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI

Multiple-imputation estimates	Imputations	=	5
Linear regression	Number of obs	=	213
	Average RVI	=	0.0075
	Largest FMI	=	0.0648
	Complete DF	=	204
DF adjustment: Small sample	DF: min	=	160.01
	avg	=	196.20
	max	=	201.98
Model F test: Equal FMI	F(8, 201.9)	=	13.77
Within VCE type: OLS	Prob > F	=	0.0000
	- 1.1		

WM	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
LnNFLw3	6423.689	8784.241	0.73	0.465	-10897.41	23744.79
Sex Men	81814.29	25104.93	3.26	0.001	32311.97	131316.6
Sex#c.LnNFLw3 Men	-11466.2	10802.71	-1.06	0.290	-32767.05	9834.655
Sex	0	(omitted)				
w1Age	-591.8866	398.2602	-1.49	0.139	-1377.169	193.396
Race	-19296.19	6431.435	-3.00	0.003	-31977.56	-6614.824
PovStat	-4810.075	7224.89	-0.67	0.506	-19055.96	9435.813
TIME_V1SCAN	-10.14187	4.801548	-2.11	0.036	-19.60947	6742771
w1BMI	253.0881	499.6394	0.51	0.613	-733.6502	1239.826
_cons	494504	33587.91	14.72	0.000	428260.1	560747.9

628 .

629 . //ANALYSIS B//

Linear regression

Multiple-imputation estimates

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

Imputations

Number of obs

213

rillear Legiessi	1011			Number		_	213
				Average	RVI	=	0.0216
				Largest	FMI	=	0.1738
				Complete	DF	=	203
DF adjustment:	Small samp	le		DF:	min	=	80.20
					avg	=	187.42
					max	=	200.91
Model F test:	Equal F	ΝI		F(9 ,	200.3)	=	20.58
Within VCE type	e: 0 I	LS		Prob > F	•	=	0.0000
Left Hippoc~s	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	-21.48788	58.49279	-0.37	0.714	-136.	8407	93.86492
Sex							
Men	329.6794	173.492	1.90	0.059	-12.4	5084	671.8096
Sex#c.LnNFLw3							
Men	-156.381	71.89298	-2.18	0.031	-298.	1508	-14.6113
Sex	0	(omitted)					
w1Age	-4.474496	2.638531	-1.70	0.091	-9.67	7305	.7283121
Race	-64.17513	46.08519	-1.39	0.165	-155.	0484	26.69811
PovStat	-81.97587	47.83514	-1.71	0.088	-176.	2992	12.34748
TIME_V1SCAN	0051153	.0320219	-0.16	0.873	068	2575	.0580268
w1BMI	1.615788	3.508434	0.46	0.646	-5.36	5946	8.597523
ICV_volM2	.0017205	.0001973	8.72	0.000	.001		.0021095
_cons	1681.436	350.8802	4.79	0.000	989.	4599	2373.412

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

Multiple-imputa Linear regressi	ion		Imputations Number of ob Average RVI Largest FMI Complete DF	= DS = = = =	5 213 0.0240 0.1904 203
DF adjustment:	Small sample		DF: min avg max	= = =	72.35 186.40 200.90
Model F test: Within VCE type	Equal FMI e: OLS		F(9, 20 6 Prob > F	0.1) = =	23.33
Right_Hippo~s	Coefficient Std. 6	err. t	P> t [95% conf.	interval]
LnNFLw3	16.67719 60.86	641 0.27	0.784 -1	103.3546	136.7089
Sex Men	268.0335 180.50	908 1.48	0.139 -8	37.92366	623.9906
Sex#c.LnNFLw3 Men	-152.311 74.78	341 -2.04	0.043 -2	299.7832	-4.838708
Sex w1Age Race	0 (omitte -4.040172 2.7437 -60.19645 47.925	733 -1.47		9.450432 L54.6987	1.370088 34.30582

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PovStat	-61.32502	49.73793	-1.23	0.219	-159.4004	36.75033
TIME_V1SCAN	.0159377	.0332983	0.48	0.633	0497214	.0815967
w1BMI	2.119381	3.680508	0.58	0.567	-5.216975	9.455736
ICV_volM2	.0021086	.0002051	10.28	0.000	.001704	.0025131
_cons	1280.35	365.0812	3.51	0.001	560.3533	2000.346

632 .

633 . //ANALYSIS C//

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

Multiple-imputation estimates Linear regression				Imputat: Number of Average	of obs RVI	= = =	5 209 0.0523
				Largest Complete		=	0.3533 199
DF adjustment:	Small sampl	e		DF:	min	=	30.41
					avg	=	174.34
					max	=	196.86
Model F test:	Equal FM	I		F(9,	193.4)	=	1.29
Within VCE type: OLS				Prob > 1	F	=	0.2427
	Coefficient	Std. err.	t	P> t	[95%	conf.	interval]
LnNFLw3	1.365678	.8191359	1.67	0.097	250	4585	2.981814
Sex	2 077191	2 424542	1 6/	0 103	- 806	1220	8 760496

LnLesion_Vo~e	Coefficient	Std. err.	t	P> t	[95% conf.	interval
LnNFLw3	1.365678	.8191359	1.67	0.097	2504585	2.981814
Sex Men	3.977181	2.424542	1.64	0.103	8061338	8.760496
Sex#c.LnNFLw3 Men	-1.673007	1.008973	-1.66	0.099	-3.663308	.3172933
Sex	0	(omitted)				
w1Age	.0674144	.0363774	1.85	0.065	0043268	.1391557
Race	.5880599	.6310862	0.93	0.353	6564973	1.832617
PovStat	.325845	.6598178	0.49	0.622	9753989	1.627089
TIME_V1SCAN	0001348	.0004346	-0.31	0.757	0009918	.0007223
w1BMI	.0344447	.0529782	0.65	0.520	0736903	.1425797
ICV_volM2	1.11e-06	2.68e-06	0.42	0.679	-4.17e-06	6.39e-06
_cons	-4.121911	4.869601	-0.85	0.398	-13.73332	5.489498

635 .

636 . save, replace

file finaldata_imputed.dta saved

637 **.** 638 **.**

639 .

640 .

641 . capture log close