```
 1 .
 2 .
 3 .
 4 . ////////////////////////////////////////TABLES 3 AND S4/////////////////////////////////////////////
   >
 5 .
 6 . **********************TABLE 3: LnNFLw3, MODELS 1 AND 2*********************
 7 .
 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 if sample_final2==1,beta
```

Source	SS	df	MS		
Model	1.0720e+12	6	1.7866e+11	Number of obs	= 163
Residual	1.1837e+12	156	7.5879e+09	F(6, 156)	= 23.55
				Prob > F	= 0.0000
Total	2.2557e+12	162	1.3924e+10	R-squared	= 0.4752
				Adj R-squared	= 0.4550
				Root MSE	= 87108

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	4588.47	15462.14	0.30	0.767	.0205686
Sex	143765.8	13906.99	10.34	0.000	.6038276
w1Age	-2489.008	877.3232	-2.84	0.005	-.1960595
Race	-66348.33	14866.05	-4.46	0.000	-.2775056
PovStat	-2281.243	16761.82	-0.14	0.892	-.0088918
TIME_V1SCAN	-16.94909	11.88346	-1.43	0.156	-.091517
_cons	1177766	59194.72	19.90	0.000	.

```
16 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1,beta
```

Source	SS	df	MS		
Model	3.4766e+11	6	5.7943e+10	Number of obs	= 163
Residual	3.3219e+11	156	2.1294e+09	F(6, 156)	= 27.21
				Prob > F	= 0.0000
Total	6.7984e+11	162	4.1966e+09	R-squared	= 0.5114
				Adj R-squared	= 0.4926
				Root MSE	= 46145

GM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-969.9696	8191.008	-0.12	0.906	-.0079201
Sex	75839.13	7367.174	10.29	0.000	.580208
w1Age	-2065.093	464.7584	-4.44	0.000	-.2963019
Race	-46123.44	7875.227	-5.86	0.000	-.3513958
PovStat	-3828.761	8879.508	-0.43	0.667	-.0271838
TIME_V1SCAN	-5.166087	6.295213	-0.82	0.413	-.0508101
_cons	715825.6	31358.16	22.83	0.000	.

```
17 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(6, 156)	=	14.80
Model	1.6579e+11	6	2.7632e+10	Prob > F	=	0.0000
Residual	2.9126e+11	156	1.8671e+09	R-squared	=	0.3627
				Adj R-squared	=	0.3382
Total	4.5705e+11	162	2.8213e+09	Root MSE	=	43210

WM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	2435.997	7669.919	0.32	0.751	.0242587
Sex	58276.6	6898.495	8.45	0.000	.5437572
w1Age	-810.6329	435.1918	-1.86	0.064	-.1418533
Race	-18537.85	7374.228	-2.51	0.013	-.1722482
PovStat	-3851.998	8314.619	-0.46	0.644	-.0333548
TIME_V1SCAN	-9.785833	5.89473	-1.66	0.099	-.1173833
_cons	458885.1	29363.25	15.63	0.000	.

```
18 .
19 . //ANALYSIS B//
20 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(7, 155)	=	18.95
Model	11291477.7	7	1613068.24	Prob > F	=	0.0000
Residual	13194485.6	155	85125.7135	R-squared	=	0.4611
				Adj R-squared	=	0.4368
Total	24485963.3	162	151147.921	Root MSE	=	291.76

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-97.3258	51.82448	-1.88	0.062	-.1324173
Sex	7.945135	63.96514	0.12	0.901	.0101283
w1Age	-4.533082	2.945609	-1.54	0.126	-.1083762
Race	-109.2668	53.66401	-2.04	0.043	-.1387103
PovStat	-155.1574	56.16401	-2.76	0.006	-.1835568
TIME_V1SCAN	.0301416	.0399131	0.76	0.451	.049397
ICV_volM2	.0016027	.0002346	6.83	0.000	.587839
_cons	2112.773	353.9768	5.97	0.000	.

```
21 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(7, 155)	=	22.85
Model	14359179.8	7	2051311.4	Prob > F	=	0.0000
Residual	13914789	155	89772.8324	R-squared	=	0.5079
				Adj R-squared	=	0.4856
Total	28273968.8	162	174530.672	Root MSE	=	299.62

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-83.79742	53.22026	-1.57	0.117	-.1060993
Sex	-97.19121	65.68791	-1.48	0.141	-.1152997
w1Age	-3.044304	3.024943	-1.01	0.316	-.067732
Race	-113.3112	55.10934	-2.06	0.041	-.1338625
PovStat	-144.8743	57.67667	-2.51	0.013	-.1594978
TIME_V1SCAN	.0691629	.0409881	1.69	0.094	.1054805
ICV_volM2	.0021053	.0002409	8.74	0.000	.7186189
_cons	1690.343	363.5105	4.65	0.000	.

```
22 .
23 . //ANALYSIS C//
24 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1, beta
```

Source	SS	df	MS		
				Number of obs	= 163
				F(7, 155)	= 1.72
Model	186.870325	7	26.6957608	Prob > F	= 0.1074
Residual	2402.03717	155	15.497014	R-squared	= 0.0722
				Adj R-squared	= 0.0303
Total	2588.9075	162	15.9809105	Root MSE	= 3.9366

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	.9859345	.6992437	1.41	0.161	.1304563
Sex	.1834878	.8630521	0.21	0.832	.022748
w1Age	.0567112	.0397437	1.43	0.156	.131859
Race	1.329848	.7240636	1.84	0.068	.1641811
PovStat	1.078799	.757795	1.42	0.157	.1241192
TIME_V1SCAN	-.0009008	.0005385	-1.67	0.096	-.1435772
ICV_volM2	2.71e-06	3.17e-06	0.86	0.393	.0966412
_cons	-4.67217	4.776046	-0.98	0.329	.

```
25 .
26 .
27 .
28 . **Model 2: BMI-Adjusted**
29 .
30 . use finaldata_imputed_final,clear

31 .
32 .
33 . //ANALYSIS A//
34 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        155
DF adjustment:   Small sample                   DF:     min       =     153.04
                                                        avg       =     153.04
                                                        max       =     153.04
Model F test:       Equal FMI                   F(   7,  153.0)   =      20.19
Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6385.695	15698.67	0.41	0.685	-24628.39	37399.78
Sex	145067	14053.15	10.32	0.000	117303.8	172830.2
w1Age	-2557.363	884.1646	-2.89	0.004	-4304.106	-810.6192
Race	-66232.03	14891.31	-4.45	0.000	-95651.11	-36812.95
PovStat	-2692.184	16799.52	-0.16	0.873	-35881.09	30496.73
TIME_V1SCAN	-16.40776	11.92799	-1.38	0.171	-39.97254	7.157022
w1BMI	755.5304	1078.918	0.70	0.485	-1375.965	2887.026
_cons	1152305	69552.02	16.57	0.000	1014899	1289711

35 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1

Multiple-imputation estimates		Imputations	= 5
Linear regression		Number of obs	= 163
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 155
DF adjustment:	Small sample	DF: min	= 153.04
		avg	= 153.04
		max	= 153.04
Model F test:	Equal FMI	F(7, 153.0)	= 23.41
Within VCE type:	OLS	Prob > F	= 0.0000

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	253.0426	8307.751	0.03	0.976	-16159.64	16665.72
Sex	76724.57	7436.937	10.32	0.000	62032.26	91416.88
w1Age	-2111.609	467.9007	-4.51	0.000	-3035.987	-1187.231
Race	-46044.3	7880.496	-5.84	0.000	-61612.9	-30475.7
PovStat	-4108.406	8890.321	-0.46	0.645	-21672	13455.19
TIME_V1SCAN	-4.797708	6.312304	-0.76	0.448	-17.26821	7.672793
w1BMI	514.1386	570.9643	0.90	0.369	-613.8508	1642.128
_cons	698499.3	36806.99	18.98	0.000	625783.9	771214.7

36 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1

Multiple-imputation estimates		Imputations	= 5
Linear regression		Number of obs	= 163
		Average RVI	= 0.0000
		Largest FMI	= 0.0000
		Complete DF	= 155
DF adjustment:	Small sample	DF: min	= 153.04
		avg	= 153.04
		max	= 153.04
Model F test:	Equal FMI	F(7, 153.0)	= 12.64
Within VCE type:	OLS	Prob > F	= 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2980.331	7794.971	0.38	0.703	-12419.31	18379.97
Sex	58670.68	6977.906	8.41	0.000	44885.23	72456.14
w1Age	-831.336	439.0204	-1.89	0.060	-1698.659	35.98666
Race	-18502.62	7394.087	-2.50	0.013	-33110.28	-3894.965
PovStat	-3976.462	8341.583	-0.48	0.634	-20455.98	12503.06
TIME_V1SCAN	-9.621876	5.922689	-1.62	0.106	-21.32266	2.078907
w1BMI	228.831	535.7226	0.43	0.670	-829.5353	1287.197
_cons	451173.6	34535.15	13.06	0.000	382946.4	519400.8

```
37 .
38 . //ANALYSIS B//
39 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        154
DF adjustment:   Small sample                   DF:     min       =     152.04
                                                        avg       =     152.04
                                                        max       =     152.04
Model F test:       Equal FMI                   F(   8,  152.0)   =      16.64
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -90.01424   52.60028    -1.71   0.089    -193.9361    13.90761
          Sex |   15.23921   64.61328     0.24   0.814    -112.4166     142.895
        w1Age |  -4.817364   2.967811    -1.62   0.107    -10.68084    1.046111
         Race |  -109.7425   53.71823    -2.04   0.043    -215.8731   -3.611974
      PovStat |  -156.8819   56.25516    -2.79   0.006    -268.0247   -45.73918
  TIME_V1SCAN |    .032177   .0400247     0.80   0.423    -.0468994    .1112535
        w1BMI |   3.035855   3.616967     0.84   0.403     -4.11015    10.18186
    ICV_volM2 |   .0015916   .0002352     6.77   0.000      .001127    .0020563
        _cons |   2024.284   369.6672     5.48   0.000     1293.936    2754.632
------------------------------------------------------------------------------

40 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        154
DF adjustment:   Small sample                   DF:     min       =     152.04
                                                        avg       =     152.04
                                                        max       =     152.04
Model F test:       Equal FMI                   F(   8,  152.0)   =      20.09
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hipp~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -75.46732   53.98844    -1.40   0.164    -182.1317    31.19709
          Sex |  -88.88103   66.31847    -1.34   0.182    -219.9058     42.1437
        w1Age |  -3.368188   3.046134    -1.11   0.271    -9.386404    2.650027
         Race |  -113.8533   55.13588    -2.06   0.041    -222.7847   -4.92186
      PovStat |  -146.8391   57.73977    -2.54   0.012     -260.915   -32.76321
  TIME_V1SCAN |   .0714818    .041081     1.74   0.084    -.0096815    .1526452
        w1BMI |   3.458767   3.712421     0.93   0.353    -3.875826    10.79336
    ICV_volM2 |   .0020928   .0002414     8.67   0.000     .0016159    .0025696
        _cons |   1589.528   379.4229     4.19   0.000     839.9055     2339.15
------------------------------------------------------------------------------
```

```
41 .
42 . //ANALYSIS C//
43 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        154
DF adjustment:   Small sample                   DF:     min       =     152.04
                                                        avg       =     152.04
                                                        max       =     152.04
Model F test:       Equal FMI                   F(   8,  152.0)   =       1.59
Within VCE type:          OLS                   Prob > F          =     0.1333

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   1.081095   .7098242     1.52   0.130    -.3212975    2.483487
          Sex |   .2784208   .8719357     0.32   0.750    -1.444254    2.001095
        w1Age |   .0530112   .0400497     1.32   0.188    -.0261145     .132137
         Race |   1.323656   .7249104     1.83   0.070    -.1085418    2.755855
      PovStat |   1.056354   .7591455     1.39   0.166    -.4434823     2.55619
  TIME_V1SCAN |  -.0008744   .0005401    -1.62   0.108    -.0019415    .0001928
       w1BMI |   .0395119   .0488098     0.81   0.419    -.0569212     .135945
    ICV_volM2 |   2.57e-06   3.17e-06     0.81   0.420    -3.70e-06    8.84e-06
        _cons |  -5.823861   4.988541    -1.17   0.245    -15.67967    4.031949
------------------------------------------------------------------------------

44 .
45 . save, replace
file finaldata_imputed_final.dta saved

46 .
47 . ********************MALES************************************************************
48 .
49 . **Model 1**
50 .
51 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

52 .
53 . //ANALYSIS A//
54 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        69
-------------+----------------------------------   F(5, 63)        =      3.71
       Model |  1.8752e+11         5  3.7504e+10   Prob > F        =    0.0052
    Residual |  6.3682e+11        63  1.0108e+10   R-squared       =    0.2275
-------------+----------------------------------   Adj R-squared   =    0.1662
       Total |  8.2434e+11        68  1.2123e+10   Root MSE        =    1.0e+05

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
      LnNFLw3 |  -7854.857   27598.99    -0.28   0.777               -.0360157
          Sex |          0  (omitted)                                        .
        w1Age |  -2565.517   1535.045    -1.67   0.100               -.2054453
         Race |  -87594.58   26768.26    -3.27   0.002                -.393523
      PovStat |   22532.17   30230.15     0.75   0.459                .0888283
  TIME_V1SCAN |  -33.35635   20.76626    -1.61   0.113               -.1869278
        _cons |    1527782   106054.2    14.41   0.000                       .
------------------------------------------------------------------------------
```

```
55 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        69
-------------+----------------------------------   F(5, 63)        =      6.13
       Model |  8.1681e+10         5  1.6336e+10   Prob > F        =    0.0001
    Residual |  1.6779e+11        63  2.6633e+09   R-squared       =    0.3274
-------------+----------------------------------   Adj R-squared   =    0.2740
       Total |  2.4947e+11        68  3.6686e+09   Root MSE        =     51607

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
       LnNFLw3 |  -6322.813   14166.55    -0.45   0.657               -.0526999
         Sex |           0  (omitted)                                        .
       w1Age |  -2510.347    787.938    -3.19   0.002               -.3654274
        Race |  -58385.24   13740.14    -4.25   0.000               -.4768063
     PovStat |    5987.46   15517.12     0.39   0.701                .0429079
  TIME_V1SCAN |  -11.40123   10.65931    -1.07   0.289               -.116143
       _cons |   918209.5   54437.58    16.87   0.000                      .
------------------------------------------------------------------------------

56 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        69
-------------+----------------------------------   F(5, 63)        =      2.17
       Model |  2.7415e+10         5  5.4829e+09   Prob > F        =    0.0690
    Residual |  1.5946e+11        63  2.5311e+09   R-squared       =    0.1467
-------------+----------------------------------   Adj R-squared   =    0.0790
       Total |  1.8687e+11        68  2.7481e+09   Root MSE        =     50310

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
       LnNFLw3 |  -4227.944   13810.45    -0.31   0.761               -.0407158
         Sex |           0  (omitted)                                        .
       w1Age |  -667.9388   768.1321    -0.87   0.388               -.1123411
        Race |  -27883.57   13394.76    -2.08   0.041               -.2631007
     PovStat |   6101.178   15127.08     0.40   0.688                .0505176
  TIME_V1SCAN |  -20.2084   10.39138    -1.94   0.056               -.2378526
       _cons |   604492.3   53069.22    11.39   0.000                      .
------------------------------------------------------------------------------

57 .
58 .
59 . //ANALYSIS B//
60 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        69
-------------+----------------------------------   F(6, 62)        =      8.71
       Model |  5690739.81         6  948456.635   Prob > F        =    0.0000
    Residual |  6751643.22        62  108897.471   R-squared       =    0.4574
-------------+----------------------------------   Adj R-squared   =    0.4049
       Total |    12442383        68  182976.221   Root MSE        =       330
```

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-108.3088	90.71727	-1.19	0.237	-.1278258
Sex	0	(omitted)			.
w1Age	-3.913135	5.039197	-0.78	0.440	-.0806581
Race	-11.58759	97.08127	-0.12	0.905	-.0133995
PovStat	-242.1219	99.47468	-2.43	0.018	-.2456879
TIME_V1SCAN	-.0076195	.0690123	-0.11	0.912	-.0109906
ICV_volM2	.0021028	.0003676	5.72	0.000	.6094617
_cons	1444.173	708.8667	2.04	0.046	.

61 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
Model	7172765.19	6	1195460.86	Number of obs	= 69
Residual	6950491.81	62	112104.707	F(6, 62)	= 10.66
Total	14123257	68	207694.956	Prob > F	= 0.0000
				R-squared	= 0.5079
				Adj R-squared	= 0.4602
				Root MSE	= 334.82

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-97.79676	92.04348	-1.06	0.292	-.1083337
Sex	0	(omitted)			.
w1Age	-3.565111	5.112865	-0.70	0.488	-.0689732
Race	-26.643	98.50051	-0.27	0.788	-.0289176
PovStat	-235.2956	100.9289	-2.33	0.023	-.2241031
TIME_V1SCAN	.0442556	.0700212	0.63	0.530	.0599169
ICV_volM2	.0024812	.000373	6.65	0.000	.6749909
_cons	1048.015	719.2297	1.46	0.150	.

62 .
63 . //ANALYSIS C//
64 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
Model	36.3335749	6	6.05559582	Number of obs	= 69
Residual	651.812342	62	10.5131023	F(6, 62)	= 0.58
Total	688.145917	68	10.1197929	Prob > F	= 0.7480
				R-squared	= 0.0528
				Adj R-squared	= -0.0389
				Root MSE	= 3.2424

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	.0827466	.8913465	0.09	0.926	.0131316
Sex	0	(omitted)			.
w1Age	-.0191229	.0495128	-0.39	0.701	-.0530016
Race	1.162285	.9538762	1.22	0.228	.1807253
PovStat	.6269264	.9773928	0.64	0.524	.0855417
TIME_V1SCAN	-.0006919	.0006781	-1.02	0.312	-.1341971
ICV_volM2	4.46e-07	3.61e-06	0.12	0.902	.0173784
_cons	5.057789	6.965	0.73	0.470	.

```
65 .
66 .
67 . **Model 2**
68 .
69 . use finaldata_imputed_final,clear

70 .
71 .
72 . //ANALYSIS A//
73 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       3.11
Within VCE type:          OLS                   Prob > F          =     0.0102

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |    -7874.2   27750.97    -0.28   0.778    -63382.66    47634.26
         Sex |          0  (omitted)
       w1Age |  -2896.134    1653.13    -1.75   0.085    -6202.781    410.5127
        Race |  -89224.77   27073.47    -3.30   0.002    -143378.1   -35071.48
     PovStat |   22886.37   30403.22     0.75   0.455    -37927.21    83699.94
  TIME_V1SCAN |  -33.00031   20.89033    -1.58   0.119    -74.78588    8.785256
       w1BMI |    1480.09   2650.195     0.56   0.579    -3820.922    6781.102
       _cons |    1502998   115503.4    13.01   0.000      1271964     1734032
------------------------------------------------------------------------------

74 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       5.17
Within VCE type:          OLS                   Prob > F          =     0.0002

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   -6336.084   14216.35    -0.45   0.657    -34772.13    22099.96
         Sex |          0  (omitted)
       w1Age |  -2737.177   846.8703    -3.23   0.002    -4431.116   -1043.237
        Race |  -59503.68   13869.28    -4.29   0.000    -87245.49   -31761.86
     PovStat |   6230.466   15575.05     0.40   0.691     -24923.3    37384.23
  TIME_V1SCAN |  -11.15696   10.70176    -1.04   0.301      -32.563    10.24908
       w1BMI |    1015.461    1357.65     0.75   0.457    -1700.158    3731.079
       _cons |    901205.7   59170.41    15.23   0.000       782851     1019560
------------------------------------------------------------------------------
```

```
75 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       1.79
Within VCE type:          OLS                   Prob > F          =     0.1168

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -4232.176   13914.73    -0.30   0.762     -32064.9    23600.55
         Sex |          0  (omitted)
       w1Age |  -740.2732   828.9026    -0.89   0.375    -2398.273    917.7265
        Race |  -28240.23   13575.02    -2.08   0.042    -55393.46   -1087.006
     PovStat |   6178.671    15244.6     0.41   0.687    -24314.12    36671.46
  TIME_V1SCAN |  -20.1305   10.47471    -1.92   0.059    -41.08238    .8213726
       w1BMI |   323.8228   1328.845     0.24   0.808     -2334.18    2981.825
       _cons |     599070   57915.02    10.34   0.000     483226.4    714913.6
------------------------------------------------------------------------------

76 .
77 .
78 . //ANALYSIS B//
79 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         61
DF adjustment:   Small sample                   DF:     min       =      59.09
                                                        avg       =      59.09
                                                        max       =      59.09
Model F test:       Equal FMI                   F(   7,   59.1)   =       7.91
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -108.7653   89.89874    -1.21   0.231    -288.6463    71.1157
         Sex |          0  (omitted)
       w1Age |  -6.718996   5.350202    -1.26   0.214    -17.42437    3.986377
        Race |  -27.87933   96.84872    -0.29   0.774    -221.6667    165.9081
     PovStat |  -238.6963   98.60441    -2.42   0.019    -435.9967   -41.39584
  TIME_V1SCAN |   -.005254   .0684084    -0.08   0.939    -.1421343    .1316264
       w1BMI |   12.53694   8.580239     1.46   0.149    -4.631508    29.70539
    ICV_volM2 |   .0020807   .0003646     5.71   0.000     .0013512    .0028102
       _cons |   1271.379   712.3514     1.78   0.079    -153.9856    2696.743
------------------------------------------------------------------------------
```

```
80 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         61
DF adjustment:   Small sample                   DF:     min       =      59.09
                                                        avg       =      59.09
                                                        max       =      59.09
Model F test:       Equal FMI                   F(   7,   59.1)   =      10.53
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hipp~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -98.50859    89.0125    -1.11   0.273    -276.6163     79.5991
          Sex |          0  (omitted)
        w1Age |  -7.940389   5.297459    -1.50   0.139    -18.54023    2.659449
         Race |  -52.04728   95.89396    -0.54   0.589    -243.9243    139.8297
      PovStat |  -229.9539   97.63235    -2.36   0.022    -425.3093   -34.59847
  TIME_V1SCAN |   .0479442    .067734     0.71   0.482    -.0875867    .1834752
        w1BMI |   19.54929   8.495653     2.30   0.025     2.550093    36.54849
    ICV_volM2 |   .0024467    .000361     6.78   0.000     .0017244    .0031691
        _cons |   778.5701   705.3289     1.10   0.274    -632.7428    2189.883
------------------------------------------------------------------------------

81 .
82 . //ANALYSIS C//
83 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         61
DF adjustment:   Small sample                   DF:     min       =      59.09
                                                        avg       =      59.09
                                                        max       =      59.09
Model F test:       Equal FMI                   F(   7,   59.1)   =       0.49
Within VCE type:          OLS                   Prob > F          =     0.8350

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   .0834902   .8982107     0.09   0.926    -1.713766    1.880746
          Sex |          0  (omitted)
        w1Age |  -.0145527   .0534558    -0.27   0.786     -.121514    .0924085
         Race |   1.188821   .9676504     1.23   0.224    -.7473784    3.125021
      PovStat |   .6213467   .9851922     0.63   0.531    -1.349953    2.592646
  TIME_V1SCAN |  -.0006957   .0006835    -1.02   0.313    -.0020634    .0006719
        w1BMI |  -.0204203   .0857283    -0.24   0.813    -.1919564    .1511159
    ICV_volM2 |   4.82e-07   3.64e-06     0.13   0.895    -6.81e-06    7.77e-06
        _cons |   5.339238   7.117359     0.75   0.456    -8.902092    19.58057
------------------------------------------------------------------------------
```

```
84 .
85 . save, replace
   file finaldata_imputed_final.dta saved

86 .
87 .
88 .
89 .
90 .
91 . ********************FEMALES************************************************************
92 .
93 . **Model 1**
94 .
95 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

96 .
97 . //ANALYSIS A//
98 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==1,beta
   note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        94
-------------+----------------------------------   F(5, 88)        =      3.80
       Model |  1.0991e+11         5  2.1981e+10   Prob > F        =    0.0037
    Residual |  5.0953e+11        88  5.7901e+09   R-squared       =    0.1774
-------------+----------------------------------   Adj R-squared   =    0.1307
       Total |  6.1943e+11        93  6.6606e+09   Root MSE        =     76093

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
     LnNFLw3 |   6306.998   19046.62     0.33   0.741                .0422214
         Sex |          0  (omitted)                                        .
       w1Age |  -2520.25    1042.429    -2.42   0.018               -.2980802
        Race |  -53985.8    17070.95    -3.16   0.002               -.3276663
     PovStat |  -24938.52   20164.58    -1.24   0.219               -.1455728
  TIME_V1SCAN |  -.2820661    14.1904    -0.02   0.984                -.002262
       _cons |    1299177   62225.23    20.88   0.000                       .
------------------------------------------------------------------------------

99 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==1,beta
   note: Sex omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =        94
-------------+----------------------------------   F(5, 88)        =      6.24
       Model |  5.4780e+10         5  1.0956e+10   Prob > F        =    0.0001
    Residual |  1.5460e+11        88  1.7568e+09   R-squared       =    0.2616
-------------+----------------------------------   Adj R-squared   =    0.2197
       Total |  2.0938e+11        93  2.2514e+09   Root MSE        =     41914

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
     LnNFLw3 |  -2252.551   10491.42    -0.21   0.830               -.0259369
         Sex |          0  (omitted)                                        .
       w1Age |  -1767.961   574.1995    -3.08   0.003               -.3596632
        Race |  -39387.35   9403.167    -4.19   0.000               -.4111902
     PovStat |  -12993.09   11107.22    -1.17   0.245               -.1304535
  TIME_V1SCAN |   1.580598   7.816477     0.20   0.840                .021802
       _cons |   769758.3   34275.43    22.46   0.000                       .
------------------------------------------------------------------------------
```

```
100 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==1,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	94
				F(5, 88)	=	1.78
Model	1.2307e+10	5	2.4614e+09	Prob > F	=	0.1260
Residual	1.2194e+11	88	1.3857e+09	R-squared	=	0.0917
				Adj R-squared	=	0.0401
Total	1.3425e+11	93	1.4436e+09	Root MSE	=	37226

WM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	5895.266	9317.862	0.63	0.529	.0847716
Sex	0	(omitted)			.
w1Age	-1003.782	509.9702	-1.97	0.052	-.2550152
Race	-12794.21	8351.339	-1.53	0.129	-.1668026
PovStat	-13566.44	9864.783	-1.38	0.173	-.1701032
TIME_V1SCAN	-.4257614	6.942134	-0.06	0.951	-.0073341
_cons	505194.5	30441.42	16.60	0.000	.

```
101 .
102 .
103 . //ANALYSIS B//
104 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	94
				F(6, 87)	=	6.54
Model	2538356.28	6	423059.379	Prob > F	=	0.0000
Residual	5626225.18	87	64669.255	R-squared	=	0.3109
				Adj R-squared	=	0.2634
Total	8164581.46	93	87791.1985	Root MSE	=	254.3

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-30.53125	63.97282	-0.48	0.634	-.0562969
Sex	0	(omitted)			.
w1Age	-6.935339	3.517041	-1.97	0.052	-.2259372
Race	-176.0809	60.69077	-2.90	0.005	-.294371
PovStat	-115.2062	67.90953	-1.70	0.093	-.1852319
TIME_V1SCAN	.0570559	.0474358	1.20	0.232	.1260293
ICV_volM2	.0010134	.0003058	3.31	0.001	.3244211
_cons	2819.451	479.8644	5.88	0.000	.

```
105 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	94
				F(6, 87)	=	9.34
Model	4119829.65	6	686638.275	Prob > F	=	0.0000
Residual	6396042.88	87	73517.7343	R-squared	=	0.3918
				Adj R-squared	=	0.3498
Total	10515872.5	93	113073.898	Root MSE	=	271.14

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-25.05324	68.20914	-0.37	0.714	-.0407051
Sex	0	(omitted)			.
w1Age	-4.269822	3.749942	-1.14	0.258	-.1225672
Race	-172.0524	64.70976	-2.66	0.009	-.2534473
PovStat	-89.7832	72.40655	-1.24	0.218	-.1271977
TIME_V1SCAN	.0830688	.050577	1.64	0.104	.1616788
ICV_volM2	.0016943	.0003261	5.20	0.000	.4779062
_cons	2023.298	511.6414	3.95	0.000	.

```
106 .
107 . //ANALYSIS C//
108 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS		
				Number of obs	= 94
				F(6, 87)	= 2.08
Model	235.66457	6	39.2774283	Prob > F	= 0.0637
Residual	1643.03561	87	18.8854668	R-squared	= 0.1254
				Adj R-squared	= 0.0651
Total	1878.70018	93	20.2010773	Root MSE	= 4.3457

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	1.408077	1.093227	1.29	0.201	.1711611
Sex	0	(omitted)			.
w1Age	.1068177	.0601025	1.78	0.079	.2294042
Race	1.298228	1.037141	1.25	0.214	.1430777
PovStat	1.947288	1.160501	1.68	0.097	.2063994
TIME_V1SCAN	-.0011473	.0008106	-1.42	0.161	-.16707
ICV_volM2	6.11e-06	5.23e-06	1.17	0.245	.1290243
_cons	-12.69257	8.20037	-1.55	0.125	.

```
109 .
110 .
111 . **Model 2**
112 .
113 . use finaldata_imputed_final,clear

114 .
115 .
116 . //ANALYSIS A//
117 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         87
DF adjustment:   Small sample                   DF:     min       =      85.07
                                                        avg       =      85.07
                                                        max       =      85.07
Model F test:       Equal FMI                   F(   6,   85.1)   =       3.29
Within VCE type:          OLS                   Prob > F          =     0.0058
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	9718.497	19435.52	0.50	0.618	-28924.08	48361.08
Sex	0	(omitted)				
w1Age	-2537.418	1043.677	-2.43	0.017	-4612.504	-462.3318
Race	-53458.82	17098.49	-3.13	0.002	-87454.81	-19462.82
PovStat	-25580.48	20197.85	-1.27	0.209	-65738.77	14577.81
TIME_V1SCAN	1.032478	14.27915	0.07	0.943	-27.35798	29.42293
w1BMI	1005.081	1110.845	0.90	0.368	-1203.55	3213.713
_cons	1259759	76012.91	16.57	0.000	1108627	1410891

118 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 87
DF adjustment: Small sample — DF: min = 85.07
avg = 85.07
max = 85.07
Model F test: Equal FMI — F(6, 85.1) = 5.43
Within VCE type: OLS — Prob > F = 0.0001

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	88.21451	10677.82	0.01	0.993	-21141.9	21318.33
Sex	0	(omitted)				
w1Age	-1779.741	573.3931	-3.10	0.003	-2919.787	-639.695
Race	-39025.77	9393.86	-4.15	0.000	-57703.07	-20348.47
PovStat	-13433.56	11096.64	-1.21	0.229	-35496.41	8629.283
TIME_V1SCAN	2.482559	7.844923	0.32	0.752	-13.11507	18.08019
w1BMI	689.6263	610.2948	1.13	0.262	-523.7895	1903.042
_cons	742712.1	41761.27	17.78	0.000	659680.4	825743.7

119 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 87
DF adjustment: Small sample — DF: min = 85.07
avg = 85.07
max = 85.07
Model F test: Equal FMI — F(6, 85.1) = 1.56
Within VCE type: OLS — Prob > F = 0.1694

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	7223.68	9524.496	0.76	0.450	-11713.35	26160.72
Sex	0	(omitted)				
w1Age	-1010.467	511.4604	-1.98	0.051	-2027.376	6.441634
Race	-12589.01	8379.221	-1.50	0.137	-29248.95	4070.943
PovStat	-13816.42	9898.083	-1.40	0.166	-33496.24	5863.401
TIME_V1SCAN	.0861131	6.997586	0.01	0.990	-13.8268	13.99903
w1BMI	391.3718	544.3763	0.72	0.474	-690.9818	1473.726
_cons	489845.4	37250.6	13.15	0.000	415782.1	563908.8

```
120 .
121 .
122 .
123 . //ANALYSIS B//
124 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 86
DF adjustment: Small sample — DF: min = 84.07
avg = 84.07
max = 84.07
Model F test: Equal FMI — F(7, 84.1) = 5.57
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-25.79673	65.67452	-0.39	0.695	-156.3962	104.8027
Sex	0	(omitted)				
w1Age	-6.975696	3.536697	-1.97	0.052	-14.00872	.0573316
Race	-176.1457	60.9985	-2.89	0.005	-297.4465	-54.84496
PovStat	-116.3608	68.33152	-1.70	0.092	-252.244	19.52229
TIME_V1SCAN	.0588282	.0479385	1.23	0.223	-.0365017	.1541581
w1BMI	1.325853	3.747215	0.35	0.724	-6.125809	8.777514
ICV_volM2	.0010022	.000309	3.24	0.002	.0003877	.0016167
_cons	2783.329	492.9818	5.65	0.000	1802.992	3763.666

```
125 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 86
DF adjustment: Small sample — DF: min = 84.07
avg = 84.07
max = 84.07
Model F test: Equal FMI — F(7, 84.1) = 7.91
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-26.00045	70.07269	-0.37	0.712	-165.346	113.3451
Sex	0	(omitted)				
w1Age	-4.261748	3.773547	-1.13	0.262	-11.76577	3.242277
Race	-172.0394	65.08352	-2.64	0.010	-301.4636	-42.6152
PovStat	-89.55221	72.90763	-1.23	0.223	-234.5353	55.4309
TIME_V1SCAN	.0827142	.0511489	1.62	0.110	-.0189998	.1844282
w1BMI	-.2652564	3.998163	-0.07	0.947	-8.21595	7.685437
ICV_volM2	.0016965	.0003297	5.15	0.000	.0010409	.0023522
_cons	2030.524	525.9964	3.86	0.000	984.535	3076.513

```
126 .
127 . //ANALYSIS C//
128 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &
```

```
Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =         94
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =         86
DF adjustment:   Small sample                 DF:     min       =      84.07
                                                      avg       =      84.07
                                                      max       =      84.07
Model F test:       Equal FMI                 F(   7,   84.1)   =       2.09
Within VCE type:          OLS                 Prob > F          =     0.0529
```

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.730667	1.110071	1.56	0.123	-.4768058	3.93814
Sex	0	(omitted)				
w1Age	.1040678	.0597795	1.74	0.085	-.0148088	.2229445
Race	1.293812	1.031035	1.25	0.213	-.7564889	3.344113
PovStat	1.868618	1.154982	1.62	0.109	-.4281633	4.165399
TIME_V1SCAN	-.0010266	.0008103	-1.27	0.209	-.0026379	.0005848
w1BMI	.0903381	.0633378	1.43	0.157	-.0356145	.2162907
ICV_volM2	5.35e-06	5.22e-06	1.02	0.309	-5.04e-06	.0000157
_cons	-15.15375	8.332684	-1.82	0.073	-31.72401	1.416513

```
129 .
130 . save, replace
    file finaldata_imputed_final.dta saved

131 .
132 .
133 .
134 . //INTERACTION BY Sex//
135 . use finaldata_imputed_final,clear

136 .
137 .
138 . //ANALYSIS A//
139 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI  if sample_final2==1
```

```
Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =        163
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =        154
DF adjustment:   Small sample                 DF:     min       =     152.04
                                                      avg       =     152.04
                                                      max       =     152.04
Model F test:       Equal FMI                 F(   8,  152.0)   =      17.62
Within VCE type:          OLS                 Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**13112.74**	**20025.93**	**0.65**	**0.514**	**-26452.29**	**52677.76**
Sex						
Men	**179297.2**	**64590.37**	**2.78**	**0.006**	**51686.69**	**306907.8**
Sex#c.LnNFLw3						
Men	**-15320.26**	**28212.66**	**-0.54**	**0.588**	**-71059.73**	**40419.21**
Sex	**0**	(omitted)				
w1Age	**-2624.828**	**894.8492**	**-2.93**	**0.004**	**-4392.773**	**-856.8837**
Race	**-66722.74**	**14952.63**	**-4.46**	**0.000**	**-96264.5**	**-37180.97**
PovStat	**-1067.669**	**17101.56**	**-0.06**	**0.950**	**-34855.05**	**32719.71**
TIME_V1SCAN	**-16.19146**	**11.96185**	**-1.35**	**0.178**	**-39.82437**	**7.441447**
w1BMI	**867.1665**	**1100.748**	**0.79**	**0.432**	**-1307.571**	**3041.904**
_cons	**1280734**	**72930.94**	**17.56**	**0.000**	**1136645**	**1424823**

140 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **163**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **154**
DF adjustment: **Small sample** — DF: min = **152.04**
avg = **152.04**
max = **152.04**
Model F test: **Equal FMI** — F(**8**, **152.0**) = **20.47**
Within VCE type: **OLS** — Prob > F = **0.0000**

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**4620.134**	**10592.61**	**0.44**	**0.663**	**-16307.59**	**25547.86**
Sex						
Men	**98946.31**	**34164.75**	**2.90**	**0.004**	**31447.35**	**166445.3**
Sex#c.LnNFLw3						
Men	**-9945.675**	**14922.95**	**-0.67**	**0.506**	**-39428.79**	**19537.44**
Sex	**0**	(omitted)				
w1Age	**-2155.406**	**473.326**	**-4.55**	**0.000**	**-3090.552**	**-1220.261**
Race	**-46362.85**	**7909.12**	**-5.86**	**0.000**	**-61988.82**	**-30736.89**
PovStat	**-3053.796**	**9045.784**	**-0.34**	**0.736**	**-20925.46**	**14817.87**
TIME_V1SCAN	**-4.657292**	**6.327161**	**-0.74**	**0.463**	**-17.1578**	**7.843217**
w1BMI	**586.611**	**582.2354**	**1.01**	**0.315**	**-563.7056**	**1736.928**
_cons	**764422.7**	**38576.46**	**19.82**	**0.000**	**688207.6**	**840637.8**

```
141 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI  if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        154
DF adjustment:   Small sample                   DF:     min       =     152.04
                                                        avg       =     152.04
                                                        max       =     152.04
Model F test:       Equal FMI                   F(   8,  152.0)   =      11.05
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   6409.379   9943.099     0.64   0.520    -13235.1    26053.86
              |
          Sex |
          Men |   76119.23   32069.85     2.37   0.019     12759.16    139479.3
              |
Sex#c.LnNFLw3 |
          Men |  -7809.361    14007.9    -0.56   0.578    -35484.64    19865.92
              |
          Sex |          0  (omitted)
        w1Age |  -865.7259   444.3027    -1.95   0.053     -1743.53    12.07853
         Race |  -18752.75   7424.151    -2.53   0.013    -33420.57   -4084.935
      PovStat |  -3148.381   8491.117    -0.37   0.711    -19924.19    13627.43
  TIME_V1SCAN |   -9.51162   5.939194    -1.60   0.111    -21.24563    2.222385
        w1BMI |   285.7365    546.534     0.52   0.602    -794.0453    1365.518
        _cons |   501363.2   36211.03    13.85   0.000     429821.4    572904.9
------------------------------------------------------------------------------

142 .
143 .
144 .
145 . //ANALYSIS B//
146 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fina

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     151.04
                                                        avg       =     151.04
                                                        max       =     151.04
Model F test:       Equal FMI                   F(   9,  151.0)   =      14.91
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippoc~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -46.96207   67.02194    -0.70   0.485    -179.3837    85.45954
              |
          Sex |
          Men |   236.1116   222.7427     1.06   0.291    -203.9823    676.2054
              |
Sex#c.LnNFLw3 |
          Men |   -97.7411   94.33261    -1.04   0.302     -284.123    88.64079
              |
          Sex |          0  (omitted)
        w1Age |  -5.260307   2.997741    -1.75   0.081    -11.18323     .662614
         Race |  -113.9984   53.86224    -2.12   0.036    -220.4191   -7.577641
      PovStat |  -146.6115   57.10853    -2.57   0.011    -259.4463   -33.77679
```

TIME_V1SCAN	.0333981	.0400325	0.83	0.405	-.045698	.1124942
w1BMI	3.759455	3.682923	1.02	0.309	-3.517245	11.03615
ICV_volM2	.0015784	.0002355	6.70	0.000	.0011132	.0020436
_cons	1951.993	407.1495	4.79	0.000	1147.549	2756.437

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

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =        163
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =        153
DF adjustment:   Small sample                 DF:     min       =     151.04
                                                      avg       =     151.04
                                                      max       =     151.04
Model F test:       Equal FMI                 F(   9,  151.0)   =      18.04
Within VCE type:          OLS                 Prob > F          =     0.0000
```

Right_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-26.46313	68.7352	-0.39	0.701	-162.2698	109.3435
Sex						
Men	162.5272	228.4366	0.71	0.478	-288.8166	613.871
Sex#c.LnNFLw3						
Men	-111.2539	96.744	-1.15	0.252	-302.4002	79.89237
Sex	0	(omitted)				
w1Age	-3.87237	3.074371	-1.26	0.210	-9.946696	2.201957
Race	-118.6975	55.2391	-2.15	0.033	-227.8386	-9.556362
PovStat	-135.1488	58.56837	-2.31	0.022	-250.8679	-19.42971
TIME_V1SCAN	.0728717	.0410559	1.77	0.078	-.0082463	.1539897
w1BMI	4.282406	3.777068	1.13	0.259	-3.180305	11.74512
ICV_volM2	.0020777	.0002415	8.60	0.000	.0016006	.0025548
_cons	1401.015	417.5573	3.36	0.001	576.0071	2226.022

```
148 .
149 . //ANALYSIS C//
150 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =        163
                                              Average RVI       =     0.0000
                                              Largest FMI       =     0.0000
                                              Complete DF       =        153
DF adjustment:   Small sample                 DF:     min       =     151.04
                                                      avg       =     151.04
                                                      max       =     151.04
Model F test:       Equal FMI                 F(   9,  151.0)   =       1.92
Within VCE type:          OLS                 Prob > F          =     0.0536
```

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2.229757	.8951615	2.49	0.014	.4611014	3.998412
Sex						
Men	6.171448	2.975006	2.07	0.040	.2934464	12.04945
Sex#c.LnNFLw3						
Men	-2.6078	1.25993	-2.07	0.040	-5.097163	-.1184381
Sex	0	(omitted)				
w1Age	.0411932	.0400386	1.03	0.305	-.0379148	.1203012
Race	1.210108	.7193973	1.68	0.095	-.211274	2.631489
PovStat	1.330375	.7627555	1.74	0.083	-.1766733	2.837424
TIME_V1SCAN	-.0008418	.0005347	-1.57	0.118	-.0018982	.0002146
w1BMI	.0588181	.04919	1.20	0.234	-.0383713	.1560075
ICV_volM2	2.21e-06	3.14e-06	0.70	0.483	-4.00e-06	8.43e-06
_cons	-7.880819	5.437989	-1.45	0.149	-18.62517	2.863532

```
151 .
152 . save, replace
    file finaldata_imputed_final.dta saved

153 .
154 .
155 . **********************TABLE S3: LnNFLw3, MODELS 3-6***************************
156 .
157 . ************MODEL 3: MODEL 2+w1dxDiabetes w1Glucose******
158 .
159 . //Overall//
160 .
161 . use finaldata_imputed_final,clear

162 .
163 .
164 . //ANALYSIS A//
165 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_fina

    Multiple-imputation estimates                   Imputations       =          5
    Linear regression                               Number of obs     =        163
                                                    Average RVI       =     0.0066
                                                    Largest FMI       =     0.0643
                                                    Complete DF       =        153
    DF adjustment:   Small sample                   DF:     min       =     124.90
                                                            avg       =     147.41
                                                            max       =     151.01
    Model F test:       Equal FMI                   F(   9,  151.0)   =      15.40
    Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6238.12	16484.19	0.38	0.706	-26331.77	38808.01
Sex	144695.1	14398.52	10.05	0.000	116246.4	173143.7
w1Age	-2575.203	910.7078	-2.83	0.005	-4374.621	-775.7845
Race	-66225.24	15027.63	-4.41	0.000	-95916.8	-36533.67
PovStat	-2960.146	16978.84	-0.17	0.862	-36506.89	30586.6
TIME_V1SCAN	-16.08972	12.15767	-1.32	0.188	-40.11095	7.93151
w1BMI	723.6224	1111.658	0.65	0.516	-1472.792	2920.036
w1dxDiabetes	1689.026	14289.16	0.12	0.906	-26591.22	29969.27
w1Glucose	.955907	338.0992	0.00	0.998	-667.3594	669.2712
_cons	1153875	74396.34	15.51	0.000	1006875	1300876

```
166 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose  if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0030
                                                Largest FMI       =     0.0292
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     142.58
                                                        avg       =     149.81
                                                        max       =     151.03
Model F test:       Equal FMI                   F(   9,  151.0)   =      18.00
Within VCE type:          OLS                   Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-1156.697	8712.496	-0.13	0.895	-18371.01	16057.62
Sex	76603.22	7611.596	10.06	0.000	61564.21	91642.23
w1Age	-2055.745	481.1666	-4.27	0.000	-3006.446	-1105.044
Race	-45687.91	7944.168	-5.75	0.000	-61383.98	-29991.84
PovStat	-4104.135	8975.048	-0.46	0.648	-21836.99	13628.72
TIME_V1SCAN	-4.956019	6.425196	-0.77	0.442	-17.65092	7.738879
w1BMI	491.9298	587.6496	0.84	0.404	-669.1476	1653.007
w1dxDiabetes	-3716.334	7422.953	-0.50	0.617	-18389.59	10956.92
w1Glucose	103.9492	177.3713	0.59	0.559	-246.5506	454.4491
_cons	690641.2	39268.39	17.59	0.000	613052.8	768229.7

```
167 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0087
                                                Largest FMI       =     0.0844
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     113.47
                                                        avg       =     145.80
                                                        max       =     151.01
Model F test:       Equal FMI                   F(   9,  150.9)   =       9.64
Within VCE type:          OLS                   Prob > F          =     0.0000
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	3289.153	8183.291	0.40	0.688	-12879.64	19457.95
Sex	58433.07	7147.067	8.18	0.000	44311.87	72554.26
w1Age	-860.9389	452.2151	-1.90	0.059	-1754.453	32.57499
Race	-18603.13	7459.337	-2.49	0.014	-33341.28	-3864.988
PovStat	-4172.925	8428.252	-0.50	0.621	-20825.46	12479.61
TIME_V1SCAN	-9.343657	6.035716	-1.55	0.124	-21.26911	2.581799
w1BMI	211.9589	551.8059	0.38	0.701	-878.2996	1302.217
w1dxDiabetes	2324.931	7164.294	0.32	0.746	-11868.19	16518.05
w1Glucose	-29.80855	168.5778	-0.18	0.860	-363.1144	303.4973
_cons	454634.6	36962.78	12.30	0.000	381597.6	527671.6

```
168 .
169 .
170 . //ANALYSIS B//
171 . 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 = 163
Average RVI = 0.0063
Largest FMI = 0.0618
Complete DF = 152
DF adjustment: Small sample — DF: min = 125.57
avg = 147.00
max = 150.03
Model F test: Equal FMI — F(10, 150.0) = 13.49
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-110.747	54.82336	-2.02	0.045	-219.0744	-2.419526
Sex	4.345838	65.00936	0.07	0.947	-124.1065	132.7982
w1Age	-4.59247	3.035374	-1.51	0.132	-10.59023	1.405291
Race	-105.8738	53.81192	-1.97	0.051	-212.201	.4534611
PovStat	-163.1368	56.43154	-2.89	0.004	-274.6401	-51.63358
TIME_V1SCAN	.0378953	.0404681	0.94	0.351	-.0420663	.1178569
w1BMI	1.912108	3.697386	0.52	0.606	-5.39358	9.217797
w1dxDiabetes	-5.421114	47.44911	-0.11	0.909	-99.3246	88.48237
w1Glucose	1.372692	1.122639	1.22	0.223	-.8464684	3.591852
ICV_volM2	.0015868	.0002351	6.75	0.000	.0011223	.0020514
_cons	1969.593	380.6279	5.17	0.000	1217.491	2721.694

```
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 = 163
Average RVI = 0.0007
Largest FMI = 0.0071
Complete DF = 152
DF adjustment: Small sample — DF: min = 148.75
avg = 149.86
max = 150.04
Model F test: Equal FMI — F(10, 150.0) = 16.84
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-102.6846	55.77551	-1.84	0.068	-212.8916	7.522433
Sex	-105.7755	66.19256	-1.60	0.112	-236.5654	25.01449
w1Age	-3.252455	3.086794	-1.05	0.294	-9.351668	2.846758
Race	-109.3536	54.79148	-2.00	0.048	-217.6162	-1.091036
PovStat	-156.9172	57.46215	-2.73	0.007	-270.4568	-43.37765
TIME_V1SCAN	.0813958	.041195	1.98	0.050	-1.44e-06	.1627931
w1BMI	1.736488	3.764564	0.46	0.645	-5.701919	9.174895
w1dxDiabetes	7.572997	47.02561	0.16	0.872	-85.35153	100.4975
w1Glucose	1.763958	1.129926	1.56	0.121	-.468723	3.996639
ICV_volM2	.0020835	.0002394	8.70	0.000	.0016104	.0025565
_cons	1537.481	387.1355	3.97	0.000	772.5366	2302.424

```
173 .
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	= **163**
		Average RVI	= **0.0003**
		Largest FMI	= **0.0026**
		Complete DF	= **152**
DF adjustment: **Small sample**		DF: min	= **149.65**
		avg	= **149.98**
		max	= **150.04**
Model F test: **Equal FMI**		F(**10**, **150.0**)	= **1.31**
Within VCE type: **OLS**		Prob > F	= **0.2293**

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**1.111263**	**.7435641**	**1.49**	**0.137**	**-.3579461**	**2.580473**
Sex	**.3459058**	**.8825402**	**0.39**	**0.696**	**-1.397908**	**2.08972**
w1Age	**.0567148**	**.0411492**	**1.38**	**0.170**	**-.0245921**	**.1380217**
Race	**1.331523**	**.7304975**	**1.82**	**0.070**	**-.1118686**	**2.774914**
PovStat	**1.108467**	**.7661047**	**1.45**	**0.150**	**-.4052813**	**2.622214**
TIME_V1SCAN	**-.0009365**	**.0005492**	**-1.71**	**0.090**	**-.0020217**	**.0001487**
w1BMI	**.0464464**	**.0501897**	**0.93**	**0.356**	**-.0527236**	**.1456164**
w1dxDiabetes	**-.3243297**	**.6255403**	**-0.52**	**0.605**	**-1.560362**	**.9117022**
w1Glucose	**-.0009322**	**.0150499**	**-0.06**	**0.951**	**-.0306697**	**.0288052**
ICV_volM2	**2.65e-06**	**3.19e-06**	**0.83**	**0.407**	**-3.65e-06**	**8.96e-06**
_cons	**-6.214809**	**5.161069**	**-1.20**	**0.230**	**-16.41259**	**3.982977**

```
176 .
177 . save, replace
    file finaldata_imputed_final.dta saved

178 .
179 .
180 . //Males//
181 .
182 . use finaldata_imputed_final,clear

183 .
184 .
185 . //ANALYSIS A//
186 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_fina
```

Multiple-imputation estimates		Imputations	= **5**
Linear regression		Number of obs	= **69**
		Average RVI	= **0.0136**
		Largest FMI	= **0.1138**
		Complete DF	= **60**
DF adjustment: **Small sample**		DF: min	= **45.48**
		avg	= **56.25**
		max	= **58.09**
Model F test: **Equal FMI**		F(**8**, **58.0**)	= **2.39**
Within VCE type: **OLS**		Prob > F	= **0.0267**

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-4685.592	29932.16	-0.16	0.876	-64599.41	55228.23
Sex	0	(omitted)				
w1Age	-3054.104	1704.179	-1.79	0.078	-6465.35	357.1417
Race	-88008.52	27323.27	-3.22	0.002	-142702	-33314.99
PovStat	24488.32	30741.92	0.80	0.429	-37046.65	86023.29
TIME_V1SCAN	-29.4199	22.53583	-1.31	0.197	-74.53253	15.69274
w1BMI	1048.143	2787.064	0.38	0.708	-4530.867	6627.153
w1dxDiabetes	23970.96	24663.98	0.97	0.336	-25690.32	73632.25
w1Glucose	-296.1118	486.0886	-0.61	0.545	-1270.313	678.0898
_cons	1523583	122503.5	12.44	0.000	1278359	1768808

187 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_final2==1 &

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0064
Largest FMI = 0.0568
Complete DF = 60
DF adjustment: Small sample — DF: min = 52.98
avg = 57.35
max = 58.08
Model F test: Equal FMI — F(8, 58.1) = 3.78
Within VCE type: OLS — Prob > F = 0.0013

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-6215.769	15434.46	-0.40	0.689	-37110.3	24678.77
Sex	0	(omitted)				
w1Age	-2756.222	878.4405	-3.14	0.003	-4514.567	-997.8765
Race	-59160.58	14080.24	-4.20	0.000	-87344.53	-30976.63
PovStat	6807.195	15850.14	0.43	0.669	-24919.35	38533.74
TIME_V1SCAN	-9.699853	11.60854	-0.84	0.407	-32.93697	13.53726
w1BMI	856.9208	1436.255	0.60	0.553	-2018.031	3731.873
w1dxDiabetes	6413.36	12364.11	0.52	0.606	-18386.14	31212.86
w1Glucose	-51.90265	248.1449	-0.21	0.835	-548.8422	445.0369
_cons	904379.9	63114.39	14.33	0.000	778043.8	1030716

188 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_final2==1 &

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0177
Largest FMI = 0.1443
Complete DF = 60
DF adjustment: Small sample — DF: min = 41.30
avg = 55.61
max = 58.09
Model F test: Equal FMI — F(8, 58.0) = 1.47
Within VCE type: OLS — Prob > F = 0.1875

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-2903.879	14964.23	-0.19	0.847	-32857.08	27049.32
Sex	0	(omitted)				
w1Age	-815.4285	852.2061	-0.96	0.343	-2521.304	890.447
Race	-27517.66	13663.78	-2.01	0.049	-54869.05	-166.2759
PovStat	7195.312	15369.25	0.47	0.641	-23568.77	37959.39
TIME_V1SCAN	-17.72846	11.27217	-1.57	0.121	-40.29383	4.836917
w1BMI	43.58452	1393.799	0.03	0.975	-2746.495	2833.664
w1dxDiabetes	13786.2	12522.72	1.10	0.277	-11498.42	39070.81
w1Glucose	-151.0506	244.4286	-0.62	0.539	-641.1975	339.0963
_cons	609333.1	61278.7	9.94	0.000	486663.7	732002.5

```
189 .
190 .
191 . //ANALYSIS B//
192 . 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 = 69
Average RVI = 0.0157
Largest FMI = 0.1333
Complete DF = 59
DF adjustment: Small sample — DF: min = 42.19
avg = 55.05
max = 57.07
Model F test: Equal FMI — F(9, 57.0) = 6.16
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-138.4948	96.5547	-1.43	0.157	-331.8376	54.84791
Sex	0	(omitted)				
w1Age	-5.92962	5.503073	-1.08	0.286	-16.94937	5.090126
Race	-28.30324	97.35048	-0.29	0.772	-223.2387	166.6322
PovStat	-227.9571	99.44708	-2.29	0.026	-427.0914	-28.82287
TIME_V1SCAN	.0247712	.0731859	0.34	0.736	-.1217845	.1713268
w1BMI	9.560359	8.988172	1.06	0.292	-8.438592	27.55931
w1dxDiabetes	46.87404	81.69451	0.57	0.569	-117.9703	211.7184
w1Glucose	.7585624	1.58599	0.48	0.634	-2.422584	3.939708
ICV_volM2	.0020443	.0003734	5.47	0.000	.0012965	.0027921
_cons	1260.55	748.9257	1.68	0.098	-239.4379	2760.537

```
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 — Number of obs = 69
Average RVI = 0.0042
Largest FMI = 0.0365
Complete DF = 59
DF adjustment: Small sample — DF: min = 54.31
avg = 56.69
max = 57.10
Model F test: Equal FMI — F(9, 57.1) = 8.87
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-153.8855	93.63919	-1.64	0.106	-341.3879	33.61685
Sex	0	(omitted)				
w1Age	-6.32124	5.334936	-1.18	0.241	-17.00398	4.361501
Race	-51.08983	94.43359	-0.54	0.591	-240.1841	138.0045
PovStat	-213.6895	96.45521	-2.22	0.031	-406.8313	-20.54763
TIME_V1SCAN	.0966753	.0709281	1.36	0.178	-.0453528	.2387034
w1BMI	14.825	8.709693	1.70	0.094	-2.615431	32.26543
w1dxDiabetes	50.02483	75.53334	0.66	0.511	-101.3909	201.4405
w1Glucose	1.730011	1.511944	1.14	0.257	-1.29842	4.758443
ICV_volM2	.0024148	.0003617	6.68	0.000	.0016905	.003139
_cons	678.4238	724.3939	0.94	0.353	-772.2108	2129.058

```
194 .
195 . //ANALYSIS C//
196 . 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 = 69
Average RVI = 0.0009
Largest FMI = 0.0076
Complete DF = 59
DF adjustment: **Small sample** — DF: min = 56.70
avg = 57.03
max = 57.09
Model F test: **Equal FMI** — F(9, 57.1) = 0.41
Within VCE type: **OLS** — Prob > F = 0.9258

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	.1357169	.9744696	0.14	0.890	-1.815562	2.086995
Sex	0	(omitted)				
w1Age	-.0151622	.0555026	-0.27	0.786	-.1263003	.0959758
Race	1.202923	.9826076	1.22	0.226	-.7646516	3.170498
PovStat	.5700238	1.003667	0.57	0.572	-1.439717	2.579764
TIME_V1SCAN	-.0008101	.0007379	-1.10	0.277	-.0022877	.0006674
w1BMI	-.0076785	.0906141	-0.08	0.933	-.1891243	.1737672
w1dxDiabetes	-.3680956	.7750637	-0.47	0.637	-1.92031	1.184119
w1Glucose	.0007355	.0156531	0.05	0.963	-.0306095	.0320805
ICV_volM2	7.85e-07	3.76e-06	0.21	0.835	-6.74e-06	8.31e-06
_cons	4.837713	7.527105	0.64	0.523	-10.23469	19.91012

```
197 .
198 . save, replace
    file finaldata_imputed_final.dta saved

199 .
200 .
```

```
. 
. //Females//
. 
. use finaldata_imputed_final,clear

. 
. 
. //ANALYSIS A//
. mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_fina

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         85
DF adjustment:   Small sample                   DF:     min       =      83.07
                                                        avg       =      83.07
                                                        max       =      83.07
Model F test:       Equal FMI                   F(   8,   83.1)   =       2.63
Within VCE type:          OLS                   Prob > F          =     0.0127

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   6439.582   19980.88     0.32   0.748    -33301.1    46180.26
          Sex |          0  (omitted)
        w1Age |  -2275.449    1073.46    -2.12   0.037    -4410.492   -140.4068
         Race |  -50317.95   17523.22    -2.87   0.005    -85170.51   -15465.39
      PovStat |  -22321.81   20531.22    -1.09   0.280    -63157.09    18513.47
  TIME_V1SCAN |  -2.290106   14.70092    -0.16   0.877    -31.52929    26.94908
        w1BMI |   1017.793   1150.858     0.88   0.379     -1271.19    3306.775
 w1dxDiabetes |  -21508.38    18078.8    -1.19   0.238    -57465.94    14449.19
    w1Glucose |   413.5432   547.5607     0.76   0.452    -675.5197    1502.606
        _cons |    1218806   85397.56    14.27   0.000      1048956     1388656
------------------------------------------------------------------------------

. mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose  if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         85
DF adjustment:   Small sample                   DF:     min       =      83.07
                                                        avg       =      83.07
                                                        max       =      83.07
Model F test:       Equal FMI                   F(   8,   83.1)   =       4.40
Within VCE type:          OLS                   Prob > F          =     0.0002

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -2560.634    10912.7    -0.23   0.815    -24265.29    19144.03
          Sex |          0  (omitted)
        w1Age |  -1601.858   586.2778    -2.73   0.008    -2767.927   -435.7896
         Race |  -36564.88   9570.435    -3.82   0.000    -55599.86    -17529.9
      PovStat |  -11291.05   11213.28    -1.01   0.317    -33593.53    11011.44
  TIME_V1SCAN |  -.0474957   8.029013    -0.01   0.995    -16.01669    15.92169
        w1BMI |   671.9117   628.5493     1.07   0.288    -578.2325    1922.056
 w1dxDiabetes |  -15501.09   9873.865    -1.57   0.120    -35139.57    4137.395
    w1Glucose |   333.7572   299.0542     1.12   0.268    -261.0424    928.5568
        _cons |   711945.3   46640.49    15.26   0.000     619180.4    804710.3
------------------------------------------------------------------------------
```

```
210 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if sample_final2==1 &
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 85
DF adjustment: **Small sample** — DF: min = 83.07
avg = 83.07
max = 83.07
Model F test: **Equal FMI** — F(8, 83.1) = 1.30
Within VCE type: **OLS** — Prob > F = 0.2565

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6508.425	9809.737	0.66	0.509	-13002.51	26019.36
Sex	0	(omitted)				
w1Age	-887.6505	527.0218	-1.68	0.096	-1935.863	160.5618
Race	-11755.1	8603.135	-1.37	0.176	-28866.19	5355.98
PovStat	-12152.08	10079.93	-1.21	0.231	-32200.42	7896.251
TIME_V1SCAN	-.9384912	7.217508	-0.13	0.897	-15.29365	13.41667
w1BMI	448.6	565.0209	0.79	0.429	-675.1901	1572.39
w1dxDiabetes	-8339.192	8875.898	-0.94	0.350	-25992.78	9314.398
w1Glucose	90.83372	268.8283	0.34	0.736	-443.8485	625.516
_cons	476402.8	41926.46	11.36	0.000	393013.8	559791.9

```
211 .
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 = 94
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 84
DF adjustment: **Small sample** — DF: min = 82.07
avg = 82.07
max = 82.07
Model F test: **Equal FMI** — F(9, 82.1) = 4.76
Within VCE type: **OLS** — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-47.28378	66.58739	-0.71	0.480	-179.7456	85.17808
Sex	0	(omitted)				
w1Age	-6.108305	3.5879	-1.70	0.092	-13.24569	1.029082
Race	-161.1169	61.22878	-2.63	0.010	-282.9189	-39.31484
PovStat	-108.0953	68.61699	-1.58	0.119	-244.5946	28.40401
TIME_V1SCAN	.0394008	.0488025	0.81	0.422	-.0576818	.1364833
w1BMI	.7880217	3.834762	0.21	0.838	-6.840446	8.41649
w1dxDiabetes	-105.513	60.60966	-1.74	0.085	-226.0834	15.05739
w1Glucose	2.963095	1.833937	1.62	0.110	-.6851446	6.611334
ICV_volM2	.0009196	.0003101	2.97	0.004	.0003028	.0015364
_cons	2662.502	493.8609	5.39	0.000	1680.067	3644.936

```
215 . 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     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         84
DF adjustment:   Small sample                   DF:     min       =      82.07
                                                        avg       =      82.07
                                                        max       =      82.07
Model F test:       Equal FMI                   F(   9,   82.1)   =       6.19
Within VCE type:          OLS                   Prob > F          =     0.0000
```

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-39.67436	72.00805	-0.55	0.583	-182.9195	103.5708
Sex	0	(omitted)				
w1Age	-3.857592	3.879979	-0.99	0.323	-11.57601	3.860826
Race	-162.6212	66.21321	-2.46	0.016	-294.3388	-30.90374
PovStat	-86.3992	74.20287	-1.16	0.248	-234.0105	61.21209
TIME_V1SCAN	.0711057	.0527754	1.35	0.182	-.0338801	.1760914
w1BMI	-.7344342	4.146938	-0.18	0.860	-8.98391	7.515042
w1dxDiabetes	-58.32453	65.54369	-0.89	0.376	-188.7102	72.06111
w1Glucose	1.87065	1.983232	0.94	0.348	-2.07458	5.815881
ICV_volM2	.0016482	.0003353	4.92	0.000	.0009812	.0023153
_cons	1959.138	534.0645	3.67	0.000	896.7269	3021.549

```
216 .
217 . //ANALYSIS C//
218 . 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     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         84
DF adjustment:   Small sample                   DF:     min       =      82.07
                                                        avg       =      82.07
                                                        max       =      82.07
Model F test:       Equal FMI                   F(   9,   82.1)   =       1.63
Within VCE type:          OLS                   Prob > F          =     0.1196
```

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.796067	1.145194	1.57	0.121	-.4820607	4.074194
Sex	0	(omitted)				
w1Age	.1095467	.061706	1.78	0.080	-.0132047	.2322981
Race	1.256083	1.053035	1.19	0.236	-.8387121	3.350879
PovStat	1.959174	1.1801	1.66	0.101	-.3883908	4.30674
TIME_V1SCAN	-.0010089	.0008393	-1.20	0.233	-.0026786	.0006608
w1BMI	.098945	.0659516	1.50	0.137	-.0322521	.2301422
w1dxDiabetes	-.163336	1.042387	-0.16	0.876	-2.23695	1.910278
w1Glucose	-.0081948	.0315407	-0.26	0.796	-.0709386	.0545489
ICV_volM2	5.36e-06	5.33e-06	1.01	0.317	-5.24e-06	.000016
_cons	-15.08835	8.4936	-1.78	0.079	-31.98462	1.807909

```
. 
. save, replace
file finaldata_imputed_final.dta saved

. 
. 
. //INTERACTION BY Sex//
. 
. 
. 
. //ANALYSIS A//
. mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1dxDiabetes w1Glucose if samp

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0065
                                                Largest FMI       =     0.0694
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     121.35
                                                        avg       =     146.44
                                                        max       =     150.02
Model F test:       Equal FMI                   F(  10,  150.0)   =      13.83
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   12895.78   20525.97     0.63   0.531    -27661.8    53453.35
             |
         Sex |
         Men |   179383.2   65110.87     2.76   0.007     50730.3    308036.2
             |
Sex#c.LnNFLw3|
         Men |  -15548.93   28458.31    -0.55   0.586    -71779.82    40681.95
             |
         Sex |          0  (omitted)
       w1Age |  -2639.289   920.3595    -2.87   0.005    -4457.876   -820.7015
        Race |  -66683.73   15085.57    -4.42   0.000    -96491.36   -36876.09
     PovStat |  -1335.898   17276.09    -0.08   0.938    -35471.81    32800.01
  TIME_V1SCAN |  -15.85756    12.1933    -1.30   0.195     -39.9505    8.235383
       w1BMI |   831.1325   1131.511     0.73   0.464    -1404.628    3066.893
 w1dxDiabetes |   1435.966   14368.12     0.10   0.921    -27008.68    29880.61
    w1Glucose |   12.80426    339.997     0.04   0.970    -659.3383    684.9468
        _cons |    1280905   78286.53    16.36   0.000      1126209     1435601
------------------------------------------------------------------------------

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0031
                                                Largest FMI       =     0.0334
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     139.89
                                                        avg       =     148.71
                                                        max       =     150.03
Model F test:       Equal FMI                   F(  10,  150.0)   =      16.20
Within VCE type:          OLS                   Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	3367.924	10841.68	0.31	0.757	-18054.25	24790.09
Sex						
Men	100178.6	34403.75	2.91	0.004	32199.79	168157.3
Sex#c.LnNFLw3						
Men	-10567.58	15036.5	-0.70	0.483	-40278.31	19143.15
Sex	0	(omitted)				
w1Age	-2099.29	485.942	-4.32	0.000	-3059.478	-1139.102
Race	-45999.46	7969.661	-5.77	0.000	-61746.75	-30252.17
PovStat	-3000.212	9126.238	-0.33	0.743	-21032.77	15032.35
TIME_V1SCAN	-4.798299	6.43983	-0.75	0.457	-17.5228	7.9262
w1BMI	565.001	597.7755	0.95	0.346	-616.1483	1746.15
w1dxDiabetes	-3888.983	7455.873	-0.52	0.603	-18629.74	10851.78
w1Glucose	112.0121	178.2196	0.63	0.531	-240.1942	464.2183
_cons	755237.2	41306.36	18.28	0.000	673617.2	836857.2

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0085
Largest FMI = 0.0902
Complete DF = 152
DF adjustment: Small sample — DF: min = 109.56
avg = 144.93
max = 150.03
Model F test: Equal FMI — F(10, 149.9) = 8.67
Within VCE type: OLS — Prob > F = 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6623.709	10189.64	0.65	0.517	-13510.19	26757.61
Sex						
Men	75806.66	32317.24	2.35	0.020	11950.88	139662.4
Sex#c.LnNFLw3						
Men	-7787.704	14125.2	-0.55	0.582	-35697.73	20122.32
Sex	0	(omitted)				
w1Age	-893.0403	457.0129	-1.95	0.053	-1796.084	10.00301
Race	-18832.79	7487.98	-2.52	0.013	-33628.32	-4037.253
PovStat	-3359.43	8575.624	-0.39	0.696	-20304.06	13585.2
TIME_V1SCAN	-9.227353	6.053355	-1.52	0.130	-21.18831	2.733605
w1BMI	265.8038	561.6454	0.47	0.637	-843.956	1375.564
w1dxDiabetes	2198.442	7206.803	0.31	0.761	-12084.39	16481.27
w1Glucose	-23.87829	169.5504	-0.14	0.888	-359.1527	311.3961
_cons	504220.1	38888.8	12.97	0.000	427373.5	581066.7

```
231 .
232 .
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                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0070
                                                Largest FMI       =     0.0741
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     118.00
                                                        avg       =     145.52
                                                        max       =     149.03
Model F test:       Equal FMI                   F(  11,  149.0)   =      12.40
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippoc~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -64.67022   68.13057    -0.95   0.344    -199.2979    69.95744
              |
          Sex |
          Men |   246.3117   222.6229     1.11   0.270    -193.5947    686.2182
              |
Sex#c.LnNFLw3 |
          Men |  -107.2465   94.37282    -1.14   0.258    -293.7285    79.23545
              |
          Sex |          0  (omitted)
        w1Age |  -5.049604   3.059619    -1.65   0.101    -11.09562    .9964126
         Race |  -110.2723   53.89992    -2.05   0.043    -216.7793   -3.765369
      PovStat |  -152.0478   57.21811    -2.66   0.009    -265.1115   -38.98406
  TIME_V1SCAN |   .0393379    .040452     0.97   0.332    -.0405962    .1192719
        w1BMI |   2.664887   3.753098     0.71   0.479    -4.751298    10.08107
 w1dxDiabetes |   -7.05504   47.72752    -0.15   0.883    -101.5685    87.45845
    w1Glucose |    1.45341   1.127066     1.29   0.199    -.7749414    3.681761
     ICV_volM2 |   .0015724   .0002352     6.68   0.000     .0011076    .0020372
         _cons |   1872.616   418.0294     4.48   0.000     1046.565    2698.667
------------------------------------------------------------------------------

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0011
                                                Largest FMI       =     0.0122
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     146.52
                                                        avg       =     148.74
                                                        max       =     149.04
Model F test:       Equal FMI                   F(  11,  149.0)   =      15.52
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -49.5813   69.26848    -0.72   0.475    -186.4566    87.29401
              |
          Sex |
          Men |   173.0753   226.3817     0.76   0.446     -274.257    620.4075
              |
Sex#c.LnNFLw3 |
          Men |  -123.5955   95.97354    -1.29   0.200    -313.2401    66.04908
              |
          Sex |          0  (omitted)
        w1Age |  -3.779433   3.107547    -1.22   0.226    -9.919998    2.361133
```

Race	-114.4234	54.81513	-2.09	0.039	-222.7387	-6.108218
PovStat	-144.1382	58.19091	-2.48	0.014	-259.124	-29.15236
TIME_V1SCAN	.0830593	.0411276	2.02	0.045	.0017907	.164328
w1BMI	2.603956	3.816411	0.68	0.496	-4.937309	10.14522
w1dxDiabetes	5.700713	47.072	0.12	0.904	-87.32708	98.7285
w1Glucose	1.856813	1.131082	1.64	0.103	-.3783257	4.091953
ICV_volM2	.0020668	.0002392	8.64	0.000	.0015941	.0025395
_cons	1314.953	424.6825	3.10	0.002	475.7726	2154.133

```
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 — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0001
Largest FMI = 0.0009
Complete DF = 151
DF adjustment: Small sample — DF: min = 148.93
avg = 149.02
max = 149.04
Model F test: Equal FMI — F(11, 149.0) = 1.60
Within VCE type: OLS — Prob > F = 0.1044

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2.22879	.9158432	2.43	0.016	.4190758	4.038504
Sex						
Men	6.214264	2.993741	2.08	0.040	.2985909	12.12994
Sex#c.LnNFLw3						
Men	-2.601039	1.269124	-2.05	0.042	-5.108842	-.0932347
Sex	0	(omitted)				
w1Age	.0456259	.0410803	1.11	0.269	-.035549	.1268009
Race	1.224837	.7247998	1.69	0.093	-.2073748	2.657048
PovStat	1.377403	.7694196	1.79	0.075	-.1429776	2.897783
TIME_V1SCAN	-.0009015	.0005438	-1.66	0.099	-.0019761	.000173
w1BMI	.0647025	.0504627	1.28	0.202	-.0350123	.1644173
w1dxDiabetes	-.3638206	.6189425	-0.59	0.558	-1.586864	.8592227
w1Glucose	.0010233	.0149198	0.07	0.945	-.0284585	.0305051
ICV_volM2	2.30e-06	3.16e-06	0.73	0.468	-3.95e-06	8.56e-06
_cons	-8.326071	5.61413	-1.48	0.140	-19.41965	2.767508

```
239 .
240 . save, replace
    file finaldata_imputed_final.dta saved

241 .
```

```
242 .
243 .
244 .
245 . ***********MODEL 4: MODEL 2+liver/kidney disease******
246 .
247 . //Overall//
248 .
249 . use finaldata_imputed_final,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     =        163
                                                Average RVI       =     0.0215
                                                Largest FMI       =     0.2177
                                                Complete DF       =        150
DF adjustment:   Small sample                   DF:     min       =      54.22
                                                        avg       =     138.72
                                                        max       =     147.85
Model F test:       Equal FMI                   F(  12,  147.7)   =      13.30
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   10684.19   16091.91     0.66   0.508    -21115.76    42484.13
         Sex |   176741.6   18208.64     9.71   0.000     140726.2      212757
       w1Age |  -1987.464   898.6382    -2.21   0.029    -3763.306   -211.6216
        Race |  -58283.98   15487.67    -3.76   0.000    -88892.71   -27675.26
     PovStat |  -2127.443   16574.91    -0.13   0.898    -34881.77    30626.89
 TIME_V1SCAN |  -17.74226   11.74694    -1.51   0.133    -40.95636    5.471843
       w1BMI |   2260.129    1194.32     1.89   0.060    -100.0912    4620.349
w1Creatinine |  -26848.26   38962.23    -0.69   0.494    -104955.7    51259.15
 w1USpecGrav |   895106.6    1198666     0.75   0.456     -1473662     3263875
       w1BUN |   315.1726   2106.403     0.15   0.881    -3849.079    4479.424
       w1ALP |   260.6667   337.7828     0.77   0.442    -406.8405    928.1739
  w1UricAcid |  -18601.82   5789.497    -3.21   0.002    -30042.72   -7160.933
       _cons |   207011.4    1207393     0.17   0.864     -2179002     2593025
------------------------------------------------------------------------------

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                               Number of obs     =        163
                                                Average RVI       =     0.0192
                                                Largest FMI       =     0.2110
                                                Complete DF       =        150
DF adjustment:   Small sample                   DF:     min       =      56.18
                                                        avg       =     139.08
                                                        max       =     147.99
Model F test:       Equal FMI                   F(  12,  147.7)   =      14.78
Within VCE type:          OLS                   Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-433.7747	8594.66	-0.05	0.960	-17418.01	16550.46
Sex	90358.36	9724.252	9.29	0.000	71124.93	109591.8
w1Age	-1927.007	479.8512	-4.02	0.000	-2875.257	-978.7578
Race	-41726.72	8267.178	-5.05	0.000	-58065.03	-25388.42
PovStat	-3604.172	8853.163	-0.41	0.685	-21099.2	13890.86
TIME_V1SCAN	-5.568402	6.272187	-0.89	0.376	-17.96326	6.826459
w1BMI	1126.873	637.2762	1.77	0.079	-132.4838	2386.23
w1Creatinine	-4501.151	20735.31	-0.22	0.829	-46035.99	37033.69
w1USpecGrav	364567	641364.5	0.57	0.571	-902922.4	1632056
w1BUN	654.0508	1122.115	0.58	0.561	-1564.032	2872.134
w1ALP	254.3884	180.3465	1.41	0.160	-101.9985	610.7753
w1UricAcid	-8544.274	3091.394	-2.76	0.006	-14653.27	-2435.281
_cons	299950.5	646105.6	0.46	0.643	-976912	1576813

255 . 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 = 163
Average RVI = 0.0348
Largest FMI = 0.3036
Complete DF = 150
DF adjustment: **Small sample** — DF: min = 35.43
avg = 134.06
max = 147.84
Model F test: **Equal FMI** — F(12, 147.1) = 8.45
Within VCE type: **OLS** — Prob > F = 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6414.236	8052.734	0.80	0.427	-9500.49	22328.96
Sex	74910.38	9215.482	8.13	0.000	56660.14	93160.62
w1Age	-548.9549	449.6892	-1.22	0.224	-1437.684	339.7745
Race	-14889.61	7740.768	-1.92	0.056	-30189.11	409.8833
PovStat	-3603.289	8263.588	-0.44	0.663	-19933.3	12726.72
TIME_V1SCAN	-10.05908	5.862229	-1.72	0.088	-21.64417	1.526014
w1BMI	1009.724	598.8532	1.69	0.094	-173.9289	2193.377
w1Creatinine	-19972.57	20405.19	-0.98	0.334	-61379.23	21434.1
w1USpecGrav	261405.2	601458.2	0.43	0.664	-927390.9	1450201
w1BUN	-23.28811	1063.292	-0.02	0.983	-2126.97	2080.394
w1ALP	61.62801	168.5681	0.37	0.715	-271.493	394.749
w1UricAcid	-8567.429	2887.704	-2.97	0.004	-14274.01	-2860.851
_cons	173492.3	605821	0.29	0.775	-1023926	1370911

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 = 163
Average RVI = 0.0648
Largest FMI = 0.4887
Complete DF = 149
DF: min = 16.64
avg = 129.54
DF adjustment: **Small sample** — max = 146.92
F(12, .) = .
Within VCE type: **OLS** — Prob > F = .

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-105.9884	56.38406	-1.88	0.062	-217.445	5.468127
Sex	5.763234	84.78668	0.07	0.946	-162.286	173.8124
w1Age	-5.612598	3.116583	-1.80	0.074	-11.77188	.5466868
Race	-86.39503	57.81961	-1.49	0.137	-200.7044	27.9143
PovStat	-148.9856	57.51913	-2.59	0.011	-262.66	-35.31132
TIME_V1SCAN	.0291995	.0408882	0.71	0.476	-.0516107	.1100096
w1BMI	2.585879	4.172006	0.62	0.536	-5.659204	10.83096
w1Creatinine	-3.926862	161.2987	-0.02	0.981	-344.8017	336.9479
w1USpecGrav	-3432.403	4275.314	-0.80	0.424	-11891.11	5026.303
w1BUN	10.44204	7.450843	1.40	0.164	-4.307351	25.19144
w1ALP	-.465269	1.174282	-0.40	0.693	-2.786061	1.855523
w1UricAcid	-2.11429	20.474	-0.10	0.918	-42.57644	38.34787
ICV_volM2	.0016431	.0002457	6.69	0.000	.0011576	.0021286
_cons	5423.283	4286.701	1.27	0.208	-3058.143	13904.71

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0200
Largest FMI = 0.1904
Complete DF = 149
DF: min = 62.54
avg = 138.12
DF adjustment: **Small sample** max = 146.94
F(12, .) = .
Within VCE type: **OLS** Prob > F = .

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-99.30245	57.45731	-1.73	0.086	-212.8581	14.25316
Sex	-89.25115	84.22487	-1.06	0.291	-255.762	77.25969
w1Age	-4.179351	3.191424	-1.31	0.192	-10.48637	2.127669
Race	-86.37496	58.77361	-1.47	0.144	-202.5337	29.78381
PovStat	-140.9504	58.94451	-2.39	0.018	-257.4401	-24.46072
TIME_V1SCAN	.0665185	.0418511	1.59	0.114	-.0161912	.1492281
w1BMI	2.91056	4.273602	0.68	0.497	-5.535128	11.35625
w1Creatinine	22.67428	136.5557	0.17	0.869	-250.2494	295.5979
w1USpecGrav	-1443.856	4361.837	-0.33	0.741	-10070.71	7182.999
w1BUN	12.52273	7.468352	1.68	0.096	-2.239957	27.28541
w1ALP	.0926627	1.202477	0.08	0.939	-2.283776	2.469101
w1UricAcid	-10.07691	20.98398	-0.48	0.632	-51.5465	31.39267
ICV_volM2	.0021177	.0002519	8.41	0.000	.0016198	.0026156
_cons	2955.543	4371.521	0.68	0.500	-5690.39	11601.48

260 .
261 . //ANALYSIS C//

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

Multiple-imputation estimates		Imputations	= **5**
Linear regression		Number of obs	= **163**
		Average RVI	= **0.0065**
		Largest FMI	= **0.0674**
		Complete DF	= **149**
		DF: min	= **120.36**
		avg	= **144.70**
DF adjustment: **Small sample**		max	= **146.95**
		F(12, .)	= .
Within VCE type: **OLS**		Prob > F	= .

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**.9292814**	**.7595221**	**1.22**	**0.223**	**-.5717907**	**2.430354**
Sex	**-.0846314**	**1.104708**	**-0.08**	**0.939**	**-2.267983**	**2.09872**
w1Age	**.0509048**	**.042241**	**1.21**	**0.230**	**-.0325752**	**.1343848**
Race	**1.460685**	**.7749371**	**1.88**	**0.061**	**-.0707889**	**2.992159**
PovStat	**1.056794**	**.7789839**	**1.36**	**0.177**	**-.4826679**	**2.596255**
TIME_V1SCAN	**-.0009409**	**.0005533**	**-1.70**	**0.091**	**-.0020343**	**.0001525**
w1BMI	**.0211919**	**.0565329**	**0.37**	**0.708**	**-.0905319**	**.1329158**
w1Creatinine	**.7818203**	**1.694346**	**0.46**	**0.645**	**-2.572762**	**4.136403**
w1USpecGrav	**23.62384**	**56.59571**	**0.42**	**0.677**	**-88.22421**	**135.4719**
w1BUN	**.0746793**	**.0980778**	**0.76**	**0.448**	**-.1191519**	**.2685105**
w1ALP	**-.0084469**	**.0158992**	**-0.53**	**0.596**	**-.0398683**	**.0229745**
w1UricAcid	**-.0194717**	**.2773608**	**-0.07**	**0.944**	**-.5676028**	**.5286594**
ICV_volM2	**2.82e-06**	**3.33e-06**	**0.85**	**0.398**	**-3.76e-06**	**9.40e-06**
_cons	**-29.79659**	**56.73159**	**-0.53**	**0.600**	**-141.9133**	**82.32007**

```
. 
. save, replace
file finaldata_imputed_final.dta saved

. 
. //Males//
. 
. use finaldata_imputed_final,clear

. 
. 
. //ANALYSIS A//
. 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	= **69**
		Average RVI	= **0.0540**
		Largest FMI	= **0.4167**
		Complete DF	= **57**
DF adjustment: **Small sample**		DF: min	= **15.90**
		avg	= **49.79**
		max	= **55.03**
Model F test: **Equal FMI**		F(**11**, **54.6**)	= **2.10**
Within VCE type: **OLS**		Prob > F	= **0.0355**

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-12565.73	28816.52	-0.44	0.664	-70314.65	45183.2
Sex	0	(omitted)				
w1Age	-2738.98	1754.859	-1.56	0.124	-6255.87	777.911
Race	-79799.57	30344.17	-2.63	0.011	-140720.9	-18878.3
PovStat	24481.93	31419.76	0.78	0.439	-38492.14	87456.01
TIME_V1SCAN	-32.56721	21.30007	-1.53	0.132	-75.27926	10.14483
w1BMI	4543.135	3232.913	1.41	0.166	-1948.786	11035.06
w1Creatinine	-54181.5	92025.09	-0.59	0.564	-249367.8	141004.8
w1USpecGrav	-1909962	2211241	-0.86	0.392	-6344656	2524732
w1BUN	2117.054	3938.621	0.54	0.594	-5812.92	10047.03
w1ALP	452.0108	758.5011	0.60	0.554	-1068.093	1972.115
w1UricAcid	-20347.75	11323.03	-1.80	0.078	-43039.55	2344.057
_cons	3471336	2253652	1.54	0.129	-1048679	7991350

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 = 69
Average RVI = 0.0654
Largest FMI = 0.4761
Complete DF = 57
DF adjustment: Small sample — DF: min = 13.17
avg = 48.92
max = 54.96
Model F test: Equal FMI — F(11, 54.4) = 3.16
Within VCE type: OLS — Prob > F = 0.0023

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-10666.8	14745.46	-0.72	0.473	-40217.79	18884.2
Sex	0	(omitted)				
w1Age	-2706.992	897.4292	-3.02	0.004	-4505.512	-908.4725
Race	-53772.2	15550.82	-3.46	0.001	-85000.04	-22544.35
PovStat	8889.765	16073.55	0.55	0.582	-23326.58	41106.11
TIME_V1SCAN	-11.00541	10.87651	-1.01	0.316	-32.81308	10.80225
w1BMI	2517.589	1660.495	1.52	0.136	-818.3641	5853.542
w1Creatinine	-15825.48	49133.11	-0.32	0.752	-121832.4	90181.46
w1USpecGrav	-1147563	1141384	-1.01	0.319	-3438470	1143343
w1BUN	1316.146	2036.357	0.65	0.522	-2790.98	5423.271
w1ALP	393.0702	387.9586	1.01	0.315	-384.435	1170.575
w1UricAcid	-9357.777	5795.717	-1.61	0.112	-20973.04	2257.491
_cons	2053840	1163836	1.76	0.084	-282418.1	4390098

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 = 69
Average RVI = 0.0487
Largest FMI = 0.3700
Complete DF = 57
DF adjustment: Small sample — DF: min = 18.51
avg = 49.57
max = 54.97
Model F test: Equal FMI — F(11, 54.7) = 1.34
Within VCE type: OLS — Prob > F = 0.2291

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-4598.015	14581.13	-0.32	0.754	-33820.2	24624.17
Sex	0	(omitted)				
w1Age	-843.5826	890.2235	-0.95	0.348	-2628.002	940.8372
Race	-26087.77	15253.33	-1.71	0.093	-56694.53	4518.989
PovStat	6321.321	15857.75	0.40	0.692	-25459.48	38102.12
TIME_V1SCAN	-20.43936	10.76018	-1.90	0.063	-42.01525	1.136534
w1BMI	2109.565	1640.759	1.29	0.205	-1186.696	5405.825
w1Creatinine	-32514.38	45097.89	-0.72	0.480	-127075.1	62046.3
w1USpecGrav	-1234833	1133280	-1.09	0.281	-3510544	1040878
w1BUN	262.0417	1986.871	0.13	0.896	-3737.052	4261.135
w1ALP	247.1583	383.3396	0.64	0.522	-521.0803	1015.397
w1UricAcid	-7564.02	5733.867	-1.32	0.193	-19055.9	3927.865
_cons	1870244	1155107	1.62	0.112	-449508.8	4189996

```
276 .
277 .
278 . //ANALYSIS B//
279 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
    > 2
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.1107
Largest FMI = 0.6187
Complete DF = 56
DF adjustment: Small sample — DF: min = 8.47
avg = 47.01
max = 53.85
Model F test: Equal FMI — F(11, 52.6) = 4.20
Within VCE type: OLS — Prob > F = 0.0002

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-118.0416	98.95878	-1.19	0.238	-316.637	80.5538
Sex	0	(omitted)				
w1Age	-7.742892	5.993369	-1.29	0.202	-19.7673	4.281516
Race	-40.5292	112.0104	-0.36	0.719	-265.5992	184.5408
PovStat	-230.0195	107.4604	-2.14	0.037	-445.6364	-14.40267
TIME_V1SCAN	-.0055308	.0725567	-0.08	0.940	-.1510335	.139972
w1BMI	15.86313	11.00508	1.44	0.156	-6.240132	37.96639
w1Creatinine	24.55364	370.3052	0.07	0.949	-821.2286	870.3358
w1USpecGrav	-3160.579	7666.174	-0.41	0.682	-18581.9	12260.74
w1BUN	-2.542231	13.64085	-0.19	0.853	-30.13541	25.05094
w1ALP	1.213115	2.567003	0.47	0.638	-3.933741	6.359972
w1UricAcid	4.496298	39.05991	0.12	0.909	-73.82289	82.81548
ICV_volM2	.0020511	.000392	5.23	0.000	.0012651	.0028372
_cons	4418.512	7891.84	0.56	0.578	-11463.33	20300.36

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0713
                                                Largest FMI       =     0.4918
                                                Complete DF       =         56
DF adjustment:   Small sample                   DF:     min       =      12.45
                                                        avg       =      48.47
                                                        max       =      53.92
Model F test:       Equal FMI                   F(  11,   53.3)   =       6.07
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hipp~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -128.0529   96.38171    -1.33   0.190    -321.3778    65.27196
         Sex |          0  (omitted)
       w1Age |  -7.711577   5.855882    -1.32   0.194    -19.45726    4.034108
        Race |  -31.84143   108.4358    -0.29   0.770    -249.4542    185.7714
     PovStat |  -213.1053   104.7863    -2.03   0.047    -423.2732   -2.937315
 TIME_V1SCAN |   .0528422    .071018     0.74   0.460    -.0895613    .1952458
       w1BMI |   22.49091   10.73019     2.10   0.041     .9512165     44.0306
w1Creatinine |  -9.182867   323.0221    -0.03   0.978     -710.163    691.7973
 w1USpecGrav |   -2107.45    7489.46    -0.28   0.780    -17166.39    12951.49
       w1BUN |    8.43654   13.04111     0.65   0.521    -17.82811    34.70119
       w1ALP |    1.74903   2.515306     0.70   0.490    -3.294026    6.792085
  w1UricAcid |  -26.51103   38.27538    -0.69   0.492    -103.2549    50.23284
   ICV_volM2 |   .0023604   .0003839     6.15   0.000     .0015907    .0031301
       _cons |   2897.349   7700.535     0.38   0.708    -12589.62    18384.32
------------------------------------------------------------------------------

281 .
282 . //ANALYSIS C//
283 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
> 

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0402
                                                Largest FMI       =     0.2876
                                                Complete DF       =         56
DF adjustment:   Small sample                   DF:     min       =      24.16
                                                        avg       =      50.26
                                                        max       =      54.04
Model F test:       Equal FMI                   F(  11,   53.8)   =       0.68
Within VCE type:          OLS                   Prob > F          =     0.7470

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   .1180785   .9689118     0.12   0.903    -1.827591    2.063748
         Sex |          0  (omitted)
       w1Age |  -.0006557   .0581264    -0.01   0.991     -.117251    .1159396
        Race |   .7829407   1.077535     0.73   0.471    -1.379837    2.945718
     PovStat |    .733986     1.0432     0.70   0.485    -1.358892    2.826864
 TIME_V1SCAN |  -.0007468   .0007052    -1.06   0.294    -.0021609    .0006673
       w1BMI |  -.0955287    .105901    -0.90   0.371    -.3080231    .1169658
w1Creatinine |   2.832106   2.785636     1.02   0.319    -2.915207    8.579419
 w1USpecGrav |   18.18922   72.65833     0.25   0.803    -127.5782    163.9566
       w1BUN |   -.067065    .125174    -0.54   0.594    -.3182174    .1840874
       w1ALP |  -.0347554   .0249235    -1.39   0.169    -.0847231    .0152124
  w1UricAcid |   .1873922   .3816876     0.49   0.625    -.5781479    .9529324
   ICV_volM2 |   1.88e-06   3.85e-06     0.49   0.628    -5.84e-06    9.59e-06
```

_cons	-13.96683	74.68179	-0.19	0.852	-163.8113	135.8777

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

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

292 .
293 .
294 . //ANALYSIS A//
295 . 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     =         94
                                                Average RVI       =     0.0312
                                                Largest FMI       =     0.2880
                                                Complete DF       =         82
DF adjustment:   Small sample                   DF:     min       =      29.68
                                                        avg       =      75.49
                                                        max       =      79.96
Model F test:       Equal FMI                   F(  11,   79.7)   =       3.11
Within VCE type:          OLS                   Prob > F          =     0.0016
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	26466.87	20210	1.31	0.194	-13759.44	66693.17
Sex	0	(omitted)				
w1Age	-1509.46	1078.774	-1.40	0.166	-3656.308	637.387
Race	-50993.94	17627.46	-2.89	0.005	-86078.02	-15909.85
PovStat	-20225.86	19606.72	-1.03	0.305	-59244.8	18793.09
TIME_V1SCAN	-.5647751	14.07038	-0.04	0.968	-28.56656	27.43701
w1BMI	2683.535	1256.212	2.14	0.036	183.3178	5183.753
w1Creatinine	-6678.562	45783.73	-0.15	0.885	-100223.4	86866.25
w1USpecGrav	2579467	1394740	1.85	0.068	-196208.6	5355143
w1BUN	-3153.258	2619.75	-1.20	0.232	-8367.212	2060.697
w1ALP	91.68911	382.2675	0.24	0.811	-669.1084	852.4867
w1UricAcid	-18662.34	7011.789	-2.66	0.009	-32617.15	-4707.523
_cons	-1377539	1409060	-0.98	0.331	-4181710	1426632

```
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     =         94
                                                Average RVI       =     0.0366
                                                Largest FMI       =     0.3323
                                                Complete DF       =         82
DF adjustment:   Small sample                   DF:     min       =      25.01
                                                        avg       =      75.15
                                                        max       =      80.05
Model F test:       Equal FMI                   F(  11,   79.6)   =       3.68
Within VCE type:          OLS                   Prob > F          =     0.0003
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	4899.262	11390.98	0.43	0.668	-17771.33	27569.85
Sex	0	(omitted)				
w1Age	-1399.8	609.0958	-2.30	0.024	-2611.928	-187.6732
Race	-38194.51	9965.58	-3.83	0.000	-58029.67	-18359.36
PovStat	-11932.97	11078.81	-1.08	0.285	-33980.83	10114.89
TIME_V1SCAN	1.475651	7.939458	0.19	0.853	-14.32422	17.27553
w1BMI	1324.181	708.2129	1.87	0.065	-85.25358	2733.616
w1Creatinine	4242.138	26560.18	0.16	0.874	-50458.06	58942.33
w1USpecGrav	1298264	787772.9	1.65	0.103	-269473.7	2866002
w1BUN	-1079.712	1484.663	-0.73	0.469	-4034.957	1875.533
w1ALP	136.9465	215.802	0.63	0.528	-292.5356	566.4285
w1UricAcid	-8234.311	3959.753	-2.08	0.041	-16114.87	-353.7464
_cons	-587049.3	795794.8	-0.74	0.463	-2170745	996646.4

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 = 94
Average RVI = 0.0150
Largest FMI = 0.1163
Complete DF = 82
DF adjustment: **Small sample** — DF: min = 59.03
avg = 77.79
max = 79.98
Model F test: **Equal FMI** — F(11, 80.0) = 2.36
Within VCE type: **OLS** — Prob > F = 0.0140

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	17210.06	9826.9	1.75	0.084	-2352.653	36772.77
Sex	0	(omitted)				
w1Age	-490.9401	523.6178	-0.94	0.351	-1533.036	551.1558
Race	-9912.93	8528.559	-1.16	0.249	-26886.28	7060.423
PovStat	-10378.09	9501.364	-1.09	0.278	-29286.49	8530.316
TIME_V1SCAN	-1.114353	6.830464	-0.16	0.871	-14.70863	12.47992
w1BMI	1302.868	610.9298	2.13	0.036	86.76078	2518.974
w1Creatinine	-12009.62	20223.89	-0.59	0.555	-52477.09	28457.85
w1USpecGrav	1202637	676106.5	1.78	0.079	-142894.2	2548167
w1BUN	-1310.558	1267.198	-1.03	0.304	-3832.418	1211.302
w1ALP	-31.2154	185.4439	-0.17	0.867	-400.3038	337.873
w1UricAcid	-9872.392	3399.276	-2.90	0.005	-16637.68	-3107.1
_cons	-736301	683066.2	-1.08	0.284	-2095682	623079.6

298 .
299 .
300 . //ANALYSIS B//
301 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
> 1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0022
Largest FMI = 0.0179
Complete DF = 81
DF adjustment: **Small sample** — DF: min = 77.32
avg = 78.86
max = 79.05
Model F test: **Equal FMI** — F(12, 79.1) = 3.45
Within VCE type: **OLS** — Prob > F = 0.0004

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-36.88809	72.99257	-0.51	0.615	-182.177	108.4008
Sex	0	(omitted)				
w1Age	-8.739028	3.835445	-2.28	0.025	-16.37323	-1.104827
Race	-133.7069	66.5717	-2.01	0.048	-266.2132	-1.200641
PovStat	-108.6811	70.1284	-1.55	0.125	-248.2668	30.90451
TIME_V1SCAN	.0429124	.0500119	0.86	0.393	-.0566335	.1424583
w1BMI	.5681254	4.560833	0.12	0.901	-8.509969	9.646219
w1Creatinine	-40.87811	141.3725	-0.29	0.773	-322.3681	240.6119
w1USpecGrav	-4067.989	5077.916	-0.80	0.425	-14175.55	6039.57
w1BUN	15.03661	9.448264	1.59	0.116	-3.770105	33.84332
w1ALP	-1.010776	1.356383	-0.75	0.458	-3.710572	1.68902
w1UricAcid	-1.840229	25.5987	-0.07	0.943	-52.79304	49.11258
ICV_volM2	.0011192	.0003348	3.34	0.001	.0004529	.0017856
_cons	6788.94	5053.402	1.34	0.183	-3269.813	16847.69

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0070
Largest FMI = 0.0691
Complete DF = 81
DF adjustment: **Small sample** — DF: min = 68.55
avg = 78.07
max = 79.05
Model F test: **Equal FMI** — F(12, 79.0) = 4.52
Within VCE type: **OLS** — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-42.81266	78.75527	-0.54	0.588	-199.5754	113.95
Sex	0	(omitted)				
w1Age	-5.722255	4.135427	-1.38	0.170	-13.95354	2.509031
Race	-146.9316	71.84686	-2.05	0.044	-289.9419	-3.921261
PovStat	-89.13798	75.63534	-1.18	0.242	-239.686	61.41003
TIME_V1SCAN	.0749541	.053951	1.39	0.169	-.032434	.1823423
w1BMI	-2.177969	4.917393	-0.44	0.659	-11.96575	7.609814
w1Creatinine	-33.61366	156.3464	-0.21	0.830	-345.5526	278.3253
w1USpecGrav	-2432.363	5488.547	-0.44	0.659	-13358.26	8493.53
w1BUN	9.895492	10.19459	0.97	0.335	-10.39726	30.18824
w1ALP	-.6997853	1.463703	-0.48	0.634	-3.613273	2.213702
w1UricAcid	12.5169	27.60095	0.45	0.651	-42.4212	67.45499
ICV_volM2	.0018202	.000361	5.04	0.000	.0011017	.0025387
_cons	4380.485	5462.881	0.80	0.425	-6494.366	15255.34

```
. 
. //ANALYSIS C//
. mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN w
>
```

Multiple-imputation estimates		Imputations	= 5
Linear regression		Number of obs	= 94
		Average RVI	= 0.0068
		Largest FMI	= 0.0756
		Complete DF	= 81
DF adjustment:	Small sample	DF: min	= 67.20
		avg	= 78.08
		max	= 79.07
Model F test:	Equal FMI	F(12, 79.0)	= 1.43
Within VCE type:	OLS	Prob > F	= 0.1710

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.614606	1.23727	1.30	0.196	-.848214	4.077426
Sex	0	(omitted)				
w1Age	.0911049	.0649492	1.40	0.165	-.0381721	.220382
Race	1.703577	1.127602	1.51	0.135	-.5408531	3.948007
PovStat	1.897262	1.187517	1.60	0.114	-.4664032	4.260927
TIME_V1SCAN	-.0013214	.0008475	-1.56	0.123	-.0030083	.0003655
w1BMI	.1077412	.0772125	1.40	0.167	-.0459449	.2614273
w1Creatinine	.2644121	2.463171	0.11	0.915	-4.651832	5.180656
w1USpecGrav	35.56922	85.9299	0.41	0.680	-135.4698	206.6082
w1BUN	.1787378	.1598661	1.12	0.267	-.1394661	.4969416
w1ALP	.0046001	.0229978	0.20	0.842	-.0411775	.0503776
w1UricAcid	-.4828113	.4335708	-1.11	0.269	-1.345815	.3801927
ICV_volM2	4.30e-06	5.67e-06	0.76	0.450	-6.98e-06	.0000156
_cons	-50.33246	85.51585	-0.59	0.558	-220.5471	119.8822

```
. 
. save, replace
file finaldata_imputed_final.dta saved

. 
. **INTERACTION BY Sex**
. 
. 
. //ANALYSIS A//
. mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav w1BUN
```

Multiple-imputation estimates		Imputations	= 5
Linear regression		Number of obs	= 163
		Average RVI	= 0.0198
		Largest FMI	= 0.2146
		Complete DF	= 149
DF adjustment:	Small sample	DF: min	= 54.96
		avg	= 139.49
		max	= 146.92
Model F test:	Equal FMI	F(13, 146.7)	= 12.35
Within VCE type:	OLS	Prob > F	= 0.0000

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	22257.91	20556.99	1.08	0.281	-18367.77	62883.58
Sex						
Men	233913.4	65794.7	3.56	0.001	103879.7	363947.1
Sex#c.LnNFLw3						
Men	-25124.64	27750.24	-0.91	0.367	-79965.83	29716.55
Sex	0	(omitted)				
w1Age	-2073.88	904.4702	-2.29	0.023	-3861.356	-286.4044
Race	-59031.64	15516.59	-3.80	0.000	-89699.12	-28364.17
PovStat	699.3689	16873.47	0.04	0.967	-32646.72	34045.46
TIME_V1SCAN	-17.4257	11.75972	-1.48	0.141	-40.6664	5.815001
w1BMI	2514.048	1228.151	2.05	0.042	86.81141	4941.284
w1Creatinine	-27939.3	38963.27	-0.72	0.476	-106024.6	50146.04
w1USpecGrav	838582	1201190	0.70	0.486	-1535313	3212477
w1BUN	249.6789	2108.564	0.12	0.906	-3919.043	4418.401
w1ALP	244.2931	338.4636	0.72	0.472	-424.5967	913.1828
w1UricAcid	-19161.84	5825.523	-3.29	0.001	-30674.56	-7649.125
_cons	415158.1	1212501	0.34	0.733	-1981092	2811409

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0168
Largest FMI = 0.2012
Complete DF = 149
DF adjustment: Small sample — DF: min = 59.01
avg = 140.01
max = 147.01
Model F test: Equal FMI — F(13, 146.8) = 13.71
Within VCE type: OLS — Prob > F = 0.0000

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	5456.937	10984.05	0.50	0.620	-16250.25	27164.12
Sex						
Men	119460.5	35154.56	3.40	0.001	49982.75	188938.3
Sex#c.LnNFLw3						
Men	-12790.11	14826.96	-0.86	0.390	-42091.72	16511.51
Sex	0	(omitted)				
w1Age	-1970.953	482.9129	-4.08	0.000	-2925.305	-1016.602
Race	-42108.06	8284.231	-5.08	0.000	-58480.89	-25735.23
PovStat	-2164.796	9014.972	-0.24	0.811	-19980.53	15650.93
TIME_V1SCAN	-5.407539	6.279922	-0.86	0.391	-17.81837	7.003289
w1BMI	1256.082	655.2188	1.92	0.057	-38.80467	2550.97
w1Creatinine	-5045.619	20667.16	-0.24	0.808	-46400.39	36309.16
w1USpecGrav	335832.2	642522.5	0.52	0.602	-934004.4	1605669
w1BUN	620.5917	1123.438	0.55	0.582	-1600.205	2841.389
w1ALP	246.0598	180.7488	1.36	0.175	-111.1417	603.2613
w1UricAcid	-8829.482	3111.377	-2.84	0.005	-14978.3	-2680.664
_cons	406251.3	648716.8	0.63	0.532	-875835.2	1688338

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0329
                                                Largest FMI       =     0.3055
                                                Complete DF       =        149
DF adjustment:   Small sample                   DF:     min       =      35.05
                                                        avg       =     136.16
                                                        max       =     146.91
Model F test:       Equal FMI                   F(  13,  146.3)   =       7.89
Within VCE type:          OLS                   Prob > F          =     0.0000
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	12624.93	10278.48	1.23	0.221	-7689.362	32939.22
Sex						
Men	105588.2	32873.57	3.21	0.002	40613.7	170562.7
Sex#c.LnNFLw3						
Men	-13481.18	13836.09	-0.97	0.331	-40824.91	13862.54
Sex	0	(omitted)				
w1Age	-595.3542	452.6485	-1.32	0.190	-1490.003	299.2943
Race	-15290.44	7751.338	-1.97	0.050	-30611.57	30.68864
PovStat	-2086.677	8408.316	-0.25	0.804	-18703.55	14530.2
TIME_V1SCAN	-9.889136	5.866517	-1.69	0.094	-21.48339	1.705114
w1BMI	1146.01	615.9843	1.86	0.065	-71.62325	2363.644
w1Creatinine	-20563.88	20454.93	-1.01	0.322	-62087.34	20959.59
w1USpecGrav	231061.7	601975.8	0.38	0.702	-958796.7	1420920
w1BUN	-58.3776	1063.727	-0.05	0.956	-2162.985	2046.23
w1ALP	52.84235	168.8269	0.31	0.755	-280.8083	386.493
w1UricAcid	-8867.838	2904.325	-3.05	0.003	-14607.57	-3128.104
_cons	265270.3	607826.9	0.44	0.663	-936167.6	1466708

```
316 .
317 .
318 . //ANALYSIS B//
319 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0621
                                                Largest FMI       =     0.4984
                                                Complete DF       =        148
DF adjustment:   Small sample                   DF:     min       =      16.05
                                                        avg       =     132.34
                                                        max       =     145.90
Model F test:       Equal FMI                   F(  13,  143.8)   =       9.72
Within VCE type:          OLS                   Prob > F          =     0.0000
```

Left_Hippoc~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-61.31213	72.09559	-0.85	0.397	-203.8245	81.20021
Sex						
Men	229.0929	239.6881	0.96	0.341	-244.7077	702.8934
Sex#c.LnNFLw3						
Men	-96.26742	96.42567	-1.00	0.320	-286.8394	94.30451
Sex	0	(omitted)				
w1Age	-5.947393	3.13591	-1.90	0.060	-12.14528	.2504931
Race	-90.91956	58.00685	-1.57	0.119	-205.6062	23.76708
PovStat	-138.3192	58.4918	-2.36	0.019	-253.9218	-22.71653
TIME_V1SCAN	.030151	.0408915	0.74	0.462	-.0506698	.1109718
w1BMI	3.603847	4.296344	0.84	0.403	-4.887498	12.09519
w1Creatinine	-8.342397	162.7884	-0.05	0.960	-353.3585	336.6737
w1USpecGrav	-3613.227	4271.854	-0.85	0.399	-12064.5	4838.048
w1BUN	10.15128	7.460349	1.36	0.176	-4.618401	24.92095
w1ALP	-.5232753	1.175764	-0.45	0.657	-2.84713	1.800579
w1UricAcid	-4.592073	20.62383	-0.22	0.824	-45.35266	36.16852
ICV_volM2	.0016231	.0002465	6.58	0.000	.0011359	.0021102
_cons	5541.36	4294.416	1.29	0.199	-2955.057	14037.78

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

Multiple-imputation estimates		Imputations	= 5
Linear regression		Number of obs	= 163
		Average RVI	= 0.0194
		Largest FMI	= 0.2006
		Complete DF	= 148
DF adjustment:	Small sample	DF: min	= 59.00
		avg	= 138.15
		max	= 145.96
Model F test:	Equal FMI	F(13, 145.7)	= 12.31
Within VCE type:	OLS	Prob > F	= 0.0000

Right_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-50.63089	73.52461	-0.69	0.492	-195.947	94.68519
Sex						
Men	154.0463	244.3567	0.63	0.529	-328.907	636.9995
Sex#c.LnNFLw3						
Men	-104.8738	98.80868	-1.06	0.290	-300.1543	90.40674
Sex	0	(omitted)				
w1Age	-4.544016	3.208654	-1.42	0.159	-10.88545	1.797418
Race	-91.30273	58.93966	-1.55	0.124	-207.7967	25.19119
PovStat	-129.3307	59.92402	-2.16	0.033	-247.7627	-10.89865
TIME_V1SCAN	.0675564	.0418379	1.61	0.109	-.0151316	.1502443
w1BMI	4.019368	4.397662	0.91	0.362	-4.671981	12.71072
w1Creatinine	17.8588	137.4287	0.13	0.897	-257.1356	292.8532
w1USpecGrav	-1641.005	4357.001	-0.38	0.707	-10257.93	6975.923
w1BUN	12.20618	7.473363	1.63	0.105	-2.56741	26.97977
w1ALP	.0294115	1.20339	0.02	0.981	-2.348965	2.407788
w1UricAcid	-12.77633	21.12912	-0.60	0.546	-54.53512	28.98247
ICV_volM2	.0020959	.0002527	8.30	0.000	.0015966	.0025952
_cons	2988.806	4375.887	0.68	0.496	-5665.42	11643.03

```
. 
. //ANALYSIS C//
. mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1Creatinine w1USpecGrav
```

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **163**
Average RVI = **0.0035**
Largest FMI = **0.0377**
Complete DF = **148**
DF adjustment: **Small sample** — DF: min = **134.43**
avg = **145.07**
max = **145.99**
Model F test: **Equal FMI** — F(**13**, **146.0**) = **1.41**
Within VCE type: **OLS** — Prob > F = **0.1630**

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**2.11992**	**.9623999**	**2.20**	**0.029**	**.2178359**	**4.022004**
Sex						
Men	**5.86683**	**3.196072**	**1.84**	**0.068**	**-.4497821**	**12.18344**
Sex#c.LnNFLw3						
Men	**-2.565337**	**1.294208**	**-1.98**	**0.049**	**-5.123141**	**-.0075326**
Sex	**0**	(omitted)				
w1Age	**.041984**	**.0420505**	**1.00**	**0.320**	**-.0411232**	**.1250913**
Race	**1.340197**	**.7695476**	**1.74**	**0.084**	**-.1807022**	**2.861095**
PovStat	**1.341006**	**.7845002**	**1.71**	**0.090**	**-.2094404**	**2.891452**
TIME_V1SCAN	**-.0009155**	**.0005479**	**-1.67**	**0.097**	**-.0019982**	**.0001673**
w1BMI	**.0483137**	**.0576138**	**0.84**	**0.403**	**-.065552**	**.1621794**
w1Creatinine	**.6634659**	**1.655529**	**0.40**	**0.689**	**-2.610788**	**3.937719**
w1USpecGrav	**18.79949**	**56.07525**	**0.34**	**0.738**	**-92.02532**	**129.6243**
w1BUN	**.0669438**	**.0971333**	**0.69**	**0.492**	**-.1250289**	**.2589165**
w1ALP	**-.0099955**	**.0157579**	**-0.63**	**0.527**	**-.0411393**	**.0211482**
w1UricAcid	**-.0854964**	**.2766489**	**-0.31**	**0.758**	**-.6322505**	**.4612576**
ICV_volM2	**2.29e-06**	**3.31e-06**	**0.69**	**0.490**	**-4.25e-06**	**8.83e-06**
_cons	**-26.88237**	**56.32656**	**-0.48**	**0.634**	**-138.2039**	**84.4392**

```
. 
. save, replace
file finaldata_imputed_final.dta saved

. 
. **********MODEL 5: MODEL 2+oxidative stress******
. 
. //Overall//
. 
. use finaldata_imputed_final,clear

. 
```

```
333 .
334 . //ANALYSIS A//
335 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  w1TotalD w1Albumin w1EosinPct if sam

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0086
                                                Largest FMI       =     0.0749
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     118.26
                                                        avg       =     146.37
                                                        max       =     150.02
Model F test:       Equal FMI                   F(  10,  149.9)   =      13.98
Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	5356.492	15846.45	0.34	0.736	-25954.74	36667.73
Sex	146690.9	14555.86	10.08	0.000	117929.7	175452
w1Age	-2600.703	894.6411	-2.91	0.004	-4368.444	-832.9615
Race	-64194.09	17376.4	-3.69	0.000	-98536.02	-29852.15
PovStat	-2585.852	16970.68	-0.15	0.879	-36118.56	30946.85
TIME_V1SCAN	-15.33569	12.31898	-1.24	0.215	-39.67704	9.005668
w1BMI	730.0233	1136.85	0.64	0.522	-1516.294	2976.34
w1TotalD	412.7974	834.2695	0.49	0.622	-1239.245	2064.84
w1Albumin	3063.783	27896.56	0.11	0.913	-52057.13	58184.7
w1EosinPct	-4018.657	3665.421	-1.10	0.275	-11262.4	3225.088
_cons	1138177	154515	7.37	0.000	832864.4	1443490

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0045
                                                Largest FMI       =     0.0410
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     136.42
                                                        avg       =     148.45
                                                        max       =     150.03
Model F test:       Equal FMI                   F(  10,  150.0)   =      16.06
Within VCE type:          OLS                   Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	83.93832	8411.503	0.01	0.992	-16536.42	16704.3
Sex	76071.5	7725.816	9.85	0.000	60806	91337
w1Age	-2103.548	474.7929	-4.43	0.000	-3041.695	-1165.4
Race	-44903.5	9186.89	-4.89	0.000	-63057.63	-26749.36
PovStat	-4307.96	9006.821	-0.48	0.633	-22104.61	13488.69
TIME_V1SCAN	-3.829624	6.538401	-0.59	0.559	-16.74893	9.089683
w1BMI	608.3347	603.4731	1.01	0.315	-584.0726	1800.742
w1TotalD	109.1688	435.4992	0.25	0.802	-752.0339	970.3715
w1Albumin	8877.469	14810.03	0.60	0.550	-20385.7	38140.64
w1EosinPct	-630.6843	1940.032	-0.33	0.746	-4464.305	3202.936
_cons	654073.8	81989.61	7.98	0.000	492068.7	816078.8

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0085
                                                Largest FMI       =     0.0683
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     121.95
                                                        avg       =     146.59
                                                        max       =     150.00
Model F test:       Equal FMI                   F(  10,  149.9)   =       9.02
Within VCE type:          OLS                   Prob > F          =     0.0000
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2242.808	7836.449	0.29	0.775	-13241.38	17727
Sex	59580.34	7199.983	8.28	0.000	45353.68	73807
w1Age	-857.4365	442.3913	-1.94	0.054	-1731.568	16.69491
Race	-16762.03	8593.761	-1.95	0.053	-33746.49	222.4276
PovStat	-3917.997	8392.238	-0.47	0.641	-20500.42	12664.42
TIME_V1SCAN	-8.716205	6.091769	-1.43	0.155	-20.75308	3.320673
w1BMI	234.9372	562.1844	0.42	0.677	-875.8919	1345.766
w1TotalD	304.003	411.1668	0.74	0.461	-509.9461	1117.952
w1Albumin	3505.221	13794.39	0.25	0.800	-23751.18	30761.62
w1EosinPct	-2620.284	1815.008	-1.44	0.151	-6207.35	966.7809
_cons	433232.6	76396.71	5.67	0.000	282277.4	584187.8

```
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                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0210
                                                Largest FMI       =     0.1805
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =      66.47
                                                        avg       =     140.52
                                                        max       =     148.99
Model F test:       Equal FMI                   F(  11,  148.7)   =      12.31
Within VCE type:          OLS                   Prob > F          =     0.0000
```

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-90.4147	52.66153	-1.72	0.088	-194.476	13.64659
Sex	-.2534368	66.05915	-0.00	0.997	-130.7882	130.2813
w1Age	-4.414416	2.979053	-1.48	0.141	-10.30112	1.472284
Race	-105.0958	61.42994	-1.71	0.089	-226.5506	16.35891
PovStat	-163.6751	56.33908	-2.91	0.004	-275.0024	-52.34776
TIME_V1SCAN	.0480243	.0410238	1.17	0.244	-.0330416	.1290901
w1BMI	4.8414	3.778089	1.28	0.202	-2.624226	12.30703
w1TotalD	.1367423	2.926544	0.05	0.963	-5.705518	5.979002
w1Albumin	178.624	92.61305	1.93	0.056	-4.380653	361.6287
w1EosinPct	-6.374555	12.28828	-0.52	0.605	-30.66721	17.9181
ICV_volM2	.0015904	.0002354	6.76	0.000	.0011252	.0020556
_cons	1185.764	592.7673	2.00	0.047	14.42032	2357.109

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0125
Largest FMI = 0.0879
Complete DF = 151
DF adjustment: **Small sample** — DF: min = 110.27
avg = 144.38
max = 149.03
Model F test: **Equal FMI** — F(11, 148.9) = 14.50
Within VCE type: **OLS** — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-71.3413	54.39566	-1.31	0.192	-178.8283	36.14575
Sex	-105.7548	68.28319	-1.55	0.124	-240.6849	29.17529
w1Age	-2.872871	3.082904	-0.93	0.353	-8.964949	3.219207
Race	-129.8458	62.97104	-2.06	0.041	-254.3024	-5.389157
PovStat	-153.9021	58.26228	-2.64	0.009	-269.0311	-38.77301
TIME_V1SCAN	.0770128	.042349	1.82	0.071	-.00667	.1606956
w1BMI	4.394878	3.90249	1.13	0.262	-3.316501	12.10626
w1TotalD	-2.267831	2.882973	-0.79	0.433	-7.981051	3.445388
w1Albumin	111.8368	95.69982	1.17	0.244	-77.26701	300.9407
w1EosinPct	1.698644	12.75581	0.13	0.894	-23.52432	26.92161
ICV_volM2	.0021095	.0002433	8.67	0.000	.0016287	.0025903
_cons	1112.288	611.9814	1.82	0.071	-97.00242	2321.578

```
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 — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0057
Largest FMI = 0.0594
Complete DF = 151
DF adjustment: **Small sample** — DF: min = 126.15
avg = 146.83
max = 149.03
Model F test: **Equal FMI** — F(11, 149.0) = 1.24
Within VCE type: **OLS** — Prob > F = 0.2652

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.086509	.716983	1.52	0.132	-.3302584	2.503276
Sex	.0974531	.8996629	0.11	0.914	-1.680292	1.875198
w1Age	.0542353	.040579	1.34	0.183	-.0259496	.1344201
Race	1.563189	.8292401	1.89	0.061	-.0756615	3.20204
PovStat	1.067143	.767497	1.39	0.166	-.4494442	2.58373
TIME_V1SCAN	-.0008003	.0005581	-1.43	0.154	-.0019032	.0003026
w1BMI	.0524474	.0514712	1.02	0.310	-.0492611	.154156
w1TotalD	.0100349	.0374731	0.27	0.789	-.0641224	.0841922
w1Albumin	.6541259	1.261891	0.52	0.605	-1.839387	3.147639
w1EosinPct	.1476508	.1652063	0.89	0.373	-.1787999	.4741015
ICV_volM2	2.80e-06	3.21e-06	0.87	0.385	-3.54e-06	9.13e-06
_cons	-10.28767	8.069643	-1.27	0.204	-26.23351	5.658169

```
346 .
347 . save, replace
    file finaldata_imputed_final.dta saved

348 .
349 .
350 . //Males//
351 .
352 .
353 . use finaldata_imputed_final,clear

354 .
355 .
356 . //ANALYSIS A//
357 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  w1TotalD w1Albumin w1EosinPct if  sa

    Multiple-imputation estimates                   Imputations       =          5
    Linear regression                               Number of obs     =         69
                                                    Average RVI       =     0.0159
                                                    Largest FMI       =     0.1257
                                                    Complete DF       =         59
    DF adjustment:   Small sample                   DF:     min       =      43.21
                                                            avg       =      55.17
                                                            max       =      57.04
    Model F test:       Equal FMI                   F(   9,   57.0)   =       2.04
    Within VCE type:          OLS                   Prob > F          =     0.0510

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -8558.479    28524.5    -0.30   0.765    -65681.32    48564.36
         Sex |          0  (omitted)
       w1Age |  -2911.385   1825.089    -1.60   0.116    -6566.119    743.3487
        Race |   -78277.4   34092.13    -2.30   0.026    -146634.6   -9920.246
     PovStat |   24280.06   32245.92     0.75   0.455    -40314.13    88874.24
  TIME_V1SCAN |  -30.43043    22.0454    -1.38   0.173    -74.57491    13.71404
       w1BMI |   1903.505   2795.842     0.68   0.499    -3695.145    7502.156
    w1TotalD |   995.8904   1784.905     0.56   0.580    -2603.209     4594.99
   w1Albumin |   18804.18   59029.88     0.32   0.751    -99401.91    137010.3
  w1EosinPct |  -2694.756   7134.043    -0.38   0.707    -16980.28    11590.77
       _cons |    1373672    357025     3.85   0.000     658684.4     2088660
------------------------------------------------------------------------------

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

    Multiple-imputation estimates                   Imputations       =          5
    Linear regression                               Number of obs     =         69
                                                    Average RVI       =     0.0163
                                                    Largest FMI       =     0.1468
                                                    Complete DF       =         59
    DF adjustment:   Small sample                   DF:     min       =      40.40
                                                            avg       =      54.92
                                                            max       =      57.09
    Model F test:       Equal FMI                   F(   9,   57.0)   =       3.49
    Within VCE type:          OLS                   Prob > F          =     0.0017
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-5512.207	14466.57	-0.38	0.705	-34480.12	23455.7
Sex	0	(omitted)				
w1Age	-2549.472	926.8002	-2.75	0.008	-4405.325	-693.6193
Race	-56534.04	17383.63	-3.25	0.002	-91400.83	-21667.26
PovStat	6743.466	16333.85	0.41	0.681	-25969.9	39456.83
TIME_V1SCAN	-7.571894	11.19944	-0.68	0.502	-29.99774	14.85395
w1BMI	1445.876	1420.55	1.02	0.313	-1398.744	4290.496
w1TotalD	46.67852	916.8347	0.05	0.960	-1805.735	1899.092
w1Albumin	34777.99	29983.47	1.16	0.251	-25262.02	94817.99
w1EosinPct	-1491.639	3623.54	-0.41	0.682	-8747.418	5764.141
_cons	716175.2	181298.5	3.95	0.000	353115	1079235

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0132
                                                Largest FMI       =     0.0554
                                                Complete DF       =         59
DF adjustment:   Small sample                   DF:     min       =      52.28
                                                        avg       =      56.03
                                                        max       =      56.99
Model F test:       Equal FMI                   F(   9,   57.0)   =       1.31
Within VCE type:          OLS                   Prob > F          =     0.2509
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-5537.895	14292.6	-0.39	0.700	-34169.26	23093.47
Sex	0	(omitted)				
w1Age	-824.3069	910.3247	-0.91	0.369	-2647.328	998.7144
Race	-18490.36	16828.18	-1.10	0.277	-52206.74	15226.02
PovStat	7688.068	16093.55	0.48	0.635	-24553.69	39929.82
TIME_V1SCAN	-19.99182	10.98758	-1.82	0.074	-41.99413	2.01049
w1BMI	462.8591	1394.104	0.33	0.741	-2328.933	3254.651
w1TotalD	995.0621	858.6659	1.16	0.252	-727.7591	2717.883
w1Albumin	-3827.322	29479.82	-0.13	0.897	-62867	55212.35
w1EosinPct	-1001.717	3560.06	-0.28	0.779	-8131.087	6127.652
_cons	583566	178275.8	3.27	0.002	226504.3	940627.8

```
360 .
361 .
362 .
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                               Number of obs     =         69
                                                Average RVI       =     0.0155
                                                Largest FMI       =     0.1148
                                                Complete DF       =         58
DF adjustment:   Small sample                   DF:     min       =      44.00
                                                        avg       =      54.44
                                                        max       =      56.07
Model F test:       Equal FMI                   F(  10,   56.0)   =       5.47
Within VCE type:          OLS                   Prob > F          =     0.0000
```

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-113.443	91.95078	-1.23	0.222	-297.6737	70.78761
Sex	0	(omitted)				
w1Age	-6.684121	5.862551	-1.14	0.259	-18.42828	5.060037
Race	19.27991	117.3152	0.16	0.870	-216.1039	254.6637
PovStat	-236.5165	103.3453	-2.29	0.026	-443.5523	-29.48071
TIME_V1SCAN	.0085645	.0714793	0.12	0.905	-.1346218	.1517508
w1BMI	14.71517	9.006841	1.63	0.108	-3.329081	32.75941
w1TotalD	4.413926	5.706918	0.77	0.443	-7.087638	15.91549
w1Albumin	98.88637	190.2576	0.52	0.605	-282.2798	480.0525
w1EosinPct	-14.25098	22.92657	-0.62	0.537	-60.17866	31.67669
ICV_volM2	.0020631	.0003701	5.57	0.000	.0013217	.0028045
_cons	653.5777	1276.497	0.51	0.611	-1904.047	3211.202

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0159
Largest FMI = 0.1436
Complete DF = 58
DF adjustment: Small sample — DF: min = 40.24
avg = 54.26
max = 56.08
Model F test: Equal FMI — F(10, 56.0) = 7.04
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-99.97867	91.41526	-1.09	0.279	-283.1007	83.1434
Sex	0	(omitted)				
w1Age	-9.423306	5.84731	-1.61	0.113	-21.13659	2.289978
Race	-73.39617	116.8949	-0.63	0.533	-307.8989	161.1065
PovStat	-249.2767	103.3061	-2.41	0.019	-456.2511	-42.30222
TIME_V1SCAN	.045305	.0713348	0.64	0.528	-.0975914	.1882013
w1BMI	18.85183	8.977397	2.10	0.040	.8677324	36.83593
w1TotalD	-.8212981	5.779777	-0.14	0.888	-12.50046	10.85786
w1Albumin	-70.26821	189.4846	-0.37	0.712	-449.8466	309.3102
w1EosinPct	-15.11933	22.8628	-0.66	0.511	-60.91753	30.67887
ICV_volM2	.0024591	.0003691	6.66	0.000	.0017197	.0031984
_cons	1288.767	1269.884	1.01	0.315	-1255.179	3832.714

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 — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0118
Largest FMI = 0.0472
Complete DF = 58
DF adjustment: Small sample — DF: min = 52.29
avg = 55.19
max = 56.01
Model F test: Equal FMI — F(10, 56.0) = 0.46
Within VCE type: OLS — Prob > F = 0.9089

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	.0135651	.9210546	0.01	0.988	-1.831807	1.858937
Sex	0	(omitted)				
w1Age	-.0169171	.0588139	-0.29	0.775	-.1347433	.1009092
Race	1.800559	1.169258	1.54	0.129	-.5443427	4.14546
PovStat	.770488	1.042066	0.74	0.463	-1.317885	2.858861
TIME_V1SCAN	-.0007397	.0007167	-1.03	0.306	-.0021755	.000696
w1BMI	-.0167241	.0902477	-0.19	0.854	-.1975259	.1640778
w1TotalD	.0596606	.0552991	1.08	0.286	-.0512908	.170612
w1Albumin	-.5508766	1.902654	-0.29	0.773	-4.36233	3.260577
w1EosinPct	.0253918	.2299879	0.11	0.912	-.4353581	.4861418
ICV_volM2	4.66e-07	3.71e-06	0.13	0.901	-6.97e-06	7.90e-06
_cons	5.566025	12.79665	0.43	0.665	-20.07445	31.2065

```
369 .
370 . save, replace
    file finaldata_imputed_final.dta saved

371 .
372 .
373 .
374 . //Females//
375 .
376 . use finaldata_imputed_final,clear

377 .
378 .
379 . //ANALYSIS A//
380 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  w1TotalD w1Albumin w1EosinPct if  sa

    Multiple-imputation estimates                   Imputations       =          5
    Linear regression                               Number of obs     =         94
                                                    Average RVI       =     0.0101
                                                    Largest FMI       =     0.0707
                                                    Complete DF       =         84
    DF adjustment:   Small sample                   DF:     min       =      70.57
                                                            avg       =      80.36
                                                            max       =      82.06
    Model F test:       Equal FMI                   F(   9,   82.0)   =       2.25
    Within VCE type:          OLS                   Prob > F          =     0.0269
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	8792.329	19727.46	0.45	0.657	-30451.55	48036.21
Sex	0	(omitted)				
w1Age	-2430.869	1075.597	-2.26	0.026	-4570.585	-291.1524
Race	-54232.09	19787.92	-2.74	0.008	-93607.48	-14856.69
PovStat	-22307.68	20738.89	-1.08	0.285	-63563.55	18948.18
TIME_V1SCAN	-.2555755	15.01339	-0.02	0.986	-30.12278	29.61163
w1BMI	799.4305	1169.595	0.68	0.496	-1527.274	3126.134
w1TotalD	220.9587	905.4303	0.24	0.808	-1584.607	2026.525
w1Albumin	-11471.72	30587.38	-0.38	0.709	-72319.04	49375.6
w1EosinPct	-3908.109	4253.631	-0.92	0.361	-12375.19	4558.966
_cons	1316147	162848	8.08	0.000	992178	1640117

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

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =         94
                                              Average RVI       =     0.0056
                                              Largest FMI       =     0.0409
                                              Complete DF       =         84
DF adjustment:   Small sample                 DF:     min       =      76.61
                                                      avg       =      81.26
                                                      max       =      82.07
Model F test:       Equal FMI                 F(   9,   82.0)   =       3.52
Within VCE type:          OLS                 Prob > F          =     0.0010
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	57.65198	10887.97	0.01	0.996	-21601.83	21717.13
Sex	0	(omitted)				
w1Age	-1788.166	593.4929	-3.01	0.003	-2968.81	-607.5214
Race	-37977.53	10884.72	-3.49	0.001	-59633.51	-16321.54
PovStat	-12650.25	11445.68	-1.11	0.272	-35419.1	10118.59
TIME_V1SCAN	2.052847	8.280944	0.25	0.805	-14.42069	18.52638
w1BMI	625.5109	645.3087	0.97	0.335	-658.205	1909.227
w1TotalD	107.6165	492.3692	0.22	0.828	-872.895	1088.128
w1Albumin	-9203.875	16881.6	-0.55	0.587	-42786.35	24378.6
w1EosinPct	126.7727	2332.26	0.05	0.957	-4514.037	4767.582
_cons	780213	89805.09	8.69	0.000	601559.8	958866.1

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

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =         94
                                              Average RVI       =     0.0103
                                              Largest FMI       =     0.0681
                                              Complete DF       =         84
DF adjustment:   Small sample                 DF:     min       =      71.15
                                                      avg       =      80.37
                                                      max       =      82.07
Model F test:       Equal FMI                 F(   9,   82.0)   =       1.29
Within VCE type:          OLS                 Prob > F          =     0.2563
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6515.556	9593.184	0.68	0.499	-12568.17	25599.29
Sex	0	(omitted)				
w1Age	-926.4558	523.0557	-1.77	0.080	-1966.985	114.0739
Race	-14074.2	9617.005	-1.46	0.147	-33210.23	5061.822
PovStat	-12367.11	10084.85	-1.23	0.224	-32428.87	7694.646
TIME_V1SCAN	-.1603885	7.300801	-0.02	0.983	-14.68438	14.3636
w1BMI	329.5861	568.8006	0.58	0.564	-801.9448	1461.117
w1TotalD	70.4415	439.7582	0.16	0.873	-806.3788	947.2618
w1Albumin	3731.209	14874.52	0.25	0.803	-25858.6	33321.02
w1EosinPct	-3107.558	2072.382	-1.50	0.138	-7233.237	1018.121
_cons	480010.9	79185.53	6.06	0.000	322479.9	637541.8

```
383 .
384 .
385 . //ANALYSIS B//
386 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  w1TotalD w1Albumin w1EosinPct
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0217
Largest FMI = 0.1411
Complete DF = 83
DF adjustment: Small sample — DF: min = 54.17
avg = 77.53
max = 81.07
Model F test: Equal FMI — F(10, 80.9) = 4.18
Within VCE type: OLS — Prob > F = 0.0001

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-28.26373	65.68698	-0.43	0.668	-158.9603	102.4328
Sex	0	(omitted)				
w1Age	-6.707025	3.590697	-1.87	0.065	-13.85153	.4374758
Race	-188.2154	68.66399	-2.74	0.008	-324.8854	-51.54534
PovStat	-126.2152	69.03001	-1.83	0.071	-263.5652	11.13476
TIME_V1SCAN	.0682054	.0497338	1.37	0.174	-.0307556	.1671664
w1BMI	2.434455	3.8795	0.63	0.532	-5.284562	10.15347
w1TotalD	-1.073702	3.112435	-0.34	0.731	-7.3133	5.165896
w1Albumin	175.1254	101.5949	1.72	0.089	-27.01418	377.265
w1EosinPct	-8.604794	14.37262	-0.60	0.551	-37.25371	20.04413
ICV_volM2	.0010382	.0003126	3.32	0.001	.0004162	.0016602
_cons	2002.436	711.6646	2.81	0.006	586.4291	3418.443

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0127
Largest FMI = 0.0710
Complete DF = 83
DF adjustment: Small sample — DF: min = 69.74
avg = 79.22
max = 81.06
Model F test: Equal FMI — F(10, 81.0) = 5.74
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-24.77072	70.37693	-0.35	0.726	-164.8001	115.2587
Sex	0	(omitted)				
w1Age	-4.078697	3.847589	-1.06	0.292	-11.73445	3.577061
Race	-186.3034	73.1464	-2.55	0.013	-331.8587	-40.74809
PovStat	-103.0279	74.00021	-1.39	0.168	-250.2713	44.21555
TIME_V1SCAN	.0892706	.0532537	1.68	0.098	-.0166934	.1952345
w1BMI	.8910728	4.155699	0.21	0.831	-7.377522	9.159667
w1TotalD	-2.307739	3.183067	-0.73	0.471	-8.649875	4.034396
w1Albumin	163.4983	108.8237	1.50	0.137	-53.02433	380.021
w1EosinPct	2.039734	15.48989	0.13	0.896	-28.85593	32.9354
ICV_volM2	.0017659	.0003346	5.28	0.000	.0011002	.0024316
_cons	1267.175	762.207	1.66	0.100	-249.3927	2783.743

```
388 .
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     =         94
                                                Average RVI       =     0.0048
                                                Largest FMI       =     0.0442
                                                Complete DF       =         83
DF adjustment:   Small sample                   DF:     min       =      75.12
                                                        avg       =      80.41
                                                        max       =      81.06
Model F test:       Equal FMI                   F(  10,   81.0)   =       1.49
Within VCE type:          OLS                   Prob > F          =     0.1595

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   1.781522   1.129274     1.58   0.119    -.4653702    4.028415
          Sex |          0  (omitted)
        w1Age |   .1047884   .0617143     1.70   0.093    -.0180045    .2275813
         Race |   1.165105   1.173989     0.99   0.324    -1.171022    3.501231
      PovStat |    1.77405   1.186621     1.50   0.139    -.5869667    4.135067
  TIME_V1SCAN |  -.0010508   .0008541    -1.23   0.222    -.0027502    .0006487
        w1BMI |   .0945288   .0666796     1.42   0.160    -.0381416    .2271992
     w1TotalD |  -.0274704   .0509735    -0.54   0.592    -.1290123    .0740714
    w1Albumin |   .4657412   1.746851     0.27   0.790    -3.009903    3.941385
   w1EosinPct |   .1251739    .240277     0.52   0.604     -.352901    .6032487
    ICV_volM2 |   6.02e-06   5.37e-06     1.12   0.265    -4.66e-06    .0000167
        _cons |  -17.61272   12.23117    -1.44   0.154    -41.94887    6.723433
------------------------------------------------------------------------------

391 .
392 . save, replace
    file finaldata_imputed_final.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     =        163
                                                Average RVI       =     0.0072
                                                Largest FMI       =     0.0671
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     121.91
                                                        avg       =     146.12
                                                        max       =     149.02
Model F test:       Equal FMI                   F(  11,  149.0)   =      12.71
Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	12689.89	20220.18	0.63	0.531	-27265.54	52645.32
Sex						
Men	184236	65737.78	2.80	0.006	54336.7	314135.3
Sex#c.LnNFLw3						
Men	-16712.96	28532.21	-0.59	0.559	-73093.19	39667.28
Sex	0	(omitted)				
w1Age	-2676.015	905.6106	-2.95	0.004	-4465.524	-886.5066
Race	-65028.25	17459.18	-3.72	0.000	-99534.57	-30521.93
PovStat	-812.0394	17271	-0.05	0.963	-34939.88	33315.8
TIME_V1SCAN	-15.23547	12.34617	-1.23	0.219	-39.63186	9.160913
w1BMI	831.3077	1152.218	0.72	0.472	-1445.494	3108.11
w1TotalD	397.3166	833.6637	0.48	0.635	-1253.016	2047.649
w1Albumin	1770.805	28043.74	0.06	0.950	-53643.94	57185.55
w1EosinPct	-4158.99	3682.4	-1.13	0.261	-11436.77	3118.787
_cons	1274354	157031.4	8.12	0.000	964054.1	1584654

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0036
Largest FMI = 0.0346
Complete DF = 151
DF adjustment: Small sample — DF: min = 138.48
avg = 147.87
max = 149.03
Model F test: Equal FMI — F(11, 149.0) = 14.60
Within VCE type: OLS — Prob > F = 0.0000

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	4242.235	10731.98	0.40	0.693	-16964.31	25448.78
Sex						
Men	97360.39	34885.8	2.79	0.006	28425.6	166295.2
Sex#c.LnNFLw3						
Men	-9476.632	15141.87	-0.63	0.532	-39397.14	20443.88
Sex	0	(omitted)				
w1Age	-2146.231	480.5737	-4.47	0.000	-3095.852	-1196.611
Race	-45377.82	9230.801	-4.92	0.000	-63619.37	-27136.27
PovStat	-3302.489	9165.902	-0.36	0.719	-21414.43	14809.45
TIME_V1SCAN	-3.772973	6.551869	-0.58	0.566	-16.71959	9.173643
w1BMI	665.751	611.5646	1.09	0.278	-542.7089	1874.211
w1TotalD	100.2558	435.4181	0.23	0.818	-760.6714	961.1831
w1Albumin	8144.481	14885.77	0.55	0.585	-21269.94	37558.9
w1EosinPct	-710.2147	1948.511	-0.36	0.716	-4560.823	3140.394
_cons	724187.9	83319.2	8.69	0.000	559547.2	888828.7

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0073
                                                Largest FMI       =     0.0625
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     124.47
                                                        avg       =     146.22
                                                        max       =     149.00
Model F test:       Equal FMI                   F(  11,  149.0)   =       8.21
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   5999.679   9996.954     0.60   0.549    -13754.47    25753.83
              |
          Sex |
          Men |   78814.83    32510.6     2.42   0.017     14572.87    143056.8
              |
Sex#c.LnNFLw3 |
          Men |  -8562.095   14109.36    -0.61   0.545    -36442.57    19318.38
              |
          Sex |          0  (omitted)
        w1Age |   -896.024   447.7744    -2.00   0.047    -1780.838   -11.21001
         Race |  -17188.93   8635.341    -1.99   0.048    -34256.03   -121.8247
      PovStat |  -3009.189   8539.652    -0.35   0.725    -19883.73    13865.35
  TIME_V1SCAN |  -8.664795   6.104792    -1.42   0.158    -20.72806    3.398465
        w1BMI |   286.8311   569.7369     0.50   0.615    -838.9804    1412.643
     w1TotalD |   296.1167    411.227     0.72   0.473    -517.7866     1110.02
    w1Albumin |   2842.761   13866.14     0.21   0.838    -24556.91    30242.44
   w1EosinPct |  -2692.191   1823.356    -1.48   0.142    -6296.003    911.6212
        _cons |   487425.4   77640.67     6.28   0.000     334004.3    640846.5
------------------------------------------------------------------------------

402 .
403 .
404 . //ANALYSIS B//
405 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI  w1TotalD w1Albumin w1Eo

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0211
                                                Largest FMI       =     0.1965
                                                Complete DF       =        150
DF adjustment:   Small sample                   DF:     min       =      60.71
                                                        avg       =     139.71
                                                        max       =     148.02
Model F test:       Equal FMI                   F(  12,  147.7)   =      11.34
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippoc~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -51.6267   67.17549    -0.77   0.443    -184.3748    81.12139
              |
          Sex |
          Men |   200.237   225.3238     0.89   0.376    -245.0306    645.5047
              |
Sex#c.LnNFLw3 |
          Men |  -88.12401    94.6775    -0.93   0.353    -275.2181    98.97011
              |
          Sex |          0  (omitted)
        w1Age |  -4.824627   3.013118    -1.60   0.111    -10.77898    1.129726
```

Race	-110.6188	61.84855	-1.79	0.076	-232.9183	11.68074
PovStat	-154.415	57.23744	-2.70	0.008	-267.5239	-41.30621
TIME_V1SCAN	.0483932	.0410499	1.18	0.240	-.0327289	.1295153
w1BMI	5.38459	3.824676	1.41	0.161	-2.173513	12.94269
w1TotalD	.0585167	2.955654	0.02	0.984	-5.852246	5.969279
w1Albumin	171.7023	92.9532	1.85	0.067	-11.98469	355.3893
w1EosinPct	-7.168851	12.3308	-0.58	0.562	-31.5476	17.2099
ICV_volM2	.0015772	.000236	6.68	0.000	.0011109	.0020435
_cons	1149.299	621.3272	1.85	0.066	-78.54729	2377.145

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0135
Largest FMI = 0.1063
Complete DF = 150
DF adjustment: Small sample — DF: min = 99.67
avg = 142.87
max = 148.03
Model F test: Equal FMI — F(12, 147.9) = 13.39
Within VCE type: OLS — Prob > F = 0.0000

Right_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-24.85164	69.34757	-0.36	0.721	-161.8919	112.1886
Sex						
Men	134.531	232.6666	0.58	0.564	-325.2484	594.3105
Sex#c.LnNFLw3						
Men	-105.6178	97.80812	-1.08	0.282	-298.9006	87.66498
Sex	0	(omitted)				
w1Age	-3.364155	3.114602	-1.08	0.282	-9.519207	2.790897
Race	-136.4857	63.37039	-2.15	0.033	-261.7482	-11.22318
PovStat	-142.809	59.12484	-2.42	0.017	-259.6488	-25.96923
TIME_V1SCAN	.0774523	.0423295	1.83	0.069	-.0061967	.1611013
w1BMI	5.045642	3.946378	1.28	0.203	-2.752885	12.84417
w1TotalD	-2.363787	2.910835	-0.81	0.419	-8.139035	3.411461
w1Albumin	103.544	95.95317	1.08	0.282	-86.07094	293.1589
w1EosinPct	.7469195	12.78789	0.06	0.954	-24.54183	26.03567
ICV_volM2	.0020937	.0002436	8.59	0.000	.0016123	.0025751
_cons	963.181	640.8284	1.50	0.135	-303.1793	2229.541

407 .
408 . //ANALYSIS C//
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 = 163
Average RVI = 0.0040
Largest FMI = 0.0456
Complete DF = 150
DF adjustment: Small sample — DF: min = 132.48
avg = 146.63
max = 148.03
Model F test: Equal FMI — F(12, 148.0) = 1.48
Within VCE type: OLS — Prob > F = 0.1395

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2.182159	.9060767	2.41	0.017	.3916423	3.972677
Sex						
Men	5.760777	3.040334	1.89	0.060	-.2472845	11.76884
Sex#c.LnNFLw3						
Men	-2.489269	1.27765	-1.95	0.053	-5.014057	.0355195
Sex	0	(omitted)				
w1Age	.0426477	.0406387	1.05	0.296	-.0376593	.1229547
Race	1.407196	.824597	1.71	0.090	-.222504	3.036897
PovStat	1.328717	.7721697	1.72	0.087	-.1971846	2.854619
TIME_V1SCAN	-.0007899	.000553	-1.43	0.155	-.0018828	.000303
w1BMI	.0677911	.0516003	1.31	0.191	-.0341779	.1697601
w1TotalD	.007827	.0369098	0.21	0.832	-.0651817	.0808357
w1Albumin	.4586098	1.254351	0.37	0.715	-2.020139	2.937359
w1EosinPct	.1252157	.1641232	0.76	0.447	-.1991133	.4495446
ICV_volM2	2.42e-06	3.18e-06	0.76	0.448	-3.87e-06	8.71e-06
_cons	-11.21318	8.376931	-1.34	0.183	-27.7671	5.340733

```
410 .
411 . save, replace
    file finaldata_imputed_final.dta saved

412 .
413 . ***********MODEL 6: MODEL 2+lifestyle/health-related factors*******
414 .
415 .
416 . //Overall//
417 .
418 . use finaldata_imputed_final,clear

419 .
420 .
421 . //ANALYSIS A//
422 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1
```

```
Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0014
                                                Largest FMI       =     0.0141
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     147.93
                                                        avg       =     150.70
                                                        max       =     151.04
Model F test:       Equal FMI                   F(   9,  151.0)   =      15.70
Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	5786.955	15754.29	0.37	0.714	-25340.28	36914.19
Sex	143316.2	14221.3	10.08	0.000	115217.8	171414.6
w1Age	-2570.013	891.9969	-2.88	0.005	-4332.417	-807.6079
Race	-66043.76	15132.29	-4.36	0.000	-95942.16	-36145.37
PovStat	-91.38666	17229.91	-0.01	0.996	-34134.24	33951.47
TIME_V1SCAN	-17.85758	12.101	-1.48	0.142	-41.7667	6.051546
w1BMI	707.4788	1096.957	0.64	0.520	-1459.889	2874.846
w1currdrugs	410.5521	17850.71	0.02	0.982	-34864.77	35685.87
w1SRH	9710.223	9149.866	1.06	0.290	-8368.04	27788.49
_cons	1135866	72514.42	15.66	0.000	992591.6	1279140

```
423 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH  if sample_final2==1

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =        163
                                              Average RVI       =     0.0042
                                              Largest FMI       =     0.0308
                                              Complete DF       =        153
DF adjustment:   Small sample                 DF:     min       =     141.92
                                                      avg       =     149.82
                                                      max       =     151.01
Model F test:       Equal FMI                 F(   9,  151.0)   =      18.54
Within VCE type:          OLS                 Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-91.92526	8291.256	-0.01	0.991	-16473.78	16289.93
Sex	75096.32	7483.781	10.03	0.000	60309.89	89882.76
w1Age	-2174.451	469.7337	-4.63	0.000	-3102.561	-1246.34
Race	-44550.33	7969.885	-5.59	0.000	-60297.48	-28803.18
PovStat	-3909.722	9079.309	-0.43	0.667	-21849.08	14029.63
TIME_V1SCAN	-5.145591	6.384584	-0.81	0.422	-17.7609	7.469713
w1BMI	383.5621	577.798	0.66	0.508	-758.0707	1525.195
w1currdrugs	-9928.264	9470.822	-1.05	0.296	-28650.38	8793.855
w1SRH	6322.911	4817.169	1.31	0.191	-3194.907	15840.73
_cons	694886.9	38197.11	18.19	0.000	619415.7	770358.2

```
424 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1

Multiple-imputation estimates                 Imputations       =          5
Linear regression                             Number of obs     =        163
                                              Average RVI       =     0.0026
                                              Largest FMI       =     0.0126
                                              Complete DF       =        153
DF adjustment:   Small sample                 DF:     min       =     148.37
                                                      avg       =     150.55
                                                      max       =     150.98
Model F test:       Equal FMI                 F(   9,  151.0)   =       9.98
Within VCE type:          OLS                 Prob > F          =     0.0000
```

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2769.366	7808.088	0.35	0.723	-12657.86	18196.6
Sex	58704	7050.082	8.33	0.000	44774.37	72633.63
w1Age	-779.3345	442.0733	-1.76	0.080	-1652.784	94.11482
Race	-19859.96	7507.207	-2.65	0.009	-34693.02	-5026.902
PovStat	-1761.627	8541.1	-0.21	0.837	-18637.24	15113.99
TIME_V1SCAN	-10.61405	6.010441	-1.77	0.079	-22.49001	1.26191
w1BMI	316.8327	543.6028	0.58	0.561	-757.2188	1390.884
w1currdrugs	10523.15	8838.596	1.19	0.236	-6942.645	27988.94
w1SRH	2620.66	4538.511	0.58	0.565	-6346.665	11587.99
_cons	439535.3	35935.15	12.23	0.000	368534.5	510536.1

```
425 .
426 . //ANALYSIS B//
427 . 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 = **163**
Average RVI = **0.0025**
Largest FMI = **0.0202**
Complete DF = **152**
DF adjustment: **Small sample** — DF: min = **145.07**
avg = **149.50**
max = **150.03**
Model F test: **Equal FMI** — F(**10**, **150.0**) = **13.42**
Within VCE type: **OLS** — Prob > F = **0.0000**

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-88.03051	52.67782	-1.67	0.097	-192.1168	16.05575
Sex	14.23475	64.78394	0.22	0.826	-113.7722	142.2417
w1Age	-4.963566	2.988745	-1.66	0.099	-10.86905	.9419204
Race	-102.57	54.45804	-1.88	0.062	-210.1751	5.03517
PovStat	-171.7217	57.56469	-2.98	0.003	-285.4642	-57.97926
TIME_V1SCAN	.039889	.0405861	0.98	0.327	-.0403062	.1200841
w1BMI	2.787508	3.670588	0.76	0.449	-4.465263	10.04028
w1currdrugs	-41.39114	59.81381	-0.69	0.490	-159.6103	76.82797
w1SRH	-34.41021	30.72993	-1.12	0.265	-95.12983	26.30941
ICV_volM2	.00162	.0002366	6.85	0.000	.0011525	.0020874
_cons	2076.161	372.785	5.57	0.000	1339.571	2812.75

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

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **163**
Average RVI = **0.0046**
Largest FMI = **0.0363**
Complete DF = **152**
DF adjustment: **Small sample** — DF: min = **138.57**
avg = **148.84**
max = **150.02**
Model F test: **Equal FMI** — F(**10**, **150.0**) = **16.45**
Within VCE type: **OLS** — Prob > F = **0.0000**

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-72.60854	53.79582	-1.35	0.179	-178.904	33.68691
Sex	-90.35585	66.17492	-1.37	0.174	-221.112	40.40028
w1Age	-3.566127	3.051869	-1.17	0.244	-9.596338	2.464083
Race	-103.7905	55.6454	-1.87	0.064	-213.7431	6.162106
PovStat	-167.6819	58.78232	-2.85	0.005	-283.8303	-51.53347
TIME_V1SCAN	.0824124	.041477	1.99	0.049	.0004558	.1643691
w1BMI	3.121614	3.747957	0.83	0.406	-4.28402	10.52725
w1currdrugs	-57.81229	61.57077	-0.94	0.349	-179.552	63.92739
w1SRH	-48.78179	31.39481	-1.55	0.122	-110.8157	13.2521
ICV_volM2	.002133	.0002416	8.83	0.000	.0016556	.0026103
_cons	1661.804	380.6568	4.37	0.000	909.6607	2413.946

```
. 
. //ANALYSIS C//
. mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_volM2 if s

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0082
                                                Largest FMI       =     0.0779
                                                Complete DF       =        152
DF adjustment:   Small sample                   DF:     min       =     116.55
                                                        avg       =     146.81
                                                        max       =     150.04
Model F test:       Equal FMI                   F(  10,  150.0)   =       1.45
Within VCE type:          OLS                   Prob > F          =     0.1618

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   1.110962   .7102479     1.56   0.120    -.2924183    2.514341
          Sex |   .3131464   .8734194     0.36   0.720    -1.412645    2.038938
        w1Age |   .0556589    .040318     1.38   0.169    -.0240065    .1353243
         Race |   1.314034   .7340295     1.79   0.075    -.1363458    2.764414
      PovStat |   .9550605   .7774212     1.23   0.221    -.5810979    2.491219
  TIME_V1SCAN |  -.0008078   .0005476    -1.48   0.142    -.0018898    .0002742
        w1BMI |   .0447059   .0495385     0.90   0.368    -.0531796    .1425913
  w1currdrugs |   .2610731   .8300196     0.31   0.754    -1.382803     1.90495
        w1SRH |   -.561031   .4142356    -1.35   0.178     -1.37952    .2574583
    ICV_volM2 |   2.99e-06   3.19e-06     0.94   0.350    -3.32e-06    9.29e-06
        _cons |  -5.589174   5.028445    -1.11   0.268    -15.52499    4.346645
------------------------------------------------------------------------------

. 
. save, replace
file finaldata_imputed_final.dta saved

. 
. 
. //Males//
. 
. 
. use finaldata_imputed_final,clear

. 
. 
. //ANALYSIS A//
. mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0010
                                                Largest FMI       =     0.0057
                                                Complete DF       =         60
DF adjustment:   Small sample                   DF:     min       =      57.81
                                                        avg       =      58.03
                                                        max       =      58.09
Model F test:       Equal FMI                   F(   8,   58.1)   =       2.41
Within VCE type:          OLS                   Prob > F          =     0.0254
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-5863.674	28136.27	-0.21	0.836	-62183.07	50455.73
Sex	0	(omitted)				
w1Age	-2931.672	1676.166	-1.75	0.086	-6286.818	423.4736
Race	-93926.31	29082.33	-3.23	0.002	-152140.4	-35712.25
PovStat	24259.3	30754.59	0.79	0.433	-37301.63	85820.22
TIME_V1SCAN	-29.84138	22.11343	-1.35	0.182	-74.10928	14.42651
w1BMI	1659.023	2708.532	0.61	0.543	-3762.515	7080.561
w1currdrugs	21151.69	34657.88	0.61	0.544	-48222.85	90526.22
w1SRH	-13185.35	17778.88	-0.74	0.461	-48772.66	22401.96
_cons	1520352	118514.6	12.83	0.000	1283123	1757580

444 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1 & Sex=

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0009
Largest FMI = 0.0084
Complete DF = 60
DF adjustment: Small sample — DF: min = 57.64
avg = 58.03
max = 58.09
Model F test: Equal FMI — F(8, 58.1) = 3.76
Within VCE type: OLS — Prob > F = 0.0013

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-6461.726	14515.36	-0.45	0.658	-35516.41	22592.96
Sex	0	(omitted)				
w1Age	-2761.946	864.6034	-3.19	0.002	-4492.58	-1031.311
Race	-58582.87	15004.96	-3.90	0.000	-88618.2	-28547.54
PovStat	6124.863	15863.24	0.39	0.701	-25627.81	37877.54
TIME_V1SCAN	-10.22939	11.38635	-0.90	0.373	-33.02103	12.56225
w1BMI	1081.553	1397.507	0.77	0.442	-1715.764	3878.871
w1currdrugs	-2470.524	17936.44	-0.14	0.891	-38378.96	33437.91
w1SRH	-2444.504	9172.132	-0.27	0.791	-20803.89	15914.88
_cons	903988.3	61129.24	14.79	0.000	781629	1026348

445 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1 & Sex==

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0041
Largest FMI = 0.0171
Complete DF = 60
DF adjustment: Small sample — DF: min = 57.00
avg = 57.79
max = 58.08
Model F test: Equal FMI — F(8, 58.1) = 1.67
Within VCE type: OLS — Prob > F = 0.1246

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-2393.04	13925.31	-0.17	0.864	-30267.24	25481.16
Sex	0	(omitted)				
w1Age	-749.1495	830.1018	-0.90	0.371	-2410.817	912.518
Race	-33187.7	14436.04	-2.30	0.025	-62088.89	-4286.506
PovStat	7429.746	15230.12	0.49	0.628	-23057.33	37916.83
TIME_V1SCAN	-18.23523	11.00157	-1.66	0.103	-40.26547	3.795023
w1BMI	416.1411	1340.199	0.31	0.757	-2266.48	3098.762
w1currdrugs	20580.31	17203.86	1.20	0.236	-13862.1	55022.72
w1SRH	-9082.015	8800.313	-1.03	0.306	-26697.61	8533.58
_cons	611544.9	58701.25	10.42	0.000	494037.9	729051.8

```
446 .
447 .
448 . //ANALYSIS B//
449 . 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 = 69
Average RVI = 0.0105
Largest FMI = 0.0563
Complete DF = 59
DF adjustment: Small sample — DF: min = 52.17
avg = 56.33
max = 57.06
Model F test: Equal FMI — F(9, 57.0) = 7.46
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-125.5676	86.71267	-1.45	0.153	-299.2199	48.0847
Sex	0	(omitted)				
w1Age	-6.497184	5.174733	-1.26	0.214	-16.86134	3.866977
Race	41.06451	100.3641	0.41	0.684	-159.9445	242.0735
PovStat	-255.6329	95.30374	-2.68	0.010	-446.518	-64.74781
TIME_V1SCAN	-.0220808	.0703564	-0.31	0.755	-.1632501	.1190884
w1BMI	11.18425	8.333553	1.34	0.185	-5.503027	27.87152
w1currdrugs	-208.3876	108.2577	-1.92	0.059	-425.1941	8.418867
w1SRH	103.0466	54.94359	1.88	0.066	-6.979601	213.0729
ICV_volM2	.0022598	.000356	6.35	0.000	.0015469	.0029726
_cons	836.0704	701.3296	1.19	0.238	-568.2838	2240.425

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0170
Largest FMI = 0.0763
Complete DF = 59
DF adjustment: Small sample — DF: min = 49.73
avg = 55.81
max = 57.05
Model F test: Equal FMI — F(9, 57.0) = 9.46
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-118.2918	86.27239	-1.37	0.176	-291.0659	54.48238
Sex	0	(omitted)				
w1Age	-8.279023	5.156428	-1.61	0.114	-18.60768	2.049639
Race	38.06647	100.5856	0.38	0.707	-163.4863	239.6192
PovStat	-248.7585	94.93459	-2.62	0.011	-438.9222	-58.59482
TIME_V1SCAN	.0533727	.0706697	0.76	0.454	-.0885904	.1953357
w1BMI	19.82056	8.288753	2.39	0.020	3.222904	36.41822
w1currdrugs	-266.183	108.1317	-2.46	0.017	-482.7931	-49.57303
w1SRH	43.11609	54.70015	0.79	0.434	-66.42837	152.6605
ICV_volM2	.0026198	.000354	7.40	0.000	.001911	.0033286
_cons	418.9591	697.9952	0.60	0.551	-978.7663	1816.684

```
451 .
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 — Imputations = 5
Linear regression — Number of obs = 69
Average RVI = 0.0073
Largest FMI = 0.0589
Complete DF = 59
DF adjustment: **Small sample** — DF: min = 51.87
avg = 56.45
max = 57.08
Model F test: **Equal FMI** — F(9, 57.1) = 0.44
Within VCE type: **OLS** — Prob > F = 0.9098

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	.1322689	.913445	0.14	0.885	-1.696862	1.9614
Sex	0	(omitted)				
w1Age	-.0154759	.0543923	-0.28	0.777	-.1243936	.0934419
Race	1.019143	1.057257	0.96	0.339	-1.098143	3.136428
PovStat	.6700101	1.001386	0.67	0.506	-1.335239	2.675259
TIME_V1SCAN	-.0006476	.0007255	-0.89	0.376	-.0021006	.0008054
w1BMI	-.0159207	.0879289	-0.18	0.857	-.1919904	.160149
w1currdrugs	.5381457	1.171241	0.46	0.648	-1.812267	2.888558
w1SRH	-.3160758	.5789804	-0.55	0.587	-1.475429	.8432769
ICV_volM2	-1.36e-08	3.76e-06	-0.00	0.997	-7.54e-06	7.51e-06
_cons	6.574791	7.402749	0.89	0.378	-8.248785	21.39837

```
454 .
455 . save, replace
    file finaldata_imputed_final.dta saved

456 .
457 .
```

```
458 .
459 . //Females//
460 .
461 . use finaldata_imputed_final,clear

462 .
463 .
464 . //ANALYSIS A//
465 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1
```

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **94**
Average RVI = **0.0050**
Largest FMI = **0.0443**
Complete DF = **85**
DF adjustment: **Small sample** — DF: min = **76.88**
avg = **82.25**
max = **83.06**
Model F test: **Equal FMI** — F(**8**, **83.0**) = **3.48**
Within VCE type: **OLS** — Prob > F = **0.0017**

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**12244.51**	**18948.45**	**0.65**	**0.520**	**-25442.86**	**49931.88**
Sex	**0**	(omitted)				
w1Age	**-2840.411**	**1037.172**	**-2.74**	**0.008**	**-4903.34**	**-777.4824**
Race	**-49248.35**	**16704.65**	**-2.95**	**0.004**	**-82472.91**	**-16023.78**
PovStat	**-16238.56**	**20413.97**	**-0.80**	**0.429**	**-56841.92**	**24364.8**
TIME_V1SCAN	**-.2018574**	**13.99152**	**-0.01**	**0.989**	**-28.03053**	**27.62682**
w1BMI	**855.4387**	**1120.437**	**0.76**	**0.447**	**-1373.174**	**3084.051**
w1currdrugs	**-8273.539**	**20250.03**	**-0.41**	**0.684**	**-48597.49**	**32050.41**
w1SRH	**26518.53**	**10170.24**	**2.61**	**0.011**	**6290.555**	**46746.51**
_cons	**1202796**	**81396.95**	**14.78**	**0.000**	**1040893**	**1364699**

```
466 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH  if sample_final2==1 & Sex=
```

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **94**
Average RVI = **0.0091**
Largest FMI = **0.0708**
Complete DF = **85**
DF adjustment: **Small sample** — DF: min = **71.34**
avg = **81.42**
max = **82.99**
Model F test: **Equal FMI** — F(**8**, **83.0**) = **5.01**
Within VCE type: **OLS** — Prob > F = **0.0000**

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	**1754.342**	**10454.41**	**0.17**	**0.867**	**-19039.09**	**22547.78**
Sex	**0**	(omitted)				
w1Age	**-2005.471**	**572.6964**	**-3.50**	**0.001**	**-3144.603**	**-866.3388**
Race	**-36949.6**	**9218.401**	**-4.01**	**0.000**	**-55284.76**	**-18614.44**
PovStat	**-10555.4**	**11276.84**	**-0.94**	**0.352**	**-32986.21**	**11875.41**
TIME_V1SCAN	**2.510149**	**7.727634**	**0.32**	**0.746**	**-12.86055**	**17.88085**
w1BMI	**495.0115**	**619.4457**	**0.80**	**0.427**	**-737.2108**	**1727.234**
w1currdrugs	**-12374.61**	**11316.14**	**-1.09**	**0.278**	**-34936.5**	**10187.29**
w1SRH	**12375.22**	**5613.361**	**2.20**	**0.030**	**1210.352**	**23540.08**
_cons	**725334.6**	**44996.11**	**16.12**	**0.000**	**635827.4**	**814841.9**

```
467 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1 & Sex==
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0022
Largest FMI = 0.0150
Complete DF = 85
DF adjustment: Small sample — DF: min = 81.57
avg = 82.83
max = 83.04
Model F test: Equal FMI — F(8, 83.1) = 2.04
Within VCE type: OLS — Prob > F = 0.0520

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	7751.396	9315.669	0.83	0.408	-10777	26279.79
Sex	0	(omitted)				
w1Age	-1039.613	509.4519	-2.04	0.044	-2052.885	-26.34143
Race	-10786.74	8212.85	-1.31	0.193	-27121.69	5548.214
PovStat	-7532.096	10028.37	-0.75	0.455	-27478.11	12413.91
TIME_V1SCAN	-1.286497	6.879333	-0.19	0.852	-14.96936	12.39636
w1BMI	486.6665	550.0121	0.88	0.379	-607.2885	1580.622
w1currdrugs	7414.494	9812.828	0.76	0.452	-12107.9	26936.89
w1SRH	12288.42	5003.378	2.46	0.016	2336.771	22240.07
_cons	451309.9	39972.28	11.29	0.000	371805.5	530814.3

```
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 = 94
Average RVI = 0.0208
Largest FMI = 0.1706
Complete DF = 84
DF adjustment: Small sample — DF: min = 48.51
avg = 78.31
max = 82.06
Model F test: Equal FMI — F(9, 81.9) = 5.30
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-39.82626	64.13721	-0.62	0.536	-167.4156	87.76305
Sex	0	(omitted)				
w1Age	-5.782114	3.546629	-1.63	0.107	-12.83831	1.27408
Race	-173.0478	59.22356	-2.92	0.004	-290.861	-55.23461
PovStat	-148.6674	68.73235	-2.16	0.033	-285.4106	-11.92413
TIME_V1SCAN	.0642072	.046899	1.37	0.175	-.0290919	.1575062
w1BMI	1.04083	3.779834	0.28	0.784	-6.480166	8.561826
w1currdrugs	-4.170258	72.67132	-0.06	0.954	-150.2457	141.9052
w1SRH	-96.80845	35.84866	-2.70	0.008	-168.1221	-25.4948
ICV_volM2	.0012682	.0003176	3.99	0.000	.0006363	.0019001
_cons	2665.092	496.9086	5.36	0.000	1676.401	3653.783

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

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0149
Largest FMI = 0.1263
Complete DF = 84
DF adjustment: **Small sample** — DF: min = 57.95
avg = 79.40
max = 82.06
Model F test: **Equal FMI** — F(9, 82.0) = 7.18
Within VCE type: **OLS** — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-40.60699	68.56346	-0.59	0.555	-177.0016	95.7876
Sex	0	(omitted)				
w1Age	-3.002299	3.786518	-0.79	0.430	-10.5354	4.530804
Race	-168.8436	63.30873	-2.67	0.009	-294.7833	-42.90384
PovStat	-123.3192	73.40878	-1.68	0.097	-269.3614	22.72299
TIME_V1SCAN	.0885349	.0501348	1.77	0.081	-.0112012	.188271
w1BMI	-.5451702	4.031	-0.14	0.893	-8.565109	7.474768
w1currdrugs	-3.577703	75.92954	-0.05	0.963	-155.5701	148.4147
w1SRH	-101.2642	38.32456	-2.64	0.010	-177.5033	-25.02518
ICV_volM2	.0019753	.0003394	5.82	0.000	.0013001	.0026505
_cons	1904.51	530.0709	3.59	0.001	849.9274	2959.092

```
472 .
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 — Imputations = 5
Linear regression — Number of obs = 94
Average RVI = 0.0060
Largest FMI = 0.0531
Complete DF = 84
DF adjustment: **Small sample** — DF: min = 74.28
avg = 81.16
max = 82.06
Model F test: **Equal FMI** — F(9, 82.0) = 1.96
Within VCE type: **OLS** — Prob > F = 0.0547

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.553924	1.111164	1.40	0.166	-.6565184	3.764366
Sex	0	(omitted)				
w1Age	.1212157	.061306	1.98	0.051	-.0007446	.243176
Race	1.334426	1.026351	1.30	0.197	-.707294	3.376146
PovStat	1.595207	1.188844	1.34	0.183	-.7698465	3.960261
TIME_V1SCAN	-.0009963	.0008123	-1.23	0.224	-.0026122	.0006197
w1BMI	.092995	.0652119	1.43	0.158	-.0367386	.2227285
w1currdrugs	.3570028	1.186465	0.30	0.764	-2.00693	2.720936
w1SRH	-1.042945	.6212293	-1.68	0.097	-2.278755	.1928652
ICV_volM2	8.41e-06	5.50e-06	1.53	0.130	-2.54e-06	.0000193
_cons	-17.13303	8.579983	-2.00	0.049	-34.20211	-.0639518

```
475 .
476 . save, replace
    file finaldata_imputed_final.dta saved

477 .
478 . ******************INTERACTION BY Sex**********************
479 .
480 .
481 . //ANALYSIS A//
482 . mi estimate: reg TOTALBRAIN c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_fi

    Multiple-imputation estimates                 Imputations       =          5
    Linear regression                             Number of obs     =        163
                                                  Average RVI       =     0.0013
                                                  Largest FMI       =     0.0147
                                                  Complete DF       =        152
    DF adjustment:   Small sample                 DF:     min       =     146.79
                                                          avg       =     149.72
                                                          max       =     150.04
    Model F test:       Equal FMI                 F(  10,  150.0)   =      14.09
    Within VCE type:          OLS                 Prob > F          =     0.0000

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   12285.67   20148.98     0.61   0.543    -27526.75     52098.1
             |
         Sex |
         Men |      176305   65098.04     2.71   0.008     47677.59    304932.5
             |
Sex#c.LnNFLw3|
         Men |   -14775.88   28450.97    -0.52   0.604    -70992.26    41440.51
             |
         Sex |           0  (omitted)
       w1Age |   -2639.923   904.2459    -2.92   0.004    -4426.627   -853.2198
        Race |   -66396.92   15183.58    -4.37   0.000    -96398.25    -36395.6
     PovStat |    1308.653   17480.42     0.07   0.940    -33231.02    35848.33
  TIME_V1SCAN |   -17.57447   12.14285    -1.45   0.150     -41.5676    6.418665
       w1BMI |    806.6538    1116.04     0.72   0.471    -1398.535    3011.843
  w1currdrugs |   -519.5365   17990.84    -0.03   0.977    -36074.05    35034.98
       w1SRH |    9604.26   9174.043     1.05   0.297    -8522.744    27731.26
       _cons |    1263933   75485.53    16.74   0.000      1114781     1413085
------------------------------------------------------------------------------

483 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH  if sample_final2==1

    Multiple-imputation estimates                 Imputations       =          5
    Linear regression                             Number of obs     =        163
                                                  Average RVI       =     0.0040
                                                  Largest FMI       =     0.0313
                                                  Complete DF       =        152
    DF adjustment:   Small sample                 DF:     min       =     140.80
                                                          avg       =     148.87
                                                          max       =     149.97
    Model F test:       Equal FMI                 F(  10,  150.0)   =      16.70
    Within VCE type:          OLS                 Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	4848.058	10594.46	0.46	0.648	-16085.64	25781.75
Sex						
Men	100172.4	34235.25	2.93	0.004	32526.44	167818.4
Sex#c.LnNFLw3						
Men	-11231.77	14961.9	-0.75	0.454	-40795.21	18331.67
Sex	0	(omitted)				
w1Age	-2227.603	475.7987	-4.68	0.000	-3167.751	-1287.455
Race	-44818.72	7989.67	-5.61	0.000	-60605.82	-29031.61
PovStat	-2845.947	9202.268	-0.31	0.758	-21029.22	15337.33
TIME_V1SCAN	-4.929931	6.4035	-0.77	0.443	-17.58345	7.723585
w1BMI	458.9335	587.2403	0.78	0.436	-701.4164	1619.283
w1currdrugs	-10637.06	9535.57	-1.12	0.267	-29488.47	8214.339
w1SRH	6242.355	4825.655	1.29	0.198	-3292.758	15777.47
_cons	758392.7	39719.67	19.09	0.000	679909.2	836876.3

484 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH if sample_final2==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0024
Largest FMI = 0.0133
Complete DF = 152
DF adjustment: Small sample — DF: min = 147.19
avg = 149.58
max = 150.00
Model F test: Equal FMI — F(10, 150.0) = 8.96
Within VCE type: OLS — Prob > F = 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	5421.399	9989.504	0.54	0.588	-14316.97	25159.77
Sex						
Men	72166.62	32268.18	2.24	0.027	8407.756	135925.5
Sex#c.LnNFLw3						
Men	-6029.937	14103.16	-0.43	0.670	-33896.47	21836.6
Sex	0	(omitted)				
w1Age	-807.8548	448.224	-1.80	0.073	-1693.504	77.79398
Race	-20004.19	7534.585	-2.65	0.009	-34892.14	-5116.245
PovStat	-1189.89	8667.208	-0.14	0.891	-18315.57	15935.79
TIME_V1SCAN	-10.49891	6.031523	-1.74	0.084	-22.41711	1.419294
w1BMI	357.3202	553.2612	0.65	0.519	-735.8743	1450.515
w1currdrugs	10145.35	8911.116	1.14	0.257	-7464.905	27755.6
w1SRH	2577.431	4551.528	0.57	0.572	-6416.09	11570.95
_cons	492015.4	37431.64	13.14	0.000	418053.5	565977.2

```
485 .
486 . //ANALYSIS B//
487 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_vo

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0020
                                                Largest FMI       =     0.0160
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     145.43
                                                        avg       =     148.64
                                                        max       =     149.03
Model F test:       Equal FMI                   F(  11,  149.0)   =      12.34
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippoc~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -40.82714   67.23261    -0.61   0.545    -173.6796     92.0253
              |
          Sex |
          Men |   255.7416   223.5961     1.14   0.255    -186.0867    697.5698
              |
Sex#c.LnNFLw3 |
          Men |  -107.0295   94.85124    -1.13   0.261    -294.4566    80.39753
              |
          Sex |          0  (omitted)
        w1Age |  -5.482865   3.021364    -1.81   0.072    -11.45313    .4874002
         Race |  -106.2965   54.51192    -1.95   0.053     -214.014    1.421109
      PovStat |  -161.6225   58.20982    -2.78   0.006    -276.6461   -46.59892
  TIME_V1SCAN |   .0417459   .0405988     1.03   0.306    -.0384793     .121971
        w1BMI |   3.517329   3.723908     0.94   0.346    -3.841197    10.87585
  w1currdrugs |  -48.08825   59.94307    -0.80   0.424    -166.5603    70.38384
        w1SRH |  -35.00168   30.71088    -1.14   0.256    -95.68711    25.68375
     ICV_volM2 |   .0016062   .0002367     6.79   0.000     .0011385    .0020739
        _cons |   1998.904   408.8977     4.89   0.000     1190.915    2806.894
------------------------------------------------------------------------------

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0042
                                                Largest FMI       =     0.0333
                                                Complete DF       =        151
DF adjustment:   Small sample                   DF:     min       =     139.03
                                                        avg       =     148.03
                                                        max       =     149.02
Model F test:       Equal FMI                   F(  11,  149.0)   =      15.17
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -17.88672   68.58846    -0.26   0.795    -153.4189    117.6455
              |
          Sex |
          Men |   189.6129   228.0669     0.83   0.407    -261.0503    640.2762
              |
Sex#c.LnNFLw3 |
          Men |  -124.0755   96.76036    -1.28   0.202    -315.2757    67.12464
              |
          Sex |          0  (omitted)
        w1Age |  -4.168092   3.081342    -1.35   0.178    -10.25687    1.920686
         Race |  -108.1094   55.63543    -1.94   0.054    -218.0486    1.829692
```

PovStat	-155.9739	59.36945	-2.63	0.010	-273.289	-38.65882
TIME_V1SCAN	.0845657	.0414486	2.04	0.043	.0026598	.1664717
w1BMI	3.967711	3.797768	1.04	0.298	-3.536755	11.47218
w1currdrugs	-65.5802	61.66091	-1.06	0.289	-187.4945	56.33413
w1SRH	-49.46848	31.34058	-1.58	0.117	-111.3989	12.46191
ICV_volM2	.0021171	.0002414	8.77	0.000	.00164	.0025941
_cons	1465.379	417.0608	3.51	0.001	641.2584	2289.499

```
489 .
490 . //ANALYSIS C//
491 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI w1currdrugs w1SRH ICV_vol
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0065
Largest FMI = 0.0693
Complete DF = 151
DF adjustment: **Small sample** — DF: min = 120.71
avg = 146.55
max = 149.04
Model F test: **Equal FMI** — F(11, 149.0) = 1.74
Within VCE type: **OLS** — Prob > F = 0.0699

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2.265765	.897789	2.52	0.013	.4917212	4.039809
Sex						
Men	6.221413	2.986468	2.08	0.039	.3200916	12.12273
Sex#c.LnNFLw3						
Men	-2.61839	1.267017	-2.07	0.041	-5.122046	-.1147347
Sex	0	(omitted)				
w1Age	.0429572	.0403601	1.06	0.289	-.0367956	.1227099
Race	1.222883	.7276225	1.68	0.095	-.2149174	2.660683
PovStat	1.202233	.7778041	1.55	0.124	-.3347412	2.739207
TIME_V1SCAN	-.0007625	.0005419	-1.41	0.162	-.0018333	.0003084
w1BMI	.0625643	.0497427	1.26	0.210	-.035729	.1608576
w1currdrugs	.0975068	.821857	0.12	0.906	-1.529615	1.724629
w1SRH	-.5755102	.4098889	-1.40	0.162	-1.385454	.234434
ICV_volM2	2.65e-06	3.16e-06	0.84	0.403	-3.59e-06	8.90e-06
_cons	-7.514564	5.459537	-1.38	0.171	-18.3027	3.273567

```
492 .
493 . save, replace
file finaldata_imputed_final.dta saved

494 .
495 .
```

```
496 .
497 . ////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    >
498 . ////////////////////////////////////////TABLES 4 AND S4-S5/////////////////////////////////////////////
    >
499 . **********************TABLE 3: LnNFLw3, MODELS 1 AND 2*********************
500 .
501 . **ANALYSES A-C, TOTAL POPULATION**
502 .
503 . **Model 1**
504 .
505 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear

506 .
507 . //ANALYSIS A//
508 . reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1,beta

      Source |       SS           df       MS      Number of obs   =       163
-------------+----------------------------------   F(6, 156)       =     23.55
       Model |  1.0720e+12         6  1.7866e+11   Prob > F        =    0.0000
    Residual |  1.1837e+12       156  7.5879e+09   R-squared       =    0.4752
-------------+----------------------------------   Adj R-squared   =    0.4550
       Total |  2.2557e+12       162  1.3924e+10   Root MSE        =     87108

------------------------------------------------------------------------------
  TOTALBRAIN |  Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
    LnNFLw3 |      4588.47   15462.14     0.30   0.767                .0205686
        Sex |      143765.8   13906.99    10.34   0.000                .6038276
      w1Age |     -2489.008   877.3232    -2.84   0.005               -.1960595
       Race |     -66348.33   14866.05    -4.46   0.000               -.2775056
    PovStat |     -2281.243   16761.82    -0.14   0.892               -.0088918
 TIME_V1SCAN |     -16.94909   11.88346    -1.43   0.156                -.091517
       _cons |      1177766   59194.72    19.90   0.000                       .
------------------------------------------------------------------------------

509 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1,beta

      Source |       SS           df       MS      Number of obs   =       163
-------------+----------------------------------   F(6, 156)       =     27.21
       Model |  3.4766e+11         6  5.7943e+10   Prob > F        =    0.0000
    Residual |  3.3219e+11       156  2.1294e+09   R-squared       =    0.5114
-------------+----------------------------------   Adj R-squared   =    0.4926
       Total |  6.7984e+11       162  4.1966e+09   Root MSE        =     46145

------------------------------------------------------------------------------
          GM |  Coefficient  Std. err.      t    P>|t|                     Beta
-------------+----------------------------------------------------------------
    LnNFLw3 |     -969.9696   8191.008    -0.12   0.906               -.0079201
        Sex |      75839.13   7367.174    10.29   0.000                .580208
      w1Age |     -2065.093   464.7584    -4.44   0.000               -.2963019
       Race |     -46123.44   7875.227    -5.86   0.000               -.3513958
    PovStat |     -3828.761   8879.508    -0.43   0.667               -.0271838
 TIME_V1SCAN |     -5.166087   6.295213    -0.82   0.413               -.0508101
       _cons |      715825.6   31358.16    22.83   0.000                       .
------------------------------------------------------------------------------
```

```
510 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(6, 156)	=	14.80
Model	1.6579e+11	6	2.7632e+10	Prob > F	=	0.0000
Residual	2.9126e+11	156	1.8671e+09	R-squared	=	0.3627
				Adj R-squared	=	0.3382
Total	4.5705e+11	162	2.8213e+09	Root MSE	=	43210

WM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	2435.997	7669.919	0.32	0.751	.0242587
Sex	58276.6	6898.495	8.45	0.000	.5437572
w1Age	-810.6329	435.1918	-1.86	0.064	-.1418533
Race	-18537.85	7374.228	-2.51	0.013	-.1722482
PovStat	-3851.998	8314.619	-0.46	0.644	-.0333548
TIME_V1SCAN	-9.785833	5.89473	-1.66	0.099	-.1173833
_cons	458885.1	29363.25	15.63	0.000	.

```
511 .
512 . //ANALYSIS B//
513 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(7, 155)	=	18.95
Model	11291477.7	7	1613068.24	Prob > F	=	0.0000
Residual	13194485.6	155	85125.7135	R-squared	=	0.4611
				Adj R-squared	=	0.4368
Total	24485963.3	162	151147.921	Root MSE	=	291.76

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-97.3258	51.82448	-1.88	0.062	-.1324173
Sex	7.945135	63.96514	0.12	0.901	.0101283
w1Age	-4.533082	2.945609	-1.54	0.126	-.1083762
Race	-109.2668	53.66401	-2.04	0.043	-.1387103
PovStat	-155.1574	56.16401	-2.76	0.006	-.1835568
TIME_V1SCAN	.0301416	.0399131	0.76	0.451	.049397
ICV_volM2	.0016027	.0002346	6.83	0.000	.587839
_cons	2112.773	353.9768	5.97	0.000	.

```
514 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1,beta
```

Source	SS	df	MS	Number of obs	=	163
				F(7, 155)	=	22.85
Model	14359179.8	7	2051311.4	Prob > F	=	0.0000
Residual	13914789	155	89772.8324	R-squared	=	0.5079
				Adj R-squared	=	0.4856
Total	28273968.8	162	174530.672	Root MSE	=	299.62

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-83.79742	53.22026	-1.57	0.117	-.1060993
Sex	-97.19121	65.68791	-1.48	0.141	-.1152997
w1Age	-3.044304	3.024943	-1.01	0.316	-.067732
Race	-113.3112	55.10934	-2.06	0.041	-.1338625
PovStat	-144.8743	57.67667	-2.51	0.013	-.1594978
TIME_V1SCAN	.0691629	.0409881	1.69	0.094	.1054805
ICV_volM2	.0021053	.0002409	8.74	0.000	.7186189
_cons	1690.343	363.5105	4.65	0.000	.

```
515 .
516 . //ANALYSIS C//
517 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1,beta
```

Source	SS	df	MS		
Model	186.870325	7	26.6957608	Prob > F	0.1074
Residual	2402.03717	155	15.497014	R-squared	0.0722
				Adj R-squared	0.0303
Total	2588.9075	162	15.9809105	Root MSE	3.9366

Number of obs	=	163			
F(7, 155)	=	1.72			
Prob > F	=	0.1074			
R-squared	=	0.0722			
Adj R-squared	=	0.0303			
Root MSE	=	3.9366			

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	.9859345	.6992437	1.41	0.161	.1304563
Sex	.1834878	.8630521	0.21	0.832	.022748
w1Age	.0567112	.0397437	1.43	0.156	.131859
Race	1.329848	.7240636	1.84	0.068	.1641811
PovStat	1.078799	.757795	1.42	0.157	.1241192
TIME_V1SCAN	-.0009008	.0005385	-1.67	0.096	-.1435772
ICV_volM2	2.71e-06	3.17e-06	0.86	0.393	.0966412
_cons	-4.67217	4.776046	-0.98	0.329	.

```
518 .
519 .
520 . **Model 2**
521 .
522 . use finaldata_imputed_final,clear

523 .
524 .
525 . //ANALYSIS A//
526 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        154
DF adjustment:   Small sample                   DF:     min       =     152.04
                                                        avg       =     152.04
                                                        max       =     152.04
Model F test:       Equal FMI                   F(   8,  152.0)   =     348.49
Within VCE type:          OLS                   Prob > F          =     0.0000
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-2069.238	4987.315	-0.41	0.679	-11922.63	7784.15
Sex	-11240.95	6126.332	-1.83	0.068	-23344.69	862.7778
w1Age	-1770.62	281.3941	-6.29	0.000	-2326.568	-1214.673
Race	4452.724	5093.313	0.87	0.383	-5610.084	14515.53
PovStat	3199.024	5333.853	0.60	0.550	-7339.016	13737.06
TIME_V1SCAN	-6.427618	3.79496	-1.69	0.092	-13.92528	1.070046
w1BMI	40.80895	342.944	0.12	0.905	-636.7421	718.36
ICV_volM2	.8298082	.0222977	37.21	0.000	.7857549	.8738615
_cons	139064.6	35050.13	3.97	0.000	69816.38	208312.7

527 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 123.66
Within VCE type: OLS — Prob > F = 0.0000

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-3757.112	4392.059	-0.86	0.394	-12434.46	4920.234
Sex	2588.077	5395.129	0.48	0.632	-8071.026	13247.18
w1Age	-1738.459	247.8086	-7.02	0.000	-2228.051	-1248.866
Race	-12518.68	4485.406	-2.79	0.006	-21380.45	-3656.913
PovStat	-1314.22	4697.236	-0.28	0.780	-10594.5	7966.063
TIME_V1SCAN	-.0641515	3.342016	-0.02	0.985	-6.66694	6.538637
w1BMI	175.1479	302.0123	0.58	0.563	-421.5348	771.8305
ICV_volM2	.3935761	.0196364	20.04	0.000	.3547807	.4323714
_cons	217921.8	30866.75	7.06	0.000	156938.7	278904.9

528 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 120.75
Within VCE type: OLS — Prob > F = 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-938.0601	3638.511	-0.26	0.797	-8126.63	6250.51
Sex	-13769.35	4469.484	-3.08	0.002	-22599.66	-4939.034
w1Age	-466.7245	205.2919	-2.27	0.024	-872.3177	-61.13131
Race	14255.83	3715.842	3.84	0.000	6914.474	21597.18
PovStat	-1246.215	3891.329	-0.32	0.749	-8934.275	6441.844
TIME_V1SCAN	-4.996636	2.768625	-1.80	0.073	-10.46658	.4733077
w1BMI	-102.4026	250.1959	-0.41	0.683	-596.7121	391.9069
ICV_volM2	.3845699	.0162673	23.64	0.000	.3524307	.4167091
_cons	-18406.91	25570.93	-0.72	0.473	-68927.14	32113.31

```
529 .
530 . //ANALYSIS B//
531 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 16.64
Within VCE type: OLS — Prob > F = 0.0000

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-90.01424	52.60028	-1.71	0.089	-193.9361	13.90761
Sex	15.23921	64.61328	0.24	0.814	-112.4166	142.895
w1Age	-4.817364	2.967811	-1.62	0.107	-10.68084	1.046111
Race	-109.7425	53.71823	-2.04	0.043	-215.8731	-3.611974
PovStat	-156.8819	56.25516	-2.79	0.006	-268.0247	-45.73918
TIME_V1SCAN	.032177	.0400247	0.80	0.423	-.0468994	.1112535
w1BMI	3.035855	3.616967	0.84	0.403	-4.11015	10.18186
ICV_volM2	.0015916	.0002352	6.77	0.000	.001127	.0020563
_cons	2024.284	369.6672	5.48	0.000	1293.936	2754.632

```
532 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 20.09
Within VCE type: OLS — Prob > F = 0.0000

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-75.46732	53.98844	-1.40	0.164	-182.1317	31.19709
Sex	-88.88103	66.31847	-1.34	0.182	-219.9058	42.1437
w1Age	-3.368188	3.046134	-1.11	0.271	-9.386404	2.650027
Race	-113.8533	55.13588	-2.06	0.041	-222.7847	-4.92186
PovStat	-146.8391	57.73977	-2.54	0.012	-260.915	-32.76321
TIME_V1SCAN	.0714818	.041081	1.74	0.084	-.0096815	.1526452
w1BMI	3.458767	3.712421	0.93	0.353	-3.875826	10.79336
ICV_volM2	.0020928	.0002414	8.67	0.000	.0016159	.0025696
_cons	1589.528	379.4229	4.19	0.000	839.9055	2339.15

```
533 .
534 . //ANALYSIS C//
535 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 1.59
Within VCE type: OLS — Prob > F = 0.1333

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	1.081095	.7098242	1.52	0.130	-.3212975	2.483487
Sex	.2784208	.8719357	0.32	0.750	-1.444254	2.001095
w1Age	.0530112	.0400497	1.32	0.188	-.0261145	.132137
Race	1.323656	.7249104	1.83	0.070	-.1085418	2.755855
PovStat	1.056354	.7591455	1.39	0.166	-.4434823	2.55619
TIME_V1SCAN	-.0008744	.0005401	-1.62	0.108	-.0019415	.0001928
w1BMI	.0395119	.0488098	0.81	0.419	-.0569212	.135945
ICV_volM2	2.57e-06	3.17e-06	0.81	0.420	-3.70e-06	8.84e-06
_cons	-5.823861	4.988541	-1.17	0.245	-15.67967	4.031949

```
536 .
537 . save, replace
    file finaldata_imputed_final.dta saved

538 .
539 . **********MALES**********
540 .
541 . **Model 1**
542 .
543 . use HANDLS_paper51_NFLBRAINSCANFINALIZED,clear
```

```
. 
. //ANALYSIS A//
. reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	69
				F(5, 63)	=	3.71
Model	1.8752e+11	5	3.7504e+10	Prob > F	=	0.0052
Residual	6.3682e+11	63	1.0108e+10	R-squared	=	0.2275
				Adj R-squared	=	0.1662
Total	8.2434e+11	68	1.2123e+10	Root MSE	=	1.0e+05

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-7854.857	27598.99	-0.28	0.777	-.0360157
Sex	0	(omitted)			.
w1Age	-2565.517	1535.045	-1.67	0.100	-.2054453
Race	-87594.58	26768.26	-3.27	0.002	-.393523
PovStat	22532.17	30230.15	0.75	0.459	.0888283
TIME_V1SCAN	-33.35635	20.76626	-1.61	0.113	-.1869278
_cons	1527782	106054.2	14.41	0.000	.

```
. reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	69
				F(5, 63)	=	6.13
Model	8.1681e+10	5	1.6336e+10	Prob > F	=	0.0001
Residual	1.6779e+11	63	2.6633e+09	R-squared	=	0.3274
				Adj R-squared	=	0.2740
Total	2.4947e+11	68	3.6686e+09	Root MSE	=	51607

GM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-6322.813	14166.55	-0.45	0.657	-.0526999
Sex	0	(omitted)			.
w1Age	-2510.347	787.938	-3.19	0.002	-.3654274
Race	-58385.24	13740.14	-4.25	0.000	-.4768063
PovStat	5987.46	15517.12	0.39	0.701	.0429079
TIME_V1SCAN	-11.40123	10.65931	-1.07	0.289	-.116143
_cons	918209.5	54437.58	16.87	0.000	.

```
. reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	69
				F(5, 63)	=	2.17
Model	2.7415e+10	5	5.4829e+09	Prob > F	=	0.0690
Residual	1.5946e+11	63	2.5311e+09	R-squared	=	0.1467
				Adj R-squared	=	0.0790
Total	1.8687e+11	68	2.7481e+09	Root MSE	=	50310

WM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-4227.944	13810.45	-0.31	0.761	-.0407158
Sex	0	(omitted)			.
w1Age	-667.9388	768.1321	-0.87	0.388	-.1123411
Race	-27883.57	13394.76	-2.08	0.041	-.2631007
PovStat	6101.178	15127.08	0.40	0.688	.0505176
TIME_V1SCAN	-20.2084	10.39138	-1.94	0.056	-.2378526
_cons	604492.3	53069.22	11.39	0.000	.

549 .
550 . //ANALYSIS B//
551 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
				Number of obs	= 69
				F(6, 62)	= 8.71
Model	5690739.81	6	948456.635	Prob > F	= 0.0000
Residual	6751643.22	62	108897.471	R-squared	= 0.4574
				Adj R-squared	= 0.4049
Total	12442383	68	182976.221	Root MSE	= 330

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-108.3088	90.71727	-1.19	0.237	-.1278258
Sex	0	(omitted)			.
w1Age	-3.913135	5.039197	-0.78	0.440	-.0806581
Race	-11.58759	97.08127	-0.12	0.905	-.0133995
PovStat	-242.1219	99.47468	-2.43	0.018	-.2456879
TIME_V1SCAN	-.0076195	.0690123	-0.11	0.912	-.0109906
ICV_volM2	.0021028	.0003676	5.72	0.000	.6094617
_cons	1444.173	708.8667	2.04	0.046	.

552 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
				Number of obs	= 69
				F(6, 62)	= 10.66
Model	7172765.19	6	1195460.86	Prob > F	= 0.0000
Residual	6950491.81	62	112104.707	R-squared	= 0.5079
				Adj R-squared	= 0.4602
Total	14123257	68	207694.956	Root MSE	= 334.82

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-97.79676	92.04348	-1.06	0.292	-.1083337
Sex	0	(omitted)			.
w1Age	-3.565111	5.112865	-0.70	0.488	-.0689732
Race	-26.643	98.50051	-0.27	0.788	-.0289176
PovStat	-235.2956	100.9289	-2.33	0.023	-.2241031
TIME_V1SCAN	.0442556	.0700212	0.63	0.530	.0599169
ICV_volM2	.0024812	.000373	6.65	0.000	.6749909
_cons	1048.015	719.2297	1.46	0.150	.

```
. 
. //ANALYSIS C//
. reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==2,beta
note: Sex omitted because of collinearity.
```

Source	SS	df	MS		
Model	36.3335749	6	6.05559582	Number of obs	= 69
Residual	651.812342	62	10.5131023	F(6, 62)	= 0.58
				Prob > F	= 0.7480
Total	688.145917	68	10.1197929	R-squared	= 0.0528
				Adj R-squared	= -0.0389
				Root MSE	= 3.2424

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	.0827466	.8913465	0.09	0.926	.0131316
Sex	0	(omitted)			.
w1Age	-.0191229	.0495128	-0.39	0.701	-.0530016
Race	1.162285	.9538762	1.22	0.228	.1807253
PovStat	.6269264	.9773928	0.64	0.524	.0855417
TIME_V1SCAN	-.0006919	.0006781	-1.02	0.312	-.1341971
ICV_volM2	4.46e-07	3.61e-06	0.12	0.902	.0173784
_cons	5.057789	6.965	0.73	0.470	.

```
. 
. 
. **Model 2**
. 
. use finaldata_imputed_final,clear

. 
. 
. //ANALYSIS A//
. mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       3.11
Within VCE type:          OLS                   Prob > F          =     0.0102
```

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	-7874.2	27750.97	-0.28	0.778	-63382.66	47634.26
Sex	0	(omitted)				
w1Age	-2896.134	1653.13	-1.75	0.085	-6202.781	410.5127
Race	-89224.77	27073.47	-3.30	0.002	-143378.1	-35071.48
PovStat	22886.37	30403.22	0.75	0.455	-37927.21	83699.94
TIME_V1SCAN	-33.00031	20.89033	-1.58	0.119	-74.78588	8.785256
w1BMI	1480.09	2650.195	0.56	0.579	-3820.922	6781.102
_cons	1502998	115503.4	13.01	0.000	1271964	1734032

```
565 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       5.17
Within VCE type:          OLS                   Prob > F          =     0.0002

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -6336.084   14216.35    -0.45   0.657    -34772.13    22099.96
         Sex |          0  (omitted)
       w1Age |  -2737.177   846.8703    -3.23   0.002    -4431.116   -1043.237
        Race |  -59503.68   13869.28    -4.29   0.000    -87245.49   -31761.86
     PovStat |   6230.466   15575.05     0.40   0.691     -24923.3    37384.23
 TIME_V1SCAN |  -11.15696   10.70176    -1.04   0.301      -32.563    10.24908
       w1BMI |   1015.461    1357.65     0.75   0.457    -1700.158    3731.079
       _cons |   901205.7   59170.41    15.23   0.000       782851     1019560
------------------------------------------------------------------------------

566 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==2

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         62
DF adjustment:   Small sample                   DF:     min       =      60.09
                                                        avg       =      60.09
                                                        max       =      60.09
Model F test:       Equal FMI                   F(   6,   60.1)   =       1.79
Within VCE type:          OLS                   Prob > F          =     0.1168

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -4232.176   13914.73    -0.30   0.762     -32064.9    23600.55
         Sex |          0  (omitted)
       w1Age |  -740.2732   828.9026    -0.89   0.375    -2398.273    917.7265
        Race |  -28240.23   13575.02    -2.08   0.042    -55393.46   -1087.006
     PovStat |   6178.671    15244.6     0.41   0.687    -24314.12    36671.46
 TIME_V1SCAN |   -20.1305   10.47471    -1.92   0.059    -41.08238    .8213726
       w1BMI |   323.8228   1328.845     0.24   0.808     -2334.18    2981.825
       _cons |     599070   57915.02    10.34   0.000     483226.4    714913.6
------------------------------------------------------------------------------

567 .
```

```
568 . //ANALYSIS B//
569 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         61
DF adjustment:   Small sample                   DF:     min       =      59.09
                                                        avg       =      59.09
                                                        max       =      59.09
Model F test:       Equal FMI                   F(   7,   59.1)   =       7.91
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -108.7653   89.89874    -1.21   0.231    -288.6463     71.1157
         Sex |           0  (omitted)
       w1Age |  -6.718996   5.350202    -1.26   0.214    -17.42437    3.986377
        Race |  -27.87933   96.84872    -0.29   0.774    -221.6667    165.9081
     PovStat |  -238.6963   98.60441    -2.42   0.019    -435.9967   -41.39584
 TIME_V1SCAN |   -.005254   .0684084    -0.08   0.939    -.1421343    .1316264
       w1BMI |   12.53694   8.580239     1.46   0.149    -4.631508    29.70539
   ICV_volM2 |   .0020807   .0003646     5.71   0.000     .0013512    .0028102
       _cons |   1271.379   712.3514     1.78   0.079    -153.9856    2696.743
------------------------------------------------------------------------------

570 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         69
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         61
DF adjustment:   Small sample                   DF:     min       =      59.09
                                                        avg       =      59.09
                                                        max       =      59.09
Model F test:       Equal FMI                   F(   7,   59.1)   =      10.53
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hipp~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |  -98.50859    89.0125    -1.11   0.273    -276.6163     79.5991
         Sex |           0  (omitted)
       w1Age |  -7.940389   5.297459    -1.50   0.139    -18.54023    2.659449
        Race |  -52.04728   95.89396    -0.54   0.589    -243.9243    139.8297
     PovStat |  -229.9539   97.63235    -2.36   0.022    -425.3093   -34.59847
 TIME_V1SCAN |   .0479442    .067734     0.71   0.482    -.0875867    .1834752
       w1BMI |   19.54929   8.495653     2.30   0.025     2.550093    36.54849
   ICV_volM2 |   .0024467    .000361     6.78   0.000     .0017244    .0031691
       _cons |   778.5701   705.3289     1.10   0.274    -632.7428    2189.883
------------------------------------------------------------------------------
```

```
571 .
572 . //ANALYSIS C//
573 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &
```

Multiple-imputation estimates — Imputations = **5**
Linear regression — Number of obs = **69**
Average RVI = **0.0000**
Largest FMI = **0.0000**
Complete DF = **61**
DF adjustment: **Small sample** — DF: min = **59.09**; avg = **59.09**; max = **59.09**
Model F test: **Equal FMI** — F(**7**, **59.1**) = **0.49**
Within VCE type: **OLS** — Prob > F = **0.8350**

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	.0834902	.8982107	0.09	0.926	-1.713766	1.880746
Sex	0	(omitted)				
w1Age	-.0145527	.0534558	-0.27	0.786	-.121514	.0924085
Race	1.188821	.9676504	1.23	0.224	-.7473784	3.125021
PovStat	.6213467	.9851922	0.63	0.531	-1.349953	2.592646
TIME_V1SCAN	-.0006957	.0006835	-1.02	0.313	-.0020634	.0006719
w1BMI	-.0204203	.0857283	-0.24	0.813	-.1919564	.1511159
ICV_volM2	4.82e-07	3.64e-06	0.13	0.895	-6.81e-06	7.77e-06
_cons	5.339238	7.117359	0.75	0.456	-8.902092	19.58057

```
574 .
575 . save, replace
```
file **finaldata_imputed_final.dta** saved

```
576 .
577 .
578 . ********************FEMALES************************************************************
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 sample_final2==1 & Sex==1,beta
```
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
				Number of obs	= **94**
				F(5, 88)	= **3.80**
Model	**1.0991e+11**	**5**	**2.1981e+10**	Prob > F	= **0.0037**
Residual	**5.0953e+11**	**88**	**5.7901e+09**	R-squared	= **0.1774**
				Adj R-squared	= **0.1307**
Total	**6.1943e+11**	**93**	**6.6606e+09**	Root MSE	= **76093**

TOTALBRAIN	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	6306.998	19046.62	0.33	0.741	.0422214
Sex	0	(omitted)			.
w1Age	-2520.25	1042.429	-2.42	0.018	-.2980802
Race	-53985.8	17070.95	-3.16	0.002	-.3276663
PovStat	-24938.52	20164.58	-1.24	0.219	-.1455728
TIME_V1SCAN	-.2820661	14.1904	-0.02	0.984	-.002262
_cons	1299177	62225.23	20.88	0.000	.

```
586 . reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==1,beta
    note: Sex omitted because of collinearity.
```

Source	SS	df	MS		
				Number of obs	= 94
				F(5, 88)	= 6.24
Model	5.4780e+10	5	1.0956e+10	Prob > F	= 0.0001
Residual	1.5460e+11	88	1.7568e+09	R-squared	= 0.2616
				Adj R-squared	= 0.2197
Total	2.0938e+11	93	2.2514e+09	Root MSE	= 41914

GM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-2252.551	10491.42	-0.21	0.830	-.0259369
Sex	0	(omitted)			.
w1Age	-1767.961	574.1995	-3.08	0.003	-.3596632
Race	-39387.35	9403.167	-4.19	0.000	-.4111902
PovStat	-12993.09	11107.22	-1.17	0.245	-.1304535
TIME_V1SCAN	1.580598	7.816477	0.20	0.840	.021802
_cons	769758.3	34275.43	22.46	0.000	.

```
587 . reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN if sample_final2==1 & Sex==1,beta
    note: Sex omitted because of collinearity.
```

Source	SS	df	MS		
				Number of obs	= 94
				F(5, 88)	= 1.78
Model	1.2307e+10	5	2.4614e+09	Prob > F	= 0.1260
Residual	1.2194e+11	88	1.3857e+09	R-squared	= 0.0917
				Adj R-squared	= 0.0401
Total	1.3425e+11	93	1.4436e+09	Root MSE	= 37226

WM	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	5895.266	9317.862	0.63	0.529	.0847716
Sex	0	(omitted)			.
w1Age	-1003.782	509.9702	-1.97	0.052	-.2550152
Race	-12794.21	8351.339	-1.53	0.129	-.1668026
PovStat	-13566.44	9864.783	-1.38	0.173	-.1701032
TIME_V1SCAN	-.4257614	6.942134	-0.06	0.951	-.0073341
_cons	505194.5	30441.42	16.60	0.000	.

```
588 .
589 .
590 . //ANALYSIS B//
591 . reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
    note: Sex omitted because of collinearity.
```

Source	SS	df	MS		
				Number of obs	= 94
				F(6, 87)	= 6.54
Model	2538356.28	6	423059.379	Prob > F	= 0.0000
Residual	5626225.18	87	64669.255	R-squared	= 0.3109
				Adj R-squared	= 0.2634
Total	8164581.46	93	87791.1985	Root MSE	= 254.3

Left_Hippo~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-30.53125	63.97282	-0.48	0.634	-.0562969
Sex	0	(omitted)			.
w1Age	-6.935339	3.517041	-1.97	0.052	-.2259372
Race	-176.0809	60.69077	-2.90	0.005	-.294371
PovStat	-115.2062	67.90953	-1.70	0.093	-.1852319
TIME_V1SCAN	.0570559	.0474358	1.20	0.232	.1260293
ICV_volM2	.0010134	.0003058	3.31	0.001	.3244211
_cons	2819.451	479.8644	5.88	0.000	.

592 . reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
Model	4119829.65	6	686638.275	Number of obs	= 94
Residual	6396042.88	87	73517.7343	F(6, 87)	= 9.34
Total	10515872.5	93	113073.898	Prob > F	= 0.0000
				R-squared	= 0.3918
				Adj R-squared	= 0.3498
				Root MSE	= 271.14

Right_Hipp~s	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	-25.05324	68.20914	-0.37	0.714	-.0407051
Sex	0	(omitted)			.
w1Age	-4.269822	3.749942	-1.14	0.258	-.1225672
Race	-172.0524	64.70976	-2.66	0.009	-.2534473
PovStat	-89.7832	72.40655	-1.24	0.218	-.1271977
TIME_V1SCAN	.0830688	.050577	1.64	0.104	.1616788
ICV_volM2	.0016943	.0003261	5.20	0.000	.4779062
_cons	2023.298	511.6414	3.95	0.000	.

593 .
594 . //ANALYSIS C//
595 . reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN ICV_volM2 if sample_final2==1 & Sex==1,beta
note: **Sex** omitted because of collinearity.

Source	SS	df	MS		
Model	235.66457	6	39.2774283	Number of obs	= 94
Residual	1643.03561	87	18.8854668	F(6, 87)	= 2.08
Total	1878.70018	93	20.2010773	Prob > F	= 0.0637
				R-squared	= 0.1254
				Adj R-squared	= 0.0651
				Root MSE	= 4.3457

LnLesion_V~e	Coefficient	Std. err.	t	P>|t|	Beta
LnNFLw3	1.408077	1.093227	1.29	0.201	.1711611
Sex	0	(omitted)			.
w1Age	.1068177	.0601025	1.78	0.079	.2294042
Race	1.298228	1.037141	1.25	0.214	.1430777
PovStat	1.947288	1.160501	1.68	0.097	.2063994
TIME_V1SCAN	-.0011473	.0008106	-1.42	0.161	-.16707
ICV_volM2	6.11e-06	5.23e-06	1.17	0.245	.1290243
_cons	-12.69257	8.20037	-1.55	0.125	.

```
596 .
597 .
598 . **Model 2**
599 .
600 . use finaldata_imputed_final,clear

601 .
602 .
603 . //ANALYSIS A//
604 . mi estimate: reg TOTALBRAIN LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         87
DF adjustment:   Small sample                   DF:     min       =      85.07
                                                        avg       =      85.07
                                                        max       =      85.07
Model F test:       Equal FMI                   F(   6,   85.1)   =       3.29
Within VCE type:          OLS                   Prob > F          =     0.0058

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   9718.497   19435.52     0.50   0.618    -28924.08    48361.08
         Sex |           0  (omitted)
       w1Age |  -2537.418   1043.677    -2.43   0.017    -4612.504   -462.3318
        Race |  -53458.82   17098.49    -3.13   0.002    -87454.81   -19462.82
     PovStat |  -25580.48   20197.85    -1.27   0.209    -65738.77    14577.81
  TIME_V1SCAN |   1.032478   14.27915     0.07   0.943    -27.35798    29.42293
       w1BMI |   1005.081   1110.845     0.90   0.368     -1203.55    3213.713
       _cons |    1259759   76012.91    16.57   0.000      1108627     1410891
------------------------------------------------------------------------------

605 . mi estimate: reg GM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI  if sample_final2==1 & Sex==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         87
DF adjustment:   Small sample                   DF:     min       =      85.07
                                                        avg       =      85.07
                                                        max       =      85.07
Model F test:       Equal FMI                   F(   6,   85.1)   =       5.43
Within VCE type:          OLS                   Prob > F          =     0.0001

------------------------------------------------------------------------------
          GM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   88.21451   10677.82     0.01   0.993     -21141.9    21318.33
         Sex |           0  (omitted)
       w1Age |  -1779.741   573.3931    -3.10   0.003    -2919.787   -639.695
        Race |  -39025.77    9393.86    -4.15   0.000    -57703.07   -20348.47
     PovStat |  -13433.56   11096.64    -1.21   0.229    -35496.41    8629.283
  TIME_V1SCAN |   2.482559   7.844923     0.32   0.752    -13.11507    18.08019
       w1BMI |   689.6263   610.2948     1.13   0.262    -523.7895    1903.042
       _cons |   742712.1   41761.27    17.78   0.000     659680.4    825743.7
------------------------------------------------------------------------------
```

```
606 . mi estimate: reg WM LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1 & Sex==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         87
DF adjustment:   Small sample                   DF:     min       =      85.07
                                                        avg       =      85.07
                                                        max       =      85.07
Model F test:       Equal FMI                   F(   6,   85.1)   =       1.56
Within VCE type:          OLS                   Prob > F          =     0.1694

------------------------------------------------------------------------------
          WM | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |    7223.68   9524.496     0.76   0.450    -11713.35    26160.72
         Sex |           0  (omitted)
       w1Age |   -1010.467   511.4604    -1.98   0.051    -2027.376    6.441634
        Race |   -12589.01   8379.221    -1.50   0.137    -29248.95    4070.943
     PovStat |   -13816.42   9898.083    -1.40   0.166    -33496.24    5863.401
 TIME_V1SCAN |    .0861131   6.997586     0.01   0.990     -13.8268    13.99903
       w1BMI |    391.3718   544.3763     0.72   0.474    -690.9818    1473.726
       _cons |    489845.4    37250.6    13.15   0.000     415782.1    563908.8
------------------------------------------------------------------------------

607 .
608 . //ANALYSIS B//
609 . mi estimate: reg Left_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         86
DF adjustment:   Small sample                   DF:     min       =      84.07
                                                        avg       =      84.07
                                                        max       =      84.07
Model F test:       Equal FMI                   F(   7,   84.1)   =       5.57
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   -25.79673   65.67452    -0.39   0.695    -156.3962    104.8027
         Sex |           0  (omitted)
       w1Age |   -6.975696   3.536697    -1.97   0.052    -14.00872    .0573316
        Race |   -176.1457    60.9985    -2.89   0.005    -297.4465   -54.84496
     PovStat |   -116.3608   68.33152    -1.70   0.092     -252.244    19.52229
 TIME_V1SCAN |    .0588282   .0479385     1.23   0.223    -.0365017    .1541581
       w1BMI |    1.325853   3.747215     0.35   0.724    -6.125809    8.777514
    ICV_volM2 |    .0010022    .000309     3.24   0.002     .0003877    .0016167
       _cons |    2783.329   492.9818     5.65   0.000     1802.992    3763.666
------------------------------------------------------------------------------
```

```
610 . mi estimate: reg Right_Hippocampus LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         86
DF adjustment:   Small sample                   DF:     min       =      84.07
                                                        avg       =      84.07
                                                        max       =      84.07
Model F test:       Equal FMI                   F(   7,   84.1)   =       7.91
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hipp~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |  -26.00045   70.07269    -0.37   0.712    -165.346    113.3451
          Sex |          0  (omitted)
        w1Age |  -4.261748   3.773547    -1.13   0.262    -11.76577    3.242277
         Race |  -172.0394   65.08352    -2.64   0.010    -301.4636   -42.6152
      PovStat |  -89.55221   72.90763    -1.23   0.223    -234.5353    55.4309
  TIME_V1SCAN |   .0827142   .0511489     1.62   0.110    -.0189998   .1844282
        w1BMI |  -.2652564   3.998163    -0.07   0.947     -8.21595    7.685437
    ICV_volM2 |   .0016965   .0003297     5.15   0.000     .0010409   .0023522
        _cons |   2030.524   525.9964     3.86   0.000      984.535    3076.513
------------------------------------------------------------------------------

611 .
612 . //ANALYSIS C//
613 . mi estimate: reg LnLesion_Volume LnNFLw3 Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final2==1 &

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =         94
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =         86
DF adjustment:   Small sample                   DF:     min       =      84.07
                                                        avg       =      84.07
                                                        max       =      84.07
Model F test:       Equal FMI                   F(   7,   84.1)   =       2.09
Within VCE type:          OLS                   Prob > F          =     0.0529

------------------------------------------------------------------------------
LnLesion_V~e | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      LnNFLw3 |   1.730667   1.110071     1.56   0.123    -.4768058    3.93814
          Sex |          0  (omitted)
        w1Age |   .1040678   .0597795     1.74   0.085    -.0148088   .2229445
         Race |   1.293812   1.031035     1.25   0.213    -.7564889   3.344113
      PovStat |   1.868618   1.154982     1.62   0.109    -.4281633   4.165399
  TIME_V1SCAN |  -.0010266   .0008103    -1.27   0.209    -.0026379   .0005848
        w1BMI |   .0903381   .0633378     1.43   0.157    -.0356145   .2162907
    ICV_volM2 |   5.35e-06   5.22e-06     1.02   0.309    -5.04e-06   .0000157
        _cons |  -15.15375   8.332684    -1.82   0.073    -31.72401   1.416513
------------------------------------------------------------------------------
```

```
614 .
615 . save, replace
    file finaldata_imputed_final.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  if sample_final2==1

    Multiple-imputation estimates                 Imputations       =          5
    Linear regression                             Number of obs     =        163
                                                  Average RVI       =     0.0000
                                                  Largest FMI       =     0.0000
                                                  Complete DF       =        154
    DF adjustment:   Small sample                 DF:     min       =     152.04
                                                          avg       =     152.04
                                                          max       =     152.04
    Model F test:       Equal FMI                 F(   8,  152.0)   =      17.62
    Within VCE type:          OLS                 Prob > F          =     0.0000

------------------------------------------------------------------------------
  TOTALBRAIN | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     LnNFLw3 |   13112.74   20025.93     0.65   0.514    -26452.29    52677.76
             |
         Sex |
         Men |   179297.2   64590.37     2.78   0.006     51686.69    306907.8
             |
Sex#c.LnNFLw3|
         Men |  -15320.26   28212.66    -0.54   0.588    -71059.73    40419.21
             |
         Sex |          0  (omitted)
       w1Age |  -2624.828   894.8492    -2.93   0.004    -4392.773   -856.8837
        Race |  -66722.74   14952.63    -4.46   0.000     -96264.5   -37180.97
     PovStat |  -1067.669   17101.56    -0.06   0.950    -34855.05    32719.71
  TIME_V1SCAN|  -16.19146   11.96185    -1.35   0.178    -39.82437    7.441447
       w1BMI |   867.1665   1100.748     0.79   0.432    -1307.571    3041.904
       _cons |    1280734   72930.94    17.56   0.000      1136645     1424823
------------------------------------------------------------------------------

624 . mi estimate: reg GM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI   if sample_final2==1

    Multiple-imputation estimates                 Imputations       =          5
    Linear regression                             Number of obs     =        163
                                                  Average RVI       =     0.0000
                                                  Largest FMI       =     0.0000
                                                  Complete DF       =        154
    DF adjustment:   Small sample                 DF:     min       =     152.04
                                                          avg       =     152.04
                                                          max       =     152.04
    Model F test:       Equal FMI                 F(   8,  152.0)   =      20.47
    Within VCE type:          OLS                 Prob > F          =     0.0000
```

GM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	4620.134	10592.61	0.44	0.663	-16307.59	25547.86
Sex						
Men	98946.31	34164.75	2.90	0.004	31447.35	166445.3
Sex#c.LnNFLw3						
Men	-9945.675	14922.95	-0.67	0.506	-39428.79	19537.44
Sex	0	(omitted)				
w1Age	-2155.406	473.326	-4.55	0.000	-3090.552	-1220.261
Race	-46362.85	7909.12	-5.86	0.000	-61988.82	-30736.89
PovStat	-3053.796	9045.784	-0.34	0.736	-20925.46	14817.87
TIME_V1SCAN	-4.657292	6.327161	-0.74	0.463	-17.1578	7.843217
w1BMI	586.611	582.2354	1.01	0.315	-563.7056	1736.928
_cons	764422.7	38576.46	19.82	0.000	688207.6	840637.8

625 . mi estimate: reg WM c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI if sample_final2==1

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 154
DF adjustment: Small sample — DF: min = 152.04
avg = 152.04
max = 152.04
Model F test: Equal FMI — F(8, 152.0) = 11.05
Within VCE type: OLS — Prob > F = 0.0000

WM	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	6409.379	9943.099	0.64	0.520	-13235.1	26053.86
Sex						
Men	76119.23	32069.85	2.37	0.019	12759.16	139479.3
Sex#c.LnNFLw3						
Men	-7809.361	14007.9	-0.56	0.578	-35484.64	19865.92
Sex	0	(omitted)				
w1Age	-865.7259	444.3027	-1.95	0.053	-1743.53	12.07853
Race	-18752.75	7424.151	-2.53	0.013	-33420.57	-4084.935
PovStat	-3148.381	8491.117	-0.37	0.711	-19924.19	13627.43
TIME_V1SCAN	-9.51162	5.939194	-1.60	0.111	-21.24563	2.222385
w1BMI	285.7365	546.534	0.52	0.602	-794.0453	1365.518
_cons	501363.2	36211.03	13.85	0.000	429821.4	572904.9

```
626 .
627 .
628 .
629 . //ANALYSIS B//
630 . mi estimate: reg Left_Hippocampus c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_fina

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     151.04
                                                        avg       =     151.04
                                                        max       =     151.04
Model F test:       Equal FMI                   F(   9,  151.0)   =      14.91
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Left_Hippoc~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -46.96207   67.02194    -0.70   0.485    -179.3837    85.45954
              |
          Sex |
          Men |   236.1116   222.7427     1.06   0.291    -203.9823    676.2054
              |
Sex#c.LnNFLw3 |
          Men |   -97.7411   94.33261    -1.04   0.302     -284.123    88.64079
              |
          Sex |          0  (omitted)
        w1Age |  -5.260307   2.997741    -1.75   0.081    -11.18323     .662614
         Race |  -113.9984   53.86224    -2.12   0.036    -220.4191   -7.577641
      PovStat |  -146.6115   57.10853    -2.57   0.011    -259.4463   -33.77679
  TIME_V1SCAN |   .0333981   .0400325     0.83   0.405     -.045698    .1124942
        w1BMI |   3.759455   3.682923     1.02   0.309    -3.517245    11.03615
    ICV_volM2 |   .0015784   .0002355     6.70   0.000     .0011132    .0020436
        _cons |   1951.993   407.1495     4.79   0.000     1147.549    2756.437
------------------------------------------------------------------------------

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

Multiple-imputation estimates                   Imputations       =          5
Linear regression                               Number of obs     =        163
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
                                                Complete DF       =        153
DF adjustment:   Small sample                   DF:     min       =     151.04
                                                        avg       =     151.04
                                                        max       =     151.04
Model F test:       Equal FMI                   F(   9,  151.0)   =      18.04
Within VCE type:          OLS                   Prob > F          =     0.0000

------------------------------------------------------------------------------
Right_Hippo~s | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
      LnNFLw3 |  -26.46313    68.7352    -0.39   0.701    -162.2698    109.3435
              |
          Sex |
          Men |   162.5272   228.4366     0.71   0.478    -288.8166     613.871
              |
Sex#c.LnNFLw3 |
          Men |  -111.2539     96.744    -1.15   0.252    -302.4002    79.89237
              |
          Sex |          0  (omitted)
        w1Age |   -3.87237   3.074371    -1.26   0.210    -9.946696    2.201957
         Race |  -118.6975    55.2391    -2.15   0.033    -227.8386   -9.556362
```

PovStat	-135.1488	58.56837	-2.31	0.022	-250.8679	-19.42971
TIME_V1SCAN	.0728717	.0410559	1.77	0.078	-.0082463	.1539897
w1BMI	4.282406	3.777068	1.13	0.259	-3.180305	11.74512
ICV_volM2	.0020777	.0002415	8.60	0.000	.0016006	.0025548
_cons	1401.015	417.5573	3.36	0.001	576.0071	2226.022

```
632 .
633 . //ANALYSIS C//
634 . mi estimate: reg LnLesion_Volume c.LnNFLw3##Sex Sex w1Age Race PovStat TIME_V1SCAN w1BMI ICV_volM2 if sample_final
```

Multiple-imputation estimates — Imputations = 5
Linear regression — Number of obs = 163
Average RVI = 0.0000
Largest FMI = 0.0000
Complete DF = 153
DF adjustment: Small sample — DF: min = 151.04
avg = 151.04
max = 151.04
Model F test: Equal FMI — F(9, 151.0) = 1.92
Within VCE type: OLS — Prob > F = 0.0536

LnLesion_Vo~e	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
LnNFLw3	2.229757	.8951615	2.49	0.014	.4611014	3.998412
Sex						
Men	6.171448	2.975006	2.07	0.040	.2934464	12.04945
Sex#c.LnNFLw3						
Men	-2.6078	1.25993	-2.07	0.040	-5.097163	-.1184381
Sex	0	(omitted)				
w1Age	.0411932	.0400386	1.03	0.305	-.0379148	.1203012
Race	1.210108	.7193973	1.68	0.095	-.211274	2.631489
PovStat	1.330375	.7627555	1.74	0.083	-.1766733	2.837424
TIME_V1SCAN	-.0008418	.0005347	-1.57	0.118	-.0018982	.0002146
w1BMI	.0588181	.04919	1.20	0.234	-.0383713	.1560075
ICV_volM2	2.21e-06	3.14e-06	0.70	0.483	-4.00e-06	8.43e-06
_cons	-7.880819	5.437989	-1.45	0.149	-18.62517	2.863532

```
635 .
636 . save, replace
    file finaldata_imputed_final.dta saved

637 .
638 .
639 .
640 .
641 . capture log close
```