**Analysis question**: Is there difference in inflammatory urinary cytokines between MSM and MSW, and is that driven by   
 differences in penile microbiome composition?

**Initial Hypothesis:** Greater inflammation among MSM, driven by greater relative abundance of more anaerobic,   
 inflammation-associated bacteria.

**Step 1:** Characterize penile microbiome of MSM and MSW.

**Step 2**: Use rigorous method to identify taxa differences and importance of differences between MSM and MSW.

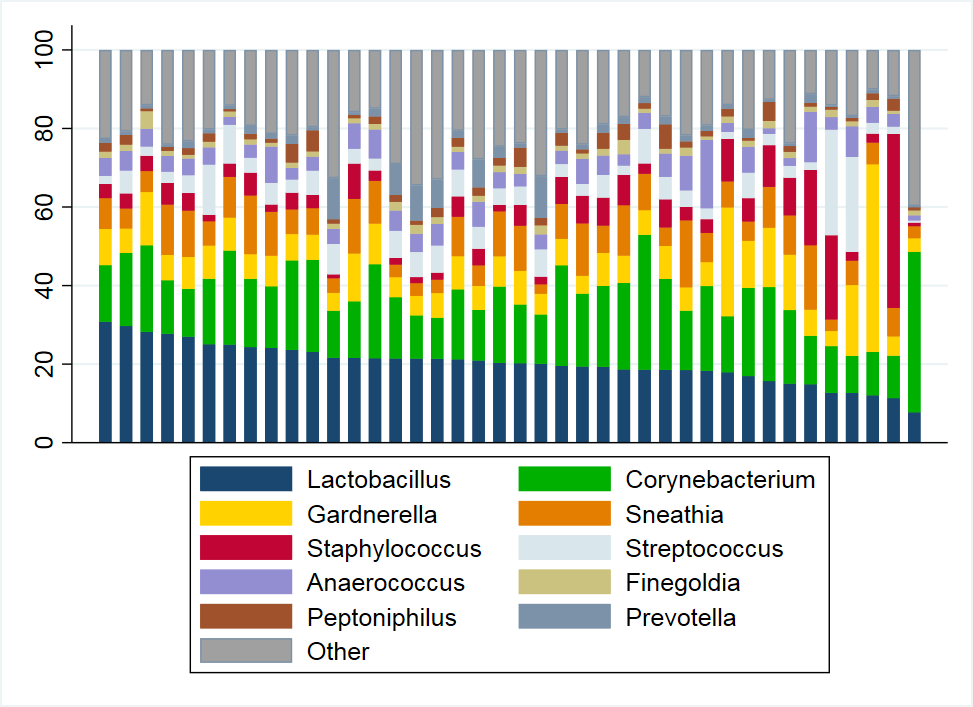
**Step 3**: Characterize urinary cytokines of MSM and MSW.

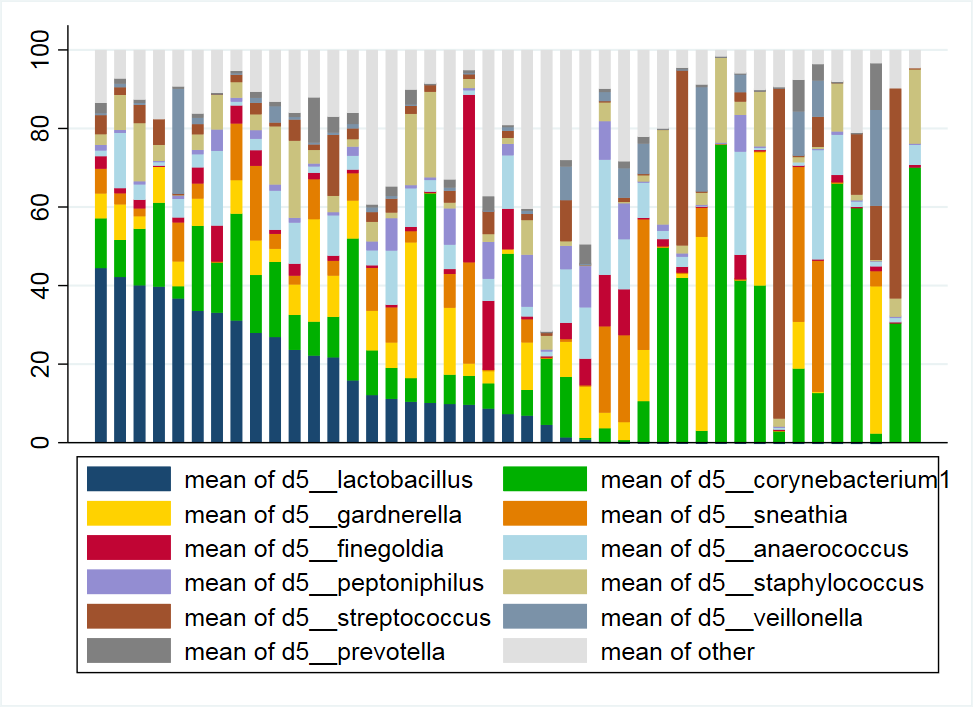
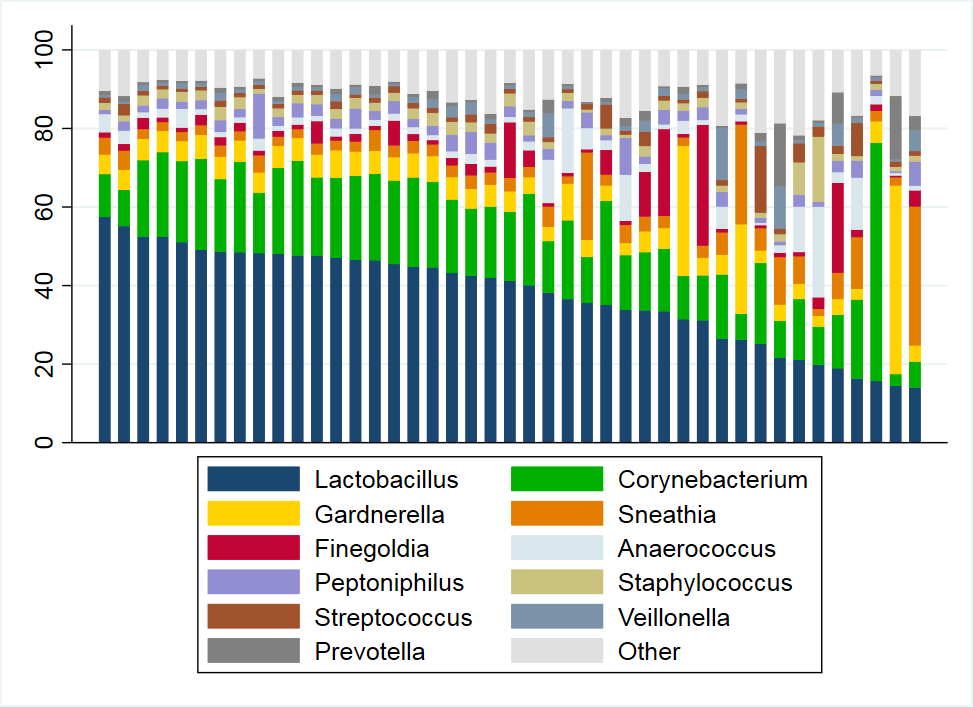
**Step 4**: Use multivariable regression to estimate the extent to which microbiome differences (identified in step 2)

account for differences in urinary cytokines between MSM and MSW.

**Step 1:** Characterize penile microbiome of MSM and MSW.

**Figure 1. Relative abundance of top 10 most abundant taxa by MSM or MSW status.**

****

****

**MSW Relative Abundance**

**MSM Relative Abundance**

**Table 1. Relative abundance of top 10 taxa by MSM or MSW status**

|  |  |  |
| --- | --- | --- |
| Taxa | **MSM**  **(%)** | **MSW**  **(%)** |
| *d5\_\_lactobacillus* | 37.32 | 11.47 |
| *d5\_\_corynebacterium1* | 17.62 | 22.33 |
| *d5\_\_gardnerella* | 7.82 | 8.95 |
| *d5\_\_sneathia* | 5.89 | 8.14 |
| *d5\_\_finegoldia* | 4.20 | 3.33 |
| *d5\_\_anaerococcus* | 4.00 | 7.17 |
| *d5\_\_peptoniphilus* | 2.93 | 2.51 |
| *d5\_\_staphylococcus* | 2.65 | 6.39 |
| *d5\_\_streptococcus* | 2.06 | 7.57 |
| *d5\_\_veillonella* | 1.99 | 4.75 |
| *OTHER* | 13.52 | 17.39 |

**Step 2**: Use rigorous method to identify taxa differences and importance of differences between MSM and MSW.

**Table 2**. **Random Forest Classifier Accuracy (msm=1, msw=0)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Classifier | Accuracy  (CV=5) | TP | FP | FN | TN |
| Logistic Regression | 77% | 9 | 2 | 6 | 12 |
| Naive Bayes | 78% | 8 | 3 | 2 | 16 |
| Random Forest | 84% | 10 | 1 | 3 | 15 |

**Table 3. Taxa and importance from random forest classification of MSM vs. MSW status.**

|  |  |
| --- | --- |
| Taxa | IMPORTANCE |
| d5\_\_lactobacillus | 33.16 |
| d5\_\_corynebacterium1 | 4.48 |
| d5\_\_gardnerella | 3.22 |
| d5\_\_sneathia | 7.79 |
| d5\_\_finegoldia | 2.65 |
| d5\_\_anaerococcus | 0.73 |
| d5\_\_peptoniphilus | 5.98 |
| d5\_\_staphylococcus | 11.37 |
| d5\_\_streptococcus | 9.63 |
| d5\_\_veillonella | 16.56 |
| Other | 4.37 |

**Deb will :**

1. **Expand to use more taxa**
2. **Also compare with Elastic net**

**Step 3: Characterize urinary cytokines by MSM vs. MSW status**

**Figure 2. Summary of urinary cytokine concentrations by MSM or MSW status.**



**Table 4. Urinary cytokine concentration (pg/mL) compared by MSM vs. MSW status**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **MSM, N=43** | | **MSW, N=43\*** | | **Wilcoxon rank sum p-value** |
| **Mean** | **Median** | **Mean** | **Median** |
| **TNF-α** | 0.76 | 0.098 | 0.55 | 0.34 | 0.008 |
| **IL-1β** | 1.37 | 0.55 | 0.85 | 0.27 | 0.032 |
| **IL-8** | 18.0 | 11.1 | 19.3 | 8.34 | 0.397 |
| **IL-10** | 0.10 | 0.06 | 0.15 | 0.13 | <0.001 |
| **IP-10** | 24.3 | 16.5 | 44.9 | 33.6 | 0.001 |

**\*For MSW, TNFa has 3 missing values, and IP10 has 4 missing values**

Interpretation: Urinary measures of cytokine levels are generally **lower** for MSM than for MSW, and this is statistically significant for TNF-a, IL-10, and IP-10, but there is no difference in IL-8 between MSM and MSW, and IL-1b is statistically significantly lower for MSW.

**Table 5. Multivariable linear regression: Association of urinary cytokines with MSM vs. MSW status.**

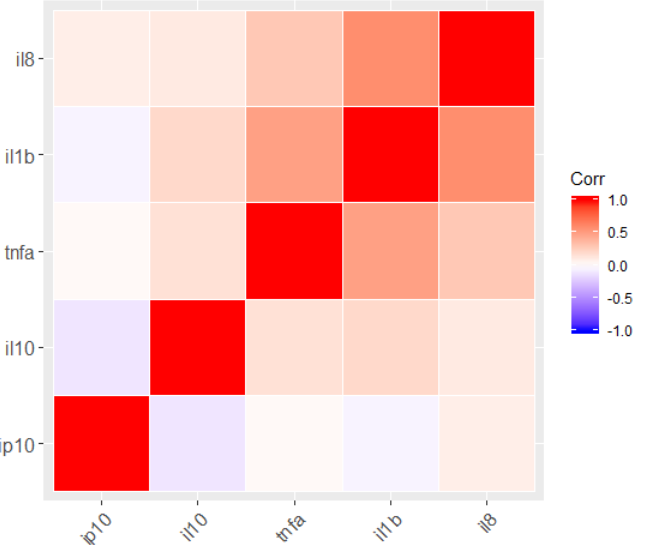
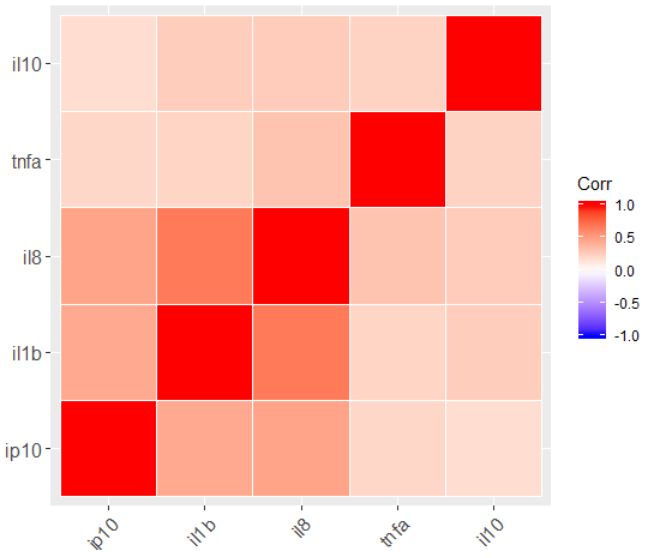
|  |  |  |  |
| --- | --- | --- | --- |
|  | **Estimate** | **P-value** | **Interpretation** |
| **TNF-a** | **-0.45** | **0.050** | Lower for MSM vs. MSW |
| **IL-8** | **0.04** | **0.860** | No difference MSM vs. MSW |
| **IL-1b** | **0.73** | **0.011** | Higher for MSM vs. MSW |
| **IL-10** | **-2.03** | **<0.001** | Lower for MSM vs. MSW |
| **IP-10** | **-0.43** | **0.077** | Lower for MSM vs. MSW |

Because cytokines are positively correlated with each other, we examine whether cytokines differ significantly by MSM vs. MSW status when simultaneously adjusted. So, these differences in cytokines by MSM vs. MSW status are independent of their inter-correlation. Note: cytokines are natural log transformed for linear regression analysis.

**Figure 3. Spearman Correlation plots**

The cytokines are more strongly positively correlated with each other among MSW than MSM. Among MSM, IP-10 is weakly negatively correlated with IL-1b and IL-10, with minimal correlation with TNFa and IL-8, while among MSW there are no negative correlations.

**MSM** **MSW**



**Step 4**: Use multivariable regression to estimate the extent to which microbiome differences (identified in step 2)

account for differences in urinary cytokines between MSM and MSW.

**Table 6. Association between taxa and urinary cytokines, crude and adjusted for MSM vs. MSW status.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Taxa | **TNFa** | | **IL-1b** | | **IL-8** | | **IL-10** | | **IP-10** | |
| Taxa Only | MSM/MSW Adjusted | Taxa Only | MSM/MSW Adjusted | Taxa Only | MSM/MSW Adjusted | Taxa Only | MSM/MSW Adjusted | Taxa Only | MSM/MSW Adjusted |
|  | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) | Estimate  (p-value) |
| MSM vs. MSW |  | -0.96 (0.04) |  | 0.08 (0.85) |  | -0.18 (0.71) |  | -0.62 (<0.01) |  | -0.70 (0.11) |
| Lactobacillus | -0.10 (0.68) | 0.12 (0.63) | 0.40 (0.07) | 0.38 (0.12) | 0.51 (0.04) | 0.56 (0.04) | -0.25 (0.02) | -0.11 (0.34) | 0.13 (0.57) | 0.29 (0.24) |
| Corynebacterium | -0.44 (0.18) | -0.19 (0.57) | 0.56 (0.06) | 0.54 (0.10) | 0.96 (<0.01) | 1.00 (<0.01) | -0.20 (0.19) | -0.04 (0.79) | 0.26 (0.40) | 0.44 (0.18) |
| Gardnerella | 0.00 (0.99) | 0.13 (0.66) | 0.41 (0.13) | 0.40 (0.15) | 0.87 (<0.01) | 0.90 (<0.01) | -0.14 (0.29) | -0.06 (0.65) | 0.30 (0.27) | 0.40 (0.16) |
| Sneathia | -0.07 (0.79) | 0.07 (0.80) | 0.33 (0.16) | 0.32 (0.19) | 0.43 (0.10) | 0.46 (0.10) | -0.26 (0.03) | -0.17 (0.14) | 0.14 (0.58) | 0.24 (0.35) |
| Finegoldia | -0.12 (0.67) | -0.01 (0.97) | 0.09 (0.71) | 0.08 (0.75) | 0.51 (0.07) | 0.53 (0.07) | -0.21 (0.09) | -0.14 (0.25) | -0.11 (0.68) | -0.02 (0.92) |
| Anaerococcus | -0.80 (0.80) | -0.05 (0.87) | 0.31 (0.29) | 0.31 (0.30) | 0.69 (0.04) | 0.70 (0.04) | -0.11 (0.46) | -0.09 (0.53) | 0.46 (0.13) | 0.49 (0.11) |
| Peptoniphilus | 0.12 (0.72) | 0.39 (0.28) | 0.61 (0.05) | 0.59 (0.08) | 0.72 (0.04) | 0.77 (0.04) | -0.28 (0.07) | -0.11 (0.48) | 0.16 (0.60) | 0.36 (0.29) |
| Staphylococcus | 0.40 (0.26) | 0.46 (0.18) | 0.22 (0.49) | 0.21 (0.50) | 0.31 (0.37) | 0.33 (0.36) | -0.22 (0.17) | -0.18 (0.24) | 0.17 (0.60) | 0.22 (0.50) |
| Streptococcus | 0.09 (0.76) | 0.25 (0.40) | 0.44 (0.10) | 0.43 (0.13) | 0.42 (0.16) | 0.45 (0.15) | -0.19 (0.17) | -0.08 (0.52) | 0.35 (0.21) | 0.47 (0.10) |
| Veillonella | 0.07 (0.81) | 0.28 (0.36) | 0.38 (0.16) | 0.36 (0.20) | 0.60 (0.05) | 0.63 (0.05) | -0.19 (0.16) | -0.06 (0.66) | 0.16 (0.56) | 0.31 (0.28) |

TNFa: No taxa are independently associated with TNF-a at the p<0.05 level

IL1b: Increasing values of Peptoniphilus are associated with increasing value of IL-1b.

IL-8: Increasing relative abundance of most common taxa is associated with increasing value of IL-8.

IL-10: Increasing relative abundance of Lactobacillus, Sneathia are associated with increasing value of IL10.

IP-10: No taxa are independently associated with IP-10 at the p<0.05 level

To do:

1. Select Approach: for parsimonious models
2. Select Approach: for multiple testing

Linear regression Number of obs = 83

F(1, 81) = 6.12

Prob > F = 0.0154

R-squared = 0.0693

Root MSE = 1.415

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7632355 .3084137 2.47 0.015 .149589 1.376882

\_cons | -2.660441 .5136317 -5.18 0.000 -3.682407 -1.638475

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(1, 84) = 5.08

Prob > F = 0.0267

R-squared = 0.0571

Root MSE = 1.3255

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6445476 .2858544 -2.25 0.027 -1.213 -.0760947

\_cons | .1668484 .4454693 0.37 0.709 -.7190162 1.052713

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(1, 84) = 0.92

Prob > F = 0.3411

R-squared = 0.0108

Root MSE = 1.572

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.324574 .3390252 -0.96 0.341 -.9987628 .3496149

\_cons | 2.522139 .4935198 5.11 0.000 1.540721 3.503557

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(1, 84) = 28.58

Prob > F = 0.0000

R-squared = 0.2539

Root MSE = .61478

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7088094 .1325873 5.35 0.000 .4451451 .9724737

\_cons | -3.433587 .2275118 -15.09 0.000 -3.886019 -2.981154

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(1, 80) = 14.65

Prob > F = 0.0003

R-squared = 0.1499

Root MSE = 1.2047

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.00044 .2614206 3.83 0.000 .480196 1.520683

\_cons | 1.469689 .4539224 3.24 0.002 .5663546 2.373023

------------------------------------------------------------------------------

**Circumcision status**

foreach var in alllntnfa alllnil1b alllnil10 alllnip10 {

2. regress `var' status2 circstat, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.09

Prob > F = 0.0511

R-squared = 0.0700

Root MSE = 1.4233

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7616604 .3102961 2.45 0.016 .1441515 1.379169

circstat | -.0903068 .2936955 -0.31 0.759 -.6747795 .4941658

\_cons | -2.589561 .5459807 -4.74 0.000 -3.676097 -1.503024

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 6.81

Prob > F = 0.0018

R-squared = 0.1304

Root MSE = 1.2805

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6445476 .2761584 -2.33 0.022 -1.193816 -.0952796

circstat | -.864875 .3770531 -2.29 0.024 -1.614819 -.1149315

\_cons | .8305897 .4705569 1.77 0.081 -.1053291 1.766509

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 14.16

Prob > F = 0.0000

R-squared = 0.2546

Root MSE = .61817

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7088094 .1333189 5.32 0.000 .4436435 .9739753

circstat | -.0447879 .1304558 -0.34 0.732 -.3042592 .2146834

\_cons | -3.399214 .2323628 -14.63 0.000 -3.861375 -2.937054

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.61

Prob > F = 0.0009

R-squared = 0.1503

Root MSE = 1.212

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.001826 .2619503 3.82 0.000 .4804268 1.523225

circstat | .0581185 .2575446 0.23 0.822 -.4545112 .5707482

\_cons | 1.4237 .4567251 3.12 0.003 .5146115 2.332789

------------------------------------------------------------------------------

**Age**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 mage, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 5.14

Prob > F = 0.0079

R-squared = 0.1006

Root MSE = 1.3997

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6824814 .3154468 2.16 0.033 .0547222 1.310241

mage | .0627925 .0374794 1.68 0.098 -.0117939 .137379

\_cons | -4.137818 .9362688 -4.42 0.000 -6.001052 -2.274584

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 2.98

Prob > F = 0.0564

R-squared = 0.0725

Root MSE = 1.3225

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.703162 .2954013 -2.38 0.020 -1.290703 -.1156206

mage | .0406519 .0338965 1.20 0.234 -.0267668 .1080706

\_cons | -.7832717 .8836237 -0.89 0.378 -2.540764 .9742203

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 3.01

Prob > F = 0.0548

R-squared = 0.0595

Root MSE = 1.542

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.4452425 .3386974 -1.31 0.192 -1.118898 .2284129

mage | .0836895 .0366223 2.29 0.025 .0108493 .1565297

\_cons | .5661409 .9895908 0.57 0.569 -1.402115 2.534397

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 14.12

Prob > F = 0.0000

R-squared = 0.2539

Root MSE = .61847

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7082632 .1343518 5.27 0.000 .4410429 .9754836

mage | .0003788 .0132659 0.03 0.977 -.0260066 .0267641

\_cons | -3.442439 .4126233 -8.34 0.000 -4.263131 -2.621748

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 8.27

Prob > F = 0.0005

R-squared = 0.1933

Root MSE = 1.1809

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9070484 .248091 3.66 0.000 .4132356 1.400861

mage | .0647445 .0303139 2.14 0.036 .0044063 .1250828

\_cons | -.0434877 .9714537 -0.04 0.964 -1.977118 1.890142

------------------------------------------------------------------------------

**Condom lst sex**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 condomlst, r

3. }

Linear regression Number of obs = 79

F(2, 76) = 2.74

Prob > F = 0.0709

R-squared = 0.0654

Root MSE = 1.4374

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8466741 .4283366 1.98 0.052 -.0064321 1.69978

condomlstsex | .1565241 .446386 0.35 0.727 -.7325307 1.045579

\_cons | -2.842971 .8007728 -3.55 0.001 -4.437848 -1.248093

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 2.37

Prob > F = 0.0997

R-squared = 0.0606

Root MSE = 1.3557

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.4157588 .3554356 -1.17 0.246 -1.123236 .291718

condomlstsex | .3185272 .3709365 0.86 0.393 -.4198034 1.056858

\_cons | -.3203596 .6249788 -0.51 0.610 -1.564349 .9236295

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 0.42

Prob > F = 0.6590

R-squared = 0.0106

Root MSE = 1.6182

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3875285 .5406583 -0.72 0.476 -1.463682 .6886249

condomlstsex | -.0919788 .5354295 -0.17 0.864 -1.157725 .9737671

\_cons | 2.656604 1.017577 2.61 0.011 .6311674 4.682041

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 12.00

Prob > F = 0.0000

R-squared = 0.2393

Root MSE = .62365

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7315079 .2101824 3.48 0.001 .3131502 1.149866

condomlstsex | .0649849 .2171054 0.30 0.765 -.3671525 .4971223

\_cons | -3.485029 .4078031 -8.55 0.000 -4.296741 -2.673317

------------------------------------------------------------------------------

Linear regression Number of obs = 78

F(2, 75) = 8.39

Prob > F = 0.0005

R-squared = 0.1730

Root MSE = 1.1567

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6732178 .4645657 1.45 0.151 -.2522445 1.59868

condomlstsex | -.4441982 .4785425 -0.93 0.356 -1.397504 .5091073

\_cons | 2.158302 .9092119 2.37 0.020 .3470587 3.969545

------------------------------------------------------------------------------

**CURREMPL**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 currempl, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 5.07

Prob > F = 0.0085

R-squared = 0.0907

Root MSE = 1.4073

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6031121 .3541902 1.70 0.092 -.1017489 1.307973

currempl | .4756688 .3528188 1.35 0.181 -.226463 1.177801

\_cons | -2.732621 .4951377 -5.52 0.000 -3.717976 -1.747266

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 3.51

Prob > F = 0.0343

R-squared = 0.0910

Root MSE = 1.3092

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.8418288 .3203746 -2.63 0.010 -1.479041 -.2046165

currempl | .5655394 .3600196 1.57 0.120 -.150525 1.281604

\_cons | .087936 .4390529 0.20 0.842 -.7853227 .9611946

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 1.34

Prob > F = 0.2676

R-squared = 0.0296

Root MSE = 1.5663

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.4946838 .3636967 -1.36 0.177 -1.218062 .2286944

currempl | .4876482 .3611044 1.35 0.181 -.2305739 1.20587

\_cons | 2.454095 .4929746 4.98 0.000 1.473589 3.434602

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 16.77

Prob > F = 0.0000

R-squared = 0.2572

Root MSE = .6171

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6766627 .1576954 4.29 0.000 .3630129 .9903126

currempl | .0921538 .1545142 0.60 0.553 -.2151688 .3994764

\_cons | -3.446445 .222931 -15.46 0.000 -3.889846 -3.003044

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.26

Prob > F = 0.0013

R-squared = 0.1531

Root MSE = 1.21

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.054719 .2911991 3.62 0.001 .4751021 1.634337

currempl | -.1634239 .3088711 -0.53 0.598 -.7782164 .4513686

\_cons | 1.495221 .4508455 3.32 0.001 .5978354 2.392606

------------------------------------------------------------------------------

**Drinketoh**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 drinketoh, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.03

Prob > F = 0.0541

R-squared = 0.0696

Root MSE = 1.4236

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7801047 .3333211 2.34 0.022 .1167746 1.443435

drinketoh | .0563399 .3327366 0.17 0.866 -.6058271 .7185069

\_cons | -2.715307 .6192494 -4.38 0.000 -3.947653 -1.482961

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 2.84

Prob > F = 0.0640

R-squared = 0.0603

Root MSE = 1.3312

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6889573 .2894044 -2.38 0.020 -1.264571 -.1133435

drinketoh | -.1591348 .2954335 -0.54 0.592 -.7467401 .4284706

\_cons | .3185816 .5215569 0.61 0.543 -.7187741 1.355937

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.82

Prob > F = 0.4427

R-squared = 0.0217

Root MSE = 1.5727

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.2296548 .339327 -0.68 0.500 -.9045625 .4452529

drinketoh | .3401271 .3467373 0.98 0.329 -.3495194 1.029774

\_cons | 2.197832 .5734981 3.83 0.000 1.057167 3.338497

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 22.25

Prob > F = 0.0000

R-squared = 0.2933

Root MSE = .60192

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .627433 .1479842 4.24 0.000 .3330983 .9217677

drinketoh | -.2915989 .1487399 -1.96 0.053 -.5874364 .0042387

\_cons | -3.155551 .2981002 -10.59 0.000 -3.74846 -2.562641

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.57

Prob > F = 0.0010

R-squared = 0.1530

Root MSE = 1.21

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9478327 .2876374 3.30 0.001 .3753047 1.520361

drinketoh | -.154234 .2916565 -0.53 0.598 -.7347617 .4262937

\_cons | 1.626314 .5593843 2.91 0.005 .5128876 2.739741

------------------------------------------------------------------------------

**Drinkfreq**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 i.drinkfreq2, r

3. }

i.drinkfreq2 \_Idrinkfreq\_0-2 (naturally coded; \_Idrinkfreq\_0 omitted)

Linear regression Number of obs = 82

F(3, 78) = 3.24

Prob > F = 0.0264

R-squared = 0.1166

Root MSE = 1.3985

-------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .7402981 .3207141 2.31 0.024 .1018053 1.378791

\_Idrinkfreq\_1 | -.5238057 .4624839 -1.13 0.261 -1.44454 .396929

\_Idrinkfreq\_2 | .4059151 .3523408 1.15 0.253 -.2955414 1.107372

\_cons | -2.673425 .6005451 -4.45 0.000 -3.869018 -1.477831

-------------------------------------------------------------------------------

i.drinkfreq2 \_Idrinkfreq\_0-2 (naturally coded; \_Idrinkfreq\_0 omitted)

Linear regression Number of obs = 85

F(3, 81) = 3.00

Prob > F = 0.0352

R-squared = 0.0765

Root MSE = 1.3353

-------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.6944867 .2899485 -2.40 0.019 -1.271393 -.1175802

\_Idrinkfreq\_1 | -.4765165 .3559288 -1.34 0.184 -1.184703 .2316702

\_Idrinkfreq\_2 | .0209437 .3328613 0.06 0.950 -.6413459 .6832334

\_cons | .32992 .5197411 0.63 0.527 -.7042018 1.364042

-------------------------------------------------------------------------------

i.drinkfreq2 \_Idrinkfreq\_0-2 (naturally coded; \_Idrinkfreq\_0 omitted)

Linear regression Number of obs = 85

F(3, 81) = 2.01

Prob > F = 0.1186

R-squared = 0.0552

Root MSE = 1.5521

-------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.2142918 .3340277 -0.64 0.523 -.8789022 .4503185

\_Idrinkfreq\_1 | -.2327494 .4679703 -0.50 0.620 -1.163864 .6983647

\_Idrinkfreq\_2 | .6209551 .3578617 1.74 0.087 -.0910774 1.332987

\_cons | 2.211463 .5617042 3.94 0.000 1.093848 3.329078

-------------------------------------------------------------------------------

i.drinkfreq2 \_Idrinkfreq\_0-2 (naturally coded; \_Idrinkfreq\_0 omitted)

Linear regression Number of obs = 85

F(3, 81) = 15.40

Prob > F = 0.0000

R-squared = 0.2883

Root MSE = .59507

-------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .606367 .147518 4.11 0.000 .3128525 .8998814

\_Idrinkfreq\_1 | -.3786639 .2356812 -1.61 0.112 -.8475955 .0902677

\_Idrinkfreq\_2 | -.2080932 .1393162 -1.49 0.139 -.4852888 .0691024

\_cons | -3.147168 .2996119 -10.50 0.000 -3.743302 -2.551034

-------------------------------------------------------------------------------

i.drinkfreq2 \_Idrinkfreq\_0-2 (naturally coded; \_Idrinkfreq\_0 omitted)

Linear regression Number of obs = 81

F(3, 77) = 8.28

Prob > F = 0.0001

R-squared = 0.2722

Root MSE = 1.1195

-------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .9127788 .2717592 3.36 0.001 .3716371 1.45392

\_Idrinkfreq\_1 | -1.004574 .4201662 -2.39 0.019 -1.841232 -.1679163

\_Idrinkfreq\_2 | .1552363 .2911542 0.53 0.595 -.4245258 .7349984

\_cons | 1.749351 .5426111 3.22 0.002 .6688743 2.829828

-------------------------------------------------------------------------------

**BHANG**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 bhang, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.82

Prob > F = 0.0260

R-squared = 0.0774

Root MSE = 1.4176

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7413555 .3135399 2.36 0.020 .1173912 1.36532

bhang | -.2894895 .3302999 -0.88 0.383 -.9468073 .3678283

\_cons | -2.544309 .5519302 -4.61 0.000 -3.642685 -1.445932

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 2.63

Prob > F = 0.0781

R-squared = 0.0584

Root MSE = 1.3325

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.654907 .287375 -2.28 0.025 -1.226484 -.0833297

bhang | -.111364 .3031663 -0.37 0.714 -.7143496 .4916217

\_cons | .2134659 .4636891 0.46 0.646 -.7087931 1.135725

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.63

Prob > F = 0.5353

R-squared = 0.0214

Root MSE = 1.5729

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3581015 .3519021 -1.02 0.312 -1.058021 .3418176

bhang | -.3604206 .4469104 -0.81 0.422 -1.249307 .5284661

\_cons | 2.673013 .5553439 4.81 0.000 1.568456 3.77757

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 14.93

Prob > F = 0.0000

R-squared = 0.2557

Root MSE = .61771

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .715115 .1374204 5.20 0.000 .4417914 .9884387

bhang | .0677857 .1247925 0.54 0.588 -.1804216 .3159929

\_cons | -3.461962 .2549589 -13.58 0.000 -3.969065 -2.954859

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.26

Prob > F = 0.0013

R-squared = 0.1499

Root MSE = 1.2122

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.002281 .2666583 3.76 0.000 .4715111 1.533051

bhang | .0194237 .298251 0.07 0.948 -.57423 .6130774

\_cons | 1.461523 .4836897 3.02 0.003 .498763 2.424284

------------------------------------------------------------------------------

**MIRAA**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. regress `var' status2 miraa, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 7.31

Prob > F = 0.0012

R-squared = 0.1176

Root MSE = 1.3864

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6286586 .3234076 1.94 0.055 -.0149431 1.27226

miraa | -.6951118 .3220364 -2.16 0.034 -1.335985 -.054239

\_cons | -2.234887 .5916273 -3.78 0.000 -3.412263 -1.057511

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 4.36

Prob > F = 0.0158

R-squared = 0.0819

Root MSE = 1.3157

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.7429411 .2835646 -2.62 0.010 -1.30694 -.1789426

miraa | -.4701024 .2886672 -1.63 0.107 -1.04425 .1040451

\_cons | .462029 .467318 0.99 0.326 -.4674477 1.391506

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.56

Prob > F = 0.5753

R-squared = 0.0150

Root MSE = 1.5781

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3712743 .3584288 -1.04 0.303 -1.084175 .3416262

miraa | -.2231239 .4267174 -0.52 0.602 -1.071848 .6255998

\_cons | 2.66224 .5585751 4.77 0.000 1.551257 3.773224

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 14.24

Prob > F = 0.0000

R-squared = 0.2544

Root MSE = .61823

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .716636 .1399059 5.12 0.000 .4383687 .9949033

miraa | .0373939 .1320802 0.28 0.778 -.2253083 .3000961

\_cons | -3.457067 .261833 -13.20 0.000 -3.977842 -2.936291

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.61

Prob > F = 0.0010

R-squared = 0.1529

Root MSE = 1.2101

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9622301 .2764708 3.48 0.001 .4119287 1.512532

miraa | -.1597938 .2902777 -0.55 0.584 -.737577 .4179895

\_cons | 1.574789 .5173258 3.04 0.003 .5450775 2.6045

------------------------------------------------------------------------------

**Sp6mos2 (1, 2, 3+)**

| MSM or MSW

sp6mos2 | MSM MSW | Total

-----------+----------------------+----------

1 | 12 32 | 44

| 27.91 74.42 | 51.16

-----------+----------------------+----------

2 | 10 8 | 18

| 23.26 18.60 | 20.93

-----------+----------------------+----------

3+ | 21 3 | 24

| 48.84 6.98 | 27.91

-----------+----------------------+----------

Total | 43 43 | 86

| 100.00 100.00 | 100.00

Pearson chi2(2) = 22.8131 Pr = 0.000

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 i.sp6mos2, r

3. }

i.sp6mos2 \_Isp6mos2\_1-3 (naturally coded; \_Isp6mos2\_1 omitted)

Linear regression Number of obs = 83

F(3, 79) = 7.21

Prob > F = 0.0002

R-squared = 0.1351

Root MSE = 1.3812

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.199414 .2973814 4.03 0.000 .6074913 1.791337

\_Isp6mos2\_2 | .6489082 .4174271 1.55 0.124 -.1819597 1.479776

\_Isp6mos2\_3 | .9648179 .3621153 2.66 0.009 .2440455 1.68559

\_cons | -3.718719 .4977274 -7.47 0.000 -4.70942 -2.728017

------------------------------------------------------------------------------

i.sp6mos2 \_Isp6mos2\_1-3 (naturally coded; \_Isp6mos2\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 2.31

Prob > F = 0.0823

R-squared = 0.0770

Root MSE = 1.3273

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6846426 .3362082 -2.04 0.045 -1.353468 -.0158173

\_Isp6mos2\_2 | .398207 .3854428 1.03 0.305 -.3685615 1.164976

\_Isp6mos2\_3 | -.1400278 .3894083 -0.36 0.720 -.9146849 .6346293

\_cons | .1827229 .6063489 0.30 0.764 -1.023498 1.388944

------------------------------------------------------------------------------

i.sp6mos2 \_Isp6mos2\_1-3 (naturally coded; \_Isp6mos2\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 0.56

Prob > F = 0.6418

R-squared = 0.0286

Root MSE = 1.5767

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.4039536 .4457402 -0.91 0.367 -1.290673 .4827657

\_Isp6mos2\_2 | .3800664 .4528214 0.84 0.404 -.5207396 1.280872

\_Isp6mos2\_3 | -.2318588 .5172648 -0.45 0.655 -1.260863 .7971457

\_cons | 2.626365 .7732343 3.40 0.001 1.088155 4.164574

------------------------------------------------------------------------------

i.sp6mos2 \_Isp6mos2\_1-3 (naturally coded; \_Isp6mos2\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 10.68

Prob > F = 0.0000

R-squared = 0.2663

Root MSE = .61704

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6806829 .136019 5.00 0.000 .4100978 .9512681

\_Isp6mos2\_2 | .1457009 .1698559 0.86 0.394 -.1921966 .4835985

\_Isp6mos2\_3 | -.08338 .1732804 -0.48 0.632 -.4280898 .2613299

\_cons | -3.398624 .2454404 -13.85 0.000 -3.886883 -2.910364

------------------------------------------------------------------------------

i.sp6mos2 \_Isp6mos2\_1-3 (naturally coded; \_Isp6mos2\_1 omitted)

Linear regression Number of obs = 82

F(3, 78) = 5.61

Prob > F = 0.0015

R-squared = 0.1744

Root MSE = 1.2023

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8647827 .3127393 2.77 0.007 .2421665 1.487399

\_Isp6mos2\_2 | -.5611075 .4062946 -1.38 0.171 -1.369978 .247763

\_Isp6mos2\_3 | -.2223631 .3662347 -0.61 0.546 -.9514803 .5067541

\_cons | 1.844432 .5947029 3.10 0.003 .6604694 3.028394

------------------------------------------------------------------------------

**SP 30days 2 (0, 1, 2, 3-4)**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 i.sp30days2, r

3. }

i.sp30days2 \_Isp30days2\_0-3 (naturally coded; \_Isp30days2\_0 omitted)

Linear regression Number of obs = 83

F(4, 78) = 8.25

Prob > F = 0.0000

R-squared = 0.1640

Root MSE = 1.3667

-------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | 1.10096 .2701027 4.08 0.000 .563227 1.638693

\_Isp30days2\_1 | -.1848942 .7093317 -0.26 0.795 -1.597065 1.227277

\_Isp30days2\_2 | .9406942 .7924236 1.19 0.239 -.6369 2.518288

\_Isp30days2\_3 | .6091725 .7803749 0.78 0.437 -.9444347 2.16278

\_cons | -3.331398 .7285802 -4.57 0.000 -4.78189 -1.880906

-------------------------------------------------------------------------------

i.sp30days2 \_Isp30days2\_0-3 (naturally coded; \_Isp30days2\_0 omitted)

Linear regression Number of obs = 86

F(4, 81) = 1.26

Prob > F = 0.2944

R-squared = 0.0588

Root MSE = 1.3486

-------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.7068427 .3400001 -2.08 0.041 -1.383336 -.0303492

\_Isp30days2\_1 | .175499 .5241321 0.33 0.739 -.8673594 1.218357

\_Isp30days2\_2 | .1103089 .5445265 0.20 0.840 -.9731281 1.193746

\_Isp30days2\_3 | .0207201 .5968612 0.03 0.972 -1.166846 1.208287

\_cons | .1307188 .5451207 0.24 0.811 -.9539004 1.215338

-------------------------------------------------------------------------------

i.sp30days2 \_Isp30days2\_0-3 (naturally coded; \_Isp30days2\_0 omitted)

Linear regression Number of obs = 86

F(4, 81) = 0.68

Prob > F = 0.6067

R-squared = 0.0184

Root MSE = 1.5947

-------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.169626 .4568748 -0.37 0.711 -1.078664 .7394116

\_Isp30days2\_1 | -.5121144 .516372 -0.99 0.324 -1.539533 .5153039

\_Isp30days2\_2 | -.2808246 .5044702 -0.56 0.579 -1.284562 .7229129

\_Isp30days2\_3 | -.3075068 .4792496 -0.64 0.523 -1.261063 .6460497

\_cons | 2.687947 .5600915 4.80 0.000 1.57354 3.802353

-------------------------------------------------------------------------------

i.sp30days2 \_Isp30days2\_0-3 (naturally coded; \_Isp30days2\_0 omitted)

Linear regression Number of obs = 86

F(4, 81) = 12.15

Prob > F = 0.0000

R-squared = 0.2980

Root MSE = .60728

-------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .7937734 .1520088 5.22 0.000 .4913235 1.096223

\_Isp30days2\_1 | -.5534281 .4244487 -1.30 0.196 -1.397948 .2910916

\_Isp30days2\_2 | -.538106 .4144009 -1.30 0.198 -1.362634 .2864217

\_Isp30days2\_3 | -.6106152 .4091725 -1.49 0.140 -1.42474 .2035097

\_cons | -3.049208 .4241959 -7.19 0.000 -3.893225 -2.205191

-------------------------------------------------------------------------------

i.sp30days2 \_Isp30days2\_0-3 (naturally coded; \_Isp30days2\_0 omitted)

Linear regression Number of obs = 82

F(4, 77) = 4.53

Prob > F = 0.0025

R-squared = 0.1602

Root MSE = 1.2205

-------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | 1.143805 .3252741 3.52 0.001 .4961019 1.791509

\_Isp30days2\_1 | -.4997086 .7707317 -0.65 0.519 -2.034431 1.035014

\_Isp30days2\_2 | -.3474645 .7284533 -0.48 0.635 -1.798 1.103071

\_Isp30days2\_3 | -.2651864 .8283457 -0.32 0.750 -1.914633 1.384261

\_cons | 1.655025 .7695088 2.15 0.035 .122737 3.187312

-------------------------------------------------------------------------------

**Sp30days continuous**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 sp30days, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 5.57

Prob > F = 0.0054

R-squared = 0.1127

Root MSE = 1.3902

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8819409 .3024919 2.92 0.005 .2799629 1.483919

sp30days | .3563233 .1881763 1.89 0.062 -.0181595 .7308061

\_cons | -3.334348 .5898419 -5.65 0.000 -4.508171 -2.160525

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 2.57

Prob > F = 0.0830

R-squared = 0.0578

Root MSE = 1.3329

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6595776 .2914461 -2.26 0.026 -1.239252 -.0799032

sp30days | -.0430862 .1541043 -0.28 0.780 -.3495933 .263421

\_cons | .2490127 .5315522 0.47 0.641 -.8082232 1.306249

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.46

Prob > F = 0.6303

R-squared = 0.0108

Root MSE = 1.5814

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.324862 .3537254 -0.92 0.361 -1.028408 .3786835

sp30days | -.0008256 .1539581 -0.01 0.996 -.307042 .3053909

\_cons | 2.523714 .6192854 4.08 0.000 1.29198 3.755447

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 23.54

Prob > F = 0.0000

R-squared = 0.2732

Root MSE = .6104

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6678485 .1477013 4.52 0.000 .3740766 .9616204

sp30days | -.1174212 .0862697 -1.36 0.177 -.2890082 .0541657

\_cons | -3.209667 .3447394 -9.31 0.000 -3.89534 -2.523994

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.37

Prob > F = 0.0012

R-squared = 0.1500

Root MSE = 1.2122

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.006474 .2824354 3.56 0.001 .4443003 1.568648

sp30days | .017094 .1965664 0.09 0.931 -.3741616 .4083495

\_cons | 1.43702 .6455822 2.23 0.029 .1520206 2.722019

------------------------------------------------------------------------------

**Dayslstsex (continuous)**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 dayslstsex, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.09

Prob > F = 0.0508

R-squared = 0.0710

Root MSE = 1.4226

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7179405 .3339194 2.15 0.035 .0534198 1.382461

dayslstsex | -.0033438 .0092574 -0.36 0.719 -.0217666 .015079

\_cons | -2.552547 .5892121 -4.33 0.000 -3.725116 -1.379977

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 3.48

Prob > F = 0.0355

R-squared = 0.0716

Root MSE = 1.3231

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.5198577 .3044614 -1.71 0.091 -1.125419 .0857037

dayslstsex | .0092762 .0072257 1.28 0.203 -.0050953 .0236478

\_cons | -.1315012 .5055895 -0.26 0.795 -1.137098 .8740961

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 1.36

Prob > F = 0.2614

R-squared = 0.0180

Root MSE = 1.5757

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.2230602 .351644 -0.63 0.528 -.922466 .4763455

dayslstsex | .0075521 .0057774 1.31 0.195 -.003939 .0190432

\_cons | 2.279244 .5430444 4.20 0.000 1.19915 3.359337

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 22.14

Prob > F = 0.0000

R-squared = 0.2861

Root MSE = .60495

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8056931 .1210811 6.65 0.000 .5648677 1.046519

dayslstsex | .0072076 .0057144 1.26 0.211 -.004158 .0185732

\_cons | -3.665404 .2095905 -17.49 0.000 -4.082271 -3.248536

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.56

Prob > F = 0.0010

R-squared = 0.1713

Root MSE = 1.1969

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8601573 .2740039 3.14 0.002 .3147662 1.405548

dayslstsex | -.0105391 .0096854 -1.09 0.280 -.0298174 .0087392

\_cons | 1.807273 .5089709 3.55 0.001 .7941914 2.820354

------------------------------------------------------------------------------

**Dayslstsex2**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 i.dayslstsex2, r

3. }

i.dayslstsex2 \_Idayslstse\_1-3 (naturally coded; \_Idayslstse\_1 omitted)

Linear regression Number of obs = 83

F(3, 79) = 2.54

Prob > F = 0.0623

R-squared = 0.0777

Root MSE = 1.4263

-------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .7819017 .3362025 2.33 0.023 .1127073 1.451096

\_Idayslstse\_2 | .3123097 .3324551 0.94 0.350 -.3494257 .9740451

\_Idayslstse\_3 | .0727056 .4291527 0.17 0.866 -.7815014 .9269127

\_cons | -2.817988 .6199537 -4.55 0.000 -4.051975 -1.584001

-------------------------------------------------------------------------------

i.dayslstsex2 \_Idayslstse\_1-3 (naturally coded; \_Idayslstse\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 1.81

Prob > F = 0.1510

R-squared = 0.0615

Root MSE = 1.3384

-------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.7032018 .311266 -2.26 0.027 -1.322409 -.0839946

\_Idayslstse\_2 | -.2152485 .3531394 -0.61 0.544 -.9177553 .4872582

\_Idayslstse\_3 | -.1824919 .3894028 -0.47 0.641 -.9571382 .5921544

\_cons | .3889515 .5897674 0.66 0.511 -.7842837 1.562187

-------------------------------------------------------------------------------

i.dayslstsex2 \_Idayslstse\_1-3 (naturally coded; \_Idayslstse\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 1.22

Prob > F = 0.3091

R-squared = 0.0339

Root MSE = 1.5723

-------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | -.5144046 .3376844 -1.52 0.132 -1.186166 .1573573

\_Idayslstse\_2 | -.5070846 .4347429 -1.17 0.247 -1.371927 .3577575

\_Idayslstse\_3 | -.5779866 .4042242 -1.43 0.157 -1.382117 .2261441

\_cons | 3.172781 .6006211 5.28 0.000 1.977954 4.367608

-------------------------------------------------------------------------------

i.dayslstsex2 \_Idayslstse\_1-3 (naturally coded; \_Idayslstse\_1 omitted)

Linear regression Number of obs = 86

F(3, 82) = 14.70

Prob > F = 0.0000

R-squared = 0.2743

Root MSE = .61365

-------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | .7976349 .1243998 6.41 0.000 .5501641 1.045106

\_Idayslstse\_2 | .0655894 .1350335 0.49 0.628 -.2030352 .334214

\_Idayslstse\_3 | .2590058 .1828861 1.42 0.161 -.1048129 .6228246

\_cons | -3.676281 .2375695 -15.47 0.000 -4.148883 -3.20368

-------------------------------------------------------------------------------

i.dayslstsex2 \_Idayslstse\_1-3 (naturally coded; \_Idayslstse\_1 omitted)

Linear regression Number of obs = 82

F(3, 78) = 5.34

Prob > F = 0.0021

R-squared = 0.1526

Root MSE = 1.2181

-------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

--------------+----------------------------------------------------------------

status2 | 1.059742 .2694535 3.93 0.000 .5233013 1.596183

\_Idayslstse\_2 | .1027562 .3144342 0.33 0.745 -.5232343 .7287467

\_Idayslstse\_3 | .1827048 .3386745 0.54 0.591 -.4915443 .856954

\_cons | 1.283454 .5290351 2.43 0.018 .2302262 2.336682

-------------------------------------------------------------------------------

**Sex7days**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 sex7days, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.20

Prob > F = 0.0462

R-squared = 0.0798

Root MSE = 1.4158

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6879384 .3312248 2.08 0.041 .0287801 1.347097

sex7days | .0746892 .1263216 0.59 0.556 -.1766987 .3260771

\_cons | -2.692835 .5117662 -5.26 0.000 -3.711282 -1.674388

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 2.65

Prob > F = 0.0767

R-squared = 0.0577

Root MSE = 1.333

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6599166 .2867521 -2.30 0.024 -1.230255 -.0895782

sex7days | .0165217 .0770515 0.21 0.831 -.1367307 .1697742

\_cons | .1583955 .4536027 0.35 0.728 -.7438021 1.060593

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.61

Prob > F = 0.5441

R-squared = 0.0115

Root MSE = 1.5809

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3437232 .3294883 -1.04 0.300 -.9990621 .3116157

sex7days | .0205854 .0708984 0.29 0.772 -.1204286 .1615994

\_cons | 2.511607 .5083886 4.94 0.000 1.500443 3.522772

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 24.50

Prob > F = 0.0000

R-squared = 0.2742

Root MSE = .61

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .75594 .1244199 6.08 0.000 .5084738 1.003406

sex7days | -.0506654 .024935 -2.03 0.045 -.1002601 -.0010707

\_cons | -3.407665 .2302045 -14.80 0.000 -3.865532 -2.949797

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.37

Prob > F = 0.0012

R-squared = 0.1500

Root MSE = 1.2122

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.006103 .2625526 3.83 0.000 .4835049 1.528701

sex7days | -.0065408 .060913 -0.11 0.915 -.127785 .1147035

\_cons | 1.473457 .4610038 3.20 0.002 .5558515 2.391062

------------------------------------------------------------------------------

**Sex30days (# times had sex past 30 days) continuous**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 sex30days, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.44

Prob > F = 0.0368

R-squared = 0.0852

Root MSE = 1.4116

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6935564 .3069847 2.26 0.027 .0826374 1.304475

sex30days | .029217 .0257255 1.14 0.259 -.0219785 .0804124

\_cons | -2.750436 .521045 -5.28 0.000 -3.787349 -1.713523

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 3.39

Prob > F = 0.0386

R-squared = 0.0637

Root MSE = 1.3287

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6869348 .2805862 -2.45 0.016 -1.24501 -.1288601

sex30days | .0176956 .0215411 0.82 0.414 -.0251488 .0605401

\_cons | .1125269 .4654814 0.24 0.810 -.8132969 1.038351

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 0.86

Prob > F = 0.4257

R-squared = 0.0151

Root MSE = 1.578

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3641386 .3327319 -1.09 0.277 -1.025929 .2976518

sex30days | .0165173 .0243552 0.68 0.500 -.0319242 .0649588

\_cons | 2.471435 .5175312 4.78 0.000 1.442086 3.500784

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 22.28

Prob > F = 0.0000

R-squared = 0.2703

Root MSE = .61162

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7435167 .1249076 5.95 0.000 .4950805 .9919529

sex30days | -.0144895 .009324 -1.55 0.124 -.0330346 .0040556

\_cons | -3.389107 .2395096 -14.15 0.000 -3.865482 -2.912732

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.37

Prob > F = 0.0012

R-squared = 0.1574

Root MSE = 1.2069

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9616535 .2619899 3.67 0.000 .4401757 1.483131

sex30days | .0182555 .0242352 0.75 0.454 -.0299836 .0664945

\_cons | 1.408707 .4677294 3.01 0.003 .4777146 2.339699

------------------------------------------------------------------------------

**Whenwash**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 whenwash, r

3. }

Linear regression Number of obs = 83

F(2, 80) = 3.82

Prob > F = 0.0259

R-squared = 0.0863

Root MSE = 1.4107

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9410865 .3402777 2.77 0.007 .2639123 1.618261

whenwash | -.4190462 .3522494 -1.19 0.238 -1.120045 .2819524

\_cons | -2.701858 .5089158 -5.31 0.000 -3.714633 -1.689084

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 5.42

Prob > F = 0.0062

R-squared = 0.1145

Root MSE = 1.2922

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3242988 .31578 -1.03 0.307 -.9523724 .3037748

whenwash | -.7247735 .3186421 -2.27 0.026 -1.35854 -.0910072

\_cons | .0825724 .4451591 0.19 0.853 -.802831 .9679759

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 1.54

Prob > F = 0.2206

R-squared = 0.0343

Root MSE = 1.5625

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.0871966 .3574528 -0.24 0.808 -.7981557 .6237626

whenwash | -.5372225 .347193 -1.55 0.126 -1.227776 .1533304

\_cons | 2.459671 .4967195 4.95 0.000 1.471716 3.447627

------------------------------------------------------------------------------

Linear regression Number of obs = 86

F(2, 83) = 18.24

Prob > F = 0.0000

R-squared = 0.2627

Root MSE = .61479

-----------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7744385 .1283089 6.04 0.000 .5192373 1.02964

whenwash | -.1485291 .1320587 -1.12 0.264 -.4111885 .1141303

\_cons | -3.450857 .2241315 -15.40 0.000 -3.896646 -3.005069

------------------------------------------------------------------------------

Linear regression Number of obs = 82

F(2, 79) = 7.33

Prob > F = 0.0012

R-squared = 0.1505

Root MSE = 1.2118

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .971309 .2995112 3.24 0.002 .3751468 1.567471

whenwash | .0696891 .3059556 0.23 0.820 -.5393002 .6786784

\_cons | 1.47613 .458249 3.22 0.002 .5640082 2.388252

------------------------------------------------------------------------------

**BMI**

. foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 bmi if bmi<35, r

3. }

Linear regression Number of obs = 81

F(2, 78) = 3.42

Prob > F = 0.0376

R-squared = 0.0684

Root MSE = 1.4182

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .6946111 .3158086 2.20 0.031 .0658845 1.323338

bmi | -.0555417 .0717364 -0.77 0.441 -.1983579 .0872744

\_cons | -1.352292 1.765623 -0.77 0.446 -4.867377 2.162793

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 2.79

Prob > F = 0.0674

R-squared = 0.0641

Root MSE = 1.3318

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6839396 .2900193 -2.36 0.021 -1.260987 -.1068923

bmi | -.0047723 .0570108 -0.08 0.933 -.118206 .1086614

\_cons | .3468853 1.321633 0.26 0.794 -2.28275 2.976521

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 0.66

Prob > F = 0.5205

R-squared = 0.0152

Root MSE = 1.5898

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3142526 .3451091 -0.91 0.365 -1.000911 .3724062

bmi | -.0441393 .0687077 -0.64 0.522 -.180846 .0925674

\_cons | 3.437985 1.477053 2.33 0.022 .4991124 6.376858

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 18.43

Prob > F = 0.0000

R-squared = 0.2664

Root MSE = .61767

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7092755 .135484 5.24 0.000 .4397048 .9788461

bmi | -.0367242 .0254613 -1.44 0.153 -.0873842 .0139357

\_cons | -2.655352 .6445187 -4.12 0.000 -3.937742 -1.372962

------------------------------------------------------------------------------

Linear regression Number of obs = 80

F(2, 77) = 7.88

Prob > F = 0.0008

R-squared = 0.1713

Root MSE = 1.2114

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.004996 .2678414 3.75 0.000 .4716559 1.538337

bmi | .074416 .0497736 1.50 0.139 -.0246959 .1735278

\_cons | -.1190676 1.169219 -0.10 0.919 -2.447279 2.209144

------------------------------------------------------------------------------

**Msqol**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 msqol, r

3. }

Linear regression Number of obs = 81

F(2, 78) = 3.64

Prob > F = 0.0308

R-squared = 0.0845

Root MSE = 1.3757

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8015881 .2985934 2.68 0.009 .2071343 1.396042

msqol | .0015132 .0062774 0.24 0.810 -.0109841 .0140106

\_cons | -2.867216 .7185392 -3.99 0.000 -4.297718 -1.436714

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 4.23

Prob > F = 0.0180

R-squared = 0.0905

Root MSE = 1.3044

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.7735716 .2930655 -2.64 0.010 -1.35668 -.1904632

msqol | .0103262 .0056171 1.84 0.070 -.0008501 .0215024

\_cons | -.4653816 .5495266 -0.85 0.400 -1.558767 .628004

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 0.49

Prob > F = 0.6172

R-squared = 0.0172

Root MSE = 1.5891

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.363125 .3841795 -0.95 0.347 -1.127522 .4012717

msqol | .0064513 .0089238 0.72 0.472 -.0113043 .0242069

\_cons | 2.043037 .6698194 3.05 0.003 .7103069 3.375768

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 23.79

Prob > F = 0.0000

R-squared = 0.3586

Root MSE = .5351

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7685295 .1225456 6.27 0.000 .5247021 1.012357

msqol | .0013855 .0021533 0.64 0.522 -.0028989 .0056699

\_cons | -3.672478 .2047638 -17.94 0.000 -4.079894 -3.265062

------------------------------------------------------------------------------

Linear regression Number of obs = 80

F(2, 77) = 6.98

Prob > F = 0.0016

R-squared = 0.1404

Root MSE = 1.2074

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9739003 .260724 3.74 0.000 .4547324 1.493068

msqol | -.0016457 .0064735 -0.25 0.800 -.0145361 .0112447

\_cons | 1.666011 .6897934 2.42 0.018 .2924564 3.039565

------------------------------------------------------------------------------

**Educatm (primary ro less, some secondary, secondary or more)**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 i.educatm, r

3. }

i.educatm \_Ieducatm\_1-3 (naturally coded; \_Ieducatm\_1 omitted)

Linear regression Number of obs = 81

F(3, 77) = 2.23

Prob > F = 0.0919

R-squared = 0.0778

Root MSE = 1.4428

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7982077 .3257254 2.45 0.017 .1496056 1.44681

\_Ieducatm\_2 | -.1577088 .3231076 -0.49 0.627 -.8010982 .4856807

\_Ieducatm\_3 | -.0153459 .4207128 -0.04 0.971 -.853092 .8224002

\_cons | -2.656347 .5959115 -4.46 0.000 -3.842959 -1.469736

------------------------------------------------------------------------------

i.educatm \_Ieducatm\_1-3 (naturally coded; \_Ieducatm\_1 omitted)

Linear regression Number of obs = 84

F(3, 80) = 2.71

Prob > F = 0.0506

R-squared = 0.0822

Root MSE = 1.3377

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.7151509 .2926817 -2.44 0.017 -1.297606 -.1326958

\_Ieducatm\_2 | -.5160255 .3794375 -1.36 0.178 -1.27113 .2390793

\_Ieducatm\_3 | -.1913555 .4295797 -0.45 0.657 -1.046246 .6635353

\_cons | .568567 .5734012 0.99 0.324 -.5725377 1.709672

------------------------------------------------------------------------------

i.educatm \_Ieducatm\_1-3 (naturally coded; \_Ieducatm\_1 omitted)

Linear regression Number of obs = 84

F(3, 80) = 1.12

Prob > F = 0.3455

R-squared = 0.0517

Root MSE = 1.5768

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.5110822 .3627611 -1.41 0.163 -1.233 .2108354

\_Ieducatm\_2 | -.3059633 .4010845 -0.76 0.448 -1.104147 .4922203

\_Ieducatm\_3 | -.8492693 .5256424 -1.62 0.110 -1.895331 .1967924

\_cons | 3.220738 .6593391 4.88 0.000 1.908611 4.532864

------------------------------------------------------------------------------

i.educatm \_Ieducatm\_1-3 (naturally coded; \_Ieducatm\_1 omitted)

Linear regression Number of obs = 84

F(3, 80) = 10.05

Prob > F = 0.0000

R-squared = 0.2650

Root MSE = .62462

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7480214 .138225 5.41 0.000 .4729449 1.023098

\_Ieducatm\_2 | .0091759 .1457801 0.06 0.950 -.2809357 .2992875

\_Ieducatm\_3 | .1618846 .1953679 0.83 0.410 -.2269099 .5506791

\_cons | -3.553499 .269234 -13.20 0.000 -4.089292 -3.017707

------------------------------------------------------------------------------

i.educatm \_Ieducatm\_1-3 (naturally coded; \_Ieducatm\_1 omitted)

Linear regression Number of obs = 80

F(3, 76) = 6.56

Prob > F = 0.0005

R-squared = 0.1971

Root MSE = 1.1789

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.093247 .2744855 3.98 0.000 .5465618 1.639932

\_Ieducatm\_2 | .6029427 .3007596 2.00 0.049 .0039281 1.201957

\_Ieducatm\_3 | .238017 .3642254 0.65 0.515 -.4874008 .9634349

\_cons | .9724291 .5483192 1.77 0.080 -.1196433 2.064501

------------------------------------------------------------------------------

**Luo**

foreach var in alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 {

2. xi: regress `var' status2 luoall, r

3. }

Linear regression Number of obs = 81

F(2, 78) = 3.44

Prob > F = 0.0370

R-squared = 0.0770

Root MSE = 1.4341

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .8116898 .3163929 2.57 0.012 .1817999 1.44158

luoall | .1471027 .3443736 0.43 0.670 -.5384925 .8326979

\_cons | -2.867677 .5755793 -4.98 0.000 -4.013567 -1.721786

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 2.97

Prob > F = 0.0567

R-squared = 0.0634

Root MSE = 1.3431

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.6481423 .2940519 -2.20 0.030 -1.233213 -.0630712

luoall | .2415906 .3067242 0.79 0.433 -.3686943 .8518756

\_cons | -.0113688 .5299193 -0.02 0.983 -1.065742 1.043004

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 0.49

Prob > F = 0.6144

R-squared = 0.0118

Root MSE = 1.5997

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | -.3419691 .3455935 -0.99 0.325 -1.029592 .3456536

luoall | .020604 .4320216 0.05 0.962 -.8389835 .8801916

\_cons | 2.541117 .5918356 4.29 0.000 1.36355 3.718684

------------------------------------------------------------------------------

Linear regression Number of obs = 84

F(2, 81) = 13.88

Prob > F = 0.0000

R-squared = 0.2552

Root MSE = .62485

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .7193461 .1384475 5.20 0.000 .4438789 .9948133

luoall | .032352 .1480217 0.22 0.828 -.2621647 .3268687

\_cons | -3.479488 .2795107 -12.45 0.000 -4.035627 -2.92335

------------------------------------------------------------------------------

Linear regression Number of obs = 80

F(2, 77) = 7.92

Prob > F = 0.0007

R-squared = 0.1602

Root MSE = 1.1978

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.025949 .2683631 3.82 0.000 .4915698 1.560328

luoall | -.0235829 .3462078 -0.07 0.946 -.7129708 .665805

\_cons | 1.436811 .5953992 2.41 0.018 .2512197 2.622402

------------------------------------------------------------------------------

. regress **alllntnfa** status2 miraa sp6mos2, r

Linear regression Number of obs = 83

F(3, 79) = 10.85

Prob > F = 0.0000

R-squared = 0.1961

Root MSE = 1.3317

------------------------------------------------------------------------------

| Robust

alllntnfa | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | 1.094465 .3062737 3.57 0.001 .4848427 1.704088

miraa | -.799339 .3059342 -2.61 0.011 -1.408286 -.1903922

sp6mos2 | .5495695 .1773919 3.10 0.003 .1964797 .9026593

\_cons | -3.871229 .6621429 -5.85 0.000 -5.189191 -2.553266

------------------------------------------------------------------------------

. regress **alllnil1b** circstat whenwash , r

Linear regression Number of obs = 86

F(2, 83) = 11.55

Prob > F = 0.0000

R-squared = 0.1872

Root MSE = 1.238

------------------------------------------------------------------------------

| Robust

alllnil1b | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

circstat | -.9287127 .371932 -2.50 0.015 -1.66847 -.1889549

whenwash | -.9159321 .2628002 -3.49 0.001 -1.438631 -.3932332

\_cons | .4133276 .3513161 1.18 0.243 -.2854259 1.112081

------------------------------------------------------------------------------

. regress **alllnil8** mage, r

Linear regression Number of obs = 86

F(1, 84) = 4.32

Prob > F = 0.0407

R-squared = 0.0398

Root MSE = 1.5488

------------------------------------------------------------------------------

| Robust

alllnil8 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

mage | .0745086 .0358514 2.08 0.041 .0032142 .145803

\_cons | .1327102 .9512727 0.14 0.889 -1.759 2.02442

------------------------------------------------------------------------------

regress **alllnil10** status2 drinketoh, r

Linear regression Number of obs = 86

F(2, 83) = 22.25

Prob > F = 0.0000

R-squared = 0.2933

Root MSE = .60192

------------------------------------------------------------------------------

| Robust

alllnil10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .627433 .1479842 4.24 0.000 .3330983 .9217677

drinketoh | -.2915989 .1487399 -1.96 0.053 -.5874364 .0042387

\_cons | -3.155551 .2981002 -10.59 0.000 -3.74846 -2.562641

------------------------------------------------------------------------------

. regress a**lllnip10** status2 mage, r

Linear regression Number of obs = 82

F(2, 79) = 8.27

Prob > F = 0.0005

R-squared = 0.1933

Root MSE = 1.1809

------------------------------------------------------------------------------

| Robust

alllnip10 | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

status2 | .9070484 .248091 3.66 0.000 .4132356 1.400861

mage | .0647445 .0303139 2.14 0.036 .0044063 .1250828

\_cons | -.0434877 .9714537 -0.04 0.964 -1.977118 1.890142

------------------------------------------------------------------------------

corr alllntnfa alllnil1b alllnil8 alllnil10 alllnip10

(obs=80)

| alllnt~a allln~1b alllnil8 alll~l10 alll~p10

-------------+---------------------------------------------

alllntnfa | 1.0000

alllnil1b | 0.2824 1.0000

alllnil8 | 0.1856 0.6489 1.0000

alllnil10 | 0.3496 0.0765 0.0321 1.0000

alllnip10 | 0.1778 0.0979 0.2919 0.1095 1.0000

corr alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 if status2==1

(obs=43)

| alllnt~a allln~1b alllnil8 alll~l10 alll~p10

-------------+---------------------------------------------

alllntnfa | 1.0000

alllnil1b | 0.5214 1.0000

alllnil8 | 0.2790 0.5936 1.0000

alllnil10 | 0.2556 0.2478 0.0361 1.0000

alllnip10 | 0.0385 -0.0051 0.1752 -0.1735 1.0000

. corr alllntnfa alllnil1b alllnil8 alllnil10 alllnip10 if status2==2

(obs=37)

| alllnt~a allln~1b alllnil8 alll~l10 alll~p10

-------------+---------------------------------------------

alllntnfa | 1.0000

alllnil1b | 0.1555 1.0000

alllnil8 | 0.1568 0.7017 1.0000

alllnil10 | 0.1375 0.2220 0.1610 1.0000

alllnip10 | 0.1446 0.5073 0.6035 -0.0281 1.0000

**missing cytokine values MSW**

+---------------------------------------------------------------------+

| client~e lnmswtnfa lnmswil1b lnmswil8 lnms~p10 lnmswil10 |

|---------------------------------------------------------------------|

9. | 124271 -.1053605 -2.396896 2.378805 . -2.087474 |

12. | 220311 -3.816713 -1.931022 3.151667 . -1.883875 |

13. | 216351 -3.816713 -1.86433 -.3974969 . -2.551046 |

22. | 230211 . -2.292635 .060154 4.548441 -2.087474 |

30. | 177741 . -1.007858 -.5942073 . -3.912023 |

55. | 269821 . -1.666008 1.520607 3.150383 -2.830218 |

+---------------------------------------------------------------------+