```
. use "infert.dta", clear

.
. * Model 1a
. logistic case i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(2)      =       0.07
                                                  Prob > chi2     =     0.9642
Log likelihood = -158.04909                       Pseudo R2       =     0.0002

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     induced |
           1 |   1.043972   .3258024     0.14   0.890     .5662992     1.92456
           2 |   1.106383   .4289044     0.26   0.794     .5175183    2.365295
             |
       _cons |   .4895833   .0871586    -4.01   0.000     .3453748    .6940051
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.07
         Prob > chi2 =    0.9641

.
. * Model 1b
. logistic case i.spont

Logistic regression                               Number of obs   =        248
                                                  LR chi2(2)      =      32.50
                                                  Prob > chi2     =     0.0000
Log likelihood = -141.83459                       Pseudo R2       =     0.1028

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
           1 |   3.127679    .998028     3.57   0.000      1.67343    5.845702
           2 |   8.071429   3.323663     5.07   0.000     3.601153    18.09086
             |
       _cons |   .2477876   .0523083    -6.61   0.000     .1638286     .374774
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   29.60
         Prob > chi2 =    0.0000

.
. * Model 1c
. logistic case i.spont i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(4)      =      36.70
                                                  Prob > chi2     =     0.0000
Log likelihood = -139.73466                       Pseudo R2       =     0.1161
```

```
------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
          1  |   3.630192    1.21331     3.86   0.000     1.885535    6.989152
          2  |   10.52532   4.629816     5.35   0.000     4.444404    24.92624
             |
     induced |
          1  |   1.585398    .556069     1.31   0.189     .7972313    3.152769
          2  |   2.281856   .9858962     1.91   0.056     .9784062    5.321787
             |
       _cons |    .174779   .0503772    -6.05   0.000     .0993446    .3074921
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   32.17
         Prob > chi2 =    0.0000

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    4.15
         Prob > chi2 =    0.1253

. estimates store mult1

.
. * Model 1d
. logistic case g2-g8

Logistic regression                               Number of obs   =        248
                                                  LR chi2(7)      =      43.02
                                                  Prob > chi2     =     0.0000
Log likelihood = -136.57398                       Pseudo R2       =     0.1361

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          g2 |   3.116883    1.62903     2.18   0.030     1.119032    8.681578
          g3 |   3.857143   2.184093     2.38   0.017     1.271382    11.70188
          g4 |   7.542857   3.733359     4.08   0.000     2.859112    19.89942
          g5 |   3.896104   2.614843     2.03   0.043     1.045569    14.51806
          g6 |   8.571428   6.960949     2.65   0.008     1.744951    42.10397
          g7 |   14.02597   7.758639     4.77   0.000     4.743299    41.47492
          g8 |   51.42857   59.22532     3.42   0.001     5.382175     491.418
       _cons |   .1166667   .0465972    -5.38   0.000     .0533302    .2552233
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   33.25
         Prob > chi2 =    0.0000
```

```
. lrtest mult1

Likelihood-ratio test                                 LR chi2(3)  =      6.32
(Assumption: mult1 nested in .)                       Prob > chi2 =    0.0970

.
. * Model 2a
. logistic case i.educ age i.parity i.induced

Logistic regression                                   Number of obs   =        248
                                                      LR chi2(10)     =       0.18
                                                      Prob > chi2     =     1.0000
Log likelihood = -157.99559                           Pseudo R2       =     0.0006

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        educ |
          1  |   1.206491   1.012619     0.22   0.823     .2328638    6.250947
          2  |   1.213706   1.024788     0.23   0.819     .2319554    6.350708
             |
         age |   1.002931   .0275681     0.11   0.915     .9503279    1.058445
             |
      parity |
          2  |   .9748148   .3221734    -0.08   0.938     .5100379    1.863124
          3  |   .9591504   .4218153    -0.09   0.924     .4050841    2.271058
          4  |   .9716015   .5819457    -0.05   0.962       .30037    3.142822
          5  |   .9390403   .8611942    -0.07   0.945     .1556134    5.666586
          6  |   1.278163   1.259914     0.25   0.803     .1851559    8.823372
             |
     induced |
          1  |   1.054825    .342424     0.16   0.869     .5582874     1.99298
          2  |   1.122426   .5040015     0.26   0.797     .4655261    2.706273
             |
       _cons |   .3741743   .4818967    -0.76   0.445      .029979    4.670151
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.07
         Prob > chi2 =    0.9640

.
. * Model 2b
. logistic case i.educ age i.parity i.spont

Logistic regression                                   Number of obs   =        248
                                                      LR chi2(10)     =      38.90
                                                      Prob > chi2     =     0.0000
Log likelihood = -138.63556                           Pseudo R2       =     0.1230

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        educ |
          1  |   .6959923   .5928765    -0.43   0.671     .1310732    3.695685
          2  |   .5705531   .4967669    -0.64   0.519      .103556    3.143525
             |
         age |    1.01646   .0302286     0.55   0.583     .9589071    1.077468
             |
      parity |
          2  |   .6945949    .253252    -1.00   0.318     .3399228    1.419329
```

```
          3  |   .4624261   .2263061    -1.58   0.115     .1772041    1.206732
          4  |   .3373544   .2159754    -1.70   0.090     .0961932    1.183119
          5  |   .2125568   .2072895    -1.59   0.112     .0314316    1.437419
          6  |   .4776534    .500294    -0.71   0.481     .0613147    3.721012
             |
       spont |
          1  |   3.893108   1.358414     3.90   0.000     1.964666    7.714439
          2  |   13.13058   6.226021     5.43   0.000     5.184135    33.25763
             |
       _cons |   .2849696   .3878218    -0.92   0.356     .0197869    4.104105
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   33.62
         Prob > chi2 =    0.0000

.
. * Model 2c
. logistic case i.educ age i.parity i.spont i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(12)     =      63.57
                                                  Prob > chi2     =     0.0000
Log likelihood = -126.30143                       Pseudo R2       =     0.2011

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        educ |
          1  |   .8004386   .7134712    -0.25   0.803     .1395113    4.592475
          2  |   .4897589    .444145    -0.79   0.431     .0828053    2.896722
             |
         age |   1.041883   .0330526     1.29   0.196     .9790739    1.108721
             |
      parity |
          2  |   .2652694   .1227243    -2.87   0.004      .107124    .6568818
          3  |   .0892426   .0582429    -3.70   0.000      .024834    .3206985
          4  |    .039799   .0328989    -3.90   0.000     .0078749    .2011402
          5  |    .016067   .0186983    -3.55   0.000     .0016419    .1572298
          6  |   .0592782   .0671945    -2.49   0.013     .0064272    .5467261
             |
       spont |
          1  |    9.23552   3.981817     5.16   0.000     3.967098    21.50056
          2  |   95.17099   67.04432     6.47   0.000     23.92576    378.5676
             |
     induced |
          1  |   4.441559   1.941694     3.41   0.001     1.885471    10.46287
          2  |   21.22015   14.45842     4.48   0.000     5.581865      80.671
             |
       _cons |   .0651839   .0951934    -1.87   0.062     .0037244    1.140827
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   44.68
         Prob > chi2 =    0.0000

. testparm i.induced
```

```
 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =   21.08
         Prob > chi2 =    0.0000

. estimates store mult2

.
. * Model 2d
. logistic case i.educ age i.parity g2-g8

Logistic regression                               Number of obs   =        248
                                                  LR chi2(15)     =      65.91
                                                  Prob > chi2     =     0.0000
Log likelihood =  -125.1295                       Pseudo R2       =     0.2085

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        educ |
          1  |   .8856477     .80598    -0.13   0.894     .1488088    5.271005
          2  |   .5407571   .5002599    -0.66   0.506     .0882159    3.314801
             |
         age |   1.049899    .034284     1.49   0.136     .9848089    1.119292
             |
      parity |
          2  |   .3257562    .155686    -2.35   0.019     .1276688    .8311904
          3  |   .1138138   .0766315    -3.23   0.001     .0304142     .425906
          4  |   .0542342   .0473098    -3.34   0.001     .0098118    .2997759
          5  |   .0128773    .018298    -3.06   0.002     .0007949    .2086129
          6  |   .0719535   .0833461    -2.27   0.023     .0074315    .6966689
             |
          g2 |   5.121103   2.914494     2.87   0.004     1.678543    15.62409
          g3 |   21.28257    16.0062     4.07   0.000     4.873627    92.93854
          g4 |   12.21333    6.75457     4.52   0.000     4.131216     36.1069
          g5 |   25.15582   21.42753     3.79   0.000     4.737962    133.5628
          g6 |   167.6361   190.5283     4.51   0.000     18.06869    1555.279
          g7 |    76.0395   56.57479     5.82   0.000     17.69007    326.8503
          g8 |   1255.104   1925.097     4.65   0.000     62.10035    25366.78
       _cons |   .0396011   .0613427    -2.08   0.037     .0019019     .824578
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   45.14
         Prob > chi2 =    0.0000

. lrtest mult2

Likelihood-ratio test                                 LR chi2(3)  =      2.34
(Assumption: mult2 nested in .)                       Prob > chi2 =    0.5042

.
. * Model 3a
. clogit case i.induced, group(matchset) or

Iteration 0:   log likelihood = -90.724689
```

```
Iteration 1:   log likelihood =  -90.71761
Iteration 2:   log likelihood =  -90.71761

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(2)      =       0.12
                                                  Prob > chi2     =     0.9401
Log likelihood =  -90.71761                       Pseudo R2       =     0.0007

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     induced |
          1  |    1.07189   .3423532     0.22   0.828     .5731695    2.004552
          2  |   1.161919   .5153444     0.34   0.735     .4871287    2.771457
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.12
         Prob > chi2 =    0.9399

.
. * Model 3b
. clogit case i.spont, group(matchset) or

Iteration 0:   log likelihood = -73.911183
Iteration 1:   log likelihood = -73.753204
Iteration 2:   log likelihood = -73.752949
Iteration 3:   log likelihood = -73.752949

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(2)      =      34.05
                                                  Prob > chi2     =     0.0000
Log likelihood = -73.752949                       Pseudo R2       =     0.1876

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
          1  |   3.776426   1.387174     3.62   0.000     1.838288    7.757973
          2  |   9.718576   4.650162     4.75   0.000      3.80468    24.82487
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   26.46
         Prob > chi2 =    0.0000

.
. * Model 3c
. clogit case i.spont i.induced, group(matchset) or

Iteration 0:   log likelihood = -68.924975
Iteration 1:   log likelihood = -64.285113
Iteration 2:   log likelihood = -64.176583
Iteration 3:   log likelihood = -64.176233
Iteration 4:   log likelihood = -64.176233

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(4)      =      53.21
```

```
                                                  Prob > chi2     =     0.0000
Log likelihood = -64.176233                       Pseudo R2       =     0.2931

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
          1  |   7.719547   3.496259     4.51   0.000     3.177417    18.75467
          2  |   51.16314   37.07509     5.43   0.000     12.36342    211.7268
             |
     induced |
          1  |   4.000705   1.853803     2.99   0.003     1.613303    9.921037
          2  |   16.76543   12.32684     3.83   0.000     3.967948    70.83754
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   31.85
         Prob > chi2 =    0.0000

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =   15.15
         Prob > chi2 =    0.0005

. estimates store mult3

.
. * Model 3d
. clogit case g2-g8, group(matchset) or

Iteration 0:   log likelihood = -66.757421
Iteration 1:   log likelihood = -62.748393
Iteration 2:   log likelihood = -62.680115
Iteration 3:   log likelihood = -62.679839
Iteration 4:   log likelihood = -62.679839

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(7)      =      56.20
                                                  Prob > chi2     =     0.0000
Log likelihood = -62.679839                       Pseudo R2       =     0.3095

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          g2 |   4.321102   2.622034     2.41   0.016      1.31549    14.19389
          g3 |   16.81592   13.47805     3.52   0.000     3.495251    80.90271
          g4 |   10.54138   6.493145     3.82   0.000      3.15199    35.25411
          g5 |   16.58736   15.27682     3.05   0.002     2.727897    100.8618
          g6 |   155.0849   204.4873     3.83   0.000     11.70083    2055.521
          g7 |   36.52221   27.59824     4.76   0.000      8.30503    160.6101
          g8 |    666.946   1021.916     4.24   0.000     33.10185    13437.83
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
```

```
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   33.16
         Prob > chi2 =    0.0000

. lrtest mult3

Likelihood-ratio test                                 LR chi2(3)  =      2.99
(Assumption: mult3 nested in .)                       Prob > chi2 =    0.3927

.
. set matsize 200

.
. * Model 4a
. logistic case i.matchset i.induced

Logistic regression                                   Number of obs   =        248
                                                      LR chi2(84)     =       0.42
                                                      Prob > chi2     =     1.0000
Log likelihood = -157.87589                           Pseudo R2       =     0.0013

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    matchset |
           2  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
           3  |   .9606712   1.672726    -0.02   0.982     .0316561    29.15359
           4  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
           5  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
           6  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
           7  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
           8  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
           9  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          10  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          11  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          12  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          13  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          14  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
          15  |   1.085373   1.921643     0.05   0.963     .0337702    34.88382
          16  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          17  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          18  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          19  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          20  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          21  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          22  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
          23  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
          24  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          25  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          26  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          27  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          28  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          29  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          30  |   1.041537   1.814416     0.02   0.981     .0342636    31.66035
          31  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          32  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          33  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          34  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
          35  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          36  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          37  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          38  |          1   1.732679     0.00   1.000     .0335074    29.84414
          39  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
```

```
          40  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          41  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          42  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          43  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          44  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          45  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          46  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          47  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          48  |   .9606712   1.672726    -0.02   0.982     .0316561    29.15359
          49  |   1.041537   1.814416     0.02   0.981     .0342636    31.66035
          50  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          51  |          1   1.732679     0.00   1.000     .0335074    29.84414
          52  |   1.041537   1.814416     0.02   0.981     .0342636    31.66035
          53  |   1.041537   1.814416     0.02   0.981     .0342636    31.66035
          54  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          55  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          56  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          57  |   1.041537   1.814416     0.02   0.981     .0342636    31.66035
          58  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          59  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          60  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          61  |   1.077419   1.877301     0.04   0.966     .0354197    32.77355
          62  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          63  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          64  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          65  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          66  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          67  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          68  |          1   1.732679     0.00   1.000     .0335074    29.84414
          69  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          70  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          71  |   1.123292    1.98391     0.07   0.948     .0352483    35.79708
          72  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          73  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          74  |   2.409246   4.627085     0.46   0.647     .0558603    103.9104
          75  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          76  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          77  |   1.115037   1.953632     0.06   0.950     .0359682    34.56689
          78  |   1.163021   2.059734     0.09   0.932     .0361487    37.41817
          79  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          80  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          81  |   1.033926   1.796917     0.02   0.985     .0342877    31.17742
          82  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
          83  |   1.204623   2.151028     0.10   0.917     .0363838    39.88359
              |
     induced  |
           1  |    1.10987   .4346273     0.27   0.790     .5151574    2.391136
           2  |   1.253939   .6851311     0.41   0.679     .4297285    3.658968
              |
        _cons |   .4150677   .5393525    -0.68   0.499     .0325117    5.299051
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.19
         Prob > chi2 =    0.9112

.
. * Model 4b
. logistic case i.matchset i.spont

Logistic regression                               Number of obs   =        248
                                                  LR chi2(84)     =      54.57
```

| | | | | | |
|---|---|---|---|---|---|
| | | | | Prob > chi2 | = 0.9947 |
| Log likelihood = -130.80036 | | | | Pseudo R2 | = 0.1726 |

| case | Odds Ratio | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| matchset | | | | | | |
| 2 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 3 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 4 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 5 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 6 | .3130873 | .6975866 | -0.52 | 0.602 | .0039729 | 24.67281 |
| 7 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 8 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 9 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 10 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 11 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 12 | .5914041 | 1.304178 | -0.24 | 0.812 | .0078487 | 44.56286 |
| 13 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 14 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 15 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 16 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 17 | .1741389 | .3846817 | -0.79 | 0.429 | .0022938 | 13.22036 |
| 18 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 19 | .5914041 | 1.304178 | -0.24 | 0.812 | .0078487 | 44.56286 |
| 20 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 21 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 22 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 23 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 24 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 25 | .3130873 | .6975866 | -0.52 | 0.602 | .0039729 | 24.67281 |
| 26 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 27 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 28 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 29 | .1741389 | .3846817 | -0.79 | 0.429 | .0022938 | 13.22036 |
| 30 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 31 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 32 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 33 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 34 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 35 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 36 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 37 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 38 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 39 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 40 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 41 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 42 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 43 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 44 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 45 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 46 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 47 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 48 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 49 | 4.936278 | 10.7523 | 0.73 | 0.464 | .0690708 | 352.7805 |
| 50 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 51 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 52 | .3130873 | .6975866 | -0.52 | 0.602 | .0039729 | 24.67281 |
| 53 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 54 | .9858993 | 2.214878 | -0.01 | 0.995 | .0120659 | 80.55722 |
| 55 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 56 | .4643176 | 1.073494 | -0.33 | 0.740 | .0049987 | 43.1298 |
| 57 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 58 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |
| 59 | 2.138658 | 4.856283 | 0.33 | 0.738 | .0249635 | 183.2219 |
| 60 | 1 | 2.511237 | 0.00 | 1.000 | .007285 | 137.2678 |

```
          61  |          1   2.511237     0.00   1.000      .007285    137.2678
          62  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          63  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          64  |          1   2.511237     0.00   1.000      .007285    137.2678
          65  |   .4643176   1.073494    -0.33   0.740     .0049987     43.1298
          66  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          67  |   .9858993   2.214878    -0.01   0.995     .0120659    80.55722
          68  |          1   2.511237     0.00   1.000      .007285    137.2678
          69  |   .1741389   .3846817    -0.79   0.429     .0022938    13.22036
          70  |   4.936278    10.7523     0.73   0.464     .0690708    352.7805
          71  |   4.936278    10.7523     0.73   0.464     .0690708    352.7805
          72  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          73  |   .9858993   2.214878    -0.01   0.995     .0120659    80.55722
          74  |   .2254141   .5172963    -0.65   0.516     .0025095    20.24784
          75  |   .1741389   .3846817    -0.79   0.429     .0022938    13.22036
          76  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          77  |   .9858993   2.214878    -0.01   0.995     .0120659    80.55722
          78  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          79  |   .9858993   2.214878    -0.01   0.995     .0120659    80.55722
          80  |   2.138658   4.856283     0.33   0.738     .0249635    183.2219
          81  |   4.936278    10.7523     0.73   0.464     .0690708    352.7805
          82  |   .5914041   1.304178    -0.24   0.812     .0078487    44.56286
          83  |   .5914041   1.304178    -0.24   0.812     .0078487    44.56286
              |
       spont  |
           1  |   8.346709   3.987161     4.44   0.000     3.272673    21.28766
           2  |   43.79742   27.98838     5.91   0.000     12.51686    153.2505
              |
       _cons  |   .1012909   .1824543    -1.27   0.204     .0029669    3.458051
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   40.61
         Prob > chi2 =    0.0000

.
. * Model 4c
. logistic case i.matchset i.spont i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(86)     =      84.29
                                                  Prob > chi2     =     0.5320
Log likelihood = -115.94098                       Pseudo R2       =     0.2666

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    matchset |
           2  |   210.8476   529.4891     2.13   0.033     1.536018    28942.82
           3  |   5.844784   13.41899     0.77   0.442     .0649385    526.0593
           4  |   3.421265   8.284147     0.51   0.611     .0297244    393.7858
           5  |   7.114426   17.16951     0.81   0.416     .0627919    806.0768
           6  |   .6310179   1.478417    -0.20   0.844     .0063937    62.27721
           7  |   484.5301   1212.151     2.47   0.013     3.596391    65279.17
           8  |   19.88305   48.60797     1.22   0.221     .1650271    2395.579
           9  |    25.6672   61.80473     1.35   0.178     .2289536    2877.461
          10  |   34.45331   85.87153     1.42   0.156     .2604317    4557.934
          11  |   58.16497   143.9944     1.64   0.101       .45437    7445.832
          12  |    1.28562   3.239362     0.10   0.921     .0092119    179.4216
          13  |   210.8476   529.4891     2.13   0.033     1.536018    28942.82
          14  |   3.421265   8.284147     0.51   0.611     .0297244    393.7858
          15  |    15.1035   38.88883     1.05   0.292      .097137    2348.391
```

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 33.75979 | 85.16321 | 1.40 | 0.163 | .2405137 | 4738.706 |
| 17 | .221629 | .5143468 | -0.65 | 0.516 | .0023453 | 20.94389 |
| 18 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 19 | 1.28562 | 3.239362 | 0.10 | 0.921 | .0092119 | 179.4216 |
| 20 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 21 | 124.8108 | 332.9072 | 1.81 | 0.070 | .6696484 | 23262.57 |
| 22 | 72.39353 | 205.7164 | 1.51 | 0.132 | .2759881 | 18989.31 |
| 23 | 4.204599 | 10.47799 | 0.58 | 0.564 | .0318056 | 555.8344 |
| 24 | 34.45331 | 85.87153 | 1.42 | 0.156 | .2604317 | 4557.934 |
| 25 | 2.314976 | 5.536704 | 0.35 | 0.726 | .0213175 | 251.3951 |
| 26 | 26.98669 | 99.8921 | 0.89 | 0.373 | .0190721 | 38185.6 |
| 27 | 26.98669 | 99.8921 | 0.89 | 0.373 | .0190721 | 38185.6 |
| 28 | 26.98669 | 99.8921 | 0.89 | 0.373 | .0190721 | 38185.6 |
| 29 | .221629 | .5143468 | -0.65 | 0.516 | .0023453 | 20.94389 |
| 30 | 2.963303 | 6.882546 | 0.47 | 0.640 | .0312451 | 281.0417 |
| 31 | 124.8108 | 332.9072 | 1.81 | 0.070 | .6696484 | 23262.57 |
| 32 | 97.60521 | 237.0736 | 1.89 | 0.059 | .8355778 | 11401.42 |
| 33 | 97.60521 | 237.0736 | 1.89 | 0.059 | .8355778 | 11401.42 |
| 34 | 4.204599 | 10.47799 | 0.58 | 0.564 | .0318056 | 555.8344 |
| 35 | 210.8476 | 529.4891 | 2.13 | 0.033 | 1.536018 | 28942.82 |
| 36 | 26.98669 | 99.8921 | 0.89 | 0.373 | .0190721 | 38185.6 |
| 37 | 124.8108 | 332.9072 | 1.81 | 0.070 | .6696484 | 23262.57 |
| 38 | 1 | 2.68241 | 0.00 | 1.000 | .0052087 | 191.9869 |
| 39 | 7.354574 | 20.01165 | 0.73 | 0.463 | .0355186 | 1522.858 |
| 40 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 41 | 12.56428 | 37.49509 | 0.85 | 0.396 | .0362185 | 4358.58 |
| 42 | 484.5301 | 1212.151 | 2.47 | 0.013 | 3.596391 | 65279.17 |
| 43 | 484.5301 | 1212.151 | 2.47 | 0.013 | 3.596391 | 65279.17 |
| 44 | 45.41325 | 144.53 | 1.20 | 0.231 | .0887543 | 23236.78 |
| 45 | 210.8476 | 529.4891 | 2.13 | 0.033 | 1.536018 | 28942.82 |
| 46 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 47 | 9.14259 | 25.37549 | 0.80 | 0.425 | .0396769 | 2106.691 |
| 48 | 1.505567 | 3.806673 | 0.16 | 0.871 | .0106053 | 213.7358 |
| 49 | 23.42037 | 56.57914 | 1.31 | 0.192 | .2057092 | 2666.453 |
| 50 | 9.14259 | 25.37549 | 0.80 | 0.425 | .0396769 | 2106.691 |
| 51 | .275023 | .6554004 | -0.54 | 0.588 | .0025757 | 29.36606 |
| 52 | .257422 | .6082446 | -0.57 | 0.566 | .0025084 | 26.41745 |
| 53 | 2.963303 | 6.882546 | 0.47 | 0.640 | .0312451 | 281.0417 |
| 54 | 25.6672 | 61.80473 | 1.35 | 0.178 | .2289536 | 2877.461 |
| 55 | 2.512096 | 6.062721 | 0.38 | 0.703 | .0221685 | 284.6659 |
| 56 | 6.304733 | 16.58447 | 0.70 | 0.484 | .0363579 | 1093.288 |
| 57 | 6.467331 | 15.40148 | 0.78 | 0.433 | .0607646 | 688.3349 |
| 58 | 3.914257 | 9.626838 | 0.55 | 0.579 | .0315631 | 485.422 |
| 59 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 60 | 9.14259 | 25.37549 | 0.80 | 0.425 | .0396769 | 2106.691 |
| 61 | 3.914257 | 9.626838 | 0.55 | 0.579 | .0315631 | 485.422 |
| 62 | 38.19656 | 91.41601 | 1.52 | 0.128 | .3506221 | 4161.109 |
| 63 | 124.8108 | 332.9072 | 1.81 | 0.070 | .6696484 | 23262.57 |
| 64 | 12.56428 | 37.49509 | 0.85 | 0.396 | .0362185 | 4358.58 |
| 65 | 6.304733 | 16.58447 | 0.70 | 0.484 | .0363579 | 1093.288 |
| 66 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 67 | 34.45331 | 85.87153 | 1.42 | 0.156 | .2604317 | 4557.934 |
| 68 | 1 | 2.68241 | 0.00 | 1.000 | .0052087 | 191.9869 |
| 69 | 1.051216 | 2.429934 | 0.02 | 0.983 | .0113266 | 97.56266 |
| 70 | 97.60521 | 237.0736 | 1.89 | 0.059 | .8355778 | 11401.42 |
| 71 | 97.60521 | 237.0736 | 1.89 | 0.059 | .8355778 | 11401.42 |
| 72 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 73 | 34.45331 | 85.87153 | 1.42 | 0.156 | .2604317 | 4557.934 |
| 74 | 1.546124 | 3.739941 | 0.18 | 0.857 | .0134978 | 177.1036 |
| 75 | 1.051216 | 2.429934 | 0.02 | 0.983 | .0113266 | 97.56266 |
| 76 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 77 | 12.05197 | 28.3952 | 1.06 | 0.291 | .1190071 | 1220.515 |
| 78 | 58.16497 | 143.9944 | 1.64 | 0.101 | .45437 | 7445.832 |
| 79 | 34.45331 | 85.87153 | 1.42 | 0.156 | .2604317 | 4557.934 |
| 80 | 124.8108 | 332.9072 | 1.81 | 0.070 | .6696484 | 23262.57 |
| 81 | 11.42039 | 27.33467 | 1.02 | 0.309 | .1047931 | 1244.598 |

```
         82  |   18.45159   44.54444     1.21   0.227     .1626022    2093.828
         83  |   18.45159   44.54444     1.21   0.227     .1626022    2093.828
             |
       spont |
          1  |   26.25954    15.5374     5.52   0.000     8.234612    83.73961
          2  |   626.7674   598.5987     6.74   0.000     96.41846    4074.296
             |
     induced |
          1  |     8.2637   4.847021     3.60   0.000     2.617626    26.08804
          2  |   82.89957   78.56521     4.66   0.000     12.93765    531.1892
             |
       _cons |   .0010319   .0022511    -3.15   0.002     .0000143    .0742101
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   48.69
         Prob > chi2 =    0.0000

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =   22.41
         Prob > chi2 =    0.0000

. estimates store mult4

.
. * Model 4d
. logistic case i.matchset g2-g8

Logistic regression                               Number of obs   =        248
                                                  LR chi2(89)     =      89.15
                                                  Prob > chi2     =     0.4755
Log likelihood =  -113.5088                       Pseudo R2       =     0.2820

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    matchset |
          2  |   635.0545   2317.806     1.77   0.077     .4967258    811905.2
          3  |   18.40698   64.53227     0.83   0.406     .0190893    17749.06
          4  |    12.9187   45.96661     0.72   0.472     .0120926    13801.19
          5  |   35.33792   126.5024     1.00   0.319     .0317042    39388.06
          6  |   2.328085   8.404086     0.23   0.815     .0019691    2752.493
          7  |   1487.982   5392.292     2.02   0.044     1.224425     1808270
          8  |   50.78677   182.2588     1.09   0.274     .0447753    57605.33
          9  |   56.53595    203.517     1.12   0.262     .0487737    65533.52
         10  |   71.63973   261.1426     1.17   0.241     .0565375    90775.99
         11  |   144.5549   528.5793     1.36   0.174     .1115654    187299.2
         12  |   4.369323   16.43618     0.39   0.695     .0027443    6956.617
         13  |   635.0545   2317.806     1.77   0.077     .4967258    811905.2
         14  |    12.9187   45.96661     0.72   0.472     .0120926    13801.19
         15  |   69.87661   253.0232     1.17   0.241      .057827    84437.02
         16  |   102.9281   376.2955     1.27   0.205     .0795463    133182.6
         17  |   .2043738   .7443917    -0.44   0.663     .0001622    257.4905
         18  |   144.5549   528.5793     1.36   0.174     .1115654    187299.2
         19  |   4.369323   16.43618     0.39   0.695     .0027443    6956.617
         20  |   144.5549   528.5793     1.36   0.174     .1115654    187299.2
         21  |   316.0162   1199.302     1.52   0.129     .1859276    537124.3
         22  |   225.0255   869.6443     1.40   0.161     .1155147    438355.2
```

| | | | | | | |
|---|---|---|---|---|---|---|
| 23 | 17.80872 | 64.37055 | 0.80 | 0.426 | .0149252 | 21249.34 |
| 24 | 71.63973 | 261.1426 | 1.17 | 0.241 | .0565375 | 90775.99 |
| 25 | 12.76389 | 45.68206 | 0.71 | 0.477 | .011469 | 14204.96 |
| 26 | 112.5651 | 483.5788 | 1.10 | 0.272 | .0248112 | 510692.5 |
| 27 | 112.5651 | 483.5788 | 1.10 | 0.272 | .0248112 | 510692.5 |
| 28 | 112.5651 | 483.5788 | 1.10 | 0.272 | .0248112 | 510692.5 |
| 29 | .2043738 | .7443917 | -0.44 | 0.663 | .0001622 | 257.4905 |
| 30 | 17.98291 | 63.56736 | 0.82 | 0.414 | .0176184 | 18354.93 |
| 31 | 316.0162 | 1199.302 | 1.52 | 0.129 | .1859276 | 537124.3 |
| 32 | 288.5906 | 1044.523 | 1.57 | 0.118 | .2395785 | 347629.3 |
| 33 | 288.5906 | 1044.523 | 1.57 | 0.118 | .2395785 | 347629.3 |
| 34 | 17.80872 | 64.37055 | 0.80 | 0.426 | .0149252 | 21249.34 |
| 35 | 635.0545 | 2317.806 | 1.77 | 0.077 | .4967258 | 811905.2 |
| 36 | 112.5651 | 483.5788 | 1.10 | 0.272 | .0248112 | 510692.5 |
| 37 | 316.0162 | 1199.302 | 1.52 | 0.129 | .1859276 | 537124.3 |
| 38 | 1 | 4.437111 | -0.00 | 1.000 | .0001672 | 5982.408 |
| 39 | 25.21598 | 93.3249 | 0.87 | 0.383 | .0178386 | 35644.43 |
| 40 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 41 | 51.42069 | 199.511 | 1.02 | 0.310 | .0256152 | 103223.5 |
| 42 | 1487.982 | 5392.292 | 2.02 | 0.044 | 1.224425 | 1808270 |
| 43 | 1487.982 | 5392.292 | 2.02 | 0.044 | 1.224425 | 1808270 |
| 44 | 221.2838 | 863.1595 | 1.38 | 0.166 | .1058465 | 462618.4 |
| 45 | 635.0545 | 2317.806 | 1.77 | 0.077 | .4967258 | 811905.2 |
| 46 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 47 | 36.89787 | 138.8863 | 0.96 | 0.338 | .0230683 | 59018.35 |
| 48 | 3.769257 | 13.89264 | 0.36 | 0.719 | .0027474 | 5171.25 |
| 49 | 70.96539 | 254.8011 | 1.19 | 0.235 | .0623461 | 80776.32 |
| 50 | 36.89787 | 138.8863 | 0.96 | 0.338 | .0230683 | 59018.35 |
| 51 | .2152335 | .790587 | -0.42 | 0.676 | .0001608 | 288.0773 |
| 52 | .2150996 | .7902184 | -0.42 | 0.676 | .0001605 | 288.2214 |
| 53 | 17.98291 | 63.56736 | 0.82 | 0.414 | .0176184 | 18354.93 |
| 54 | 56.53595 | 203.517 | 1.12 | 0.262 | .0487737 | 65533.52 |
| 55 | 16.04614 | 58.10011 | 0.77 | 0.443 | .0132839 | 19382.7 |
| 56 | 22.01332 | 80.59917 | 0.84 | 0.398 | .0168311 | 28791.16 |
| 57 | 30.70451 | 108.9846 | 0.96 | 0.335 | .0292343 | 32248.68 |
| 58 | 16.29455 | 58.5373 | 0.78 | 0.437 | .0142609 | 18618.22 |
| 59 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 60 | 36.89787 | 138.8863 | 0.96 | 0.338 | .0230683 | 59018.35 |
| 61 | 16.29455 | 58.5373 | 0.78 | 0.437 | .0142609 | 18618.22 |
| 62 | 96.50476 | 347.8208 | 1.27 | 0.205 | .0825397 | 112832.6 |
| 63 | 316.0162 | 1199.302 | 1.52 | 0.129 | .1859276 | 537124.3 |
| 64 | 51.42069 | 199.511 | 1.02 | 0.310 | .0256152 | 103223.5 |
| 65 | 22.01332 | 80.59917 | 0.84 | 0.398 | .0168311 | 28791.16 |
| 66 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 67 | 71.63973 | 261.1426 | 1.17 | 0.241 | .0565375 | 90775.99 |
| 68 | 1 | 4.437111 | -0.00 | 1.000 | .0001672 | 5982.408 |
| 69 | 6.484639 | 23.13866 | 0.52 | 0.600 | .0059512 | 7065.877 |
| 70 | 288.5906 | 1044.523 | 1.57 | 0.118 | .2395785 | 347629.3 |
| 71 | 288.5906 | 1044.523 | 1.57 | 0.118 | .2395785 | 347629.3 |
| 72 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 73 | 71.63973 | 261.1426 | 1.17 | 0.241 | .0565375 | 90775.99 |
| 74 | 8.850251 | 32.20895 | 0.60 | 0.549 | .0070657 | 11085.5 |
| 75 | 6.484639 | 23.13866 | 0.52 | 0.600 | .0059512 | 7065.877 |
| 76 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 77 | 29.09616 | 102.8882 | 0.95 | 0.340 | .0284358 | 29771.88 |
| 78 | 144.5549 | 528.5793 | 1.36 | 0.174 | .1115654 | 187299.2 |
| 79 | 71.63973 | 261.1426 | 1.17 | 0.241 | .0565375 | 90775.99 |
| 80 | 316.0162 | 1199.302 | 1.52 | 0.129 | .1859276 | 537124.3 |
| 81 | 35.94561 | 128.3033 | 1.00 | 0.316 | .0329146 | 39255.7 |
| 82 | 37.54443 | 134.7966 | 1.01 | 0.313 | .0329957 | 42720.23 |
| 83 | 37.54443 | 134.7966 | 1.01 | 0.313 | .0329957 | 42720.23 |
| | | | | | | |
| g2 | 8.636948 | 6.545217 | 2.85 | 0.004 | 1.955718 | 38.14297 |
| g3 | 80.83794 | 83.81227 | 4.24 | 0.000 | 10.59485 | 616.7876 |
| g4 | 39.63256 | 31.57185 | 4.62 | 0.000 | 8.317123 | 188.8562 |
| g5 | 83.70851 | 97.59536 | 3.80 | 0.000 | 8.518394 | 822.5864 |

```
          g6 |   3460.892   6071.258     4.65   0.000     111.1656    107747.1
          g7 |   336.2576   331.5483     5.90   0.000     48.68459    2322.484
          g8 |   53290.52   113002.1     5.13   0.000     834.9958     3401071
       _cons |    .000336   .0011461    -2.35   0.019     4.20e-07    .2688646
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   50.35
         Prob > chi2 =    0.0000

. lrtest mult4

Likelihood-ratio test                                 LR chi2(3)  =      4.86
(Assumption: mult4 nested in .)                       Prob > chi2 =    0.1820

.
. * Model 5a
. clogit case i.induced, group(stratum) or
note: multiple positive outcomes within groups encountered.

Iteration 0:   log likelihood = -101.55908
Iteration 1:   log likelihood = -101.55229
Iteration 2:   log likelihood = -101.55229

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(2)      =       0.12
                                                  Prob > chi2     =     0.9406
Log likelihood = -101.55229                       Pseudo R2       =     0.0006

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     induced |
          1  |   1.071884   .3492498     0.21   0.831     .5659815    2.029986
          2  |   1.160049   .5127361     0.34   0.737     .4878084    2.758693
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.12
         Prob > chi2 =    0.9404

.
. * Model 5b
. clogit case i.spont, group(stratum) or
note: multiple positive outcomes within groups encountered.

Iteration 0:   log likelihood = -84.453469
Iteration 1:   log likelihood = -84.257831
Iteration 2:   log likelihood = -84.257572
Iteration 3:   log likelihood = -84.257572

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(2)      =      34.71
```

```
                                                Prob > chi2     =     0.0000
Log likelihood = -84.257572                     Pseudo R2       =     0.1708

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
          1  |    3.83593   1.385401     3.72   0.000     1.889936    7.785641
          2  |   9.944654   4.647364     4.92   0.000     3.979274    24.85281
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   28.14
         Prob > chi2 =    0.0000

.
. * Model 5c
. clogit case i.spont i.induced, group(stratum) or
note: multiple positive outcomes within groups encountered.

Iteration 0:   log likelihood = -79.322323
Iteration 1:   log likelihood = -74.198614
Iteration 2:   log likelihood = -74.088486
Iteration 3:   log likelihood = -74.088255
Iteration 4:   log likelihood = -74.088255

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(4)      =      55.05
                                                  Prob > chi2     =     0.0000
Log likelihood = -74.088255                       Pseudo R2       =     0.2709

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       spont |
          1  |   8.158671   3.667148     4.67   0.000     3.380824    19.68867
          2  |   55.76217   39.59607     5.66   0.000     13.86473    224.2683
             |
     induced |
          1  |    3.87267   1.770345     2.96   0.003     1.580861    9.486964
          2  |   17.82149   12.75244     4.03   0.000      4.38383     72.4493
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   34.46
         Prob > chi2 =    0.0000

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =   16.56
         Prob > chi2 =    0.0003

. estimates store mult5

.
```

```
. * Model 5d
. clogit case g2-g8, group(stratum) or
note: multiple positive outcomes within groups encountered.

Iteration 0:   log likelihood = -76.666257
Iteration 1:   log likelihood = -72.343099
Iteration 2:   log likelihood = -72.272375
Iteration 3:   log likelihood = -72.272054
Iteration 4:   log likelihood = -72.272054

Conditional (fixed-effects) logistic regression   Number of obs   =        248
                                                  LR chi2(7)      =      58.68
                                                  Prob > chi2     =     0.0000
Log likelihood = -72.272054                       Pseudo R2       =     0.2888

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          g2 |   4.707625   2.907964     2.51   0.012     1.402824    15.79795
          g3 |   19.02158   15.07709     3.72   0.000     4.023074     89.9363
          g4 |   12.61018   7.835284     4.08   0.000     3.731048    42.61985
          g5 |    16.6441   15.05333     3.11   0.002     2.827569    97.97329
          g6 |   172.1462   226.1072     3.92   0.000     13.11831    2259.003
          g7 |   44.72934   33.62056     5.06   0.000      10.2516    195.1612
          g8 |   734.4804   1125.094     4.31   0.000     36.48298    14786.66
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   35.53
         Prob > chi2 =    0.0000

. lrtest mult5

Likelihood-ratio test                                 LR chi2(3)  =      3.63
(Assumption: mult5 nested in .)                       Prob > chi2 =    0.3040

.
.
. * Model 6a
. logistic case i.stratum i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(64)     =       0.40
                                                  Prob > chi2     =     1.0000
Log likelihood = -157.88793                       Pseudo R2       =     0.0013

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     stratum |
          2  |   .9645122    1.68054    -0.02   0.983     .0317101    29.33719
          3  |   .8771215   1.548956    -0.07   0.941     .0275345    27.94105
          4  |     .84727   1.523324    -0.09   0.927     .0249821    28.73522
          5  |          1   1.732412     0.00   1.000      .033525     29.8285
          6  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          7  |          1   1.732412     0.00   1.000      .033525     29.8285
          8  |          1   1.732412     0.00   1.000      .033525     29.8285
```

```
           9  |          1   1.732412     0.00   1.000      .033525     29.8285
          10  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          11  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          12  |   1.031245   1.552737     0.02   0.984     .0539156    19.72464
          13  |          1   1.732412     0.00   1.000      .033525     29.8285
          14  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          15  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          16  |   .9699923   1.684857    -0.02   0.986     .0322291    29.19365
          17  |          1   1.732412     0.00   1.000      .033525     29.8285
          18  |   .9672492   1.453866    -0.02   0.982      .050828     18.4066
          19  |   .9971675   1.501779    -0.00   0.998      .052098    19.08602
          20  |          1   1.732412     0.00   1.000      .033525     29.8285
          21  |    .941185   1.647137    -0.03   0.972       .03048    29.06263
          22  |   .9645122   1.457787    -0.02   0.981     .0498633    18.65668
          23  |   .9699923   1.684857    -0.02   0.986     .0322291    29.19365
          24  |   .9971675   1.501779    -0.00   0.998      .052098    19.08602
          25  |          1   1.732412     0.00   1.000      .033525     29.8285
          26  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          27  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          28  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          29  |   .9645122    1.68054    -0.02   0.983     .0317101    29.33719
          30  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          31  |   .9500494   1.434367    -0.03   0.973      .049274    18.31784
          32  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          33  |          1   1.732412     0.00   1.000      .033525     29.8285
          34  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          35  |   .9084094   1.589214    -0.05   0.956     .0294544    28.01649
          36  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          37  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          38  |   .9358813   1.629972    -0.04   0.970     .0308128    28.42569
          39  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          40  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          41  |   .9848438    1.35028    -0.01   0.991     .0670377    14.46823
          42  |          1   1.500312     0.00   1.000     .0528362    18.92641
          43  |   1.031245   1.791255     0.02   0.986     .0342641     31.0373
          44  |          1   1.732412     0.00   1.000      .033525     29.8285
          45  |    1.02069   1.446358     0.01   0.988     .0634904    16.40893
          46  |   .9848438   1.478899    -0.01   0.992     .0518983     18.6888
          47  |   1.031245   1.552737     0.02   0.984     .0539156    19.72464
          48  |          1   1.732412     0.00   1.000      .033525     29.8285
          49  |   .9681629   1.371902    -0.02   0.982     .0602257    15.56377
          50  |   .9699923   1.684857    -0.02   0.986     .0322291    29.19365
          51  |   .9376465   1.335266    -0.05   0.964     .0575275    15.28278
          52  |   .9699923   1.684857    -0.02   0.986     .0322291    29.19365
          53  |   .9820561   1.476263    -0.01   0.990     .0515915    18.69365
          54  |    .919404   1.398331    -0.06   0.956     .0466557     18.1179
          55  |          1   1.732412     0.00   1.000      .033525     29.8285
          56  |   .8771215   1.548956    -0.07   0.941     .0275345    27.94105
          57  |   .9084094   1.589214    -0.05   0.956     .0294544    28.01649
          58  |   .8771215   1.548956    -0.07   0.941     .0275345    27.94105
          59  |          1   1.732412     0.00   1.000      .033525     29.8285
          60  |   .9699923   1.684857    -0.02   0.986     .0322291    29.19365
          61  |     .84727   1.523324    -0.09   0.927     .0249821    28.73522
          62  |   .9084094   1.589214    -0.05   0.956     .0294544    28.01649
          63  |    2.06249   3.867985     0.39   0.699     .0522459    81.42004
              |
     induced  |
           1  |   1.095688   .4137371     0.24   0.809       .52272    2.296703
           2  |   1.217139   .6209088     0.39   0.700     .4478266    3.308037
              |
       _cons  |   .4848508   .5971951    -0.59   0.557     .0433686    5.420519
------------------------------------------------------------------------------

. testparm i.induced

 ( 1)  [case]1.induced = 0
```

```
 ( 2)  [case]2.induced = 0

           chi2(  2) =    0.16
         Prob > chi2 =    0.9221

.
. * Model 6b
. logistic case i.stratum i.spont

Logistic regression                               Number of obs   =        248
                                                  LR chi2(64)     =      47.80
                                                  Prob > chi2     =     0.9350
Log likelihood = -134.18723                       Pseudo R2       =     0.1512

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     stratum |
           2 |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
           3 |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
           4 |          1   1.732051    -0.00   1.000     .0335487    29.80742
           5 |   .2610311   .4745041    -0.74   0.460     .0074024    9.204752
           6 |          1   1.732051    -0.00   1.000     .0335487    29.80742
           7 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
           8 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
           9 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          10 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          11 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          12 |   .3522313   .5529019    -0.66   0.506     .0162438    7.637823
          13 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          14 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          15 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          16 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          17 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          18 |   .2604501   .4198757    -0.83   0.404     .0110532    6.137053
          19 |   .2604501   .4198757    -0.83   0.404     .0110532    6.137053
          20 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          21 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          22 |    .377845   .6104221    -0.60   0.547     .0159282    8.963139
          23 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          24 |   .5762701   .9169643    -0.35   0.729     .0254794    13.03356
          25 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          26 |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          27 |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          28 |   .1645842   .2935951    -1.01   0.312     .0049884    5.430156
          29 |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
          30 |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
          31 |   .2595434   .4409459    -0.79   0.427     .0092913    7.250056
          32 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          33 |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          34 |   .0573938   .1053767    -1.56   0.120     .0015705    2.097468
          35 |   .2610311   .4745041    -0.74   0.460     .0074024    9.204752
          36 |   .0951672   .1740069    -1.29   0.198     .0026432    3.426511
          37 |   .1645842   .2935951    -1.01   0.312     .0049884    5.430156
          38 |   .0573938   .1053767    -1.56   0.120     .0015705    2.097468
          39 |   .2610311   .4745041    -0.74   0.460     .0074024    9.204752
          40 |   .1645842   .2935951    -1.01   0.312     .0049884    5.430156
          41 |   .5962937   .8337878    -0.37   0.712     .0384803    9.240203
          42 |   .3522313   .5529019    -0.66   0.506     .0162438    7.637823
          43 |   .1645842   .2935951    -1.01   0.312     .0049884    5.430156
          44 |          1   1.732051    -0.00   1.000     .0335487    29.80742
          45 |   .3169668   .4676392    -0.78   0.436     .0175868    5.712679
          46 |   .7140874   1.094597    -0.22   0.826     .0353979    14.40542
          47 |   .4973116   .7750074    -0.45   0.654     .0234488    10.54717
          48 |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          49 |   .1632549   .2501386    -1.18   0.237     .0081032     3.28908
```

```
          50  |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          51  |   .3376499   .5126761    -0.72   0.475     .0172199     6.62067
          52  |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
          53  |   .2604501   .4198757    -0.83   0.404     .0110532    6.137053
          54  |   .5762701   .9169643    -0.35   0.729     .0254794    13.03356
          55  |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
          56  |   .1378376   .2630705    -1.04   0.299     .0032719    5.806736
          57  |   .2610311   .4745041    -0.74   0.460     .0074024    9.204752
          58  |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          59  |   .0573938   .1053767    -1.56   0.120     .0015705    2.097468
          60  |   .2595434   .5319767    -0.66   0.510     .0046723     14.4174
          61  |   .4973116    .906644    -0.38   0.702     .0139576    17.71928
          62  |   .0951672   .1740069    -1.29   0.198     .0026432    3.426511
          63  |   .0774082   .1515047    -1.31   0.191     .0016703    3.587351
              |
       spont  |
          1   |   6.075917   2.593181     4.23   0.000     2.632218    14.02497
          2   |   25.83707   14.85806     5.65   0.000     8.370372    79.75203
              |
       _cons  |         .5   .6123724    -0.57   0.571     .0453383    5.514101
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   37.28
         Prob > chi2 =    0.0000

.
. * Model 6c
. logistic case i.stratum i.spont i.induced

Logistic regression                               Number of obs   =        248
                                                  LR chi2(66)     =      76.81
                                                  Prob > chi2     =     0.1708
Log likelihood =  -119.6824                       Pseudo R2       =     0.2429

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     stratum |
          2  |    .024428   .0500556    -1.81   0.070     .0004402    1.355473
          3  |   .0078117   .0183751    -2.06   0.039     .0000777    .7851982
          4  |   .0362339   .0716057    -1.68   0.093     .0007533    1.742877
          5  |   .1487253   .2802737    -1.01   0.312     .0037008    5.976947
          6  |     2.1395   3.945304     0.41   0.680     .0576328    79.42451
          7  |   .3170604   .6170017    -0.59   0.555     .0069936    14.37428
          8  |   .3170604   .6170017    -0.59   0.555     .0069936    14.37428
          9  |          1   1.920208     0.00   1.000     .0232015    43.10064
         10  |   .6349275   1.317675    -0.22   0.827     .0108696    37.08823
         11  |     2.1395   3.945304     0.41   0.680     .0576328    79.42451
         12  |   .3261837   .5720598    -0.64   0.523     .0104864    10.14604
         13  |          1   1.920208     0.00   1.000     .0232015    43.10064
         14  |   .6349275   1.317675    -0.22   0.827     .0108696    37.08823
         15  |     2.1395   3.945304     0.41   0.680     .0576328    79.42451
         16  |   .4952856   .9391778    -0.37   0.711     .0120442    20.36731
         17  |   .3170604   .6170017    -0.59   0.555     .0069936    14.37428
         18  |   .0454273   .0823442    -1.71   0.088     .0013013    1.585821
         19  |   .0851006   .1547571    -1.35   0.175     .0024099    3.005104
         20  |   .3170604   .6170017    -0.59   0.555     .0069936    14.37428
         21  |   .0905046   .1915441    -1.14   0.256     .0014295    5.730006
         22  |   .0624729   .1146968    -1.51   0.131     .0017098    2.282703
         23  |   .4952856   .9391778    -0.37   0.711     .0120442    20.36731
         24  |   .2832785   .5819136    -0.61   0.539     .0050544    15.87672
```

```
          25  |   .2519967   .6584155    -0.53   0.598     .0015045    42.20938
          26  |    .165044   .4980469    -0.60   0.551     .0004456    61.12763
          27  |    .165044   .4980469    -0.60   0.551     .0004456    61.12763
          28  |   .0097331   .0216264    -2.08   0.037      .000125    .7578228
          29  |    .024428   .0500556    -1.81   0.070     .0004402    1.355473
          30  |   .0521061   .1185536    -1.30   0.194     .0006028    4.503725
          31  |   .0213176   .0417076    -1.97   0.049     .0004607    .9865138
          32  |   .0467405   .0968081    -1.48   0.139     .0008067    2.708228
          33  |   .0825866   .2047922    -1.01   0.315       .00064    10.65753
          34  |   .0020215    .004266    -2.94   0.003     .0000323    .1264613
          35  |   .0202364   .0396877    -1.99   0.047     .0004333    .9451795
          36  |   .0051571   .0106969    -2.54   0.011     .0000885     .300592
          37  |   .0097331   .0216264    -2.08   0.037      .000125    .7578228
          38  |   .0020215    .004266    -2.94   0.003     .0000323    .1264613
          39  |   .2021534   .3985183    -0.81   0.417     .0042428    9.631874
          40  |   .1106271   .2092471    -1.16   0.244     .0027155    4.506905
          41  |   .3134326   .4793711    -0.76   0.448     .0156422    6.280461
          42  |   .2064731   .3457739    -0.94   0.346     .0077515    5.499756
          43  |   .1106271   .2092471    -1.16   0.244     .0027155    4.506905
          44  |          1   1.920208     0.00   1.000     .0232015    43.10064
          45  |    .233588   .3776691    -0.90   0.368     .0098223    5.555051
          46  |   .3989054   .6663858    -0.55   0.582     .0150976    10.53981
          47  |   .6349275   1.119156    -0.26   0.797      .020061    20.09536
          48  |   .3170604   .6170017    -0.59   0.555     .0069936    14.37428
          49  |   .0273807   .0470037    -2.10   0.036     .0009467    .7919158
          50  |   .0603254   .1382569    -1.23   0.220     .0006756    5.386774
          51  |   .0394177   .0674295    -1.89   0.059     .0013791    1.126652
          52  |   .0191717   .0394166    -1.92   0.054     .0003409    1.078229
          53  |   .0757301    .135226    -1.45   0.148     .0022874    2.507265
          54  |   .0449532   .0819672    -1.70   0.089     .0012609     1.60263
          55  |   .0437888   .0951999    -1.44   0.150     .0006177     3.10409
          56  |    .002484   .0054357    -2.74   0.006     .0000341    .1810569
          57  |   .0202364   .0396877    -1.99   0.047     .0004333    .9451795
          58  |   .0078117   .0183751    -2.06   0.039     .0000777    .7851982
          59  |   .0085772   .0168969    -2.42   0.016     .0001805    .4075684
          60  |   .0603254   .1382569    -1.23   0.220     .0006756    5.386774
          61  |   .0107529    .024168    -2.02   0.044     .0001313    .8803749
          62  |   .0023103   .0049769    -2.82   0.005     .0000339    .1575161
          63  |   .0132425   .0279362    -2.05   0.040      .000212    .8272821
              |
       spont  |
           1  |   19.33975   10.62699     5.39   0.000     6.587558    56.77763
           2  |   323.1262   283.5563     6.58   0.000       57.864    1804.413
              |
     induced  |
           1  |   7.015417   3.855632     3.54   0.000     2.389121    20.60008
           2  |   59.04695   51.53253     4.67   0.000     10.67386    326.6432
              |
       _cons  |   .2336995   .3221708    -1.05   0.292     .0156754    3.484156
------------------------------------------------------------------------------

. testparm i.spont

 ( 1)  [case]1.spont = 0
 ( 2)  [case]2.spont = 0

           chi2(  2) =   46.18
         Prob > chi2 =    0.0000

. testparm i.induced

 ( 1)  [case]1.induced = 0
 ( 2)  [case]2.induced = 0

           chi2(  2) =   22.54
         Prob > chi2 =    0.0000
```

```
. estimates store mult6

.
. * Model 6d
. logistic case i.stratum g2-g8

Logistic regression                                     Number of obs   =        248
                                                        LR chi2(69)     =      82.87
                                                        Prob > chi2     =     0.1218
Log likelihood = -116.64849                             Pseudo R2       =     0.2621

------------------------------------------------------------------------------
        case | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     stratum |
           2 |   .0287171   .0577608    -1.77   0.078     .0005573    1.479873
           3 |   .0024395   .0085042    -1.73   0.084     2.63e-06    2.262395
           4 |   .0396383   .0804906    -1.59   0.112     .0007407     2.12123
           5 |   .1033635   .2014229    -1.16   0.244      .002268    4.710759
           6 |   2.365951   4.458022     0.46   0.648     .0589029    95.03305
           7 |   .2479755    .501176    -0.69   0.490     .0047214    13.02409
           8 |   .2479755    .501176    -0.69   0.490     .0047214    13.02409
           9 |          1   1.970226    -0.00   1.000     .0210349    47.53999
          10 |   .5474319   1.208521    -0.27   0.785      .007231    41.44375
          11 |   2.365951   4.458022     0.46   0.648     .0589029    95.03305
          12 |   .2333689   .4280205    -0.79   0.428       .00641    8.496234
          13 |          1   1.970226    -0.00   1.000     .0210349    47.53999
          14 |   .5474319   1.208521    -0.27   0.785      .007231    41.44375
          15 |   2.365951   4.458022     0.46   0.648     .0589029    95.03305
          16 |   .4502394   .8751621    -0.41   0.681     .0099748    20.32283
          17 |   .2479755    .501176    -0.69   0.490     .0047214    13.02409
          18 |   .0619059   .1118147    -1.54   0.123     .0017959    2.133908
          19 |   .0767991   .1400909    -1.41   0.159     .0021511    2.741896
          20 |   .2479755    .501176    -0.69   0.490     .0047214    13.02409
          21 |   .1350674   .2697997    -1.00   0.316     .0026931     6.77394
          22 |   .0658425   .1214608    -1.47   0.140     .0017713    2.447552
          23 |   .4502394   .8751621    -0.41   0.681     .0099748    20.32283
          24 |   .3265765   .6729304    -0.54   0.587     .0057548     18.5326
          25 |   .4418645   1.036538    -0.35   0.728     .0044516    43.85922
          26 |   .2223337   .6308219    -0.53   0.596     .0008549    57.82266
          27 |   .2223337   .6308219    -0.53   0.596     .0008549    57.82266
          28 |   .0104894   .0261729    -1.83   0.068     .0000789    1.395212
          29 |   .0287171   .0577608    -1.77   0.078     .0005573    1.479873
          30 |   .0544815   .1176257    -1.35   0.178     .0007916     3.74969
          31 |   .0243463   .0489122    -1.85   0.064     .0004746    1.248859
          32 |   .0820946   .1730049    -1.19   0.236     .0013198    5.106501
          33 |   .1006225   .2354236    -0.98   0.326      .001026    9.867935
          34 |   .0005397   .0014585    -2.78   0.005     2.70e-06    .1077618
          35 |   .0434324   .0879977    -1.55   0.122     .0008189    2.303661
          36 |   .0058467   .0134307    -2.24   0.025     .0000648    .5275091
          37 |   .0104894   .0261729    -1.83   0.068     .0000789    1.395212
          38 |   .0005397   .0014585    -2.78   0.005     2.70e-06    .1077618
          39 |   .1354775   .2759972    -0.98   0.326     .0024991     7.34429
          40 |   .0716176   .1394692    -1.35   0.176     .0015753    3.255842
          41 |   .2539526   .4036172    -0.86   0.388     .0112695    5.722709
          42 |   .1496392   .2606593    -1.09   0.276      .004924    4.547459
          43 |   .0716176   .1394692    -1.35   0.176     .0015753    3.255842
          44 |          1   1.970226    -0.00   1.000     .0210349    47.53999
          45 |   .1635939   .2758599    -1.07   0.283     .0060039    4.457631
          46 |   .3393007   .5867072    -0.63   0.532     .0114476    10.05665
          47 |   .5474319    1.01623    -0.32   0.746     .0143944     20.8193
          48 |   .2479755    .501176    -0.69   0.490     .0047214    13.02409
          49 |   .0398605   .0684733    -1.88   0.061     .0013751    1.155468
          50 |   .0713606   .1554875    -1.21   0.226     .0009972    5.106711
          51 |   .0550693   .0945895    -1.69   0.091     .0019004    1.595775
```

```
          52  |   .0383897   .0802854    -1.56   0.119     .0006369    2.313966
          53  |   .0687982   .1233452    -1.49   0.135     .0020488    2.310248
          54  |   .0524576   .0967903    -1.60   0.110     .0014101    1.951523
          55  |   .0460613   .0957052    -1.48   0.139     .0007847    2.703615
          56  |   .0005678   .0015685    -2.71   0.007     2.53e-06    .1274984
          57  |   .0434324   .0879977    -1.55   0.122     .0008189    2.303661
          58  |   .0024395   .0085042    -1.73   0.084     2.63e-06    2.262395
          59  |   .0161747   .0327256    -2.04   0.042     .0003066    .8531698
          60  |   .0713606   .1554875    -1.21   0.226     .0009972    5.106711
          61  |   .0087523   .0212825    -1.95   0.051     .0000745    1.027899
          62  |   .0005694   .0015747    -2.70   0.007     2.52e-06    .1287176
          63  |   .0219233   .0467148    -1.79   0.073     .0003366    1.427815
              |
           g2 |   8.829499   6.625497     2.90   0.004     2.028662    38.42929
           g3 |   59.68848   57.32766     4.26   0.000     9.085648    392.1255
           g4 |    33.0359   25.24242     4.58   0.000      7.38909    147.7003
           g5 |   51.98628   56.30819     3.65   0.000     6.221886    434.3656
           g6 |   2178.239   3741.422     4.47   0.000     75.17117    63118.97
           g7 |   215.8391    198.894     5.83   0.000     35.46131    1313.728
           g8 |   30546.26   64670.06     4.88   0.000     481.7958     1936658
        _cons |   .2113315   .3026075    -1.09   0.278     .0127679    3.497902
------------------------------------------------------------------------------

. test g2 g3 g4 g5 g6 g7 g8

 ( 1)  [case]g2 = 0
 ( 2)  [case]g3 = 0
 ( 3)  [case]g4 = 0
 ( 4)  [case]g5 = 0
 ( 5)  [case]g6 = 0
 ( 6)  [case]g7 = 0
 ( 7)  [case]g8 = 0

           chi2(  7) =   47.45
         Prob > chi2 =    0.0000

. lrtest mult6

Likelihood-ratio test                                 LR chi2(3)  =      6.07
(Assumption: mult6 nested in .)                       Prob > chi2 =    0.1084

.
. log close
```