```
. mixed CMEP_ Tx##time age_yr_0 sex_0 || ID: , nolog

Mixed-effects ML regression                     Number of obs     =        471
Group variable: ID                              Number of groups  =        175

                                                Obs per group:
                                                              min =          1
                                                              avg =        2.7
                                                              max =          3

                                                Wald chi2(7)      =     135.90
Log likelihood = -1295.4745                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
       CMEP_ |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          Tx |
    TranS-C  |  -.3787526   .6542838    -0.58   0.563    -1.661125    .9036201
             |
   timepoint |
        POST |    1.83559   .4611028     3.98   0.000     .9318452    2.739335
         FU6 |   2.341118   .4790332     4.89   0.000      1.40223    3.280006
             |
Tx#timepoint |
TranS-C#POST |   1.996845   .6517062     3.06   0.002     .7195247    3.274166
 TranS-C#FU6 |    1.83574   .6723391     2.73   0.006      .517979      3.1535
             |
    age_yr_0 |  -.2895171   .1530096    -1.89   0.058    -.5894103    .0103762
       sex_0 |   .3720777   .5668456     0.66   0.512    -.7389193    1.483075
       _cons |   25.58818   2.368881    10.80   0.000     20.94526     30.2311
------------------------------------------------------------------------------

------------------------------------------------------------------------------
  Random-effects Parameters  |   Estimate   Std. Err.     [95% Conf. Interval]
-----------------------------+------------------------------------------------
ID: Identity                 |
                  var(_cons) |   10.15033    1.44713      7.675818    13.42257
-----------------------------+------------------------------------------------
               var(Residual) |   8.449383   .6901632      7.199412    9.916374
------------------------------------------------------------------------------
LR test vs. linear model: chibar2(01) = 126.82        Prob >= chibar2 = 0.0000

. contrast Tx#timepoint

Contrasts of marginal linear predictions

Margins      : asbalanced

------------------------------------------------
             |         df        chi2     P>chi2
-------------+----------------------------------
CMEP_        |
Tx#timepoint |          2       11.58     0.0031
------------------------------------------------

. margins Tx#timepoint

Predictive margins                              Number of obs     =        471

Expression   : Linear prediction, fixed portion, predict()

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
Tx#timepoint |
     PE#PRE  |    21.5453   .4648897    46.34   0.000     20.63413    22.45647
    PE#POST  |   23.38089   .4802547    48.68   0.000     22.43961    24.32217
     PE#FU6  |   23.88642   .4975131    48.01   0.000     22.91131    24.86153
 TranS-C#PRE |   21.16655   .4600335    46.01   0.000      20.2649     22.0682
TranS-C#POST |   24.99898   .4814572    51.92   0.000     24.05535    25.94262
 TranS-C#FU6 |   25.34341   .4919951    51.51   0.000     24.37911     26.3077
------------------------------------------------------------------------------
```

```
. margins timepoint#Tx

Predictive margins                                Number of obs     =        471

Expression   : Linear prediction, fixed portion, predict()

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 timepoint#Tx |
      PRE#PE |    21.5453   .4648897    46.34   0.000     20.63413    22.45647
 PRE#TranS-C |   21.16655   .4600335    46.01   0.000      20.2649     22.0682
     POST#PE |   23.38089   .4802547    48.68   0.000     22.43961    24.32217
POST#TranS-C |   24.99898   .4814572    51.92   0.000     24.05535    25.94262
      FU6#PE |   23.88642   .4975131    48.01   0.000     22.91131    24.86153
 FU6#TranS-C |   25.34341   .4919951    51.51   0.000     24.37911     26.3077
------------------------------------------------------------------------------

. contrast timepoint@Tx

Contrasts of marginal linear predictions

Margins      : asbalanced

------------------------------------------------
             |         df        chi2     P>chi2
-------------+----------------------------------
CMEP_        |
timepoint@Tx |
         PE  |          2       27.62     0.0000
    TranS-C  |          2      101.13     0.0000
       Joint |          4      128.70     0.0000
------------------------------------------------

. contrast Tx@timepoint

Contrasts of marginal linear predictions

Margins      : asbalanced

------------------------------------------------
             |         df        chi2     P>chi2
-------------+----------------------------------
CMEP_        |
Tx@timepoint |
        PRE  |          1        0.34     0.5627
       POST  |          1        5.66     0.0174
        FU6  |          1        4.33     0.0374
      Joint  |          3       13.60     0.0035
------------------------------------------------

. contrast Tx@timepoint, pveffects nowald

Contrasts of marginal linear predictions

Margins      : asbalanced

------------------------------------------------------------------
                       |   Contrast   Std. Err.      z    P>|z|
-----------------------+------------------------------------------
CMEP_                  |
           Tx@timepoint |
 (TranS-C vs base) PRE |  -.3787526   .6542838    -0.58   0.563
(TranS-C vs base) POST |   1.618093   .6803454     2.38   0.017
 (TranS-C vs base) FU6 |   1.456987   .7000971     2.08   0.037
------------------------------------------------------------------

. contrast timepoint@Tx, pveffects

Contrasts of marginal linear predictions

Margins      : asbalanced
```

```
-----------------------------------------------
             |         df        chi2     P>chi2
-------------+---------------------------------
CMEP_        |
timepoint@Tx |
         PE  |          2       27.62     0.0000
    TranS-C  |          2      101.13     0.0000
      Joint  |          4      128.70     0.0000
-----------------------------------------------

------------------------------------------------------------------------------
                        |   Contrast   Std. Err.      z    P>|z|
------------------------+-----------------------------------------------------
CMEP_                   |
          timepoint@Tx  |
     (POST vs base) PE  |    1.83559   .4611028     3.98   0.000
(POST vs base) TranS-C  |   3.832435   .4606932     8.32   0.000
      (FU6 vs base) PE  |   2.341118   .4790332     4.89   0.000
 (FU6 vs base) TranS-C  |   4.176858   .4719105     8.85   0.000
------------------------------------------------------------------------------

. contrast Tx#timepoint, pveffects

Contrasts of marginal linear predictions

Margins      : asbalanced

-----------------------------------------------
             |         df        chi2     P>chi2
-------------+---------------------------------
CMEP_        |
Tx#timepoint |          2       11.58     0.0031
-----------------------------------------------

------------------------------------------------------------------------------
                                |   Contrast   Std. Err.      z    P>|z|
--------------------------------+---------------------------------------------
CMEP_                           |
                    Tx#timepoint |
(TranS-C vs base) (POST vs base)  |   1.996845   .6517062     3.06   0.002
 (TranS-C vs base) (FU6 vs base)  |    1.83574   .6723391     2.73   0.006
------------------------------------------------------------------------------

. *this provides the estimate of the size of the interaction effect, SE, and a test of th
> e significance of the interaction

. marginsplot
previous command was not margins
r(301);

. margins, over(time Tx)

Predictive margins                              Number of obs     =        471

Expression   : Linear prediction, fixed portion, predict()
over         : timepoint Tx

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 timepoint#Tx |
      PRE#PE  |   21.53629   .4640397    46.41   0.000     20.62679    22.44579
 PRE#TranS-C  |   21.13636   .4597395    45.97   0.000     20.23529    22.03744
     POST#PE  |   23.38582   .4801063    48.71   0.000     22.44483    24.32681
POST#TranS-C  |   24.99606   .4813183    51.93   0.000     24.05269    25.93943
      FU6#PE  |    23.8801   .4971476    48.03   0.000     22.90571    24.85449
 FU6#TranS-C  |     25.395   .4926908    51.54   0.000     24.42934    26.36066
------------------------------------------------------------------------------
```

```
. margins Tx@timepoint, contrast(nowald pveffects)

Contrasts of predictive margins

Expression   : Linear prediction, fixed portion, predict()

------------------------------------------------------------------------------
                         |            Delta-method
                         |   Contrast   Std. Err.      z    P>|z|
-------------------------+----------------------------------------------------
           Tx@timepoint  |
 (TranS-C vs base) PRE   |  -.3787526   .6542838    -0.58   0.563
(TranS-C vs base) POST   |   1.618093   .6803454     2.38   0.017
 (TranS-C vs base) FU6   |   1.456987   .7000971     2.08   0.037
------------------------------------------------------------------------------

. contrast Tx@timepoint, pveffects

Contrasts of marginal linear predictions

Margins      : asbalanced

------------------------------------------------
             |         df        chi2     P>chi2
-------------+----------------------------------
CMEP_        |
Tx@timepoint |
         PRE |          1        0.34     0.5627
        POST |          1        5.66     0.0174
         FU6 |          1        4.33     0.0374
       Joint |          3       13.60     0.0035
------------------------------------------------

------------------------------------------------------------------------------
                         |   Contrast   Std. Err.      z    P>|z|
-------------------------+----------------------------------------------------
CMEP_                    |
           Tx@timepoint  |
 (TranS-C vs base) PRE   |  -.3787526   .6542838    -0.58   0.563
(TranS-C vs base) POST   |   1.618093   .6803454     2.38   0.017
 (TranS-C vs base) FU6   |   1.456987   .7000971     2.08   0.037
------------------------------------------------------------------------------
```