```
1 .
2 . * Descriptions

3 . bysort hiv2: tabstat new1wcc new2wcc if hiv2s!=., by(outcome) stats (p50 p25 p75)
```

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

-> hiv2s = 0

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

| outcome | new1wcc | new2wcc |
|---------|---------|---------|
| Alive   | 11.85   | 10.78   |
|         | 7.5     | 8.41    |
|         | 19.8    | 16.48   |
| Died    | 12.535  | 13.08   |
|         | 5.105   | 5.2     |
|         | 23.61   | 23.6    |
| Total   | 12.25   | 11.09   |
|         | 6.9     | 7.7     |
|         | 20.6    | 18.1    |

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

-> hiv2s = 1

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

| outcome | new1wcc | new2wcc |
|---------|---------|---------|
| Alive   | 9.81    | 9.9     |
|         | 4.95    | 7       |
|         | 15.39   | 12.55   |
| Died    | 8.82    | 9.35    |
|         | 3       | 4.1     |
|         | 20.26   | 12.08   |
| Total   | 8.975   | 9.9     |
|         | 4       | 5.7     |
|         | 18      | 12.4    |

```
4 . bysort hiv2: tabstat new1neut new2neut if hiv2s!=., by(outcome) stats (p50 p25 p75)
```

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

-> hiv2s = 0

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

| outcome | new1neut | new2neut |
|---------|----------|----------|
| Alive   | 4.86     | 4.63     |
|         | 2.86     | 2.27     |
|         | 10.18    | 8.33     |
| Died    | 4.525    | 7.955    |
|         | .745     | 1.33     |
|         | 13.05    | 14.62    |
| Total   | 4.77     | 4.66     |
|         | 2.22     | 2.1      |
|         | 11.03    | 10.06    |

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

-> hiv2s = 1

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

| outcome | new1neut | new2neut |
|---------|----------|----------|
| Alive   | 3.69     | 3.995    |
|         | .99      | 2.31     |
|         | 8.51     | 5.56     |
| Died    | 2.9      | 3.41     |
|         | .62      | 1.41     |
|         | 8.45     | 6.29     |

```
      Total │     3.53     3.735
            │      .98      1.72
            │     8.45      6.02
            │
```

5 . bysort hiv2: tabstat new1band new2band if hiv2s!=., by(outcome) stats (p50 p25 p75)

---

-> hiv2s = 0

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
 outcome │  new1band  new2band
─────────┼────────────────────
   Alive │     1.55       .41
         │      .34       .13
         │     4.28      1.43
─────────┼────────────────────
    Died │    2.165     1.025
         │      .24       .27
         │    4.985       3.3
─────────┼────────────────────
   Total │      1.6       .49
         │      .28       .17
         │     4.41      1.98
─────────┴────────────────────
```

---

-> hiv2s = 1

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
 outcome │  new1band  new2band
─────────┼────────────────────
   Alive │     1.56       .19
         │      .41      .035
         │     4.73       .99
─────────┼────────────────────
    Died │     1.65     1.245
         │      .25       .35
         │     4.96       3.5
─────────┼────────────────────
   Total │     1.58       .49
         │      .34       .07
         │     4.73      1.47
─────────┴────────────────────
```

6 . bysort hiv2: tabstat  band1per band2perc if hiv2s!=., by(outcome) stats (p50 p25 p75)

---

-> hiv2s = 0

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
 outcome │  band1p~c  band2p~c
─────────┼────────────────────
   Alive │ 13.04348  5.431573
         │ 4.935065  .9756098
         │ 26.89655        12
─────────┼────────────────────
    Died │ 14.04442      10.5
         │ 1.501454  6.010929
         │ 29.97014  25.95838
─────────┼────────────────────
   Total │ 13.96825  6.964619
         │  3.04878   .980768
         │ 26.98113  15.98527
─────────┴────────────────────
```

---

-> hiv2s = 1

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
 outcome │  band1p~c  band2p~c
─────────┼────────────────────
   Alive │ 19.90291  2.025195
         │      6.8  .472973
         │ 30.10101        11
─────────┼────────────────────
    Died │ 17.02335   16.9746
```

```
                    │         8         10
                    │  27.98527   25.95745
       ─────────────┼────────────────────────
          Total     │  19.00436         10
                    │  7.995619   .9876543
                    │  28.04124   16.98842
       ─────────────┴────────────────────────
```

7 . bysort hiv2: tabstat new1plat new2plat if hiv2s!=., by(outcome) stats (p50 p25 p75)

───────────────────────────────────────────────────────────────────────────────

-> hiv2s = 0

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
   outcome │   new1plat   new2plat
   ────────┼──────────────────────
     Alive │      194.5      229.5
           │         66        100
           │        394        472
   ────────┼──────────────────────
      Died │         60         37
           │         21         11
           │        136        142
   ────────┼──────────────────────
     Total │        140        181
           │         44         56
           │        308        430
   ────────┴──────────────────────
```

───────────────────────────────────────────────────────────────────────────────

-> hiv2s = 1

Summary statistics: p50, p25, p75
  by categories of: outcome (Outcome)

```
   outcome │   new1plat   new2plat
   ────────┼──────────────────────
     Alive │         94      132.5
           │         22         45
           │        241      233.5
   ────────┼──────────────────────
      Died │         42       63.5
           │         11         17
           │        140        143
   ────────┼──────────────────────
     Total │       60.5       98.5
           │         18         36
           │      182.5        204
   ────────┴──────────────────────
```

8 .
9 . *Hypothesis testing

10 .
11 . *HIV negative - alive

12 . signrank new1wcc=new2wcc if hiv2s==0 & outcome==0

   Wilcoxon signed-rank test

```
          sign │      obs   sum ranks    expected
   ────────────┼─────────────────────────────────
      positive │       55      2699.5      2575.5
      negative │       46      2451.5      2575.5
          zero │        0           0           0
   ────────────┼─────────────────────────────────
           all │      101        5151        5151
```

   unadjusted variance      87137.75
   adjustment for ties        -0.38
   adjustment for zeros        0.00
                           ──────────
   adjusted variance        87137.38

   Ho: new1wcc = new2wcc
               z =    0.420
      Prob > |z| =   0.6744
      Exact Prob =   0.6763

13 . signrank new1neut=new2neut if hiv2s==0 & outcome==0

   Wilcoxon signed-rank test

```
          sign │      obs   sum ranks    expected
```

```
           |
  positive |      31      989.5        855
  negative |      26      720.5        855
      zero |       1          1          1
-----------+---------------------------------
       all |      58       1711       1711

unadjusted variance      16682.25
adjustment for ties         -0.12
adjustment for zeros        -0.25
                         ----------
adjusted variance        16681.88

Ho: new1neut = new2neut
            z =   1.041
   Prob > |z| =  0.2977
   Exact Prob =  0.3010
```

14 . signrank new1band=new2band if hiv2s==0 & outcome==0

```
    Wilcoxon signed-rank test

      sign |     obs  sum ranks   expected
-----------+---------------------------------
  positive |      37       1262      850.5
  negative |      17        439      850.5
      zero |       4         10         10
-----------+---------------------------------
       all |      58       1711       1711

unadjusted variance      16682.25
adjustment for ties          0.00
adjustment for zeros        -7.50
                         ----------
adjusted variance        16674.75

Ho: new1band = new2band
            z =   3.187
   Prob > |z| =  0.0014
   Exact Prob =  0.0012
```

15 . signrank band1perc=band2perc if hivs==0 & outcome==0

```
    Wilcoxon signed-rank test

      sign |     obs  sum ranks   expected
-----------+---------------------------------
  positive |      37       1064      687.5
  negative |      13        311      687.5
      zero |       2          3          3
-----------+---------------------------------
       all |      52       1378       1378

unadjusted variance      12057.50
adjustment for ties          0.00
adjustment for zeros        -1.25
                         ----------
adjusted variance        12056.25

Ho: band1perc = band2perc
            z =   3.429
   Prob > |z| =  0.0006
   Exact Prob =  0.0004
```

16 . signrank new1plat=new2plat if hiv2s==0 & outcome==0

```
    Wilcoxon signed-rank test

      sign |     obs  sum ranks   expected
-----------+---------------------------------
  positive |      33       1295       2328
  negative |      63       3361       2328
      zero |       0          0          0
-----------+---------------------------------
       all |      96       4656       4656

unadjusted variance      74884.00
adjustment for ties         -2.62
adjustment for zeros         0.00
                         ----------
adjusted variance        74881.38

Ho: new1plat = new2plat
            z =  -3.775
   Prob > |z| =  0.0002
   Exact Prob =  0.0001
```

```
17 .
18 . *HIV negative - dead

19 . signrank new1wcc=new2wcc if hiv2s==0 & outcome==1

    Wilcoxon signed-rank test

          sign |      obs    sum ranks    expected
    ---------------+---------------------------------
      positive |       15         247       232.5
      negative |       15         218       232.5
          zero |        0           0           0
    ---------------+---------------------------------
           all |       30         465         465

    unadjusted variance      2363.75
    adjustment for ties         0.00
    adjustment for zeros        0.00
                            ----------
    adjusted variance        2363.75

    Ho: new1wcc = new2wcc
              z =    0.298
        Prob > |z| =  0.7655
        Exact Prob =  0.7766

20 . signrank new1neut=new2neut if hiv2s==0 & outcome==1

    Wilcoxon signed-rank test

          sign |      obs    sum ranks    expected
    ---------------+---------------------------------
      positive |        8         108         126
      negative |       13         144         126
          zero |        1           1           1
    ---------------+---------------------------------
           all |       22         253         253

    unadjusted variance       948.75
    adjustment for ties         0.00
    adjustment for zeros       -0.25
                            ----------
    adjusted variance         948.50

    Ho: new1neut = new2neut
              z =   -0.584
        Prob > |z| =  0.5589
        Exact Prob =  0.5769

21 . signrank new1band=new2band if hiv2s==0 & outcome==1

    Wilcoxon signed-rank test

          sign |      obs    sum ranks    expected
    ---------------+---------------------------------
      positive |       11         148         125
      negative |        9         102         125
          zero |        2           3           3
    ---------------+---------------------------------
           all |       22         253         253

    unadjusted variance       948.75
    adjustment for ties         0.00
    adjustment for zeros       -1.25
                            ----------
    adjusted variance         947.50

    Ho: new1band = new2band
              z =    0.747
        Prob > |z| =  0.4549
        Exact Prob =  0.4724

22 . signrank band1perc=band2perc if hivs==0 & outcome==1

    Wilcoxon signed-rank test

          sign |      obs    sum ranks    expected
    ---------------+---------------------------------
      positive |       11         121          75
      negative |        4          29          75
          zero |        2           3           3
    ---------------+---------------------------------
           all |       17         153         153

    unadjusted variance       446.25
```

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```
     adjustment for ties       0.00
     adjustment for zeros     -1.25
                             _____
     adjusted variance       445.00

     Ho: band1perc = band2perc
                 z =   2.181
         Prob > |z| =   0.0292
         Exact Prob =   0.0283

23 . signrank new1plat=new2plat if hiv2s==0 & outcome==1

     Wilcoxon signed-rank test

             sign │     obs    sum ranks    expected
     ─────────────┼────────────────────────────────────
          positive │      20         299       217.5
          negative │       9         136       217.5
              zero │       0           0           0
     ─────────────┼────────────────────────────────────
               all │      29         435         435

     unadjusted variance    2138.75
     adjustment for ties       0.00
     adjustment for zeros      0.00
                             _____
     adjusted variance      2138.75

     Ho: new1plat = new2plat
                 z =   1.762
         Prob > |z| =   0.0780
         Exact Prob =   0.0798

24 .
25 .
26 . *HIV positive- alive

27 . signrank new1wcc=new2wcc if hiv2s==1 & outcome==0

     Wilcoxon signed-rank test

             sign │     obs    sum ranks    expected
     ─────────────┼────────────────────────────────────
          positive │      13         191         203
          negative │      15         215         203
              zero │       0           0           0
     ─────────────┼────────────────────────────────────
               all │      28         406         406

     unadjusted variance    1928.50
     adjustment for ties       0.00
     adjustment for zeros      0.00
                             _____
     adjusted variance      1928.50

     Ho: new1wcc = new2wcc
                 z =  -0.273
         Prob > |z| =   0.7847
         Exact Prob =   0.7966

28 . signrank new1neut=new2neut if hiv2s==1 & outcome==0

     Wilcoxon signed-rank test

             sign │     obs    sum ranks    expected
     ─────────────┼────────────────────────────────────
          positive │       2          14        38.5
          negative │       9          63        38.5
              zero │       1           1           1
     ─────────────┼────────────────────────────────────
               all │      12          78          78

     unadjusted variance     162.50
     adjustment for ties       0.00
     adjustment for zeros     -0.25
                             _____
     adjusted variance       162.25

     Ho: new1neut = new2neut
                 z =  -1.923
         Prob > |z| =   0.0544
         Exact Prob =   0.0576

29 . signrank new1band=new2band if hiv2s==1 & outcome==0

     Wilcoxon signed-rank test
```

```
         sign │    obs    sum ranks    expected
──────────────┼───────────────────────────────────
     positive │      8          63         38.5
     negative │      3          14         38.5
         zero │      1           1            1
──────────────┼───────────────────────────────────
          all │     12          78           78
```

unadjusted variance     162.50
adjustment for ties        0.00
adjustment for zeros      -0.25
                       ─────────
adjusted variance       162.25

Ho: new1band = new2band
            z =   1.923
   Prob > |z| =   0.0544
   Exact Prob =   0.0576

30 . signrank band1perc=band2perc if hivs==1 & outcome==0

   Wilcoxon signed-rank test

```
         sign │    obs    sum ranks    expected
──────────────┼───────────────────────────────────
     positive │      4          14            7
     negative │      0           0            7
         zero │      1           1            1
──────────────┼───────────────────────────────────
          all │      5          15           15
```

unadjusted variance      13.75
adjustment for ties        0.00
adjustment for zeros      -0.25
                       ─────────
adjusted variance        13.50

Ho: band1perc = band2perc
            z =   1.905
   Prob > |z| =   0.0568
   Exact Prob =   0.1250

31 . signrank new1plat=new2plat if hiv2s==1 & outcome==0

   Wilcoxon signed-rank test

```
         sign │    obs    sum ranks    expected
──────────────┼───────────────────────────────────
     positive │     10         111          203
     negative │     18         295          203
         zero │      0           0            0
──────────────┼───────────────────────────────────
          all │     28         406          406
```

unadjusted variance    1928.50
adjustment for ties      -0.25
adjustment for zeros      0.00
                       ─────────
adjusted variance      1928.25

Ho: new1plat = new2plat
            z =  -2.095
   Prob > |z| =   0.0362
   Exact Prob =   0.0352

32 .
33 . *HIV positive - dead

34 . signrank new1wcc=new2wcc if hiv2s==1 & outcome==1

   Wilcoxon signed-rank test

```
         sign │    obs    sum ranks    expected
──────────────┼───────────────────────────────────
     positive │     11          86         85.5
     negative │      7          85         85.5
         zero │      0           0            0
──────────────┼───────────────────────────────────
          all │     18         171          171
```

unadjusted variance     527.25
adjustment for ties        0.00
adjustment for zeros       0.00
                       ─────────
adjusted variance       527.25

```
Ho: new1wcc = new2wcc
            z =   0.022
   Prob > |z| =   0.9826
   Exact Prob =   1.0000
```

35 . signrank new1neut=new2neut if hiv2s==1 & outcome==1

Wilcoxon signed-rank test

| sign | obs | sum ranks | expected |
|---|---|---|---|
| positive | 9 | 66 | 52.5 |
| negative | 5 | 39 | 52.5 |
| zero | 0 | 0 | 0 |
| all | 14 | 105 | 105 |

```
unadjusted variance      253.75
adjustment for ties        0.00
adjustment for zeros       0.00
                        _____
adjusted variance        253.75

Ho: new1neut = new2neut
            z =   0.847
   Prob > |z| =   0.3967
   Exact Prob =   0.4263
```

36 . signrank new1band=new2band if hiv2s==1 & outcome==1

Wilcoxon signed-rank test

| sign | obs | sum ranks | expected |
|---|---|---|---|
| positive | 7 | 54 | 52 |
| negative | 6 | 50 | 52 |
| zero | 1 | 1 | 1 |
| all | 14 | 105 | 105 |

```
unadjusted variance      253.75
adjustment for ties        0.00
adjustment for zeros      -0.25
                        _____
adjusted variance        253.50

Ho: new1band = new2band
            z =   0.126
   Prob > |z| =   0.9000
   Exact Prob =   0.9272
```

37 . signrank band1perc=band2perc if hivs==1 & outcome==1

Wilcoxon signed-rank test

| sign | obs | sum ranks | expected |
|---|---|---|---|
| positive | 3 | 8 | 7.5 |
| negative | 2 | 7 | 7.5 |
| zero | 0 | 0 | 0 |
| all | 5 | 15 | 15 |

```
unadjusted variance       13.75
adjustment for ties        0.00
adjustment for zeros       0.00
                        _____
adjusted variance         13.75

Ho: band1perc = band2perc
            z =   0.135
   Prob > |z| =   0.8927
   Exact Prob =   1.0000
```

38 . signrank new1plat=new2plat if hiv2s==1 & outcome==1

Wilcoxon signed-rank test

| sign | obs | sum ranks | expected |
|---|---|---|---|
| positive | 8 | 73 | 76.5 |
| negative | 9 | 80 | 76.5 |
| zero | 0 | 0 | 0 |
| all | 17 | 153 | 153 |

```
    unadjusted variance          446.25
    adjustment for ties           -0.12
    adjustment for zeros           0.00
                               _____
    adjusted variance            446.12

    Ho: new1plat = new2plat
                  z =   -0.166
       Prob > |z| =    0.8684
       Exact Prob =    0.8803

 39 .
 40 .
```