```
STaTa®
Statistics/Data Analysis
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```
      name:  <unnamed>
       log:  C:\Users\Zhou Xiaoxiang\Downloads\Stata12.0\Trim_and_fill_record.smcl
  log type:  smcl
 opened on:   7 Dec 2019, 09:08:39
```

1 . use "C:\Users\Zhou Xiaoxiang\Desktop\Any OS.dta", clear

2 . metan log_HR log_down log_upper, label(namevar=Study) random eform

```
              Study │     ES    [95% Conf. Interval]    % Weight
--------------------+-------------------------------------------------
Keller, 2016        │   0.423     0.243      0.735        4.26
Haratani, 2017      │   0.285     0.102      0.675        2.46
Kim, 2017           │   0.110     0.010      0.920        0.61
Judd, 2017          │   0.480     0.227      1.107        3.04
Osorio, 2017        │   0.290     0.090      0.940        1.82
Nakamura, 2017      │   0.160     0.030      0.790        1.08
Grangeon, 2018      │   0.290     0.180      0.460        4.78
Toi, 2018           │   0.420     0.240      0.710        4.33
Rogado, 2018        │   0.909     0.625      1.429        5.13
Ricciuti, 2018      │   0.380     0.260      0.560        5.32
Ksienski, 2018      │   0.850     0.500      1.420        4.45
Ksienski, 2018      │   2.290     1.050      4.980        3.10
Faje, 2018          │   0.530     0.360      0.750        5.43
Indini, 2018        │   0.390     0.180      0.810        3.22
Lesueur, 2018       │   0.640     0.377      1.087        4.41
Owen, 2018          │   0.364     0.203      0.649        4.10
Lisberg, 2018       │   0.720     0.490      1.050        5.34
Okada, 2019         │   0.010     0.000      0.880        0.16
Lei, 2019           │   0.400     0.190      0.850        3.23
Cortellini, 2019    │   0.550     0.410      0.720        5.95
Ahn, 2019           │   0.484     0.255      0.919        3.77
Berner, 2019        │   0.290     0.120      0.710        2.66
Verzoni, 2019       │   0.570     0.350      0.930        4.66
Yamauchi, 2019      │   0.610     0.390      0.930        5.00
Bjornhart, 2019     │   0.470     0.210      1.050        2.99
Moel, 2019          │   1.120     0.700      1.790        4.78
Lang, 2019          │   1.320     0.710      2.440        3.90
--------------------+-------------------------------------------------
D+L pooled ES       │   0.541     0.450      0.651      100.00
--------------------+-------------------------------------------------
```

 Heterogeneity calculated by formula
   $Q = SIGMA\_i\{ (1/variance\_i)*(effect\_i - effect\_pooled)^2 \}$
 where $variance\_i = ((upper\ limit - lower\ limit)/(2*z))^2$

   Heterogeneity chi-squared = **68.72** (d.f. = **26**) p = **0.000**
   I-squared (variation in ES attributable to heterogeneity) = **62.2%**
   Estimate of between-study variance Tau-squared = **0.1285**

   Test of ES=1 : z=   **6.52** p = **0.000**

3 . metatrim log_HR selog_HR, reffect eform funnel

  Note: default data input format (theta, se_theta) assumed.

  Meta-analysis

```
        │  Pooled      95% CI          Asymptotic        No. of
 Method │    Est    Lower    Upper   z_value  p_value     studies
 -------+----------------------------------------------------------
 Fixed  │  -0.577  -0.682   -0.473  -10.862    0.000        27
 Random │  -0.614  -0.799   -0.429   -6.516    0.000
```

  Test for heterogeneity: Q= **68.723** on **26** degrees of freedom (p= **0.000**)
  Moment-based estimate of between studies variance = **0.129**

  Trimming estimator: **Linear**
  Meta-analysis type: **Random-effects model**

```
iteration │  estimate    Tn    # to trim     diff
----------+------------------------------------------
        1 │   -0.614    131         0         378
        2 │   -0.614    131         0           0
```

Note: no trimming performed; data unchanged

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Meta-analysis (exponential form)

```
        │  Pooled      95% CI        Asymptotic     No. of
 Method │    Est   Lower   Upper   z_value  p_value  studies
--------+---------------------------------------------------
 Fixed  │  0.561   0.506   0.623  -10.862    0.000     27
 Random │  0.541   0.450   0.651   -6.516    0.000
```

Test for heterogeneity: Q= 68.723 on 26 degrees of freedom (p= 0.000)
Moment-based estimate of between studies variance =   0.129

```
4 . log close
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     log type:  smcl
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