R documentation

of all in '`./man`'

October 24, 2024

R topics documented:

`combine` *Title*

Description

Title

Usage

```
combine(A, B)
```

Arguments

B

Examples

```
A <- matrix(c(1, 0.8, 0.8, 1), nrow = 2, ncol = 2, byrow = TRUE)
combine(A, A)

A <- c(1, 2, 3)
B <- c(4, 5, 6)
combine(A, B)
```

`getN_Bin_Equi` *Title*

Description

Title

Usage

```
getN_Bin_Equi(p1, p0, cut, alpha, beta, N, r, maxN = 1e+06)
```

Arguments

maxN

Examples

```
(v <- getN_Bin_Noninf(
  p1 = 0.4, p0 = 0.45, cut = 0.2, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Bin_Noninf(
  p1 = 0.4, p0 = 0.45, cut = 0.2, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Bin_Equi_JM1 *Title*

Description

Title

Usage

```
getN_Bin_Equi_JM1(p1_j, p0_j, p1_nj, p0_nj, pi, cut, beta1, N, r)
```

Arguments

```
r
```

Examples

```
getN_Bin_Equi_JM1(
  p1_j = 0.4, p0_j = 0.5, p1_nj = 0.4, p0_nj = 0.4,
  pi = 0.5, cut = 0.3, beta1 = 0.2, N = seq(100, 400, 100), r = 1
)
```

getN_Bin_Noninf *Title*

Description

Title

Usage

```
getN_Bin_Noninf(p1 = p1, p0 = p0, cut, alpha, beta, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
(v <- getN_Bin_Noninf(
  p1 = 0.4, p0 = 0.45, cut = 0.2, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Bin_Noninf(
  p1 = 0.4, p0 = 0.45, cut = 0.2, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Bin_Noninf_JM1 *Title*

Description

Title

Usage

```
getN_Bin_Noninf_JM1(p1_j, p0_j, p1_nj, p0_nj, pi, cut, beta1, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
getN_Bin_Noninf_JM1(
  p1_j = 0.4, p0_j = 0.5, p1_nj = 0.4, p0_nj = 0.4,
  pi = 0.5, cut = 0.3, beta1 = 0.2, N = seq(100, 400, 100), r = 1, direct = 1
)
```

getN_Bin_Super *Title*

Description

Title

Usage

```
getN_Bin_Super(p1, p0, alpha, beta, N, r)
```

Arguments

```
r
```

Examples

```
(v <- getN_Bin_Super(
  p1 = 0.4, p0 = 0.2, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Bin_Super(
  p1 = 0.4, p0 = 0.2, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Bin_Super_JM1 *Title*

Description

Title

Usage

```
getN_Bin_Super_JM1(p1_j, p0_j, p1_nj, p0_nj, pi, beta1, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
getN_Bin_Super_JM1(
  p1_j = 0.6, p0_j = 0.4, p1_nj = 0.7, p0_nj = 0.4,
  pi = 0.5, beta1 = 0.2, N = seq(100, 400, 100), r = 1, direct = 1
)
```

getN_Con_Equi *Title*

Description

Title

Usage

```
getN_Con_Equi(delta, sigma, cut, alpha, beta, N, r, maxN = 1e+06)
```

Arguments

```
maxN
```

Examples

```
(v <- getN_Con_Equi(
  delta = 0, sigma = 2, cut = 1, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Con_Equi(
  delta = 0, sigma = 2, cut = 1, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Con_Equi_JM1 *Title*

Description

Title

Usage

```
getN_Con_Equi_JM1(delta_j, delta_nj, sigma, pi, cut, beta1, N, r)
```

Arguments

```
r
```

Examples

```
getN_Con_Equi_JM1(
  delta_j = -0.1, delta_nj = 0, sigma = 1,
  pi = 0.5, cut = 0.3, beta1 = 0.2,
  N = seq(100, 400, 100), r = 1
)
```

getN_Con_Noninf *Title*

Description

Title

Usage

```
getN_Con_Noninf(delta, sigma, cut, alpha, beta, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
(v <- getN_Con_Noninf(
  delta = 0, sigma = 2, cut = 1, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Con_Noninf(
  delta = 0, sigma = 2, cut = 1, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Con_Noninf_JM1 *Title*

Description

Title

Usage

```
getN_Con_Noninf_JM1(delta_j, delta_nj, sigma, pi, cut, beta1, N, r, direct = 1)
```

Arguments

direct

Examples

```
getN_Con_Noninf_JM1(
  delta_j = -0.1, delta_nj = 0, sigma = 1,
  pi = 0.5, cut = 0.3, beta1 = 0.2,
  N = seq(100, 400, 100), r = 1, direct = 1
)
```

getN_Con_Super *Title*

Description

Title

Usage

```
getN_Con_Super(delta, sigma, alpha, beta, N, r)
```

Arguments

r

Examples

```
(v <- getN_Con_Super(
  delta = 1, sigma = 4, alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Con_Super(
  delta = 1, sigma = 4, alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Con_Super_JM1 *Title*

Description

Title

Usage

```
getN_Con_Super_JM1(delta_j, delta_nj, sigma, pi, beta1, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
getN_Con_Super_JM1(
  delta_j = 0.5, delta_nj = 0.7, sigma = 1,
  pi = 0.5, beta1 = 0.2, N = seq(100, 400, 100), r = 1, direct = 1
)
```

getN_Surv_Equi *Title*

Description

Title

Usage

```
getN_Surv_Equi(delta, cut, alpha, beta, N, r, maxN = 1e+06)
```

Arguments

```
maxN
```

Examples

```
(v <- getN_Surv_Equi(
  delta = log(1.1), cut = log(1.2), alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Surv_Equi(
  delta = log(1.1), cut = log(1.2), alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Surv_Equi_JM1 *Title*

Description

Title

Usage

```
getN_Surv_Equi_JM1(delta_j, delta_nj, pi, cut, beta1, N, r)
```

Arguments

```
r
```

Examples

```
getN_Surv_Equi_JM1(
  delta_j = log(1.1), delta_nj = log(1.0),
  pi = 0.5, cut = log(1.3), beta1 = 0.2, N = seq(400, 800, 200),
  r = 1
)
```

getN_Surv_Noninf *Title*

Description

Title

Usage

```
getN_Surv_Noninf(delta, cut, alpha, beta, N, r, direct = 1)
```

Arguments

```
direct
```

Examples

```
(v <- getN_Surv_Noninf(
  delta = log(1.1), cut = log(1.2), alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Surv_Noninf(
  delta = log(1.1), cut = log(1.2), alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Surv_Noninf_JM1 *Title*

Description

Title

Usage

```
getN_Surv_Noninf_JM1(delta_j, delta_nj, pi, cut, beta1, N, r, direct = -1)
```

Arguments

```
direct
```

Examples

```
getN_Surv_Noninf_JM1(
  delta_j = log(1.1), delta_nj = log(1.0),
  pi = 0.5, cut = log(1.3), beta1 = 0.2, N = seq(400, 800, 200),
  r = 1, direct = -1
)
```

getN_Surv_Super *Title*

Description

Title

Usage

```
getN_Surv_Super(delta, alpha, beta, N, r)
```

Arguments

```
r
```

Examples

```
(v <- getN_Surv_Super(
  delta = log(0.8), alpha = 0.025,
  beta = 0.2, N = NA, r = 1
))
getN_Surv_Super(
  delta = log(0.8), alpha = 0.025,
  beta = NA, N = v$N, r = 1
)
```

getN_Surv_Super_JM1 *Title*

Description

Title

Usage

```
getN_Surv_Super_JM1(delta_j, delta_nj, pi, beta1, N, r, criterion, direct = -1)
```

Arguments

```
direct
```

Examples

```
getN_Surv_Super_JM1(
  delta_j = log(0.8), delta_nj = log(0.7),
  pi = 0.5, beta1 = 0.2, N = seq(400, 800, 200),
  criterion = c(1, 2), r = 1, direct = -1
)
```

getPwr_Bin_Equi_JM1 *Title*

Description

Title

Usage

```
getPwr_Bin_Equi_JM1(
  p1_j,
  p0_j,
  p1_nj,
  p0_nj,
  f,
  pi,
  cut,
  alpha,
  N,
  r,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

```
seed
```

Examples

```
getPwr_Bin_Equi_JM1(
  p1_j = 0.55, p0_j = 0.65, p1_nj = 0.65, p0_nj = 0.65,
  f = seq(0.1, 0.9, 0.1), pi = 0.5,
  cut = 0.2, alpha = 0.025, N = 400, r = 1, sim = FALSE
)
```

---

getPwr_Bin_Equi_JM2 *Title*

Description

Title

Usage

```
getPwr_Bin_Equi_JM2(
  pt_i,
  pc_i,
  fi,
  cut,
  alpha,
  N,
  r,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Bin_Equi_JM2(
    pt_i = c(0.5, 0.6),
    pc_i = c(0.6, 0.6),
    fi = c(f, 1 - f), cut = 0.3,
    alpha = 0.025, N = 100, r = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

getPwr_Bin_Noninf_JM1 *Title*

Description

Title

Usage

```
getPwr_Bin_Noninf_JM1(
  p1_j,
  p0_j,
  p1_nj,
  p0_nj,
  f,
  pi,
  cut,
  alpha,
  N,
  r,
  direct = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
getPwr_Bin_Noninf_JM1(
  p1_j = 0.55, p0_j = 0.65, p1_nj = 0.65, p0_nj = 0.65,
  f = seq(0.1, 0.9, 0.1), pi = 0.5,
  cut = 0.2, alpha = 0.025, N = 400, r = 1,
  direct = 1, sim = FALSE
)
```

getPwr_Bin_Noninf_JM2 *Title*

Description

Title

Usage

```
getPwr_Bin_Noninf_JM2(
  pt_i,
  pc_i,
  fi,
  cut,
  alpha,
  N,
  r,
  direct = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Bin_Noninf_JM2(
    pt_i = c(0.5, 0.6),
    pc_i = c(0.6, 0.6),
    fi = c(f, 1 - f), cut = 0.3,
    alpha = 0.025, N = 100, r = 1, direct = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

---

getPwr_Bin_Super_JM1 *Title*

Description

Title

Usage

```
getPwr_Bin_Super_JM1(
  p1_j,
  p0_j,
  p1_nj,
  p0_nj,
  f,
  pi,
  alpha,
```

```
  N,
  r,
  direct,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
getPwr_Bin_Super_JM1(
  p1_j = 0.35, p0_j = 0.5, p1_nj = 0.25, p0_nj = 0.5,
  f = seq(0.1, 0.9, 0.1),
  pi = 0.5, alpha = 0.025, N = 200, r = 1, direct = -1, sim = FALSE
)
```

---

getPwr_Bin_Super_JM2 *Title*

Description

Title

Usage

```
getPwr_Bin_Super_JM2(
  pt_i,
  pc_i,
  fi,
  alpha,
  N,
  r,
  direct = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Bin_Super_JM2(
    pt_i = c(0.3, 0.4),
```

```
    pc_i = c(0.6, 0.6),
    fi = c(f, 1 - f),
    alpha = 0.025, N = 100, r = 1, direct = -1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

---

getPwr_Con_Equi_JM1 *Title*

Description

Title

Usage

```
getPwr_Con_Equi_JM1(
  delta_j,
  delta_nj,
  sigma,
  f,
  pi = 0.5,
  cut,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0,
  numcore = 2
)
```

Arguments

numcore

Examples

```
getPwr_Con_Equi_JM1(
  delta_j = -0.2, delta_nj = -0.1, sigma = 1,
  f = seq(0.1, 0.9, 0.1), pi = 0.5, cut = 0.4, alpha = 0.025, beta = NA,
  N = 400, r = 1, sim = FALSE
)
getPwr_Con_Equi_JM1(
  delta_j = -0.2, delta_nj = -0.1, sigma = 1,
  f = seq(0.1, 0.9, 0.1), pi = 0.5, cut = 0.4, alpha = 0.025, beta = 0.2,
  N = NA, r = 1, sim = FALSE
)
```

getPwr_Con_Equi_JM2 *Title*

Description

Title

Usage

```
getPwr_Con_Equi_JM2(
  delta_i,
  sigma,
  fi,
  cut,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Con_Equi_JM2(
    delta_i = c(-0.5, 0), sigma = 4,
    fi = c(f, 1 - f), cut = 2,
    alpha = 0.025, beta = NA, N = 200, r = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})

f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Con_Equi_JM2(
    delta_i = c(-0.5, 0), sigma = 4,
    fi = c(f, 1 - f), cut = 2,
    alpha = 0.025, beta = 0.2, N = NA, r = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

getPwr_Con_Noninf_JM1 *Title*

Description

Title

Usage

```
getPwr_Con_Noninf_JM1(
  delta_j,
  delta_nj,
  sigma,
  f,
  pi = 0.5,
  cut,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  direct = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0,
  numcore = 2
)
```

Arguments

numcore

Examples

```
getPwr_Con_Noninf_JM1(
  delta_j = -0.2, delta_nj = -0.1, sigma = 1,
  f = seq(0.1, 0.9, 0.1), pi = 0.5, cut = 0.4, alpha = 0.025, beta = NA,
  N = 400, r = 1, direct = 1, sim = FALSE
)
getPwr_Con_Noninf_JM1(
  delta_j = -0.2, delta_nj = -0.1, sigma = 1,
  f = seq(0.1, 0.9, 0.1), pi = 0.5, cut = 0.4, alpha = 0.025, beta = 0.2,
  N = NA, r = 1, direct = 1, sim = FALSE
)
```

getPwr_Con_Noninf_JM2 *Title*

Description

Title

Usage

```
getPwr_Con_Noninf_JM2(
  delta_i,
  sigma,
  fi,
  cut,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  direct = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Con_Noninf_JM2(
    delta_i = c(-0.5, 0), sigma = 4,
    fi = c(f, 1 - f), cut = 2,
    alpha = 0.025, beta = NA, N = 200, r = 1, direct = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Con_Noninf_JM2(
    delta_i = c(-0.5, 0), sigma = 4,
    fi = c(f, 1 - f), cut = 2,
    alpha = 0.025, beta = 0.2, N = NA, r = 1, direct = 1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

---

getPwr_Con_Super_JM1 *Title*

Description

Title

Usage

```
getPwr_Con_Super_JM1(
  delta_j,
  delta_nj,
  sigma,
  f,
  pi = 0.5,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0,
  numcore = 2
)
```

Arguments

```
numcore
```

Examples

```
getPwr_Con_Super_JM1(
  delta_j = 0.5, delta_nj = 0.7, sigma = 1,
  f = seq(0.1, 0.9, 0.1),
  pi = 0.5, alpha = 0.025, beta = NA, N = 100, r = 1, sim = FALSE
)
getPwr_Con_Super_JM1(
  delta_j = 0.5, delta_nj = 0.7, sigma = 1,
  f = seq(0.1, 0.9, 0.1),
  pi = 0.5, alpha = 0.025, beta = 0.2, N = NA, r = 1, sim = FALSE
)
```

---

getPwr_Con_Super_JM2 *Title*

Description

Title

Usage

```
getPwr_Con_Super_JM2(
  delta_i,
  sigma,
  fi,
  alpha = 0.025,
  beta = NA,
  N,
  r = 1,
  sim = FALSE,
```

```
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

---

getPwr_Surv_Equi_JM1 *Title*

Description

Title

Usage

```
getPwr_Surv_Equi_JM1(
  delta_j,
  delta_nj,
  f,
  pi,
  cut,
  alpha,
  N,
  r,
  lambda0_j = 1,
  lambda0_nj = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
getPwr_Surv_Equi_JM1(
  delta_j = log(1.1), delta_nj = log(1.0),
  f = seq(0.1, 0.9, 0.1), cut = log(1.3),
  pi = 0.5, alpha = 0.025, N = 400, r = 1, sim = FALSE
)
```

getPwr_Surv_Equi_JM2 *Title*

Description

Title

Usage

```
getPwr_Surv_Equi_JM2(
  delta_i,
  fi,
  cut,
  alpha,
  N,
  r,
  direct = -1,
  lambda0_i = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Surv_Equi_JM2(
    delta_i = c(log(1.1), log(1.0)),
    fi = c(f, 1 - f), cut = log(1.3),
    alpha = 0.025, N = 300, r = 1, direct = -1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

getPwr_Surv_Noninf_JM1 *Title*

Description

Title

Usage

```
getPwr_Surv_Noninf_JM1(
  delta_j,
  delta_nj,
  f,
  pi,
  cut,
  alpha,
  N,
  r,
  direct = -1,
  lambda0_j = 1,
  lambda0_nj = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

```
direct
```

Examples

```
getPwr_Surv_Noninf_JM1(
  delta_j = log(1.1), delta_nj = log(1.0),
  f = seq(0.1, 0.9, 0.1), cut = log(1.3),
  pi = 0.5, alpha = 0.025, N = 400, r = 1,
  direct = -1, sim = FALSE
)
```

---

getPwr_Surv_Noninf_JM2

Title

Description

Title

Usage

```
getPwr_Surv_Noninf_JM2(
  delta_i,
  fi,
  cut,
  alpha,
  N,
  r,
  direct = -1,
  lambda0_i = 1,
  sim = FALSE,
```

```
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Surv_Noninf_JM2(
    delta_i = c(log(1.1), log(1.0)),
    fi = c(f, 1 - f), cut = log(1.3),
    alpha = 0.025, N = 300, r = 1, direct = -1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

---

getPwr_Surv_Super_JM1 *Title*

Description

Title

Usage

```
getPwr_Surv_Super_JM1(
  delta_j,
  delta_nj,
  f,
  pi,
  alpha,
  N,
  r,
  criterion,
  direct = -1,
  lambda0_j = 1,
  lambda0_nj = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
getPwr_Surv_Super_JM1(
  delta_j = log(0.8), delta_nj = log(0.6),
  f = seq(0.1, 0.9, 0.1),
  pi = 0.5, alpha = 0.025, N = 200, r = 1,
  criterion = 1, direct = -1, sim = FALSE
)
```

---

getPwr_Surv_Super_JM2 *Title*

Description

Title

Usage

```
getPwr_Surv_Super_JM2(
  delta_i,
  fi,
  alpha,
  N,
  r,
  direct = -1,
  lambda0_i = 1,
  sim = FALSE,
  nsim = 1000,
  seed = 0
)
```

Arguments

seed

Examples

```
f_set <- seq(0.1, 0.9, 0.1)
map_dfr(.x = 1:length(f_set), .f = function(i) {
  f <- f_set[i]
  res <- getPwr_Surv_Super_JM2(
    delta_i = c(log(0.8), log(0.6)),
    fi = c(f, 1 - f),
    alpha = 0.025, N = 300, r = 1, direct = -1, sim = FALSE
  )$overall
  res$M <- "calc"
  res$f <- f
  res
})
```

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