Package: allelic (via r-universe)

November 15, 2026

Version 0.1.9001

Title A Fast, Unbiased and Exact Allelic Exact Test

Author Karl Forner [aut], Mickael Guedj [cre]

Maintainer Mickael Guedj <guedj@genopole.cnrs.fr>

Description This is the implementation in R+C of a new association test described in ``A fast, unbiased and exact allelic exact test for case-control association studies" (Submitted). It appears that in most cases the classical chi-square test used for testing for allelic association on genotype data is biased. Our test is unbiased, exact but fast throught careful optimization. Compatibility updates by Renova.

License GPL (>= 2)

Repository https://renova-r.r-universe.dev

Date/Publication 2026-11-15 20:24:43 UTC

RemoteUrl https://github.com/renova-r/allelic

RemoteRef renova-0.1.9001

RemoteSha b454f5cd6fb4d1d9fd945d590f8485a84ff8e37f

Contents

allelic.exact.test 1

Index **3**

`allelic.exact.test` *Fast Unbiased Exact Allelic Test*

Description

This is the implementation in R+C of a new association test described in "A fast, unbiased and exact allelic exact test for case-control association studies" (Submitted). It appears that in most cases the classical chi-square test used for testing for allelic association on genotype data is biased. Our test is unbiased, exact but fast throught careful optimization.

Usage

```
allelic.exact.test(d0,d1,d2,h0,h1,h2)
```

Arguments

Takes the 2x3 contingency table on which to compute the test

	aa	aA	AA
[case (diseased)]	d0	d1	d2
[control(healthy)]	h0	h1	h2

`d0`	nb of first homozygous among cases
`d1`	nb of heterozygous among cases
`d2`	nb of second homozygous among cases
`h0`	nb of first homozygous among controls
`h1`	nb of heterozygous among controls
`h2`	nb of second homozygous among controls

Value

return the p-value of the test, or -1 if the sum of all cells in table is greater than `TABLE_OF_LOG_FACTORIALS_SIZE`, a C symbol defined in src/newallelic.c

See Also

`chisq.test`, `fisher.test`

Examples

```
allelic.exact.test(160,80,60,160,160,30)
```

Index

∗ **univar**
allelic.exact.test, 1

allelic.exact.test, 1

chisq.test, *2*

fisher.test, *2*