# Package 'RISmed'

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Title Download Content from NCBI Databases

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mation	f tools to extract bibliographic content from the National Center for Biotechnology Infor- (NCBI) databases, including PubMed. The name RISmed is a portmanteau of RIS (for Re- Information Systems, a common tag format for bibliographic data) and PubMed.
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# Description

Download content from NCBI databases. This package is intended to facilitate analyses of NCBI database content. This package is not intended for reference management.

# **Details**

Package: RISmed
Type: Package
Version: 2.1.3
Date: 2014-7-20
License: GPL (>=2)
LazyLoad: yes

Note on usage:

AbstractText 5

In order not to overload the E-utility servers, NCBI recommends that users post no more than three URL requests per second and limit large jobs to either weekends or between 9:00 PM and 5:00 AM Eastern time during weekdays. Failure to comply with this policy may result in an IP address being blocked from accessing NCBI.

### Author(s)

Maintainer: Stephanie Kovalchik <s.a.kovalchik@gmail.com>

AbstractText

Extracts AbstractText from Medline object.

### **Description**

Extractor for the AbstractText of a Medline object.

# Usage

```
AbstractText(object)
```

#### **Arguments**

object

instance of class Medline

#### Value

vector

#### See Also

Medline

### **Examples**

```
data(myeloma)
AbstractText(myeloma)
```

AbstractText-methods

~~ Methods for Function AbstractText in Package RISmed ~~

#### **Description**

```
~~ Methods for function AbstractText in package RISmed ~~
```

```
signature(object = "Medline")
```

6 Acronym-methods

Acronym

Extracts Acronym from Medline object.

# Description

Extractor for the Acronym of a Medline object.

# Usage

```
Acronym(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
Acronym(myeloma)
```

Acronym-methods

~~ Methods for Function Acronym in Package RISmed ~~

# Description

```
~~ Methods for function Acronym in package RISmed ~~
```

```
signature(object = "Medline")
```

Affiliation 7

Affiliation

Extracts Affiliation from Medline object.

# Description

Extractor for the Affiliation of a Medline object.

# Usage

```
Affiliation(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
Affiliation(myeloma)
```

Affiliation-methods

~~ Methods for Function Affiliation in Package RISmed ~~

# Description

```
~~ Methods for function Affiliation in package RISmed ~~
```

```
signature(object = "Medline")
```

8 Agency-methods

Agency

Extracts Agency from Medline object.

# Description

Extractor for the Agency of a Medline object.

# Usage

```
Agency(object)
```

# **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
Agency(myeloma)
```

Agency-methods

~~ Methods for Function Agency in Package RISmed ~~

# Description

```
~~ Methods for function Agency in package RISmed ~~
```

```
signature(object = "Medline")
```

ArticleId 9

ArticleId

Extracts ArticleId from Medline object.

# Description

Extractor for the  $\mbox{ArticleId}$  of a  $\mbox{Medline}$  object.

# Usage

```
ArticleId(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
ArticleId(myeloma)
```

ArticleId-methods

~~ Methods for Function ArticleId in Package RISmed ~~

# Description

```
~~ Methods for function ArticleId in package RISmed ~~
```

```
signature(object = "Medline")
```

10 ArticleTitle-methods

ArticleTitle

Extracts ArticleTitle from Medline object.

# Description

 $Extractor\ for\ the\ {\tt ArticleTitle}\ of\ a\ {\tt Medline}\ object.$ 

# Usage

```
ArticleTitle(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
ArticleTitle(myeloma)
```

ArticleTitle-methods ~~ Methods for Function ArticleTitle in Package RISmed ~~

# Description

```
~~ Methods for function ArticleTitle in package RISmed ~~
```

```
signature(object = "Medline")
```

Author 11

Author

Extracts Author from Medline object.

# Description

Extractor for the Author of a Medline object.

### Usage

```
Author(object)
```

# Arguments

object

instance of class Medline

#### Value

List by Pubmed article. Each list contains a data frame with LastName, ForeName, Initials, and order of article authors.

#### See Also

Medline

# **Examples**

```
data(myeloma)
Author(myeloma)
```

Author-methods

~~ Methods for Function Author in Package RISmed ~~

# Description

~~ Methods for function Author in package RISmed ~~

### Methods

signature(object = "Medline") List by Pubmed article. Each list contains a data frame with LastName, ForeName, Initials, and order of article authors. 12 Cited-methods

Cited

Number of citations

# Description

Retrieves the number of citations in PubMed Central for the articles contained in the EUtilsSummary or Medline object.

# Usage

```
Cited(object)
```

# Arguments

object

instance of class Medline or EUtilsSummary

#### Value

vector

#### See Also

```
Medline, EUtilsSummary
```

# **Examples**

```
res <- EUtilsSummary("myeloma[ti]", mindate = "2002/01/01", maxdate = "2002/02/01", retmax = 5)
Cited(res)</pre>
```

Cited-methods

~~ Methods for Function Cited in Package RISmed ~~

# Description

```
~~ Methods for function Cited in package RISmed ~~
```

```
signature(object = "Medline")
```

CollectiveName 13

 ${\tt CollectiveName}$ 

Extracts CollectiveName from Medline object.

# Description

Extractor for the CollectiveName of a Medline object.

# Usage

```
CollectiveName(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

### See Also

Medline

CollectiveName-methods

~~ Methods for Function CollectiveName in Package RISmed ~~

# Description

```
~~ Methods for function CollectiveName in package RISmed ~~
```

```
signature(object = "Medline")
```

CopyrightInformation Extracts CopyrightInformation from Medline object.

### **Description**

Extractor for the CopyrightInformation of a Medline object.

### Usage

```
CopyrightInformation(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### See Also

Medline

# **Examples**

```
data(myeloma)
CopyrightInformation(myeloma)
```

 ${\tt CopyrightInformation-methods}$ 

~~ Methods for Function CopyrightInformation in Package RISmed ~~

# Description

~~ Methods for function CopyrightInformation in package RISmed ~~

```
signature(object = "Medline")
```

Country 15

Country

Extracts Country from Medline object.

# Description

Extractor for the Country of a Medline object.

# Usage

```
Country(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
Country(myeloma)
```

Country-methods

~~ Methods for Function Country in Package RISmed ~~

# Description

```
~~ Methods for function Country in package RISmed ~~
```

```
signature(object = "Medline")
```

DayAccepted

Extracts DayAccepted from Medline object.

# Description

Extractor for the DayAccepted of a Medline object. This date corresponds to the date the article was accepted.

# Usage

```
DayAccepted(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

# See Also

Medline

# **Examples**

```
data(myeloma)
DayAccepted(myeloma)
```

DayAccepted-methods

~~ Methods for Function DayAccepted in Package RISmed ~~

# Description

```
~~ Methods for function DayAccepted in package RISmed ~~
```

```
signature(object = "Medline")
```

DayEpublish 17

 ${\tt DayEpublish}$ 

Extracts DayEpublish from Medline object.

# Description

Extractor for the DayEpublish of a Medline object. This date corresponds to the date the article was published online.

# Usage

```
DayEpublish(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
DayEpublish(myeloma)
```

DayEpublish-methods

~~ Methods for Function DayEpublish in Package RISmed ~~

# Description

```
~~ Methods for function DayEpublish in package RISmed ~~
```

```
signature(object = "Medline")
```

DayPmc-methods

DayPmc

Extracts DayPmc from Medline object.

# Description

Extractor for the DayPmc of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

# Usage

```
DayPmc(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
DayPmc(myeloma)
```

DayPmc-methods

~~ Methods for Function DayPmc in Package RISmed ~~

# Description

```
~~ Methods for function DayPmc in package RISmed ~~
```

```
signature(object = "Medline")
```

DayPpublish 19

 ${\tt DayPpublish}$ 

Extracts DayPpublish from Medline object.

# Description

Extractor for the DayPpublish of a Medline object. This date corresponds to the date the article was published in print.

# Usage

```
DayPpublish(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
DayPpublish(myeloma)
```

DayPpublish-methods

~~ Methods for Function DayPpublish in Package RISmed ~~

# Description

```
~~ Methods for function DayPpublish in package RISmed ~~
```

```
signature(object = "Medline")
```

20 DayPubmed-methods

DayPubmed

Extracts DayPubmed from Medline object.

# Description

Extractor for the DayPubmed of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

# Usage

```
DayPubmed(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
DayPubmed(myeloma)
```

DayPubmed-methods

~~ Methods for Function DayPubmed in Package RISmed ~~

# Description

```
~~ Methods for function DayPubmed in package RISmed ~~
```

```
signature(object = "Medline")
```

DayReceived 21

DayReceived

Extracts DayReceived from Medline object.

# Description

Extractor for the DayReceived of a Medline object. This date corresponds to the date the article was received.

# Usage

```
DayReceived(object)
```

# Arguments

object

instance of class Medline

#### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
DayReceived(myeloma)
```

DayReceived-methods

~~ Methods for Function DayReceived in Package RISmed ~~

# Description

```
~~ Methods for function DayReceived in package RISmed ~~
```

```
signature(object = "Medline")
```

22 ELocationID-methods

ELocationID

Extracts ELocationID from Medline object.

# Description

 $\label{prop:extractor} Extractor\ for\ the\ {\tt ELocationID}\ of\ a\ {\tt Medline}\ object.$ 

# Usage

```
ELocationID(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
ELocationID(myeloma)
```

ELocationID-methods

~~ Methods for Function ELocationID in Package RISmed ~~

# Description

```
~~ Methods for function ELocationID in package RISmed ~~
```

```
signature(object = "Medline")
```

EUtilsGet 23

EUtilsGet Results of an NCBI EUtils query
---

### **Description**

Download results of a query for any database of the National Center for Biotechnology Information (NCBI).

#### Usage

```
EUtilsGet(x,type="efetch",db="pubmed")
```

#### **Arguments**

х	$Either\ vector\ of\ NCBI\ records\ ids,\ i.e.\ returned\ ids\ from\ EUtilsSummary,\ or\ the\ EUtilsSummary\ object\ itself$
type	string indicating type of NCBI Eutility, efetch, esummary, etc.
db	string indicating the NCBI database used in query

#### **Details**

Possible E-utilities to supply to type are efetch, esummary, and elink.

The database name supplied to db can be any valid Entrez database, such as pubmed, protein, nlm, etc.

For further details on available E-utilities and databases visit <a href="http://www.ncbi.nlm.nih.gov/books/NBK25499/">http://www.ncbi.nlm.nih.gov/books/NBK25499/</a>.

Note on usage:

In order not to overload the E-utility servers, NCBI recommends that users post no more than three URL requests per second and limit large jobs to either weekends or between 9:00 PM and 5:00 AM Eastern time during weekdays. Failure to comply with this policy may result in an IP address being blocked from accessing NCBI.

#### Value

For queries to PubMed, a list by article, with named vectors for each field of the article result.

For all other database, a vector with each element name the field returned from XML output.

### Author(s)

Stephanie Kovalchik <s.a.kovalchik@gmail.com>

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#### References

```
Summary help:
```

http://www.ncbi.nlm.nih.gov/books/NBK3827/

MEDLINE/PubMed Field Descriptions

http://www.nlm.nih.gov/bsd/mms/medlineelements.html

#### See Also

**EUtilsSummary** 

### **Examples**

```
# PUBMED QUERY FOR MYELOMA ARTICLES FOR LAST YEAR
res <- EUtilsSummary("myeloma[ti]",retmax=2,reldate=365)
summary(res)
fetch <- EUtilsGet(res)
# PUBMED RETURNS A MEDLINE OBJECT
fetch
PMID(fetch)
Author(fetch)[[1]]</pre>
```

EUtilsQuery

Construct URL to make NCBI EUtils query

# Description

Construct a URL query for any database of the National Center for Biotechnology Information (NCBI).

#### Usage

```
EUtilsQuery(query,type="esearch",db="pubmed",...)
```

### Arguments

query string query as given in NCBI search box type string indicating type of NCBI Eutility

db string indicating the NCBI database used in query

... additional limits added to query

EUtilsQuery 25

#### **Details**

Possible E-utilities to supply to type are einfo, esearch, epost, esummary, elink, egquery, espell.

The database name supplied to db can be any valid Entrez database, such as pubmed, protein, nlm, etc.

For further details on available E-utilities and databases visit http://www.ncbi.nlm.nih.gov/books/NBK25499/.

Limits that can be supplied to . . . to refine the query include:

reldate Limits search results to be within the specified number of days from current date.

mindate Minimum of date range for search results (examples: 2002; 2002/01/01); must be supplied with maxdate.

maxdate Maximum of date range for search results; must be supplied with mindate.

datetype Which date field to use in setting date limits. Possible choices are edat, Entrez date, which is the date article was

retstart Where in the sequence of returned results to begin retrieving, default is 0.

retmax Maximum number of records to retrieve, default is 1000.

#### Value

String URL to access NCBI E-utility.

#### Author(s)

Stephanie Kovalchik <s.a.kovalchik@gmail.com>

#### References

```
Query help:
```

```
http://www.ncbi.nlm.nih.gov/books/NBK3827/
```

MEDLINE/PubMed Field Descriptions

http://www.nlm.nih.gov/bsd/mms/medlineelements.html

```
# PUBMED QUERY
EUtilsQuery("myeloma[ti] jones[au]")
# RESTRICT TO RECORDS WITHIN LAST 30 days
EUtilsQuery("myeloma[ti] jones[au]",reldat=30)
```

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EUtilsSummary	Get summary of NCBI EUtils query	
---------------	----------------------------------	--

### **Description**

Get summary information on the results of a query for any database of the National Center for Biotechnology Information (NCBI).

# Usage

```
EUtilsSummary(query,type="esearch",db="pubmed",url=NULL,encoding="unknown",...)
```

### **Arguments**

query	string query as given in NCBI search box
type	string indicating type of NCBI Eutility
db	string indicating the NCBI database used in query
url	string of url to bypass query construction
	1

encoding to be assumed for input strings, see readLines

. . . additional limits added to query

#### **Details**

Possible E-utilities to supply to type are einfo, esearch, epost, esummary, elink, egquery, espell.

The database name supplied to db can be any valid Entrez database, such as pubmed, protein, nlm, etc.

For further details on available E-utilities and databases visit <a href="http://www.ncbi.nlm.nih.gov/books/NBK25499/">http://www.ncbi.nlm.nih.gov/books/NBK25499/</a>.

Limits that can be supplied to ... to refine the guery include:

reldate	Limits search results to be within the specified number of days from current date.
mindate	Minimum of date range for search results (examples: 2002; 2002/01/01); must be supplied with maxdate.
maxdate	Maximum of date range for search results; must be supplied with mindate.
datetype	Which date field to use in setting date limits. Possible choices are edat, Entrez date, which is the date article was
retstart	Where in the sequence of returned results to begin retrieving, default is 0.
retmax	Maximum number of records to retrieve, default is 1000.

### Value

Returns an EUtilsSummary object.

#### Author(s)

Stephanie Kovalchik <s.a.kovalchik@gmail.com>

EUtilsSummary-class 27

#### References

```
Summary help:
http://www.ncbi.nlm.nih.gov/books/NBK3827/
MEDLINE/PubMed Field Descriptions
http://www.nlm.nih.gov/bsd/mms/medlineelements.html
```

#### See Also

```
EUtilsQuery
```

### **Examples**

```
# PUBMED QUERY
res <- EUtilsSummary("myeloma[ti] jones[au]", retmax = 10)
res
summary(res)
QueryCount(res)
QueryId(res)
QueryTranslation(res)
# PROTEIN QUERY
res <- EUtilsSummary("C-reactive[ti]",db="protein", retmax = 10)
summary(res)</pre>
```

EUtilsSummary-class Class "EUtilsSummary"

### **Description**

Summary of query of an NCBI E-utility

### **Objects from the Class**

Objects can be created by calls of the form new("EUtilsSummary", ...).

#### **Slots**

```
db: Name of database
count: total ids
retmax: limit on number of records to return
retstart: numeric indicating where return records start
PMID: character vector of matching ids
querytranslation: character of NCBI translation of query
```

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### Methods

```
QueryCount signature(object = "EUtilsSummary"): ...
QueryId signature(object = "EUtilsSummary"): ...
print signature(x = "EUtilsSummary"): ...
show signature(object = "EUtilsSummary"): ...
summary signature(object = "EUtilsSummary"): ...
QueryTranslation signature(object = "EUtilsSummary"): ...
```

### Author(s)

Stephanie Kovalchik

GrantID

Extracts GrantID from Medline object.

### **Description**

Extractor for the GrantID of a Medline object.

### Usage

```
GrantID(object)
```

### **Arguments**

object

instance of class Medline

#### Value

vector

### See Also

Medline

```
data(myeloma)
GrantID(myeloma)
```

GrantID-methods 29

GrantID-methods

~~ Methods for Function GrantID in Package RISmed ~~

### **Description**

~~ Methods for function GrantID in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

HourAccepted

Extracts HourAccepted from Medline object.

# Description

Extractor for the HourAccepted of a Medline object. This date corresponds to the date the article was accepted.

#### Usage

HourAccepted(object)

# Arguments

object

instance of class Medline

#### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

#### See Also

Medline

```
data(myeloma)
HourAccepted(myeloma)
```

30 HourEpublish

HourAccepted-methods ~~ Methods f

~~ Methods for Function HourAccepted in Package RISmed ~~

### Description

~~ Methods for function HourAccepted in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

 ${\it HourEpublish}$ 

Extracts HourEpublish from Medline object.

# Description

Extractor for the HourEpublish of a Medline object. This date corresponds to the date the article was published online.

#### Usage

```
HourEpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

#### See Also

Medline

```
data(myeloma)
HourEpublish(myeloma)
```

HourEpublish-methods

~~ Methods for Function HourEpublish in Package RISmed ~~

### Description

~~ Methods for function HourEpublish in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

HourPmc

Extracts HourPmc from Medline object.

# Description

Extractor for the HourPmc of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

HourPmc(object)

# Arguments

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

#### See Also

Medline

```
data(myeloma)
HourPmc(myeloma)
```

32 HourPpublish

HourPmc-methods

~~ Methods for Function HourPmc in Package RISmed ~~

### Description

```
~~ Methods for function HourPmc in package RISmed ~~
```

#### Methods

```
signature(object = "Medline")
```

HourPpublish

Extracts HourPpublish from Medline object.

# Description

Extractor for the HourPpublish of a Medline object. This date corresponds to the date the article was published in print.

#### Usage

```
HourPpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

#### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

#### See Also

Medline

```
data(myeloma)
HourPpublish(myeloma)
```

HourPpublish-methods

HourPpublish-methods ~~ Methods for Function HourPpublish in Package RISmed ~~

### **Description**

~~ Methods for function HourPpublish in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

HourPubmed

Extracts HourPubmed from Medline object.

# Description

Extractor for the HourPubmed of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

```
HourPubmed(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

#### See Also

Medline

```
data(myeloma)
HourPubmed(myeloma)
```

34 HourReceived

HourPubmed-methods

~~ Methods for Function HourPubmed in Package RISmed ~~

### **Description**

~~ Methods for function HourPubmed in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

HourReceived

Extracts HourReceived from Medline object.

# Description

Extractor for the HourReceived of a Medline object. This date corresponds to the date the article was received.

### Usage

HourReceived(object)

# Arguments

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

#### See Also

Medline

```
data(myeloma)
HourReceived(myeloma)
```

HourReceived-methods 35

HourReceived-methods

~~ Methods for Function HourReceived in Package RISmed ~~

# Description

~~ Methods for function HourReceived in package RISmed ~~

#### Methods

```
signature(object = "Medline")
```

**ISOAbbreviation** 

Extracts ISOAbbreviation from Medline object.

# Description

 $Extractor\ for\ the\ {\tt ISOAbbreviation}\ of\ a\ {\tt Medline}\ object.$ 

# Usage

ISOAbbreviation(object)

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

```
data(myeloma)
ISOAbbreviation(myeloma)
```

36 ISSN

ISOAbbreviation-methods

~~ Methods for Function ISOAbbreviation in Package RISmed ~~

# Description

~~ Methods for function ISOAbbreviation in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

ISSN

Extracts ISSN from Medline object.

# Description

Extractor for the ISSN of a Medline object.

# Usage

ISSN(object)

# Arguments

object

instance of class Medline

### Value

vector

# See Also

Medline

```
data(myeloma)
ISSN(myeloma)
```

ISSN-methods 37

ISSN-methods

~~ Methods for Function ISSN in Package RISmed ~~

# Description

```
~~ Methods for function ISSN in package RISmed ~~
```

### Methods

```
signature(object = "Medline")
```

ISSNLinking

Extracts ISSNLinking from Medline object.

# Description

Extractor for the ISSNLinking of a Medline object.

# Usage

```
ISSNLinking(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

```
data(myeloma)
ISSNLinking(myeloma)
```

38 Issue

ISSNLinking-methods

~~ Methods for Function ISSNLinking in Package RISmed ~~

# Description

```
~~ Methods for function ISSNLinking in package RISmed ~~
```

### Methods

```
signature(object = "Medline")
```

Issue

Extracts Issue from Medline object.

# Description

Extractor for the Issue of a Medline object.

# Usage

Issue(object)

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

```
data(myeloma)
Issue(myeloma)
```

Issue-methods 39

Issue-methods

~~ Methods for Function Issue in Package RISmed ~~

# Description

```
~~ Methods for function Issue in package RISmed ~~
```

### Methods

```
signature(object = "Medline")
```

Language

Extracts Language from Medline object.

# Description

Extractor for the Language of a Medline object.

# Usage

```
Language(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

```
data(myeloma)
Language(myeloma)
```

40 Medline-class

Language-methods

~~ Methods for Function Language in Package RISmed ~~

### **Description**

~~ Methods for function Language in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

Medline-class

Class "Medline"

### **Description**

Class for Medline citation of query to PubMed.

# **Objects from the Class**

Objects can be created by calls of the form new("Medline", ...).

# Slots

Unless stated otherwise, each of the components is a vector of the given field where each element corresponds to a PubMed article.

Query:

PMID:

YearAccepted:

MonthAccepted:

DayAccepted:

HourAccepted:

MinuteAccepted:

YearReceived:

MonthReceived:

DayReceived:

HourReceived:

MinuteReceived:

YearEpublish:

MonthEpublish:

DayEpublish:

HourEpublish: MinuteEpublish: YearPpublish: MonthPpublish: DayPpublish: HourPpublish: MinutePpublish: YearPmc: MonthPmc: DayPmc: HourPmc: MinutePmc: YearPubmed: MonthPubmed: DayPubmed: HourPubmed: MinutePubmed: Author: list of data frames giving LastName, ForeName, Initials, and order of authors by PubMed article. ISSN: Title: ArticleTitle: ELocationID: AbstractText: Affiliation: Language: PublicationType: MedlineTA: NlmUniqueID: ISSNLinking: PublicationStatus: ArticleId: Volume: Issue: ISOAbbreviation: MedlinePgn:

CopyrightInformation:

42 Medline-class

```
Country:
GrantID:
Acronym:
Agency:
RegistryNumber:
RefSource:
CollectiveName:
Mesh: list of data frames giving Heading and Type of MeSH term or NA if no terms are in MED-LINE record
```

#### Methods

In addition to print and show methods, each slot of the Medline class has a corresponding extractor of the same name.

```
print signature(x = "Medline", ...): ...
show signature(object = "Medline"): ...
Query signature(object = "Medline"): ...
PMID signature(object = "Medline"): ...
YearAccepted signature(object = "Medline"): ...
MonthAccepted signature(object = "Medline"): ...
DayAccepted signature(object = "Medline"): ...
HourAccepted signature(object = "Medline"): ...
MinuteAccepted signature(object = "Medline"): ...
YearReceived signature(object = "Medline"): ...
MonthReceived signature(object = "Medline"): ...
DayReceived signature(object = "Medline"): ...
HourReceived signature(object = "Medline"): ...
MinuteReceived signature(object = "Medline"): ...
YearEpublish signature(object = "Medline"): ...
MonthEpublish signature(object = "Medline"): ...
DayEpublish signature(object = "Medline"): ...
HourEpublish signature(object = "Medline"): ...
MinuteEpublish signature(object = "Medline"): ...
YearPpublish signature(object = "Medline"): ...
MonthPpublish signature(object = "Medline"): ...
DayPpublish signature(object = "Medline"): ...
HourPpublish signature(object = "Medline"): ...
MinutePpublish signature(object = "Medline"): ...
```

Medline-class 43

```
YearPmc signature(object = "Medline"): ...
MonthPmc signature(object = "Medline"): ...
DayPmc signature(object = "Medline"): ...
HourPmc signature(object = "Medline"): ...
MinutePmc signature(object = "Medline"): ...
YearPubmed signature(object = "Medline"): ...
MonthPubmed signature(object = "Medline"): ...
DayPubmed signature(object = "Medline"): ...
HourPubmed signature(object = "Medline"): ...
MinutePubmed signature(object = "Medline"): ...
Author signature(object = "Medline"): ...
ISSN signature(object = "Medline"): ...
Title signature(object = "Medline"): ...
ArticleTitle signature(object = "Medline"): ...
ELocationID signature(object = "Medline"): ...
AbstractText signature(object = "Medline"): ...
Affiliation signature(object = "Medline"): ...
Language signature(object = "Medline"): ...
PublicationType signature(object = "Medline"): ...
MedlineTA signature(object = "Medline"): ...
NlmUniqueID signature(object = "Medline"): ...
ISSNLinking signature(object = "Medline"): ...
PublicationStatus signature(object = "Medline"): ...
ArticleId signature(object = "Medline"): ...
Volume signature(object = "Medline"): ...
Issue signature(object = "Medline"): ...
ISOAbbreviation signature(object = "Medline"): ...
MedlinePgn signature(object = "Medline"): ...
CopyrightInformation signature(object = "Medline"): ...
Country signature(object = "Medline"): ...
GrantID signature(object = "Medline"): ...
Acronym signature(object = "Medline"): ...
Agency signature(object = "Medline"): ...
RegistryNumber signature(object = "Medline"): ...
RefSource signature(object = "Medline"): ...
CollectiveName signature(object = "Medline"): ...
Mesh signature(object = "Medline"): ...
```

#### Author(s)

Stephanie Kovalchik

44 MedlinePgn-methods

MedlinePgn

Extracts MedlinePgn from Medline object.

# Description

Extractor for the MedlinePgn of a Medline object.

# Usage

```
MedlinePgn(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# Examples

```
data(myeloma)
MedlinePgn(myeloma)
```

MedlinePgn-methods

~~ Methods for Function MedlinePgn in Package RISmed ~~

# Description

```
~~ Methods for function MedlinePgn in package RISmed ~~
```

```
signature(object = "Medline")
```

MedlineTA 45

MedlineTA

Extracts MedlineTA from Medline object.

# Description

Extractor for the MedlineTA of a Medline object.

# Usage

```
MedlineTA(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
MedlineTA(myeloma)
```

MedlineTA-methods

~~ Methods for Function MedlineTA in Package RISmed ~~

# Description

```
~~ Methods for function MedlineTA in package RISmed ~~
```

```
signature(object = "Medline")
```

46 Mesh

Mesh

Extracts Mesh headings from Medline object.

### **Description**

Extractor for the Mesh headings of a Medline object.

### Usage

```
Mesh(object)
```

### **Arguments**

object

instance of class Medline

### **Details**

In Process and publisher-supplied records lack MeSH terms. See the MeSH Fact Sheet <a href="http://www.nlm.nih.gov/pubs/factsheets/mesh.html">http://www.nlm.nih.gov/pubs/factsheets/mesh.html</a> or the MeSH home page <a href="http://www.nlm.nih.gov/mesh/meshhome.html">http://www.nlm.nih.gov/mesh/meshhome.html</a> for additional information about MeSH. Note that more recent records may lack MeSH headings.

### Value

List by Pubmed article. Each list contains a data frame with Heading and Type. The Heading is a MeSH Term and Type is either a Descriptor or a Qualifier of a Descriptor term. Qualifiers of a Descriptor immediately follow the Descriptor term in the data frame. When MeSH headings have not been included with a MEDLINE record, the list will contain NAs (see details).

### See Also

Medline

```
res <- EUtilsSummary("myeloma[MeSh]",retmax=2,reldate=365)
summary(res)
fetch <- EUtilsGet(res)

Mesh(fetch)</pre>
```

Mesh-methods 47

Mesh-methods

~~ Methods for Function Mesh in Package RISmed ~~

### **Description**

~~ Methods for function Mesh in package RISmed ~~

#### Methods

signature(object = "Medline") List by Pubmed article. Each list contains a data frame with Heading and Type. The Heading is a MeSH Term and Type is either a Descriptor or a Qualifier of a Descriptor term.

MinuteAccepted

Extracts MinuteAccepted from Medline object.

### **Description**

Extractor for the MinuteAccepted of a Medline object. This date corresponds to the date the article was accepted.

### Usage

MinuteAccepted(object)

### **Arguments**

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MinuteAccepted(myeloma)
```

48 MinuteEpublish

MinuteAccepted-methods

~~ Methods for Function MinuteAccepted in Package RISmed ~~

### **Description**

~~ Methods for function MinuteAccepted in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

MinuteEpublish

Extracts MinuteEpublish from Medline object.

### **Description**

Extractor for the MinuteEpublish of a Medline object. This date corresponds to the date the article was published online.

### Usage

```
MinuteEpublish(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MinuteEpublish(myeloma)
```

MinuteEpublish-methods

~~ Methods for Function MinuteEpublish in Package RISmed ~~

### **Description**

~~ Methods for function MinuteEpublish in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

MinutePmc

Extracts MinutePmc from Medline object.

### **Description**

Extractor for the MinutePmc of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

```
MinutePmc(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MinutePmc(myeloma)
```

50 MinutePpublish

MinutePmc-methods

~~ Methods for Function MinutePmc in Package RISmed ~~

### **Description**

```
~~ Methods for function MinutePmc in package RISmed ~~
```

### Methods

```
signature(object = "Medline")
```

MinutePpublish

Extracts MinutePpublish from Medline object.

# Description

Extractor for the MinutePpublish of a Medline object. This date corresponds to the date the article was published in print.

### Usage

```
MinutePpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

```
data(myeloma)
MinutePpublish(myeloma)
```

MinutePpublish-methods

~~ Methods for Function MinutePpublish in Package RISmed ~~

### **Description**

~~ Methods for function MinutePpublish in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

MinutePubmed

Extracts MinutePubmed from Medline object.

### **Description**

Extractor for the MinutePubmed of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

```
MinutePubmed(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MinutePubmed(myeloma)
```

52 MinuteReceived

MinutePubmed-methods ~~ Methods for Function MinutePubmed in Package RISmed ~~

### **Description**

~~ Methods for function MinutePubmed in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

MinuteReceived

Extracts MinuteReceived from Medline object.

# Description

Extractor for the MinuteReceived of a Medline object. This date corresponds to the date the article was received.

### Usage

MinuteReceived(object)

# Arguments

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MinuteReceived(myeloma)
```

MinuteReceived-methods 53

MinuteReceived-methods

~~ Methods for Function MinuteReceived in Package RISmed ~~

### **Description**

~~ Methods for function MinuteReceived in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

MonthAccepted

Extracts MonthAccepted from Medline object.

# Description

Extractor for the MonthAccepted of a Medline object. This date corresponds to the date the article was accepted.

# Usage

MonthAccepted(object)

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthAccepted(myeloma)
```

54 MonthEpublish

MonthAccepted-methods ~~ Methods for Function MonthAccepted in Package RISmed ~~

### **Description**

~~ Methods for function MonthAccepted in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

MonthEpublish

Extracts MonthEpublish from Medline object.

# Description

Extractor for the MonthEpublish of a Medline object. This date corresponds to the date the article was published online.

### Usage

```
MonthEpublish(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthEpublish(myeloma)
```

MonthEpublish-methods ~~ Methods for Function MonthEpublish in Package RISmed ~~

### **Description**

~~ Methods for function MonthEpublish in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

MonthPmc

Extracts MonthPmc from Medline object.

# Description

Extractor for the MonthPmc of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

```
MonthPmc(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthPmc(myeloma)
```

MonthPpublish

MonthPmc-methods

~~ Methods for Function MonthPmc in Package RISmed ~~

### **Description**

~~ Methods for function MonthPmc in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

MonthPpublish

Extracts MonthPpublish from Medline object.

# Description

Extractor for the MonthPpublish of a Medline object. This date corresponds to the date the article was published in print.

### Usage

```
MonthPpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthPpublish(myeloma)
```

MonthPpublish-methods ~~ Methods for Function MonthPpublish in Package RISmed ~~

### **Description**

~~ Methods for function MonthPpublish in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

MonthPubmed

Extracts MonthPubmed from Medline object.

# Description

Extractor for the MonthPubmed of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

### Usage

MonthPubmed(object)

### **Arguments**

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthPubmed(myeloma)
```

58 MonthReceived

MonthPubmed-methods

~~ Methods for Function MonthPubmed in Package RISmed ~~

### Description

~~ Methods for function MonthPubmed in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

MonthReceived

Extracts MonthReceived from Medline object.

# Description

Extractor for the MonthReceived of a Medline object. This date corresponds to the date the article was received.

### Usage

MonthReceived(object)

# Arguments

object

instance of class Medline

### Value

vector

### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

```
data(myeloma)
MonthReceived(myeloma)
```

MonthReceived-methods 59

MonthReceived-methods ~~ Methods for Function MonthReceived in Package RISmed ~~

# Description

~~ Methods for function MonthReceived in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

myeloma

Example of results from EUtilsGet

# Description

First five records of query of NCBI PubMed for "myeloma[MeSh]" in the past year (at the time of this writing) as a Medline object.

# Usage

myeloma

### **Format**

A list object with five PubMed article records.

# Author(s)

Stephanie Kovalchik <s.a.kovalchik@gmail.com>

### Source

PubMed database of the US National Library of Medicine

### See Also

EUtilsGet,Medline

NlmUniqueID

Extracts NlmUniqueID from Medline object.

# Description

Extractor for the NlmUniqueID of a Medline object.

# Usage

```
NlmUniqueID(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# Examples

```
data(myeloma)
NlmUniqueID(myeloma)
```

NlmUniqueID-methods

~~ Methods for Function NlmUniqueID in Package RISmed ~~

# Description

```
~~ Methods for function NlmUniqueID in package RISmed ~~
```

```
signature(object = "Medline")
```

PMID 61

PMID

Extracts PMID from Medline object.

# Description

Extractor for the PMID of a Medline object.

# Usage

```
PMID(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

# Examples

data(myeloma)
PMID(myeloma)

PMID-methods

~~ Methods for Function PMID in Package RISmed ~~

# Description

```
~~ Methods for function PMID in package RISmed ~~
```

```
signature(object = "Medline")
```

62 PublicationStatus

print-Medline

Print method for Medline object

# Description

Print object of class Medline

### Methods

signature(object = "Medline") Query translation (if provided) and total fetched record count
for Medline object.

print-methods

Print method for EUtilsSummary object

# Description

Print object of class EUtilsSummary

### Methods

signature(object = "EUtilsSummary") Query translation for EUtilsSummary object.

PublicationStatus

Extracts PublicationStatus from Medline object.

# Description

Extractor for the PublicationStatus of a Medline object.

### Usage

PublicationStatus(object)

### Arguments

object

instance of class Medline

#### Value

vector

### See Also

Medline

PublicationStatus-methods 63

### **Examples**

```
data(myeloma)
PublicationStatus(myeloma)
```

PublicationStatus-methods

~~ Methods for Function PublicationStatus in Package RISmed

~-

# Description

~~ Methods for function PublicationStatus in package RISmed ~~

### Methods

```
signature(object = "Medline")
```

 ${\tt PublicationType}$ 

Extracts PublicationType from Medline object.

# Description

Extractor for the PublicationType of a Medline object.

### Usage

PublicationType(object)

# Arguments

object

instance of class Medline

### Value

list

### See Also

Medline

```
data(myeloma)
PublicationType(myeloma)
```

Query Query

PublicationType-methods

~~ Methods for Function PublicationType in Package RISmed ~~

# Description

~~ Methods for function PublicationType in package **RISmed** ~~

### Methods

```
signature(object = "Medline")
```

Query

Extract Query from Medline object.

# Description

Extractor for the translated Query of a Medline object.

# Usage

Query(object)

# Arguments

object

instance of class Medline

### Value

vector

# See Also

Medline

```
data(myeloma)
Query(myeloma)
```

Query-methods 65

Query-methods

~~ Methods for Function Query in Package RISmed ~~

# Description

```
~~ Methods for function Query in package RISmed ~~
```

### Methods

```
signature(object = "Medline")
```

QueryCount

Count of record results for EUtilsQuery

# Description

Returns the number of Ids from a E-utility query

# Usage

```
QueryCount(object)
```

# Arguments

object

object of the EUtilsSummary class.

### Value

numeric count

### Author(s)

Stephanie Kovalchik

### See Also

**EUtilsSummary** 

QueryTranslation

QueryId

Get ids from EUtilsQuery

# Description

Returns the vector Ids from a E-utility query

# Usage

QueryId(object)

### **Arguments**

object

object of the EUtilsSummary class.

### Value

character vector of ids

### Author(s)

Stephanie Kovalchik

### See Also

**EUtilsSummary** 

 ${\tt QueryTranslation}$ 

Get the NCBI query translation from EUtilsQuery

# Description

Returns the string translation of a E-utility query

# Usage

QueryTranslation(object)

# Arguments

object

object of the EUtilsSummary class.

### Value

character query translation

RefSource 67

### Author(s)

Stephanie Kovalchik

### See Also

**EUtilsSummary** 

RefSource

Extracts RefSource from Medline object.

# Description

Extractor for the RefSource of a Medline object.

### Usage

```
RefSource(object)
```

# **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
RefSource(myeloma)
```

RefSource-methods

~~ Methods for Function RefSource in Package RISmed ~~

# Description

```
~~ Methods for function RefSource in package RISmed ~~
```

```
signature(object = "Medline")
```

RegistryNumber

Extracts RegistryNumber from Medline object.

# Description

Extractor for the RegistryNumber of a Medline object.

# Usage

```
RegistryNumber(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
RegistryNumber(myeloma)
```

 ${\tt RegistryNumber-methods}$ 

~~ Methods for Function RegistryNumber in Package RISmed ~~

# Description

```
~~ Methods for function RegistryNumber in package RISmed ~~
```

```
signature(object = "Medline")
```

show-Medline 69

show-Medline

Show method for Medline object

# Description

Show object of class Medline

# Methods

signature(object = "Medline") Query translation (if provided) and total fetched record count
for Medline object.

show-methods

Show method for EUtilsSummary object

# Description

Show object of class EUtilsSummary

### Methods

signature(object = "EUtilsSummary") Query translation for EUtilsSummary object.

 $\verb|summary-methods||$ 

Summary method for EUtilsSummary object

# Description

Summary of object of class EUtilsSummary

# Methods

signature(object = "EUtilsSummary",...) Returns the number of records and id vector.

70 Title-methods

Title

Extracts Title from Medline object.

# Description

Extractor for the Title of a Medline object.

# Usage

```
Title(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### See Also

Medline

# **Examples**

```
data(myeloma)
Title(myeloma)
```

Title-methods

~~ Methods for Function Title in Package **RISmed** ~~

# Description

```
~~ Methods for function Title in package RISmed ~~
```

```
signature(object = "Medline")
```

Volume 71

Volume

Extracts Volume from Medline object.

# Description

Extractor for the Volume of a Medline object.

# Usage

```
Volume(object)
```

### **Arguments**

object

instance of class Medline

### Value

vector

### See Also

Medline

# Examples

```
data(myeloma)
Volume(myeloma)
```

Volume-methods

~~ Methods for Function Volume in Package RISmed ~~

# Description

```
~~ Methods for function Volume in package RISmed ~~
```

```
signature(object = "Medline")
```

72 YearAccepted-methods

YearAccepted

Extracts YearAccepted from Medline object.

# Description

Extractor for the YearAccepted of a Medline object. This date corresponds to the date the article was accepted.

# Usage

```
YearAccepted(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
YearAccepted(myeloma)
```

YearAccepted-methods

~~ Methods for Function YearAccepted in Package RISmed ~~

# Description

```
~~ Methods for function YearAccepted in package RISmed ~~
```

```
signature(object = "Medline")
```

YearEpublish 73

 ${\it Year Epublish}$ 

Extracts YearEpublish from Medline object.

# Description

Extractor for the YearEpublish of a Medline object. This date corresponds to the date the article was published online.

# Usage

```
YearEpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
YearEpublish(myeloma)
```

YearEpublish-methods

~~ Methods for Function YearEpublish in Package RISmed ~~

# Description

```
~~ Methods for function YearEpublish in package RISmed ~~
```

```
signature(object = "Medline")
```

74 YearPmc-methods

YearPmc

Extracts YearPmc from Medline object.

# Description

Extractor for the YearPmc of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

# Usage

```
YearPmc(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
YearPmc(myeloma)
```

YearPmc-methods

~~ Methods for Function YearPmc in Package RISmed ~~

# Description

```
~~ Methods for function YearPmc in package RISmed ~~
```

```
signature(object = "Medline")
```

YearPpublish 75

YearPpublish

Extracts YearPpublish from Medline object.

# Description

Extractor for the YearPpublish of a Medline object. This date corresponds to the date the article was published in print.

# Usage

```
YearPpublish(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

### See Also

Medline

# **Examples**

```
data(myeloma)
YearPpublish(myeloma)
```

YearPpublish-methods

~~ Methods for Function YearPpublish in Package RISmed ~~

# Description

```
~~ Methods for function YearPpublish in package RISmed ~~
```

```
signature(object = "Medline")
```

76 YearPubmed-methods

YearPubmed

Extracts YearPubmed from Medline object.

# Description

Extractor for the YearPubmed of a Medline object. This date corresponds to the date the article was made available through Pubmed Central.

# Usage

```
YearPubmed(object)
```

# Arguments

object

instance of class Medline

### Value

vector

### References

```
http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst
```

# See Also

Medline

# **Examples**

```
data(myeloma)
YearPubmed(myeloma)
```

YearPubmed-methods

~~ Methods for Function YearPubmed in Package RISmed ~~

# Description

```
~~ Methods for function YearPubmed in package RISmed ~~
```

```
signature(object = "Medline")
```

YearReceived 77

YearReceived

Extracts YearReceived from Medline object.

# Description

Extractor for the YearReceived of a Medline object. This date corresponds to the date the article was received.

### Usage

```
YearReceived(object)
```

# Arguments

object

instance of class Medline

### Value

vector

#### References

http://www.nlm.nih.gov/bsd/mms/medlineelements.html#phst

### See Also

Medline

# **Examples**

```
data(myeloma)
YearReceived(myeloma)
```

YearReceived-methods

~~ Methods for Function YearReceived in Package RISmed ~~

### **Description**

```
~~ Methods for function YearReceived in package RISmed ~~
```

```
signature(object = "Medline")
```

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