

# Package ‘ALL’

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**Title** A data package

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**Description** Data of T- and B-cell Acute Lymphocytic Leukemia from the Ritz Laboratory at the DFCI (includes Apr 2004 versions)

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**License** Artistic-2.0

**Depends** R (>= 2.10), Biobase (>= 2.5.5)

**Suggests** rpart

**biocViews** ExperimentData, CancerData, LeukemiaCancerData

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ALL

*Acute Lymphoblastic Leukemia Data from the Ritz Laboratory***Description**

The data consist of microarrays from 128 different individuals with acute lymphoblastic leukemia (ALL). A number of additional covariates are available. The data have been normalized (using `rma`) and it is the jointly normalized data that are available here. The data are presented in the form of an `exprSet` object.

**Usage**

```
data(ALL)
```

**Format**

The different covariates are:

- `cod`: The patient IDs.
- `diagnosis`: The date of diagnosis.
- `sex`: The sex of the patient, coded as M and F.
- `age`: The age of the patient in years.
- `BT`: The type and stage of the disease; B indicates B-cell ALL while a T indicates T-cell ALL.
- `remission`: A factor with two levels, either CR indicate that remission was achieved or REF indicating that the patient was refractory and remission was not achieved.
- `CR`: A vector with the following values: 1: "CR", remission achieved; 2: "DEATH IN CR", patient died while in remission; 3: "DEATH IN INDUCTION", patient died while in induction therapy; 4: "REF", patient was refractory to therapy.
- `date.cr`: The date on which remission was achieved.
- `t(4;11)`: A logical vector indicating whether a t(4;11) translocation was detected.
- `t(9;22)`: A logical vector indicating whether a t(9;22) translocation was detected.
- `cyto.normal`: A logical vector indicating whether the cytogenetics were normal.
- `citog`: A vector indicating the various cytogenetic abnormalities that were detected.
- `mol.biol`: The assigned molecular biology of the cancer (mainly for those with B-cell ALL), BCRVABL, ALLVAF4, E2APBX etc.
- `fusion.protein`: For those with BCRVABL which of the fusion proteins was detected, p190, p190\p210, p210.
- `mdr`: The patients response to multidrug resistance, either NEG, or POS.
- `kinet.ploidy`, either diploid or hyperd.
- `ccr`: A vector indicating whether the patient had continuous complete remission nor not.
- `relapse`: A vector indicating whether the patient had relapse or not.
- `transplant`: Did the patient receive a bone marrow transplant or not.

- f.u Follow-up data. The possible values are 1: "AUBMT V REL": autologous bone marrow transplant and subsequent relapse; 2: "BMT V CCR": allogeneic bone marrow transplant and still in continuous complete remission; 3: "BMT V DEATH IN CR": after allogeneic bone marrow transplant patient died without relapsing; 4: "BMT V REL": after allogeneic bone marrow transplant patient relapsed; 5: "CCR": patient was in continuous complete remission; 6: "CCR V OFF": patient was in continuous complete remission but off-protocol for some reasons; 7: "DEATH IN CR": died when in complete remission; 8: "MUD V DEATH IN CR": unrelated allogeneic bone marrow transplant and death without relapsing; 9: "REL": relapse; 10: "REL V SNC": relapse occurred at central nervous system.
- date last seen Date the patient was last seen.

### Source

Sabina Chiaretti, Xiaochun Li, Robert Gentleman, Antonella Vitale, Marco Vignetti, Franco Mandelli, Jerome Ritz, and Robin Foa Gene expression profile of adult T-cell acute lymphocytic leukemia identifies distinct subsets of patients with different response to therapy and survival. *Blood*, 1 April 2004, Vol. 103, No. 7.

### Examples

```
data(ALL)
```

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```
tojulian
```

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*Convert Calendar Date to Julian Time*

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### Description

Convert Calendar Date in the form of "%m/%d/%Y" to Julian time, number of days since 1970-01-01 in the time zone of "GMT".

### Usage

```
tojulian(x)
```

### Arguments

```
x          Date to convert
```

### Author(s)

Robert Gentleman

### Examples

```
ds <- tojulian(c("4/8/2000", "4/30/2000"))
ds[2]-ds[1]
```

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