

Package ‘MetaGxBreast’

October 17, 2019

Type Package

Title Transcriptomic Breast Cancer Datasets

Version 1.4.0

Date 2018-02-25

Author Michael Zon <michaelzon7@gmail.com>, Deena M.A. Gendoo <deena.gendoo@utoronto.ca>, Benjamin Haibe-Kains <benjamin.haibe.kains@utoronto.ca>

Maintainer Michael Zon <michaelzon7@gmail.com>

Description A collection of Breast Cancer Transcriptomic Datasets that are part of the MetaGx-Data package compendium.

License Artistic-2.0

Depends Biobase, stats, lattice, impute, AnnotationHub, ExperimentHub, SummarizedExperiment, R (>= 3.6.0)

Suggests testthat, xtable

NeedsCompilation no

biocViews ExpressionData, ExperimentHub, CancerData, Homo_sapiens_Data, ArrayExpress, GEO, NCI, MicroarrayData, ExperimentData

LazyData yes

RoxygenNote 6.1.1

git_url <https://git.bioconductor.org/packages/MetaGxBreast>

git_branch RELEASE_3_9

git_last_commit 485b0f6

git_last_commit_date 2019-05-02

Date/Publication 2019-10-17

R topics documented:

CAL	2
DFHCC	5
DFHCC2	7
DFHCC3	9
DUKE	10
DUKE2	12

duplicates	14
EMC2	15
EORTC10994	16
EXPO	18
FNCLCC	20
GSE25066	21
GSE32646	24
GSE48091	26
GSE58644	27
HLP	29
IRB	31
KOO	33
loadBreastDatasets	35
loadBreastEsets	36
LUND	37
LUND2	39
MAINZ	40
MAQC2	42
MCCC	44
MDA4	45
METABRIC	47
MSK	49
MUG	51
NCCS	53
NCI	54
NKI	56
PNC	59
STK	61
STNO2	63
TCGA	65
TRANSBIG	67
UCSF	69
UNC4	72
UNT	74
UPP	76
VDX	78

Index**81**

CAL

CAL

Description

ExpressionSet for the CAL Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/17157792
  Title:
  URL: http://www.ebi.ac.uk/arrayexpress/experiments/E-TABM-158/
  PMIDs: 17157792
  No abstract available.
notes:
  summary:
    Recurrent copy number abnormalities differ between tumor subtypes as defined by gene expression patterns. Accuracy of stratification by outcome can be improved by combining expression and copy number.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (21169 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 21169 features, 118 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

```

```

  1 observation deleted due to missingness
  n events median 0.95LCL 0.95UCL
117.00  77.00   8.96   8.33   9.71

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
  118 character character

```

```

sample_type:
tumor
  118

```

er:

negative	positive
43	75

pgr:

negative	positive	NA's
51	66	1

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
0.300	1.675	2.300	2.729	3.500	7.500	2

N:

0	1
51	67

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
31.00	44.00	51.00	55.06	66.00	88.00	1

grade:

1	2	3	NA's
10	42	61	5

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
0	767	2059	2094	3336	5183	1

dmfs_status:

norecurrence	recurrence	NA's
91	26	1

days_to_tumor_recurrence:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
0	767	2059	2094	3336	5183	1

recurrence_status:

norecurrence	recurrence	NA's
81	36	1

days_to_death:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
47	1117	2234	2347	3504	5183	1

vital_status:

deceased	living
77	41

treatment:

chemo.plus.hormono	chemotherapy	hormonotherapy	untreated
25	36	40	14

NA's
3

batch:
CAL
118

uncurated_author_metadata:
Length Class Mode
118 character character

Source

<http://www.ebi.ac.uk/arrayexpress/experiments/E-TABM-158/>

DFHCC

DFHCC

Description

ExpressionSet for the DFHCC Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2826790/
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE19615
  PMIDs: 20098429
  No abstract available.
notes:
  summary:
    A small number of over-expressed and over-amplified genes were significant
ly associated with early recurrence despite adjuvant therapy. This was ve
rified in independent cohorts.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

assayData: 42447 features, 115 samples
 Platform type:

 Available sample meta-data:

sample_name:

Length	Class	Mode
115	character	character

alt_sample_name:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
6.0	155.0	230.0	293.3	398.5	828.0

sample_type:

tumor
115

er:

negative	positive
45	70

pgr:

negative	positive
51	64

her2:

negative	positive
79	36

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.800	1.350	2.100	2.312	2.850	6.500

N:

0	1
62	53

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
32.00	45.00	53.00	53.89	60.00	85.00

grade:

1	2	3
23	28	64

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
30	1500	1920	1799	2325	2640

dmfs_status:

```

norecurrence  recurrence
              101      14

treatment:
chemo.plus.hormono  chemotherapy  hormonotherapy  untreated
                  42             38             22             7
                  NA's
                  6

batch:
DFHCC
115

uncurated_author_metadata:
  Length  Class  Mode
    115 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE19615>

DFHCC2

DFHCC2

Description

Test the efficacy of treating TNBC with neoadjuvant cisplatin; explore biomarkers to identify predictors of response

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2834466/
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE18864
  PMIDs: 20100965

Abstract: A 16 word abstract is available. Use 'abstract' method.
notes:
  summary:
    A subset of the patients experienced a response induced by cisplatin and b
iomarkers were identified that could predict response to cisplatin.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:

```

As published by original author.

```
featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
(42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

```
assayData: 42447 features, 84 samples
Platform type:
```

```
-----
Available sample meta-data:
-----
```

```
sample_name:
  Length      Class      Mode
    84 character character
```

```
unique_patient_ID:
  Length      Class      Mode
    84 character character
```

```
sample_type:
tumor
  84
```

```
er:
negative positive
  53      31
```

```
pgr:
negative positive
  53      31
```

```
her2:
negative positive
  66      18
```

```
age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 29.00  45.00   53.00   52.89  59.00   85.00
```

```
grade:
  1  2  3
10 16 58
```

```
treatment:
chemotherapy
  84
```



```
batch:
DFHCC2_CISPLATIN DFHCC2_REFERENCE
                24                60
```

```
uncurated_author_metadata:
  Length   Class   Mode
    84 character character
```

```
duplicates:
  Length   Class   Mode
    84 character character
```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE18864>

DFHCC3

DFHCC3

Description

ExpressionSet for the DFHCC3 Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/16473279
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE3744
  PMIDs: 16473279
  No abstract available.
  notes:
    summary:
      Basal like cancerse_often lack an inactivated X chromosome.e_Other markers
      found were duplication of the active X chromosome ande_nonheterochromatin
      ized X chromosomal DNA. A small subset of X chromosomal genes were overexp
      ressed. These abnormalities are thought to led to the pathogenesis of basa
      l like cancers.
    mapping.method:
      maxRowVariance
    mapping.group:
      EntrezGene.ID
    preprocessing:
      As published by original author.

featureData(eset):
```

```
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

```
assayData: 42447 features, 40 samples
Platform type:
```

```
-----
Available sample meta-data:
-----
```

```
sample_name:
  Length      Class      Mode
     40 character character
```

```
alt_sample_name:
  Length      Class      Mode
     40 character character
```

```
sample_type:
tumor
     40
```

```
batch:
DFHCC3
     40
```

```
uncurated_author_metadata:
  Length      Class      Mode
     40 character character
```

Source

```
http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE3744
```

DUKE

DUKE

Description

ExpressionSet for the DUKE Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
```

Laboratory:
 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/16273092>
 Title:
 URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse3143>
 PMIDs: 16273092
 No abstract available.
 notes:

summary:

It was shown that the activation_status of several oncogenic pathways can be identified by gene expression signatures. These gene signatures identify deregulation of pathways, associations with clinically relevant outcomes, and characteristics of specific cancers and tumor subtypes.

mapping.method:
 maxRowVariance

mapping.group:
 EntrezGene.ID

preprocessing:
 As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'
 featureNames: 1000_at 1001_at ... AFFX-MurIL4_at (12085 total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription

Details

assayData: 12085 features, 171 samples
 Platform type:
 Overall survival time-to-event summary (in years):
 Call: survfit(formula = Surv(time, cens) ~ -1)

```

1 observation deleted due to missingness
  n events median 0.95LCL 0.95UCL
170.00  43.00   9.01   6.22   NA

```

 Available sample meta-data:

sample_name:
 Length Class Mode
 171 character character

alt_sample_name:
 Length Class Mode
 171 character character

sample_type:
 tumor
 171

```
er:
negative positive
      57      114
```

```
pgr:
negative positive  NA's
      23      65      83
```

```
tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
  0.20  1.80    2.30    2.74  3.50    8.50    83
```

```
N:
  0  1 NA's
53 36 82
```

```
days_to_death:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
171.0  417.0  957.5 1235.0 1852.0 4069.0     1
```

```
vital_status:
deceased  living  NA's
      43    127     1
```

```
batch:
DUKE
171
```

```
uncurated_author_metadata:
  Length    Class    Mode
    171 character character
```

```
duplicates:
DUKE.DUKE_T00.622 DUKE.DUKE_T01.052 DUKE.DUKE_T01.522 DUKE.DUKE_T01.534
              1              1              1              1
              NA's
              167
```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse3143>

DUKE2

DUKE2

Description

Predicting response with gene signature

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/18024211
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse6861
  PMIDs: 18024211

  Abstract: A 5 word abstract is available. Use 'abstract' method.
  notes:
    summary:
      Retraction in Lancet Feb 2011 (21277543); Regimen specific signatures were
      able to predict pathological complete response. Selecting patients with t
      hese gene signataures could increase the proportion of patients with pCR t
      han by basing clinical decisions on clinical factors.
    mapping.method:
      maxRowVariance
    mapping.group:
      EntrezGene.ID
    preprocessing:
      As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1053_3p_at 117_3p_at ... X79510cds_3p_s_at (45490
    total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 45490 features, 160 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
    160 character character

alt_sample_name:
  Length      Class      Mode
    160 character character

sample_type:
tumor
  160

```

```

er:
negative positive
  123      37

pgr:
negative positive  NA's
  133      25      2

N:
  0      1 NA's
 58     95     7

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
 26.00  43.00   49.00   49.41  56.00   70.00    35

grade:
  1      2      3 NA's
  2     37     70    51

treatment:
chemotherapy
      160

batch:
DUKE2
      160

uncurated_author_metadata:
  Length      Class      Mode
  160 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse6861>

duplicates	<i>a list containing the names of patients that are believed to be duplicates across datasets</i>
------------	---

Description

The object is a list where each element is a patient ID that is believed to be a duplicate of a patient in another dataset. Patients are designated as duplicated if they have Spearman correlations greater than or equal to 0.98 with other patient expression profiles

Format

A list with 107 elements, each of which is a patient ID.

EMC2

*EMC2***Description**

ExpressionSet for the EMC2 Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/19421193
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse12276
  PMIDs: 19421193
  No abstract available.
  notes:
    summary:
      Genes were identified that may increase the ability of breast cancer cells
      to infiltrate the blood-brain barrier.
    mapping.method:
      maxRowVariance
    mapping.group:
      EntrezGene.ID
    preprocessing:
      As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 42447 features, 204 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
  204 character character

alt_sample_name:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.

```

1.00 51.75 102.50 102.50 153.20 204.00

sample_type:

tumor
204

N:

0 NA's
48 156

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0	335	640	799	1098	3507

dmfs_status:

norecurrence	recurrence
19	185

treatment:

chemotherapy	untreated
156	48

batch:

EMC2
204

uncurated_author_metadata:

Length	Class	Mode
204	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse12276>

EORTC10994

EORTC10994

Description

ExpressionSet for the EORTC10994 Dataset

Format

experimentData(eset):

Experiment data

Experimenter name:

Laboratory:

Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=15897907>

Title:

URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE1561>

PMIDs: 15897907

No abstract available.

notes:

summary:

The tumors with an apocrine gene expression profile had strong histological apocrine features. These tumors were androgen receptor positive and were all ER negative, creating further classifications of tumor cells based on steroid receptor activity- luminal which are ER and AR positive, basal that are ER and AR negative, and molecular apocrine that are ER negative and AR positive.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
(20967 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 20967 features, 49 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
49	character	character

alt_sample_name:

Length	Class	Mode
49	character	character

sample_type:

tumor
49

er:

negative	positive
22	27

pgr:

negative	positive	NA's
29	18	2

tumor_size:

1 2 3 4
4 23 14 8

N:

0 1
19 30

grade:

1 2 3 NA's
4 22 20 3

batch:

EORTC10994
49

uncurated_author_metadata:

Length Class Mode
49 character character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE1561>

EXPO

EXPO

Description

ExpressionSet for the EXPO Dataset

Format

experimentData(eset):

Experiment data

Experimenter name:

Laboratory:

Contact information:

Title:

URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE2109>

PMIDs:

No abstract available.

notes:

summary:

N/A

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

```
featureData(eset):
An object of class 'AnnotatedDataFrame'
 featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
 (42447 total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription
```

Details

```
assayData: 42447 features, 353 samples
Platform type:
```

```
-----
Available sample meta-data:
-----
```

```
sample_name:
  Length      Class      Mode
    353 character character
```

```
alt_sample_name:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  1005  21640  101100  134700  215900  486200
```

```
sample_type:
tumor
  353
```

```
er:
negative positive  NA's
    85      161    107
```

```
pgr:
negative positive  NA's
    114      129    110
```

```
her2:
negative positive  NA's
    166      61    126
```

```
age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.  NA's
  25.00  45.00  55.00  59.44  67.50  95.00    1
```

```
grade:
  1  2  3 NA's
  32 114 151 56
```

```
batch:
EXPO
  353
```

```

uncurated_author_metadata:
  Length      Class      Mode
    353 character character

```

```

duplicates:
EXPO.EXPO_GSM53027 EXPO.EXPO_GSM53059      NA's
                   1                   1      351

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE2109>

FNCLCC

FNCLCC

Description

ExpressionSet for the FNCLCC Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=17659439
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE7017
  PMIDs: 17659439
  No abstract available.
  notes:
    summary:
      A potentially more powerful clinicogenomic model was created by combining
      a subset of relevant genes from an already published gene expression signa
      ture and a commonly used clinical prognostic model (NPI). The genes in thi
      s model are known to have a role in breast cancer, carcinogenesis, or chem
      otherapy resistance.
    mapping.method:
      maxRowVariance
    mapping.group:
      EntrezGene.ID
    preprocessing:
      As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: UMGC_00005 UMGC_00007 ... UMGC_09018 (6064 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

assayData: 6064 features, 150 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
150	character	character

alt_sample_name:

Length	Class	Mode
150	character	character

sample_type:

tumor
150

N:

1
150

treatment:

chemotherapy
150

batch:

FNCLCC
150

uncurated_author_metadata:

Length	Class	Mode
150	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE7017>

GSE25066

GSE25066

Description

ExpressionSet for the GSE25066 Dataset

Format

experimentData(eset):
Experiment data

```

Experimenter name:
Laboratory:
Contact information:
Title:
URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE25066
PMIDs: 21558518
No abstract available.
notes:
  summary:

  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (20967 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 20967 features, 508 samples
Platform type:
-----

```

```

Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
    508 character character

```

```

alt_sample_name:
  Length      Class      Mode
    508 character character

```

```

sample_type:
tumor
  508

```

```

er:
negative positive      NA's
    205      297      6

```

```

pgr:
negative positive      NA's
    258      243      7

```

```

her2:
negative positive  NA's
    485         6    17

```

```

T:
T0 T1 T2 T3 T4
  3 30 255 145 75

```

```

N:
  0  1
157 351

```

```

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  24.0   42.0   49.0   49.8   58.0   75.0

```

```

grade:
  1  2  3  4 NA's
 32 180 259 15 22

```

```

dmfs_days:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  0.0   636.5   999.9  1088.0  1500.0  2717.0

```

```

dmfs_status:
norecurrence  recurrence
          397           111

```

```

batch:
GSE25066
    508

```

```

uncurated_author_metadata:
  Length    Class      Mode
    508 character character

```

```

chemosensitivity_prediction:
Rx Insensitive  Rx Sensitive
          339           169

```

```

GGI_prediction:
High Low
  336 172

```

```

PAM50_prediction:
  Basal  Her2  LumA  LumB Normal
    189   37  160   78   44

```

```

dlda30_prediction:
pCR RD
  196 312

```

RCB_prediction:
 RCB-0/I RCB-II/III
 230 278

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE25066>

GSE32646

GSE32646

Description

ExpressionSet for the GSE32646 Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information:
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE32646
  PMIDs: 22320227
  No abstract available.
  notes:
  summary:

  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... 91952_at (42437 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 42437 features, 115 samples
Platform type:
-----
Available sample meta-data:
-----

```



```

sample_name:
  Length   Class      Mode
    115 character character

sample_type:
tumor
  115

er:
negative positive
   44      71

pgr:
negative positive
   70      45

her2:
negative positive
   81      34

T:
  1  2  3  4
  5 87 18  5

N:
  0  1
 32 83

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 27.00  45.00   51.00   51.49  59.00   73.00

grade:
  1  2  3
 16 78 21

batch:
GSE32646
  115

uncurated_author_metadata:
  Length   Class      Mode
    115 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE32646>

GSE48091

*GSE48091***Description**

ExpressionSet for the GSE48091 Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information:
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE48091
  PMIDs: 26077471
  No abstract available.
notes:
  summary:

  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 100121619_TGI_at 100121620_TGI_at ... 100314044_TGI_at
    (23246 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 23246 features, 623 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
    623 character character

sample_type:
tumor
  623

```

```
batch:
GSE48091
  623

uncurated_author_metadata:
  Length      Class      Mode
  623 character character
```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE48091>

GSE58644

GSE58644

Description

ExpressionSet for the GSE58644 Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information:
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE58644
  PMIDs: 25284793
  No abstract available.
  notes:
  summary:

  mapping.method:
  maxRowVariance
  mapping.group:
  EntrezGene.ID
  preprocessing:
  As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 7896756 7896759 ... 8180179 (21462 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 21462 features, 321 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
321	character	character

alt_sample_name:

Length	Class	Mode
321	character	character

sample_type:

tumor
321

er:

negative	positive	NA's
70	250	1

her2:

negative	positive	NA's
256	58	7

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.600	1.600	2.100	2.354	2.600	15.000

T:

1	2	3	4	NA's
43	59	13	1	205

N:

0	1	NA's
138	151	32

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
29.00	49.00	58.00	58.82	68.00	93.00

grade:

1	2	3	NA's
26	135	159	1

dmfs_status:

norecurrence	recurrence
295	26

dmfs_days:

```

      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
      0     9496   17900   21620   33600   52590

treatment:
chemo.plus.hormono      chemotherapy      hormonotherapy      untreated
           91                29                66                10
           NA's
           125

chemo:
  0  1 NA's
105 123  93

tamoxifen:
  0  1 NA's
 39 157 125

herceptin:
  0  1 NA's
190  12 119

batch:
GSE58644
  321

uncurated_author_metadata:
  Length  Class  Mode
  321 character character

duplicates:
  Length  Class  Mode
  321 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE58644>

HLP

HLP

Description

ExpressionSet for the HLP Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:

```

Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=19688261>

Title:

URL: <http://www.ebi.ac.uk/arrayexpress/experiments/E-TABM-543/>

PMIDs: 19688261

No abstract available.

notes:

summary:

The results show evidence of different patterns of genetic aberrations in distinct molecular subtypes of breast cancer. Patterns of copy number aberrations may drive biological phenomena characteristic to each subtype.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: 9g8cQB1TZtuiix.u1U fJUdX0IAn_P9VLTgJU ...

xopB7pPn18FJ067uDs (26536 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 26536 features, 53 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
53	character	character

alt_sample_name:

Length	Class	Mode
53	character	character

sample_type:

tumor
53

er:

negative	positive
28	25

pgr:

negative	positive
33	20

```

her2:
negative positive
      40      13

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.   NA's
  1.200  1.800  2.450  2.648  3.000  8.000    5

N:
  0    1 NA's
 27  25   1

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.   NA's
 30.00  47.50  53.50  54.96  64.25  81.00    5

grade:
  3
 53

batch:
HLP
 53

uncurated_author_metadata:
  Length    Class      Mode
    53 character character

```

Source

<http://www.ebi.ac.uk/arrayexpress/experiments/E-TABM-543/>

 IRB

 IRB

Description

ExpressionSet for the IRB Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/18297396
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5460
  PMIDs: 18297396
  No abstract available.

```

```

notes:
  summary:

  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 42447 features, 129 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
    129 character character

alt_sample_name:
  Length      Class      Mode
    129 character character

sample_type:
tumor
  129

er:
negative positive
   53      76

her2:
negative positive
   98      31

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 0.800  1.500  2.200  2.488  3.000  8.500

N:
  0 1
64 65

```



```

grade:
  1 2 3
27 32 70

treatment:
untreated
  129

batch:
IRB
129

uncurated_author_metadata:
  Length      Class      Mode
  129 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5460>

K00

KOO

Description

link does not work, in progress8

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/12747878
  Title:
  URL: Unavailable
  PMIDs: 12747878

Abstract: A 6 word abstract is available. Use 'abstract' method.
notes:
  summary:
    A new gene signature was used to accurately predict 90
n the study.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

```

```
featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at (280
  total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 280 features, 88 samples

Platform type:

Available sample meta-data:

```
sample_name:
  Length      Class      Mode
    88 character character
```

```
alt_sample_name:
  Length      Class      Mode
    88 character character
```

sample_type:

```
tumor
  88
```

er:

```
negative positive
   15         73
```

pgr:

```
negative positive
   23         65
```

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.20	1.80	2.30	2.74	3.50	8.50

N:

```
  0  1
19 69
```

treatment:

```
chemotherapy  untreated
           61           27
```

batch:

```
KOO
  88
```

```

uncurated_author_metadata:
  Length      Class      Mode
    88 character character

duplicates:
  Length      Class      Mode
    88 character character

```

Source

Unavailable

loadBreastDatasets	<i>Function to load breast cancer SummarizedExperiment objects from the Experiment Hub</i>
--------------------	--

Description

This function returns breast cancer datasets from the hub and a vector of patients from the datasets that are duplicates based on a spearman correlation > 0.98

Usage

```

loadBreastDatasets(rescale = FALSE, minNumberGenes = 0,
  minNumberEvents = 0, minSampleSize = 0, keepCommonOnly = FALSE,
  imputeMissing = FALSE, removeDuplicates = FALSE)

```

Arguments

rescale	apply centering and scaling to the expression sets (default FALSE)
minNumberGenes	an integer specifying to remove expression sets with less genes than this number (default 0)
minNumberEvents	an integer specifying how man survival events must be in the dataset to keep the dataset (default 0)
minSampleSize	an integer specifying the minimum number of patients required in a summarizedExperiment (default 0)
keepCommonOnly	remove entrezIDs not common to all datasets (default FALSE)
imputeMissing	remove patients from datasets with missing expression values
removeDuplicates	remove patients with a Spearman correlation greater than or equal to 0.98 with other patient expression profiles (default TRUE)

Value

a list with 2 elements. The First element named summarizedExperiments contains the datasets. The second element named duplicates contains a vector with patient IDs for the duplicate patients (those with Spearman correlation greater than or equal to 0.98 with other patient expression profiles).

Examples

```
experimentsAndDups = loadBreastDatasets()
```

loadBreastEsets	<i>Function to load breast cancer expression sets from the Experiment Hub</i>
-----------------	---

Description

This function returns breast cancer datasets from the hub and a vector of patients from the datasets that are most likely duplicates

Usage

```
loadBreastEsets(loadString = "majority", removeDuplicates = TRUE,
  quantileCutoff = 0, rescale = FALSE, minNumberGenes = 0,
  minNumberEvents = 0, minSampleSize = 0, removeRetracted = TRUE,
  removeSubsets = TRUE, keepCommonOnly = FALSE,
  imputeMissing = FALSE)
```

Arguments

loadString	a character vector specifying which data will be loaded. The default is "majority", which loads in 37 of the 39 datasets. The other option is to provide a character vector of the names of the datasets to load. The metabric and tcga datasets are loaded separately as they are very large and doing so will help prevent memory allocation errors for R windows. Furthermore, these datasets are so large that they dominate statistical analyses so it is best that they are analyzed separate of the 37 smaller datasets loaded with the string majority
removeDuplicates	remove patients with a Spearman correlation greater than or equal to 0.98 with other patient expression profiles (default TRUE)
quantileCutoff	A numeric between 0 and 1 specifying to remove genes with standard deviation below the required quantile (default 0)
rescale	apply centering and scaling to the expression sets (default FALSE)
minNumberGenes	an integer specifying to remove expression sets with less genes than this number (default 0)
minNumberEvents	an integer specifying how many survival events must be in the dataset to keep the dataset (default 0)
minSampleSize	an integer specifying the minimum number of patients required in an eset (default 0)
removeRetracted	remove datasets from retracted papers (default TRUE, currently just PMID17290060 dataset)
removeSubsets	remove datasets that are a subset of other datasets (default TRUE, currently just PMID19318476)
keepCommonOnly	remove probes not common to all datasets (default FALSE)
imputeMissing	remove patients from datasets with missing expression values

Value

a list with 2 elements. The First element named `esets` contains the datasets. The second element named `duplicates` contains a vector with patient IDs for the duplicate patients (those with Spearman correlation greater than or equal to 0.98 with other patient expression profiles).

Examples

```
#Use the default loadString = "majority" if you want the 37 smaller datasets
esetsAndDups = loadBreastEsets(loadString = c("CAL", "DFHCC", "DFHCC2", "DFHCC3", "DUKE", "DUKE2", "EMC2"))
```

LUND

LUND

Description

ExpressionSet for the LUND Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=18430221
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE31863
  PMIDs: 18430221
  No abstract available.
  notes:
    summary:
      A significant difference was found between the ER positive subgroup and ER
      negative subgroup in the gene expression profiles.
    mapping.method:
      maxRowVariance
    mapping.group:
      EntrezGene.ID
    preprocessing:
      As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: H200006618 H200006808 ... H300022925 (11154 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 11154 features, 143 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
143	character	character

alt_sample_name:

Length	Class	Mode
143	character	character

sample_type:

tumor
143

er:

negative	positive
29	114

pgr:

negative	positive	NA's
47	88	8

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
0.200	1.100	1.500	1.486	1.800	4.000	2

N:

0
143

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
27.00	47.50	56.00	54.76	63.00	73.00

batch:

LUNDS1	LUNDS2	LUNDS3	LUNDS4
30	47	22	44

uncurated_author_metadata:

Length	Class	Mode
143	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE31863>

LUND2

*LUND2***Description**

ExpressionSet for the LUND2 Dataset

Format

experimentData(eset):

Experiment data

Experimenter name:

Laboratory:

 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=17452630>

Title:

 URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5325>

PMIDs: 17452630

No abstract available.

notes:

summary:

 Microarray signature was able to show PTEN mRNA losse_when IHC was unable, even though tumors exhibited PTEN loss behavior. Stathmim was an accurate IHC marker of the signature and had prognostic significance.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: 1 2 ... 27648 (22008 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 22008 features, 105 samples

Platform type:

Available sample meta-data:

sample_name:

Length Class Mode

105 character character

alt_sample_name:

Length Class Mode

```

105 character character

sample_type:
tumor
  105

er:
negative positive
  60      45

treatment:
hormonotherapy
  105

batch:
LUND2
  105

uncurated_author_metadata:
  Length      Class      Mode
  105 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5325>

MAINZ

MAINZ

Description

ExpressionSet for the MAINZ Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=18593943
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE11121
  PMIDs: 18593943
  No abstract available.
notes:
  summary:
    Poor prognosis is noted in tumors with low ER expression, showing the high
    est level of proliferative activity. In some tumors with highly expressed
    B-cell or T-cell metagenes, metastases rarely occurred, even with high pro
    liferation and low ER expression.

```



```

mapping.method:
  maxRowVariance
mapping.group:
  EntrezGene.ID
preprocessing:
  As published by original author.

```

```

featureData(eset):
An object of class 'AnnotatedDataFrame'
 featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
 (20967 total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription

```

Details

```

assayData: 20967 features, 200 samples
Platform type:

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
    200 character character

```

```

alt_sample_name:
  Length      Class      Mode
    200 character character

```

```

sample_type:
tumor
  200

```

```

er:
negative positive
   38      162

```

```

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 0.100  1.500   2.000   2.070  2.425   6.000

```

```

N:
  0
200

```

```

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 25.00  50.00   60.00   59.98  69.00   90.00

```

```

grade:
  1  2  3

```

29 136 35

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
30	1905	2715	2816	3855	7200

dmfs_status:

norecurrence	recurrence
154	46

treatment:

untreated
200

batch:

MAINZ
200

uncurated_author_metadata:

Length	Class	Mode
200	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE11121>

MAQC2

MAQC2

Description

ExpressionSet for the MAQC2 Dataset

Format

experimentData(eset):

Experiment data

 Experimenter name:

 Laboratory:

 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=20064235>

 Title:

 URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20194>

 PMIDs: 20064235

 No abstract available.

 notes:

 summary:

 It is possible to build multi-gene classifiers of clinical outcome. Prediction accuracy depends on training sample size and classification difficulty.

 mapping.method:

```

maxRowVariance
mapping.group:
  EntrezGene.ID
preprocessing:
  As published by original author.

```

```

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (20967 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 20967 features, 230 samples
Platform type:

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
    230 character character

```

```

alt_sample_name:
  Length      Class      Mode
    230 character character

```

```

sample_type:
tumor
  230

```

```

er:
negative positive
   89      141

```

```

pgr:
negative positive
  126      104

```

```

her2:
negative positive
  190      40

```

```

N:
  0  1
66 164

```

```

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
 26.00  45.00   51.00   52.02  59.00   79.00

```

```

grade:
  1  2  3
 13 94 123

treatment:
chemotherapy
      230

batch:
MAQC2
      230

uncurated_author_metadata:
  Length      Class      Mode
      230 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20194>

MCCC

MCCC

Description

ExpressionSet for the MCCC Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=19960244
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE19177
  PMIDs: 19960244
  No abstract available.
notes:
  summary:
    Overall, expression and copy number profiling of familial tumors have shown that the tumors show molecular heterogeneity similar to sporadic tumors and are defined by their molecular subtypes rather than BRCA1 or BRCA2 germline mutation status.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:

```

As published by original author.

```
featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: probe_10017 probe_10021 ... probe_7650767 (19048 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 19048 features, 75 samples

Platform type:

Available sample meta-data:

```
sample_name:
  Length      Class      Mode
    75 character character
```

```
sample_type:
tumor
  75
```

```
batch:
MCCC
  75
```

```
uncurated_author_metadata:
  Length      Class      Mode
    75 character character
```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE19177>

MDA4

MDA4

Description

ExpressionSet for the MDA4 Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
```

Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=16896004>

Title:

URL: <http://bioinformatics.mdanderson.org/pubdata.html>

PMIDs: 16896004

No abstract available.

notes:

summary:

The developed 30-probe set has high sensitivity and negative predictive value, accurately identifying 12 out of 13 patients with pCR and 27 out of 28 patients with residual disease.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
(21169 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 21169 features, 129 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
129	character	character

unique_patient_ID:

Length	Class	Mode
129	character	character

sample_type:

tumor

129

er:

negative	positive	NA's
48	79	2

pgr:

negative	positive	NA's
73	54	2

```

her2:
negative positive
      114      15

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
  0.000  0.500  1.800  2.162  3.000 10.000     8

N:
  0    1 NA's
 59  62   8

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
 28.00  43.00  51.00  51.43  61.00  73.00

treatment:
chemotherapy
      129

batch:
MDA4
  129

uncurated_author_metadata:
  Length    Class    Mode
  129 character character

duplicates:
MDA4.MDA4_M207 MDA4.MDA4_M400    NA's
              1              1    127

```

Source

<http://bioinformatics.mdanderson.org/pubdata.html>

METABRIC

METABRIC

Description

ExpressionSet for the METABRIC Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/22522925

```

```

Title:
URL: https://www.ebi.ac.uk/ega/studies/EGAS00000000083
PMIDs: 22522925
No abstract available.
notes:
  summary:

  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

```

```

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: ILMN_1802380 ILMN_1736104 ... ILMN_1709472 (36155
  total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 36155 features, 2136 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

```

```

  165 observations deleted due to missingness
      n events median 0.95LCL 0.95UCL
1971.0  891.0   12.3   11.6   13.2

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
  2136 character character

```

```

alt_sample_name:
  Length      Class      Mode
  2136 character character

```

```

sample_type:
healthy  tumor
  144    1992

```

```

er:
negative positive  NA's
  440    1508    188

```



```

her2:
negative positive  NA's
   676    148    1312

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
  0.000  1.700  2.300  2.621  3.000  18.200   164

N:
  0    1 NA's
1042 950 144

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
  21.93  51.36  61.78  61.13  70.76  96.29   13

grade:
  1    2    3 NA's
 170  775  957  234

days_to_death:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
    3   1498   2632   2948  4357   9218   147

vital_status:
deceased  living    NA's
   891    1081    164

treatment:
chemo.plus.hormono      chemotherapy      hormonotherapy      untreated
           196                226                1029                685

batch:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
  1.000  1.000  3.000  2.613  3.000  5.000   144

uncurated_author_metadata:
  Length    Class    Mode
  2136 character character

duplicates:
  Length    Class    Mode
  2136 character character

```

Source

<https://www.ebi.ac.uk/ega/studies/EGAS00000000083>

Description

ExpressionSet for the MSK Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=16049480
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2603
  PMIDs: 16049480
  No abstract available.
notes:
  summary:
    A set of genes were identified that mark and mediate metastasis to the lung. Some genes confer growth advantages to both the breast tumor and lung environment, while others contribute to aggressive growth specifically in the lung.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (20967 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 20967 features, 99 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
    99 character character

alt_sample_name:
  Length      Class      Mode
    99 character character

sample_type:

```

```

tumor
  99

er:
negative positive
  42      57

pgr:
negative positive  NA's
  55      43      1

her2:
positive  NA's
  85      14

tumor_size:
  Min. 1st Qu.  Median  Mean 3rd Qu.  Max.
  1.100  2.450  3.200  3.624  4.300 10.000

N:
  0  1
34 65

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median  Mean 3rd Qu.  Max.
  30.00  46.50  56.00  55.81  63.50  87.00

dmfs_days:
  Min. 1st Qu.  Median  Mean 3rd Qu.  Max.  NA's
  245  1279  1971  1888  2575  3924  17

dmfs_status:
norecurrence  recurrence  NA's
           55           27           17

batch:
MSK
  99

uncurated_author_metadata:
  Length  Class  Mode
  99 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2603>

Description

ExpressionSet for the MUG Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=18592372
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse10510
  PMIDs: 18592372
  No abstract available.
notes:
  summary:
    A method was developed to separate tumor cells and their microenvironment
    to test the prognostic abilities of the immune system. Results showed that
    lymphatic infiltration is beneficial for ER negative patients, but probab
    ly not beneficial for ER positive patients.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: H200000001 H200000005 ... opHsV04TC000043 (14288 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 14288 features, 152 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
    152 character character

alt_sample_name:
  Length      Class      Mode
    152 character character

sample_type:
tumor

```

152

batch:
MUG
152

uncurated_author_metadata:
Length Class Mode
152 character character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse10510>

NCCS

NCCS

Description

ExpressionSet for the NCCS Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=18636107
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse5364
  PMIDs: 18636107
  No abstract available.
notes:
  summary:
    48 genes were identified that displayed highly restricted levels of expres
    sion in tumors compared to normal tissues. This was validated in 11 indepe
    ndent cohorts of different cancer types.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (20967 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

assayData: 20967 features, 183 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
183	character	character

alt_sample_name:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
1.0	46.5	92.0	92.0	137.5	183.0

sample_type:

tumor
183

batch:

NCCS
183

uncurated_author_metadata:

Length	Class	Mode
183	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse5364>

NCI

NCI

Description

ExpressionSet for the NCI Dataset

Format

experimentData(eset):

Experiment data

 Experimenter name:

 Laboratory:

 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=12917485>

 Title:

 URL: Supplemental data from paper

 PMIDs: 12917485

 No abstract available.

 notes:

summary:

Expression patterns were strongly associated with ER status, moderately associated with grade, but not associated with menopausal state, node status, or tumor size. Genes that were significantly associated with survival were identified.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: AF106966 AF217974 ... Y12473 (5154 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 5154 features, 99 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
99	character	character

alt_sample_name:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
21580	21610	21640	21650	21670	21830

sample_type:

tumor
99

er:

negative	positive
34	65

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.80	1.80	2.50	2.82	3.00	8.00

N:

0	1
46	53

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
------	---------	--------	------	---------	------

33.00 49.00 57.00 57.47 64.50 90.00

grade:

1 2 3
16 38 45

days_to_tumor_recurrence:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
8	967	2057	1969	2930	4067

recurrence_status:

norecurrence	recurrence
54	45

treatment:

chemotherapy	hormonotherapy	untreated
10	78	11

batch:

NCI
99

uncurated_author_metadata:

Length	Class	Mode
99	character	character

Source

Supplemental data from paper

NKI

NKI

Description

ExpressionSet for the NKI Dataset

Format

experimentData(eset):

Experiment data

Experimenter name:

Laboratory:

Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=12490681>; <http://www.ncbi.nlm.nih.gov/pubmed/11823860>

Title:

URL: Not available

PMIDs: 12490681, 11823860

No abstract available.

notes:

summary:

It was found that the gene expression profile that was studied was more powerful in predicting outcome of disease in younger patients than using standard clinical and pathological criteria.

```
mapping.method:
  maxRowVariance
mapping.group:
  EntrezGene.ID
preprocessing:
  As published by original author.
```

```
featureData(eset):
An object of class 'AnnotatedDataFrame'
 featureNames: Contig45645_RC Contig44916_RC ... Contig62037_RC (14960
  total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription
```

Details

```
assayData: 14960 features, 337 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)
```

```
42 observations deleted due to missingness
  n events median 0.95LCL 0.95UCL
295    79     NA     NA     NA
```

```
-----
Available sample meta-data:
-----
```

```
sample_name:
  Length      Class      Mode
    337 character character
```

```
alt_sample_name:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  4.0   123.0   215.0   214.1  312.0   404.0
```

```
sample_type:
tumor
  337
```

```
er:
negative positive
   88    249
```

```
tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
 0.200  1.500  2.000  2.241  2.800  5.500
```

N:

0 1
193 144

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
26.0	40.0	45.0	44.2	49.0	62.0

grade:

1	2	3
79	109	149

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
9	1252	2414	2546	3602	6699	18

dmfs_status:

norecurrence	recurrence	NA's
210	109	18

days_to_tumor_recurrence:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
9	1252	2414	2546	3602	6699	18

recurrence_status:

norecurrence	recurrence	NA's
210	109	18

days_to_death:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
20	1934	2637	2870	3763	6694	42

vital_status:

deceased	living	NA's
79	216	42

treatment:

chemotherapy	hormonotherapy	untreated
90	40	207

batch:

NKI	NKI2
117	220

uncurated_author_metadata:

Length	Class	Mode
337	character	character

Source

Not available

PNC

PNC

Description

ExpressionSet for the PNC Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=21910250
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20711
  PMIDs: GSE20711, PMID 21910250
  No abstract available.
notes:
  summary:
    Breast tumors can be further divided than the currently known expression s
ubtypes based on DNA methylation profiles.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (42447 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 42447 features, 92 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

```

```

  4 observations deleted due to missingness
    n events median 0.95LCL 0.95UCL
88.0  25.0    NA    11.3    NA

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length   Class      Mode
    92 character character

alt_sample_name:
  Length   Class      Mode
    92 character character

sample_type:
tumor
  92

er:
negative positive  NA's
   43      45      4

pgr:
negative positive  NA's
   43      40      9

her2:
negative positive  NA's
   64      26      2

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.  NA's
  0.900  1.700   2.500   2.758  3.000 10.000    6

N:
  0  1 NA's
 43 40  9

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.  NA's
 32.16 48.57 53.90 55.97 64.84 82.13    4

grade:
  1  2  3 NA's
 13  5 70  4

days_to_tumor_recurrence:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.  NA's
   29   967   2216   2122  2931  5139    7

recurrence_status:
norecurrence  recurrence  NA's
           49           36           7

days_to_death:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.  NA's
   318   1940   2372   2525  3043  5139    4

```

```
vital_status:
deceased  living  NA's
      25      63      4

batch:
PNC
92

uncurated_author_metadata:
  Length      Class      Mode
    92 character character
```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20711>

STK	<i>STK</i>
-----	------------

Description

ExpressionSet for the STK Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=16280042
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse1456
  PMIDs: 16280042
  No abstract available.
notes:
  summary:
    Expression profiling was able to better predict prognosis compared to hist
ological staging.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... 244889_at (36178 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 36178 features, 159 samples

Platform type:

 Available sample meta-data:

sample_name:

Length	Class	Mode
159	character	character

alt_sample_name:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
1.0	67.0	136.0	138.3	208.5	277.0

sample_type:

tumor

159

er:

negative positive

29 130

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
31.0	48.0	56.0	57.8	68.5	87.0

grade:

1 2 3 NA's

28 58 61 12

days_to_tumor_recurrence:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
66	2022	2467	2234	2846	3099

recurrence_status:

norecurrence recurrence

113 46

treatment:

chemotherapy hormonotherapy untreated

89 48 22

batch:

STK

159

uncurated_author_metadata:

Length	Class	Mode
159	character	character

159 character character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse1456>

 STNO2

 STNO2

Description

ExpressionSet for the STNO2 Dataset

Format

experimentData(eset):

Experiment data

 Experimenter name:

 Laboratory:

 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=12829800>

 Title:

 URL: http://smd.princeton.edu/cgi-bin/publication/viewPublication.pl?pub_no=248

 PMIDs: 12829800

 No abstract available.

 notes:

 summary:

 Distinct breast cancer subtypes were determined by gene expression profiles and were validated in other published datasets.

 mapping.method:

 maxRowVariance

 mapping.group:

 EntrezGene.ID

 preprocessing:

 As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

 featureNames: IMAGE:1020315 IMAGE:1030271 ... IMAGE:971399 (3663 total)

 varLabels: probeset gene EntrezGene.ID best_probe

 varMetadata: labelDescription

Details

assayData: 3663 features, 118 samples

Platform type:

Overall survival time-to-event summary (in years):

Call: `survfit(formula = Surv(time, cens) ~ -1)`

	n	events	median	0.95LCL	0.95UCL
	118.00	46.00	4.67	3.34	NA

Available sample meta-data:

sample_name:
 Length Class Mode
 118 character character

alt_sample_name:
 Length Class Mode
 118 character character

sample_type:
 tumor
 118

er:
 negative positive NA's
 31 82 5

tumor_size:
 1 2 3 4 NA's
 6 13 62 32 5

N:
 0 1 NA's
 34 79 5

age_at_initial_pathologic_diagnosis:
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 21.00 46.25 58.00 58.47 71.75 85.00

grade:
 1 2 3 NA's
 11 49 53 5

days_to_tumor_recurrence:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 122.0 396.0 761.0 927.9 1233.0 2800.0 23

recurrence_status:
 norecurrence recurrence
 58 60

days_to_death:
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 91 426 898 1019 1392 5722

vital_status:
 deceased living
 46 72

treatment:

chemotherapy	hormonotherapy	untreated
23	73	22

batch:

STN02

118

uncurated_author_metadata:

Length	Class	Mode
118	character	character

Source

http://smd.princeton.edu/cgi-bin/publication/viewPublication.pl?pub_no=248

TCGA

TCGA

Description

ExpressionSet for the TCGA Dataset

Format

experimentData(eset):

Experiment data

 Experimenter name:

 Laboratory:

 Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/23000897>

 Title:

 URL: <http://cancergenome.nih.gov/>

 PMIDs: 23000897

 No abstract available.

 notes:

 summary:

 mapping.method:

 maxRowVariance

 mapping.group:

 EntrezGene.ID

 preprocessing:

 As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

 featureNames: A1BG A2M ... ARHGAP11A.2 (19504 total)

 varLabels: probeset gene EntrezGene.ID best_probe

 varMetadata: labelDescription

Details

assayData: 19504 features, 1073 samples
 Platform type:
 Overall survival time-to-event summary (in years):
 Call: survfit(formula = Surv(time, cens) ~ -1)

n	events	median	0.95LCL	0.95UCL
1073.00	103.00	10.05	8.56	12.05

 Available sample meta-data:

sample_name:
 Length Class Mode
 1073 character character

alt_sample_name:
 Length Class Mode
 1073 character character

unique_patient_ID:
 Length Class Mode
 1073 character character

sample_type:
 tumor
 1073

er:
 negative positive NA's
 233 790 50

pgr:
 negative positive NA's
 334 686 53

her2:
 negative positive NA's
 549 161 363

age_at_initial_pathologic_diagnosis:
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 26.00 49.00 58.00 58.48 68.00 90.00

days_to_death:
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 -7.0 137.0 412.0 820.3 1180.0 6796.0

vital_status:
 deceased living
 103 970

```
batch:
TCGA
1073

uncurated_author_metadata:
  Length      Class      Mode
  1073 character character
```

Source

<http://cancergenome.nih.gov/>

TRANSBIG	<i>TRANSBIG</i>
----------	-----------------

Description

ExpressionSet for the TRANSBIG Dataset

Format

```
experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=17545524
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gsE7390
  PMIDs: 17545524
  No abstract available.
notes:
  summary:
    The 76-gene signature was validated. The results supports the hypothesis that utilizing the gene signature could reduce the number of patients who receive unnecessary adjuvant therapy.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
    (20967 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription
```

Details

assayData: 20967 features, 198 samples
 Platform type:
 Overall survival time-to-event summary (in years):
 Call: survfit(formula = Surv(time, cens) ~ -1)

n	events	median	0.95LCL	0.95UCL
198.0	56.0	NA	17.1	NA

 Available sample meta-data:

sample_name:

Length	Class	Mode
198	character	character

sample_type:
 tumor
 198

er:
 negative positive
 64 134

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.600	1.700	2.000	2.181	2.500	5.000

N:
 0
 198

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
24.00	42.00	46.00	46.39	51.00	60.00

grade:

1	2	3	NA's
30	83	83	2

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
125	2375	4384	3954	5566	9108

dmfs_status:
 norecurrence recurrence
 147 51

days_to_tumor_recurrence:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
121	1528	3534	3399	5130	8711

recurrence_status:

norecurrence	recurrence
112	86

days_to_death:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
146	2744	4562	4150	5610	9108

vital_status:

deceased	living
56	142

treatment:

untreated
198

batch:

VDXGUYU	VDXIGRU	VDXKIU	VDXOXFU	VDXRHU
36	50	51	24	37

uncurated_author_metadata:

Length	Class	Mode
198 character	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gsE7390>

UCSF

UCSF

Description

ExpressionSet for the UCSF Dataset

Format

experimentData(eset):

Experiment data

Experimenter name:

Laboratory:

Contact information: <http://www.ncbi.nlm.nih.gov/pubmed/?term=17428335>; <http://www.ncbi.nlm.nih.gov/pubmed/14612510>

Title:

URL: Not available

PMIDs: 17428335, 14612510

No abstract available.

notes:

summary:

A gene set was identified that correctly predicted outcomes more effective

```

ly than using histological markers.
mapping.method:
  maxRowVariance
mapping.group:
  EntrezGene.ID
preprocessing:
  As published by original author.

```

```

featureData(eset):
An object of class 'AnnotatedDataFrame'
 featureNames: probe_1 probe_3 ... probe_10365 (8015 total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription

```

Details

```

assayData: 8015 features, 162 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

```

```

      29 observations deleted due to missingness
      n events median 0.95LCL 0.95UCL
133.00  44.00  11.56   9.25   NA

```

```

-----
Available sample meta-data:
-----

```

```

sample_name:
  Length      Class      Mode
    162 character character

```

```

alt_sample_name:
  Length      Class      Mode
    162 character character

```

```

sample_type:
tumor
  162

```

```

er:
negative positive  NA's
   41      101      20

```

```

pgr:
negative positive  NA's
   46      94      22

```

```

her2:
negative positive  NA's
   35      19      108

```

tumor_size:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 0.000 1.800 2.000 2.682 3.200 11.000 7

N:
 0 1 NA's
 67 82 13

age_at_initial_pathologic_diagnosis:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 28.00 44.00 53.00 56.61 70.00 88.00 9

grade:
 1 2 3 NA's
 14 62 74 12

dmfs_days:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 47 897 2040 2084 2992 8267 29

dmfs_status:
 norecurrence recurrence
 140 22

days_to_tumor_recurrence:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 47 861 1865 1985 2847 8267 29

recurrence_status:
 norecurrence recurrence
 125 37

days_to_death:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 47 1087 2054 2140 3087 8267 29

vital_status:
 deceased living NA's
 54 99 9

treatment:
 chemo.plus.hormono chemotherapy hormonotherapy untreated
 31 38 61 22
 NA's
 10

batch:
 UCSF
 162

uncurated_author_metadata:

Length	Class	Mode
162	character	character

Source

Not available

UNC4

UNC4

Description

ExpressionSet for the UNC4 Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=20813035
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse18229
  PMIDs: 20813035
  No abstract available.
  notes:
  summary:
    Clinically, this subtype is usually triple negative invasive ductal carcinomas with a poor prognosis. Response to standard of care preoperative chemotherapy is intermediate between basal-like and luminal tumors. The claudin-low subtype most closely resembles the mammary epithelial stem cell.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: probe.10 probe.12 ... probe.79701 (5420 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 5420 features, 305 samples
Platform type:
Overall survival time-to-event summary (in years):

```


Call: survfit(formula = Surv(time, cens) ~ -1)

65 observations deleted due to missingness
 n events median 0.95LCL 0.95UCL
 240.00 51.00 7.73 6.82 NA

 Available sample meta-data:

sample_name:
 Length Class Mode
 305 character character

sample_type:
 tumor
 305

er:
 negative positive NA's
 99 154 52

pgr:
 negative positive NA's
 126 109 70

her2:
 negative positive NA's
 203 58 44

tumor_size:
 1 1.5 3 6 NA's
 60 1 129 43 72

N:
 0 1 NA's
 126 135 44

age_at_initial_pathologic_diagnosis:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 24.00 46.00 55.00 56.73 68.00 89.00 59

grade:
 1 2 3 NA's
 25 80 138 62

days_to_tumor_recurrence:
 Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
 30.0 450.0 750.0 954.3 1380.0 3540.0 64

recurrence_status:
 norecurrence recurrence NA's

```

          170          70          65

days_to_death:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
   30    540    885   1104   1590   5190    65

vital_status:
deceased  living    NA's
   51     189     65

batch:
UNC4
305

uncurated_author_metadata:
  Length    Class    Mode
   305 character character

duplicates:
K00.K00_KF_105 K00.K00_T01_514    NA's
           1                1        303

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse18229>

 UNT

 UNT

Description

ExpressionSet for the UNT Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=16478745; http://www.ncbi.nlm.nih.gov/pubmed/17401012
  Title:
  URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2990
  PMIDs: 16478745, 17401012
  No abstract available.
notes:
  summary:
    A gene expression grading index (GGI) was developed. The GGI reclassified
    grade 2 patients into two groups with low and high risks of recurrence.
  mapping.method:
    maxRowVariance

```

```

mapping.group:
  EntrezGene.ID
preprocessing:
  As published by original author.

```

```

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... 244889_at (36084 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 36084 features, 133 samples
Platform type:
-----

```

```

Available sample meta-data:
-----

```

```

sample_name:
  Length   Class      Mode
  133 character character

```

```

alt_sample_name:
  Length   Class      Mode
  133 character character

```

```

sample_type:
tumor
  133

```

```

er:
negative positive  NA's
  40      86      7

```

```

pgr:
negative positive  NA's
  6      56      71

```

```

tumor_size:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  0.000  1.200  1.900  1.892  2.300  6.000

```

```

N:
  0
133

```

```

age_at_initial_pathologic_diagnosis:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  24.00  44.00  53.00  51.79  60.00  73.00

```

```

grade:

```

```

  1   2   3 NA's
32  51  29  21

dmfs_days:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
   61   1338   2809   2724   4078   5305

dmfs_status:
norecurrence  recurrence      NA's
           97           28           8

days_to_tumor_recurrence:
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
   61   1338   2675   2687   3912   5305

recurrence_status:
norecurrence  recurrence      NA's
           76           49           8

treatment:
untreated
  133

batch:
KIU OXFU
  64  69

uncurated_author_metadata:
  Length    Class      Mode
  133 character character

```

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2990>

UPP

UPP

Description

ExpressionSet for the UPP Dataset

Format

```

experimentData(eset):
Experiment data
  Experimenter name:
  Laboratory:
  Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=16141321
  Title:

```

URL: <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse3494>

PMIDs: 16141321

No abstract available.

notes:

summary:

A 32-gene expression signature of p53 was identified that differentiates p53 mutant and wild-type tumors. The signature is more effective than sequence-based assessments of p53 in predicting prognosis and therapeutic response.

mapping.method:

maxRowVariance

mapping.group:

EntrezGene.ID

preprocessing:

As published by original author.

featureData(eset):

An object of class 'AnnotatedDataFrame'

featureNames: 1007_s_at 1053_at ... 244889_at (36178 total)

varLabels: probeset gene EntrezGene.ID best_probe

varMetadata: labelDescription

Details

assayData: 36178 features, 251 samples

Platform type:

Available sample meta-data:

sample_name:

Length	Class	Mode
251	character	character

alt_sample_name:

Length	Class	Mode
251	character	character

sample_type:

tumor
251

er:

negative	positive	NA's
34	213	4

pgr:

negative	positive
61	190

tumor_size:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
------	---------	--------	------	---------	------

0.200 1.500 2.000 2.243 2.562 13.000

N:

0 1 NA's
158 84 9

age_at_initial_pathologic_diagnosis:

Min. 1st Qu. Median Mean 3rd Qu. Max.
28.00 52.00 64.00 62.11 72.00 93.00

grade:

1 2 3 NA's
67 128 54 2

days_to_tumor_recurrence:

Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
30 1870 3711 3007 3985 4654 17

recurrence_status:

norecurrence recurrence NA's
181 55 15

treatment:

hormonotherapy untreated NA's
80 142 29

batch:

UPPT UPPU
80 171

uncurated_author_metadata:

Length Class Mode
251 character character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse3494>

VDX

VDX

Description

ExpressionSet for the VDX Dataset

Format

experimentData(eset):
Experiment data
Experimenter name:

```

Laboratory:
Contact information: http://www.ncbi.nlm.nih.gov/pubmed/?term=15721472; http://www.ncbi.nlm.nih.gov/pubmed/15721472
Title:
URL: http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2034; http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2034
PMIDs: 15721472, 17420468
No abstract available.
notes:
  summary:
    15721472: A gene signature was identified that can accurately predict distant metastases in node-negative cases. 17420468: Tumors with a lung metastatic gene signature were shown to be larger.
  mapping.method:
    maxRowVariance
  mapping.group:
    EntrezGene.ID
  preprocessing:
    As published by original author.

featureData(eset):
An object of class 'AnnotatedDataFrame'
  featureNames: 1007_s_at 1053_at ... AFFX-HUMISGF3A/M97935_MB_at
  (21169 total)
  varLabels: probeset gene EntrezGene.ID best_probe
  varMetadata: labelDescription

```

Details

```

assayData: 21169 features, 344 samples
Platform type:
-----
Available sample meta-data:
-----

sample_name:
  Length      Class      Mode
  344 character character

alt_sample_name:
  Min. 1st Qu.  Median    Mean 3rd Qu.  Max.
  3.0  122.8   605.5   575.7  836.5  2038.0

sample_type:
tumor
  344

er:
negative positive
  135      209

tumor_size:
  1  2  3  4 NA's
146 132 5 3 58

```

N:
0
344

age_at_initial_pathologic_diagnosis:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
26.00	44.00	52.00	53.88	63.00	83.00	58

grade:

1	2	3	NA's
7	42	148	147

dmfs_days:

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
61	1254	2616	2377	3285	5201

dmfs_status:

norecurrence	recurrence
226	118

treatment:

untreated	344
-----------	-----

batch:

VDX	VDXN
286	58

uncurated_author_metadata:

Length	Class	Mode
344	character	character

Source

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse2034>; <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=gse5>

Index

*Topic **datasets**

CAL, [2](#)
DFHCC, [5](#)
DFHCC2, [7](#)
DFHCC3, [9](#)
DUKE, [10](#)
DUKE2, [12](#)
duplicates, [14](#)
EMC2, [15](#)
EORTC10994, [16](#)
EXPO, [18](#)
FNCLCC, [20](#)
GSE25066, [21](#)
GSE32646, [24](#)
GSE48091, [26](#)
GSE58644, [27](#)
HLP, [29](#)
IRB, [31](#)
KOO, [33](#)
LUND, [37](#)
LUND2, [39](#)
MAINZ, [40](#)
MAQC2, [42](#)
MCCC, [44](#)
MDA4, [45](#)
METABRIC, [47](#)
MSK, [49](#)
MUG, [51](#)
NCCS, [53](#)
NCI, [54](#)
NKI, [56](#)
PNC, [59](#)
STK, [61](#)
STNO2, [63](#)
TCGA, [65](#)
TRANSBIG, [67](#)
UCSF, [69](#)
UNC4, [72](#)
UNT, [74](#)
UPP, [76](#)
VDX, [78](#)

CAL (CAL), [2](#)
DFHCC (DFHCC), [5](#)

DFHCC2 (DFHCC2), [7](#)
DFHCC3 (DFHCC3), [9](#)
DUKE (DUKE), [10](#)
DUKE2 (DUKE2), [12](#)
EMC2 (EMC2), [15](#)
EORTC10994 (EORTC10994), [16](#)
EXPO (EXPO), [18](#)
FNCLCC (FNCLCC), [20](#)
GSE25066 (GSE25066), [21](#)
GSE32646 (GSE32646), [24](#)
GSE48091 (GSE48091), [26](#)
GSE58644 (GSE58644), [27](#)
HLP (HLP), [29](#)
IRB (IRB), [31](#)
KOO (KOO), [33](#)
LUND (LUND), [37](#)
LUND2 (LUND2), [39](#)
MAINZ (MAINZ), [40](#)
MAQC2 (MAQC2), [42](#)
MCCC (MCCC), [44](#)
MDA4 (MDA4), [45](#)
METABRIC (METABRIC), [47](#)
MSK (MSK), [49](#)
MUG (MUG), [51](#)
NCCS (NCCS), [53](#)
NCI (NCI), [54](#)
NKI (NKI), [56](#)
PNC (PNC), [59](#)
STK (STK), [61](#)
STNO2 (STNO2), [63](#)
TCGA (TCGA), [65](#)
TRANSBIG (TRANSBIG), [67](#)
UCSF (UCSF), [69](#)
UNC4 (UNC4), [72](#)
UNT (UNT), [74](#)
UPP (UPP), [76](#)
VDX (VDX), [78](#)

CAL, [2](#)

DFHCC, [5](#)
DFHCC2, [7](#)
DFHCC3, [9](#)
DUKE, [10](#)

DUKE2, [12](#)
duplicates, [14](#)

EMC2, [15](#)
EORTC10994, [16](#)
EXPO, [18](#)

FNCLCC, [20](#)

GSE25066, [21](#)
GSE32646, [24](#)
GSE48091, [26](#)
GSE58644, [27](#)

HLP, [29](#)

IRB, [31](#)

KOO, [33](#)

loadBreastDatasets, [35](#)
loadBreastEsets, [36](#)
LUND, [37](#)
LUND2, [39](#)

MAINZ, [40](#)
MAQC2, [42](#)
MCCC, [44](#)
MDA4, [45](#)
METABRIC, [47](#)
MSK, [49](#)
MUG, [51](#)

NCCS, [53](#)
NCI, [54](#)
NKI, [56](#)

PNC, [59](#)

STK, [61](#)
STNO2, [63](#)

TCGA, [65](#)
TRANSBIG, [67](#)

UCSF, [69](#)
UNC4, [72](#)
UNT, [74](#)
UPP, [76](#)

VDX, [78](#)