Package ‘MetaGxOvarian’

April 4, 2024

Type Package

Title Transcriptomic Ovarian Cancer Datasets

Version 1.22.0

Date `r Sys.date()`

Description A collection of Ovarian Cancer Transcriptomic Datasets that are part of the MetaGxData package compendium.

License Artistic-2.0

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

Imports stats, lattice, impute

Suggests testthat, xtable, rmarkdown, knitr, BiocStyle, markdown

Encoding UTF-8

VignetteBuilder knitr

NeedsCompilation no

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

LazyData yes

RoxygenNote 7.1.1

git_url https://git.bioconductor.org/packages/MetaGxOvarian
git_branch RELEASE_3_18
git_last_commit 77bbd05
git_last_commit_date 2023-10-24

Repository Bioconductor 3.18

Date/Publication 2024-04-04

Author Michael Zon [aut],
   Vandana Sandhu [aut],
   Christopher Eeles [ctb],
   Benjamin Haibe-Kains [aut, cre]

Maintainer Benjamin Haibe-Kains <benjamin.haibe.kains@utoronto.ca>
R topics documented:

- attention .................................................. 2
- duplicates ................................................. 2
- E.MTAB.386 ............................................... 2
- GSE12418 .................................................. 10
- GSE12470 .................................................. 14
- GSE13876 .................................................. 20
- GSE14764 .................................................. 27
- GSE17260 .................................................. 33
- GSE18520 .................................................. 42
- GSE19829 .................................................. 48
- GSE20565 .................................................. 54
- GSE2109 .................................................... 65
- GSE26193 .................................................. 74
- GSE26712 .................................................. 82
- GSE30009 .................................................. 91
- GSE30161 .................................................. 99
- GSE32062 .................................................. 105
- GSE32063 .................................................. 113
- GSE44104 .................................................. 117
- GSE49997 .................................................. 122
- GSE51088 .................................................. 130
- GSE6008 .................................................... 139
- GSE6822 .................................................... 148
- GSE8842 .................................................... 154
- GSE9891 .................................................... 162
- loadOvarianDatasets ................................. 170
- loadOvarianEsets ................................. 171
- PMID15897565 ....................................... 173
- PMID17290060 ....................................... 178
- PMID19318476 ....................................... 185
- TCGA.RNASeqV2 .................................... 190
- TCGAOVARIAN ....................................... 201

Description

This is a note to inform package users that the days_to_death variable is also valid for living patients. In this case, the value in days_to_death is the number of days since the last follow-up appointment.

Format

A field included in various data files in the this package.
duplicates

A list containing the names of patients that are believed to be duplicates across datasets.

**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 130 elements, each of which is a patient ID.

---

**E.MTAB.386**

Angiogenic mRNA and microRNA gene expression signature predicts a novel subtype of serous ovarian cancer.

**Description**

Ovarian cancer is the fifth leading cause of cancer death for women in the U.S. and the seventh most fatal worldwide. Although ovarian cancer is notable for its initial sensitivity to platinum-based therapies, the vast majority of patients eventually develop recurrent cancer and succumb to increasingly platinum-resistant disease. Modern, targeted cancer drugs intervene in cell signaling, and identifying key disease mechanisms and pathways would greatly advance our treatment abilities. In order to shed light on the molecular diversity of ovarian cancer, we performed comprehensive transcriptional profiling on 129 advanced stage, high grade serous ovarian cancers. We implemented a, re-sampling based version of the ISIS class discovery algorithm (rISIS: robust ISIS) and applied it to the entire set of ovarian cancer transcriptional profiles. rISIS identified a previously undescribed patient stratification, further supported by micro-RNA expression profiles, and gene set enrichment analysis found strong biological support for the stratification by extracellular matrix, cell adhesion, and angiogenesis genes. The corresponding "angiogenesis signature" was validated in ten published independent ovarian cancer gene expression datasets and is significantly associated with overall survival. The subtypes we have defined are of potential translational interest as they may be relevant for identifying patients who may benefit from the addition of anti-angiogenic therapies that are now being tested in clinical trials.

**Format**

experimentData(eset):

Experiment data
Laboratory: Bentink, Matulonis 2012
Contact information:
Title: Angiogenic mRNA and microRNA gene expression signature predicts a novel subtype of serous ovarian cancer.
Abstract: A 212 word abstract is available. Use 'abstract' method.

Information is available on: preprocessing

notes:
platform_title: Illumina humanRef-8 v2.0 expression beadchip
platform_shorttitle: Illumina humanRef-8 v2.0
platform_summary: illuminaHumanv2
platform_manufacturer: Illumina
platform_distribution: commercial
platform_accession: GPL6104
version: 2015-09-22 19:06:44

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: ILMN_1343291 ILMN_1651228 ... ILMN_1815951 (12449 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 12449 features, 129 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>129.00</td>
<td>73.00</td>
<td>3.51</td>
<td>2.68</td>
<td>4.13</td>
</tr>
</tbody>
</table>

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

unique_patient_ID:
DFCI.1 DFCI.10 DFCI.100 DFCI.101 DFCI.102 DFCI.103 DFCI.104 DFCI.105
1 1 1 1 1 1 1 1
DFCI.106 DFCI.107 DFCI.108 DFCI.109 DFCI.11 DFCI.110 DFCI.111 DFCI.112
1 1 1 1 1 1 1 1
DFCI.113 DFCI.114 DFCI.115 DFCI.116 DFCI.117 DFCI.118 DFCI.119 DFCI.12
1 1 1 1 1 1 1 1
sample_type:
tumor
129

histological_type:
ser
129

primarysite:
ov
129

summarygrade:
high
129

summarystage:
early late
1 128

tumorstage:
2 3 4
1 109 19

substage:
a b c NA's
<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>age_at_initial_pathologic_diagnosis:</strong></td>
<td>21.00</td>
<td>50.00</td>
<td>66.00</td>
<td>60.71</td>
<td>72.00</td>
<td>95.00</td>
</tr>
<tr>
<td><strong>days_to_death:</strong></td>
<td>3.9</td>
<td>516.9</td>
<td>917.1</td>
<td>1007.0</td>
<td>1401.0</td>
<td>2724.0</td>
</tr>
<tr>
<td><strong>vital_status:</strong></td>
<td>deceased</td>
<td>living</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>73</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>debulking:</strong></td>
<td>optimal</td>
<td>suboptimal</td>
<td>NA's</td>
<td>98</td>
<td>28</td>
<td>3</td>
</tr>
</tbody>
</table>
Source.Name: DFCI-11
Source.Name: DFCI-115
Source.Name: DFCI-116
Source.Name: DFCI-117
Source.Name: DFCI-118
Source.Name: DFCI-119
Source.Name: DFCI-11
Source.Name: DFCI-120
Source.Name: DFCI-121
Source.Name: DFCI-12
Source.Name: DFCI-123
Source.Name: DFCI-124
Source.Name: DFCI-125
Source.Name: DFCI-127
Source.Name: DFCI-128
Source.Name: DFCI-129
Source.Name: DFCI-12
Source.Name: DFCI-130
Source.Name: DFCI-131
Source.Name: DFCI-132
Source.Name: DFCI-13
Source.Name: DFCI-14
Source.Name: DFCI-15
...
Source.Name: DFCI-1
Source.Name: DFCI-17
Source.Name: DFCI-18
Source.Name: DFCI-19
Source.Name: DFCI-20
Source.Name: DFCI-21
Source.Name: DFCI-22
Source.Name: DFCI-23
Source.Name: DFCI-24
Source.Name: DFCI-25
Source.Name: DFCI-26
Source.Name: DFCI-27
Source.Name: DFCI-28
Source.Name: DFCI-29
Source.Name: DFCI-30
Source.Name: DFCI-31
Source.Name: DFCI-32
Source.Name: DFCI-33
Source.Name: DFCI-34
Source.Name: DFCI-35
Source.Name: DFCI-36
Source.Name: DFCI-37
Source.Name: DFCI-38
Source.Name: DFCI-39
Source.Name: DFCI-40
Source.Name: DFCI-41
Source.Name: DFCI-42
Source.Name: DFCI-44
Source.Name: DFCI-45
Source.Name: DFCI-46
Source.Name: DFCI-47
Source.Name: DFCI-49
Source.Name: DFCI-50
Source.Name: DFCI-51
Source.Name: DFCI-52
Source.Name: DFCI-53
Source.Name: DFCI-54
Source.Name: DFCI-55
Source.Name: DFCI-56
Source.Name: DFCI-57
Source.Name: DFCI-58
Source.Name: DFCI-59
Source.Name: DFCI-60
An expression set

Expression analysis of stage III serous ovarian adenocarcinoma distinguishes a sub-group of survivors.

It is difficult to predict the clinical outcome for patients with ovarian cancer. However, the use of biomarkers as additional prognostic factors may improve the outcome for these patients. In order to find novel candidate biomarkers, differences in gene expressions were analysed in 54 stage III serous ovarian adenocarcinomas with oligonucleotide microarrays containing 27,000 unique probes. The microarray data was verified with quantitative real-time polymerase chain reaction for the genes TACC1, MUC5B and PRAME. Using hierarchical cluster analysis we detected a sub-group that included 60% of the survivors. The gene expressions in tumours from patients in this sub-group of survivors were compared with the remaining tumours, and 204 genes were found to
be differently expressed. We conclude that the sub-group of survivors might represent patients with favourable tumour biology and sensitivity to treatment. A selection of the 204 genes might be used as a predictive model to distinguish patients within and outside of this group. Alternative chemotherapy strategies could then be offered as first-line treatment, which may lead to improvements in the clinical outcome for these patients.

Format

experimentData(eset):
Experiment data
Laboratory: Partheen, Horvath 2006
Contact information:
Title: Expression analysis of stage III serous ovarian adenocarcinoma distinguishes a sub-group of survivors.
URL:
PMIDs: 16996261

Abstract: A 177 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
   SWEGENE H_v2.1.1_27k
platform_shorttitle:
   SWEGENE H_v2.1.1_27k
platform_summary:
   PartheenMetaData
platform_manufacturer:
other
platform_distribution:
   non-commercial
platform_accession:
   GPL5886
version:
   2015-09-22 19:07:14

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 28 29 ... 29999 (11304 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 11304 features, 54 samples
Platform type:
---------------------------
Available sample meta-data:
---------------------------
alt_sample_name:
<table>
<thead>
<tr>
<th>1035LA0</th>
<th>1047LB</th>
<th>1059LB0</th>
<th>1177DB</th>
<th>1178LB0</th>
<th>1180DB</th>
<th>1186DB0</th>
<th>123DC</th>
<th>1242LC0</th>
<th>1274LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>134LC</td>
<td>1426LB</td>
<td>1487DB</td>
<td>1528DC</td>
<td>1538DC</td>
<td>1567DB</td>
<td>1568DC</td>
<td>1574LC0</td>
<td>164DC</td>
<td>1658DC</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1760LB</td>
<td>1805DB</td>
<td>193DC</td>
<td>198DC</td>
<td>202DC</td>
<td>211DC</td>
<td>26DC</td>
<td>272DC</td>
<td>405LB</td>
<td>436DC</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>452DC</td>
<td>454LC</td>
<td>45LA0</td>
<td>462DB</td>
<td>46LB0</td>
<td>47DC</td>
<td>480DC0</td>
<td>489DC</td>
<td>505DB</td>
<td>541DC</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>559DC</td>
<td>563LA</td>
<td>626DC</td>
<td>662DC</td>
<td>719DC</td>
<td>742LC0</td>
<td>755LC</td>
<td>759DC</td>
<td>76DC</td>
<td>789DC</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>83LC</td>
<td>918DB0</td>
<td>988LC0</td>
<td>99LC0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

sample_type:
tumor
54

histological_type:
ser
54

primarysite:
ov
54

summarystage:
late
54

tumorstage:
3
54

substage:
b c
19 35

age_at_initial_pathologic_diagnosis:
<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.00</td>
<td>51.25</td>
<td>59.50</td>
<td>59.56</td>
<td>69.75</td>
<td>84.00</td>
</tr>
</tbody>
</table>

pltx:
y
54

os_binary:
long short
20 34
debulking:
optimal suboptimal
13 41

uncurated_author_metadata:


title: 1242LC0///geo_accession: GSM311980///status: Public on Aug 12 2008///submission_date: Aug 12 2008


title: 1574LC0///geo_accession: GSM311988///status: Public on Aug 12 2008///submission_date: Aug 12 2008


title: 45LA0///geo_accession: GSM311939///status: Public on Aug 12 2008///submission_date: Aug 12 2008///last_update_date: Aug 12 2008


Value

An expression set

---

GSE12470  Gene expression profiling of advanced-stage serous ovarian cancers distinguishes novel subclasses and implicates ZEB2 in tumor progression and prognosis.

Description

To elucidate the mechanisms of rapid progression of serous ovarian cancer, gene expression profiles from 43 ovarian cancer tissues comprising eight early stage and 35 advanced stage tissues were carried out using oligonucleotide microarrays of 18,716 genes. By non-negative matrix factorization analysis using 178 genes, which were extracted as stage-specific genes, 35 advanced stage cases were classified into two subclasses with superior (n = 17) and poor (n = 18) outcome evaluated by progression-free survival (log rank test, P = 0.03). Of the 178 stage-specific genes, 112 genes were identified as showing different expression between the two subclasses. Of the 48 genes selected for biological function by gene ontology analysis or Ingenuity Pathway Analysis, five genes (ZEB2, CDH1, LTBP2, COL16A1, and ACTA2) were extracted as candidates for prognostic factors associated with progression-free survival. The relationship between high ZEB2 or low CDH1 expression and shorter progression-free survival was validated by real-time RT-PCR experiments of 37 independent advanced stage cancer samples. ZEB2 expression was negatively correlated with CDH1 expression in advanced stage samples, whereas ZEB2 knockdown in ovarian adenocarcinoma SKOV3 cells resulted in an increase in CDH1 expression. Multivariate analysis showed that
high ZEB2 expression was independently associated with poor prognosis. Furthermore, the prognostic effect of E-cadherin encoded by CDH1 was verified using immunohistochemical analysis of an independent advanced stage cancer samples set (n = 74). These findings suggest that the expression of epithelial-mesenchymal transition-related genes such as ZEB2 and CDH1 may play important roles in the invasion process of advanced stage serous ovarian cancer.

Format

experimentData(eset):

Experiment data
Laboratory: Yoshihara, Tanaka 2009
Contact information:
Title: Gene expression profiling of advanced-stage serous ovarian cancers distinguishes novel subclasses and implicates ZEB2 in tumor progression and prognosis.
URL: PMIDs: 19486012

Abstract: A 253 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:

platform_title:
Agilent-012097 Human 1A Microarray (V2) G4110B (Feature Number version)
platform_shorttitle:
Agilent G4110B
platform_summary:
hgug4110b
platform_manufacturer:
Agilent
platform_distribution:
commercial
platform_accession:
GPL887
version:
2015-09-22 19:08:17

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 3 5 ... 22571 (15999 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 15999 features, 53 samples
Platform type:
---------------------------
Available sample meta-data:
---------------------------
alt_sample_name:
Advanced serous ovarian cancer 10 Advanced serous ovarian cancer 11
    1
Advanced serous ovarian cancer 15 Advanced serous ovarian cancer 17
    1
Advanced serous ovarian cancer 18 Advanced serous ovarian cancer 2
    1
Advanced serous ovarian cancer 20 Advanced serous ovarian cancer 23
    1
Advanced serous ovarian cancer 24 Advanced serous ovarian cancer 25
    1
Advanced serous ovarian cancer 27 Advanced serous ovarian cancer 36
    1
Advanced serous ovarian cancer 37 Advanced serous ovarian cancer 38
    1
Advanced serous ovarian cancer 39 Advanced serous ovarian cancer 42
    1
Advanced serous ovarian cancer 43 Advanced serous ovarian cancer 45
    1
Advanced serous ovarian cancer 46 Advanced serous ovarian cancer 49
    1
Advanced serous ovarian cancer 50 Advanced serous ovarian cancer 51
    1
Advanced serous ovarian cancer 52 Advanced serous ovarian cancer 53
    1
Advanced serous ovarian cancer 54 Advanced serous ovarian cancer 55
    1
Advanced serous ovarian cancer 56 Advanced serous ovarian cancer 57
    1
Advanced serous ovarian cancer 58 Advanced serous ovarian cancer 6
    1
Advanced serous ovarian cancer 60 Advanced serous ovarian cancer 61
    1
Advanced serous ovarian cancer 62 Advanced serous ovarian cancer 64
    1
Advanced serous ovarian cancer 7 Early serous ovarian cancer 28
    1
Early serous ovarian cancer 32 Early serous ovarian cancer 33
    1
Early serous ovarian cancer 35 Early serous ovarian cancer 5
    1
Early serous ovarian cancer 65 Early serous ovarian cancer 8
    1
Early serous ovarian cancer 9 Peritoneum normal 12
    1
Peritoneum normal 15 Peritoneum normal 16
    1
Peritoneum normal 18 Peritoneum normal 21
   1
Peritoneum normal 23 Peritoneum normal 3
   1
Peritoneum normal 30 Peritoneum normal 4
   1
Peritoneum normal 7
   1

sample_type:
healthy  tumor
  10   43

histological_type:
ser NA's
  43   10

primarysite:
ov
  53

summarystage:
early  late  NA's
  8   35   10

tumorstage:
  1   NA's
  8   45

uncurated_author_metadata:
title: Advanced serous ovarian cancer 10/geo_accession: GSM312155/status: Public

title: Advanced serous ovarian cancer 11/geo_accession: GSM312141/status: Public

title: Advanced serous ovarian cancer 15/geo_accession: GSM312156/status: Public

title: Advanced serous ovarian cancer 17/geo_accession: GSM312142/status: Public

title: Advanced serous ovarian cancer 18/geo_accession: GSM312143/status: Public

title: Advanced serous ovarian cancer 20/geo_accession: GSM312144/status: Public

title: Advanced serous ovarian cancer 23/geo_accession: GSM312157/status: Public

title: Advanced serous ovarian cancer 24/geo_accession: GSM312145/status: Public

title: Advanced serous ovarian cancer 25/geo_accession: GSM312146/status: Public
title: Advanced serous ovarian cancer 6///geo_accession: GSM312139///status: Published on Jul 19, 2009
submission_date: August 13, 2009
data_row_count: 22153

title: Advanced serous ovarian cancer 7///geo_accession: GSM312140///status: Published on Jul 19, 2009
submission_date: August 13, 2009
data_row_count: 22153

duplicates:
GSE12470.GSE12470_GSM312135 GSE12470.GSE12470_GSM312136 1 1
GSE12470.GSE12470_GSM312145 GSE12470.GSE12470_GSM312146 1 1

NA's
49
Ovarian cancer has a poor prognosis due to advanced stage at presentation and either intrinsic or acquired resistance to classic cytotoxic drugs such as platinum and taxoids. Recent large clinical trials with different combinations and sequences of classic cytotoxic drugs indicate that further significant improvement in prognosis by this type of drugs is not to be expected. Currently a large number of drugs, targeting dysregulated molecular pathways in cancer cells have been developed and are introduced in the clinic. A major challenge is to identify those patients who will benefit from drugs targeting these specific dysregulated pathways. The aims of our study were (1) to develop a gene expression profile associated with overall survival in advanced stage serous ovarian cancer, (2) to assess the association of pathways and transcription factors with overall survival, and (3) to validate our identified profile and pathways/transcription factors in an independent set of ovarian cancers. According to a randomized design, profiling of 157 advanced stage serous ovarian cancers was performed in duplicate using approximately 35,000 70-mer oligonucleotide microarrays. A continuous predictor of overall survival was built taking into account well-known issues in microarray analysis, such as multiple testing and overfitting. A functional class scoring analysis was utilized to assess pathways/transcription factors for their association with overall survival. The prognostic value of genes that constitute our overall survival profile was validated on a fully independent, publicly available dataset of 118 well-defined primary serous ovarian cancers. Furthermore, functional class scoring analysis was also performed on this independent dataset to assess the similarities with results from our own dataset. An 86-gene overall survival profile discriminated between patients with unfavorable and favorable prognosis (median survival, 19 versus 41 mo, respectively; permutation p-value of log-rank statistic = 0.015) and maintained its independent prognostic value in multivariate analysis. Genes that composed the overall survival profile were also able to discriminate between the two risk groups in the independent dataset. In our dataset 17/167 pathways and 13/111 transcription factors were associated with overall survival, of which 16 and 12, respectively, were confirmed in the independent dataset. Our study provides new clues to genes, pathways, and transcription factors that contribute to the clinical outcome of serous ovarian cancer and might be exploited in designing new treatment strategies.

experimentData(eset):

Experiment data
Experiment data
Laboratory: Crijns, van der Zee 2009
Contact information:
Title: Survival-related profile, pathways, and transcription factors in ovarian cancer.

URL: [PMIDs: 19192944]

Abstract: A 371 word abstract is available. Use 'abstract' method.

Information is available on: preprocessing

notes:

platform_title: Operon human v3 ~35K 70-mer two-color oligonucleotide microarrays
platform_shorttitle: Operon v3 two-color
platform_summary: OperonHumanV3
platform_manufacturer: other
platform_distribution: non-commercial
platform_accession: GPL7759
version: 2015-09-22 19:11:43

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 1 2 ... 37629 (20939 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 20939 features, 157 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>157.00</td>
<td>113.00</td>
<td>2.05</td>
<td>1.56</td>
<td>2.71</td>
</tr>
</tbody>
</table>

Available sample meta-data:

alt_sample_name:
151 NA's
1 156

unique_patient_ID:
Min. 1st Qu. Median Mean 3rd Qu. Max.
sample_type:
tumor
157

histological_type:
ser
157

primarysite:
ov
157

summarygrade:
high  low  NA's
85 59 13

summarystage:
late
157

grade:
1  2  3  4  NA's
14 45 82 3 13

age_at_initial_pathologic_diagnosis:
Min. 1st Qu. Median  Mean  3rd Qu.  Max.
21.00 50.00 60.00 57.95 67.00 84.00

days_to_death:
Min. 1st Qu. Median  Mean  3rd Qu.  Max.
30 360 630 1100 1470 7020

vital_status:
deceased  living
113 44

uncurated_author_metadata:

title: Ovarian tumor sample 105 / Ovarian tumor sample 106
geo_accession:

    title: Ovarian tumor sample 10 / Ovarian tumor sample 11
geo_accession:
title: Ovarian tumor sample 111 / Ovarian tumor sample 112///geo_accession:

title: Ovarian tumor sample 115 / Ovarian tumor sample 117///geo_accession:

title: Ovarian tumor sample 126 / Ovarian tumor sample 127///geo_accession:

title: Ovarian tumor sample 13 / Ovarian tumor sample 14///geo_accession:
title: Ovarian tumor sample 193 / Ovarian tumor sample 194
geo_accession: GSM405821 / GSM405823
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 165 / Ovarian tumor sample 166
geo_accession: GSM405634 / GSM405635
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 216 / Ovarian tumor sample 217
geo_accession: GSM405669 / GSM405754
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 178 / Ovarian tumor sample 179
geo_accession: GSM405882 / GSM405913
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 171 / Ovarian tumor sample 172
geo_accession: GSM405559 / GSM405866
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 208 / Ovarian tumor sample 209
geo_accession: GSM405584 / GSM405661
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 200 / Ovarian tumor sample 201
geo_accession: GSM405583 / GSM405593
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 189 / Ovarian tumor sample 190
geo_accession: GSM405626 / GSM405868
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 185 / Ovarian tumor sample 186
geo_accession: GSM405613 / GSM405741
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 180 / Ovarian tumor sample 181
geo_accession: GSM405591 / GSM405654
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 176 / Ovarian tumor sample 177
geo_accession: GSM405746 / GSM405864
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 173 / Ovarian tumor sample 174
geo_accession: GSM405652 / GSM405959
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 214 / Ovarian tumor sample 215
geo_accession: GSM405713 / GSM405872
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 212 / Ovarian tumor sample 213
geo_accession: GSM405699 / GSM405935
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 210 / Ovarian tumor sample 211
geo_accession: GSM405757 / GSM405800
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 202 / Ovarian tumor sample 203
geo_accession: GSM405637 / GSM405655
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 198 / Ovarian tumor sample 199
geo_accession: GSM405562 / GSM405852
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 169 / Ovarian tumor sample 170
geo_accession: GSM405556 / GSM405695
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 196 / Ovarian tumor sample 197
geo_accession: GSM405603 / GSM405900
status: Public on May ...
data_row_count: 37632

---
title: Ovarian tumor sample 18 / Ovarian tumor sample 19
geo_accession: GSM405612 / GSM405642
status: Public on May ...
data_row_count: 37632


title: Ovarian tumor sample 284 / Ovarian tumor sample 285
geo_accession: GSM405859 / GSM405917
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 289 / Ovarian tumor sample 290
geo_accession: GSM405620 / GSM405910
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 304 / Ovarian tumor sample 305
geo_accession: GSM405567 / GSM405834
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 309 / Ovarian tumor sample 310
geo_accession: GSM405605 / GSM405820
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 313 / Ovarian tumor sample 314
geo_accession: GSM405714 / GSM405715
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 316 / Ovarian tumor sample 317
geo_accession: GSM405772 / GSM405818
status: Public on May ...
data_row_count: 37632

title: Ovarian tumor sample 318 / Ovarian tumor sample 319
geo_accession: GSM405670 / GSM405811
status: Public on May ...
data_row_count: 37632
Value

An expression set

---

GSE14764

A prognostic gene expression index in ovarian cancer - validation across different independent data sets.

Description

Ovarian carcinoma has the highest mortality rate among gynaecological malignancies. In this project, we investigated the hypothesis that molecular markers are able to predict outcome of ovarian cancer independently of classical clinical predictors, and that these molecular markers can be validated using independent data sets. We applied a semi-supervised method for prediction of patient survival. Microarrays from a cohort of 80 ovarian carcinomas (TOC cohort) were used for the development of a predictive model, which was then evaluated in an entirely independent cohort of 118 carcinomas (Duke cohort). A 300-gene ovarian prognostic index (OPI) was generated and validated in a leave-one-out approach in the TOC cohort (Kaplan-Meier analysis, p = 0.0087). In a second validation step, the prognostic power of the OPI was confirmed in an independent data set (Duke cohort, p = 0.0063). In multivariate analysis, the OPI was independent of the post-operative residual tumour, the main clinico-pathological prognostic parameter with an adjusted hazard ratio of 6.4 (TOC cohort, CI 1.8-23.5, p = 0.0049) and 1.9 (Duke cohort, CI 1.2-3.0, p = 0.0068). We constructed a combined score of molecular data (OPI) and clinical parameters (residual tumour), which was able to define patient groups with highly significant differences in survival. The integrated analysis of gene expression data as well as residual tumour can be used for optimized assessment of the prognosis of platinum-taxol-treated ovarian cancer. As traditional treatment options are limited, this analysis may be able to optimize clinical management and to identify those patients who would be candidates for new therapeutic strategies.

Format

experimentData(ezet):
Experiment data
Laboratory: Denkert, Lage 2009
Contact information:
Title: A prognostic gene expression index in ovarian cancer - validation across different independent data sets.
URL: PMIDs: 19294737

Abstract: A 254 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HG-U133A] Affymetrix Human Genome U133A Array
platform_shorttitle:
Affymetrix HG-U133A
platform_summary: 
hgu133a
platform_manufacturer: 
Affymetrix
platform_distribution: 
commercial
platform_accession: 
GPL96
version: 
2015-09-22 19:13:08

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, 80 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
    80.00 21.00 4.52 4.19 NA

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

alt_sample_name:
Min. 1st Qu. Median Mean 3rd Qu. Max.
1.00 20.75 40.50 40.50 60.25 80.00

sample_type:
tumor
80

histological_type:
clearcell  endo  mix  other
2        6  1    2
ser undifferentiated
68

primarysite:
ov
summarygrade:  
<table>
<thead>
<tr>
<th>high</th>
<th>low</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>26</td>
</tr>
</tbody>
</table>

summarystage:  
<table>
<thead>
<tr>
<th>early</th>
<th>late</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>71</td>
</tr>
</tbody>
</table>

tumorstage:  
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1</td>
<td>69</td>
<td>2</td>
</tr>
</tbody>
</table>

substage:  
<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6</td>
<td>32</td>
<td>38</td>
</tr>
</tbody>
</table>

grade:  
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>23</td>
<td>54</td>
</tr>
</tbody>
</table>

recurrence_status:  
<table>
<thead>
<tr>
<th>no recurrence</th>
<th>recurrence</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>26</td>
<td>4</td>
</tr>
</tbody>
</table>

days_to_death:  
<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>660</td>
<td>1050</td>
<td>1011</td>
<td>1328</td>
<td>2190</td>
</tr>
</tbody>
</table>

vital_status:  
<table>
<thead>
<tr>
<th>deceased</th>
<th>living</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>59</td>
</tr>
</tbody>
</table>

batch:  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2006-08-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

uncurated_author_metadata:  
- title: ovarian cancer: O10///geo_accession: GSM368670///status: Public
- title: ovarian cancer: O11///geo_accession: GSM368671///status: Public
- title: ovarian cancer: O12///geo_accession: GSM368672///status: Public
title: ovarian cancer: O13///geo_accession: GSM368673///status: Public on Feb 09 2009

title: ovarian cancer: O14///geo_accession: GSM368674///status: Public on Feb 09 2009

title: ovarian cancer: O15///geo_accession: GSM368675///status: Public on Feb 09 2009

title: ovarian cancer: O16///geo_accession: GSM368676///status: Public on Feb 09 2009

title: ovarian cancer: O17///geo_accession: GSM368677///status: Public on Feb 09 2009

title: ovarian cancer: O18///geo_accession: GSM368678///status: Public on Feb 09 2009


title: ovarian cancer: O2///geo_accession: GSM368662///status: Public on Feb 09 2009

title: ovarian cancer: O20///geo_accession: GSM368680///status: Public on Feb 09 2009

title: ovarian cancer: O21///geo_accession: GSM368681///status: Public on Feb 09 2009

title: ovarian cancer: O22///geo_accession: GSM368682///status: Public on Feb 09 2009

title: ovarian cancer: O23///geo_accession: GSM368683///status: Public on Feb 09 2009

title: ovarian cancer: O24///geo_accession: GSM368684///status: Public on Feb 09 2009


title: ovarian cancer: O26///geo_accession: GSM368686///status: Public on Feb 09 2009

title: ovarian cancer: O27///geo_accession: GSM368687///status: Public on Feb 09 2009


title: ovarian cancer: O29///geo_accession: GSM368689///status: Public on Feb 09 2009

title: ovarian cancer: O2///geo_accession: GSM368662///status: Public on Feb 09 2009

title: ovarian cancer: O30///geo_accession: GSM368690///status: Public on Feb 09 2009

title: ovarian cancer: O31///geo_accession: GSM368691///status: Public on Feb 09 2009

title: ovarian cancer: O32///geo_accession: GSM368692///status: Public on Feb 09 2009

title: ovarian cancer: O33///geo_accession: GSM368693///status: Public on Feb 09 2009

title: ovarian cancer: O34///geo_accession: GSM368694///status: Public on Feb 09 2009
title: ovarian cancer: O57///geo_accession: GSM368717///status: Public on Feb 09 2009

title: ovarian cancer: O58///geo_accession: GSM368718///status: Public on Feb 09 2009


title: ovarian cancer: O5///geo_accession: GSM368665///status: Public on Feb 09 2009

title: ovarian cancer: O60///geo_accession: GSM368720///status: Public on Feb 09 2009

title: ovarian cancer: O61///geo_accession: GSM368721///status: Public on Feb 09 2009


title: ovarian cancer: O63///geo_accession: GSM368723///status: Public on Feb 09 2009

title: ovarian cancer: O64///geo_accession: GSM368724///status: Public on Feb 09 2009

title: ovarian cancer: O65///geo_accession: GSM368725///status: Public on Feb 09 2009

title: ovarian cancer: O66///geo_accession: GSM368726///status: Public on Feb 09 2009


title: ovarian cancer: O68///geo_accession: GSM368728///status: Public on Feb 09 2009

title: ovarian cancer: O69///geo_accession: GSM368729///status: Public on Feb 09 2009

title: ovarian cancer: O6///geo_accession: GSM368666///status: Public on Feb 09 2009

title: ovarian cancer: O70///geo_accession: GSM368730///status: Public on Feb 09 2009

title: ovarian cancer: O71///geo_accession: GSM368731///status: Public on Feb 09 2009

title: ovarian cancer: O72///geo_accession: GSM368732///status: Public on Feb 09 2009

title: ovarian cancer: O73///geo_accession: GSM368733///status: Public on Feb 09 2009

title: ovarian cancer: O74///geo_accession: GSM368734///status: Public on Feb 09 2009

title: ovarian cancer: O75///geo_accession: GSM368735///status: Public on Feb 09 2009

title: ovarian cancer: O76///geo_accession: GSM368736///status: Public on Feb 09 2009

title: ovarian cancer: O77///geo_accession: GSM368737///status: Public on Feb 09 2009

title: ovarian cancer: O78///geo_accession: GSM368738///status: Public on Feb 09 2009
An expression set

**Value**

**GSE17260**

*Gene expression profile for predicting survival in advanced-stage serous ovarian cancer across two independent datasets.*

**Description**

Advanced-stage ovarian cancer patients are generally treated with platinum/taxane-based chemotherapy after primary debulking surgery. However, there is a wide range of outcomes for individual patients. Therefore, the clinicopathological factors alone are insufficient for predicting prognosis. Our aim is to identify a progression-free survival (PFS)-related molecular profile for predicting survival of patients with advanced-stage serous ovarian cancer. Advanced-stage serous ovarian cancer tissues from 110 Japanese patients who underwent primary surgery and platinum/taxane-based chemotherapy were profiled using oligonucleotide microarrays. We selected 88 PFS-related genes by a univariate Cox model (p<0.01) and generated the prognostic index based on 88 PFS-related genes after adjustment of regression coefficients of the respective genes by ridge regression Cox model using 10-fold cross-validation. The prognostic index was independently associated with PFS time compared to other clinical factors in multivariate analysis [hazard ratio (HR), 3.72; 95% confidence interval (CI), 2.66-5.43; p<0.0001]. In an external dataset, multivariate analysis revealed that this prognostic index was significantly correlated with PFS time (HR, 1.54; 95% CI, 1.20-1.98; p = 0.0008). Furthermore, the correlation between the prognostic index and overall survival time was confirmed in the two independent external datasets (log rank test, p = 0.0010 and 0.0008). The prognostic ability of our index based on the 88-gene expression profile in ridge regression Cox hazard model was shown to be independent of other clinical factors in predicting cancer prognosis across two distinct datasets. Further study will be necessary to improve predictive accuracy of the
prognostic index toward clinical application for evaluation of the risk of recurrence in patients with advanced-stage serous ovarian cancer.

Format

experimentData(eset):
Experiment data
Laboratory: Yoshihara, Tanaka 2010
Contact information:
Title: Gene expression profile for predicting survival in advanced-stage serous ovarian cancer across two independent datasets.
URL:
PMIDs: 20300634

Abstract: A 257 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  Agilent-012391 Whole Human Genome Oligo Microarray G4112A
platform_shorttitle:
  Agilent G4112A
platform_summary:
  hgug4112a
platform_manufacturer:
  Agilent
platform_distribution:
  commercial
platform_accession:
  GPL6848
version:
  2015-09-22 19:16:49

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: A_23_P100001 A_23_P100011 ... A_32_P99902 (30936 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 30936 features, 110 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110.00</td>
<td>46.00</td>
<td>4.44</td>
<td>4.03</td>
<td>NA</td>
</tr>
</tbody>
</table>
Available sample meta-data:

<table>
<thead>
<tr>
<th>alt_sample_name</th>
<th>Serous ovarian cancer 10</th>
<th>Serous ovarian cancer 100</th>
<th>Serous ovarian cancer 104</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 106</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 109</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 111</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 114</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 117</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 122</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 123</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 130</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 134</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 139</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 144</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 148</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 150</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 156</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 160</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 172</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 176</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 182</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 185</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 20</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 22</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Serous ovarian cancer 25</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
sample_type:
tumor
110

histological_type:
ser
110

primarysite:
ov
110

summarygrade:
high low
43 67

summarystage:
late
110

tumorstage:
3 4
93 17

substage:
   a   b   c   NA's
   6   18   69   17

grade:
   1   2   3
   26  41  43

pltx:
   y
   110

tax:
   y
   110

days_to_tumor_recurrence:
   Min. 1st Qu. Median Mean 3rd Qu. Max.
   30.0 285.0  510.0 673.9  870.0 2250.0

recurrence_status:
   norecurrence recurrence
   34   76

days_to_death:
   Min. 1st Qu. Median Mean 3rd Qu. Max.
   30   660   915 1086  1530 2430

vital_status:
   deceased living
   46   64

debulking:
   optimal suboptimal
   57    53

uncurated_author_metadata:
   title: Serous ovarian cancer 100///geo_accession: GSM432221///status: Public on Mar 22 2010///submission_date: Jul 22 2010///relation: 1
   title: Serous ovarian cancer 104///geo_accession: GSM432222///status: Public on Mar 22 2010///submission_date: Jul 22 2010///relation: 1
   title: Serous ovarian cancer 106///geo_accession: GSM432223///status: Public on Mar 22 2010///submission_date: Jul 22 2010///relation: Reanalyzed by: GSM795125
   title: Serous ovarian cancer 107///geo_accession: GSM432224///status: Public on Mar 22 2010///submission_date: Jul 22 2010///relation: 1
   title: Serous ovarian cancer 108///geo_accession: GSM432225///status: Public on Mar 22 2010///submission_date: Jul 22 2010///relation: 1
title: Serous ovarian cancer 109///geo_accession: GSM432226///status: Public on Mar

GSM432231

GSM432233

GSM432234

GSM432235

GSM432236

GSM432237

GSM432238

GSM432239

GSM432240

GSM432242

GSM432243

GSM432244

GSM432245

GSM432246

GSM432247

GSM432248

GSM432249

GSM432250

GSM432251

GSM432252
title: Serous ovarian cancer 137///geo_accession: GSM43

title: Serous ovarian cancer 139///geo_accession: GSM43

title: Serous ovarian cancer 140///geo_accession: GSM43225

title: Serous ovarian cancer 143///geo_accession: GSM43225

title: Serous ovarian cancer 144///geo_accession: GSM43226

title: Serous ovarian cancer 145///geo_accession: GSM432255

title: Serous ovarian cancer 146///geo_accession: GSM432256

title: Serous ovarian cancer 148///geo_accession: GSM43

title: Serous ovarian cancer 149///geo_accession: GSM43

title: Serous ovarian cancer 150///geo_accession: GSM432260

title: Serous ovarian cancer 151///geo_accession: GSM43

title: Serous ovarian cancer 154///geo_accession: GSM43

title: Serous ovarian cancer 156///geo_accession: GSM43

title: Serous ovarian cancer 157///geo_accession: GSM43

...
GSE17260

- title: Serous ovarian cancer 182
  - geo_accession: GSM432274
- title: Serous ovarian cancer 183
  - geo_accession: GSM432276
- title: Serous ovarian cancer 184
  - geo_accession: GSM432277
- title: Serous ovarian cancer 185
  - geo_accession: GSM432278
- title: Serous ovarian cancer 186
  - geo_accession: GSM432279
- title: Serous ovarian cancer 187
  - geo_accession: GSM432280
- title: Serous ovarian cancer 188
  - geo_accession: GSM432281
- title: Serous ovarian cancer 189
  - geo_accession: GSM432282
- title: Serous ovarian cancer 190
  - geo_accession: GSM432283
- title: Serous ovarian cancer 191
  - geo_accession: GSM432284
- title: Serous ovarian cancer 192
  - geo_accession: GSM432285
- title: Serous ovarian cancer 193
  - geo_accession: GSM432286
- title: Serous ovarian cancer 194
  - geo_accession: GSM432287
- title: Serous ovarian cancer 195
  - geo_accession: GSM432288
- title: Serous ovarian cancer 196
  - geo_accession: GSM432289
- title: Serous ovarian cancer 197
  - geo_accession: GSM432290
- title: Serous ovarian cancer 198
  - geo_accession: GSM432291
- title: Serous ovarian cancer 199
  - geo_accession: GSM432292
- title: Serous ovarian cancer 200
  - geo_accession: GSM432293
- title: Serous ovarian cancer 201
  - geo_accession: GSM432294
- title: Serous ovarian cancer 202
  - geo_accession: GSM432295
- title: Serous ovarian cancer 203
  - geo_accession: GSM432296
- title: Serous ovarian cancer 204
  - geo_accession: GSM432297
- title: Serous ovarian cancer 205
  - geo_accession: GSM432298
- title: Serous ovarian cancer 206
  - geo_accession: GSM432299
- title: Serous ovarian cancer 207
  - geo_accession: GSM432300
GSE18520

Value

An expression set

Description

Advanced stage papillary serous tumors of the ovary are responsible for the majority of ovarian cancer deaths, yet the molecular determinants modulating patient survival are poorly characterized. Here, we identify and validate a prognostic gene expression signature correlating with survival in a series of microdissected serous ovarian tumors. Independent evaluation confirmed the association of a prognostic gene microfibril-associated glycoprotein 2 (MAGP2) with poor prognosis, whereas in vitro mechanistic analyses demonstrated its ability to prolong tumor cell survival and stimulate endothelial cell motility and survival via the alpha(V)beta(3) integrin receptor. Increased MAGP2 expression correlated with microvessel density suggesting a proangiogenic role in vivo. Thus, MAGP2 may serve as a survival-associated target.

Format

experimentData(eset):
Experiment data
   Laboratory: Mok, Birrer 2009
   Contact information:
   Title: A gene signature predictive for outcome in advanced ovarian cancer identifies a survival factor: microfibril-associated glycoprotein 2.
   URL:
   PMIDs: 19962670

Abstract: A 110 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
   platform_title:
      [HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
   platform_shorttitle:
      Affymetrix HG-U133Plus2
   platform_summary:
      hgu133plus2
   platform_manufacturer:
      Affymetrix|Operon
   platform_distribution:
      commercial|non-commercial
   platform_accession:
      GPL570|GPL9216
   version:
2015-09-22 19:21:25

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

10 observations deleted due to missingness
n events median 0.95LCL 0.95UCL
53.00 41.00 2.05 1.48 3.70

Available sample meta-data:

alt_sample_name:
    Min. 1st Qu. Median     Mean 3rd Qu.    Max.
  312.0  395.0  694.0  893.3 1040.0  2237.0

sample_type:
  healthy tumor
    10  53

histological_type:
  ser NA's
    53  10

primarysite:
  ov
    63

summarygrade:
  high NA's
    53  10

summarystage:
  late NA's
    53  10
tumorstage:
3 NA's
53 10

grade:
3 NA's
53 10

days_to_death:
<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>450</td>
<td>630</td>
<td>1212</td>
<td>1440</td>
<td>4500</td>
<td>10</td>
</tr>
</tbody>
</table>

vital_status:
deceased  living  NA's
41        12       10

debulking:
optimal
63

percent_normal_cells:
0
63

percent_stromal_cells:
0
63

percent_tumor_cells:
100
63

batch:
20       6        9       11       10       1       6

uncurated_author_metadata:

- title: Normal Ovary, 2061///geo_accession: GSM462644///status: Public on Oct 17 2009///submission_date: Oct 16
- title: Normal Ovary, 2085///geo_accession: GSM462645///status: Public on Oct 17 2009///submission_date: Oct 16
- title: Normal Ovary, 2225///geo_accession: GSM462646///status: Public on Oct 17 2009///submission_date: Oct 16
- title: Normal Ovary, 2226///geo_accession: GSM462647///status: Public on Oct 17 2009///submission_date: Oct 16
The dimensions of the data set were reduced from 200 to 5 by PC analysis. The number of PCs was set at 5 capturing 90% of the variance.
An expression set

Value

An expression set

Description

To define a gene expression profile of BRCAness that correlates with responsiveness to chemotherapy and with outcome in patients with epithelial ovarian cancer (EOC). A publicly available microarray data set including 61 patients with EOC with either sporadic disease or BRCA(1/2) germline mutations was used for development of the BRCAness profile. Correlation with platinum responsiveness was assessed in platinum-sensitive and platinum-resistant tumor biopsy specimens from six patients with BRCA
germline mutations. Association with poly-ADP ribose polymerase (PARP) inhibitor responsiveness and with radiation-induced RAD51 foci formation (a surrogate of homologous recombination) was assessed in Capan-1 cell line clones. The BRCAness profile was validated in 70 patients enriched for sporadic disease to assess its association with outcome. The BRCAness profile accurately predicted platinum responsiveness in eight out of 10 patient-derived tumor specimens, and between PARP-inhibitor sensitivity and resistance in four out of four Capan-1 clones. [corrected] When applied to the 70 patients with sporadic disease, patients with the BRCA-like (BL) profile had improved disease-free survival (34 months v 15 months; log-rank P = .013) and overall survival (72 months v 41 months; log-rank P = .006) compared with patients with a non-BRCA-like (NBL) profile, respectively. The BRCAness profile maintained independent prognostic value in multivariate analysis, which controlled for other known clinical prognostic factors. The BRCAness profile correlates with responsiveness to platinum and PARP inhibitors and identifies a subset of sporadic patients with improved outcome. Additional evaluation of this profile as a predictive tool in patients with sporadic EOC is warranted.

Format

eexperimentData(eset):
Experiment data
Experimenter name: Konstantinopoulos PA, Spentzos D, Karlan BY, Taniguchi T et al.
Laboratory: Konstantinopoulos, Cannistra 2010 hgu95
Contact information:
Title: Gene expression profile of BRCAness that correlates with responsiveness to chemotherapy and with outcome in patients with epithelial ovarian cancer. J Clin Oncol 2010 Aug 1;28(22):3555-61.
URL: 
PMIDs: 20547991

Abstract: A 241 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  [HG_U95Av2] Affymetrix Human Genome U95 Version 2 Array
platform_shorttitle:
  Affymetrix HG_U95Av2
platform_summary:
  hgu95av2
platform_manufacturer:
  Affymetrix
platform_distribution:
  commercial
platform_accession:
  GPL570|GPL8300
version:
  2015-09-22 19:26:29

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 1007_s_at 1053_at ... AFFX-MurIL4_at (54253 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription
Details

assayData: 54253 features, 70 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.00</td>
<td>40.00</td>
<td>3.78</td>
<td>2.96</td>
<td>5.92</td>
</tr>
</tbody>
</table>

Available sample meta-data:

alt_sample_name:

Ovarian cancer_sample 1 | Ovarian cancer_sample 10 | Ovarian cancer_sample 11 | 1 | 1 | 1
Ovarian cancer_sample 12 | Ovarian cancer_sample 13 | Ovarian cancer_sample 14 | 1 | 1 | 1
Ovarian cancer_sample 15 | Ovarian cancer_sample 16 | Ovarian cancer_sample 17 | 1 | 1 | 1
Ovarian cancer_sample 18 | Ovarian cancer_sample 19 | Ovarian cancer_sample 2 | 1 | 1 | 1
Ovarian cancer_sample 20 | Ovarian cancer_sample 21 | Ovarian cancer_sample 22 | 1 | 1 | 1
Ovarian cancer_sample 23 | Ovarian cancer_sample 24 | Ovarian cancer_sample 25 | 1 | 1 | 1
Ovarian cancer_sample 26 | Ovarian cancer_sample 27 | Ovarian cancer_sample 28 | 1 | 1 | 1
Ovarian cancer_sample 29 | Ovarian cancer_sample 3 | Ovarian cancer_sample 30 | 1 | 1 | 1
Ovarian cancer_sample 31 | Ovarian cancer_sample 32 | Ovarian cancer_sample 33 | 1 | 1 | 1
Ovarian cancer_sample 34 | Ovarian cancer_sample 35 | Ovarian cancer_sample 36 | 1 | 1 | 1
Ovarian cancer_sample 37 | Ovarian cancer_sample 38 | Ovarian cancer_sample 39 | 1 | 1 | 1
Ovarian cancer_sample 4 | Ovarian cancer_sample 40 | Ovarian cancer_sample 41 | 1 | 1 | 1
Ovarian cancer_sample 42 | Ovarian cancer_sample 43 | Ovarian cancer_sample 44 | 1 | 1 | 1
Ovarian cancer_sample 45 | Ovarian cancer_sample 46 | Ovarian cancer_sample 47 | 1 | 1 | 1
Ovarian cancer_sample 48 | Ovarian cancer_sample 49 | Ovarian cancer_sample 5 | 1 | 1 | 1
Ovarian cancer_sample 50 | Ovarian cancer_sample 51 | Ovarian cancer_sample 52 | 1 | 1 | 1
<table>
<thead>
<tr>
<th>Batch</th>
<th>Days to Death</th>
<th>Primary Site</th>
<th>Sample Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-09-14</td>
<td>30.0</td>
<td>ov</td>
<td>tumor</td>
</tr>
<tr>
<td>2001-12-14</td>
<td>667.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002-08-20</td>
<td>1125.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-09-09</td>
<td>1170.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-09-18</td>
<td>1522.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009-08-14</td>
<td>3450.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Uncurated Author Metadata:
- title: Ovarian cancer_sample 10///geo_accession: GSM495148///status: Public
- title: Ovarian cancer_sample 11///geo_accession: GSM495149///status: Public
- title: Ovarian cancer_sample 12///geo_accession: GSM495150///status: Public
- title: Ovarian cancer_sample 13///geo_accession: GSM495151///status: Public
- title: Ovarian cancer_sample 14///geo_accession: GSM495152///status: Public
- title: Ovarian cancer_sample 15///geo_accession: GSM495153///status: Public
- title: Ovarian cancer_sample 16///geo_accession: GSM495154///status: Public
vital_status:
deceased  living  
40 30

Value

An expression set

GSE20565  A genomic and transcriptomic approach for a differential diagnosis between primary and secondary ovarian carcinomas in patients with a previous history of breast cancer.
Description

The distinction between primary and secondary ovarian tumors may be challenging for pathologists. The purpose of the present work was to develop genomic and transcriptomic tools to further refine the pathological diagnosis of ovarian tumors after a previous history of breast cancer. Sixteen paired breast-ovary tumors from patients with a former diagnosis of breast cancer were collected. The genomic profiles of paired tumors were analyzed using the Affymetrix GeneChip Mapping 50 K Xba Array or Genome-Wide Human SNP Array 6.0 (for one pair), and the data were normalized with ITALICS (ITerative and Alternative normaLLization and Copy number calling for affymetrix Snp arrays) algorithm or Partek Genomic Suite, respectively. The transcriptome of paired samples was analyzed using Affymetrix GeneChip Human Genome U133 Plus 2.0 Arrays, and the data were normalized with gc-Robust Multi-array Average (gcRMA) algorithm. A hierarchical clustering of these samples was performed, combined with a dataset of well-identified primary and secondary ovarian tumors. In 12 of the 16 paired tumors analyzed, the comparison of genomic profiles confirmed the pathological diagnosis of primary ovarian tumor (n = 5) or metastasis of breast cancer (n = 7). Among four cases with uncertain pathological diagnosis, genomic profiles were clearly distinct between the ovarian and breast tumors in two pairs, thus indicating primary ovarian carcinomas, and showed common patterns in the two others, indicating metastases from breast cancer. In all pairs, the result of the transcriptomic analysis was concordant with that of the genomic analysis. In patients with ovarian carcinoma and a previous history of breast cancer, SNP array analysis can be used to distinguish primary and secondary ovarian tumors. Transcriptomic analysis may be used when primary breast tissue specimen is not available.

Format

experimentData(eset):
Experiment data
Laboratory: Meyniel, Sastre-Garau 2010
Contact information:
URL:
PMIDs: 20492709

Abstract: A 277 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  [HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
platform_shorttitle:
  Affymetrix HG-U133Plus2
platform_summary:
  hgu133plus2
platform_manufacturer:
  Affymetrix
platform_distribution:
  commercial
platform_accession:
  GPL570|GPL2005|GPL6801
version:
  2015-09-22 19:33:01

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, 140 samples
Platform type:
---------------------------
Available sample meta-data:
---------------------------

alt_sample_name:
Breast metastasis in the ovary_OC01_ARN0016 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0017 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0020 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0029 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0035 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0046 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0051 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0053 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0055 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0060 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0069 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0073 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0077 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0079 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0081 [HG-U133_Plus_2] 1
Breast metastasis in the ovary_OC01_ARN0083 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0092 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0097 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0098 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0099 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0102 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0104 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0112 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0120 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0121 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0123 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0126 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0141 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0142 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0143 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0145 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0146 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0153 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0162 [HG-U133_Plus_2]
Breast metastasis in the ovary_OC01_ARN0201 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0001 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0002 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0004 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0005 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0007 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0008 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0009 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0010 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0011 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0012 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0013 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0015 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0022 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0023 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0025 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0028 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0030 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0032 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0034 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0036 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0037 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0038 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0039 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0041 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0042 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0045 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0049 [HG-U133_Plus_2]
Ovarian carcinoma_OC01_ARN0057 [HG-U133_Plus_2]
<table>
<thead>
<tr>
<th>Sample Name</th>
<th>Array Set</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovarian carcinoma_OC01_ARN0058</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0061</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0062</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0063</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0064</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0066</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0067</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0070</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0072</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0075</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0076</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0080</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0084</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0085</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0089</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0091</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0093</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0095</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0096</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0100</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0101</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0103</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0105</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0106</td>
<td>[HG-U133_Plus_2]</td>
<td>1</td>
</tr>
<tr>
<td>Sample ID</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0107</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0108</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0109</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0111</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0113</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0114</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0115</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0116</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0118</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0119</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0124</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
<tr>
<td>Ovarian carcinoma_OC01_ARN0125</td>
<td>[HG-U133_Plus_2]</td>
<td></td>
</tr>
</tbody>
</table>

(Other) 41

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Tumor</th>
<th>140</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Histological Type</th>
<th>Clearcell</th>
<th>Endo</th>
<th>Mucinous</th>
<th>Other</th>
<th>Ser</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>71</td>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Other</th>
<th>Ov</th>
<th>44</th>
<th>96</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Summary Grade</th>
<th>High</th>
<th>Low</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63</td>
<td>33</td>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary Stage</th>
<th>Early</th>
<th>Late</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27</td>
<td>67</td>
<td>46</td>
</tr>
</tbody>
</table>
GSE20565

<table>
<thead>
<tr>
<th>tumorstage</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>9</td>
<td>52</td>
<td>15</td>
<td>15</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>substage</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>10</td>
<td>55</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>27</td>
<td>63</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21</td>
<td>18</td>
<td>37</td>
<td>20</td>
<td>36</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

uncurated_author_metadata:
title: Breast metastasis in the ovary_OC01_ARN0016 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0017 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0020 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0029 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0035 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0046 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0051 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0053 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0055 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0060 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0069 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0073 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0077 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0079 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0081 [HG-U133_Plus_2]///geo_accession

title: Breast metastasis in the ovary_OC01_ARN0083 [HG-U133_Plus_2]///geo_accession
title: Ovarian carcinoma_OC01_ARN0045 [HG-U133_Plus_2]
geo_accession: GSM516713
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0030 [HG-U133_Plus_2]
geo_accession: GSM516702
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0058 [HG-U133_Plus_2]
geo_accession: GSM516721
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0013 [HG-U133_Plus_2]
geo_accession: GSM516689
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0057 [HG-U133_Plus_2]
geo_accession: GSM516720
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0049 [HG-U133_Plus_2]
geo_accession: GSM516715
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0042 [HG-U133_Plus_2]
geo_accession: GSM516712
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0039 [HG-U133_Plus_2]
geo_accession: GSM516709
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0038 [HG-U133_Plus_2]
geo_accession: GSM516708
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0037 [HG-U133_Plus_2]
geo_accession: GSM516707
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0034 [HG-U133_Plus_2]
geo_accession: GSM516704
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0032 [HG-U133_Plus_2]
geo_accession: GSM516703
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0009 [HG-U133_Plus_2]
geo_accession: GSM516685
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0008 [HG-U133_Plus_2]
geo_accession: GSM516684
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0010 [HG-U133_Plus_2]
geo_accession: GSM516686
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0036 [HG-U133_Plus_2]
geo_accession: GSM516706
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0028 [HG-U133_Plus_2]
geo_accession: GSM516700
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0025 [HG-U133_Plus_2]
geo_accession: GSM516699
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0023 [HG-U133_Plus_2]
geo_accession: GSM516698
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0022 [HG-U133_Plus_2]
geo_accession: GSM516697
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0015 [HG-U133_Plus_2]
geo_accession: GSM516691
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0012 [HG-U133_Plus_2]
geo_accession: GSM516688
status: Public on Apr 14
data_row_count: 54675

title: Ovarian carcinoma_OC01_ARN0011 [HG-U133_Plus_2]
geo_accession: GSM516687
status: Public on Apr 14
data_row_count: 54675


Value

An expression set

Description

Format

experimentData(eset):
Experiment data
Laboratory: expO, IGC 2005
Contact information:
Title: IGC EXpression Project for Oncology
URL:
PMIDs: PMID unknown

Abstract: A 8 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
platform_shorttitle:
Affymetrix HG-U133Plus2
platform_summary:
hgu133plus2
platform_manufacturer:
Affymetrix
platform_distribution:
commercial
platform_accession:
GPL570
version:
2015-09-22 19:40:35

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:
-----------------------------

alt_sample_name:
Abdominal wall mass - 8176 Omentum - 1006
1 1
Omentum - 8174 Omentum - 8186
<table>
<thead>
<tr>
<th>Omentum - 8240</th>
<th>Ovary - 101094</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 101109</td>
<td>Ovary - 101120</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 101150</td>
<td>Ovary - 1018</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1040</td>
<td>Ovary - 1057</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 112866</td>
<td>Ovary - 112867</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 118662</td>
<td>Ovary - 118671</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1241</td>
<td>Ovary - 1270</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 129660</td>
<td>Ovary - 129669</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1311</td>
<td>Ovary - 1313</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1323</td>
<td>Ovary - 133643</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 133651</td>
<td>Ovary - 1351</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 151614</td>
<td>Ovary - 151622</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 161465</td>
<td>Ovary - 161524</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 161525</td>
<td>Ovary - 161534</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1636</td>
<td>Ovary - 1639</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 1643</td>
<td>Ovary - 170809</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 174931</td>
<td>Ovary - 174936</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 180953</td>
<td>Ovary - 184837</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 187243</td>
<td>Ovary - 187246</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 187251</td>
<td>Ovary - 187253</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 191413</td>
<td>Ovary - 191424</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 195198</td>
<td>Ovary - 199399</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 199400</td>
<td>Ovary - 202030</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ovary - 202041</td>
<td>Ovary - 20284</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Gene ID</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>GSE2109</td>
<td>Ovary - 20285</td>
</tr>
<tr>
<td></td>
<td>Ovary - 20307</td>
</tr>
<tr>
<td></td>
<td>Ovary - 20323</td>
</tr>
<tr>
<td></td>
<td>Ovary - 20326</td>
</tr>
<tr>
<td></td>
<td>Ovary - 207532</td>
</tr>
<tr>
<td></td>
<td>Ovary - 209709</td>
</tr>
<tr>
<td></td>
<td>Ovary - 209718</td>
</tr>
<tr>
<td></td>
<td>Ovary - 211372</td>
</tr>
<tr>
<td></td>
<td>Ovary - 211409</td>
</tr>
<tr>
<td></td>
<td>Ovary - 219571</td>
</tr>
<tr>
<td></td>
<td>Ovary - 219590</td>
</tr>
<tr>
<td></td>
<td>Ovary - 21981</td>
</tr>
<tr>
<td></td>
<td>Ovary - 226414</td>
</tr>
<tr>
<td></td>
<td>Ovary - 228537</td>
</tr>
<tr>
<td></td>
<td>Ovary - 231863</td>
</tr>
<tr>
<td></td>
<td>Ovary - 234329</td>
</tr>
<tr>
<td></td>
<td>Ovary - 235692</td>
</tr>
<tr>
<td></td>
<td>Ovary - 23862</td>
</tr>
<tr>
<td></td>
<td>Ovary - 23904</td>
</tr>
<tr>
<td></td>
<td>Ovary - 23934</td>
</tr>
<tr>
<td></td>
<td>Ovary - 23938</td>
</tr>
<tr>
<td></td>
<td>Ovary - 241187</td>
</tr>
<tr>
<td></td>
<td>Ovary - 241198</td>
</tr>
<tr>
<td></td>
<td>Ovary - 242929</td>
</tr>
<tr>
<td></td>
<td>(Other)</td>
</tr>
<tr>
<td>sample_type:</td>
<td>tumor</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>histological_type:</td>
<td>clearcell 9</td>
</tr>
<tr>
<td></td>
<td>ser undifferentiated 85</td>
</tr>
<tr>
<td>primarysite:</td>
<td>other 23</td>
</tr>
<tr>
<td>summarygrade:</td>
<td>high 91</td>
</tr>
<tr>
<td>summarystage:</td>
<td>early 37</td>
</tr>
<tr>
<td>tumorstage:</td>
<td>1 20</td>
</tr>
<tr>
<td>substage:</td>
<td>a 17</td>
</tr>
<tr>
<td>grade:</td>
<td>1 11</td>
</tr>
<tr>
<td>age_at_initial_pathologic_diagnosis:</td>
<td>Min. 25.00</td>
</tr>
<tr>
<td>batch:</td>
<td>2004-12-03 3</td>
</tr>
<tr>
<td>Date</td>
<td>Count</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>2005-11-15</td>
<td>1</td>
</tr>
<tr>
<td>2005-11-18</td>
<td>6</td>
</tr>
<tr>
<td>2005-12-02</td>
<td>1</td>
</tr>
<tr>
<td>2005-01-24</td>
<td>3</td>
</tr>
<tr>
<td>2005-01-26</td>
<td>3</td>
</tr>
<tr>
<td>2006-01-20</td>
<td>6</td>
</tr>
<tr>
<td>2006-01-22</td>
<td>3</td>
</tr>
<tr>
<td>2006-01-24</td>
<td>1</td>
</tr>
<tr>
<td>2006-01-26</td>
<td>1</td>
</tr>
<tr>
<td>2006-02-07</td>
<td>1</td>
</tr>
<tr>
<td>2006-02-28</td>
<td>1</td>
</tr>
<tr>
<td>2006-03-06</td>
<td>2</td>
</tr>
<tr>
<td>2006-03-14</td>
<td>3</td>
</tr>
<tr>
<td>2006-04-18</td>
<td>1</td>
</tr>
<tr>
<td>2006-04-20</td>
<td>2</td>
</tr>
<tr>
<td>2006-05-16</td>
<td>4</td>
</tr>
<tr>
<td>2006-06-08</td>
<td>1</td>
</tr>
<tr>
<td>2006-07-26</td>
<td>2</td>
</tr>
<tr>
<td>2006-07-28</td>
<td>1</td>
</tr>
<tr>
<td>2006-09-12</td>
<td>2</td>
</tr>
<tr>
<td>2006-09-14</td>
<td>1</td>
</tr>
<tr>
<td>2006-10-10</td>
<td>2</td>
</tr>
<tr>
<td>2006-10-24</td>
<td>3</td>
</tr>
<tr>
<td>2006-10-31</td>
<td>1</td>
</tr>
<tr>
<td>2006-11-09</td>
<td>2</td>
</tr>
<tr>
<td>2006-11-21</td>
<td>1</td>
</tr>
<tr>
<td>2006-11-30</td>
<td>2</td>
</tr>
<tr>
<td>2006-12-07</td>
<td>1</td>
</tr>
<tr>
<td>2006-12-09</td>
<td>6</td>
</tr>
<tr>
<td>2007-01-12</td>
<td>3</td>
</tr>
<tr>
<td>2007-02-09</td>
<td>6</td>
</tr>
<tr>
<td>2007-03-07</td>
<td>1</td>
</tr>
<tr>
<td>2007-03-09</td>
<td>1</td>
</tr>
<tr>
<td>2007-03-18</td>
<td>8</td>
</tr>
<tr>
<td>2007-05-01</td>
<td>1</td>
</tr>
<tr>
<td>2007-05-03</td>
<td>2</td>
</tr>
<tr>
<td>2007-05-15</td>
<td>3</td>
</tr>
<tr>
<td>2007-05-18</td>
<td>4</td>
</tr>
<tr>
<td>2007-05-30</td>
<td>2</td>
</tr>
<tr>
<td>2007-06-12</td>
<td>2</td>
</tr>
<tr>
<td>2007-07-27</td>
<td>1</td>
</tr>
<tr>
<td>2007-09-05</td>
<td>3</td>
</tr>
<tr>
<td>2007-09-07</td>
<td>2</td>
</tr>
<tr>
<td>2007-09-11</td>
<td>1</td>
</tr>
<tr>
<td>2007-09-12</td>
<td>4</td>
</tr>
<tr>
<td>2008-02-15</td>
<td>4</td>
</tr>
<tr>
<td>2008-02-21</td>
<td>1</td>
</tr>
<tr>
<td>2008-03-04</td>
<td>2</td>
</tr>
<tr>
<td>2008-05-13</td>
<td>1</td>
</tr>
<tr>
<td>2008-05-16</td>
<td>4</td>
</tr>
<tr>
<td>2008-05-23</td>
<td>4</td>
</tr>
</tbody>
</table>

uncurated_author_metadata:

<table>
<thead>
<tr>
<th>Title</th>
<th>Geo Accession</th>
<th>Status</th>
<th>Submission Date</th>
<th>FTP URL</th>
</tr>
</thead>
</table>
Value

An expression set

duplicates:
GSE2109.GSE2109_GSM76554 GSE2109.GSE2109_GSM76567
1 1
1
202

miR-141 and miR-200a act on ovarian tumorigenesis by controlling oxidative stress response.

Description

Although there is evidence that redox regulation has an essential role in malignancies, its impact on tumor prognosis remains unclear. Here we show crosstalk between oxidative stress and the miR-200 family of microRNAs that affects tumorigenesis and chemosensitivity. miR-141 and miR-200a target p38?? and modulate the oxidative stress response. Enhanced expression of these microRNAs mimics p38?? deficiency and increases tumor growth in mouse models, but it also improves
the response to chemotherapeutic agents. High-grade human ovarian adenocarcinomas that accumulate miR-200a have low concentrations of p38?? and an associated oxidative stress signature. The miR200a-dependent stress signature correlates with improved survival of patients in response to treatment. Therefore, the role of miR-200a in stress could be a predictive marker for clinical outcome in ovarian cancer. In addition, although oxidative stress promotes tumor growth, it also sensitizes tumors to treatment, which could account for the limited success of antioxidants in clinical trials.

Format

experimentData(eset):
Experiment data
Experimenter name: Mateescu B, Batista L, Mariani O, Meyniel J, Cottu PH, Sastre-Garau X, Mechta-Grigoriou F
Laboratory: Mateescu, Mechta-Grigoriou 2011
Contact information:
Title: miR-141 and miR-200a act on ovarian tumorigenesis by controlling oxidative stress response.
URL:
PMIDs: 22101765

Abstract: A 149 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  [HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
platform_shorttitle:
  Affymetrix HG-U133Plus2
platform_summary:
  hgu133plus2
platform_manufacturer:
  Affymetrix
platform_distribution:
  commercial
platform_accession:
  GPL570
platform_technology:
  in situ oligonucleotide
version:
  2015-09-22 19:44:56

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

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>107.00</td>
<td>76.00</td>
<td>3.05</td>
<td>2.50</td>
<td>4.56</td>
</tr>
</tbody>
</table>

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

alt_sample_name:
Ovarian carcinoma 1 Ovarian carcinoma 10 Ovarian carcinoma 100 1 1 1
Ovarian carcinoma 101 Ovarian carcinoma 102 Ovarian carcinoma 103 1 1 1
Ovarian carcinoma 104 Ovarian carcinoma 105 Ovarian carcinoma 106 1 1 1
Ovarian carcinoma 107 Ovarian carcinoma 11 Ovarian carcinoma 12 1 1 1
Ovarian carcinoma 13 Ovarian carcinoma 14 Ovarian carcinoma 15 1 1 1
Ovarian carcinoma 16 Ovarian carcinoma 17 Ovarian carcinoma 18 1 1 1
Ovarian carcinoma 19 Ovarian carcinoma 2 Ovarian carcinoma 20 1 1 1
Ovarian carcinoma 21 Ovarian carcinoma 22 Ovarian carcinoma 23 1 1 1
Ovarian carcinoma 24 Ovarian carcinoma 25 Ovarian carcinoma 26 1 1 1
Ovarian carcinoma 27 Ovarian carcinoma 28 Ovarian carcinoma 29 1 1 1
Ovarian carcinoma 3 Ovarian carcinoma 30 Ovarian carcinoma 31 1 1 1
Ovarian carcinoma 32 Ovarian carcinoma 33 Ovarian carcinoma 34 1 1 1
Ovarian carcinoma 35 Ovarian carcinoma 36 Ovarian carcinoma 37 1 1 1
Ovarian carcinoma 38 Ovarian carcinoma 39 Ovarian carcinoma 4 1 1 1
Ovarian carcinoma 40 Ovarian carcinoma 41 Ovarian carcinoma 42 1 1 1
Ovarian carcinoma 43 Ovarian carcinoma 44 Ovarian carcinoma 45 1 1 1
Ovarian carcinoma 46 Ovarian carcinoma 47 Ovarian carcinoma 48 1 1 1
<table>
<thead>
<tr>
<th>sample_type:</th>
<th>tumor</th>
<th>107</th>
</tr>
</thead>
<tbody>
<tr>
<td>histological_type:</td>
<td>clearcell endo mucinous other ser</td>
<td>6 8 8 6 79</td>
</tr>
<tr>
<td>summarygrade:</td>
<td>high low</td>
<td>67 40</td>
</tr>
<tr>
<td>summarystage:</td>
<td>(Other)</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 49</th>
<th>Ovarian carcinoma 5</th>
<th>Ovarian carcinoma 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 51</th>
<th>Ovarian carcinoma 52</th>
<th>Ovarian carcinoma 53</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 54</th>
<th>Ovarian carcinoma 55</th>
<th>Ovarian carcinoma 56</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 57</th>
<th>Ovarian carcinoma 58</th>
<th>Ovarian carcinoma 59</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 6</th>
<th>Ovarian carcinoma 60</th>
<th>Ovarian carcinoma 61</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 62</th>
<th>Ovarian carcinoma 63</th>
<th>Ovarian carcinoma 64</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 65</th>
<th>Ovarian carcinoma 66</th>
<th>Ovarian carcinoma 67</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 68</th>
<th>Ovarian carcinoma 69</th>
<th>Ovarian carcinoma 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 70</th>
<th>Ovarian carcinoma 71</th>
<th>Ovarian carcinoma 72</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 73</th>
<th>Ovarian carcinoma 74</th>
<th>Ovarian carcinoma 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 76</th>
<th>Ovarian carcinoma 77</th>
<th>Ovarian carcinoma 78</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 79</th>
<th>Ovarian carcinoma 8</th>
<th>Ovarian carcinoma 80</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 81</th>
<th>Ovarian carcinoma 82</th>
<th>Ovarian carcinoma 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 84</th>
<th>Ovarian carcinoma 85</th>
<th>Ovarian carcinoma 86</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 87</th>
<th>Ovarian carcinoma 88</th>
<th>Ovarian carcinoma 89</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovarian carcinoma 9</th>
<th>Ovarian carcinoma 90</th>
<th>Ovarian carcinoma 91</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>tumour stage:</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>20 11 59 17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>substages:</th>
<th>a b c NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 12 62 17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>grade:</th>
<th>1 2 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 33 67</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days to tumor recurrence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max.</td>
</tr>
<tr>
<td>3.0 340.5 584.0 1108.0 1525.0 7386.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>recurrence status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>norecurrence recurrence</td>
</tr>
<tr>
<td>27 80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days to death:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max.</td>
</tr>
<tr>
<td>3 668 1096 1520 2220 7386</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>vital status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>deceased living</td>
</tr>
<tr>
<td>76 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>batch:</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 14 23 16 21 3 1</td>
</tr>
<tr>
<td>2009-03-18 2009-03-19</td>
</tr>
<tr>
<td>4 10</td>
</tr>
</tbody>
</table>

uncurated author metadata:

- title: Ovarian carcinoma 100///geo_accession: GSM643032///status: Public on Nov 01 2011///submission_date: Dec 20 ...
- title: Ovarian carcinoma 101///geo_accession: GSM643033///status: Public on Nov 01 2011///submission_date: Dec 20 ...
- title: Ovarian carcinoma 102///geo_accession: GSM643034///status: Public on Nov 01 2011///submission_date: Dec 20 ...
- title: Ovarian carcinoma 103///geo_accession: GSM643035///status: Public on Nov 01 2011///submission_date: Dec 20 ...
- title: Ovarian carcinoma 104///geo_accession: GSM643036///status: Public on Nov 01 2011///submission_date: Dec 20 ...
title: Ovarian carcinoma 2///geo_accession: GSM642934///status: Public on Nov 01 2011

title: Ovarian carcinoma 30///geo_accession: GSM642962///status: Public on Nov 01 2011

title: Ovarian carcinoma 31///geo_accession: GSM642963///status: Public on Nov 01 2011

title: Ovarian carcinoma 32///geo_accession: GSM642964///status: Public on Nov 01 2011

title: Ovarian carcinoma 33///geo_accession: GSM642965///status: Public on Nov 01 2011

title: Ovarian carcinoma 34///geo_accession: GSM642966///status: Public on Nov 01 2011

title: Ovarian carcinoma 35///geo_accession: GSM642967///status: Public on Nov 01 2011

title: Ovarian carcinoma 36///geo_accession: GSM642968///status: Public on Nov 01 2011

title: Ovarian carcinoma 37///geo_accession: GSM642969///status: Public on Nov 01 2011

title: Ovarian carcinoma 38///geo_accession: GSM642970///status: Public on Nov 01 2011

title: Ovarian carcinoma 39///geo_accession: GSM642971///status: Public on Nov 01 2011

title: Ovarian carcinoma 3///geo_accession: GSM642935///status: Public on Nov 01 2011

title: Ovarian carcinoma 40///geo_accession: GSM642972///status: Public on Nov 01 2011

title: Ovarian carcinoma 41///geo_accession: GSM642973///status: Public on Nov 01 2011

title: Ovarian carcinoma 42///geo_accession: GSM642974///status: Public on Nov 01 2011

title: Ovarian carcinoma 43///geo_accession: GSM642975///status: Public on Nov 01 2011

title: Ovarian carcinoma 44///geo_accession: GSM642976///status: Public on Nov 01 2011

title: Ovarian carcinoma 45///geo_accession: GSM642977///status: Public on Nov 01 2011

title: Ovarian carcinoma 46///geo_accession: GSM642978///status: Public on Nov 01 2011

title: Ovarian carcinoma 47///geo_accession: GSM642979///status: Public on Nov 01 2011

title: Ovarian carcinoma 48///geo_accession: GSM642980///status: Public on Nov 01 2011

title: Ovarian carcinoma 49///geo_accession: GSM642981///status: Public on Nov 01 2011

title: Ovarian carcinoma 4///geo_accession: GSM642936///status: Public on Nov 01 2011

title: Ovarian carcinoma 50///geo_accession: GSM642982///status: Public on Nov 01 2011
Value

An expression set

GSE26712

A gene signature predicting for survival in suboptimally debulked patients with ovarian cancer.

Description

Despite the existence of morphologically indistinguishable disease, patients with advanced ovarian tumors display a broad range of survival end points. We hypothesize that gene expression profiling can identify a prognostic signature accounting for these distinct clinical outcomes. To resolve survival-associated loci, gene expression profiling was completed for an extensive set of 185 (90 optimal/95 suboptimal) primary ovarian tumors using the Affymetrix human U133A microarray. Cox regression analysis identified probe sets associated with survival in optimally and suboptimally debulked tumor sets at a P value of <0.01. Leave-one-out cross-validation was applied to each tumor cohort and confirmed by a permutation test. External validation was conducted by applying the gene signature to a publicly available array database of expression profiles of advanced stage suboptimally debulked tumors. The prognostic signature successfully classified the tumors according to survival for suboptimally (P = 0.0179) but not optimally debulked (P = 0.144) patients. The suboptimal gene signature was validated using the independent set of tumors (odds ratio, 8.75; P = 0.0146). To elucidate signaling events amenable to therapeutic intervention in suboptimally debulked patients, pathway analysis was completed for the top 57 survival-associated probe sets. For suboptimally debulked patients, confirmation of the predictive gene signature supports the existence of a clinically relevant predictor, as well as the possibility of novel therapeutic opportunities. Ultimately, the prognostic classifier defined for suboptimally debulked tumors may aid in the classification and enhancement of patient outcome for this high-risk population.

Format

eperimentData(eset):

Experiment data
Laboratory: Bonome, Birrer 2008
Contact information:
Title: A gene signature predicting for survival in suboptimally debulked patients with ovarian cancer.
URL:
PMIDs: 18593951

Abstract: A 238 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HG-U133A] Affymetrix Human Genome U133A Array
platform_shorttitle:
Affymetrix HG-U133A
platform_summary:
hgu133a
platform_manufacturer: Affymetrix
platform_distribution: commercial
platform_accession: GPL96
version: 2015-09-22 19:46:24

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

  10 observations deleted due to missingness
  n events median 0.95LCL 0.95UCL
  185.00 129.00 3.83 3.24 4.83

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

alt_sample_name:
Normal HOSE2008 Normal HOSE2061 Normal HOSE2064
  1  1  1
Normal HOSE2085 Normal HOSE2225 Normal HOSE2226
  1  1  1
Normal HOSE2228 Normal HOSE2230 Normal HOSE2234
  1  1  1
Normal HOSE2237 Ovarian Cancer SO10 Ovarian Cancer SO100
  1  1  1
Ovarian Cancer SO103 Ovarian Cancer SO106 Ovarian Cancer SO108
  1  1  1
Ovarian Cancer SO11 Ovarian Cancer SO113 Ovarian Cancer SO115
  1  1  1
Ovarian Cancer SO116 Ovarian Cancer SO117 Ovarian Cancer SO118
  1  1  1
Ovarian Cancer SO12 Ovarian Cancer SO121 Ovarian Cancer SO122
<table>
<thead>
<tr>
<th>ID</th>
<th>Ovarian Cancer SO124</th>
<th>Ovarian Cancer SO129</th>
<th>Ovarian Cancer SO13</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO131</td>
<td>Ovarian Cancer SO134</td>
<td>Ovarian Cancer SO135</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO137</td>
<td>Ovarian Cancer SO141</td>
<td>Ovarian Cancer SO143</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO148</td>
<td>Ovarian Cancer SO154</td>
<td>Ovarian Cancer SO16</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO166</td>
<td>Ovarian Cancer SO17</td>
<td>Ovarian Cancer SO173</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO174</td>
<td>Ovarian Cancer SO18</td>
<td>Ovarian Cancer SO181</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO184</td>
<td>Ovarian Cancer SO185</td>
<td>Ovarian Cancer SO187</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO189</td>
<td>Ovarian Cancer SO190</td>
<td>Ovarian Cancer SO193</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO194</td>
<td>Ovarian Cancer SO196</td>
<td>Ovarian Cancer SO197</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO2</td>
<td>Ovarian Cancer SO200</td>
<td>Ovarian Cancer SO201</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO203</td>
<td>Ovarian Cancer SO205</td>
<td>Ovarian Cancer SO21</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO211</td>
<td>Ovarian Cancer SO214</td>
<td>Ovarian Cancer SO216</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO217</td>
<td>Ovarian Cancer SO218</td>
<td>Ovarian Cancer SO224</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO225</td>
<td>Ovarian Cancer SO227</td>
<td>Ovarian Cancer SO228</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO229</td>
<td>Ovarian Cancer SO23</td>
<td>Ovarian Cancer SO230</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO231</td>
<td>Ovarian Cancer SO235</td>
<td>Ovarian Cancer SO236</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO237</td>
<td>Ovarian Cancer SO24</td>
<td>Ovarian Cancer SO242</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO243</td>
<td>Ovarian Cancer SO244</td>
<td>Ovarian Cancer SO246</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO247</td>
<td>Ovarian Cancer SO249</td>
<td>Ovarian Cancer SO25</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO250</td>
<td>Ovarian Cancer SO256</td>
<td>Ovarian Cancer SO257</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO258</td>
<td>Ovarian Cancer SO26</td>
<td>Ovarian Cancer SO262</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO263</td>
<td>Ovarian Cancer SO265</td>
<td>Ovarian Cancer SO267</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO268</td>
<td>Ovarian Cancer SO27</td>
<td>Ovarian Cancer SO273</td>
</tr>
<tr>
<td>ID</td>
<td>Ovarian Cancer SO278</td>
<td>Ovarian Cancer SO279</td>
<td>Ovarian Cancer SO282</td>
</tr>
<tr>
<td>sample_type:</td>
<td>healthy</td>
<td>tumor</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>185</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>histological_type:</th>
<th>ser</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>185</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>primarysite:</th>
<th>ov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>195</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>summarygrade:</th>
<th>high</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>185</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>summarystage:</th>
<th>late</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>185</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>tumorstage:</th>
<th>3</th>
<th>4</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>146</td>
<td>36</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>subststage:</th>
<th>b</th>
<th>c</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>137</td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>age_at_initial_pathologic_diagnosis:</th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.00</td>
<td>52.00</td>
<td>63.00</td>
<td>61.54</td>
<td>70.00</td>
<td>84.00</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>recurrence_status:</th>
<th>no recurrence</th>
<th>recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42</td>
<td>153</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days_to_death:</th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.9</td>
<td>660.6</td>
<td>1164.0</td>
<td>1429.0</td>
<td>1880.0</td>
<td>4982.0</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>vital_status:</th>
<th>deceased</th>
<th>living</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
debulking:
  optimal suboptimal NA's
  90 95 10

percent_normal_cells:
  20-
  195

percent_stromal_cells:
  20-
  195

percent_tumor_cells:
  80+
  195

batch:
  14 16 9 6 10 15 17
  12 11 20 17 9 14 15
  2006-11-09
  10

uncurated_author_metadata:

  title: Normal HOSE2008
  geo_accession: GSM657520
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2061
  geo_accession: GSM657521
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2064
  geo_accession: GSM657522
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2085
  geo_accession: GSM657523
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2225
  geo_accession: GSM657524
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2226
  geo_accession: GSM657525
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2228
  geo_accession: GSM657526
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2230
  geo_accession: GSM657527
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2234
  geo_accession: GSM657528
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Normal HOSE2237
  geo_accession: GSM657519
  status: Public on Jan 20 2011
  submission_date: Jan 19 2011
  title: Ovarian Cancer SO100
  geo_accession: GSM657530
  status: Public on Jan 20 2011
title: Ovarian Cancer SO103///geo_accession: GSM657531///status: Public on Jan 20

Title: Ovarian Cancer SO106///geo_accession: GSM657532///status: Public on Jan 20

Title: Ovarian Cancer SO108///geo_accession: GSM657533///status: Public on Jan 20

Title: Ovarian Cancer SO10///geo_accession: GSM657529///status: Public on Jan 20

Title: Ovarian Cancer SO113///geo_accession: GSM657535///status: Public on Jan 20

Title: Ovarian Cancer SO115///geo_accession: GSM657536///status: Public on Jan 20

Title: Ovarian Cancer SO116///geo_accession: GSM657537///status: Public on Jan 20

Title: Ovarian Cancer SO117///geo_accession: GSM657538///status: Public on Jan 20

Title: Ovarian Cancer SO118///geo_accession: GSM657539///status: Public on Jan 20

Title: Ovarian Cancer SO11///geo_accession: GSM657534///status: Public on Jan 20

Title: Ovarian Cancer SO121///geo_accession: GSM657541///status: Public on Jan 20

Title: Ovarian Cancer SO122///geo_accession: GSM657542///status: Public on Jan 20

Title: Ovarian Cancer SO124///geo_accession: GSM657543///status: Public on Jan 20

Title: Ovarian Cancer SO129///geo_accession: GSM657544///status: Public on Jan 20

Title: Ovarian Cancer SO12///geo_accession: GSM657540///status: Public on Jan 20

Title: Ovarian Cancer SO131///geo_accession: GSM657546///status: Public on Jan 20

Title: Ovarian Cancer SO134///geo_accession: GSM657547///status: Public on Jan 20

Title: Ovarian Cancer SO135///geo_accession: GSM657548///status: Public on Jan 20

Title: Ovarian Cancer SO137///geo_accession: GSM657549///status: Public on Jan 20

Title: Ovarian Cancer SO13///geo_accession: GSM657545///status: Public on Jan 20

Title: Ovarian Cancer SO141///geo_accession: GSM657550///status: Public on Jan 20

Title: Ovarian Cancer SO143///geo_accession: GSM657551///status: Public on Jan 20

Title: Ovarian Cancer SO148///geo_accession: GSM657552///status: Public on Jan 20

Title: Ovarian Cancer SO154///geo_accession: GSM657553///status: Public on Jan 20
| Title                  | Geo Accession | Status          | Submission Date |
|-----------------------|---------------|-----------------|-----------------|-----------------|
| Ovarian Cancer SO166  | GSM657555     | Public on Jan 20|                 |
| Ovarian Cancer SO16    | GSM657554     | Public on Jan 20|                 |
| Ovarian Cancer SO173   | GSM657557     | Public on Jan 20|                 |
| Ovarian Cancer SO174   | GSM657558     | Public on Jan 20|                 |
| Ovarian Cancer SO17    | GSM657556     | Public on Jan 20|                 |
| Ovarian Cancer SO181   | GSM657560     | Public on Jan 20|                 |
| Ovarian Cancer SO184   | GSM657561     | Public on Jan 20|                 |
| Ovarian Cancer SO185   | GSM657562     | Public on Jan 20|                 |
| Ovarian Cancer SO187   | GSM657563     | Public on Jan 20|                 |
| Ovarian Cancer SO189   | GSM657564     | Public on Jan 20|                 |
| Ovarian Cancer SO18    | GSM657559     | Public on Jan 20|                 |
| Ovarian Cancer SO190   | GSM657565     | Public on Jan 20|                 |
| Ovarian Cancer SO193   | GSM657566     | Public on Jan 20|                 |
| Ovarian Cancer SO194   | GSM657567     | Public on Jan 20|                 |
| Ovarian Cancer SO196   | GSM657568     | Public on Jan 20|                 |
| Ovarian Cancer SO197   | GSM657569     | Public on Jan 20|                 |
| Ovarian Cancer SO200   | GSM657571     | Public on Jan 20|                 |
| Ovarian Cancer SO201   | GSM657572     | Public on Jan 20|                 |
| Ovarian Cancer SO203   | GSM657573     | Public on Jan 20|                 |
| Ovarian Cancer SO205   | GSM657574     | Public on Jan 20|                 |
| Ovarian Cancer SO211   | GSM657576     | Public on Jan 20|                 |
| Ovarian Cancer SO214   | GSM657577     | Public on Jan 20|                 |
| Ovarian Cancer SO216   | GSM657578     | Public on Jan 20|                 |
| Ovarian Cancer SO217   | GSM657579     | Public on Jan 20|                 |
title: Ovarian Cancer SO25///geo_accession: GSM657599///status: Public on Jan 20 2011

title: Ovarian Cancer SO261///geo_accession: GSM657604///status: Public on Jan 20 2011

title: Ovarian Cancer SO262///geo_accession: GSM657605///status: Public on Jan 20 2011

title: Ovarian Cancer SO263///geo_accession: GSM657606///status: Public on Jan 20 2011

title: Ovarian Cancer SO265///geo_accession: GSM657607///status: Public on Jan 20 2011

title: Ovarian Cancer SO267///geo_accession: GSM657608///status: Public on Jan 20 2011

title: Ovarian Cancer SO268///geo_accession: GSM657609///status: Public on Jan 20 2011

title: Ovarian Cancer SO272///geo_accession: GSM657610///status: Public on Jan 20 2011

title: Ovarian Cancer SO273///geo_accession: GSM657611///status: Public on Jan 20 2011

title: Ovarian Cancer SO278///geo_accession: GSM657612///status: Public on Jan 20 2011

title: Ovarian Cancer SO279///geo_accession: GSM657613///status: Public on Jan 20 2011

title: Ovarian Cancer SO282///geo_accession: GSM657614///status: Public on Jan 20 2011

title: Ovarian Cancer SO283///geo_accession: GSM657615///status: Public on Jan 20 2011


title: Ovarian Cancer SO290///geo_accession: GSM657617///status: Public on Jan 20 2011

title: Ovarian Cancer SO295///geo_accession: GSM657618///status: Public on Jan 20 2011

duplicates:

GSE26712.GSE26712_GSM657526
  1
GSE26712.GSE26712_GSM657526///GSE26712.GSE26712_GSM657527
  1
GSE26712.GSE26712_GSM657527
  1
NA's
  192
Value

An expression set

GSE30009  

Multidrug resistance-linked gene signature predicts overall survival of patients with primary ovarian serous carcinoma.

Description

This study assesses the ability of multidrug resistance (MDR)-associated gene expression patterns to predict survival in patients with newly diagnosed carcinoma of the ovary. The scope of this research differs substantially from that of previous reports, as a very large set of genes was evaluated whose expression has been shown to affect response to chemotherapy. We applied a customized TaqMan low density array, a highly sensitive and specific assay, to study the expression profiles of 380 MDR-linked genes in 80 tumor specimens collected at initial surgery to debulk primary serous carcinoma. The RNA expression profiles of these drug resistance genes were correlated with clinical outcomes. Leave-one-out cross-validation was used to estimate the ability of MDR gene expression to predict survival. Although gene expression alone does not predict overall survival (OS; P = 0.06), four covariates (age, stage, CA125 level, and surgical debulking) do (P = 0.03). When gene expression was added to the covariates, we found an 11-gene signature that provides a major improvement in OS prediction (log-rank statistic P < 0.003). The predictive power of this 11-gene signature was confirmed by dividing high- and low-risk patient groups, as defined by their clinical covariates, into four specific risk groups on the basis of expression levels. This study reveals an 11-gene signature that allows a more precise prognosis for patients with serous cancer of the ovary treated with carboplatin- and paclitaxel-based therapy. These 11 new targets offer opportunities for new therapies to improve clinical outcome in ovarian cancer.

Format

experimentData(eset):

Experiment data

Experimenter name: Gillet JP, Calcagno AM, Varma S, Davidson B et al. Multidrug resistance-linked gene signature predicts overall survival of patients with primary ovarian serous carcinoma.

Laboratory: Gillet, Gottesman 2012

Contact information:

Title: Multidrug resistance-linked gene signature predicts overall survival of patients with primary ovarian serous carcinoma.

URL:

PMIDs: 22492981

Abstract: A 244 word abstract is available. Use 'abstract' method.

Information is available on: preprocessing

notes:

platform_title:

TaqMan qRT-PCR Homo sapiens Low-Density Array 380

platform_shorttitle:

TaqMan qRT-PCR

platform_summary:
NA
platform_manufacturer: TaqMan
platform_distribution: custom
platform_accession: GPL13728
version: 2015-09-22 19:46:26

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 5 6 ... 380 (363 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 363 features, 103 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>103</td>
<td>57.00</td>
<td>3.42</td>
<td>2.92</td>
<td>5.34</td>
</tr>
</tbody>
</table>

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

alt_sample_name:
Norwegian patient 1 Norwegian patient 10 Norwegian patient 11 1 1 1
Norwegian patient 12 Norwegian patient 13 Norwegian patient 14 1 1 1
Norwegian patient 15 Norwegian patient 16 Norwegian patient 17 1 1 1
Norwegian patient 18 Norwegian patient 19 Norwegian patient 2 1 1 1
Norwegian patient 20 Norwegian patient 21 Norwegian patient 22 1 1 1
Norwegian patient 23 Norwegian patient 3 Norwegian patient 4 1 1 1
Norwegian patient 5 Norwegian patient 6 Norwegian patient 7 1 1 1
Norwegian patient 8 Norwegian patient 9 US Patient 1 1 1 1
<table>
<thead>
<tr>
<th>US Patient 13</th>
<th>US Patient 14</th>
<th>US Patient 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 16</td>
<td>US Patient 17</td>
<td>US Patient 18</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 3</td>
<td>US Patient 30</td>
<td>US Patient 31</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 32</td>
<td>US Patient 33</td>
<td>US Patient 34</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 38</td>
<td>US Patient 39</td>
<td>US Patient 4</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 40</td>
<td>US Patient 41</td>
<td>US Patient 42</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 43</td>
<td>US Patient 44</td>
<td>US Patient 45</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 49</td>
<td>US Patient 5</td>
<td>US Patient 50</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 51</td>
<td>US Patient 52</td>
<td>US Patient 53</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 54</td>
<td>US Patient 55</td>
<td>US Patient 56</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 57</td>
<td>US Patient 58</td>
<td>US Patient 59</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 6</td>
<td>US Patient 60</td>
<td>US Patient 61</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 62</td>
<td>US Patient 63</td>
<td>US Patient 64</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 68</td>
<td>US Patient 69</td>
<td>US Patient 7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 70</td>
<td>US Patient 71</td>
<td>US Patient 72</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 73</td>
<td>US Patient 74</td>
<td>US Patient 75</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>US Patient 76</td>
<td>US Patient 77</td>
<td>US Patient 78</td>
</tr>
<tr>
<td>Sample Type</td>
<td>Tumor</td>
<td>Histological Type</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Grade</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age at Initial Pathologic Diagnosis</th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.00</td>
<td>56.00</td>
<td>61.00</td>
<td>62.45</td>
<td>71.50</td>
<td>87.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Days to Death</th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24</td>
<td>598</td>
<td>1053</td>
<td>1156</td>
<td>1568</td>
<td>4748</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Status</th>
<th>Deceased</th>
<th>Living</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Debulking</th>
<th>Optimal</th>
<th>Suboptimal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81</td>
<td>22</td>
</tr>
</tbody>
</table>
uncurated_author_metadata:
title: US Patient 33///geo_accession: GSM742597///status: Public on Apr 19 2012///submission_date: Jun 15 2012///contact_zip.postal_code: 20892///contact_country: USA///supplementary_file: NONE///data_row_count: 380


...
Value

An expression set

---

GSE30161  
*Multi-gene expression predictors of single drug responses to adjuvant chemotherapy in ovarian carcinoma: predicting platinum resistance.*

Description

Despite advances in radical surgery and chemotherapy delivery, ovarian cancer is the most lethal gynecologic malignancy. Standard therapy includes treatment with platinum-based combination chemotherapies yet there is no biomarker model to predict their responses to these agents. We here have developed and independently tested our multi-gene molecular predictors for forecasting patients’ responses to individual drugs on a cohort of 55 ovarian cancer patients. To independently validate these molecular predictors, we performed microarray profiling on FFPE tumor samples of 55 ovarian cancer patients (UVA-55) treated with platinum-based adjuvant chemotherapy. Genome-wide chemosensitivity biomarkers were initially discovered from the in vitro drug activities and genomic expression data for carboplatin and paclitaxel, respectively. Multivariate predictors were trained with the cell line data and then evaluated with a historical patient cohort. For the UVA-55 cohort, the carboplatin, taxol, and combination predictors significantly stratified responder patients and non-responder patients (p = 0.019, 0.04, 0.014) with sensitivity = 91%, 96%, 93 and NPV = 57%, 67%, 67% in pathologic clinical response. The combination predictor also demonstrated a significant survival difference between predicted responders and non-responders with a median survival of 55.4 months vs. 32.1 months. Thus, COXEN single- and combination-drug predictors successfully stratified platinum resistance and taxane response in an independent cohort of ovarian cancer patients based on their FFPE tumor samples.

Format

experimentData(eset):

Experiment data
Laboratory: Ferriss, Lee 2012
Contact information:
Title: Multi-gene expression predictors of single drug responses to adjuvant chemotherapy in ovarian carcinoma: predicting platinum resistance.
Abstract: A 215 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  [HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
platform_shorttitle:
  Affymetrix HG-U133Plus2
platform_summary:
  hgu133plus2
platform_manufacturer:
  Affymetrix
platform_distribution:
  commercial
platform_accession:
  GPL570
version:
  2015-09-22 19:50:24

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

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>58.00</td>
<td>36.00</td>
<td>4.19</td>
<td>2.70</td>
<td>6.17</td>
</tr>
</tbody>
</table>

Available sample meta-data:

alt_sample_name:
OV_FFPE_1  OV_FFPE_10  OV_FFPE_11  OV_FFPE_12  OV_FFPE_13  OV_FFPE_14  OV_FFPE_15
  1  1  1  1  1  1  1
OV_FFPE_16  OV_FFPE_17  OV_FFPE_18  OV_FFPE_19  OV_FFPE_2  OV_FFPE_20  OV_FFPE_21
  1  1  1  1  1  1  1
OV_FFPE_22  OV_FFPE_23  OV_FFPE_24  OV_FFPE_25  OV_FFPE_26  OV_FFPE_27  OV_FFPE_28
  1  1  1  1  1  1  1
| sample_type: | tumor | 58 |
| histological_type: | clearcell | endo | mucinous | other |
| | 5 | 1 | 1 | 1 |
| | | | ser | undifferentiated | NA's |
| | | | 47 | 1 | 2 |
| summarygrade: | high | low | NA's |
| | 33 | 21 | 4 |
| summarystage: | late | 58 |
| tumorstage: | 3 | 4 |
| | 53 | 5 |
| stage: | a | b | c |
| | 9 | 11 | 38 |
| grade: | 1 | 2 | 3 | NA's |
| | 2 | 19 | 33 | 4 |
| age_at_initial_pathologic_diagnosis: | Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
| | 38.00 | 53.50 | 62.00 | 62.57 | 72.00 | 85.00 |
pltx:
y
58
tax:
   n  y
4 54
neo:
   n
58
days_to_tumor_recurrence:
         Min.    1st Qu.    Median     Mean   3rd Qu.      Max.
recurrence_status:
      norecurrence  recurrence       NA's
           6        48            4
days_to_death:
         Min.    1st Qu.    Median     Mean   3rd Qu.      Max.
vital_status:
      deceased  living
          36        22
debulking:
      optimal  suboptimal         NA's
                 26        30            2
batch:
2009-10-07  2009-10-08  2009-10-09  2009-10-20
           28        18            8            4
uncurated_author_metadata:
  title: OV_FFPE_10///geo_accession: GSM746870///status: Public on Aug 21 2012
  title: OV_FFPE_11///geo_accession: GSM746871///status: Public on Aug 21 2012
  title: OV_FFPE_12///geo_accession: GSM746872///status: Public on Aug 21 2012
  title: OV_FFPE_13///geo_accession: GSM746873///status: Public on Aug 21 2012
  title: OV_FFPE_14///geo_accession: GSM746874///status: Public on Aug 21 2012
  title: OV_FFPE_15///geo_accession: GSM746875///status: Public on Aug 21 2012
Value

An expression set

GSE32062

*High-risk ovarian cancer based on 126-gene expression signature is uniquely characterized by downregulation of antigen presentation pathway.*

Description

High-grade serous ovarian cancers are heterogeneous not only in terms of clinical outcome but also at the molecular level. Our aim was to establish a novel risk classification system based on a gene expression signature for predicting overall survival, leading to suggesting novel therapeutic strategies for high-risk patients. In this large-scale cross-platform study of six microarray data sets consisting of 1,054 ovarian cancer patients, we developed a gene expression signature for predicting overall survival by applying elastic net and 10-fold cross-validation to a Japanese data set A (n = 260) and evaluated the signature in five other data sets. Subsequently, we investigated differences in the biological characteristics between high- and low-risk ovarian cancer groups. An elastic net analysis identified a 126-gene expression signature for predicting overall survival in patients with ovarian cancer using the Japanese data set A (multivariate analysis, P = 4 × 10^-20). We validated its predictive ability with five other data sets using multivariate analysis (Tothill’s data set, P = 1 × 10^-5; Bonome’s data set, P = 0.0033; Dressman’s data set, P = 0.0016; TCGA data set, P = 0.0027; Japanese data set B, P = 0.021). Through gene ontology and pathway analyses, we identified a significant reduction in expression of immune-response-related genes, especially on the antigen presentation pathway, in high-risk ovarian cancer patients. This risk classification based on the 126-gene expression signature is an accurate predictor of clinical outcome in patients with advanced stage high-grade serous ovarian cancer and has the potential to develop new therapeutic strategies for high-grade serous ovarian cancer patients.

Format

experimentData(eset):

**Experiment data**


Laboratory: Yoshihara, Tanaka 2012
Contact information:
Title: High-risk ovarian cancer based on 126-gene expression signature is uniquely characterized by downregulation of antigen presentation pathway.
URL: 
PMIDs: 22241791

Abstract: A 255 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title: 
   Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (Probe Name version)
platform_shorttitle: 
   Agilent G4112F
platform_summary: 
   hgug4112a
platform_manufacturer: 
   Agilent
platform_distribution: 
   commercial
platform_accession: 
   GPL6480
version: 
   2015-09-22 19:55:29

featureData(eset):
An object of class 'AnnotatedDataFrame'
   featureNames: A_23_P100001 A_23_P100011 ... A_32_P99902 (30936 total)
   varLabels: probeset gene EntrezGene.ID best_probe
   varMetadata: labelDescription

Details

assayData: 30936 features, 260 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>260.00</td>
<td>121.00</td>
<td>4.93</td>
<td>4.11</td>
<td>6.58</td>
</tr>
</tbody>
</table>

Available sample meta-data:

<table>
<thead>
<tr>
<th>alt_sample_name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10d   115d  116d  117d  119d  11d  120d  122d  123d  125Rd</td>
</tr>
<tr>
<td>1     1     1     1     1     1     1     1     1     1</td>
</tr>
<tr>
<td>129d  12d   130d  132d  134d  139d  140d  143d  144d  145d</td>
</tr>
</tbody>
</table>
sample_type: tumor 260

histological_type: ser 260

summarygrade: high low 129 131

summarystage: late 260

tumorstage: 3 4 204 56

substage: a b c NA's 4 20 180 56

grade: 2 3 131 129

pltx: y
days_to_death:

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td>810</td>
<td>1245</td>
<td>1344</td>
<td>1710</td>
<td>3840</td>
</tr>
</tbody>
</table>

days_to_death:

vital_status:

deceased  living
121        139

debulking:

optimal  suboptimal
103       157

uncurated_author_metadata:

title: serous ovarian cancer 10d///geo_accession: GSM794865///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 115d///geo_accession: GSM794867///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 116d///geo_accession: GSM794868///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 117d///geo_accession: GSM794869///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 119d///geo_accession: GSM794870///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 11d///geo_accession: GSM794866///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 120d///geo_accession: GSM794872///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 122d///geo_accession: GSM794873///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 123d///geo_accession: GSM794874///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 125Rd///geo_accession: GSM794875///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 129d///geo_accession: GSM794876///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 12d///geo_accession: GSM794871///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 130d///geo_accession: GSM794877///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 132d///geo_accession: GSM794878///status: Public on Mar 01 2012///submission_date: Sep 12 2010

title: serous ovarian cancer 134d///geo_accession: GSM794879///status: Public on Mar 01 2012///submission_date: Sep 12 2010
title: serous ovarian cancer 139d///geo_accession: GSM794880///status: Public on Mar 01 2012
title: serous ovarian cancer 140d///geo_accession: GSM794881///status: Public on Mar 01 2012
title: serous ovarian cancer 143d///geo_accession: GSM794882///status: Public on Mar 01 2012
title: serous ovarian cancer 144d///geo_accession: GSM794883///status: Public on Mar 01 2012
title: serous ovarian cancer 145d///geo_accession: GSM794884///status: Public on Mar 01 2012
title: serous ovarian cancer 146d///geo_accession: GSM794885///status: Public on Mar 01 2012
title: serous ovarian cancer 148d///geo_accession: GSM794886///status: Public on Mar 01 2012
title: serous ovarian cancer 150d///geo_accession: GSM794888///status: Public on Mar 01 2012
title: serous ovarian cancer 155d///geo_accession: GSM794889///status: Public on Mar 01 2012
title: serous ovarian cancer 156d///geo_accession: GSM794890///status: Public on Mar 01 2012
title: serous ovarian cancer 15d///geo_accession: GSM794887///status: Public on Mar 01 2012
title: serous ovarian cancer 160d///geo_accession: GSM794892///status: Public on Mar 01 2012
title: serous ovarian cancer 16d///geo_accession: GSM794891///status: Public on Mar 01 2012
title: serous ovarian cancer 171d///geo_accession: GSM794894///status: Public on Mar 01 2012
title: serous ovarian cancer 173d///geo_accession: GSM794895///status: Public on Mar 01 2012
title: serous ovarian cancer 174d///geo_accession: GSM794896///status: Public on Mar 01 2012
title: serous ovarian cancer 178d///geo_accession: GSM794897///status: Public on Mar 01 2012
title: serous ovarian cancer 17d///geo_accession: GSM794893///status: Public on Mar 01 2012
title: serous ovarian cancer 183d///geo_accession: GSM794899///status: Public on Mar 01 2012
title: serous ovarian cancer 184d///geo_accession: GSM794900///status: Public on Mar 01 2012
title: serous ovarian cancer 185d///geo_accession: GSM794901///status: Public on Mar 01 2012
title: serous ovarian cancer 186d///geo_accession: GSM794902///status: Public on Mar 01 2012
title: serous ovarian cancer 18d///geo_accession: GSM794898///status: Public on Mar 01 2012
title: serous ovarian cancer 20d///geo_accession: GSM794904///status: Public on Mar 01 2012
High-risk ovarian cancer based on 126-gene expression signature is uniquely characterized by downregulation of antigen presentation pathway.

Description

High-grade serous ovarian cancers are heterogeneous not only in terms of clinical outcome but also at the molecular level. Our aim was to establish a novel risk classification system based on
a gene expression signature for predicting overall survival, leading to suggesting novel therapeutic strategies for high-risk patients. In this large-scale cross-platform study of six microarray data sets consisting of 1,054 ovarian cancer patients, we developed a gene expression signature for predicting overall survival by applying elastic net and 10-fold cross-validation to a Japanese data set A (n = 260) and evaluated the signature in five other data sets. Subsequently, we investigated differences in the biological characteristics between high- and low-risk ovarian cancer groups. An elastic net analysis identified a 126-gene expression signature for predicting overall survival in patients with ovarian cancer using the Japanese data set A (multivariate analysis, \( P = 4 \times 10^{-20} \)). We validated its predictive ability with five other data sets using multivariate analysis (Tothill’s data set, \( P = 1 \times 10^{-5} \); Bonome’s data set, \( P = 0.0033 \); Dressman’s data set, \( P = 0.0016 \); TCGA data set, \( P = 0.0027 \); Japanese data set B, \( P = 0.021 \)). Through gene ontology and pathway analyses, we identified a significant reduction in expression of immune-response-related genes, especially on the antigen presentation pathway, in high-risk ovarian cancer patients. This risk classification based on the 126-gene expression signature is an accurate predictor of clinical outcome in patients with advanced stage high-grade serous ovarian cancer and has the potential to develop new therapeutic strategies for high-grade serous ovarian cancer patients.

Format

experimentData(eset):
Experiment data
Laboratory: Yoshihara, Tanaka 2012
Contact information:
Title: High-risk ovarian cancer based on 126-gene expression signature is uniquely characterized by downregulation of antigen presentation pathway.
URL:
PMIDs: 22241791

Abstract: A 255 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (Probe Name version)
platform_shorttitle:
Agilent G4112F
platform_summary:
hgug4112a
platform_manufacturer:
Agilent
platform_distribution:
commercial
platform_accession:
GPL6480
version:
2015-09-22 19:58:23

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: A_23_P100001 A_23_P100011 ... A_32_P99902 (30936 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 30936 features, 40 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
40.00  22.00   4.44    3.29   NA
```

Available sample meta-data:

alt_sample_name:
```
106 108 109R 110 111R 192 195R 196 197 198 200 203 205 206 207 213
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
222 224 226 229 230 231 274 277 278 280 281 282 283 284 285 286
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
287 288 289 291 292 294 297R 298R
1 1 1 1 1 1 1
```

sample_type:
tumor
40

histological_type:
ser
40

summarygrade:
high low
17 23

summarystage:
late
40

tumorstage:
3 4
31 9

substage:
b c NA's
| 3 | 28 | 9 |

**grade:**
2 3
23 17

**pltx:**
Y 40

**tax:**
Y 40

**days_to_death:**

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>705</td>
<td>1155</td>
<td>1346</td>
<td>1792</td>
<td>3330</td>
</tr>
</tbody>
</table>

**vital_status:**
deceased living
22 18

**debulking:**
optimal suboptimal
19 21

**uncurated_author_metadata:**
title: serous ovarian cancer 106///geo_accession: GSM795125///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 108///geo_accession: GSM795126///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 109R///geo_accession: GSM795127///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 110///geo_accession: GSM795128///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 111R///geo_accession: GSM795129///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 192///geo_accession: GSM795130///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 195R///geo_accession: GSM795131///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 196///geo_accession: GSM795132///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 197///geo_accession: GSM795133///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 198///geo_accession: GSM795134///status: Public on Mar 01 2012///submission_date: Sep 12 2008

title: serous ovarian cancer 200///geo_accession: GSM795135///status: Public on Mar 01 2012///submission_date: Sep 12 2008
title: serous ovarian cancer 203///geo_accession: GSM79511

title: serous ovarian cancer 205///geo_accession: GSM79513

title: serous ovarian cancer 206///geo_accession: GSM79514

title: serous ovarian cancer 207///geo_accession: GSM79515

title: serous ovarian cancer 213///geo_accession: GSM79516

title: serous ovarian cancer 222///geo_accession: GSM79517

title: serous ovarian cancer 224///geo_accession: GSM79518

...
An expression set

GSE44104

**COL11A1 promotes tumor progression and predicts poor clinical outcome in ovarian cancer.**

**Description**

Biomarkers that predict disease progression might assist the development of better therapeutic strategies for aggressive cancers, such as ovarian cancer. Here, we investigated the role of collagen type XI alpha 1 (COL11A1) in cell invasiveness and tumor formation and the prognostic impact of COL11A1 expression in ovarian cancer. Microarray analysis suggested that COL11A1 is a disease progression-associated gene that is linked to ovarian cancer recurrence and poor survival. Small interference RNA-mediated specific reduction in COL11A1 protein levels suppressed the invasive ability and oncogenic potential of ovarian cancer cells and decreased tumor formation and lung colonization in mouse xenografts. A combination of experimental approaches, including real-time RT-PCR, casein zymography and chromatin immunoprecipitation (ChIP) assays, showed that COL11A1 knockdown attenuated MMP3 expression and suppressed binding of Ets-1 to its putative MMP3 promoter-binding site, suggesting that the Ets-1-MMP3 axis is upregulated by COL11A1. Transforming growth factor (TGF)-beta (TGF-β1) treatment triggers the activation of smad2 signaling cascades, leading to activation of COL11A1 and MMP3. Pharmacological inhibition of MMP3 abrogated the TGF-β1-triggered, COL11A1-dependent cell invasiveness. Furthermore, the NF-YA-binding site on the COL11A1 promoter was identified as the major determinant of TGF-β1-dependent COL11A1 activation. Analysis of 88 ovarian cancer patients indicated that high COL11A1 mRNA levels are associated with advanced disease stage. The 5-year recurrence-free and overall survival rates were significantly lower (P=0.006 and P=0.018, respectively) among patients with high expression levels of tissue COL11A1 mRNA compared with those with low expression. We conclude that COL11A1 may promote tumor aggressiveness via the TGF-β1-MMP3 axis and that COL11A1 expression can predict clinical outcome in ovarian cancer patients.
Format

experimentData(eset):

Experiment data
  Experimenter name: Wu Y, Chang T, Huang Y, Huang H, Chou C
  Laboratory: Wu, Chou 2013
  Contact information:
  Title: COL11A1 promotes tumor progression and predicts poor clinical outcome in ovarian cancer.
  URL: PMIDs: 23934190

Abstract: A 260 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing

notes:
  platform_title:
    [HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
  platform_shorttitle:
    Affymetrix HG-U133Plus2
  platform_summary:
    hgu133plus2
  platform_manufacturer:
    Affymetrix
  platform_distribution:
    commercial
  platform_accession:
    GPL570
  platform_technology:
    in situ oligonucleotide
  version:
    2015-09-22 20:02:05

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, 60 samples
Platform type:

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

alt_sample_name:
  Tc_113  Tc_48  Tc_49  Tc_51  Tc_56  Tc_59  Tc_61  Tc_63  Tc_64  Tc_65  Tc_74
<table>
<thead>
<tr>
<th></th>
<th>Tc_94</th>
<th>Te_69</th>
<th>Te_77</th>
<th>Te_78</th>
<th>Te_79</th>
<th>Te_84</th>
<th>Te_87</th>
<th>Te_89</th>
<th>Te_90</th>
<th>Te_91</th>
<th>Te_92</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Te_93</th>
<th>Tm_101</th>
<th>Tm_102</th>
<th>Tm_106</th>
<th>Tm_110</th>
<th>Tm_95</th>
<th>Tm_96</th>
<th>Tm_97</th>
<th>Tm_98</th>
<th>Ts_11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Ts_14</th>
<th>Ts_15</th>
<th>Ts_17</th>
<th>Ts_19</th>
<th>Ts_20</th>
<th>Ts_21</th>
<th>Ts_23</th>
<th>Ts_24</th>
<th>Ts_26</th>
<th>Ts_28</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Ts_3</th>
<th>Ts_31</th>
<th>Ts_32</th>
<th>Ts_34</th>
<th>Ts_35</th>
<th>Ts_36</th>
<th>Ts_37</th>
<th>Ts_39</th>
<th>Ts_4</th>
<th>Ts_41</th>
<th>Ts_43</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Ts_45</th>
<th>Ts_46</th>
<th>Ts_47</th>
<th>Ts_5</th>
<th>Ts_8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>sample_type:</th>
<th>tumor</th>
</tr>
</thead>
<tbody>
<tr>
<td>histological_type:</td>
<td>clearcell endo mucinous ser</td>
</tr>
<tr>
<td>summarystage:</td>
<td>early late</td>
</tr>
<tr>
<td>tumorstage:</td>
<td>1 2 3 4 17 8 30 5</td>
</tr>
<tr>
<td>recurrence_status:</td>
<td>norecurrence recurrence</td>
</tr>
<tr>
<td>os_binary:</td>
<td>long short</td>
</tr>
<tr>
<td>relapse_binary:</td>
<td>long short</td>
</tr>
<tr>
<td>batch:</td>
<td>2010-09-07 2010-09-08 2010-10-14 2010-12-10 2010-12-14</td>
</tr>
</tbody>
</table>
title: Tm_107///geo_accession: GSM1078998///status: Public on Jan 01 2014///submission_date: Feb 06 ...

were embedded, and sections were cut and mounted on slides. The slides were stained with H&E to ensure that at least 70

Title: Tm_110///geo_accession: GSM1078999///status: Public on Jan 01 2014///submission_date: Feb 06 ...

were embedded, and sections were cut and mounted on slides. The slides were stained with H&E to ensure that at least 70

Title: Tm_95///geo_accession: GSM1079000///status: Public on Jan 01 2014///submission_date: Feb 06 ...

were embedded, and sections were cut and mounted on slides. The slides were stained with H&E to ensure that at least 70

Title: Tm_96///geo_accession: GSM1079001///status: Public on Jan 01 2014///submission_date: Feb 06 ...

were embedded, and sections were cut and mounted on slides. The slides were stained with H&E to ensure that at least 70

Title: Tm_97///geo_accession: GSM1079002///status: Public on Jan 01 2014///submission_date: Feb 06 ...

were embedded, and sections were cut and mounted on slides. The slides were stained with H&E to ensure that at least 70
An expression set

Validating the impact of a molecular subtype in ovarian cancer on outcomes: a study of the OVCAD Consortium.

Most patients with epithelial ovarian cancer (EOC) are diagnosed at advanced stage and have a poor prognosis. However, a small proportion of these patients will survive, whereas others will die very quickly. Clinicopathological factors do not allow precise identification of these subgroups. Thus, we have validated a molecular subclassification as new prognostic factor in EOC. One hundred and ninety-four patients with Stage II-IV EOC were characterized by whole-genome expression profiling of tumor tissues and were classified using a published 112 gene set, derived from an International Federation of Gynecology and Obstetrics (FIGO) stage-directed supervised classification approach. The 194 tumor samples were classified into two subclasses comprising 95 (Subclass 1) and 99 (Subclass 2) tumors. All nine FIGO II tumors were grouped in Subclass 1 (P = 0.001). Subclass 2 (54% of advanced-stage tumors) was significantly correlated with peritoneal carcinomatosis
and non-optimal debulking. Patients with Subclass 2 tumors had a worse overall survival for both serous and non-serous histological subtypes, as revealed by univariate analysis (hazard ratios [HR] of 3.17 and 17.11, respectively; P < 0.001) and in models corrected for relevant clinicopathologic parameters (HR 2.87 and 12.42, respectively; P < 0.023). Significance analysis of microarrays revealed 2082 genes that were differentially expressed in advanced-grade serous tumors of both subclasses and the focal adhesion pathway as the most deregulated pathway. In the present validation study, we have shown that, in advanced-stage serous ovarian cancer, two approximately equally large molecular subtypes exist, independent of classical clinicopathological parameters and presenting with highly different whole-genome expression profiles and a markedly different overall survival. Similar results were obtained in a small cohort of patients with non-serous tumors.?? 2012 Japanese Cancer Association.

Format

experimentData(eset):
Experiment data
Laboratory: Pils, Zeilinger 2012
Contact information:
Title: Validating the impact of a molecular subtype in ovarian cancer on outcomes
URL:
PMIDs: 22497737

Abstract: A 276 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
  ABI Human Genome Survey Microarray Version 2
platform_shorttitle:
  ABI Human Genome
platform_summary:
platform_manufacturer:
  Applied Biosystems
platform_distribution:
  commercial
platform_accession:
  GPL2986
platform_technology:
  in situ oligonucleotide
version:
  2015-09-22 20:04:13

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 100027 100036 ... 10715781 (18439 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription
Details

assayData: 18439 features, 204 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

10 observations deleted due to missingness
n  events  median 0.95LCL 0.95UCL
194.00 57.00 NA  3.67 NA

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

alt_sample_name:
EOC P001 EOC P002 EOC P003 EOC P004 EOC P005 EOC P006 EOC P007 EOC P008
 1  1  1  1  1  1  1  1
EOC P009 EOC P010 EOC P011 EOC P012 EOC P013 EOC P014 EOC P015 EOC P016
 1  1  1  1  1  1  1  1
EOC P017 EOC P018 EOC P019 EOC P020 EOC P021 EOC P022 EOC P023 EOC P024
 1  1  1  1  1  1  1  1
EOC P025 EOC P026 EOC P027 EOC P028 EOC P029 EOC P030 EOC P031 EOC P032
 1  1  1  1  1  1  1  1
EOC P033 EOC P034 EOC P035 EOC P036 EOC P037 EOC P038 EOC P039 EOC P040
 1  1  1  1  1  1  1  1
EOC P041 EOC P042 EOC P043 EOC P044 EOC P045 EOC P046 EOC P047 EOC P048
 1  1  1  1  1  1  1  1
EOC P049 EOC P050 EOC P051 EOC P052 EOC P053 EOC P054 EOC P055 EOC P056
 1  1  1  1  1  1  1  1
EOC P057 EOC P058 EOC P059 EOC P060 EOC P061 EOC P062 EOC P063 EOC P064
 1  1  1  1  1  1  1  1
EOC P065 EOC P066 EOC P067 EOC P068 EOC P069 EOC P070 EOC P071 EOC P072
 1  1  1  1  1  1  1  1
EOC P073 EOC P074 EOC P075 EOC P076 EOC P077 EOC P078 EOC P079 EOC P080
 1  1  1  1  1  1  1  1
EOC P081 EOC P082 EOC P083 EOC P084 EOC P085 EOC P086 EOC P087 EOC P088
 1  1  1  1  1  1  1  1
EOC P089 EOC P090 EOC P091 EOC P092 EOC P093 EOC P094 EOC P095 EOC P096
 1  1  1  1  1  1  1  1
EOC P097 EOC P098 EOC P099  (Other)
 1  1  1  105

sample_type:
tumor
204

histological_type:
other  ser  NA's
summarygrade:
high  low  NA's
143  50   11

summarystage:
early  late  NA's
 9  185  10

tumorstage:
  2  3  4  NA's
 9 154  31  10

grade:
  2  3  NA's
 50 143  11

age_at_initial_pathologic_diagnosis:
   Min.  1st Qu.  Median  Mean  3rd Qu.  Max.  NA's
     26.00   50.00    57.00  57.66   67.00  85.00   10

days_to_tumor_recurrence:
   Min.  1st Qu.  Median  Mean  3rd Qu.  Max.  NA's
      30.0    335.0   487.0  580.1   722.5 1461.0  10

recurrence_status:
norecurrence recurrence NA's
   70   124   10

days_to_death:
   Min.  1st Qu.  Median  Mean  3rd Qu.  Max.  NA's
     30.0   517.0   745.5  782.9  1027.0 1491.0  10

vital_status:
deceased  living  NA's
     57   137   10

debulking:
optimal  suboptimal  NA's
    137    57   10

uncurated_author_metadata:
title: EOC P001///geo_accession: GSM1211536///status: Public on Jan 01 2014///

title: EOC P002///geo_accession: GSM1211537///status: Public on Jan 01 2014///

title: EOC P003///geo_accession: GSM1211538///status: Public on Jan 01 2014///

title: EOC P004///geo_accession: GSM1211539///status: Public on Jan 01 2014///

title: EOC P005///geo_accession: GSM1211540///status: Public on Jan 01 2014///

title: EOC P006///geo_accession: GSM1211541///status: Public on Jan 01 2014///

title: EOC P007///geo_accession: GSM1211542///status: Public on Jan 01 2014///

title: EOC P008///geo_accession: GSM1211543///status: Public on Jan 01 2014///

title: EOC P009///geo_accession: GSM1211544///status: Public on Jan 01 2014///

title: EOC P010///geo_accession: GSM1211545///status: Public on Jan 01 2014///

title: EOC P011///geo_accession: GSM1211546///status: Public on Jan 01 2014///

title: EOC P012///geo_accession: GSM1211547///status: Public on Jan 01 2014///

title: EOC P013///geo_accession: GSM1211548///status: Public on Jan 01 2014///

title: EOC P014///geo_accession: GSM1211549///status: Public on Jan 01 2014///

title: EOC P015///geo_accession: GSM1211550///status: Public on Jan 01 2014///

title: EOC P016///geo_accession: GSM1211551///status: Public on Jan 01 2014///

title: EOC P017///geo_accession: GSM1211552///status: Public on Jan 01 2014///

title: EOC P018///geo_accession: GSM1211553///status: Public on Jan 01 2014///

title: EOC P019///geo_accession: GSM1211554///status: Public on Jan 01 2014///

title: EOC P020///geo_accession: GSM1211555///status: Public on Jan 01 2014///

title: EOC P021///geo_accession: GSM1211556///status: Public on Jan 01 2014///

title: EOC P022///geo_accession: GSM1211557///status: Public on Jan 01 2014///

title: EOC P023///geo_accession: GSM1211558///status: Public on Jan 01 2014///

title: EOC P024///geo_accession: GSM1211559///status: Public on Jan 01 2014///

title: EOC P025///geo_accession: GSM1211560///status: Public on Jan 01 2014///

title: EOC P026///geo_accession: GSM1211561///status: Public on Jan 01 2014///
title: EOC P028///geo_accession: GSM1211563///status: Public on Jan 01 2014///

title: EOC P029///geo_accession: GSM1211564///status: Public on Jan 01 2014///

title: EOC P030///geo_accession: GSM1211565///status: Public on Jan 01 2014///

title: EOC P031///geo_accession: GSM1211566///status: Public on Jan 01 2014///

title: EOC P032///geo_accession: GSM1211567///status: Public on Jan 01 2014///

title: EOC P033///geo_accession: GSM1211568///status: Public on Jan 01 2014///

title: EOC P034///geo_accession: GSM1211569///status: Public on Jan 01 2014///

title: EOC P035///geo_accession: GSM1211570///status: Public on Jan 01 2014///

title: EOC P036///geo_accession: GSM1211571///status: Public on Jan 01 2014///

title: EOC P037///geo_accession: GSM1211572///status: Public on Jan 01 2014///

title: EOC P038///geo_accession: GSM1211573///status: Public on Jan 01 2014///

title: EOC P039///geo_accession: GSM1211574///status: Public on Jan 01 2014///

title: EOC P040///geo_accession: GSM1211575///status: Public on Jan 01 2014///

title: EOC P041///geo_accession: GSM1211576///status: Public on Jan 01 2014///

title: EOC P042///geo_accession: GSM1211577///status: Public on Jan 01 2014///

title: EOC P043///geo_accession: GSM1211578///status: Public on Jan 01 2014///

title: EOC P044///geo_accession: GSM1211579///status: Public on Jan 01 2014///

title: EOC P045///geo_accession: GSM1211580///status: Public on Jan 01 2014///

title: EOC P046///geo_accession: GSM1211581///status: Public on Jan 01 2014///

title: EOC P047///geo_accession: GSM1211582///status: Public on Jan 01 2014///

title: EOC P048///geo_accession: GSM1211583///status: Public on Jan 01 2014///

title: EOC P049///geo_accession: GSM1211584///status: Public on Jan 01 2014///

title: EOC P050///geo_accession: GSM1211585///status: Public on Jan 01 2014///

title: EOC P051///geo_accession: GSM1211586///status: Public on Jan 01 2014///
title: EOC P052///geo_accession: GSM1211587///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P053///geo_accession: GSM1211588///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P054///geo_accession: GSM1211589///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P055///geo_accession: GSM1211590///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P056///geo_accession: GSM1211591///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P057///geo_accession: GSM1211592///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P058///geo_accession: GSM1211593///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P059///geo_accession: GSM1211594///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P060///geo_accession: GSM1211595///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P061///geo_accession: GSM1211596///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P062///geo_accession: GSM1211597///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P063///geo_accession: GSM1211598///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P064///geo_accession: GSM1211599///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P065///geo_accession: GSM1211600///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P066///geo_accession: GSM1211601///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P067///geo_accession: GSM1211602///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P068///geo_accession: GSM1211603///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P069///geo_accession: GSM1211604///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P070///geo_accession: GSM1211605///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P071///geo_accession: GSM1211606///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P072///geo_accession: GSM1211607///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P073///geo_accession: GSM1211608///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P074///geo_accession: GSM1211609///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria

title: EOC P075///geo_accession: GSM1211610///status: Public on Jan 01 2014///submission_date: Aug 19 2011///contact_zip.postal_code: 1090///contact_country: Austria
Value
An expression set

Description
To identify molecular prognosticators and therapeutic targets for high-grade serous epithelial ovarian cancers (EOCs) using genetic analyses driven by biologic features of EOC pathogenesis. Ovarian tissue samples (n = 172; 122 serous EOCs, 30 other EOCs, 20 normal/benign) collected prospectively from sequential patients undergoing gynecologic surgery were analyzed using RNA expression microarrays. Samples were classified based on expression of genes with potential relevance in ovarian cancer. Gene sets were defined using Rosetta Similarity Search Tool (ROAST) and analysis of variance (ANOVA). Gene copy number variations were identified by array comparative genomic hybridization. No distinct subgroups of EOC could be identified by unsupervised clustering, however, analyses based on genes correlated with periostin (POSTN) and estrogen receptor-alpha (ESR1) yielded distinct subgroups. When 95 high-grade serous EOCs were grouped by genes based on ANOVA comparing ESR1/WT1 and POSTN/TGFBI samples, overall survival (OS) was significantly shorter for 43 patients with tumors expressing genes associated with POSTN/TGFBI compared to 52 patients with tumors expressing genes associated with ESR1/WT1 (median 30 versus 49 months, respectively; P = 0.022). Several targets with therapeutic potential were identified within each subgroup. BRCA germline mutations were more frequent in the ESR1/WT1 subgroup. Proliferation-associated genes and TP53 status (mutated or wild-type) did not correlate with survival. Findings were validated using independent ovarian cancer datasets. Two distinct molecular subgroups of high-grade serous EOCs based on POSTN/TGFBI and ESR1/WT1 expressions were identified with significantly different OS. Specific differentially expressed genes between these subgroups provide potential prognostic and therapeutic targets. Copyright ?? 2013 Elsevier Inc. All rights reserved.

Format

experimentData(eset):
Experiment data
  Experimenter name: Karlan BY, Dering J, Walsh C, Orsulic S, Lester J, Anderson LA, Ginther CL, Fejzo M, Slamon D
  Laboratory: Karlan, Slamon 2014
  Contact information:
  Title: POSTN/TGFBI-associated stromal signature predicts poor prognosis in serous epithelial ovarian cancer.
  URL:
  PMIDs: 24368280
Abstract: A 250 word abstract is available. Use 'abstract' method.

Information is available on: preprocessing

notes:

platform_title:
  Agilent-012097 Human 1A Microarray (V2) G4110B (Probe Name version)
platform_shorttitle:
  Agilent G4110B
platform_summary:
  hgug4110b
platform_manufacturer:
  Agilent
platform_distribution:
  commercial
platform_accession:
  GPL7264
platform_technology:
  in situ oligonucleotide
version:
  2015-09-22 20:05:48

featureData(eset):
An object of class 'AnnotatedDataFrame'

featureNames: A_23_P100001 A_23_P100011 ... A_23_P99996 (18703 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 18703 features, 172 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

  20 observations deleted due to missingness
   n  events  median  0.95LCL  0.95UCL
  152.00  112.00   4.13    3.50    4.92

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

alt_sample_name:
Ov_Tumor_Ref_Mix vs. CS-OV-001 Ov_Tumor_Ref_Mix vs. CS-OV-002
  1
Ov_Tumor_Ref_Mix vs. CS-OV-003 Ov_Tumor_Ref_Mix vs. CS-OV-004
  1
Ov_Tumor_Ref_Mix vs. CS-OV-005 Ov_Tumor_Ref_Mix vs. CS-OV-006
  1

Ov_Tumor_Ref_Mix vs. CS-OV-007
Ov_Tumor_Ref_Mix vs. CS-OV-008
Ov_Tumor_Ref_Mix vs. CS-OV-009
Ov_Tumor_Ref_Mix vs. CS-OV-010
Ov_Tumor_Ref_Mix vs. CS-OV-011
Ov_Tumor_Ref_Mix vs. CS-OV-012
Ov_Tumor_Ref_Mix vs. CS-OV-013
Ov_Tumor_Ref_Mix vs. CS-OV-014
Ov_Tumor_Ref_Mix vs. CS-OV-015
Ov_Tumor_Ref_Mix vs. CS-OV-016
Ov_Tumor_Ref_Mix vs. CS-OV-017
Ov_Tumor_Ref_Mix vs. CS-OV-018
Ov_Tumor_Ref_Mix vs. CS-OV-019
Ov_Tumor_Ref_Mix vs. CS-OV-020
Ov_Tumor_Ref_Mix vs. CS-OV-021
Ov_Tumor_Ref_Mix vs. CS-OV-022
Ov_Tumor_Ref_Mix vs. CS-OV-023
Ov_Tumor_Ref_Mix vs. CS-OV-024
Ov_Tumor_Ref_Mix vs. CS-OV-025
Ov_Tumor_Ref_Mix vs. CS-OV-026
Ov_Tumor_Ref_Mix vs. CS-OV-027
Ov_Tumor_Ref_Mix vs. CS-OV-028
Ov_Tumor_Ref_Mix vs. CS-OV-029
Ov_Tumor_Ref_Mix vs. CS-OV-030
Ov_Tumor_Ref_Mix vs. CS-OV-031
Ov_Tumor_Ref_Mix vs. CS-OV-032
Ov_Tumor_Ref_Mix vs. CS-OV-033
Ov_Tumor_Ref_Mix vs. CS-OV-034
Ov_Tumor_Ref_Mix vs. CS-OV-035
Ov_Tumor_Ref_Mix vs. CS-OV-036
Ov_Tumor_Ref_Mix vs. CS-OV-037
Ov_Tumor_Ref_Mix vs. CS-OV-038
Ov_Tumor_Ref_Mix vs. CS-OV-039
Ov_Tumor_Ref_Mix vs. CS-OV-040
Ov_Tumor_Ref_Mix vs. CS-OV-041
Ov_Tumor_Ref_Mix vs. CS-OV-042
Ov_Tumor_Ref_Mix vs. CS-OV-043
Ov_Tumor_Ref_Mix vs. CS-OV-044
Ov_Tumor_Ref_Mix vs. CS-OV-045
Ov_Tumor_Ref_Mix vs. CS-OV-046
Ov_Tumor_Ref_Mix vs. CS-OV-047
Ov_Tumor_Ref_Mix vs. CS-OV-048
Ov_Tumor_Ref_Mix vs. CS-OV-049
Ov_Tumor_Ref_Mix vs. CS-OV-050
Ov_Tumor_Ref_Mix vs. CS-OV-051
Ov_Tumor_Ref_Mix vs. CS-OV-052
Ov_Tumor_Ref_Mix vs. CS-OV-053
Ov_Tumor_Ref_Mix vs. CS-OV-054
<table>
<thead>
<tr>
<th>Comparison</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-055</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-056</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-057</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-058</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-059</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-060</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-061</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-062</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-063</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-064</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-065</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-066</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-067</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-068</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-069</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-070</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-071</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-072</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-073</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-074</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-075</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-076</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-077</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-078</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-079</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-080</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-081</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-082</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-083</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-084</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-085</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-086</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-087</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-088</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-089</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-090</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-091</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-092</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-093</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-094</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-095</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-096</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-097</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-098</td>
<td>1</td>
</tr>
<tr>
<td>Ov_Tumor_Ref_Mix vs. CS-OV-099 (Other)</td>
<td>73</td>
</tr>
</tbody>
</table>
sample_type:
benign borderline healthy metastatic tumor
5 12 15 17 123

histological_type:
clearcell endo mucinous other ser NA's
3 7 9 11 122 20

summarygrade:
high low NA's
119 30 23

summarystage:
early late NA's
31 120 21

tumorstage:
1 2 3 4 NA's
22 9 103 17 21

substage:
a b c NA's
17 22 94 39

grade:
0 1 2 3 NA's
8 8 14 119 23

age_at_initial_pathologic_diagnosis:
Min. 1st Qu. Median Mean 3rd Qu. Max.
26.0 49.0 57.5 58.6 68.0 91.0

neo:
n
172

recurrence_status:
norecurrence recurrence NA's
36 111 25

days_to_death:
Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
30 791 1491 1835 2344 7001 20

vital_status:
deceased living NA's
112 40 20
percent_normal_cells:
  30- NA's
  140  32

percent_stromal_cells:
  30- NA's
  140  32

percent_tumor_cells:
  70+ NA's
  140  32

uncurated_author_metadata:
  title: Ov_Tumor_Ref_Mix vs. CS-OV-001///geo_accession: GSM1238145///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-002///geo_accession: GSM1238146///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-003///geo_accession: GSM1238147///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-004///geo_accession: GSM1238148///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-005///geo_accession: GSM1238149///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-006///geo_accession: GSM1238150///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-007///geo_accession: GSM1238151///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-008///geo_accession: GSM1238152///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-009///geo_accession: GSM1238153///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-010///geo_accession: GSM1238154///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-011///geo_accession: GSM1238155///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-012///geo_accession: GSM1238156///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-013///geo_accession: GSM1238157///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-014///geo_accession: GSM1238158///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-015///geo_accession: GSM1238159///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-016///geo_accession: GSM1238160///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-017///geo_accession: GSM1238161///status: Public on Dec 26 2013///submission_date: Sep 13 2013
  title: Ov_Tumor_Ref_Mix vs. CS-OV-018///geo_accession: GSM1238162///status: Public on Dec 26 2013///submission_date: Sep 13 2013
title: Ov_Tumor_Ref_Mix vs. CS-OV-019///geo_accession: GSM1238163///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-020///geo_accession: GSM1238164///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-021///geo_accession: GSM1238165///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-022///geo_accession: GSM1238166///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-023///geo_accession: GSM1238167///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-024///geo_accession: GSM1238168///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-025///geo_accession: GSM1238169///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-026///geo_accession: GSM1238170///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-027///geo_accession: GSM1238171///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-028///geo_accession: GSM1238172///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-029///geo_accession: GSM1238173///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-030///geo_accession: GSM1238174///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-031///geo_accession: GSM1238175///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-032///geo_accession: GSM1238176///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-033///geo_accession: GSM1238177///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-034///geo_accession: GSM1238178///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-035///geo_accession: GSM1238179///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-036///geo_accession: GSM1238180///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-037///geo_accession: GSM1238181///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-038///geo_accession: GSM1238182///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-039///geo_accession: GSM1238183///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-040///geo_accession: GSM1238184///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-041///geo_accession: GSM1238185///status: Public on Dec 26 2013///submission_date: Sep 26 2017

title: Ov_Tumor_Ref_Mix vs. CS-OV-042///geo_accession: GSM1238186///status: Public on Dec 26 2013///submission_date: Sep 26 2017
Value

An expression set

GSE6008

Lysophosphatidic acid-induced transcriptional profile represents serous epithelial ovarian carcinoma and worsened prognosis.

Description

Lysophosphatidic acid (LPA) governs a number of physiologic and pathophysiological processes. Malignant ascites fluid is rich in LPA, and LPA receptors are aberrantly expressed by ovarian cancer cells, implicating LPA in the initiation and progression of ovarian cancer. However, there is an absence of systematic data critically analyzing the transcriptional changes induced by LPA in ovarian cancer. In this study, gene expression profiling was used to examine LPA-mediated transcription by exogenously adding LPA to human epithelial ovarian cancer cells for 24 h to mimic long-term stimulation in the tumor microenvironment. The resultant transcriptional profile comprised a 39-gene signature that closely correlated to serous epithelial ovarian carcinoma. Hierarchical clustering of ovarian cancer patient specimens demonstrated that the signature is associated with worsened prognosis. Patients with LPA-signature-positive ovarian tumors have reduced disease-specific and progression-free survival times. They have a higher frequency of stage IIIc serous carcinoma and a greater proportion is deceased. Among the 39-gene signature, a group of seven genes associated with cell adhesion recapitulated the results. Out of those seven, claudin-1, an adhesion molecule and phenotypic epithelial marker, is the only independent biomarker of serous epithelial ovarian
carcinoma. Knockdown of claudin-1 expression in ovarian cancer cells reduces LPA-mediated cellular adhesion, enhances suspended cells and reduces LPA-mediated migration. The data suggest that transcriptional events mediated by LPA in the tumor microenvironment influence tumor progression through modulation of cell adhesion molecules like claudin-1 and, for the first time, report an LPA-mediated expression signature in ovarian cancer that predicts a worse prognosis.

Format

experimentData(eset):
Experiment data
Laboratory: Murph, Mills 2009
Contact information:
Title: lysophosphatidic acid-induced transcriptional profile represents serous epithelial ovarian carcinoma and worsened prognosis.
URL:
PMIDs: 19440550

Abstract: A 247 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HG-U133A] Affymetrix Human Genome U133A Array
platform_shorttitle:
Affymetrix HG-U133A
platform_summary:
hgu133
platform_manufacturer:
Affymetrix
platform_distribution:
commercial
platform_accession:
GPL96
version:
2015-09-22 20:07:11

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, 103 samples
Platform type:
-----------------------------
Available sample meta-data:
<table>
<thead>
<tr>
<th>alt_sample_name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovarian_Tumor_ClearCell_CHTN-OC-004</td>
<td>Ovarian_Tumor_ClearCell_CHTN-OC-012</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_ClearCell_CHTN-OC-028</td>
<td>Ovarian_Tumor_ClearCell_KU-OC-003</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_ClearCell_KU-OC-004</td>
<td>Ovarian_Tumor_ClearCell_KU-OC-005</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_ClearCell_KU-OC-006</td>
<td>Ovarian_Tumor_ClearCell_KU-OC-007</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-005</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-011</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-014</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-017</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-018</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-019</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-023</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-029</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-033</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-035</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-036</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-038</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-039</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-040</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-042</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-046</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-047</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-048</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-053</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-054</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-056</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-059</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-060</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-061</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-065</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-069</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-076</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-077</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-080</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-082</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-087</td>
<td>Ovarian_Tumor_Endometrioid_CHTN-OE-092</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_JH-OE-2T</td>
<td>Ovarian_Tumor_Endometrioid_KU-OE-003</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_KU-OE-004</td>
<td>Ovarian_Tumor_Endometrioid_KU-OE-007</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovarian_Tumor_Endometrioid_UM-OE-1T</td>
<td>Ovarian_Tumor_Mucinous_CHTN-OM-007</td>
</tr>
<tr>
<td>Pathotype</td>
<td>ID</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_CHTN-OM-017</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_CHTN-OM-029</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_CHTN-OM-035</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_KU-OM-003</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_KU-OM-006</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Mucinous_UM-OM-01</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-002</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-009</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-011</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-020</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-038</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-044</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-048</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-055</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-072</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-089</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CHTN-OS-098</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_CU-OS-05</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-002</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-005</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-009</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-012</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-015</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_KU-OS-021</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sample ID</td>
<td>Count</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_UM-OS-02</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_UM-OS-07</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_UM-OS-09</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_UM-OS-10</td>
<td>1</td>
</tr>
<tr>
<td>Ovarian_Tumor_Serous_UM-OS-11</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>sample_type:</th>
<th>healthy</th>
<th>tumor</th>
<th>4</th>
<th>99</th>
</tr>
</thead>
<tbody>
<tr>
<td>histological_type:</td>
<td>clearcell</td>
<td>endo</td>
<td>mucinous</td>
<td>ser</td>
</tr>
<tr>
<td>primarysite:</td>
<td>ov</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>summarygrade:</td>
<td>high</td>
<td>low</td>
<td>NA's</td>
<td>38</td>
</tr>
<tr>
<td>summarystage:</td>
<td>early</td>
<td>late</td>
<td>NA's</td>
<td>42</td>
</tr>
<tr>
<td>tumorstage:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>substage:</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
</tr>
<tr>
<td>grade:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA's</td>
</tr>
<tr>
<td></td>
<td>2002-08-22</td>
<td>2002-08-23</td>
<td>2002-08-27</td>
<td>2002-08-28</td>
</tr>
<tr>
<td></td>
<td>2006-01-27</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
uncurated_author_metadata:


...
Value

An expression set

GSE6822 Classification of ovarian tumor samples

Description


Format

experimentData(eset):
Experiment data
Laboratory: Ouellet, Mes-Masson 2005
Contact information:
Title: Classification of ovarian tumor samples
URL:
PMIDs: PMID unknown

Abstract: A 40 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title: [Hu6800] Affymetrix Human Full Length HuGeneFL Array
platform_shorttitle: Affymetrix Hu6800
platform_summary: hu6800
platform_manufacturer: Affymetrix
platform_distribution: commercial
platform_accession: GPL80
version: 2015-09-22 20:07:22

featureData(eset):
An object of class 'AnnotatedDataFrame'

featureNames: A28102_at AB000114_at ... Z97074_at (6407 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 6407 features, 66 samples
Platform type:
----------------------------------------
Available sample meta-data:
----------------------------------------

alt_sample_name:
Ovarian tumor AM053 Ovarian tumor AM122 Ovarian tumor AM124 Ovarian tumor AM125
1 1 1 1
Ovarian tumor AM127 Ovarian tumor AM137 Ovarian tumor AM138 Ovarian tumor AM144
1 1 1 1
Ovarian tumor AM178 Ovarian tumor AM179 Ovarian tumor AM182 Ovarian tumor AM195
1 1 1 1
Ovarian tumor AM196 Ovarian tumor AM198 Ovarian tumor AM200 Ovarian tumor AM201
1 1 1 1
Ovarian tumor AM202 Ovarian tumor AM203 Ovarian tumor AM204 Ovarian tumor AM207
1 1 1 1
Ovarian tumor AM208 Ovarian tumor AM209 Ovarian tumor AM225 Ovarian tumor AM226
1 1 1 1
Ovarian tumor AM228 Ovarian tumor AM233 Ovarian tumor AM250 Ovarian tumor AM252
1 1 1 1
Ovarian tumor AM253 Ovarian tumor AM255 Ovarian tumor AM256 Ovarian tumor AM259
1 1 1 1
Ovarian tumor AM261 Ovarian tumor AM263 Ovarian tumor AM268 Ovarian tumor AM269
1 1 1 1
<table>
<thead>
<tr>
<th>sample_type:</th>
<th>tumor</th>
</tr>
</thead>
<tbody>
<tr>
<td>histological_type:</td>
<td>clearcell</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
<tr>
<td>ser</td>
<td>undifferentiated</td>
</tr>
</tbody>
</table>
uncurated_author_metadata:

title: Ovarian tumor AM053///geo_accession: GSM157233///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM122///geo_accession: GSM157231///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM124///geo_accession: GSM157232///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM127///geo_accession: GSM157234///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM137///geo_accession: GSM157238///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM138///geo_accession: GSM157239///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM144///geo_accession: GSM157240///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM178///geo_accession: GSM157246///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM179///geo_accession: GSM157247///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM182///geo_accession: GSM157243///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM195///geo_accession: GSM157245///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM196///geo_accession: GSM157249///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM198///geo_accession: GSM157251///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM200///geo_accession: GSM157253///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM201///geo_accession: GSM157254///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM202///geo_accession: GSM157255///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM203///geo_accession: GSM157256///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM204///geo_accession: GSM157257///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM207///geo_accession: GSM157258///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM208///geo_accession: GSM157259///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM209///geo_accession: GSM157260///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM225///geo_accession: GSM157261///status: Public on Dec 31 2007///submission_date: Jan 22 2008

title: Ovarian tumor AM226///geo_accession: GSM157262///status: Public on Dec 31 2007///submission_date: Jan 22 2008


...
title: Ovarian tumor AM335///geo_accession: GSM157281///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM339///geo_accession: GSM157282///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM341///geo_accession: GSM157283///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM344///geo_accession: GSM157284///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM345///geo_accession: GSM157285///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM347///geo_accession: GSM157286///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM348///geo_accession: GSM157287///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM349///geo_accession: GSM157288///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM354///geo_accession: GSM157289///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM364///geo_accession: GSM157290///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM367///geo_accession: GSM157291///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM368///geo_accession: GSM157292///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM381///geo_accession: GSM157293///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM382///geo_accession: GSM157294///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM398///geo_accession: GSM157295///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM429///geo_accession: GSM157296///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM431///geo_accession: GSM157297///status: Public on Dec 31 2007///submission_date: Jan 22

title: Ovarian tumor AM438///geo_accession: GSM157298///status: Public on Dec 31 2007///submission_date: Jan 22

duplicates:
<table>
<thead>
<tr>
<th>Length</th>
<th>Class</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td>character</td>
<td>character</td>
</tr>
</tbody>
</table>

Value

An expression set
Analysis of gene expression in early-stage ovarian cancer.

Description

Gene expression profile was analyzed in 68 stage I and 15 borderline ovarian cancers to determine if different clinical features of stage I ovarian cancer such as histotype, grade, and survival are related to differential gene expression. Tumors were obtained directly at surgery and immediately frozen in liquid nitrogen until analysis. Glass arrays containing 16,000 genes were used in a dual-color assay labeling protocol. Unsupervised analysis identified eight major patient partitions, one of which was statistically associated to overall survival, grading, and histotype and another with grading and histotype. Supervised analysis allowed detection of gene profiles clearly associated to histotype or to degree of differentiation. No difference was found between borderline and grade 1 tumors. As to recurrence, a subset of genes able to differentiate relapsers from nonrelapsers was identified. Among these, cyclin E and minichromosome maintenance protein 5 were found particularly relevant, as their expression was inversely correlated to progression-free survival (P = 0.00033 and 0.017, respectively). Specific molecular signatures define different histotypes and prognosis of stage I ovarian cancer. Mucinous and clear cells histotypes can be distinguished from the others regardless of tumor grade. Cyclin E and minichromosome maintenance protein 5, whose expression was found previously to be related to a bad prognosis of advanced ovarian cancer, appear to be potential prognostic markers in stage I ovarian cancer too, independent of other pathologic and clinical variables.

Format

experimentData(eset):
Experiment data
Experimenter name: Marchini S, Mariani P, Chiorino G, Marrazzo E, Bonomi R, Fruscio R, Clivio L, Garbi A, Torri V, ... M, D'Incalci M.
Laboratory: Marchini, D'Incalci 2008
Contact information:
Title: Analysis of gene expression in early-stage ovarian cancer.
URL:
PMIDs: 19047114

Abstract: A 225 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
   Agilent Human 1 cDNA Microarray (G4100A)
platform_shorttitle:
   Agilent G4100A cDNA
platform_summary:
   hgug4100a
platform_manufacturer:
   Agilent
platform_distribution:
   custom-commercial
platform_accession:
GPL5689
platform_technology:
spotted DNA/cDNA
version:
2015-09-22 20:07:40

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: 1 2 ... 8864 (7809 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 7809 features, 83 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

<table>
<thead>
<tr>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>83</td>
<td>15</td>
<td>NA</td>
<td>12</td>
<td>NA</td>
</tr>
</tbody>
</table>

Available sample meta-data:

alt_sample_name:
p0102bis sample_Ovarian tumor p0103bis sample_Ovarian tumor
  1
p0112bis sample_Ovarian tumor p0114bis sample_Ovarian tumor
  1
p0125bis sample_Ovarian tumor p0128bis sample_Ovarian tumor
  1
p0143bis sample_Ovarian tumor p0146bis sample_Ovarian tumor
  1
p0188bis sample_Ovarian tumor p0208bis sample_Ovarian tumor
  1
p0210bis sample_Ovarian tumor p0217bis sample_Ovarian tumor
  1
p057bis sample_Ovarian tumor p070bis sample_Ovarian tumor
  1
p080bis sample_Ovarian tumor p091bis sample_Ovarian tumor
  1
p139bis sample_Ovarian tumor p13bis sample_Ovarian tumor
  1
p141bis sample_Ovarian tumor p166bis sample_Ovarian tumor
  1
p171bis sample_Ovarian tumor 1
p183bis sample_Ovarian tumor 1
p212bis sample_Ovarian tumor 1
p243bis sample_Ovarian tumor 1
p261bis sample_Ovarian tumor 1
p293bis sample_Ovarian tumor 1
p31bis sample_Ovarian tumor 1
p331bis sample_Ovarian tumor 1
p350bis sample_Ovarian tumor 1
p382bis sample_Ovarian tumor 1
p386bis sample_Ovarian tumor 1
p398bis sample_Ovarian tumor 1
p401bis sample_Ovarian tumor 1
p421bis sample_Ovarian tumor 1
p433bis sample_Ovarian tumor 1
p455bis sample_Ovarian tumor 1
p462bis sample_Ovarian tumor 1
p487bis sample_Ovarian tumor 1
p502bis sample_Ovarian tumor 1
p541bis sample_Ovarian tumor 1
p550bis sample_Ovarian tumor 1
p56bis sample_Ovarian tumor 1
p586bis sample_Ovarian tumor 1
p616bis sample_Ovarian tumor 1
p17bis sample_Ovarian tumor 1
p209bis sample_Ovarian tumor 1
p213bis sample_Ovarian tumor 1
p246bis sample_Ovarian tumor 1
p284bis sample_Ovarian tumor 1
p310bis sample_Ovarian tumor 1
p320bis sample_Ovarian tumor 1
p336bis sample_Ovarian tumor 1
p375bis sample_Ovarian tumor 1
p383bis sample_Ovarian tumor 1
p388bis sample_Ovarian tumor 1
p39bis sample_Ovarian tumor 1
p414bis sample_Ovarian tumor 1
p429bis sample_Ovarian tumor 1
p448bis sample_Ovarian tumor 1
p459bis sample_Ovarian tumor 1
p482bis sample_Ovarian tumor 1
p497bis sample_Ovarian tumor 1
p540bis sample_Ovarian tumor 1
p549bis sample_Ovarian tumor 1
p567bis sample_Ovarian tumor 1
p573bis sample_Ovarian tumor 1
p597bis sample_Ovarian tumor 1
p63bis sample_Ovarian tumor 1
p646bis sample_Ovarian tumor 1
p68bis sample_Ovarian tumor 1
p692bis sample_Ovarian tumor 1
p73bis sample_Ovarian tumor 1
p770bis sample_Ovarian tumor 1
p775bis sample_Ovarian tumor 1
p79bis sample_Ovarian tumor 1
p90bis sample_Ovarian tumor 1
p66bis sample_Ovarian tumor 1
p690bis sample_Ovarian tumor 1
p725bis sample_Ovarian tumor 1
p760bis sample_Ovarian tumor 1
p772bis sample_Ovarian tumor 1
p793bis sample_Ovarian tumor 1
p84bis sample_Ovarian tumor 1

sample_type:
borderline tumor
15 68

histological_type:
clearcell endo mucinous other
16 17 17 1
ser undifferentiated
31 1

primarysite:
ov
83

summarygrade:
high low NA's
35 33 15

summarystage:
early
83

tumorstage:
1
83

substage:
a b c
25 5 53

grade:
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>20</td>
<td>35</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**age_at_initial_pathologic_diagnosis:**

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.00</td>
<td>43.00</td>
<td>50.00</td>
<td>51.25</td>
<td>61.00</td>
<td>87.00</td>
</tr>
</tbody>
</table>

**recurrence_status:**

<table>
<thead>
<tr>
<th></th>
<th>norecurrence</th>
<th>recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

**days_to_death:**

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1192</td>
<td>2248</td>
<td>2273</td>
<td>3048</td>
<td>5824</td>
</tr>
</tbody>
</table>

**vital_status:**

<table>
<thead>
<tr>
<th></th>
<th>deceased</th>
<th>living</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

**uncurated_author_metadata:**

Value
An expression set
Novel molecular subtypes of serous and endometrioid ovarian cancer linked to clinical outcome.

Description

The study aimed to identify novel molecular subtypes of ovarian cancer by gene expression profiling with linkage to clinical and pathologic features. Microarray gene expression profiling was done on 285 serous and endometrioid tumors of the ovary, peritoneum, and fallopian tube. K-means clustering was applied to identify robust molecular subtypes. Statistical analysis identified differentially expressed genes, pathways, and gene ontologies. Laser capture microdissection, pathology review, and immunohistochemistry validated the array-based findings. Patient survival within k-means groups was evaluated using Cox proportional hazards models. Class prediction validated k-means groups in an independent dataset. A semisupervised survival analysis of the array data was used to compare against unsupervised clustering results. Optimal clustering of array data identified six molecular subtypes. Two subtypes represented predominantly serous low malignant potential and low-grade endometrioid subtypes, respectively. The remaining four subtypes represented higher grade and advanced stage cancers of serous and endometrioid morphology. A novel subtype of high-grade serous cancers reflected a mesenchymal cell type, characterized by overexpression of N-cadherin and P-cadherin and low expression of differentiation markers, including CA125 and MUC1. A poor prognosis subtype was defined by a reactive stroma gene expression signature, correlating with extensive desmoplasia in such samples. A similar poor prognosis signature could be found using a semisupervised analysis. Each subtype displayed distinct levels and patterns of immune cell infiltration. Class prediction identified similar subtypes in an independent ovarian dataset with similar prognostic trends. Gene expression profiling identified molecular subtypes of ovarian cancer of biological and clinical importance.

Format

experimentData(eset):
Experiment data
Laboratory: Tothill, Bowtell 2008
Contact information:
Title: Novel molecular subtypes of serous and endometrioid ovarian cancer linked to clinical outcome.
URL: 18698038

Abstract: A 243 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HG-U133_Plus_2] Affymetrix Human Genome U133 Plus 2.0 Array
platform_shorttitle:
Affymetrix HG-U133Plus2
platform_summary:
hgu133plus2
platform_manufacturer: Affymetrix
platform_distribution: commercial
platform_accession: GPL570
version: 2015-09-22 20:16:32

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

7 observations deleted due to missingness
n events median 0.95LCL 0.95UCL
278.00 113.00 3.95 3.53 5.01

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

alt_sample_name:
X129  X146  X152  X20019  X20025  X20027  X20031  X20032  X20041  X20046
1  1  1  1  1  1  1  1  1  1  1
X20074  X22002  X22012  X22013  X22020  X22023  X22027  X22029  X22031  X22037
1  1  1  1  1  1  1  1  1  1  1
X22046  X22047  X22048  X22057  X22058  X2219  X2227  X23026  X23030  X23036
1  1  1  1  1  1  1  1  1  1  1
X23043  X23052  X23053  X23055  X23066  X23070  X23074  X23077  X23084  X23098
1  1  1  1  1  1  1  1  1  1  1
X23102  X23106  X23116  X23128  X23139  X23143  X23162  X23165  X23167  X23170
1  1  1  1  1  1  1  1  1  1  1
X23172  X23177  X23178  X23182  X23187  X23197  X23202  X23204  X23210  X23212
1  1  1  1  1  1  1  1  1  1  1
X23213  X23221  X26047  X261  X27006  X27098  X32013  X32022  X32032  X32034
1  1  1  1  1  1  1  1  1  1  1
X32048  X32049  X32054  X32055  X32089  X32098  X32103  X32117  X34019  X34049
1  1  1  1  1  1  1  1  1  1  1
<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Histological Type</th>
<th>Primary Site</th>
<th>Arrayed Site</th>
<th>Summary Grade</th>
<th>Summary Stage</th>
<th>Tumor Stage</th>
<th>Substage</th>
<th>Grade</th>
<th>Age at Initial Pathologic Diagnosis</th>
<th>Pltx</th>
</tr>
</thead>
<tbody>
<tr>
<td>tumor</td>
<td>endo other ser</td>
<td>ft other ov</td>
<td>ft other ov</td>
<td>high low NA's</td>
<td>early late NA's</td>
<td>1 2 3 4 NA's</td>
<td>a b c NA's</td>
<td>1 2 3 NA's</td>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max. NA's</td>
<td>n y NA's</td>
</tr>
<tr>
<td>285</td>
<td>20 1 264</td>
<td>8 34 243</td>
<td>2 83 200</td>
<td>163 116 6</td>
<td>42 240 3</td>
<td>24 18 218 22 3</td>
<td>26 19 212 28</td>
<td>19 97 163 6</td>
<td>22.00 53.00 59.00 59.62 68.00 80.00 3</td>
<td>39 243 3</td>
</tr>
<tr>
<td>tax:</td>
<td>n</td>
<td>y</td>
<td>NA's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---</td>
<td>---</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>195</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>neo:</th>
<th>n</th>
<th>y</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>264</td>
<td>18</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days_to_tumor_recurrence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max. NA's</td>
</tr>
<tr>
<td>0.0 300.0 450.0 618.9 810.0 4980.0 10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>recurrence_status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>norecurrence recurrence NA's</td>
</tr>
<tr>
<td>94 188 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days_to_death:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max. NA's</td>
</tr>
<tr>
<td>0.0 547.5 855.0 955.1 1252.0 6420.0 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>vital_status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>deceased living NA's</td>
</tr>
<tr>
<td>113 169 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>debulking:</th>
</tr>
</thead>
<tbody>
<tr>
<td>optimal suboptimal NA's</td>
</tr>
<tr>
<td>160 88 37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>batch:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 4 7 7 8 10 10</td>
</tr>
<tr>
<td>2 1 1 2 3 3 6</td>
</tr>
<tr>
<td>4 5 3 5 6 2 9</td>
</tr>
<tr>
<td>7 5 6 3 4 8 4</td>
</tr>
<tr>
<td>4 6 6 4 5 2 4</td>
</tr>
<tr>
<td>6 3 7 4 7 8 3</td>
</tr>
<tr>
<td>7 3 3 7 3 7 4</td>
</tr>
<tr>
<td>6 9 6 3 9 4 7</td>
</tr>
</tbody>
</table>

<p>| uncurated_author_metadata: |</p>
<table>
<thead>
<tr>
<th>Title</th>
<th>Geo Accession</th>
<th>Status: Public on Mar 01 2008</th>
<th>Submission Date: Dec 14 2007</th>
<th>Last Update Date: NA</th>
<th>Time to Death or Last Follow-Up Months:</th>
<th>Residual Disease</th>
<th>Arrayed Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>X129</td>
<td>GSM250001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X146</td>
<td>GSM250000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X152</td>
<td>GSM249999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20019</td>
<td>GSM249998</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20025</td>
<td>GSM249997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20027</td>
<td>GSM249996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20031</td>
<td>GSM249995</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20032</td>
<td>GSM249994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20041</td>
<td>GSM249993</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20046</td>
<td>GSM249992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X20074</td>
<td>GSM249991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22002</td>
<td>GSM249728</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22012</td>
<td>GSM249990</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22013</td>
<td>GSM249989</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22020</td>
<td>GSM249988</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22023</td>
<td>GSM249987</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22027</td>
<td>GSM249725</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22029</td>
<td>GSM249986</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22031</td>
<td>GSM249985</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22037</td>
<td>GSM249984</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22046</td>
<td>GSM249983</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22047</td>
<td>GSM249982</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22048</td>
<td>GSM249981</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X22057</td>
<td>GSM249980</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Geo Accession</td>
<td>Status</td>
<td>Submission Date</td>
<td>Time to Death or Last Follow-Up Months</td>
<td>Residual Disease</td>
<td>Arrayed Site</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------</td>
<td>------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>X23167</td>
<td>GSM249958</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>23</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23170</td>
<td>GSM249957</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>12</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23172</td>
<td>GSM249956</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>16</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23177</td>
<td>GSM249720</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>21</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23178</td>
<td>GSM249955</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>24</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23182</td>
<td>GSM249954</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>18</td>
<td>nil</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23187</td>
<td>GSM249953</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>16</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23197</td>
<td>GSM249951</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>8</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23202</td>
<td>GSM249950</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>19</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23204</td>
<td>GSM249949</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>13</td>
<td>nil</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23210</td>
<td>GSM249948</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>20</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23212</td>
<td>GSM249947</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>31</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23213</td>
<td>GSM249946</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>13</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X23221</td>
<td>GSM249945</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>11</td>
<td>&gt;1</td>
<td>PE</td>
<td></td>
</tr>
<tr>
<td>X26047</td>
<td>GSM249944</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>23</td>
<td>&lt;1</td>
<td>PE</td>
<td></td>
</tr>
<tr>
<td>X26048</td>
<td>GSM249943</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>35</td>
<td>&lt;1</td>
<td>PE</td>
<td></td>
</tr>
<tr>
<td>X27006</td>
<td>GSM249942</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>32</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X27098</td>
<td>GSM249941</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>23</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X32013</td>
<td>GSM249939</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>35</td>
<td>&lt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X32022</td>
<td>GSM249938</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>41</td>
<td>nil</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X32032</td>
<td>GSM249937</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>37</td>
<td>&gt;1</td>
<td>OV</td>
<td></td>
</tr>
<tr>
<td>X32048</td>
<td>GSM249936</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>35</td>
<td>nil</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>X32049</td>
<td>GSM249935</td>
<td>Public on Mar 01 2008</td>
<td>Dec 14 2007</td>
<td>29</td>
<td>&gt;1</td>
<td>PE</td>
<td></td>
</tr>
</tbody>
</table>
title: X32054///geo_accession: GSM249934///status: Public on Mar 01 2008///

title: X32055///geo_accession: GSM249933///status: Public on Mar 01 2008///

title: X32089///geo_accession: GSM249932///status: Public on Mar 01 2008///

title: X32098///geo_accession: GSM249931///status: Public on Mar 01 2008///

title: X32103///geo_accession: GSM249930///status: Public on Mar 01 2008///

title: X32117///geo_accession: GSM249929///status: Public on Mar 01 2008///

title: X34019///geo_accession: GSM249928///status: Public on Mar 01 2008///

title: X34049///geo_accession: GSM249927///status: Public on Mar 01 2008///

title: X34066///geo_accession: GSM249926///status: Public on Mar 01 2008///

title: X34078///geo_accession: GSM249925///status: Public on Mar 01 2008///

title: X34085///geo_accession: GSM249924///status: Public on Mar 01 2008///

title: X34086///geo_accession: GSM249923///status: Public on Mar 01 2008///

title: X34090///geo_accession: GSM249922///status: Public on Mar 01 2008///

title: X34102///geo_accession: GSM249921///status: Public on Mar 01 2008///

title: X34103///geo_accession: GSM249920///status: Public on Mar 01 2008///

title: X34111///geo_accession: GSM249919///status: Public on Mar 01 2008///

title: X34113///geo_accession: GSM249918///status: Public on Mar 01 2008///

title: X34117///geo_accession: GSM249917///status: Public on Mar 01 2008///

title: X34125///geo_accession: GSM249916///status: Public on Mar 01 2008///

title: X34165///geo_accession: GSM249915///status: Public on Mar 01 2008///

title: X34168///geo_accession: GSM249914///status: Public on Mar 01 2008///

title: X34172///geo_accession: GSM249913///status: Public on Mar 01 2008///

title: X34186///geo_accession: GSM249912///status: Public on Mar 01 2008///
loadOvarianDatasets

Function to load ovarian cancer SummarizedExperiment objects from the Experiment Hub

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

Usage
loadOvarianDatasets(
  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**

```r
experimentsAndDups = loadOvarianDatasets()
```

---

**Description**

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

**Usage**

```r
loadOvarianEsets(
  removeDuplicates = TRUE,
  quantileCutoff = 0,
  rescale = FALSE,
  minNumberGenes = 0,
  minNumberEvents = 0,
  minSampleSize = 0,
  removeRetracted = TRUE,
  removeSubsets = TRUE,
  keepCommonOnly = FALSE,
  imputeMissing = FALSE
)
```
Arguments

- **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

```r
esetsAndDups = loadOvarianEsets()
```
Description

A better understanding of the underlying biology of invasive serous ovarian cancer is critical for the development of early detection strategies and new therapeutics. The objective of this study was to define gene expression patterns associated with favorable survival. RNA from 65 serous ovarian cancers was analyzed using Affymetrix U133A microarrays. This included 54 stage III/IV cases (30 short-term survivors who lived <3 years and 24 long-term survivors who lived >7 years) and 11 stage I/II cases. Genes were screened on the basis of their level of and variability in expression, leaving 7,821 for use in developing a predictive model for survival. A composite predictive model was developed that combines Bayesian classification tree and multivariate discriminant models. Leave-one-out cross-validation was used to select and evaluate models. Patterns of genes were identified that distinguish short-term and long-term ovarian cancer survivors. The expression model developed for advanced stage disease classified all 11 early-stage ovarian cancers as long-term survivors. The MAL gene, which has been shown to confer resistance to cancer therapy, was most highly overexpressed in short-term survivors (3-fold compared with long-term survivors, and 29-fold compared with early-stage cases). These results suggest that gene expression patterns underlie differences in outcome, and an examination of the genes that provide this discrimination reveals that many are implicated in processes that define the malignant phenotype. Differences in survival of advanced ovarian cancers are reflected by distinct patterns of gene expression. This biological distinction is further emphasized by the finding that early-stage cancers share expression patterns with the advanced stage long-term survivors, suggesting a shared favorable biology.

Format

experimentData(eset):
Experiment data
   Experimenter name: Berchuck A, Iversen ES, Lancaster JM, Pittman J, Luo J, Lee P, Murphy S, Dressman HK, Febbo PG, West ...
   Laboratory: Berchuck, Marks 2005
Contact information:
   Title: Patterns of gene expression that characterize long-term survival in advanced stage serous ovarian cancers.
   URL:
   PMIDs: 15897565

Abstract: A 258 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
   platform_title: [HG-U133A] Affymetrix Human Genome U133A Array
   platform_shorttitle: Affymetrix HG-U133A
   platform_summary: hgu133a
   platform_manufacturer: Affymetrix
   platform_distribution: commercial
   platform_accession: GPL96
   warnings:
These samples are a subset of PMID17290060.

version: 2015-09-22 20:17:53

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, 63 samples
Platform type:
---------------------------
Available sample meta-data:
---------------------------

alt_sample_name:
  Min. 1st Qu. Median  Mean 3rd Qu. Max.
  1761  1828  1907  2001  2032  2536

sample_type:
tumor
  63

histological_type:
  ser
  63

primarysite:
  ov
  63

summarygrade:
  high  low  NA's
  25  37  1

summarystage:
  early  late
  11  52

tumorstage:
  1  2  3  4
  7  4  48  4

grade:
### age_at_initial_pathologic_diagnosis:

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.00</td>
<td>52.50</td>
<td>59.00</td>
<td>59.21</td>
<td>67.00</td>
<td>79.00</td>
</tr>
</tbody>
</table>

### os_binary:

<table>
<thead>
<tr>
<th>long</th>
<th>short</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>28</td>
<td>11</td>
</tr>
</tbody>
</table>

### debulking:

<table>
<thead>
<tr>
<th>optimal</th>
<th>suboptimal</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>28</td>
<td>11</td>
</tr>
</tbody>
</table>

### batch:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>9</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

| 2003-07-02 | 1 |

### uncurated_author_metadata:

- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1761///Cancer.Type: Early stage///AgeDx: 72///STAGE: IC///GRADE: 2///Debulking: ///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1762///Cancer.Type: Early stage///AgeDx: 52///STAGE: IA///GRADE: 3///Debulking: ///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1763///Cancer.Type: Early stage///AgeDx: 58///STAGE: IIC///GRADE: 2///Debulking: ///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1764///Cancer.Type: Early stage///AgeDx: 48///STAGE: IC///GRADE: 3///Debulking: ///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1765///Cancer.Type: Early stage///AgeDx: 45///STAGE: IA///GRADE: 2///Debulking: ///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1772///Cancer.Type: Long///AgeDx: 33///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1773///Cancer.Type: Long///AgeDx: 68///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1774///Cancer.Type: Long///AgeDx: 56///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1775///Cancer.Type: Long///AgeDx: 60///STAGE: IIIC///GRADE: 2///Debulking: O///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1776///Cancer.Type: Long///AgeDx: 40///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1777///Cancer.Type: Long///AgeDx: 78///STAGE: IIIB///GRADE: 3///Debulking: O///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1778///Cancer.Type: Long///AgeDx: 66///STAGE: IIIB///GRADE: 2///Debulking: O///X: NA
- Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1779///Cancer.Type: Long///AgeDx: 53///STAGE: IIIC///GRADE: 3///Debulking: O///X: NA
Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1780///Cancer.Type: Long///AgeDx: 63///STAGE: IIIC///GRADE: 2///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1781///Cancer.Type: Long///AgeDx: 73///STAGE: IIIC///GRADE: 3///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1828///Cancer.Type: Short///AgeDx: 59///STAGE: IV///GRADE: 3///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1829///Cancer.Type: Short///AgeDx: 65///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1830///Cancer.Type: Short///AgeDx: 79///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1831///Cancer.Type: Short///AgeDx: 70///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1832///Cancer.Type: Short///AgeDx: 59///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1833///Cancer.Type: Short///AgeDx: 55///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1834///Cancer.Type: Short///AgeDx: 48///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1835///Cancer.Type: Short///AgeDx: 54///STAGE: IIIC///GRADE: 2///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1836///Cancer.Type: Short///AgeDx: 57///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1900///Cancer.Type: Long///AgeDx: 62///STAGE: IIIA///GRADE: 3///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1901///Cancer.Type: Long///AgeDx: 50///STAGE: IIIC///GRADE: 2///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1902///Cancer.Type: Long///AgeDx: 67///STAGE: IIIC///GRADE: 1///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1903///Cancer.Type: Early stage///AgeDx: 73///STAGE: IIC///GRADE: 3///Debulking: ///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1904///Cancer.Type: Long///AgeDx: 70///STAGE: IIIC///GRADE: 3///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1905///Cancer.Type: Short///AgeDx: 70///STAGE: IIIC///GRADE: 2///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1906///Cancer.Type: Short///AgeDx: 75///STAGE: IIIB///GRADE: 2///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1907///Cancer.Type: Long///AgeDx: 73///STAGE: IIIC///GRADE: 4///Debulking: S///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1908///Cancer.Type: Short///AgeDx: 59///STAGE: IIIC///GRADE: 3///Debulking: O///X: NA

Genome.ID..File.name....0074_GenomeID_h133a_2802.cel: 1909///Cancer.Type: Short///AgeDx: 65///STAGE: IIIC///GRADE: 3///Debulking: S///X: NA


Value

An expression set

PMID17290060  An integrated genomic-based approach to individualized treatment of patients with advanced-stage ovarian cancer.

Description

The purpose of this study was to develop an integrated genomic-based approach to personalized treatment of patients with advanced-stage ovarian cancer. We have used gene expression profiles to identify patients likely to be resistant to primary platinum-based chemotherapy and also to identify alternate targeted therapeutic options for patients with de novo platinum-resistant disease. A gene expression model that predicts response to platinum-based therapy was developed using a training set of 83 advanced-stage serous ovarian cancers and tested on a 36-sample external validation set. In parallel, expression signatures that define the status of oncogenic signaling pathways were evaluated in 119 primary ovarian cancers and 12 ovarian cancer cell lines. In an effort to increase chemotherapy sensitivity, pathways shown to be activated in platinum-resistant cancers were subject to targeted therapy in ovarian cancer cell lines. Gene expression profiles identified patients with ovarian cancer likely to be resistant to primary platinum-based chemotherapy with greater than 80% accuracy. In patients with platinum-resistant disease, we identified expression signatures consistent with activation of Src and Rb/E2F pathways, components of which were successfully targeted to increase response in ovarian cancer cell lines. We have defined a strategy for treatment of patients with advanced-stage ovarian cancer that uses therapeutic stratification based on predictions of response to chemotherapy, coupled with prediction of oncogenic pathway deregulation, as a method to direct the use of targeted agents.

Format

experimentData(eset):
Experiment data
  Laboratory: Dressman, Lancaster 2007
  Contact information:
  Title: An integrated genomic-based approach to individualized treatment of patients with advanced-stage ovarian cancer.
  URL:
  PMIDs: 17290060
  Abstract: A 223 word abstract is available. Use 'abstract' method.
  Information is available on: preprocessing
notes:
platform_title:
   [HG-U133A] Affymetrix Human Genome U133A Array
platform_shorttitle:
   Affymetrix HG-U133A
platform_summary:
   hgu133a
platform_manufacturer:
   Affymetrix
platform_distribution:
   commercial
platform_accession:
   GPL96
warnings:
   This paper has been retracted.
version:
   2015-09-22 20:19:16

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

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>events</th>
<th>median</th>
<th>0.95LCL</th>
<th>0.95UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>117.00</td>
<td>67.00</td>
<td>5.26</td>
<td>2.79</td>
<td>7.48</td>
</tr>
</tbody>
</table>

Available sample meta-data:

alt_sample_name:

<table>
<thead>
<tr>
<th></th>
<th>1024</th>
<th>1447</th>
<th>1451</th>
<th>1504</th>
<th>1526</th>
<th>1552</th>
<th>1578</th>
<th>1590</th>
<th>1615</th>
<th>1623</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1665</td>
<td>1674</td>
<td>1675</td>
<td>1774</td>
<td>1784</td>
<td>1834</td>
<td>1846</td>
<td>1877</td>
<td>1913</td>
<td>1929</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2046</td>
<td>2063</td>
<td>2064</td>
<td>2075</td>
<td>2198</td>
<td>2204</td>
<td>2324</td>
<td>2419</td>
<td>2422</td>
<td>2424</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2465</td>
<td>2476</td>
<td>2479</td>
<td>2505</td>
<td>2542</td>
<td>2573</td>
<td>2673</td>
<td>2739</td>
<td>2802</td>
<td>2849</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
sample_type:
tumor

histological_type:
ser

primary_site:

ov

summary_grade:
high low NA's
57 57 3

summary_stage:
early late NA's
1 115 1

tumor stage:

2 3 4 NA's
1 98 17 1

grade:

1 2 3 4 NA's
4 53 56 1 3

days_to_death:

Min. 1st Qu. Median Mean 3rd Qu. Max.
30 510 1020 1496 2220 5550

vital_status:
deceased living
67 50
<table>
<thead>
<tr>
<th>Batch</th>
<th>Survival</th>
<th>Stage</th>
<th>Grade</th>
<th>Debulking</th>
<th>CA125 POST</th>
<th>Response</th>
<th>X</th>
<th>X.1</th>
<th>X.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-09-20</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>O</td>
<td>12</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-10-23</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>S</td>
<td>12</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-11-12</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>O</td>
<td>8.6</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-12-16</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>S</td>
<td>875</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-12-21</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>500</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-03-09</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>15</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-03-16</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>S</td>
<td>14.4</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-04-20</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>S</td>
<td>9.9</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-05-18</td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>8.7</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-05-21</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>7</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-05-27</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>7</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-06-22</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>7</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2002-06-23</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>O</td>
<td>7</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
OVC.TumorID: 1834///Survival: 118///X0...alive...1...dead: 1

OVC.TumorID: 1846///Survival: 142///X0...alive...1...dead: 1

OVC.TumorID: 1877///Survival: 119///X0...alive...1...dead: 1

OVC.TumorID: 1913///Survival: 32///X0...alive...1...dead: 1

OVC.TumorID: 1929///Survival: 134///X0...alive...1...dead: 1

OVC.TumorID: 2046///Survival: 127///X0...alive...1...dead: 1

OVC.TumorID: 2063///Survival: 16///X0...alive...1...dead: 1

OVC.TumorID: 2064///Survival: 27///X0...alive...1...dead: 1

OVC.TumorID: 2075///Survival: 87///X0...alive...1...dead: 1

OVC.TumorID: 2198///Survival: 91///X0...alive...1...dead: 1

OVC.TumorID: 2204///Survival: 118///X0...alive...1...dead: 1

OVC.TumorID: 2324///Survival: 98///X0...alive...1...dead: 1

OVC.TumorID: 2419///Survival: 107///X0...alive...1...dead: 1

OVC.TumorID: 2422///Survival: 20///X0...alive...1...dead: 1

OVC.TumorID: 2424///Survival: 16///X0...alive...1...dead: 1

OVC.TumorID: 2465///Survival: 17///X0...alive...1...dead: 1

OVC.TumorID: 2476///Survival: 74///X0...alive...1...dead: 1

OVC.TumorID: 2505///Survival: 95///X0...alive...1...dead: 1

OVC.TumorID: 2542///Survival: 36///X0...alive...1...dead: 1

OVC.TumorID: 2573///Survival: 7///X0...alive...1...dead: 1

OVC.TumorID: 2673///Survival: 74///X0...alive...1...dead: 0

OVC.TumorID: 2739///Survival: 67///X0...alive...1...dead: 0

OVC.TumorID: 2802///Survival: 24///X0...alive...1...dead: 1
<table>
<thead>
<tr>
<th>Tumor ID</th>
<th>Survival</th>
<th>Alive</th>
<th>Dead</th>
<th>Assigned Stage</th>
<th>Grade</th>
<th>Debulk</th>
<th>CA125 Post</th>
<th>Response</th>
<th>X</th>
<th>X.1</th>
<th>X.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVC.TumorID: 2849</td>
<td>23</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 2895</td>
<td>9</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 2967</td>
<td>22</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 2981</td>
<td>6</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 2999</td>
<td>16</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 3018</td>
<td>16</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 3090</td>
<td>16</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 3102</td>
<td>10</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 3107</td>
<td>31</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 3142</td>
<td>18</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: 860</td>
<td>17</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D1805</td>
<td>9</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D1837</td>
<td>83</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D1859</td>
<td>110</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2098</td>
<td>42</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2208</td>
<td>2</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2332</td>
<td>27</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2342</td>
<td>20</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2358</td>
<td>9</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2421</td>
<td>12</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2432</td>
<td>34</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVC.TumorID: D2433</td>
<td>49</td>
<td>alive</td>
<td>1</td>
<td>dead</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TumorID</td>
<td>Survival</td>
<td>Alive</td>
<td>Dead</td>
<td>Stage</td>
<td>Grade</td>
<td>Debulk</td>
<td>CA125 POST</td>
<td>Response</td>
<td>X</td>
<td>X.1</td>
<td>X.2</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>-------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
<td>---</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>D2480</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2557</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2559</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2560</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2572</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2575</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2576</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2581</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2603</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2611</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2629</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2640</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2648</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2668</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2689</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2691</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2700</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2726</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2727</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2733</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2738</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2749</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2776</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2792</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Value

An expression set

PMID19318476  
Microarray analysis of early stage serous ovarian cancers shows profiles predictive of favorable outcome.

Description

Although few women with advanced serous ovarian cancer are cured, detection of the disease at an early stage is associated with a much higher likelihood of survival. We previously used gene expression array analysis to distinguish subsets of advanced cancers based on disease outcome. In the present study, we report on gene expression of early-stage cancers and validate our prognostic model for advanced-stage cancers. Frozen specimens from 39 stage I/II, 42 stage III/IV, and 20 low malignant potential cancers were obtained from four different sites. A linear discriminant model was used to predict survival based upon array data. We validated the late-stage survival model and show that three of the most differentially expressed genes continue to be predictive of outcome. Most early-stage cancers (38 of 39 invasive, 15 of 20 low malignant potential) were classified as
long-term survivors (median probabilities 0.97 and 0.86). MAL, the most differentially expressed
gene, was further validated at the protein level and found to be an independent predictor of poor
survival in an unselected group of advanced serous cancers ($P = 0.0004$). These data suggest that
serous ovarian cancers detected at an early stage generally have a favorable underlying biology
similar to advanced-stage cases that are long-term survivors. Conversely, most late-stage ovarian
cancers seem to have a more virulent biology. This insight suggests that if screening approaches are
to succeed it will be necessary to develop approaches that are able to detect these virulent cancers
at an early stage.

Format

experimentData(eset):
Experiment data
Laboratory: Berchuck, Lancaster 2009
Contact information:
Title: Microarray analysis of early stage serous ovarian cancers shows profiles predictive of favorable outcome.
URL:
PMIDs: 19318476

Abstract: A 241 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title: [HG-U133A] Affymetrix Human Genome U133A Array
platform_shorttitle: Affymetrix HG-U133A
platform_summary: hgu133a
platform_manufacturer: Affymetrix
platform_distribution: commercial
platform_accession: GPL96
warnings: These samples are a subset of PMID17290060.
version: 2015-09-22 20:20:30

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, 42 samples

Platform type:

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

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

\[
\begin{array}{cccccc}
 n & \text{events} & \text{median} & 0.95\text{LCL} & 0.95\text{UCL} \\
42.00 & 22.00 & 2.79 & 2.30 & \text{NA} \\
\end{array}
\]

Available sample meta-data:

alt_sample_name:

<table>
<thead>
<tr>
<th>D1462</th>
<th>D1805</th>
<th>D2171</th>
<th>D2208</th>
<th>D2247</th>
<th>D2332</th>
<th>D2432</th>
<th>D2480</th>
<th>D2559</th>
<th>D2560</th>
<th>D2575</th>
<th>D2576</th>
<th>D2611</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D2629</th>
<th>D2640</th>
<th>D2648</th>
<th>D2736</th>
<th>D2749</th>
<th>D2776</th>
<th>D2792</th>
<th>M1025</th>
<th>M1054</th>
<th>M1055</th>
<th>M120</th>
<th>M1241</th>
<th>M1572</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M17</th>
<th>M1777</th>
<th>M1891</th>
<th>M2184</th>
<th>M2515</th>
<th>M2807</th>
<th>M3035</th>
<th>M337</th>
<th>M3484</th>
<th>M359</th>
<th>M4161</th>
<th>M444</th>
<th>M503</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M5668</th>
<th>M5775</th>
<th>M806</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

sample_type:
tumor

42

histological_type:

ser

42

summarygrade:

high  low  NA's

24  17  1

summarystage:

eyear late  NA's

2  39  1

tumorstage:

1  2  3  4  NA's

1  1  29  10  1

substage:

a  b  c  NA's

1  1  29  11

grade:
age_at_initial_pathologic_diagnosis:

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
<th>NA's</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.00</td>
<td>55.00</td>
<td>62.00</td>
<td>61.46</td>
<td>70.00</td>
<td>81.00</td>
<td>1</td>
</tr>
</tbody>
</table>

recurrence_status:

- norecurrence
- recurrence

<table>
<thead>
<tr>
<th>6</th>
<th>36</th>
</tr>
</thead>
</table>

days_to_death:

<table>
<thead>
<tr>
<th>Min.</th>
<th>1st Qu.</th>
<th>Median</th>
<th>Mean</th>
<th>3rd Qu.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00</td>
<td>367.5</td>
<td>825.0</td>
<td>1105.0</td>
<td>1050.0</td>
<td>3420.0</td>
</tr>
</tbody>
</table>

vital_status:

- deceased
- living

<table>
<thead>
<tr>
<th>22</th>
<th>20</th>
</tr>
</thead>
</table>

debulking:

- optimal
- suboptimal
- NA's

<table>
<thead>
<tr>
<th>20</th>
<th>21</th>
<th>1</th>
</tr>
</thead>
</table>

batch:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2004-06-23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

uncurated_author_metadata:
Tumor: D2560///NEW.Response: CR///SHORT.LONG: NA///AgeDx: 60///DateDx: 5/14/1996///Status: 12/9/03, AWD - despite an imaging scan shows no definitive measurable disease///Survival..months.: 91///X: 0///STAGE: IIIC///GRADE: 2///Race: W///Debulk: S


Value

An expression set

Description

A catalogue of molecular aberrations that cause ovarian cancer is critical for developing and deploying therapies that will improve patients’ lives. The Cancer Genome Atlas project has analysed messenger RNA expression, microRNA expression, promoter methylation and DNA copy number in 489 high-grade serous ovarian adenocarcinomas and the DNA sequences of exons from coding genes in 316 of these tumours. Here we report that high-grade serous ovarian cancer is characterized by TP53 mutations in almost all tumours (96%); low prevalence but statistically recurrent somatic mutations in nine further genes including NF1, BRCA1, BRCA2, RB1 and CDK12; 113 significant focal DNA copy number aberrations; and promoter methylation events involving 168 genes. Analyses delineated four ovarian cancer transcriptional subtypes, three microRNA subtypes, four promoter methylation subtypes and a transcriptional signature associated with survival duration, and shed new light on the impact that tumours with BRCA1/2 (BRCA1 or BRCA2) and CCNE1 aberrations have on survival. Pathway analyses suggested that homologous recombination is defective in about half of the tumours analysed, and that NOTCH and FOXM1 signalling are involved in serous ovarian cancer pathophysiology.
Format

experimentData(eset):
Experiment data
Laboratory: Cancer Genome Atlas Research Network 2011
Contact information:
Title: Integrated genomic analyses of ovarian carcinoma.
URL:
PMIDs: 21720365

Abstract: A 179 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
  platform_title:
    [RNASeqV2] Illumina HiSeq RNA sequencing
platform_shorttitle:
  Illumina HiSeq RNA sequencing
platform_summary:
  NA
platform_manufacturer:
  Illumina
platform_distribution:
  sequencing
platform_accession:
  NA
platform_technology:
  RNA sequencing
version:
  2015-09-22 20:27:26

featureData(eset):
An object of class 'AnnotatedDataFrame'
featureNames: ?|100133144 ?|100134869 ... ZZZ3|26009 (20471 total)
varLabels: probeset gene EntrezGene.ID best_probe
varMetadata: labelDescription

Details

assayData: 20471 features, 261 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

  5 observations deleted due to missingness
  n events median 0.95LCL 0.95UCL
  256.00 143.00  3.62    3.19   4.03
Available sample meta-data:

alt_sample_name:
TCGA-04-1348-01A-01R-1565-13 TCGA-04-1357-01A-01R-1565-13 1
TCGA-04-1362-01A-01R-1565-13 TCGA-04-1364-01A-01R-1565-13 1
TCGA-04-1365-01A-01R-1565-13 TCGA-04-1514-01A-01R-1566-13 1
TCGA-04-1519-01A-01R-1565-13 TCGA-09-0364-01A-02R-1564-13 1
TCGA-09-0366-01A-01R-1564-13 TCGA-09-0367-01A-01R-1564-13 1
TCGA-09-0369-01A-01R-1564-13 TCGA-09-1662-01A-01R-1566-13 1
TCGA-09-1666-01A-01R-1566-13 TCGA-09-1667-01C-01R-1566-13 1
TCGA-09-1668-01B-01R-1566-13 TCGA-09-1669-01A-01R-1566-13 1
TCGA-09-1670-01A-01R-1566-13 TCGA-09-1673-01A-01R-1566-13 1
TCGA-09-1674-01A-01R-1566-13 TCGA-09-2044-01B-01R-1568-13 1
TCGA-09-2045-01A-01R-1568-13 TCGA-09-2048-01A-01R-1568-13 1
TCGA-09-2051-01A-01R-1568-13 TCGA-09-2054-01A-01R-1568-13 1
TCGA-09-2056-01B-01R-1568-13 TCGA-10-0928-01A-02R-1564-13 1
TCGA-10-0936-01A-01R-1564-13 TCGA-13-0730-01A-01R-1564-13 1
TCGA-13-0799-01A-01R-1564-13 TCGA-13-0800-01A-01R-1564-13 1
TCGA-13-0801-01A-01R-1564-13 TCGA-13-0890-01A-01R-1564-13 1
TCGA-13-0893-01B-01R-1565-13 TCGA-13-0897-01A-01R-1564-13 1
TCGA-13-0899-01A-01R-1564-13 TCGA-13-0913-01A-01R-1564-13 1
TCGA-13-0916-01A-01R-1564-13 TCGA-13-0920-01A-01R-1564-13 1
TCGA-13-0924-01A-01R-1564-13 TCGA-13-1403-01A-01R-1565-13 1
TCGA-13-1405-01A-01R-1565-13 TCGA-13-1410-01A-01R-1565-13 1
TCGA-13-1481-01A-01R-1565-13 TCGA-13-1497-01A-01R-1565-13 1
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TCGA-20-1685-01A-01R-1566-13</td>
<td>TCGA-20-1687-01A-01R-1566-13</td>
</tr>
<tr>
<td>TCGA-23-1023-01A-02R-1564-13</td>
<td>TCGA-23-1026-01B-01R-1569-13</td>
</tr>
<tr>
<td>TCGA-23-1027-01A-02R-1564-13</td>
<td>TCGA-23-1029-01B-01R-1567-13</td>
</tr>
<tr>
<td>TCGA-23-1109-01A-01R-1564-13</td>
<td>TCGA-23-1111-01A-01R-1567-13</td>
</tr>
<tr>
<td>TCGA-23-1114-01B-01R-1566-13</td>
<td>TCGA-23-1120-01A-02R-1565-13</td>
</tr>
<tr>
<td>TCGA-24-0975-01A-02R-1565-13</td>
<td>TCGA-24-1103-01A-01R-1565-13</td>
</tr>
<tr>
<td>TCGA-24-1413-01A-01R-1565-13</td>
<td>TCGA-24-1416-01A-01R-1565-13</td>
</tr>
<tr>
<td>TCGA-24-1417-01A-01R-1565-13</td>
<td>TCGA-24-1418-01A-01R-1565-13</td>
</tr>
<tr>
<td>TCGA-24-1424-01A-01R-1565-13</td>
<td>TCGA-24-1427-01A-01R-1565-13</td>
</tr>
<tr>
<td>TCGA-24-1428-01A-01R-1564-13</td>
<td>TCGA-24-1430-01A-01R-1566-13</td>
</tr>
<tr>
<td>TCGA-24-1436-01A-01R-1566-13</td>
<td>TCGA-24-1467-01A-01R-1566-13</td>
</tr>
<tr>
<td>TCGA-24-1551-01A-01R-1566-13</td>
<td>TCGA-24-1552-01A-01R-1566-13</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>TCGA-24-1556-01A-01R-1566-13</td>
<td>TCGA-24-1557-01A-01R-1566-13</td>
</tr>
<tr>
<td>TCGA-24-1562-01A-01R-1566-13</td>
<td>(Other)</td>
</tr>
</tbody>
</table>

**unique_patient_ID:**

**sample_type:**
tumor
<table>
<thead>
<tr>
<th>histological_type:</th>
<th>ser</th>
</tr>
</thead>
<tbody>
<tr>
<td>primarysite:</td>
<td>other ov</td>
</tr>
<tr>
<td>summarygrade:</td>
<td>high low NA's</td>
</tr>
<tr>
<td>summarystage:</td>
<td>early late NA's</td>
</tr>
<tr>
<td>tumorstage:</td>
<td>2 3 4 NA's</td>
</tr>
<tr>
<td>substage:</td>
<td>b c NA's</td>
</tr>
<tr>
<td>grade:</td>
<td>1 2 3 4 NA's</td>
</tr>
<tr>
<td>age_at_initial_pathologic_diagnosis:</td>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max.</td>
</tr>
<tr>
<td>pltx:</td>
<td>n y NA's</td>
</tr>
<tr>
<td>tax:</td>
<td>n y NA's</td>
</tr>
<tr>
<td>neo:</td>
<td>n NA's</td>
</tr>
<tr>
<td>days_to_tumor_recurrence:</td>
<td>Min. 1st Qu. Median Mean 3rd Qu. Max. NA's</td>
</tr>
<tr>
<td></td>
<td>9.0</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>recurrence_status:</strong></td>
<td></td>
</tr>
<tr>
<td>norecurrence</td>
<td>123</td>
</tr>
<tr>
<td>recurrence</td>
<td>138</td>
</tr>
<tr>
<td><strong>days_to_death:</strong></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>9.0</td>
</tr>
<tr>
<td>1st Qu.</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>3rd Qu.</td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td></td>
</tr>
<tr>
<td>NA's</td>
<td></td>
</tr>
<tr>
<td><strong>vital_status:</strong></td>
<td></td>
</tr>
<tr>
<td>deceased</td>
<td>143</td>
</tr>
<tr>
<td>living</td>
<td>114</td>
</tr>
<tr>
<td>NA's</td>
<td>4</td>
</tr>
<tr>
<td><strong>site_of_tumor_first_recurrence:</strong></td>
<td></td>
</tr>
<tr>
<td>locoregional</td>
<td>82</td>
</tr>
<tr>
<td>metastasis</td>
<td>56</td>
</tr>
<tr>
<td>NA's</td>
<td>123</td>
</tr>
<tr>
<td><strong>primary_therapy_outcome_success:</strong></td>
<td></td>
</tr>
<tr>
<td>completeresponse</td>
<td>147</td>
</tr>
<tr>
<td>partialresponse</td>
<td>30</td>
</tr>
<tr>
<td>progressivedisease</td>
<td>15</td>
</tr>
<tr>
<td>stabledisease</td>
<td>15</td>
</tr>
<tr>
<td>NA's</td>
<td>54</td>
</tr>
<tr>
<td><strong>debulking:</strong></td>
<td></td>
</tr>
<tr>
<td>optimal</td>
<td>171</td>
</tr>
<tr>
<td>suboptimal</td>
<td>60</td>
</tr>
<tr>
<td>NA's</td>
<td>30</td>
</tr>
<tr>
<td><strong>percent_normal_cells:</strong></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>0.00</td>
</tr>
<tr>
<td>1st Qu.</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>3rd Qu.</td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td></td>
</tr>
<tr>
<td>NA's</td>
<td></td>
</tr>
<tr>
<td><strong>percent_stromal_cells:</strong></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>0.00</td>
</tr>
<tr>
<td>1st Qu.</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>3rd Qu.</td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td></td>
</tr>
<tr>
<td>NA's</td>
<td></td>
</tr>
<tr>
<td><strong>percent_tumor_cells:</strong></td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>0.00</td>
</tr>
<tr>
<td>1st Qu.</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>3rd Qu.</td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td></td>
</tr>
<tr>
<td>NA's</td>
<td></td>
</tr>
</tbody>
</table>

**uncurated_author_metadata:**

- age_at_initial_pathologic_diagnosis: 38
- anatomic_organ_subdivision: Bilateral
- bcr_patient_uuid: ...
- bilateral
- day_of_form_completion: 2009
- Extract.Name: TCGA-24-1416-01A-01R-1565-13
- unique_patient_id: TCGA-24-1416
- year_of_form_completion: 2009
- Extract.Name: TCGA-61-1721-01A-01R-1569-13
- unique_patient_id: TCGA-61-1721
- year_of_form_completion: 2010
- unique_patient_id: TCGA-25-2404
- year_of_form_completion: 2009
- Extract.Name: TCGA-25-1328-01A-01R-1565-13
- unique_patient_id: TCGA-25-1328
- year_of_form_completion: 2009
age_at_initial_pathologic_diagnosis: 39
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1688-01A-01R-1566-13
unique_patient_id: TCGA-29-1688

age_at_initial_pathologic_diagnosis: 40
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-2008-01A-02R-1568-13
unique_patient_id: TCGA-61-2008

age_at_initial_pathologic_diagnosis: 40
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-1725-01A-01R-1567-13
unique_patient_id: TCGA-61-1725

age_at_initial_pathologic_diagnosis: 40
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-2109-01A-01R-1568-13
unique_patient_id: TCGA-61-2109

age_at_initial_pathologic_diagnosis: 40
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2010
unique_patient_id: TCGA-59-2363

age_at_initial_pathologic_diagnosis: 42
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-09-2051-01A-01R-1568-13
unique_patient_id: TCGA-09-2051

age_at_initial_pathologic_diagnosis: 42
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-25-1314-01A-01R-1565-13
unique_patient_id: TCGA-25-1314

age_at_initial_pathologic_diagnosis: 43
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1763-01A-02R-1567-13
unique_patient_id: TCGA-29-1763

age_at_initial_pathologic_diagnosis: 43
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
unique_patient_id: TCGA-61-1995

age_at_initial_pathologic_diagnosis: 43
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-36-1577-01A-01R-1566-13
unique_patient_id: TCGA-36-1577

age_at_initial_pathologic_diagnosis: 43
anatomic_organ_subdivision: Right
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1696-01A-01R-1567-13
unique_patient_id: TCGA-29-1696

age_at_initial_pathologic_diagnosis: 44
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-30-1718-01A-01R-1567-13
unique_patient_id: TCGA-30-1718

age_at_initial_pathologic_diagnosis: 44
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-13-0799-01A-01R-1564-13
unique_patient_id: TCGA-13-0799

age_at_initial_pathologic_diagnosis: 44
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2010
Extract.Name: TCGA-59-2350-01A-01R-1569-13
unique_patient_id: TCGA-59-2350

age_at_initial_pathologic_diagnosis: 44
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-04-1348-01A-01R-1565-13
unique_patient_id: TCGA-04-1348

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-1736-01B-01R-1568-13
unique_patient_id: TCGA-61-1736

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-13-1506-01A-01R-1565-13
unique_patient_id: TCGA-13-1506

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1694-01A-01R-1567-13
unique_patient_id: TCGA-29-1694

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1847-01A-01R-1566-13
unique_patient_id: TCGA-24-1847

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-1918-01A-01R-1568-13
unique_patient_id: TCGA-61-1918

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1846-01A-01R-1567-13
unique_patient_id: TCGA-24-1846

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-20-1685-01A-01R-1566-13
unique_patient_id: TCGA-20-1685

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-04-1514-01A-01R-1566-13
unique_patient_id: TCGA-04-1514

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1711-01A-01R-1567-13
unique_patient_id: TCGA-29-1711
age_at_initial_pathologic_diagnosis: 49
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
unique_patient_id: TCGA-13-1512

age_at_initial_pathologic_diagnosis: 49
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1550-01A-01R-1566-13
unique_patient_id: TCGA-24-1550

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-13-1405-01A-01R-1565-13
unique_patient_id: TCGA-13-1405

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-09-2045-01A-01R-1568-13
unique_patient_id: TCGA-09-2045

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-09-1673-01A-01R-1566-13
unique_patient_id: TCGA-09-1673

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1555-01A-01R-1566-13
unique_patient_id: TCGA-24-1555

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-57-1582-01A-01R-1566-13
unique_patient_id: TCGA-57-1582

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1556-01A-01R-1566-13
unique_patient_id: TCGA-24-1556

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1428-01A-01R-1564-13
unique_patient_id: TCGA-24-1428

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-25-1315-01A-01R-1566-13
unique_patient_id: TCGA-25-1315

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2010
Extract.Name: TCGA-24-2036-01A-01R-1568-13
unique_patient_id: TCGA-24-2036

age_at_initial_pathologic_diagnosis: 50
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1103-01A-01R-1565-13
unique_patient_id: TCGA-24-1103

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2010
unique_patient_id: TCGA-59-2351

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
unique_patient_id: TCGA-13-2060

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2010
Extract.Name: TCGA-24-2027-01A-01R-1567-13
unique_patient_id: TCGA-24-2027

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-2088-01A-01R-1568-13
unique_patient_id: TCGA-61-2088

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-61-2016-01A-01R-1568-13
unique_patient_id: TCGA-61-2016

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-20-1684-01A-01R-1566-13
unique_patient_id: TCGA-20-1684

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-29-1691-01A-01R-1566-13
unique_patient_id: TCGA-29-1691

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1560-01A-01R-1566-13
unique_patient_id: TCGA-24-1560

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1413-01A-01R-1565-13
unique_patient_id: TCGA-24-1413

age_at_initial_pathologic_diagnosis: 51
anatomic_organ_subdivision: Right
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-24-1467-01A-01R-1566-13
unique_patient_id: TCGA-24-1467

age_at_initial_pathologic_diagnosis: 52
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
year_of_form_completion: 2009
Extract.Name: TCGA-13-0800-01A-01R-1564-13
unique_patient_id: TCGA-13-0800
age_at_initial_pathologic_diagnosis: 52

age_at_initial_pathologic_diagnosis: 52

age_at_initial_pathologic_diagnosis: 53

age_at_initial_pathologic_diagnosis: 53

age_at_initial_pathologic_diagnosis: 53

age_at_initial_pathologic_diagnosis: 53

age_at_initial_pathologic_diagnosis: 54

age_at_initial_pathologic_diagnosis: 54

age_at_initial_pathologic_diagnosis: 54

age_at_initial_pathologic_diagnosis: 54

age_at_initial_pathologic_diagnosis: 55
Value
An expression set

Description
A catalogue of molecular aberrations that cause ovarian cancer is critical for developing and deploying therapies that will improve patients’ lives. The Cancer Genome Atlas project has analysed messenger RNA expression, microRNA expression, promoter methylation and DNA copy number in 489 high-grade serous ovarian adenocarcinomas and the DNA sequences of exons from coding genes in 316 of these tumours. Here we report that high-grade serous ovarian cancer is characterized by TP53 mutations in almost all tumours (96%); low prevalence but statistically recurrent somatic mutations in nine further genes including NF1, BRCA1, BRCA2, RB1 and CDK12; 113 significant focal DNA copy number aberrations; and promoter methylation events involving 168 genes. Analyses delineated four ovarian cancer transcriptional subtypes, three microRNA subtypes, four promoter methylation subtypes and a transcriptional signature associated with survival duration, and shed new light on the impact that tumours with BRCA1/2 (BRCA1 or BRCA2) and CCNE1 aberrations have on survival. Pathway analyses suggested that homologous recombination is defective in about half of the tumours analysed, and that NOTCH and FOXM1 signalling are involved in serous ovarian cancer pathophysiology.

Format

experimentData(eset):
Experiment data
Laboratory: Cancer Genome Atlas Research Network 2011
Contact information:
Title: Integrated genomic analyses of ovarian carcinoma.
URL:
PMIDs: 21720365

Abstract: A 179 word abstract is available. Use 'abstract' method.
Information is available on: preprocessing
notes:
platform_title:
[HT_HG-U133A] Affymetrix HT Human Genome U133A Array
platform_shorttitle:
Affymetrix HT_HG-U133A
platform_summary:
hthgu133a
platform_manufacturer: Affymetrix
platform_distribution: commercial
platform_accession: GPL3921
warnings:
version: 2015-09-22 20:25:15

featureData(eset):
An object of class 'AnnotatedDataFrame'
 featureNames: 1007_s_at 1053_at ... AFFX-M27830_M_at (21260 total)
 varLabels: probeset gene EntrezGene.ID best_probe
 varMetadata: labelDescription

Details

assayData: 21260 features, 578 samples
Platform type:
Overall survival time-to-event summary (in years):
Call: survfit(formula = Surv(time, cens) ~ -1)

21 observations deleted due to missingness

n  events  median  0.95LCL  0.95UCL
 557.00  290.00  3.73  3.45  4.06

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

---------------------------

alt_sample_name:
TCGA-01-0628-11A-01R-0362-01 TCGA-01-0630-11A-01R-0362-01
 1     1
TCGA-01-0631-11A-01R-0362-01 TCGA-01-0633-11A-01R-0362-01
 1     1
TCGA-01-0636-11A-01R-0362-01 TCGA-01-0637-11A-01R-0362-01
 1     1
TCGA-01-0639-11A-01R-0362-01 TCGA-01-0642-11A-02R-0362-01
 1     1
TCGA-04-1331-01A-01R-0434-01 TCGA-04-1332-01A-01R-0434-01
 1     1
TCGA-04-1335-01A-01R-0434-01 TCGA-04-1336-01A-01R-0434-01
 1     1
TCGA-04-1337-01A-01R-0434-01 TCGA-04-1338-01A-01R-0434-01
 1     1
<table>
<thead>
<tr>
<th>TCGA-04-1341-01A-01R-0434-01</th>
<th>TCGA-04-1342-01A-01R-0434-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1343-01A-01R-0434-01</td>
<td>TCGA-04-1346-01A-01R-0434-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1347-01A-01R-0434-01</td>
<td>TCGA-04-1348-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1349-01A-01R-0453-01</td>
<td>TCGA-04-1350-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1351-01A-01R-0453-01</td>
<td>TCGA-04-1353-01A-01R-1048-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1356-01A-01R-0453-01</td>
<td>TCGA-04-1357-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1360-01A-01R-0453-01</td>
<td>TCGA-04-1361-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1362-01A-01R-0453-01</td>
<td>TCGA-04-1364-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1365-01A-01R-0453-01</td>
<td>TCGA-04-1367-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1369-01A-02R-1048-01</td>
<td>TCGA-04-1371-01A-01R-0453-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1514-01A-01R-0502-01</td>
<td>TCGA-04-1516-01A-01R-1048-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1517-01A-01R-0538-01</td>
<td>TCGA-04-1519-01A-01R-0538-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1525-01A-01R-0538-01</td>
<td>TCGA-04-1530-01A-02R-0502-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1536-01A-01R-0538-01</td>
<td>TCGA-04-1542-01A-01R-0502-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1638-01A-01R-0582-01</td>
<td>TCGA-04-1644-01B-01R-1048-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1646-01A-01R-0582-01</td>
<td>TCGA-04-1648-01A-01R-0582-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1649-01A-01R-0582-01</td>
<td>TCGA-04-1651-01A-01R-0582-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1652-01A-01R-0582-01</td>
<td>TCGA-04-1654-01A-02R-0653-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-04-1655-01A-01R-0564-01</td>
<td>TCGA-09-0364-01A-02R-0362-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-0365-01A-02R-0362-01</td>
<td>TCGA-09-0366-01A-01R-0362-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-0367-01A-01R-0362-01</td>
<td>TCGA-09-0369-01A-01R-0362-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1659-01B-01R-0538-01</td>
<td>TCGA-09-1661-01B-01R-0538-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1662-01A-01R-0538-01</td>
<td>TCGA-09-1664-01A-01R-0582-01</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1665-01B-01R-0538-01</td>
<td>TCGA-09-1666-01A-01R-0538-01</td>
</tr>
<tr>
<td>Patient ID</td>
<td>Status</td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>TCGA-09-1667-01C-01R-0538-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1669-01A-01R-0538-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1672-01A-01R-0564-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-1674-01A-01R-0564-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2043-01A-01R-0709-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2045-01A-01R-0709-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2049-01D-01R-0709-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2051-01A-01R-0709-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2054-01A-01R-0668-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-09-2056-01B-01R-0668-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0926-01A-01R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0928-01A-02R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0931-01A-01R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0934-01A-02R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0936-01A-01R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-10-0938-01A-02R-0404-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-13-0717-01A-01R-0362-01</td>
<td>1</td>
</tr>
<tr>
<td>TCGA-13-0723-01A-02R-0362-01</td>
<td>1</td>
</tr>
</tbody>
</table>

(Other) NA's

479

unique_patient_ID:

TCGA-01-0628 TCGA-01-0630 TCGA-01-0631 TCGA-01-0633 TCGA-01-0636 TCGA-01-0637
1 1 1 1 1 1
TCGA-01-0639 TCGA-01-0642 TCGA-04-1331 TCGA-04-1332 TCGA-04-1335 TCGA-04-1336
1 1 1 1 1 1
TCGA-04-1337 TCGA-04-1338 TCGA-04-1341 TCGA-04-1342 TCGA-04-1343 TCGA-04-1346
1 1 1 1 1 1
TCGA-04-1347 TCGA-04-1348 TCGA-04-1349 TCGA-04-1350 TCGA-04-1351 TCGA-04-1353
1 1 1 1 1 1
<table>
<thead>
<tr>
<th>sample_type:</th>
<th>adjacentnormal</th>
<th>tumor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>570</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>histological_type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ser</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>primarysite:</th>
</tr>
</thead>
<tbody>
<tr>
<td>other</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>summarygrade:</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>summarystage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>early</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Feature</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>tumorstage</td>
</tr>
<tr>
<td>bstage:</td>
</tr>
<tr>
<td>substage:</td>
</tr>
<tr>
<td>grade:</td>
</tr>
<tr>
<td>age_at_initial_pathologic_diagnosis:</td>
</tr>
<tr>
<td>age_at_initial_pathologic_diagnosis:</td>
</tr>
<tr>
<td>pltx:</td>
</tr>
<tr>
<td>tax:</td>
</tr>
<tr>
<td>neo:</td>
</tr>
<tr>
<td>days_to_tumor_recurrence:</td>
</tr>
<tr>
<td>recurrence_status:</td>
</tr>
<tr>
<td>days_to_death:</td>
</tr>
<tr>
<td>vital_status:</td>
</tr>
<tr>
<td>site_of_tumor_first_recurrence:</td>
</tr>
<tr>
<td>metastasis</td>
</tr>
</tbody>
</table>
primary_therapy_outcome_success:
completeresponse partialresponse progressivedisease stabledisease
318 65 41 30
NA's 124

debulking:
optimal suboptimal NA's
367 140 71

percent_normal_cells:
Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
0.000 0.000 0.000 2.385 0.000 55.000 19

percent_stromal_cells:
Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
0.00 5.00 10.00 12.85 20.00 70.00 25

percent_tumor_cells:
Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
0.00 75.00 85.00 80.64 90.00 100.00 22

batch:
Min. 1st Qu. Median Mean 3rd Qu. Max. NA's
9.00 13.00 17.00 18.55 22.00 40.00 1

uncurated_author_metadata:

age_at_initial_pathologic_diagnosis: 26
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-36-2540
batch: 40
Extract.Name: TCGA-36-2540-01A-01R-1048-01

age_at_initial_pathologic_diagnosis: 30
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-31-1946
batch: 21
Extract.Name: TCGA-31-1946-01A-01R-0653-01

age_at_initial_pathologic_diagnosis: 34
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-24-1416
batch: 14
Extract.Name: TCGA-24-1416-01A-01R-0477-01

age_at_initial_pathologic_diagnosis: 36
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-29-2436
batch: 40
Extract.Name: TCGA-29-2436-01A-01R-1048-01

age_at_initial_pathologic_diagnosis: 36
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-24-1105
batch: 12
Extract.Name: TCGA-24-1105-01A-01R-0434-01

age_at_initial_pathologic_diagnosis: 37
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-09-1664
batch: 19
Extract.Name: TCGA-09-1664-01A-01R-0582-01

age_at_initial_pathologic_diagnosis: 37
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-25-2408
batch: 24
Extract.Name: TCGA-25-2408-01A-01R-0709-01

age_at_initial_pathologic_diagnosis: 37
anatomic_organ_subdivision: Right
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-36-2538
batch: 40
Extract.Name: TCGA-36-2538-01A-01R-1048-01

age_at_initial_pathologic_diagnosis: 38
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-61-1721
batch: 21
Extract.Name: TCGA-61-1721-01A-01R-0653-01

age_at_initial_pathologic_diagnosis: 38
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
bcr_patient_barcode: ...
unique_patient_ID: TCGA-25-2404
batch: 24
Extract.Name: TCGA-25-2404-01A-01R-0709-01
age_at_initial_pathologic_diagnosis: 38///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 39///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 39///anatomic_organ_subdivision: NA

age_at_initial_pathologic_diagnosis: 40///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 40///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 40///anatomic_organ_subdivision: NA

age_at_initial_pathologic_diagnosis: 41///anatomic_organ_subdivision: Left

age_at_initial_pathologic_diagnosis: 41///anatomic_organ_subdivision: NA

age_at_initial_pathologic_diagnosis: 42///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 42///anatomic_organ_subdivision: Bilateral

age_at_initial_pathologic_diagnosis: 42///anatomic_organ_subdivision: NA

age_at_initial_pathologic_diagnosis: 42///anatomic_organ_subdivision: NA
age_at_initial_pathologic_diagnosis: 42

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 43

age_at_initial_pathologic_diagnosis: 44

age_at_initial_pathologic_diagnosis: 44

age_at_initial_pathologic_diagnosis: 44

age_at_initial_pathologic_diagnosis: 44

age_at_initial_pathologic_diagnosis: 44

age_at_initial_pathologic_diagnosis: 45

age_at_initial_pathologic_diagnosis: 45

age_at_initial_pathologic_diagnosis: 45

age_at_initial_pathologic_diagnosis: 45

age_at_initial_pathologic_diagnosis: 45
age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-20-1685
batch: 18
Extract.Name: TCGA-20-1685-01A-01R-0564-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-04-1514
batch: 15
Extract.Name: TCGA-04-1514-01A-01R-0502-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-29-1711
batch: 18
Extract.Name: TCGA-29-1711-01A-01R-0564-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: Left
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-2077
batch: 22
Extract.Name: TCGA-23-2077-01A-01R-0668-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-1118
batch: 12
Extract.Name: TCGA-23-1118-01A-01R-0434-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-1021
batch: 12
Extract.Name: TCGA-23-1021-01B-01R-0434-01

age_at_initial_pathologic_diagnosis: 45
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-1026
batch: 12
Extract.Name: TCGA-23-1026-01B-01R-0434-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-61-2002
batch: 22
Extract.Name: TCGA-61-2002-01A-01R-0668-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-20-1687
batch: 18
Extract.Name: TCGA-20-1687-01A-01R-0564-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-24-1546
batch: 17
Extract.Name: TCGA-24-1546-01A-01R-0538-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-13-0801
batch: 9
Extract.Name: TCGA-13-0801-01A-01R-0362-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-24-2019
batch: 22

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-2079
batch: 22
Extract.Name: TCGA-23-2079-01A-01R-0668-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
unique_patient_ID: TCGA-04-1350
batch: 13
Extract.Name: TCGA-04-1350-01A-01R-0453-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: NA
bcr_patient_uuid: ...
unique_patient_ID: TCGA-30-1867
batch: 21
Extract.Name: TCGA-30-1867-01A-01R-0653-01

age_at_initial_pathologic_diagnosis: 46
anatomic_organ_subdivision: Right
bcr_patient_uuid: ...
unique_patient_ID: TCGA-23-1029
batch: 19
Extract.Name: TCGA-23-1029-01B-01R-0582-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-61-1724
batch: 21
Extract.Name: TCGA-61-1724-01A-01R-0653-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-04-1525
batch: 17
Extract.Name: TCGA-04-1525-01A-01R-0538-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-29-1777
batch: 19
Extract.Name: TCGA-29-1777-01A-01R-0582-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-31-1944
batch: 21
Extract.Name: TCGA-31-1944-01A-01R-0653-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-57-1584
batch: 17
Extract.Name: TCGA-57-1584-01A-01R-0538-01

age_at_initial_pathologic_diagnosis: 47
anatomic_organ_subdivision: Bilateral
bcr_patient_uuid: ...
unique_patient_ID: TCGA-29-1705
batch: 18
Extract.Name: TCGA-29-1705-01A-01R-0564-01
Duplicates:
Length Class Mode
578 character character

Value
An expression set