# Summary of the curatedPCaData-package

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	is is a summary of the MultiAssayExperiment-objects (MAE) offered for
curate	d prostate cancer datasets in the <i>curatedPCaData</i> -package version 0.6.24.
The fo	llowing objects are currently available in the package:
> util	ls::data(package="curatedPCaData")\$result[,c("Item", "Title")]
	Item
[1,]	"mae_abida"
[2,]	"mae_baca"
[3,]	"mae_barbieri"
[4,]	"mae_barwick"
[5,]	"mae_chandran"
[6,]	"mae_friedrich"
[7,]	"mae_hieronymus"
[8,]	"mae_icgcca"
[9,]	"mae_igc"
[10,]	"mae_kim"
[11,]	"mae_kunderfranco"
[12,]	"mae_ren"
[13,]	"mae_sun"
[14,]	"mae_taylor"
[15,]	"mae_tcga"
[16,]	"mae_true"
[17,]	"mae_wallace"
[18,]	"mae_wang"
[19,]	"mae_weiner"
	Title
[1,]	"Abida et al. MAE-object"
[2,]	"Baca et al."
	"Barbieri MAE-object"
	"Barwick MAE-object"
	"Chandran et al., Yu et al. MAE-object"
	"Friedrich et al. MAE-object"
[7,]	<del>-</del>
	"ICGC CA MAE-object"
	"IGC"
[10,]	

```
[11,] "Kunderfranco et al. MAE-object"
```

- [15,] "TCGA MAE-object"
- [16,] "True et al. MAE-object"
- [17,] "Wallace et al. MAE-object"
- [18,] ""
- [19,] "MultiAssayExperiment object containing gene expression (gex),"

They can be accessed via syntax  $curatedPCaData::mae\_name$  or by first calling library("curatedPCaData") and then calling directly the objects  $mae\_name$  in the workspace environment.

#### 1 Summary of all MAE-objects

Summary table of all MAE-objects and availability of most important variables.

#### 1.1 End-points

#### 1.1.1 Gleason grades

Gleason grade distribution over studies:

	5	6	7	8	9	10	Other	N/A
abida	_	29 (7%)	107 (24%)	69 (16%)	128 (29%)	24 (5%)	1 (0%)	86 (19%
baca	-	8 (14%)	35~(62%)	8 (14%)	4(7%)	-	0 (0%)	1(2%)
barbieri	-	13~(12%)	87 (78%)	8 (7%)	4 (4%)	-	0 (0%)	0 (0%)
barwick	2(1%)	36~(26%)	90~(65%)	5(4%)	6 (4%)	-	0 (0%)	0(0%)
chandran	6(1%)	46 (9%)	85 (17%)	21 (4%)	35~(7%)		3 (1%)	307 (61
friedrich	2(1%)	47 (18%)	54 (21%)	68~(27%)	43~(17%)	2(1%)	0 (0%)	39 (15%
hieronymus	-	16 (15%)	78 (75%)	4 (4%)	6 (6%)	-	0 (0%)	0 (0%)
icgcca	-	12 (6%)	58 (27%)	5 (2%)	-	-	0 (0%)	138 (65)
igc	-	27(33%)	40 (48%)	13~(16%)	-	-	0 (0%)	3(4%)
$_{ m kim}$	-	-	-	-	-	-	$266 \ (100\%)$	0 (0%)
kunderfranco	1 (1%)	9(13%)	32~(48%)	6(9%)	5 (7%)	-	0 (0%)	14 (21%
ren	-	-	-	-	-	-	65~(100%)	0(0%)
sun	-	-	-	-	-	-	0 (0%)	79 (100
taylor	-	53~(21%)	107 (43%)	18 (7%)	19~(8%)	-	21 (9%)	29 (12%
tcga	-	45 (9%)	244 (49%)	64~(13%)	137~(28%)	4(1%)	0 (0%)	0(0%)
true	-	4(14%)	20~(69%)	1(3%)	4 (14%)	-	0 (0%)	0(0%)
wallace	1 (1%)	17~(25%)	48 (70%)	1 (1%)	2(3%)	-	0 (0%)	0 (0%)
wang	-	-	-	-	-	-	0 (0%)	148 (10
weiner	_	_	_	_	_	_	0 (0%)	838 (10

#### 1.1.2 Overall Survival

Quantiles [min, 25%, median, 75%, max] for follow-up times and 0 (no event) and 1 (event) for survival:

<sup>[12,] &</sup>quot;Ren et al. MAE-object"

<sup>[13,] &</sup>quot;Sun et al. MAE-object"

<sup>[14,] &</sup>quot;Taylor et al. MAE-object"

	0 (no event)	1 (event)	N/A (event)	Time (d)	N/A (time)
abida	52 (12%)	84 (19%)	308 (69%)	[51,326,605,898,2104]	308 (69%)
baca	-	-	56 (100%)	-	56 (100%)
barbieri	-	-	112 (100%)	-	112 (100%)
barwick	-	-	139 (100%)	-	139 (100%)
chandran	-	-	503 (100%)	-	503 (100%)
friedrich	230 (90%)	25~(10%)	0 (0%)	[641,3005,3614,4301,6771]	91 (36%)
hieronymus	96 (92%)	8 (8%)	0 (0%)	[295, 1575, 2139, 2895, 3758]	0 (0%)
icgcca	198 (93%)	8 (4%)	7 (3%)	[1460,2190,2920,3650,4745]	1 (0%)
igc	-	-	83 (100%)	-	83 (100%)
$_{ m kim}$	-	-	$266 \ (100\%)$	-	266 (100%)
kunderfranco	-	-	67 (100%)	-	67 (100%)
ren	-	-	65 (100%)	-	65~(100%)
sun	-	-	79 (100%)	-	79 (100%)
taylor	-	-	247 (100%)	-	247 (100%)
tcga	484~(98%)	10 (2%)	0 (0%)	$[23,\!525,\!926,\!1466,\!5034]$	0 (0%)
true	-	-	29 (100%)	-	29 (100%)
wallace	-	-	69 (100%)	-	69 (100%)
wang	-	-	148 (100%)	-	148 (100%)
weiner	_	-	838 (100%)	-	838 (100%)

#### 1.1.3 Recurrence

Quantiles [min, 25%, median, 75%, max] for follow-up times and counts for 0 (no event) and 1 (event) for recurrence:

event) and i (e	vene, for recur	i cii cc.			
	0 (no event)	1 (event)	N/A (event)	Time (d)	N/A (time)
abida	-	-	444 (100%)	-	444 (100%)
baca	-	-	56 (100%)	-	56 (100%)
barbieri	-	-	112 (100%)	-	112 (100%)
barwick	106 (76%)	33~(24%)	0 (0%)	[92,274,732,1662,2928]	0 (0%)
chandran	-	-	503 (100%)	-	503 (100%)
friedrich	-	-	255 (100%)	-	255 (100%)
hieronymus	-	-	104 (100%)	-	104 (100%)
icgcca	-	-	213 (100%)	-	213 (100%)
igc	-	-	83 (100%)	-	83 (100%)
kim	-	-	266(100%)	-	266 (100%)
kunderfranco	-	-	67 (100%)	-	67 (100%)
ren	-	-	65 (100%)	-	65 (100%)
sun	40~(51%)	39 (49%)	0 (0%)	-	79 (100%)
taylor	137 (55%)	61 (25%)	49 (20%)	[3,717,1386,1974,4909]	49 (20%)
tcga	397 (80%)	91 (18%)	6 (1%)	[23,427,823,1376,5034]	6 (1%)
true	-	-	29 (100%)	-	29 (100%)
wallace	-	-	69 (100%)	-	69 (100%)
wang	-	-	148 (100%)	-	148 (100%)
weiner	-	-	838 (100%)	-	838 (100%)

#### 1.1.4 Other end-points

 $\rm TODO,$  for example the newer grading system available in Weiner et al.

#### 1.1.5 MAE-slots

The following MAE-slots are available in each study:

ne tonowing is	11111	5100	o arc	ava	11001	C 111	Cacii	buuu	<i>y</i> •		0								
	mae_abida	mae_baca	mae_barbieri	mae_barwick	mae_chandran	mae_friedrich	mae_hieronymus	mae_icgcca	mae_igc	mae_kim	mae_kunderfranco	mae_ren	mae_sun	mae_taylor	mae_tcga	mae_true	mae_wallace	mae_wang	mae_weiner
cibersort								X											
cna															X				
cna.gistic	X	X	$\mathbf{x}$									X							
$\operatorname{cna.logr}$							$\mathbf{X}$							X					
epic								X											X
gex					$\mathbf{x}$			X			$\mathbf{X}$				$\mathbf{x}$	$\mathbf{X}$			$\mathbf{x}$
gex.logq				$\mathbf{x}$		$\mathbf{x}$													
gex.relz	X		X									X							
gex.rma									X	X			X	X			X	X	
mcp								X											X
$\operatorname{mut}$	$\mathbf{x}$		$\mathbf{x}$									X		$\mathbf{X}$	$\mathbf{x}$				
quantiseq								X											$\mathbf{x}$
scores								X											$\mathbf{x}$
xcell								X											X

#### 1.1.6 MAE-slot classes

The classes for each slot for datasets

abida

cna.gistic: matrix, array
gex.relz: matrix, array
mut: matrix, array

baca

 ${\tt cna.gistic:\ matrix,\ array}$ 

barbieri

cna.gistic: matrix, array
gex.relz: matrix, array
mut: matrix, array

barwick

gex.logq: matrix, array

chandran

gex: matrix, array

 ${\tt friedrich}$ 

gex.logq: matrix, array

hieronymus

cna.logr: matrix, array

```
icgcca
 gex: matrix, array
xcell: matrix, array
epic: matrix, array
 quantiseq: matrix, array
mcp: matrix, array
 scores: matrix, array
cibersort: matrix, array
gex.rma: matrix, array
kim
gex.rma: matrix, array
kunderfranco
gex: matrix, array
ren
cna.gistic: matrix, array
gex.relz: matrix, array
mut: matrix, array
sun
gex.rma: matrix, array
taylor
cna.logr: matrix, array
gex.rma: matrix, array
mut: matrix, array
tcga
cna: matrix, array
gex: matrix, array
mut: matrix, array
osf.cibersort: matrix, array
osf.epic: matrix, array
osf.mcp: matrix, array
 osf.quantiseq: matrix, array
 osf.xcell: matrix, array
true
gex: matrix, array
wallace
gex.rma: matrix, array
wang
gex.rma: matrix, array
```

weiner

epic: matrix, array

gex: matrix, array
mcp: matrix, array
quantiseq: matrix, array
xcell: matrix, array
scores: matrix, array

### 2 Individual MAE colData-summaries

Looping over and summarizing the datasets:

#### 2.1 abida

	Instances	Missingness
overall_survival_status	NA: 308 (69%);1: 84 (19%);0: 52 (12%)	n=308 (69%)
days_to_overall_survival	[51.1,326.39,604.69,897.52,2104.14], NA	n=308 (69%)
	n=308	
age_at_initial_diagnosis	[38,56,61,66,89], NA n=51	n=51 (11%)
year_diagnosis	N/A	n=444 (100%)
gleason_grade	[6,7,8,9,11], NA n=86	n=86 (19%)
gleason_major	N/A	n=444 (100%)
gleason_minor	N/A	n=444 (100%)
source_of_gleason	N/A	n=444 (100%)
grade_group	N/A	n=444 (100%)
T_pathological	N/A	n=444 (100%)
$T_substage\_pathological$	N/A	n=444 (100%)
T_clinical	N/A	n=444 (100%)
T_substage_clinical	N/A	n=444 (100%)
ERG_fusion_CNA	N/A	n=444 (100%)
ERG_fusion_IHC	N/A	n=444 (100%)
ERG_fusion_GEX	0: 316 (71%);1: 128 (29%)	-
disease_specific_recurrence_status	N/A	n=444 (100%)
days_to_disease_specific_recurrence	N/A	n=444 (100%)
metastasis_occurrence_status	1: 444 (100%)	-
days_to_metastatic_occurrence	N/A	n=444 (100%)
psa	[0.2,5.7,14.04,52.84,3118], NA n=91	-
race	N/A	n=444 (100%)
smoking_status	N/A	n=444 (100%)
extraprostatic_extension	N/A	n=444 (100%)
perineural_invasion	N/A	n=444 (100%)
seminal_vesicle_invasion	N/A	n=444 (100%)
angiolymphatic_invasion	N/A	n=444 (100%)
androgen_ablation	N/A	n=444 (100%)
capsule	N/A	n=444 (100%)
M_stage	N/A	n=444 (100%)
M_substage	N/A	n=444 (100%)
other_patient	N/A	n=444 (100%)
sample_type	metastatic: $444 (100\%)$	-
genomic_alterations	N/A	n=444 (100%)

tumor_margins_positive	N/A	n=444 (100%)
tissue_source	N/A	n=444 (100%)
metastatic_site	lymph_node: 167 (38%);bone: 160	-
	(36%); liver: $64 (14%)$ ;	
microdissected	N/A	n=444 (100%)
frozen_ffpe	N/A	n=444 (100%)
other_feature	N/A	n=444 (100%)
batch	N/A	n=444 (100%)
other_sample	N/A	n=444 (100%)
tumor_purity_pathology	N/A	n=444 (100%)
tumor_purity_demixt	N/A	n=444 (100%)
tumor_purity_absolute	N/A	n=444 (100%)
zone_of_origin	N/A	n=444 (100%)
zone_of_origin_estimated	N/A	n=444 (100%)
mutational_signatures	N/A	n=444 (100%)
neoantigen_load	N/A	n=444 (100%)
AR_activity	N/A	n=444 (100%)
prolaris	N/A	n=444 (100%)
decipher	N/A	n=444 (100%)
oncotypedx	N/A	n=444 (100%)
N_stage	N/A	n=444 (100%)
N_substage	N/A	n=444 (100%)
therapy_radiation_initial	N/A	n=444 (100%)
therapy_radiation_salvage	N/A	n=444 (100%)
therapy_surgery_initial	N/A	n=444 (100%)
therapy_hormonal_initial	N/A	n=444 (100%)
other_treatment	Standard of care abiraterone: 95	=
	(21%);Standard of care enzalutamide: 76	
	(17%);MLN8237: 40 (9%);	
psa_category	N/A	n=444 (100%)
genome_altered	[0,0.22,0.36,0.57,0.99], NA n=1	n=1 (0%)

## 2.2 baca

	Instances	Missingness
overall_survival_status	N/A	n=56 (100%)
days_to_overall_survival	N/A	n=56 (100%)
age_at_initial_diagnosis	[46, 56, 62.5, 67.25, 76]	-
year_diagnosis	N/A	n=56 (100%)
gleason_grade	[6,7,7,7,9], NA n=1	n=1 (2%)
gleason_major	3: 32 (57%);4: 23 (41%);NA: 1 (2%)	n=1 (2%)
gleason_minor	[3,3,4,4,5], NA n=1	n=1 (2%)
source_of_gleason	N/A	n=56 (100%)
grade_group	3+4: 23 $(41%)$ ; $4+3$ : 12 $(21%)$ ; >=8: 11	n=2 (4%)
	(20%);	
$T_{-}$ pathological	[2,2,3,3,4], NA n=1	n=1 (2%)
T_substage_pathological	a: 27 (48%);c: 21 (38%);b: 6 (11%);	n=1 (2%)
T_clinical	N/A	n=56 (100%)

T_substage_clinical	N/A	n=56 (100%)
ERG_fusion_CNA	N/A	n=56 (100%)
ERG_fusion_IHC	N/A	n=56 (100%)
ERG_fusion_GEX	N/A	n=56 (100%)
disease_specific_recurrence_status	N/A	n=56 (100%)
days_to_disease_specific_recurrence	N/A	n=56 (100%)
metastasis_occurrence_status	N/A	n=56 (100%)
days_to_metastatic_occurrence	N/A	n=56 (100%)
psa	[2.7,5.7,7.3,12.55,43.2], NA n=1	n=1 (2%)
race	N/A	n=56 (100%)
smoking_status	N/A	n=56 (100%)
extraprostatic_extension	N/A	n=56 (100%)
perineural_invasion	N/A	n=56 (100%)
seminal_vesicle_invasion	N/A	n=56 (100%)
angiolymphatic_invasion	N/A	n=56 (100%)
androgen_ablation	N/A	n=56 (100%)
capsule	N/A	n=56 (100%)
M_stage	N/A	n=56 (100%)
$M_{substage}$	N/A	n=56 (100%)
other_patient	N/A	n=56 (100%)
sample_type	Primary: 55 (98%);Metastasis: 1 (2%)	-
genomic_alterations	N/A	n=56 (100%)
tumor_margins_positive	N/A	n=56 (100%)
tissue_source	N/A	n=56 (100%)
metastatic_site	N/A	n=56 (100%)
microdissected	N/A	n=56 (100%)
frozen_ffpe	N/A	n=56 (100%)
other_feature	N/A	n=56 (100%)
batch	N/A	n=56 (100%)
other_sample	N/A	n=56 (100%)
tumor_purity_pathology	N/A	n=56 (100%)
tumor_purity_demixt	N/A	n=56 (100%)
tumor_purity_absolute	N/A	n=56 (100%)
zone_of_origin	N/A	n=56 (100%)
zone_of_origin_estimated	N/A	n=56 (100%)
mutational_signatures	N/A	n=56 (100%)
neoantigen_load	N/A	n=56 (100%)
AR_activity	N/A	n=56 (100%)
prolaris	N/A	n=56 (100%)
decipher	N/A	n=56 (100%)
oncotypedx Notago	N/A N/A	n=56 (100%)
N_stage	N/A N/A	n=56 (100%)
N_substage therapy_radiation_initial	N/A N/A	n=56 (100%)
therapy_radiation_initial therapy_radiation_salvage	N/A N/A	n=56 (100%) n=56 (100%)
therapy_radiation_sarvage therapy_surgery_initial	N/A N/A	n=56 (100%)
therapy_surgery_initial therapy_hormonal_initial	N/A N/A	n=56 (100%)
other_treatment	N/A N/A	n=56 (100%)
psa_category	N/A N/A	n=56 (100%)
psa_category	11/11	11-90 (100\0)

genome\_altered N/A  $\mid$  n=56 (100%)

### 2.3 barbieri

	Instances	Missingness
overall_survival_status	N/A	n=112 (100%)
days_to_overall_survival	N/A	n=112 (100%)
age_at_initial_diagnosis	[34, 58, 62.5, 68, 77]	-
year_diagnosis	N/A	n=112 (100%)
gleason_grade	[6, 7, 7, 7, 9]	-
gleason_major	3: 71 (63%);4: 41 (37%)	-
gleason_minor	4: 66 (59%);3: 42 (38%);5: 4 (4%)	-
source_of_gleason	N/A	n=112 (100%)
grade_group	3+4: 58 (52%); $4+3$ : 29 (26%); $<=6$ : 13	- '
	(12%);	
$T_{-}$ pathological	N/A	n=112 (100%)
$T_substage\_pathological$	N/A	n=112 (100%)
T_clinical	3: 68 (61%);2: 44 (39%)	-
T_substage_clinical	a: 53 (47%);c: 39 (35%);b: 20 (18%)	-
ERG_fusion_CNA	N/A	n=112 (100%)
ERG_fusion_IHC	N/A	n=112 (100%)
ERG_fusion_GEX	N/A	n=112 (100%)
disease_specific_recurrence_status	N/A	n=112 (100%)
days_to_disease_specific_recurrence	N/A	n=112 (100%)
metastasis_occurrence_status	N/A	n=112 (100%)
days_to_metastatic_occurrence	N/A	n=112 (100%)
psa	[2.7,5.55,7.8,10.9,31.5], NA n=1	n=1 (1%)
race	N/A	n=112 (100%)
smoking_status	N/A	n=112 (100%)
extraprostatic_extension	N/A	n=112 (100%)
perineural_invasion	N/A	n=112 (100%)
seminal_vesicle_invasion	N/A	n=112 (100%)
angiolymphatic_invasion	N/A	n=112 (100%)
androgen_ablation	N/A	n=112 (100%)
capsule	N/A	n=112 (100%)
$M_{stage}$	N/A	n=112 (100%)
M_substage	N/A	n=112 (100%)
other_patient	N/A	n=112 (100%)
sample_type	N/A	n=112 (100%)
genomic_alterations	N/A	n=112 (100%)
tumor_margins_positive	N/A	n=112 (100%)
tissue_source	N/A	n=112 (100%)
metastatic_site	N/A	n=112 (100%)
microdissected	N/A	n=112 (100%)
frozen_ffpe	N/A	n=112 (100%)
other_feature	N/A	n=112 (100%)
batch	N/A	n=112 (100%)
other_sample	N/A	n=112 (100%)

tumor_purity_pathology	N/A	n=112 (100%)
tumor_purity_demixt	Feature not found in MAE	_` _
tumor_purity_absolute	N/A	n=112 (100%)
zone_of_origin	N/A	n=112 (100%)
zone_of_origin_estimated	N/A	n=112 (100%)
mutational_signatures	N/A	n=112 (100%)
neoantigen_load	N/A	n=112 (100%)
AR_activity	N/A	n=112 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=112 (100%)
N_substage	N/A	n=112 (100%)
therapy_radiation_initial	N/A	n=112 (100%)
therapy_radiation_salvage	N/A	n=112 (100%)
therapy_surgery_initial	N/A	n=112 (100%)
therapy_hormonal_initial	N/A	n=112 (100%)
other_treatment	N/A	n=112 (100%)
psa_category	N/A	n=112 (100%)
genome_altered	Feature not found in MAE	

#### 2.4 barwick

	Instances	Missingness
overall_survival_status	N/A	n=139 (100%)
days_to_overall_survival	N/A	n=139 (100%)
age_at_initial_diagnosis	[31, 58, 62, 67, 74]	-
year_diagnosis	N/A	n=139 (100%)
gleason_grade	[5, 6, 7, 7, 9]	-
gleason_major	N/A	n=139 (100%)
gleason_minor	N/A	n=139 (100%)
source_of_gleason	N/A	n=139 (100%)
grade_group	N/A	n=139 (100%)
T_pathological	2: 90 (65%);1: 38 (27%);3: 11 (8%)	-
$T_substage\_pathological$	N/A	n=139 (100%)
T_clinical	N/A	n=139 (100%)
T_substage_clinical	N/A	n=139 (100%)
ERG_fusion_CNA	N/A	n=139 (100%)
ERG_fusion_IHC	N/A	n=139 (100%)
ERG_fusion_GEX	0: 70 (50%);1: 69 (50%)	-
disease_specific_recurrence_status	0: 106 (76%);1: 33 (24%)	-
days_to_disease_specific_recurrence	[92, 274, 732, 1662, 2928]	-
metastasis_occurrence_status	N/A	n=139 (100%)
days_to_metastatic_occurrence	N/A	n=139 (100%)
psa	[2.16, 4.89, 7.27, 10, 42.99]	-
race	N/A	n=139 (100%)
smoking_status	N/A	n=139 (100%)
extraprostatic_extension	N/A	n=139 (100%)

perinet	ıral_invasion	N/A	n=139 (100%)
seminal_v	vesicle_invasion	N/A	n=139 (100%)
angiolym	phatic_invasion	N/A	n=139 (100%)
androg	gen_ablation	N/A	n=139 (100%)
c	apsule	N/A	n=139 (100%)
N	$_{ m Lstage}$	N/A	n=139 (100%)
$M_{-}$	substage	N/A	n=139 (100%)
othe	er_patient	N/A	n=139 (100%)
san	ple_type	N/A	n=139 (100%)
genomi	$c_{alterations}$	N/A	n=139 (100%)
tumor_m	argins_positive	1: 77 (55%);0: 62 (45%)	-
tissı	ue_source	prostatectomy: 139 (100%)	-
meta	static_site	N/A	n=139 (100%)
micr	odissected	N/A	n=139 (100%)
fro	zen_ffpe	N/A	n=139 (100%)
othe	er_feature	N/A	n=139 (100%)
	batch	N/A	n=139 (100%)
othe	er_sample	N/A	n=139 (100%)
tumor_pu	rity_pathology	N/A	n=139 (100%)
tumor_p	ourity_demixt	N/A	n=139 (100%)
	urity_absolute	N/A	n=139 (100%)
zone	e_of_origin	N/A	n=139 (100%)
	rigin_estimated	N/A	n=139 (100%)
	nal_signatures	N/A	n=139 (100%)
neoar	ntigen_load	N/A	n=139 (100%)
AR	_activity	N/A	n=139 (100%)
_	rolaris	N/A	n=139 (100%)
	ecipher	N/A	n=139 (100%)
	cotypedx	N/A	n=139 (100%)
	$I_{stage}$	N/A	n=139 (100%)
	substage	N/A	n=139 (100%)
	adiation_initial	N/A	n=139 (100%)
therapy_ra	$adiation\_salvage$	N/A	n=139 (100%)
	surgery_initial	N/A	n=139 (100%)
	$ormonal\_initial$	N/A	n=139 (100%)
1	_treatment	N/A	n=139 (100%)
	_category	N/A	n=139 (100%)
genor	me_altered	N/A	n=139 (100%)

#### 2.5 chandran

	Instances	Missingness
overall_survival_status	N/A	n=503 (100%)
days_to_overall_survival	N/A	n=503 (100%)
age_at_initial_diagnosis	[13,20,24,48,63], NA n=452	n=452 (90%)
year_diagnosis	N/A	n=503 (100%)
gleason_grade	[4,6,7,8,9], NA n=307	n=307 (61%)
gleason_major	N/A	n=503 (100%)

1	DT / A	F00 (100%)
gleason_minor	N/A	n=503 (100%)
source_of_gleason	N/A	n=503 (100%)
grade_group	N/A	n=503 (100%)
$T_{-}$ pathological	[2,2,3,3,4], NA n=307	n=307 (61%)
T_substage_pathological	NA: 310 (62%);b: 102 (20%);a: 91 (18%)	n=310 (62%)
T_clinical	N/A	n=503 (100%)
T_substage_clinical	N/A	n=503 (100%)
ERG_fusion_CNA	N/A	n=503 (100%)
ERG_fusion_IHC	N/A	n=503 (100%)
ERG_fusion_GEX	N/A	n=503 (100%)
disease_specific_recurrence_status	N/A	n=503 (100%)
days_to_disease_specific_recurrence	N/A	n=503 (100%)
metastasis_occurrence_status	N/A	n=503 (100%)
days_to_metastatic_occurrence	N/A	n=503 (100%)
psa	N/A	n=503 (100%)
race	NA: 452 (90%);caucasian: 45	n=452 (90%)
	(9%);african_american: 6 (1%)	,
smoking_status	N/A	n=503 (100%)
extraprostatic_extension	N/A	n=503 (100%)
perineural_invasion	N/A	n=503 (100%)
seminal_vesicle_invasion	N/A	n=503 (100%)
angiolymphatic_invasion	N/A	n=503 (100%)
androgen_ablation	N/A	n=503 (100%)
capsule	N/A	n=503 (100%)
M_stage	N/A	n=503 (100%)
M_substage	N/A	n=503 (100%)
other_patient	N/A	n=503 (100%)
sample_type	primary: 196 (39%);adjacentnormal: 181	-
r Ur	(36%);metastatic: 75 (15%);	
genomic_alterations	N/A	n=503 (100%)
tumor_margins_positive	N/A	n=503 (100%)
tissue_source	N/A	n=503 (100%)
metastatic_site	NA: 428 (85%);lymph_node: 45 (9%);liver: 15	n=428 (85%)
	(3%);	( )
microdissected	N/A	n=503 (100%)
frozen_ffpe	N/A	n=503 (100%)
other_feature	N/A	n=503 (100%)
batch	N/A	n=503 (100%)
other_sample	N/A	n=503 (100%)
tumor_purity_pathology	N/A	n=503 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=503 (100%)
zone_of_origin	N/A	n=503 (100%)
zone_of_origin_estimated	N/A	n=503 (100%)
mutational_signatures	N/A	n=503 (100%) n=503 (100%)
neoantigen_load	N/A	n=503 (100%) n=503 (100%)
AR_activity	N/A	n=503 (100%) n=503 (100%)
prolaris	Feature not found in MAE	
decipher	Feature not found in MAE	_
oncotypedx	Feature not found in MAE	_
oncotypeax	readure not found in MAE	-

N_stage	N/A	n=503 (100%)
$N_{substage}$	N/A	n=503 (100%)
therapy_radiation_initial	N/A	n=503 (100%)
therapy_radiation_salvage	N/A	n=503 (100%)
therapy_surgery_initial	N/A	n=503 (100%)
therapy_hormonal_initial	N/A	n=503 (100%)
other_treatment	N/A	n=503 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

### 2.6 friedrich

	Instances	Missingness
overall_survival_status	0: 230 (90%);1: 25 (10%)	-
days_to_overall_survival	[641,3004.75,3614.5,4301,6771], NA n=91	n=91 (36%)
age_at_initial_diagnosis	N/A	n=255 (100%)
year_diagnosis	N/A	n=255 (100%)
gleason_grade	[5,7,8,8,10], NA n=39	n=39 (15%)
gleason_major	N/A	n=255 (100%)
gleason_minor	N/A	n=255 (100%)
source_of_gleason	N/A	n=255 (100%)
grade_group	N/A	n=255 (100%)
T_pathological	N/A	n=255 (100%)
T_substage_pathological	N/A	n=255 (100%)
$T_{-}$ clinical	N/A	n=255 (100%)
T_substage_clinical	N/A	n=255 (100%)
ERG_fusion_CNA	N/A	n=255 (100%)
ERG_fusion_IHC	N/A	n=255 (100%)
ERG_fusion_GEX	N/A	n=255 (100%)
disease_specific_recurrence_status	N/A	n=255 (100%)
days_to_disease_specific_recurrence	N/A	n=255 (100%)
metastasis_occurrence_status	N/A	n=255 (100%)
days_to_metastatic_occurrence	N/A	n=255 (100%)
psa	N/A	n=255 (100%)
race	caucasian: $255 (100\%)$	-
$smoking\_status$	N/A	n=255 (100%)
extraprostatic_extension	N/A	n=255 (100%)
perineural_invasion	N/A	n=255 (100%)
seminal_vesicle_invasion	N/A	n=255 (100%)
angiolymphatic_invasion	N/A	n=255 (100%)
androgen_ablation	N/A	n=255 (100%)
capsule	N/A	n=255 (100%)
M_stage	N/A	n=255 (100%)
$M_{\text{-}}$ substage	N/A	n=255 (100%)
other_patient	N/A	n=255 (100%)
$sample\_type$	primary: 164 (64%);adjacentnormal: 52	-
	(20%);BPH: 39 (15%)	
genomic_alterations	N/A	n=255 (100%)

tumor_margins_positive	N/A	n=255 (100%)
tissue_source	prostatectomy: 216 (85%);cystoprostatec-	-
	tomy: 28 (11%);TURP: 11 (4%)	
metastatic_site	Feature not found in MAE	-
microdissected	1: 255 (100%)	-
frozen_ffpe	frozen: 255 (100%)	-
other_feature	N/A	n=255 (100%)
batch	N/A	n=255 (100%)
other_sample	N/A	n=255 (100%)
tumor_purity_pathology	N/A	n=255 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=255 (100%)
zone_of_origin	N/A	n=255 (100%)
zone_of_origin_estimated	N/A	n=255 (100%)
mutational_signatures	N/A	n=255 (100%)
neoantigen_load	N/A	n=255 (100%)
AR_activity	N/A	n=255 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=255 (100%)
N_substage	N/A	n=255 (100%)
therapy_radiation_initial	N/A	n=255 (100%)
therapy_radiation_salvage	N/A	n=255 (100%)
therapy_surgery_initial	N/A	n=255 (100%)
therapy_hormonal_initial	N/A	n=255 (100%)
other_treatment	N/A	n=255 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

## 2.7 hieronymus

	Instances	Missingness
overall_survival_status	0: 96 (92%);1: 8 (8%)	-
days_to_overall_survival	[294.83, 1575.33, 2139.07, 2895.21, 3757.6]	-
age_at_initial_diagnosis	[41.07, 53.25, 58.19, 63.06, 75.63]	-
year_diagnosis	N/A	n=104 (100%)
gleason_grade	[6, 7, 7, 7, 9]	-
gleason_major	3: 72 (69%);4: 30 (29%);5: 2 (2%)	-
gleason_minor	4: 60 (58%);3: 39 (38%);5: 5 (5%)	-
source_of_gleason	prostatectomy: 104 (100%)	-
grade_group	3+4: $56 (54%); 4+3$ : $22 (21%); <=6$ : $16$	n=4 (4%)
	(15%);	
T_pathological	2: 54 (52%);3: 49 (47%);4: 1 (1%)	-
$T_substage\_pathological$	b: 54 (52%);a: 44 (42%);c: 4 (4%);	n=2 (2%)
T_clinical	1: 61 (59%);2: 41 (39%);3: 2 (2%)	-
T_substage_clinical	c: 67 (64%);a: 18 (17%);b: 18 (17%);	n=1 (1%)
ERG_fusion_CNA	N/A	n=104 (100%)

	DT / A	104 (10007)
ERG_fusion_IHC	N/A	n=104 (100%)
ERG_fusion_GEX	N/A	n=104 (100%)
disease_specific_recurrence_status	N/A	n=104 (100%)
days_to_disease_specific_recurrence	N/A	n=104 (100%)
metastasis_occurrence_status	0: 101 (97%);1: 3 (3%)	-
days_to_metastatic_occurrence	[121.25, 1455.26, 1989.62, 2752.45, 3694.65]	- (404)
psa	[1,4.35,5.3,8,56.24], NA n=1	n=1 (1%)
race	N/A	n=104 (100%)
smoking_status	N/A	n=104 (100%)
extraprostatic_extension	0: 52 (50%);1: 52 (50%)	-
perineural_invasion	N/A	n=104 (100%)
seminal_vesicle_invasion	0: 90 (87%);1: 14 (13%)	-
angiolymphatic_invasion	N/A	n=104 (100%)
androgen_ablation	N/A	n=104 (100%)
capsule	N/A	n=104 (100%)
M_stage	N/A	n=104 (100%)
M_substage	N/A	n=104 (100%)
other_patient	N/A	n=104 (100%)
sample_type	N/A	n=104 (100%)
genomic_alterations	N/A	n=104 (100%)
tumor_margins_positive	N/A	n=104 (100%)
tissue_source	N/A	n=104 (100%)
metastatic_site	Feature not found in MAE	-
microdissected	N/A	n=104 (100%)
frozen_ffpe	N/A	n=104 (100%)
other_feature	N/A	n=104 (100%)
batch	N/A	n=104 (100%)
other_sample	N/A	n=104 (100%)
tumor_purity_pathology	N/A	n=104 (100%)
tumor_purity_demixt	Feature not found in MAE	104 (10007)
tumor_purity_absolute	N/A	n=104 (100%)
zone_of_origin	N/A	n=104 (100%)
zone_of_origin_estimated	N/A	n=104 (100%)
mutational_signatures	N/A	n=104 (100%)
neoantigen_load	N/A	n=104 (100%)
AR_activity	N/A	n=104 (100%)
prolaris	Feature not found in MAE	_
decipher	Feature not found in MAE	_
oncotypedx	Feature not found in MAE	104 (10007)
N_stage	N/A	n=104 (100%)
N_substage	N/A	n=104 (100%)
therapy_radiation_initial	N/A	n=104 (100%)
therapy_radiation_salvage	N/A	n=104 (100%)
therapy_surgery_initial	N/A	n=104 (100%)
therapy_hormonal_initial	N/A	n=104 (100%)
other_treatment	N/A Footure not found in MAE	n=104 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	_

## 2.8 icgcca

	Instances	Missingness
overall_survival_status	0: 198 (93%);1: 8 (4%);NA: 7 (3%)	n=7 (3%)
days_to_overall_survival	[1460,2190,2920,3650,4745], NA n=1	n=1 (0%)
age_at_initial_diagnosis	[42, 58, 62, 66, 74]	_` ´
year_diagnosis	N/A	n=213 (100%)
gleason_grade	[6,7,7,7,8], NA n=138	n=138 (65%)
gleason_major	NA: 138 (65%);3: 49 (23%);4: 26 (12%)	n=138 (65%)
gleason_minor	NA: 138 (65%);4: 42 (20%);3: 33 (15%)	n=138 (65%)
source_of_gleason	N/A	n=213 (100%)
grade_group	NA: 138 (65%);3+4: 37 (17%);4+3: 21 (10%);	n=138 (65%)
	•••	, , ,
T_pathological	N/A	n=213 (100%)
T_substage_pathological	N/A	n=213 (100%)
$T_{clinical}$	NA: 104 (49%);1: 56 (26%);2: 53 (25%)	n=104 (49%)
T_substage_clinical	NA: 104 (49%);c: 55 (26%);a: 30 (14%);	n=104 (49%)
ERG_fusion_CNA	N/A	n=213 (100%)
ERG_fusion_IHC	N/A	n=213 (100%)
ERG_fusion_GEX	N/A	n=213 (100%)
disease_specific_recurrence_status	N/A	n=213 (100%)
days_to_disease_specific_recurrence	N/A	n=213 (100%)
metastasis_occurrence_status	N/A	n=213 (100%)
days_to_metastatic_occurrence	N/A	n=213 (100%)
psa	N/A	n=213 (100%)
race	N/A	n=213 (100%)
smoking_status	N/A	n=213 (100%)
extraprostatic_extension	N/A	n=213 (100%)
perineural_invasion	N/A	n=213 (100%)
seminal_vesicle_invasion	N/A	n=213 (100%)
angiolymphatic_invasion	N/A	n=213 (100%)
androgen_ablation	N/A	n=213 (100%)
capsule	N/A	n=213 (100%)
$M_{-}$ stage	N/A	n=213 (100%)
M_substage	N/A	n=213 (100%)
other_patient	N/A	n=213 (100%)
sample_type	N/A	n=213 (100%)
genomic_alterations	N/A	n=213 (100%)
tumor_margins_positive	N/A	n=213 (100%)
tissue_source	N/A	n=213 (100%)
metastatic_site	Feature not found in MAE	-
microdissected	N/A	n=213 (100%)
frozen_ffpe	N/A	n=213 (100%)
other_feature	N/A	n=213 (100%)
batch	N/A	n=213 (100%)
other_sample	N/A	n=213 (100%)
tumor_purity_pathology	N/A	n=213 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=213 (100%)

zone_of_origin	N/A	n=213 (100%)
zone_of_origin_estimated	N/A	n=213 (100%)
mutational_signatures	N/A	n=213 (100%)
neoantigen_load	N/A	n=213 (100%)
AR_activity	N/A	n=213 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=213 (100%)
N_substage	N/A	n=213 (100%)
therapy_radiation_initial	N/A	n=213 (100%)
therapy_radiation_salvage	N/A	n=213 (100%)
therapy_surgery_initial	N/A	n=213 (100%)
therapy_hormonal_initial	N/A	n=213 (100%)
other_treatment	N/A	n=213 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	_

## 2.9 igc

	Instances	Missingness
overall_survival_status	N/A	n=83 (100%)
days_to_overall_survival	N/A	n=83 (100%)
age_at_initial_diagnosis	NA: 83 (100%)	_
year_diagnosis	N/A	n=83 (100%)
gleason_grade	[6,6,7,7,8], NA n=3	n=3 (4%)
gleason_major	N/A	n=83 (100%)
gleason_minor	N/A	n=83 (100%)
source_of_gleason	N/A	n=83 (100%)
grade_group	N/A	n=83 (100%)
T_pathological	[2,2,2,3,4], NA n=26	n=26 (31%)
T_substage_pathological	c: 33 (40%);NA: 29 (35%);a: 11 (13%);	n=29 (35%)
$T_{-}$ clinical	NA: 59 (71%);2: 20 (24%);3: 4 (5%)	n=59 (71%)
T_substage_clinical	NA: 59 (71%);c: 15 (18%);a: 6 (7%);	n=59 (71%)
ERG_fusion_CNA	N/A	n=83 (100%)
ERG_fusion_IHC	N/A	n=83 (100%)
$ERG\_fusion\_GEX$	N/A	n=83 (100%)
disease_specific_recurrence_status	N/A	n=83 (100%)
days_to_disease_specific_recurrence	N/A	n=83 (100%)
metastasis_occurrence_status	N/A	n=83 (100%)
days_to_metastatic_occurrence	N/A	n=83 (100%)
psa	N/A	n=83 (100%)
race	Caucasian: 74 (89%); African-American: 7	_
	(8%); American Indian: 1 $(1%)$ ;	
$\operatorname{smoking\_status}$	1: 42 (51%);0: 41 (49%)	-
$extraprostatic\_extension$	N/A	n=83 (100%)
perineural_invasion	N/A	n=83 (100%)
seminal_vesicle_invasion	N/A	n=83 (100%)

angiolymphatic_invasion	N/A	n=83 (100%)
androgen_ablation	N/A	n=83 (100%)
capsule	N/A	n=83 (100%)
M_stage	N/A	n=83 (100%)
M_substage	N/A	n=83 (100%)
other_patient	N/A	n=83 (100%)
sample_type	N/A	n=83 (100%)
genomic_alterations	N/A	n=83 (100%)
tumor_margins_positive	N/A	n=83 (100%)
tissue_source	N/A	n=83 (100%)
metastatic_site	N/A	n=83 (100%)
microdissected	N/A	n=83 (100%)
frozen_ffpe	N/A	n=83 (100%)
other_feature	N/A	n=83 (100%)
batch	N/A	n=83 (100%)
other_sample	N/A	n=83 (100%)
tumor_purity_pathology	N/A	n=83 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=83 (100%)
zone_of_origin	N/A	n=83 (100%)
zone_of_origin_estimated	N/A	n=83 (100%)
mutational_signatures	N/A	n=83 (100%)
neoantigen_load	N/A	n=83 (100%)
AR_activity	N/A	n=83 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=83 (100%)
N_substage	N/A	n=83 (100%)
therapy_radiation_initial	N/A	n=83 (100%)
therapy_radiation_salvage	N/A	n=83 (100%)
therapy_surgery_initial	N/A	n=83 (100%)
therapy_hormonal_initial	N/A	n=83 (100%)
$other\_treatment$	N/A	n=83 (100%)
psa_category	Elevated: 74 (89%);Normal: 6 (7%);NA: 3 (4%)	n=3 (4%)
genome_altered	Feature not found in MAE	

## 2.10 kim

	Instances	Missingness
overall_survival_status	N/A	n=266 (100%)
days_to_overall_survival	N/A	n=266 (100%)
age_at_initial_diagnosis	[43.41, 57.59, 61.53, 66.91, 76]	-
year_diagnosis	N/A	n=266 (100%)
gleason_grade	NA: 266 (100%)	-
gleason_major	3: 264 (99%);NA: 2 (1%)	-
gleason_minor	[2,3,3,3,4], NA n=2	-
source_of_gleason	N/A	n=266 (100%)

grade_group
T_substage_pathological       N/A       n=266 (100%)         T_clinical       1: 225 (85%);2: 41 (15%)       -         T_substage_clinical       c: 266 (100%)       -         ERG_fusion_CNA       N/A       n=266 (100%)         ERG_fusion_IHC       N/A       n=266 (100%)         ERG_fusion_GEX       N/A       n=266 (100%)         disease_specific_recurrence_status       N/A       n=266 (100%)         days_to_disease_specific_recurrence       N/A       n=266 (100%)
T_clinical       1: 225 (85%);2: 41 (15%)       -         T_substage_clinical       c: 266 (100%)       -         ERG_fusion_CNA       N/A       n=266 (100%)         ERG_fusion_IHC       N/A       n=266 (100%)         ERG_fusion_GEX       N/A       n=266 (100%)         disease_specific_recurrence_status       N/A       n=266 (100%)         days_to_disease_specific_recurrence       N/A       n=266 (100%)
T_substage_clinical         c: 266 (100%)           ERG_fusion_CNA         N/A         n=266 (100%)           ERG_fusion_IHC         N/A         n=266 (100%)           ERG_fusion_GEX         N/A         n=266 (100%)           disease_specific_recurrence_status         N/A         n=266 (100%)           days_to_disease_specific_recurrence         N/A         n=266 (100%)
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days_to_disease_specific_recurrence N/A n=266 (100%)
111000000000000000000000000000000000000
days_to_metastatic_occurrence $N/A$ $n=266 (100\%)$
psa [0, 4.16, 5.4, 7.19, 20]
race $N/A$ $n=266 (100\%)$
smoking_status $N/A$ $n=266 (100\%)$
extraprostatic_extension $N/A$ $n=266 (100\%)$
perineural_invasion $N/A$ $n=266 (100\%)$
seminal_vesicle_invasion $N/A$ $n=266 (100\%)$
angiolymphatic_invasion $N/A$ $n=266 (100\%)$
androgen_ablation $N/A$ $n=266 (100\%)$
capsule $N/A$ $n=266 (100\%)$
$M_{\text{stage}}$ $N/A$ $n=266 (100\%)$
$M_{\text{substage}}$ N/A $n=266 (100\%)$
other_patient $N/A$ $n=266 (100\%)$
sample_type $N/A$ $n=266 (100\%)$
genomic_alterations $N/A$ $n=266 (100\%)$
tumor_margins_positive $N/A$ $n=266 (100\%)$
tissue_source prostate cancer biopsy: 266 (100%)
metastatic_site Feature not found in MAE -
microdissected $N/A$ $n=266 (100\%)$
frozen_ffpe $N/A$ $n=266 (100\%)$
other_feature $N/A$ $n=266 (100\%)$
batch $N/A$ $n=266 (100\%)$
other_sample $N/A$ $n=266 (100\%)$
tumor_purity_pathology $N/A$ $n=266 (100\%)$
tumor_purity_demixt Feature not found in MAE -
tumor_purity_absolute N/A n=266 (100%)
zone_of_origin $N/A$ $n=266 (100\%)$
zone_of_origin_estimated $N/A$ $n=266 (100\%)$
mutational_signatures $N/A$ $n=266 (100\%)$
neoantigen_load $N/A$ $n=266 (100\%)$
AR_activity N/A $n=266 (100\%)$
prolaris Feature not found in MAE -
decipher Feature not found in MAE -
oncotypedx Feature not found in MAE -
N_stage N/A n=266 (100%)
N_substage
therapy_radiation_initial $N/A$ $n=266 (100\%)$
therapy_radiation_salvage N/A n=266 (100%)
therapy_surgery_initial $N/A$ $n=266 (100\%)$

therapy_hormonal_initial	N/A	n=266 (100%)
other_treatment	N/A	n=266 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

#### 2.11 kunderfranco

	Instances	Missingness
overall_survival_status	N/A	n=67 (100%)
days_to_overall_survival	N/A	n=67 (100%)
age_at_initial_diagnosis	[50,62,67,70,74], NA n=14	n=14 (21%)
year_diagnosis	N/A	n=67 (100%)
gleason_grade	[5,7,7,7,9], NA n=14	n=14 (21%)
gleason_major	[2,3,3,4,5], NA n=14	n=14 (21%)
gleason_minor	[3,4,4,4,5], NA n=14	n=14 (21%)
source_of_gleason	prostatectomy: 53 (79%);biopsy: 14 (21%)	-
grade_group	3+4: 29 (43%);NA: 14 (21%);>=8: 11 (16%);	-
		,
$T_{-}$ pathological	N/A	n=67 (100%)
$T_substage\_pathological$	N/A	n=67 (100%)
T_clinical	N/A	n=67 (100%)
T_substage_clinical	N/A	n=67 (100%)
ERG_fusion_CNA	N/A	n=67 (100%)
ERG_fusion_IHC	N/A	n=67 (100%)
ERG_fusion_GEX	N/A	n=67 (100%)
disease_specific_recurrence_status	N/A	n=67 (100%)
days_to_disease_specific_recurrence	N/A	n=67 (100%)
metastasis_occurrence_status	N/A	n=67 (100%)
days_to_metastatic_occurrence	N/A	n=67 (100%)
psa	N/A	n=67 (100%)
race	N/A	n=67 (100%)
smoking_status	N/A	n=67 (100%)
extraprostatic_extension	N/A	n=67 (100%)
perineural_invasion	N/A	n=67 (100%)
seminal_vesicle_invasion	N/A	n=67 (100%)
angiolymphatic_invasion	N/A	n=67 (100%)
androgen_ablation	N/A	n=67 (100%)
capsule	N/A	n=67 (100%)
M_stage	N/A	n=67 (100%)
M_substage	N/A	n=67 (100%)
other_patient	N/A	n=67 (100%)
sample_type	primary: 53 (79%);BPH: 14 (21%)	- (1000)
genomic_alterations	N/A	n=67 (100%)
tumor_margins_positive	N/A	n=67 (100%)
tissue_source	prostatectomy: 53 (79%);biopsy: 14 (21%)	-
metastatic_site	N/A	n=67 (100%)
microdissected	0: 67 (100%)	-
frozen_ffpe	FFPE: 67 (100%)	-

1 0	3T / A	l a= (100M)
other_feature	N/A	n=67 (100%)
batch	N/A	n=67 (100%)
other_sample	N/A	n=67 (100%)
tumor_purity_pathology	N/A	n=67 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=67 (100%)
zone_of_origin	N/A	n=67 (100%)
zone_of_origin_estimated	N/A	n=67 (100%)
mutational_signatures	N/A	n=67 (100%)
neoantigen_load	N/A	n=67 (100%)
AR_activity	N/A	n=67 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
$N_{stage}$	N/A	n=67 (100%)
$N_{\text{substage}}$	N/A	n=67 (100%)
therapy_radiation_initial	N/A	n=67 (100%)
therapy_radiation_salvage	N/A	n=67 (100%)
therapy_surgery_initial	N/A	n=67 (100%)
therapy_hormonal_initial	N/A	n=67 (100%)
other_treatment	N/A	n=67 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

### 2.12 ren

	Instances	Missingness
overall_survival_status	N/A	n=65 (100%)
days_to_overall_survival	N/A	n=65 (100%)
age_at_initial_diagnosis	[49,64.25,69,74,80], NA n=7	n=7 (11%)
year_diagnosis	N/A	n=65 (100%)
gleason_grade	NA: 65 (100%)	-
gleason_major	3: 29 (45%);4: 27 (42%);5: 9 (14%)	-
gleason_minor	4: 39 (60%);3: 18 (28%);5: 8 (12%)	-
source_of_gleason	N/A	n=65 (100%)
grade_group	3+4: 23 $(35%)$ ;>=8: 14 $(22%)$ ;4+3: 13	n=10 (15%)
	(20%);	
T_pathological	N/A	n=65 (100%)
T_substage_pathological	N/A	n=65 (100%)
T_clinical	[2,2,2,3,4], NA n=1	n=1 (2%)
T_substage_clinical	c: 38 (58%);b: 11 (17%);a: 10 (15%);	n=6 (9%)
ERG_fusion_CNA	N/A	n=65 (100%)
ERG_fusion_IHC	N/A	n=65 (100%)
ERG_fusion_GEX	N/A	n=65 (100%)
disease_specific_recurrence_status	N/A	n=65 (100%)
days_to_disease_specific_recurrence	N/A	n=65 (100%)
metastasis_occurrence_status	N/A	n=65 (100%)
days_to_metastatic_occurrence	N/A	n=65 (100%)

I	[F 00 10 F0 1F 0 00 4 0F1] NIA 0	0 (904)
psa	[5.28,10.73,17.3,33.4,271], NA n=2	n=2 (3%)
race	N/A	n=65 (100%)
smoking_status	N/A	n=65 (100%)
extraprostatic_extension	N/A	n=65 (100%)
perineural_invasion	N/A	n=65 (100%)
seminal_vesicle_invasion	N/A	n=65 (100%)
angiolymphatic_invasion	N/A	n=65 (100%)
androgen_ablation	N/A	n=65 (100%)
capsule	N/A	n=65 (100%)
M_stage	N/A	n=65 (100%)
M_substage	N/A	n=65 (100%)
other_patient	N/A	n=65 (100%)
sample_type	N/A	n=65 (100%)
genomic_alterations	N/A	n=65 (100%)
tumor_margins_positive	N/A	n=65 (100%)
tissue_source	N/A	n=65 (100%)
metastatic_site	Feature not found in MAE	-
microdissected	N/A	n=65 (100%)
frozen_ffpe	N/A	n=65 (100%)
other_feature	N/A	n=65 (100%)
batch	N/A	n=65 (100%)
other_sample	N/A	n=65 (100%)
tumor_purity_pathology	N/A	n=65 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=65 (100%)
zone_of_origin	N/A	n=65 (100%)
zone_of_origin_estimated	N/A	n=65 (100%)
mutational_signatures	N/A	n=65 (100%)
neoantigen_load	N/A	n=65 (100%)
AR_activity	N/A	n=65 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
$N_{stage}$	N/A	n=65 (100%)
N_substage	N/A	n=65 (100%)
therapy_radiation_initial	N/A	n=65 (100%)
therapy_radiation_salvage	N/A	n=65 (100%)
therapy_surgery_initial	N/A	n=65 (100%)
therapy_hormonal_initial	N/A	n=65 (100%)
other_treatment	N/A	n=65 (100%)
psa_category	Feature not found in MAE	- 1
genome_altered	Feature not found in MAE	-

## 2.13 sun

	Instances	Missingness
overall_survival_status	N/A	n=79 (100%)
days_to_overall_survival	N/A	n=79 (100%)

$age\_at\_initial\_diagnosis$	N/A	n=79 (100%)
year_diagnosis	N/A	n=79 (100%)
gleason_grade	N/A	n=79 (100%)
${\it gleason\_major}$	N/A	n=79 (100%)
gleason_minor	N/A	n=79 (100%)
$source\_of\_gleason$	N/A	n=79 (100%)
$\operatorname{grade\_group}$	N/A	n=79 (100%)
$T_{-}$ pathological	N/A	n=79 (100%)
$T_substage\_pathological$	N/A	n=79 (100%)
$T_{-}$ clinical	N/A	n=79 (100%)
$T_substage\_clinical$	N/A	n=79 (100%)
ERG_fusion_CNA	N/A	n=79 (100%)
ERG_fusion_IHC	N/A	n=79 (100%)
ERG_fusion_GEX	N/A	n=79 (100%)
disease_specific_recurrence_status	0: 40 (51%);1: 39 (49%)	-
$days\_to\_disease\_specific\_recurrence$	N/A	n=79 (100%)
metastasis_occurrence_status	N/A	n=79 (100%)
days_to_metastatic_occurrence	N/A	n=79 (100%)
psa	N/A	n=79 (100%)
race	N/A	n=79 (100%)
$smoking\_status$	N/A	n=79 (100%)
$extraprostatic\_extension$	N/A	n=79 (100%)
perineural_invasion	N/A	n=79 (100%)
seminal_vesicle_invasion	N/A	n=79 (100%)
angiolymphatic_invasion	N/A	n=79 (100%)
$androgen\_ablation$	N/A	n=79 (100%)
capsule	N/A	n=79 (100%)
$M_{stage}$	N/A	n=79 (100%)
$M_substage$	N/A	n=79 (100%)
$other\_patient$	N/A	n=79 (100%)
$sample\_type$	primary: 79 (100%)	-
$genomic\_alterations$	N/A	n=79 (100%)
$tumor\_margins\_positive$	N/A	n=79 (100%)
$tissue\_source$	N/A	n=79 (100%)
$metastatic\_site$	Feature not found in MAE	-
microdissected	N/A	n=79 (100%)
frozen_ffpe	N/A	n=79 (100%)
$other\_feature$	N/A	n=79 (100%)
batch	N/A	n=79 (100%)
$other\_sample$	N/A	n=79 (100%)
$tumor\_purity\_pathology$	N/A	n=79 (100%)
$tumor\_purity\_demixt$	Feature not found in MAE	-
$tumor\_purity\_absolute$	N/A	n=79 (100%)
$zone\_of\_origin$	N/A	n=79 (100%)
$zone\_of\_origin\_estimated$	N/A	n=79 (100%)
$mutational\_signatures$	N/A	n=79 (100%)
$neoantigen\_load$	N/A	n=79 (100%)
AR_activity	N/A	n=79 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-

oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=79 (100%)
N_substage	N/A	n=79 (100%)
therapy_radiation_initial	N/A	n=79 (100%)
therapy_radiation_salvage	N/A	n=79 (100%)
therapy_surgery_initial	N/A	n=79 (100%)
therapy_hormonal_initial	N/A	n=79 (100%)
other_treatment	N/A	n=79 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

## **2.14** taylor

	Instances	Missingness
overall_survival_status	N/A	n=247 (100%)
days_to_overall_survival	N/A	n=247 (100%)
age_at_initial_diagnosis	N/A	n=247 (100%)
year_diagnosis	N/A	n=247 (100%)
gleason_grade	[6,6,7,7,9], NA n=50	n=29 (12%)
gleason_major	[3,3,3,4,5], NA n=50	n=50 (20%)
gleason_minor	[3,3,4,4,5], NA n=50	n=50 (20%)
source_of_gleason	N/A	n=247 (100%)
grade_group	3+4: 73 (30%); <=6: 53 (21%); NA: 50 (20%);	n=50 (20%)
$T_{-}$ pathological	[2,2,2,3,4], NA n=47	n=47 (19%)
$T_substage\_pathological$	b: 86 (35%);NA: 67 (27%);a: 55 (22%);	n=67 (27%)
T_clinical	[1,1,2,2,4], NA n=38	n=38 (15%)
T_substage_clinical	c: 127 (51%);NA: 46 (19%);a: 40 (16%);	n=46 (19%)
ERG_fusion_CNA	0: 164 (66%);1: 54 (22%);NA: 29 (12%)	n=29 (12%)
ERG_fusion_IHC	N/A	n=247 (100%)
ERG_fusion_GEX	NA: 97 (39%);0: 76 (31%);1: 74 (30%)	n=97 (39%)
disease_specific_recurrence_status	0: 137 (55%);1: 61 (25%);NA: 49 (20%)	n=49 (20%)
days_to_disease_specific_recurrence	[3,717.25,1386.5,1974.25,4909], NA n=49	n=49 (20%)
metastasis_occurrence_status	N/A	n=247 (100%)
days_to_metastatic_occurrence	N/A	n=247 (100%)
psa	N/A	n=247 (100%)
race	N/A	n=247 (100%)
smoking_status	N/A	n=247 (100%)
extraprostatic_extension	N/A	n=247 (100%)
perineural_invasion	N/A	n=247 (100%)
seminal_vesicle_invasion	N/A	n=247 (100%)
angiolymphatic_invasion	N/A	n=247 (100%)
androgen_ablation	N/A	n=247 (100%)
capsule	N/A	n=247 (100%)
$M_{-}$ stage	N/A	n=247 (100%)
$M\_substage$	N/A	n=247 (100%)
other_patient	N/A	n=247 (100%)

sample_type	primary: 181 (73%);metastasis: 37 (15%);normal: 29 (12%)	-
genomic_alterations	N/A	n=247 (100%)
tumor_margins_positive	N/A	n=247 (100%)
tissue_source	N/A	n=247 (100%)
metastatic_site	N/A	n=247 (100%)
microdissected	N/A	n=247 (100%)
frozen_ffpe	N/A	n=247 (100%)
other_feature	N/A	n=247 (100%)
batch	N/A	n=247 (100%)
other_sample	N/A	n=247 (100%)
tumor_purity_pathology	N/A	n=247 (100%)
tumor_purity_demixt	N/A	n=247 (100%)
tumor_purity_absolute	N/A	n=247 (100%)
zone_of_origin	N/A	n=247 (100%)
zone_of_origin_estimated	N/A	n=247 (100%)
mutational_signatures	N/A	n=247 (100%)
neoantigen_load	N/A	n=247 (100%)
AR_activity	N/A	n=247 (100%)
prolaris	N/A	n=247 (100%)
decipher	N/A	n=247 (100%)
oncotypedx	N/A	n=247 (100%)
N_stage	N/A	n=247 (100%)
$N_{substage}$	N/A	n=247 (100%)
therapy_radiation_initial	N/A	n=247 (100%)
therapy_radiation_salvage	N/A	n=247 (100%)
therapy_surgery_initial	N/A	n=247 (100%)
therapy_hormonal_initial	N/A	n=247 (100%)
other_treatment	N/A	n=247 (100%)
psa_category	N/A	n=247 (100%)
genome_altered	[0,0.01,0.04,0.14,0.78], NA n=53	n=53 (21%)

# 2.15 tcga

	Instances	Missingness
overall_survival_status	0: 484 (98%);1: 10 (2%)	-
days_to_overall_survival	[23.18, 524.9, 925.68, 1466.06, 5034.03]	-
age_at_initial_diagnosis	[41, 56, 61, 66, 78]	-
year_diagnosis	[2000,2009,2011,2012,2013], NA n=31	n=31~(6%)
gleason_grade	[6, 7, 7, 9, 10]	-
gleason_major	[2, 3, 4, 4, 5]	-
gleason_minor	4: 234 (47%);3: 150 (30%);5: 110 (22%)	-
source_of_gleason	biopsy: 494 (100%)	-
grade_group	>=8: 205 (41%);3+4: 145 (29%);4+3: 99	-
	(20%);	
T_pathological	[2,2,3,3,4], NA n=7	n=7 (1%)
$T_substage\_pathological$	a: 171 (35%);c: 164 (33%);b: 142 (29%);	n=17 (3%)
T_clinical	[1,1,2,2,4], NA n=91	n=91 (18%)

ı	$T_{substage\_clinical}$	c: 224 (45%);NA: 106 (21%);a: 93 (19%);	n=106 (21%)
	ERG_fusion_CNA	N/A	n=494 (100%)
	ERG_fusion_IHC	N/A	n=494 (100%)
	ERG_fusion_GEX	N/A	n=494 (100%)
	disease_specific_recurrence_status	0: 397 (80%);1: 91 (18%);NA: 6 (1%)	n=6 (1%)
	days_to_disease_specific_recurrence	[23.18,427.38,823.04,1375.86,5034.03], NA	n=6 (1%)
	day beto-discusces poemice recurrence	n=6	11-0 (170)
	metastasis_occurrence_status	N/A	n=494 (100%)
	days_to_metastatic_occurrence	N/A	n=494 (100%)
	psa	[0,0.03,0.1,0.11,323], NA n=57	n=57 (12%)
	race	NA: 338 (68%);caucasian: 147	-
		(30%);african_american: 7 (1%);	
	smoking_status	N/A	n=494 (100%)
	extraprostatic_extension	N/A	n=494 (100%)
	perineural_invasion	N/A	n=494 (100%)
	seminal_vesicle_invasion	N/A	n=494 (100%)
	angiolymphatic_invasion	N/A	n=494 (100%)
	androgen_ablation	N/A	n=494 (100%)
	capsule	N/A	n=494 (100%)
	$M_{stage}$	0: 452 (91%);NA: 39 (8%);1: 3 (1%)	n=39(8%)
	$M_{substage}$	: 491 (99%);a: 1 (0%);b: 1 (0%);	- ` ′
	$other\_patient$	N/A	n=494 (100%)
	$\operatorname{sample\_type}$	Primary: 493 (100%); Metastasis: 1 (0%)	-
	$genomic\_alterations$	N/A	n=494 (100%)
	tumor_margins_positive	N/A	n=494 (100%)
	$tissue\_source$	N/A	n=494 (100%)
	$metastatic\_site$	N/A	n=494 (100%)
	microdissected	N/A	n=494 (100%)
	frozen_ffpe	NA: 493 (100%);: 1 (0%)	-
	$other\_feature$	N/A	n=494 (100%)
	batch	N/A	n=494 (100%)
	$other\_sample$	N/A	n=494 (100%)
	$tumor\_purity\_pathology$	N/A	n=494 (100%)
	tumor_purity_demixt	Feature not found in MAE	-
	tumor_purity_absolute	N/A	n=494 (100%)
	${ m zone\_of\_origin}$	NA: 218 (44%); peripheral: 137 (28%); mixed:	-
		127 (26%);	40.4 (10007)
	zone_of_origin_estimated	N/A	n=494 (100%)
	mutational_signatures	N/A	n=494 (100%)
	neoantigen_load	N/A	n=494 (100%)
	AR_activity	N/A Feature not found in MAE	n=494 (100%)
	prolaris	Feature not found in MAE	-
	$rac{ m decipher}{ m oncotypedx}$	Feature not found in MAE	-
	oncotypeax N_stage	0: 343 (69%);1: 79 (16%);NA: 72 (15%)	n=72 (15%)
	N_substage	N/A	n=494 (100%)
	therapy_radiation_initial	0: 246 (50%);NA: 208 (42%);1: 40 (8%)	n=494 (100%) n=208 (42%)
	therapy_radiation_salvage	N/A	n=494 (100%)
	therapy_surgery_initial	N/A	n=494 (100%)
	therapy_hormonal_initial	N/A	n=494 (100%)
	T /	ı	- (-00,0)

other_treatment	0: 244 (49%);NA: 207 (42%);1: 43 (9%)	n=207 (42%)
psa_category	N/A	n=494 (100%)
genome_altered	[0,0.02,0.06,0.12,0.58], NA n=6	n=6 (1%)

### 2.16 true

	Instances	Missingness
overall_survival_status	N/A	n=29 (100%)
days_to_overall_survival	N/A	n=29 (100%)
age_at_initial_diagnosis	N/A	n=29 (100%)
year_diagnosis	N/A	n=29 (100%)
gleason_grade	[6, 7, 7, 7, 9]	-
gleason_major	3: 15 (52%);4: 12 (41%);5: 2 (7%)	_
gleason_minor	4: 14 (48%);3: 13 (45%);5: 2 (7%)	_
source_of_gleason	N/A	n=29 (100%)
grade_group	4: 11 (38%);3: 10 (34%);5: 6 (21%);	n=2 (7%)
T_pathological	N/A	n=29 (100%)
T_substage_pathological	N/A	n=29 (100%)
T_clinical	N/A	n=29 (100%)
T_substage_clinical	N/A	n=29 (100%)
ERG_fusion_CNA	N/A	n=29 (100%)
ERG_fusion_IHC	N/A	n=29 (100%)
ERG_fusion_GEX	N/A	n=29 (100%)
disease_specific_recurrence_status	N/A	n=29 (100%)
days_to_disease_specific_recurrence	N/A	n=29 (100%)
metastasis_occurrence_status	N/A	n=29 (100%)
days_to_metastatic_occurrence	N/A	n=29 (100%)
psa	[1,5,6.35,8.62,15.9], NA n=1	n=1 (3%)
race	N/A	n=29 (100%)
smoking_status	N/A	n=29 (100%)
extraprostatic_extension	N/A	n=29 (100%)
perineural_invasion	N/A	n=29 (100%)
seminal_vesicle_invasion	N/A	n=29 (100%)
angiolymphatic_invasion	N/A	n=29 (100%)
androgen_ablation	N/A	n=29 (100%)
capsule	N/A	n=29 (100%)
M_stage	N/A	n=29 (100%)
M_substage	N/A	n=29 (100%)
other_patient	N/A	n=29 (100%)
sample_type	N/A	n=29 (100%)
genomic_alterations	N/A	n=29 (100%)
tumor_margins_positive	0: 18 (62%);1: 11 (38%)	-
tissue_source	N/A	n=29 (100%)
metastatic_site	N/A	n=29 (100%)
microdissected	1: 29 (100%)	-
frozen_ffpe	N/A	n=29 (100%)

other_feature	$\label{eq:age:60-69} Age:60-69 Volume:8 LCM\_Gleason\_Pattern:5:\\ 2                                  $	-
batch	N/A	n=29 (100%)
other_sample	N/A	n=29 (100%)
tumor_purity_pathology	N/A	n=29 (100%)
tumor_purity_demixt	Feature not found in MAE	- /
tumor_purity_absolute	N/A	n=29 (100%)
zone_of_origin	N/A	n=29 (100%)
zone_of_origin_estimated	N/A	n=29 (100%)
mutational_signatures	N/A	n=29 (100%)
neoantigen_load	N/A	n=29 (100%)
AR_activity	N/A	n=29 (100%)
prolaris	Feature not found in MAE	- ′
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=29 (100%)
$N_{\text{substage}}$	N/A	n=29 (100%)
therapy_radiation_initial	0: 29 (100%)	-
therapy_radiation_salvage	0: 29 (100%)	-
therapy_surgery_initial	N/A	n=29 (100%)
therapy_hormonal_initial	0: 29 (100%)	-
$other\_treatment$	NA: 21 (72%);fish_oil: 2 (7%);selenium: 2	n=21 (72%)
	(7%);	
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

### 2.17 wallace

	Instances	Missingness
overall_survival_status	N/A	n=69 (100%)
days_to_overall_survival	N/A	n=69 (100%)
age_at_initial_diagnosis	N/A	n=69 (100%)
year_diagnosis	$\dot{N/A}$	n=69 (100%)
gleason_grade	[5, 6, 7, 7, 9]	- '
gleason_major	N/A	n=69 (100%)
gleason_minor	N/A	n=69 (100%)
source_of_gleason	N/A	n=69 (100%)
grade_group	N/A	n=69 (100%)
T_pathological	N/A	n=69 (100%)
T_substage_pathological	N/A	n=69 (100%)
T_clinical	N/A	n=69 (100%)
T_substage_clinical	N/A	n=69 (100%)
ERG_fusion_CNA	N/A	n=69 (100%)
ERG_fusion_IHC	N/A	n=69 (100%)

ERG_fusion_GEX disease_specific_recurrence_status days_to_disease_specific_recurrence metastasis_occurrence_status days_to_metastatic_occurrence psa race	N/A N/A N/A N/A N/A N/A N/A N/A (1007) 36 (52%);african_american: 33	n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%)
smoking_status extraprostatic_extension perineural_invasion seminal_vesicle_invasion angiolymphatic_invasion androgen_ablation capsule M_stage M_substage	(48%) 1: 30 (43%);NA: 22 (32%);0: 17 (25%) 0: 44 (64%);1: 24 (35%);NA: 1 (1%) 1: 59 (86%);0: 9 (13%);NA: 1 (1%) 0: 58 (84%);1: 10 (14%);NA: 1 (1%) 0: 63 (91%);1: 5 (7%);NA: 1 (1%) N/A N/A N/A N/A N/A	n=22 (32%) n=1 (1%) n=1 (1%) n=1 (1%) n=1 (1%) n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%)
other_patient sample_type genomic_alterations tumor_margins_positive tissue_source metastatic_site microdissected	N/A primary: 63 (91%);adjacentnormal: 6 (9%) N/A 0: 41 (59%);1: 26 (38%);NA: 2 (3%) N/A N/A 0: 69 (100%)	n=69 (100%) n=69 (100%) n=69 (100%) n=2 (3%) n=69 (100%) n=69 (100%)
frozen_ffpe other_feature batch other_sample tumor_purity_pathology tumor_purity_demixt tumor_purity_absolute zone_of_origin	frozen: 69 (100%) N/A N/A N/A N/A N/A N/A Feature not found in MAE N/A N/A	n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%) - n=69 (100%) n=69 (100%)
zone_of_origin_estimated mutational_signatures neoantigen_load AR_activity prolaris decipher oncotypedx	N/A N/A N/A N/A N/A N/A Feature not found in MAE Feature not found in MAE Feature not found in MAE	n=69 (100%) n=69 (100%) n=69 (100%) n=69 (100%) -
N_stage N_substage therapy_radiation_initial therapy_radiation_salvage therapy_surgery_initial therapy_hormonal_initial other_treatment psa_category genome_altered	N/A N/A 0: 69 (100%) 0: 69 (100%) 0: 69 (100%) 0: 69 (100%) N/A Feature not found in MAE Feature not found in MAE	n=69 (100%) n=69 (100%) - - - n=69 (100%)

## 2.18 wang

	Instances	Missingness
overall_survival_status	N/A	n=148 (100%
days_to_overall_survival	N/A	n=148 (100%
age_at_initial_diagnosis	N/A	n=148 (100%)
year_diagnosis	$N^{'}/A$	n=148 (100%)
gleason_grade	N/A	n=148 (100%)
gleason_major	N/A	n=148 (100%
gleason_minor	N/A	n=148 (100%
source_of_gleason	N/A	n=148 (100%
grade_group	N/A	n=148 (100%
$T_{\text{pathological}}$	N/A	n=148 (100%
T_substage_pathological	N/A	n=148 (100%)
T_clinical	N/A	n=148 (100%)
T_substage_clinical	N/A	n=148 (100%)
ERG_fusion_CNA	N/A	n=148 (100%)
ERG_fusion_IHC	N/A	n=148 (100%)
ERG_fusion_GEX	N/A	n=148 (100%)
disease_specific_recurrence_status	N/A	n=148 (100%)
days_to_disease_specific_recurrence	N/A N/A	n=148 (100%)
metastasis_occurrence_status		n=148 (100%)
	N/A	,
days_to_metastatic_occurrence	N/A	n=148 (100%
psa	N/A	n=148 (100%
race	N/A	n=148 (100%
smoking_status	N/A	n=148 (100%
extraprostatic_extension	N/A	n=148 (100%
perineural_invasion	N/A	n=148 (100%
seminal_vesicle_invasion	N/A	n=148 (100%
angiolymphatic_invasion	N/A	n=148 (100%
androgen_ablation	N/A	n=148 (100%
capsule	N/A	n=148 (100%
$M_{stage}$	N/A	n=148 (100%
$M_{substage}$	N/A	n=148 (100%
$other\_patient$	N/A	n=148 (100%
$sample\_type$	N/A	n=148 (100%
$genomic\_alterations$	N/A	n=148 (100%
tumor_margins_positive	N/A	n=148 (100%
$tissue\_source$	N/A	n=148 (100%
$metastatic\_site$	N/A	n=148 (100%
microdissected	N/A	n=148 (100%
$frozen\_ffpe$	N/A	n=148 (100%
$other\_feature$	N/A	n=148 (100%
batch	N/A	n=148 (100%
$other\_sample$	N/A	n=148 (100%
$tumor\_purity\_pathology$	N/A	n=148 (100%
$tumor\_purity\_demixt$	Feature not found in MAE	-
$tumor\_purity\_absolute$	N/A	n=148 (100%
zone_of_origin	N/A	n=148 (100%)

zone_of_origin_estimated	N/A	n=148 (100%)
mutational_signatures	N/A	n=148 (100%)
neoantigen_load	N/A	n=148 (100%)
AR_activity	N/A	n=148 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	_
oncotypedx	Feature not found in MAE	_
N_stage	N/A	n=148 (100%)
N_substage	N/A	n=148 (100%)
therapy_radiation_initial	N/A	n=148 (100%)
therapy_radiation_salvage	N/A	n=148 (100%)
therapy_surgery_initial	N/A	n=148 (100%)
therapy_hormonal_initial	N/A	n=148 (100%)
other_treatment	N/A	n=148 (100%)
psa_category	N/A	n=148 (100%)
genome_altered	Feature not found in MAE	-

## **2.19** weiner

	Instances	Missingness
overall_survival_status	N/A	n=838 (100%)
days_to_overall_survival	N/A	n=838 (100%)
age_at_initial_diagnosis	[39, 57, 61, 65, 76]	-
year_diagnosis	N/A	n=838 (100%)
gleason_grade	N/A	n=838 (100%)
gleason_major	N/A	n=838 (100%)
gleason_minor	N/A	n=838 (100%)
source_of_gleason	N/A	n=838 (100%)
$\operatorname{grade\_group}$	3+4: $419 (50%); 4+3$ : $183 (22%); >=8$ : $171$	-
	(20%);	
T_pathological	N/A	n=838 (100%)
T_substage_pathological	N/A	n=838 (100%)
T_clinical	N/A	n=838 (100%)
T_substage_clinical	N/A	n=838 (100%)
ERG_fusion_CNA	N/A	n=838 (100%)
ERG_fusion_IHC	N/A	n=838 (100%)
ERG_fusion_GEX	N/A	n=838 (100%)
disease_specific_recurrence_status	N/A	n=838 (100%)
days_to_disease_specific_recurrence	N/A	n=838 (100%)
metastasis_occurrence_status	N/A	n=838 (100%)
days_to_metastatic_occurrence	N/A	n=838 (100%)
psa	[0,5.2,7.4,11.42,83.44], NA n=18	n=18 (2%)
race	NA: $538$ $(64\%)$ ; african_american: $150$	n=538 (64%)
	(18%); caucasian: 150 $(18%)$	
smoking_status	N/A	n=838 (100%)
extraprostatic_extension	N/A	n=838 (100%)
perineural_invasion	N/A	n=838 (100%)
seminal_vesicle_invasion	N/A	n=838 (100%)
angiolymphatic_invasion	N/A	n=838 (100%)

androgen_ablation	N/A	n=838 (100%)
capsule	N/A	n=838 (100%)
M_stage	N/A	n=838 (100%)
M_substage	N/A	n=838 (100%)
other_patient	N/A	n=838 (100%)
$sample\_type$	primary: 838 (100%)	-
genomic_alterations	N/A	n=838 (100%)
tumor_margins_positive	N/A	n=838 (100%)
tissue_source	prostatectomy: $838 (100\%)$	-
metastatic_site	N/A	n=838 (100%)
microdissected	0: 838 (100%)	-
frozen_ffpe	FFPE: 838 (100%)	-
other_feature	N/A	n=838 (100%)
batch	Durham Veterans Affairs Hospital: 538	-
	(64%); Johns Hopkins Medical Institute: 300	
	(36%)	
other_sample	N/A	n=838 (100%)
tumor_purity_pathology	N/A	n=838 (100%)
tumor_purity_demixt	Feature not found in MAE	-
tumor_purity_absolute	N/A	n=838 (100%)
zone_of_origin	N/A	n=838 (100%)
zone_of_origin_estimated	N/A	n=838 (100%)
mutational_signatures	N/A	n=838 (100%)
neoantigen_load	N/A	n=838 (100%)
AR_activity	N/A	n=838 (100%)
prolaris	Feature not found in MAE	-
decipher	Feature not found in MAE	-
oncotypedx	Feature not found in MAE	-
N_stage	N/A	n=838 (100%)
N_substage	N/A	n=838 (100%)
therapy_radiation_initial	0: 838 (100%)	-
therapy_radiation_salvage	0: 838 (100%)	-
therapy_surgery_initial	0: 838 (100%)	-
therapy_hormonal_initial	0: 838 (100%)	-
other_treatment	N/A	n=838 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

#### Omics sample overlap within MAE-objects 3

null device

## 3.1 abida

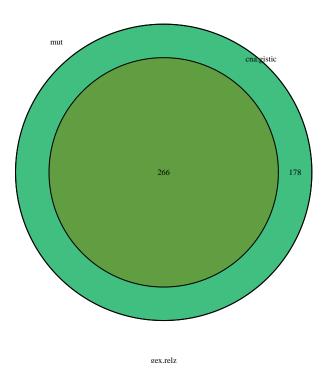


Figure 1: Omics sample overlap in  $\mathrm{mae}_a bida$ 

## 3.2 baca

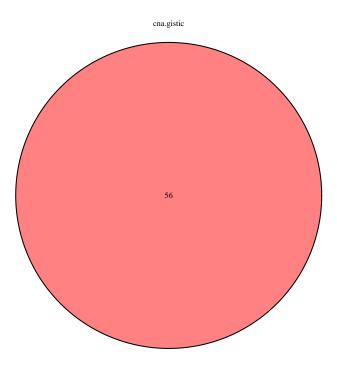


Figure 2: Omics sample overlap in  $\mathrm{mae}_baca$ 

## 3.3 barbieri

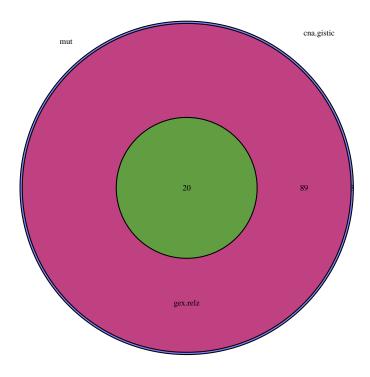


Figure 3: Omics sample overlap in  $mae_barbieri$ 

## 3.4 barwick



Figure 4: Omics sample overlap in  ${\rm mae}_b arwick$ 

## 3.5 chandran

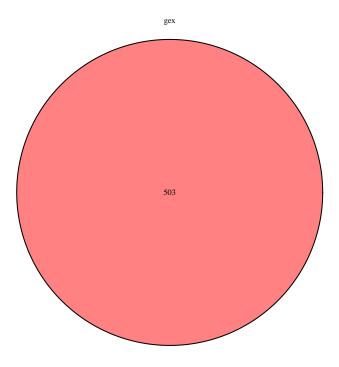


Figure 5: Omics sample overlap in  ${\rm mae}_c handran$ 

## 3.6 friedrich

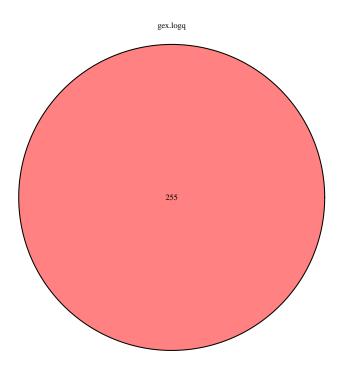


Figure 6: Omics sample overlap in  $\mathrm{mae}_f riedrich$ 

## 3.7 hieronymus



Figure 7: Omics sample overlap in  $mae_hieronymus$ 

## 3.8 icgcca

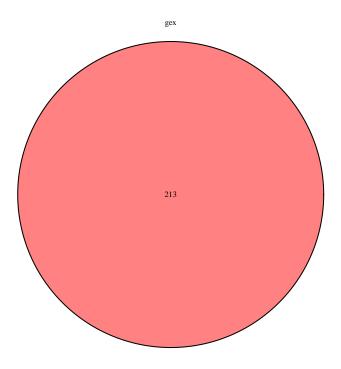


Figure 8: Omics sample overlap in  ${\rm mae}_i cgcca$ 

## 3.9 igc



Figure 9: Omics sample overlap in  $\mathrm{mae}_i gc$ 

## **3.10** kim

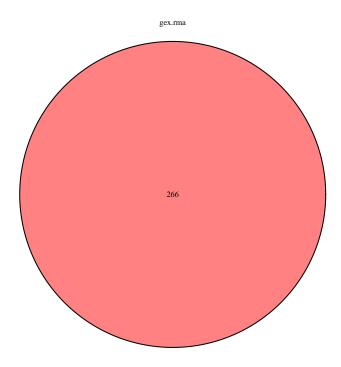


Figure 10: Omics sample overlap in  ${\rm mae}_k im$ 

## 3.11 kunderfranco

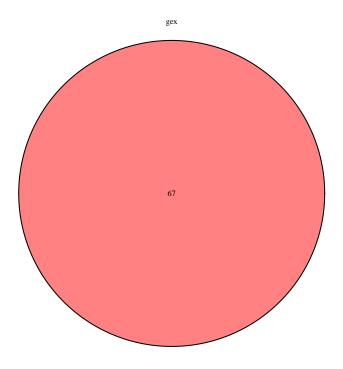


Figure 11: Omics sample overlap in  $\mathrm{mae}_k under franco$ 

#### 3.12 ren

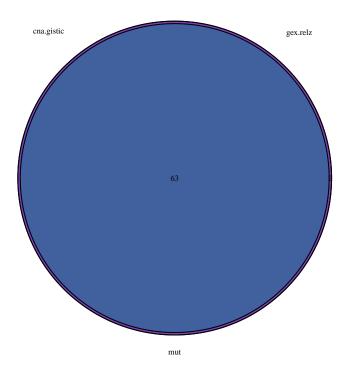


Figure 12: Omics sample overlap in  ${\rm mae}_r en$ 

# 3.13 sun

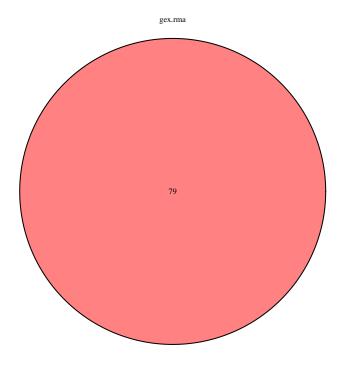


Figure 13: Omics sample overlap in  $\mathrm{mae}_s un$ 

## **3.14** taylor

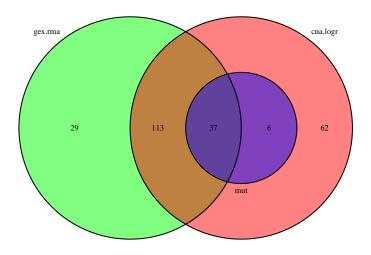


Figure 14: Omics sample overlap in  $\mathrm{mae}_t aylor$ 

## 3.15 tcga

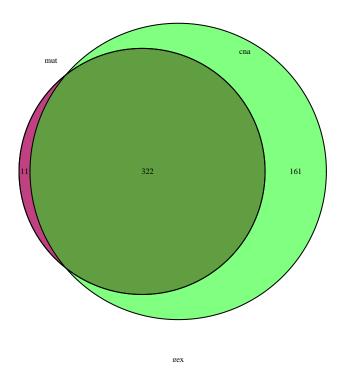


Figure 15: Omics sample overlap in  ${\rm mae}_t cga$ 

## **3.16** true

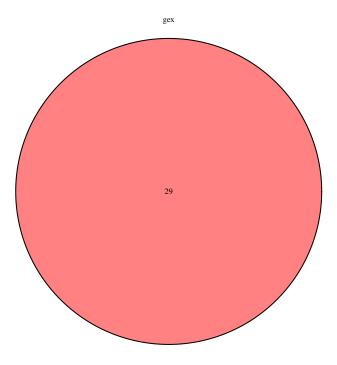


Figure 16: Omics sample overlap in  ${\rm mae}_t rue$ 

## 3.17 wallace

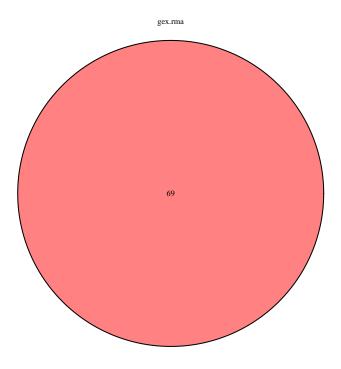


Figure 17: Omics sample overlap in  $mae_wallace$ 

## **3.18** wang



Figure 18: Omics sample overlap in  ${\rm mae}_w ang$ 

## 3.19 weiner

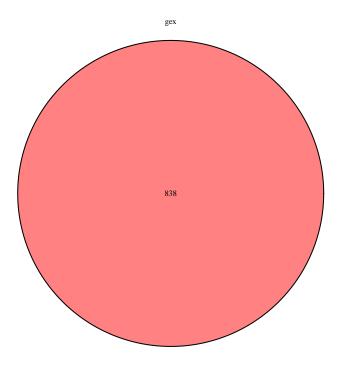


Figure 19: Omics sample overlap in  ${\rm mae}_w einer$