Summary of the curatedPCaData-package

Teemu Daniel Laajala

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This is a summary of the MultiAssayExperiment-objects (MAE) offered for curated prostate cancer datasets in the *curatedPCaData*-package version 0.6.0. The following objects are currently available in the package:

> utils::data(package="curatedPCaData")\$result[,c("Item", "Title")]

```
Tt.em
                         Title
 [1,] "mae_abida"
                         "Abida et al. MAE-object"
 [2,] "mae_barbieri"
                         "Barbieri MAE-object"
 [3,] "mae_chandran"
                         "Barwick MAE-object"
 [4,] "mae_friedrich"
                         "Friedrich et al. MAE-object"
 [5,] "mae_hieronymus"
                         "Hieronymus et al. MAE-object"
 [6,] "mae_icgcca"
                         "ICGC CA MAE-object"
 [7,] "mae_igc"
 [8,] "mae_kim"
[9,] "mae_kunderfranco" "Kunderfranco et al. MAE-object"
[10,] "mae_ren"
                         "Ren 2017 MAE-object"
[11,] "mae_sun"
                         "Sun et al. MAE-object"
[12,] "mae_taylor"
                         "Taylor et al. MAE-object"
[13,] "mae_tcga"
                         "TCGA MAE-object"
[14,] "mae_true"
                         "True et al. MAE-object"
[15,] "mae_wallace"
                         "Wallace et al. MAE-object"
[16,] "mae_wang"
[17,] "mae_weiner"
                         "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:

1.1.2 Overall Survival

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

5	6	7	8	9	10	Other	N/A
-	-	-	-	-	-	0 (0%)	444 (10
-	13~(12%)	84~(77%)	8 (7%)	4 (4%)	-	0 (0%)	0 (0%)
6 (1%)	46 (9%)	85 (17%)	21 (4%)	35~(7%)	-	3(1%)	307 (61
2(1%)	47~(18%)	54 (21%)	68~(27%)	43~(17%)	2(1%)	0 (0%)	39 (15%
-	$16 \ (15\%)$	78 (75%)	4 (4%)	6 (6%)	-	0 (0%)	0 (0%)
-	12 (6%)	58 (27%)	5 (2%)	-	-	0 (0%)	138 (65
-	27 (33%)	40 (48%)	13~(16%)	-	-	0 (0%)	3(4%)
-	-	-	-	-	-	266 (100%)	0 (0%)
1 (1%)	9 (13%)	32~(48%)	6 (9%)	5 (7%)	-	0 (0%)	14 (21%
-	-	-	-	-	-	65~(100%)	0 (0%)
-	-	-	-	-	-	0 (0%)	79 (100
2(1%)	104~(48%)	77 (35%)	19 (9%)	15~(7%)	-	0 (0%)	1(0%)
-	45 (9%)	244~(49%)	64~(13%)	137~(28%)	4 (1%)	0 (0%)	0 (0%)
-	4 (14%)	20 (69%)	1 (3%)	4 (14%)	-	0 (0%)	0 (0%)
2(2%)	21(25%)	57 (69%)	1 (1%)	2(2%)	-	0 (0%)	0 (0%)
-	_	-	-	-	-	0 (0%)	148 (10
-	-	_	-	-	-	0 (0%)	838 (10
	- 6 (1%) 2 (1%) - - 1 (1%) - 2 (1%)	- 13 (12%) 6 (1%) 46 (9%) 2 (1%) 47 (18%) - 16 (15%) - 12 (6%) - 27 (33%) 1 1 (1%) 9 (13%) 2 (1%) 104 (48%) - 45 (9%) - 4 (14%)	13 (12%) 84 (77%) 6 (1%) 46 (9%) 85 (17%) 2 (1%) 47 (18%) 54 (21%) - 16 (15%) 78 (75%) - 12 (6%) 58 (27%) - 27 (33%) 40 (48%) 1 (1%) 9 (13%) 32 (48%) 2 (1%) 104 (48%) 77 (35%) - 45 (9%) 244 (49%) - 4 (14%) 20 (69%)		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

	0 (no event)	1 (event)	N/A (event)	Time (d)	N/A (time)
abida	52 (12%)	84 (19%)	308 (69%)	[50,321,595,883,2070]	308 (69%)
barbieri	-	-	109 (100%)	-	109 (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%)
kim	-	_	266 (100%)	-	266 (100%)
kunderfranco	-	-	67 (100%)	-	67 (100%)
ren	-	-	65 (100%)	-	65 (100%)
sun	-	-	79 (100%)	-	79 (100%)
taylor	-	_	218 (100%)	-	218 (100%)
tcga	484 (98%)	10(2%)	0 (0%)	[23,525,926,1466,5034]	0 (0%)
true	-	-	29 (100%)	-	29 (100%)
wallace	_	_	83 (100%)	-	83 (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:

	0 (no event)	1 (event)	N/A (event)	Time (d)	N/A (time)
abida	-	-	444 (100%)	-	444 (100%)
barbieri	-	-	109 (100%)	-	109 (100%)
chandran	-	-	$503 \ (100\%)$	-	$503 \ (100\%)$
friedrich	-	-	255 (100%)	-	255 (100%)
hieronymus	-	-	$104 \ (100\%)$	-	$104 \ (100\%)$
icgcca	-	-	$213\ (100\%)$	-	$213\ (100\%)$
igc	-	-	83 (100%)	-	$83\ (100\%)$
$_{ m kim}$	-	-	$266 \ (100\%)$	-	$266 \ (100\%)$
kunderfranco	-	-	67 (100%)	-	67 (100%)
ren	-	-	65 (100%)	-	65~(100%)
sun	40~(51%)	39~(49%)	0 (0%)	-	79 (100%)
taylor	137~(63%)	61~(28%)	20 (9%)	[3,717,1386,1974,4909]	20 (9%)
tcga	397~(80%)	91 (18%)	6 (1%)	$[23,\!427,\!823,\!1376,\!5034]$	6 (1%)
true	-	-	29 (100%)	-	29 (100%)
wallace	-	-	83 (100%)	-	83 (100%)
wang	-	-	148 (100%)	-	$148 \ (100\%)$
weiner	-	-	838 (100%)	-	838 (100%)

1.1.4 Other end-points

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

2 Individual MAE-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	[50.26,321.04,594.78,882.8,2069.65], 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	N/A	n=444 (100%)
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	N/A	n=444 (100%)
disease_specific_recurrence_status	N/A	n=444 (100%)
days_to_disease_specific_recurrence	N/A	n=444 (100%)

1	37/4	(1000)
metastasis_occurrence_status	N/A	n=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	N/A	n=444 (100%)
genomic_alterations	N/A	n=444 (100%) n=444 (100%)
tumor_margins_positive tissue_source	N/A LN: 167 (38%);Bone: 160 (36%);Liver: 64	$n=444 \ (100\%)$
tissue_source	. , , , , , , , , , , , , , , , , , , ,	-
metastatic_site	(14%);	n=444 (100%)
microdissected	N/A N/A	n=444 (100%) n=444 (100%)
frozen_ffpe	N/A N/A	n=444 (100%) n=444 (100%)
other_feature	N/A N/A	n=444 (100%) n=444 (100%)
batch	N/A N/A	n=444 (100%) n=444 (100%)
other_sample	N/A	n=444 (100%) n=444 (100%)
tumor_purity_pathology	N/A	n=444 (100%) n=444 (100%)
tumor_purity_demix	N/A	n=444 (100%) 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%)
immune_infiltration	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%)
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	$N^{'}/A$	n=444 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

2.2 barbieri

	Instances	Missingness
overall_survival_status	N/A	n=109 (100%)
days_to_overall_survival	N/A	n=109 (100%)

age_at_initial_diagnosis	[34, 58, 63, 68, 77]	1 _ 1
year_diagnosis	N/A	n=109 (100%)
gleason_grade	[6, 7, 7, 7, 9]	11-103 (10070)
gleason_major	3: 70 (64%);4: 39 (36%)	_
gleason_minor	4: 65 (60%);3: 40 (37%);5: 4 (4%)	_
source_of_gleason	N/A	n=109 (100%)
grade_group	3+4: 57 (52%); $4+3$: 27 (25%); $<=6$: 13	11—103 (10070)
grade_group	$(12\%); \dots$	
T_pathological	N/A	n=109 (100%)
T_substage_pathological	N/A	n=109 (100%)
T_clinical	3: 67 (61%);2: 42 (39%)	-
T_substage_clinical	a: 53 (49%);c: 37 (34%);b: 19 (17%)	_
ERG_fusion_CNA	N/A	n=109 (100%)
ERG_fusion_IHC	m N'A	n=109 (100%)
ERG_fusion_GEX	N/A	n=109 (100%)
disease_specific_recurrence_status	N/A	n=109 (100%)
days_to_disease_specific_recurrence		n=109 (100%)
metastasis_occurrence_status	N/A	n=109 (100%)
days_to_metastatic_occurrence	N/A	n=109 (100%)
psa	[2.7,5.57,7.8,10.85,31.5], NA n=1	n=1 (1%)
race	N/A	n=109 (100%)
smoking_status	N/A	n=109 (100%)
extraprostatic_extension	N/A	n=109 (100%)
perineural_invasion	N/A	n=109 (100%)
seminal_vesicle_invasion	N/A	n=109 (100%)
angiolymphatic_invasion	N/A	n=109 (100%)
androgen_ablation	N/A	n=109 (100%)
capsule	N/A	n=109 (100%)
M_stage	N/A	n=109 (100%)
M_substage	N/A	n=109 (100%)
other_patient	N/A	n=109 (100%)
sample_type	N/A	n=109 (100%)
genomic_alterations	N/A	n=109 (100%)
tumor_margins_positive	N/A	n=109 (100%)
tissue_source metastatic_site	N/A	n=109 (100%) n=109 (100%)
microdissected	N/A N/A	n=109 (100%) n=109 (100%)
frozen_ffpe	N/A	n=109 (100%)
other_feature	N/A	n=109 (100%)
batch	N/A	n=109 (100%)
other_sample	N/A	n=109 (100%)
tumor_purity_pathology	N/A	n=109 (100%)
tumor_purity_demix	N/A	n=109 (100%)
tumor_purity_absolute	N/A	n=109 (100%)
zone_of_origin	N/A	n=109 (100%)
zone_of_origin_estimated	N/A	n=109 (100%)
immune_infiltration	N/A	n=109 (100%)
mutational_signatures	$N^{'}$ A	n=109 (100%)
neoantigen_load	$ m N^{'}\!/A$	n=109 (100%)
AR_activity	N/A	n=109 (100%)

N_stage	N/A	n=109 (100%)
$N_{substage}$	N/A	n=109 (100%)
therapy_radiation_initial	N/A	n=109 (100%)
therapy_radiation_salvage	N/A	n=109 (100%)
therapy_surgery_initial	N/A	n=109 (100%)
therapy_hormonal_initial	N/A	n=109 (100%)
other_treatment	N/A	n=109 (100%)
psa_category	N/A	n=109 (100%)
genome_altered	Feature not found in MAE	-

2.3 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%)
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	-
	(36%); metastatic: 75 $(15%)$;	- 502 (100%)
genomic_alterations	N/A	n=503 (100%)

	27/4	H00 (100M)
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_demix	N/A	n=503 (100%)
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%)
immune_infiltration	N/A	n=503 (100%)
mutational_signatures	N/A	n=503 (100%)
neoantigen_load	N/A	n=503 (100%)
AR_activity	N/A	n=503 (100%)
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	-

2.4 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_substage	N/A	n=255 (100%)
other_patient	N/A	n=255 (100%)
sample_type	primary: 164 (64%);adjacentnormal: 52	-
P	(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_demix	N/A	n=255 (100%)
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%)
immune_infiltration	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%)
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	-

2.5 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]
                                   3: 72 (69%);4: 30 (29%);5: 2 (2%)
         gleason_major
                                   4: 60 (58%);3: 39 (38%);5: 5 (5%)
         gleason_minor
        source_of_gleason
                                   prostatectomy: 104 (100%)
          grade_group
                                   3+4: 56 (54%);4+3: 22 (21%);<=6:
                                                                                    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\%)
                                   1: 61 (59%);2: 41 (39%);3: 2 (2%)
           T_clinical
       T_substage_clinical
                                   c: 67 (64%);a: 18 (17%);b: 18 (17%); ...
                                                                                    n=1 (1\%)
       ERG_fusion_CNA
                                   N/A
                                                                                  n=104 (100\%)
        ERG_fusion_IHC
                                   N/A
                                                                                  n=104 (100\%)
       ERG_fusion_GEX
                                   N/A
                                                                                  n=104 (100%)
                                   N/A
disease_specific_recurrence_status
                                                                                  n=104 (100%)
days_to_disease_specific_recurrence
                                   N/A
                                                                                  n=104 (100%)
  metastasis_occurrence_status
                                   0: 101 (97%);1: 3 (3%)
                                   [121.25, 1455.26, 1989.62, 2752.45, 3694.65]
 days_to_metastatic_occurrence
                                   [1,4.35,5.3,8,56.24], NA n=1
                                                                                    n=1 (1\%)
              psa
              race
                                   N/A
                                                                                  n=104 (100\%)
         smoking_status
                                   N/A
                                                                                  n=104 (100\%)
                                   0: 52 (50%);1: 52 (50%)
    extraprostatic_extension
       perineural_invasion
                                   N/A
                                                                                  n=104 (100\%)
    seminal_vesicle_invasion
                                   0: 90 (87%);1: 14 (13%)
    angiolymphatic_invasion
                                   N/A
                                                                                 n=104 (100%)
                                   N/A
       androgen\_ablation
                                                                                 n=104 (100%)
            capsule
                                   N/A
                                                                                  n=104 (100%)
            M_stage
                                   N/A
                                                                                  n=104 (100\%)
          M_substage
                                   N/A
                                                                                  n=104 (100\%)
                                   N/A
         other_patient
                                                                                  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\%)
                                   N/A
                                                                                 n=104 (100%)
          tissue\_source
         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\%)
                                                                                  n=104 (100\%)
             batch
                                   N/A
                                   N/A
                                                                                 n=104 (100\%)
         other_sample
    tumor_purity_pathology
                                   N/A
                                                                                 n=104 (100\%)
      tumor_purity_demix
                                   N/A
                                                                                 n=104 (100\%)
     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%)
      immune\_infiltration
                                   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%)
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	n=104 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

2.6 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	$\dot{N/A}$	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_demix	N/A	n=213 (100%)
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%)
immune_infiltration	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%)
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	-

2.7 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%);	
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_demix	N/A	n=83 (100%)
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%)
immune_infiltration	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%)
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 Florested: 74 (20%) Normal, 6 (7%) NA. 2	n=83 (100%)
psa_category	Elevated: 74 (89%);Normal: 6 (7%);NA: 3	n=3 (4%)
ganama altared	(4%) Feature not found in MAE	
genome_altered	reature not found in MAE	-

2.8 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	<=6: 198 (74%);3+4: 65 (24%);NA: 3 (1%)	n=3 (1%)
T_pathological	N/A	n=266 (100%)
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%)
metastasis_occurrence_status	N/A	n=266 (100%)
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_stage	N/A	n=266 (100%)
M_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_demix	N/A	n=266 (100%)
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%)
$immune_infiltration$	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%)
N_stage	N/A	n=266 (100%)
N_substage	N/A	n=266 (100%)
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	-

2.9 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%)	-

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%)	-
$other_feature$	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_demix	N/A	n=67 (100%)
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%)
immune_infiltration	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%)
N_stage	N/A	n=67 (100%)
$N_{substage}$	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	-

2.10 ren

	Т .	74.
	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%)
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_demix	N/A	n=65 (100%)
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%)
immune_infiltration	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%)
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	-
genome_altered	Feature not found in MAE	-

2.11 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%)
gleason_major	N/A	n=79 (100%)
gleason_minor	N/A	n=79 (100%)
source_of_gleason	N/A	n=79 (100%)
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	$ m 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_demix	N/A	n=79 (100%)
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%)
immune_infiltration	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%)
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	-

2.12 taylor

	Instances	Missingness
overall_survival_status	N/A	n=218 (100%)
days_to_overall_survival	N/A	n=218 (100%)
age_at_initial_diagnosis	N/A	n=218 (100%)
year_diagnosis	N/A	n=218 (100%)
gleason_grade	[5,6,7,7,9], NA n=1	n=1 (0%)
gleason_major	[3,3,3,4,5], NA n=21	n=21 (10%)
gleason_minor	[3,3,4,4,5], NA n=21	n=21 (10%)
source_of_gleason	N/A	n=218 (100%)
grade_group	<=6: 104 (48%);>=8: 34 (16%);3+4: 34	n=31 (14%)
	(16%);	
T_pathological	[2,2,2,3,4], NA n=18	n=18 (8%)
$T_substage_pathological$	b: 86 (39%);a: 55 (25%);c: 39 (18%);	n=38 (17%)
T_clinical	[1,1,2,2,4], NA n=9	n=9 (4%)
T_substage_clinical	c: 127 (58%);a: 40 (18%);b: 34 (16%);	n=17 (8%)
ERG_fusion_CNA	0: 164 (75%);1: 54 (25%)	_
ERG_fusion_IHC	N/A	n=218 (100%)
ERG_fusion_GEX	0: 76 (35%);1: 74 (34%);NA: 68 (31%)	n=68 (31%)
disease_specific_recurrence_status	0: 137 (63%);1: 61 (28%);NA: 20 (9%)	n=20 (9%)
days_to_disease_specific_recurrence	[3,717.25,1386.5,1974.25,4909], NA n=20	n=20 (9%)
metastasis_occurrence_status	N/A	n=218 (100%)
days_to_metastatic_occurrence	N/A	n=218 (100%)
psa	N/A	n=218 (100%)
race	N/A	n=218 (100%)
smoking_status	N/A	n=218 (100%)
extraprostatic_extension	N/A	n=218 (100%)
perineural_invasion	N/A	n=218 (100%)
seminal_vesicle_invasion	N/A	n=218 (100%)
angiolymphatic_invasion	N/A	n=218 (100%)
androgen_ablation	N/A	n=218 (100%)
capsule	N/A	n=218 (100%)
M_stage	N/A	n=218 (100%)
$M_{substage}$	N/A	n=218 (100%)
other_patient	N/A	n=218 (100%)
sample_type	primary: 181 (83%);metastasis: 37 (17%)	-
genomic_alterations	N/A	n=218 (100%)
tumor_margins_positive	N/A	n=218 (100%)
tissue_source	N/A	n=218 (100%)

metastatic_site	N/A	n=218 (100%)
microdissected	N/A	n=218 (100%)
frozen_ffpe	N/A	n=218 (100%)
other_feature	N/A	n=218 (100%)
batch	N/A	n=218 (100%)
other_sample	N/A	n=218 (100%)
tumor_purity_pathology	N/A	n=218 (100%)
tumor_purity_demix	N/A	n=218 (100%)
tumor_purity_absolute	N/A	n=218 (100%)
zone_of_origin	N/A	n=218 (100%)
zone_of_origin_estimated	N/A	n=218 (100%)
immune_infiltration	N/A	n=218 (100%)
mutational_signatures	N/A	n=218 (100%)
neoantigen_load	N/A	n=218 (100%)
AR_activity	N/A	n=218 (100%)
N_stage	N/A	n=218 (100%)
N_substage	N/A	n=218 (100%)
therapy_radiation_initial	N/A	n=218 (100%)
therapy_radiation_salvage	N/A	n=218 (100%)
therapy_surgery_initial	N/A	n=218 (100%)
therapy_hormonal_initial	N/A	n=218 (100%)
other_treatment	N/A	n=218 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

2.13 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%)
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%)
	n=6	
metastasis_occurrence_status	N/A	n=494 (100%)

days_to_metastatic_occurrence	N/A	n=494 (100%)
	[0,0.03,0.1,0.11,323], NA n=57	n=57 (12%)
psa race	NA: 338 (68%); caucasian: 147	11-57 (1270)
Tacc	(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%)
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	Feature not found in MAE	
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_demix	N/A	n=494 (100%)
tumor_purity_absolute	N/A	n=494 (100%)
zone_of_origin	NA: 218 (44%); peripheral: 137 (28%); mixed: 127 (26%);	-
zone_of_origin_estimated	N/A	n=494 (100%)
immune_infiltration	N/A	n=494 (100%)
mutational_signatures	N/A	n=494 (100%)
neoantigen_load	N/A	n=494 (100%)
AR_activity	N/A	n=494 (100%)
N_stage	N/A	n=494 (100%)
N_substage	N/A	n=494 (100%)
therapy_radiation_initial	N/A	n=494 (100%)
therapy_radiation_salvage	N/A	n=494 (100%)
therapy_surgery_initial	N/A	n=494 (100%)
therapy_hormonal_initial	N/A	n=494 (100%)
other_treatment	N/A	n=494 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

2.14 true

	Instances	Missingness
overall_survival_status	N/A	n=29 (100%)
days_to_overall_survival	N/A	n=29 (100%)

```
N/A
     age_at_initial_diagnosis
                                                                                 n=29 (100\%)
                                   N/A
                                                                                 n=29 (100\%)
         year_diagnosis
                                   [6, 7, 7, 7, 9]
         gleason_grade
         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\%)
                                   4: 11 (38%);3: 10 (34%);5: 6 (21%); ...
                                                                                   n=2 (7\%)
          grade_group
         T_pathological
                                   N/A
                                                                                 n=29 (100\%)
                                   N/A
    T_substage\_pathological
                                                                                 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\%)
                                   N/A
                                                                                 n=29 (100\%)
days_to_disease_specific_recurrence
  metastasis_occurrence_status
                                   N/A
                                                                                 n=29 (100\%)
                                   N/A
                                                                                 n=29 (100\%)
 days_to_metastatic_occurrence
              psa
                                   [1,5,6.35,8.62,15.9], NA n=1
                                                                                   n=1 (3\%)
              race
                                   N/A
                                                                                 n=29 (100\%)
                                   N/A
                                                                                 n=29 (100\%)
         smoking_status
                                                                                 n=29 (100%)
                                   N/A
    extraprostatic_extension
       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\%)
                                   N/A
                                                                                 n=29 (100\%)
            M_stage
                                   N/A
                                                                                 n=29 (100\%)
          M_substage
         other_patient
                                   N/A
                                                                                 n=29 (100\%)
          sample\_type
                                   N/A
                                                                                 n=29 (100\%)
      genomic_alterations
                                   N/A
                                                                                 n=29 (100\%)
                                   0: 18 (62%);1: 11 (38%)
     tumor_margins_positive
                                   N/A
                                                                                 n=29 (100\%)
         tissue_source
                                   N/A
         metastatic_site
                                                                                 n=29 (100\%)
         microdissected
                                   1: 29 (100%)
           frozen_ffpe
                                   N/A
                                                                                 n=29 (100%)
          other_feature
                                   Age:60-69|Volume:8|LCM_Gleason_Pattern:5:
                                                                  (7\%);Age:40-
                                   49 | Volume: 2.2 | LCM\_Gleason\_Pattern: 5:
                                                                  (3\%);Age:40-
                                   49|Volume:3.5|LCM_Gleason_Pattern:3:
                                   (3\%); ...
                                   N/A
                                                                                 n=29 (100\%)
             batch
                                                                                 n=29 (100%)
                                   N/A
         other_sample
    tumor_purity_pathology
                                   N/A
                                                                                 n=29 (100\%)
      tumor\_purity\_demix
                                   N/A
                                                                                 n=29 (100\%)
                                   N/A
                                                                                 n=29 (100%)
     tumor\_purity\_absolute
                                                                                 n=29 (100%)
                                   N/A
         zone_of_origin
    zone_of_origin_estimated
                                   N/A
                                                                                 n=29 (100\%)
```

immune_infiltration	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%)
N_stage	N/A	n=29 (100%)
N_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	-

2.15 wallace

	Instances	Missingness
overall_survival_status	N/A	n=83 (100%)
days_to_overall_survival	N/A	n=83 (100%)
age_at_initial_diagnosis	N/A	n=83 (100%)
year_diagnosis	N/A	n=83 (100%)
gleason_grade	[5, 6, 7, 7, 9]	-
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	N/A	n=83 (100%)
$T_substage_pathological$	N/A	n=83 (100%)
T_clinical	N/A	n=83 (100%)
T_substage_clinical	N/A	n=83 (100%)
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: 45 (54%); african_american: 38	-
	(46%)	
smoking_status	1: 37 (45%);NA: 25 (30%);0: 21 (25%)	n=25 (30%)
extraprostatic_extension	0: 54 (65%);1: 27 (33%);NA: 2 (2%)	n=2 (2%)
perineural_invasion	1: 69 (83%);0: 12 (14%);NA: 2 (2%)	n=2 (2%)
seminal_vesicle_invasion	0: 69 (83%);1: 12 (14%);NA: 2 (2%)	n=2 (2%)
angiolymphatic_invasion	0: 76 (92%);1: 5 (6%);NA: 2 (2%)	n=2 (2%)
androgen_ablation	N/A	n=83 (100%)
capsule	N/A	n=83 (100%)
M_stage	N/A	n=83 (100%)

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M_substage	N/A	n=83 (100%)
other_patient	N/A	n=83 (100%)
sample_type	primary: 69 (83%);adjacentnormal: 14 (17%)	-
genomic_alterations	N/A	n=83 (100%)
tumor_margins_positive	0: 51 (61%);1: 29 (35%);NA: 3 (4%)	n=3 (4%)
tissue_source	N/A	n=83 (100%)
metastatic_site	N/A	n=83 (100%)
microdissected	0: 83 (100%)	-
frozen_ffpe	frozen: $83 (100\%)$	-
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_demix	N/A	n=83 (100%)
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%)
immune_infiltration	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%)
N_stage	N/A	n=83 (100%)
N_substage	N/A	n=83 (100%)
therapy_radiation_initial	0: 83 (100%)	-
therapy_radiation_salvage	0: 83 (100%)	-
therapy_surgery_initial	0: 83 (100%)	-
therapy_hormonal_initial	0: 83 (100%)	-
other_treatment	N/A	n=83 (100%)
psa_category	Feature not found in MAE	-
genome_altered	Feature not found in MAE	-

2.16 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_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=148 (100%)
metastasis_occurrence_status	N/A	n=148 (100%)
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_demix	N/A	n=148 (100%)
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%)
immune_infiltration	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%)
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 therapy_surgery_initial	N/A N/A	n=148 (100%)
10 0 0	N/A N/A	n=148 (100%)
therapy_hormonal_initial other_treatment	N/A N/A	n=148 (100%) n=148 (100%)
psa_category	N/A N/A	n=148 (100%) n=148 (100%)
psa_category genome_altered	Feature not found in MAE	11-140 (10070)
genome_artered	reature not found in MAE	_

2.17 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%)
grade_group	3+4: 419 (50%); $4+3$: 183 (22%);>=8: 17	. - · ·
	(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_demix	N/A	n=838 (100%)
tumor_purity_absolute	N/A	n=838 (100%)

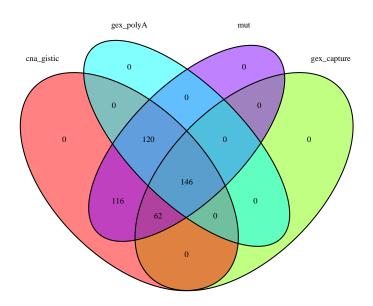
zone_of_origin	N/A	n=838 (100%)
zone_of_origin_estimated	N/A	n=838 (100%)
immune_infiltration	N/A	n=838 (100%)
mutational_signatures	N/A	n=838 (100%)
neoantigen_load	N/A	n=838 (100%)
AR_activity	N/A	n=838 (100%)
N_stage	N/A	n=838 (100%)
N_substage	N/A	n=838 (100%)
therapy_radiation_initial	0: 838 (100%)	-
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	-

3 Omics sample overlap within MAE-objects

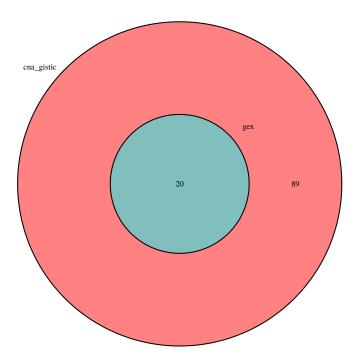
null device

1

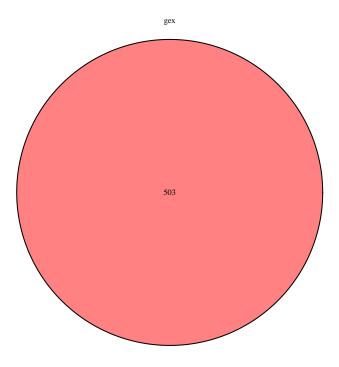
3.1 abida



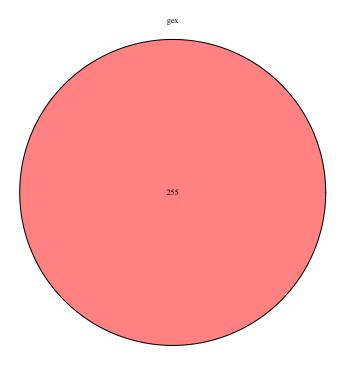
3.2 barbieri



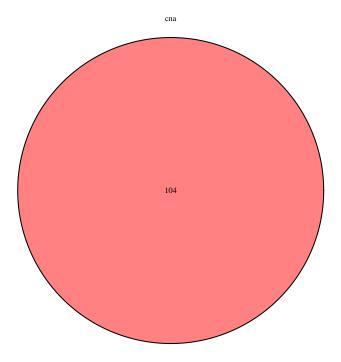
3.3 chandran



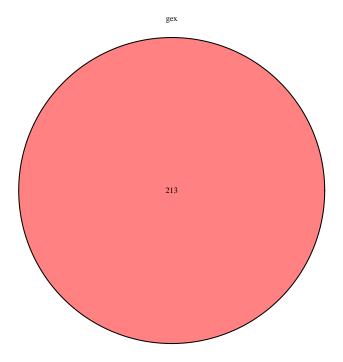
3.4 friedrich



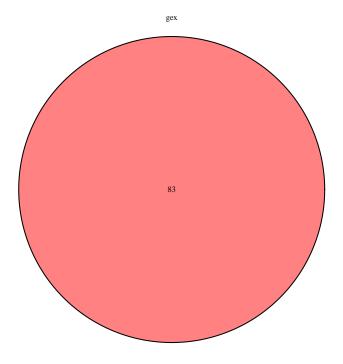
3.5 hieronymus



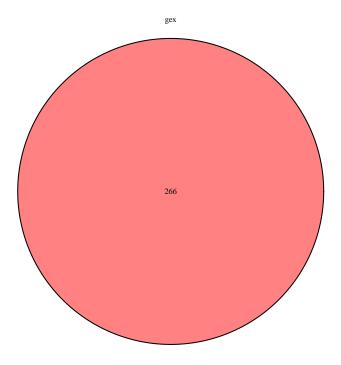
3.6 icgcca



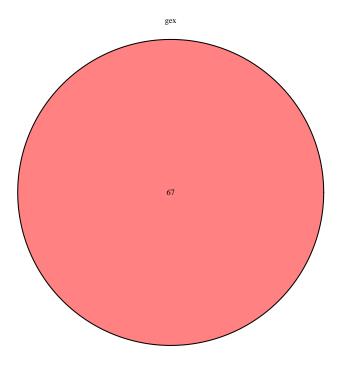
3.7 igc



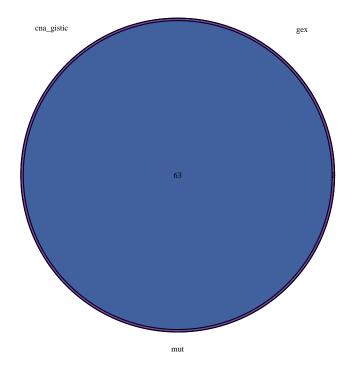
3.8 kim



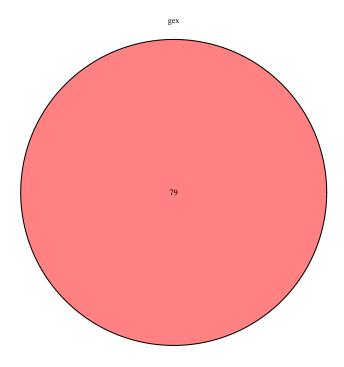
3.9 kunderfranco



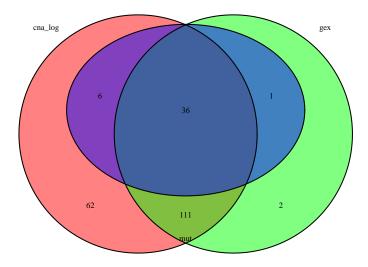
3.10 ren



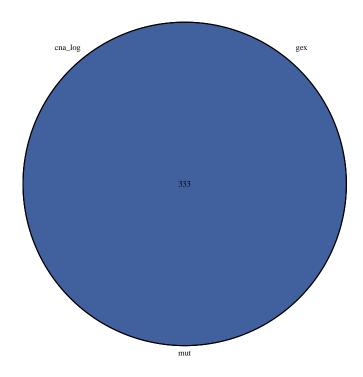
3.11 sun



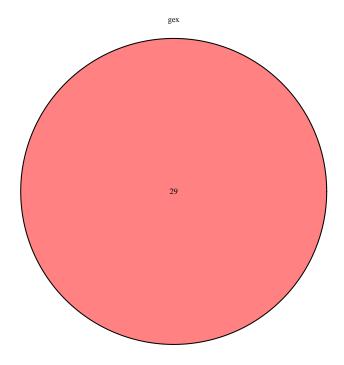
3.12 taylor



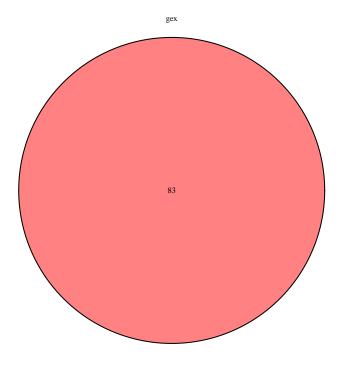
3.13 tcga



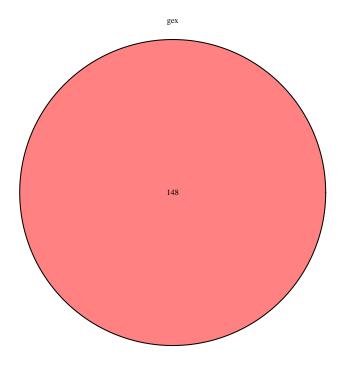
3.14 true



3.15 wallace



3.16 wang



3.17 weiner

