

The data set can be downloaded under: <http://lib.stat.cmu.edu/datasets/veteran>

Original description:

Veteran's Administration Lung Cancer Trial
Taken from Kalbfleisch and Prentice, pages 223-224

Variables

Treatment 1=standard, 2=test
Celltype 1=squamous, 2=smallcell, 3=adeno, 4=large
Survival in days
Status 1=dead, 0=censored
Karnofsky score
Months from Diagnosis
Age in years
Prior therapy 0=no, 10=yes

Descriptive statistics:

Dataset= veteran-lung-cancer : n= 137 , d= 7

Class1: n= 69

Covariance matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]
[1,]	1.1125	27.7283	0.0256	5.1343	-1.2155	-2.3261	-0.3389
[2,]	27.7283	12710.2434	0.7165	607.6172	-21.8459	-162.1040	-41.3299
[3,]	0.0256	0.7165	0.0682	-0.6468	0.2685	-0.2715	0.0767
[4,]	5.1343	607.6172	-0.6468	351.1935	-18.0754	-18.1191	-7.8325
[5,]	-1.2155	-21.8459	0.2685	-18.0754	76.7596	7.4437	14.6036
[6,]	-2.3261	-162.1040	-0.2715	-18.1191	7.4437	116.8713	2.2570
[7,]	-0.3389	-41.3299	0.0767	-7.8325	14.6036	2.2570	21.4834

Correlation matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]
[1,]	1.0000	0.2332	0.0928	0.2597	-0.1315	-0.2040	-0.0693
[2,]	0.2332	1.0000	0.0243	0.2876	-0.0221	-0.1330	-0.0791
[3,]	0.0928	0.0243	1.0000	-0.1322	0.1174	-0.0962	0.0634
[4,]	0.2597	0.2876	-0.1322	1.0000	-0.1101	-0.0894	-0.0902
[5,]	-0.1315	-0.0221	0.1174	-0.1101	1.0000	0.0786	0.3596
[6,]	-0.2040	-0.1330	-0.0962	-0.0894	0.0786	1.0000	0.0450
[7,]	-0.0693	-0.0791	0.0634	-0.0902	0.3596	0.0450	1.0000

Median: 2.2944 93.7236 0.8491 63.0138 8.27 58.7266 2.4218

Mean: 2.3478 115.1449 0.9275 59.2029 8.6522 57.5072 3.0435

MCD-estimated:

MDC-0.975-Mean: 2.4213 97.6316 1.0002 58.816 5.4736 56.474 -4e-04
MDC-0.750-Mean: 2.4213 97.6316 1.0002 58.816 5.4736 56.474 -4e-04
MDC-0.500-Mean: 2.4213 97.6316 1.0002 58.816 5.4736 56.474 -4e-04

Class2: n= 68

Covariance matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]
[1,]	1.1773	-56.3512	0.0342	-1.4236	-1.7125	0.2599	-0.0219
[2,]	-56.3512	37568.5540	0.1317	1841.5527	-137.2621	-76.9649	180.7594
[3,]	0.0342	0.1317	0.0562	-1.0044	-0.0061	0.6488	-0.1317
[4,]	-1.4236	1841.5527	-1.0044	457.8900	-60.7987	-21.2897	-3.0751
[5,]	-1.7125	-137.2621	-0.0061	-60.7987	150.6609	-15.3459	26.2621
[6,]	0.2599	-76.9649	0.6488	-21.2897	-15.3459	105.6277	-11.8262
[7,]	-0.0219	180.7594	-0.1317	-3.0751	26.2621	-11.8262	20.4346

Correlation matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]
[1,]	1.0000	-0.2679	0.1331	-0.0613	-0.1286	0.0233	-0.0045
[2,]	-0.2679	1.0000	0.0029	0.4440	-0.0577	-0.0386	0.2063
[3,]	0.1331	0.0029	1.0000	-0.1980	-0.0021	0.2663	-0.1229
[4,]	-0.0613	0.4440	-0.1980	1.0000	-0.2315	-0.0968	-0.0318
[5,]	-0.1286	-0.0577	-0.0021	-0.2315	1.0000	-0.1216	0.4733
[6,]	0.0233	-0.0386	0.2663	-0.0968	-0.1216	1.0000	-0.2545
[7,]	-0.0045	0.2063	-0.1229	-0.0318	0.4733	-0.2545	1.0000

Median: 2.5476 65.0506 0.9491 56.4596 7.7785 59.7997 2.0501

Mean: 2.3235 128.2059 0.9412 57.9265 8.8971 59.1176 2.7941

MCD-estimated:

MDC-0.975-Mean: 2.5383 55.7178 0.9998 54.6152 4.8973 61.0256 1e-04

MDC-0.750-Mean: 2.5383 55.7178 0.9998 54.6152 4.8973 61.0256 1e-04

MDC-0.500-Mean: 2.5383 55.7178 0.9998 54.6152 4.8973 61.0256 1e-04

Measures:

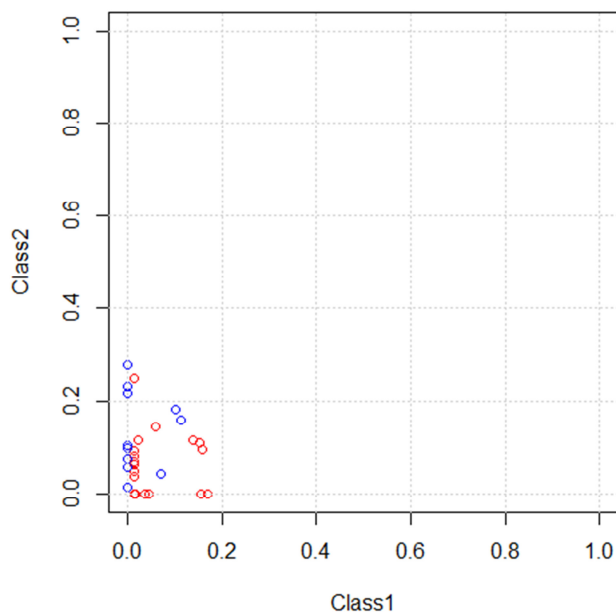
Mah. Dist: 0.216

Mah. Dist-MCD-0.975: 0.8343

Mah. Dist-MCD-0.750: 0.8343

Mah. Dist-MCD-0.500: 0.8343

DD-Plot (zonoid): veteran-lung-cancer



DD-Plot (random Tukey) for veteran-lung-cancer

