

```
GET
  FILE='N:\PROJECTEN\KMG\boek clinimetrics\opgaven en website\hoofdstuk 8\chapter 8_
  assignment 2_1_PRAFAB.sav'.
```

```
USE ALL.
COMPUTE filter_$=(GRS9 <= 3).
VARIABLE LABEL filter_$ 'GRS9 <= 3 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
```

* determine distribution over T2-T0 leading to positive change scores for the improved patients

```
FREQUENCIES
  VARIABLES=ChangeT0_T2
  /ORDER= ANALYSIS .
```

Frequencies

Statistics

changeT0_T2

N	Valid	296
	Missing	0

changeT0_T2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2.00	37	12.5	12.5	12.5
3.00	41	13.9	13.9	26.4
4.00	48	16.2	16.2	42.6
5.00	51	17.2	17.2	59.8
6.00	43	14.5	14.5	74.3
7.00	31	10.5	10.5	84.8
8.00	25	8.4	8.4	93.2
9.00	16	5.4	5.4	98.6
10.00	4	1.4	1.4	100.0
Total	296	100.0	100.0	

```
FILTER OFF.
USE ALL.
EXECUTE .
USE ALL.
COMPUTE filter_$=(GRS9 > 3 AND GRS9 < 7).
VARIABLE LABEL filter_$ 'GRS9 > 3 AND GRS9 < 7 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
```

* determine distribution over T2-T0 for the non importantly changed patients

```
FREQUENCIES
  VARIABLES=ChangeT0_T2
  /STATISTICS=MEAN STDDEV MIN MAX
```

Frequencies

Statistics

changeT0_T2

N	Valid	227
	Missing	0
Mean		.9912
Std. Deviation		1.33035
Minimum		-2.00
Maximum		5.00

changeT0_T2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -2.00	10	4.4	4.4	4.4
-1.00	13	5.7	5.7	10.1
.00	59	26.0	26.0	36.1
1.00	67	29.5	29.5	65.6
2.00	50	22.0	22.0	87.7
3.00	22	9.7	9.7	97.4
4.00	5	2.2	2.2	99.6
5.00	1	.4	.4	100.0
Total	227	100.0	100.0	

```

FILTER OFF.
USE ALL.
EXECUTE .
USE ALL.
COMPUTE filter_$=(GRS9 <= 6).
VARIABLE LABEL filter_$ 'GRS9 <= 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
ROC
  changeT0_T2 BY changed (1)
  /PLOT = CURVE
  /PRINT = SE COORDINATES
  /CRITERIA = CUTOFF(INCLUDE) TESTPOS(LARGE) DISTRIBUTION(FREE) CI(95)
  /MISSING = EXCLUDE .

```

ROC Curve

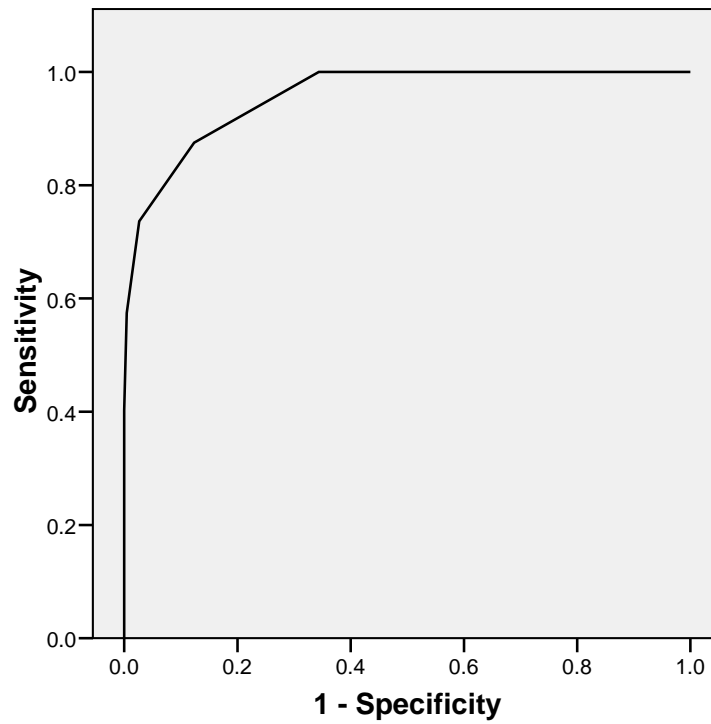
Case Processing Summary

changed	Valid N (listwise)
Positive ^a	296
Negative	227

Larger values of the test result variable(s) indicate stronger evidence for a positive actual state.

a. The positive actual state is 1.00.

ROC Curve



Diagonal segments are produced by ties.

Area Under the Curve

Test Result Variable(s): changeT0_T2

Area	Std. Error ^a	Asymptotic Sig. ^b	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.958	.007	.000	.943	.972

The test result variable(s): changeT0_T2 has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

- a. Under the nonparametric assumption
- b. Null hypothesis: true area = 0.5

Coordinates of the Curve

Test Result Variable(s): changeT0_T2

Positive if Greater Than or Equal To ^a	Sensitivity	1 - Specificity
-3.0000	1.000	1.000
-1.5000	1.000	.956
-.5000	1.000	.899
.5000	1.000	.639
1.5000	1.000	.344
2.5000	.875	.123
3.5000	.736	.026
4.5000	.574	.004
5.5000	.402	.000
6.5000	.257	.000
7.5000	.152	.000
8.5000	.068	.000
9.5000	.014	.000
11.0000	.000	.000

The test result variable(s): changeT0_T2 has at least one tie between the positive actual state group and the negative actual state group.

- a. The smallest cutoff value is the minimum observed test value minus 1, and the largest cutoff value is the maximum observed test value plus 1. All the other cutoff values are the averages of two consecutive ordered observed test values.