

Table 28-6 McNemar Test: Use of Pain Medications Before and After Vertebroplasty

This procedure can be run three ways in SPSS, all displayed here. The results from the Legacy Dialogs are included in the text.

NPAR TESTS

```
/MCNEMAR=Before WITH After (PAIRED)  
/MISSING ANALYSIS.
```

NPar Tests

This test was run using Nonparametric Tests > Legacy Dialogs > 2 Related Samples: McNemar

McNemar Test

Crosstabs

Before & After

Before	After	
	No meds	Meds
No meds	25	12
Meds	23	10

Test Statistics^a

Before & After	
N	70
Chi-Square ^b	2.857
Asymp. Sig.	.091

a. McNemar Test

b. Continuity Corrected

*Nonparametric Tests: Related Samples.

NPTESTS

/RELATED TEST(Before After) MCNEMAR(SUCCESS=LIST(1))

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

Nonparametric Tests

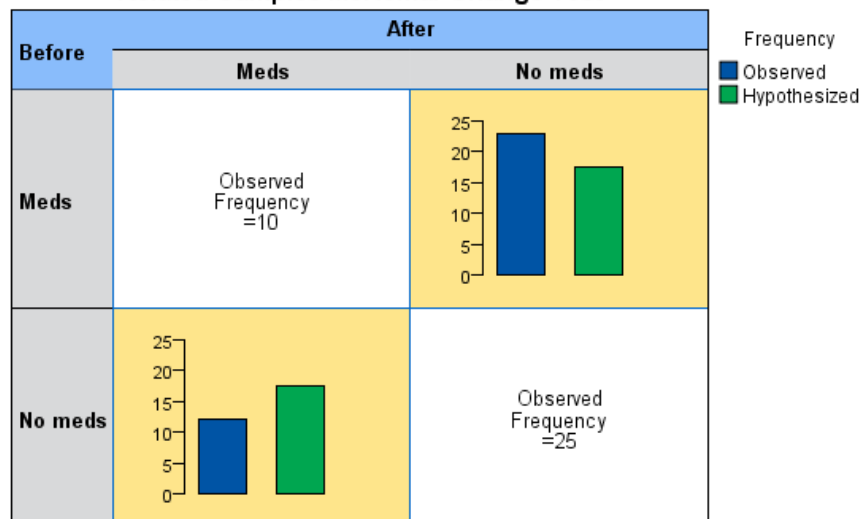
This test was run using Nonparametric Tests > Related Samples. Under Settings: Choose McNemar / Define Success: Combine categories into success category: 1. In SPSS, by clicking on the Hypothesis Test Summary, the results will be displayed. They are included below.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of different values across Before and After are equally likely for the specified categories.	Related-Samples McNemar Test	.091	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Related-Samples McNemar Change Test



Total N	70
Test Statistic	2.857
Degrees of Freedom	1
Asymptotic Sig. (2-sided test)	.091

```

CROSSTABS
  /TABLES=Before BY After
  /FORMAT=AVALUE TABLES
  /STATISTICS=MCNEMAR
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.

```

Crosstabs

This test was run using Descriptives > Crosstabs > Statistics: McNemar

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Before * After	70	98.6%	1	1.4%	71	100.0%

Before * After Crosstabulation

			After		Total
			No meds	Meds	
Before	No meds	Count	25	12	37
		% within Before	67.6%	32.4%	100.0%
		% within After	52.1%	54.5%	52.9%
		% of Total	35.7%	17.1%	52.9%
	Meds	Count	23	10	33
		% within Before	69.7%	30.3%	100.0%
		% within After	47.9%	45.5%	47.1%
		% of Total	32.9%	14.3%	47.1%
Total	Count		48	22	70
	% within Before		68.6%	31.4%	100.0%
	% within After		100.0%	100.0%	100.0%
	% of Total		68.6%	31.4%	100.0%

Chi-Square Tests

	Value	Exact Sig. (2-sided)
McNemar Test		.090 ^a
N of Valid Cases	70	

a. Binomial distribution used.