NOMREG HeartDisease (BASE=LAST ORDER=ASCENDING) WITH Age Sex ChestPainType BP Cholesterol

 ${\tt FBSOver120~EKGResults~MaxHR~ExcerciseAngina~STDepression~SlopeOfST~NoOfVesselsFluro~Thallium}$ 

/CRITERIA CIN(95) DELTA(0) MXITER(100) MXSTEP(5) CHKSEP(20) LCONVERGE(0) PCONVERGE(0.000001)

SINGULAR (0.0000001)

/MODEL

/STEPWISE=PIN(.05) POUT(0.1) MINEFFECT(0) RULE(SINGLE) ENTRYMETHOD(LR) REMOVALMETHOD(LR)

/INTERCEPT=INCLUDE

/PRINT=FIT PARAMETER SUMMARY LRT CPS STEP MFI.

# **Nominal Regression**

#### **Notes**

Output Created		30-DEC-2021 01:21:41
Comments		
Input	Data	C:\Users\Dilawar
		Asad\Desktop\HeartDisease.
		sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	270
	File	
Missing Value Handling	Definition of Missing	User-defined missing values
		are treated as missing.
	Cases Used	Statistics are based on all
		cases with valid data for all
		variables in the model.

Syntax		NOMREG HeartDisease
		(BASE=LAST
		ORDER=ASCENDING)
		WITH Age Sex
		ChestPainType BP
		Cholesterol
		FBSOver120 EKGResults
		MaxHR ExcerciseAngina
		STDepression SlopeOfST
		NoOfVesselsFluro Thallium
		/CRITERIA CIN(95)
		DELTA(0) MXITER(100)
		MXSTEP(5) CHKSEP(20)
		LCONVERGE(0)
		PCONVERGE(0.000001)
		SINGULAR(0.00000001)
		/MODEL
		/STEPWISE=PIN(.05)
		POUT(0.1) MINEFFECT(0)
		RULE(SINGLE)
		ENTRYMETHOD(LR)
		REMOVALMETHOD(LR)
		/INTERCEPT=INCLUDE
		/PRINT=FIT PARAMETER
		SUMMARY LRT CPS STEP
		MFI.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.08

# Warnings

There are 270 (50.0%) cells (i.e., dependent variable levels by subpopulations) with zero frequencies.

# **Case Processing Summary**

			Marginal
		N	Percentage
HeartDisease	0	150	55.6%

1	120	44.4%
Valid	270	100.0%
Missing	0	
Total	270	
Subpopulation	270ª	

a. The dependent variable has only one value observed in 270 (100.0%) subpopulations.

## **Model Fitting Information**

	Model Fitting			
	Criteria	Likelihoo	d Ratio Te	ests
	-2 Log			
Model	Likelihood	Chi-Square	df	Sig.
Intercept Only	370.959			
Final	179.598	191.361	13	.000

### Goodness-of-Fit

	Chi-Square df		Sig.
Pearson	232.117	256	.856
Deviance	179.598	256	1.000

## Pseudo R-Square

Cox and Snell	.508
Nagelkerke	.680
McFadden	.516

### **Likelihood Ratio Tests**

	Model Fitting			
	Criteria	Likelihoo	d Ratio Te	ests
	-2 Log			
	Likelihood of			
Effect	Reduced Model	Chi-Square	df	Sig.

Intercept	187.628	8.031	1	.005
Age	180.063	.465	1	.495
Sex	188.408	8.810	1	.003
ChestPainType	191.342	11.744	1	.001
BP	184.646	5.048	1	.025
Cholesterol	182.847	3.249	1	.071
FBSOver120	181.571	1.973	1	.160
EKGResults	181.956	2.358	1	.125
MaxHR	183.687	4.089	1	.043
ExcerciseAngina	183.262	3.664	1	.056
STDepression	181.947	2.349	1	.125
SlopeOfST	180.862	1.264	1	.261
NoOfVesselsFluro	202.822	23.224	1	.000
Thallium	190.248	10.650	1	.001

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

**Parameter Estimates** 

			Std.					
Heartl	Disease <sup>a</sup>	В	Error	Wald	df	Sig.	Exp(B)	
0	Intercept	8.446	3.088	7.481	1	.006		
	Age	.017	.026	.462	1	.497	1.018	
	Sex	-1.542	.541	8.132	1	.004	.214	
	ChestPainType	701	.215	10.600	1	.001	.496	
	ВР	025	.011	4.850	1	.028	.975	
	Cholesterol	007	.004	3.142	1	.076	.993	
	FBSOver120	.795	.575	1.913	1	.167	2.214	
	EKGResults	302	.198	2.325	1	.127	.740	
	MaxHR	.021	.011	3.957	1	.047	1.021	
	ExcerciseAngin	829	.431	3.701	1	.054	.436	
	а							
	STDepression	344	.227	2.291	1	.130	.709	
	SlopeOfST	442	.391	1.279	1	.258	.643	

NoOfVesselsFl	-1.165	.269	18.726	1	.000	.312	
uro							
Thallium	341	.106	10.359	1	.001	.711	