

```

* Curve Estimation.
TSET NEWVAR=NONE.
CURVEFIT
  /VARIABLES=SPO2 WITH CaO2
  /CONSTANT
  /MODEL=LINEAR LOGARITHMIC INVERSE QUADRATIC CUBIC COMPOUND POWER S GROWTH EXPONENTIAL L
GSTIC
  /PRINT ANOVA
  /PLOT FIT.

```

Curve Fit

[DataSet0] C:_project\ECMO\trunk\app\doc\ECMOjo Component Docs\CaO2-SPO2.SAV.sav

Model Description		
Model Name		MOD_1
Dependent Variable	1	SPO2
Equation	1	Linear
	2	Logarithmic
	3	Inverse
	4	Quadratic
	5	Cubic
	6	Compound ^a
	7	Power ^a
	8	S ^a
	9	Growth ^a
	10	Exponential ^a
	11	Logistic ^a
Independent Variable		CaO2
Constant		Included
Variable Whose Values Label Observations in Plots		Unspecified
Tolerance for Entering Terms in Equations		1.0E-4

a. The model requires all non-missing values to be positive.

Case Processing Summary

	N
Total Cases	19
Excluded Cases ^a	0

a. Cases with a missing value in any variable are excluded from the analysis.

Case Processing Summary

	N
Forecasted Cases	0
Newly Created Cases	0

a. Cases with a missing value in any variable are excluded from the analysis.

Variable Processing Summary

		Variables	
		Dependent	Independent
		SPO2	CaO2
Number of Positive Values		19	19
Number of Zeros		0	0
Number of Negative Values		0	0
Number of Missing Values	User-Missing	0	0
	System-Missing	0	0

SPO2

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.000	1.000	1.000	.000

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.337	1	.337	1.479E7	.000
Residual	.000	17	.000		
Total	.337	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.050	.000	1.000	3845.329	.000
(Constant)	-.075	.000		-345.026	.000

Logarithmic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.996	.992	.991	.013

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.334	1	.334	1983.323	.000
Residual	.003	17	.000		
Total	.337	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
ln(CaO2)	.804	.018	.996	44.535	.000
(Constant)	-1.497	.050		-29.676	.000

Inverse

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.983	.966	.964	.026

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.325	1	.325	477.296	.000
Residual	.012	17	.001		
Total	.337	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 / CaO2	-12.507	.572	-.983	-21.847	.000
(Constant)	1.525	.036		42.164	.000

Quadratic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.000	1.000	1.000	.000

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.337	2	.168	7081871.884	.000
Residual	.000	16	.000		
Total	.337	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.050	.000	1.002	333.982	.000
CaO2 ** 2	-2.380E-6	.000	-.002	-.533	.601
(Constant)	-.075	.001		-61.458	.000

Cubic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.000	1.000	1.000	.000

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.337	2	.168	7081871.884	.000
Residual	.000	16	.000		
Total	.337	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.050	.000	1.002	333.982	.000
CaO2 ** 2	-2.380E-6	.000	-.002	-.533	.601
(Constant)	-.075	.001		-61.458	.000

Excluded Terms

	Beta In	t	Sig.	Partial Correlation	Minimum Tolerance
CaO2 ** 3 ^a	.018	.632	.537	.161	.000

a. The tolerance limit for entering variables is reached.

Compound

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.995	.990	.989	.020

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.624	1	.624	1604.521	.000
Residual	.007	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	1.070	.002	2.704	591.632	.000
(Constant)	.240	.007		35.413	.000

The dependent variable is ln(SPO2).

Power

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.631	1	.631	162343.957	.000
Residual	.000	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
ln(CaO2)	1.105	.003	1.000	402.919	.000
(Constant)	.034	.000		130.504	.000

The dependent variable is ln(SPO2).

S**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.996	.993	.992	.016

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.626	1	.626	2377.484	.000
Residual	.004	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 / CaO2	-17.353	.356	-.996	-48.759	.000
(Constant)	.772	.022		34.315	.000

The dependent variable is ln(SPO2).

Growth

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.624	1	.624	1604.521	.000
Residual	.007	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.068	.002	.995	40.056	.000
(Constant)	-1.426	.028		-50.504	.000

The dependent variable is ln(SPO2).

Exponential**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.995	.990	.989	.020

The independent variable is CaO2.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.624	1	.624	1604.521	.000
Residual	.007	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.068	.002	.995	40.056	.000
(Constant)	.240	.007		35.413	.000

The dependent variable is ln(SPO2).

Logistic

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.624	1	.624	1604.521	.000
Residual	.007	17	.000		
Total	.631	18			

The independent variable is CaO2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
CaO2	.935	.002	.370	591.632	.000
(Constant)	4.163	.118		35.413	.000

The dependent variable is $\ln(1 / \text{SPO}_2)$.

SPO2

