
Stepwise regression Vuln. genes vs pathology at time 2

1. Adding x7, FStat = 52.8643, pValue = 4.65713e-12

mdl =

Linear regression model:

 $y \sim 1 + x7$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.05655 0.02038 -2.7748 0.0059438 x7 0.50968 0.070099 7.2708 4.6571e-12

Number of observations: 250, Error degrees of freedom: 248

Root Mean Squared Error: 0.21

R-squared: 0.176, Adjusted R-Squared 0.172

F-statistic vs. constant model: 52.9, p-value = 4.66e-12

Stepwise regression Vuln. genes vs pathology at time 4

- 1. Adding x9, FStat = 194.2731, pValue = 5.33475e-33
- 2. Adding x7, FStat = 59.7007, pValue = 2.7694e-13
- 3. Adding x14, FStat = 24.0339, pValue = 1.71993e-06

mdl =

Linear regression model:

 $y \sim 1 + x7 + x9 + x14$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.23823 0.034904 -6.8254 6.7945e-11 x7 0.48573 0.072187 6.7288 1.1928e-10 x9 0.86167 0.081632 10.556 9.9864e-22 x14 0.41402 0.084451 4.9024 1.7199e-06

Number of observations: 250, Error degrees of freedom: 246

Root Mean Squared Error: 0.199

R-squared: 0.589, Adjusted R-Squared 0.584

F-statistic vs. constant model: 117, p-value = 3.46e-47

Stepwise regression Vuln. genes vs pathology at time 6

- 1. Adding x9, FStat = 194.3202, pValue = 5.264423e-33
- 2. Adding x7, FStat = 58.8765, pValue = 3.88188e-13
- 3. Adding x14, FStat = 28.4994, pValue = 2.12968e-07

mdl =

Linear regression model:

 $y \sim 1 + x7 + x9 + x14$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.27465 0.039903 -6.883 4.843e-11 x7 0.5478 0.082525 6.638 2.0157e-10 х9 0.98152 0.093322 10.517 1.3197e-21 x14 0.51541 0.096546 5.3385 2.1297e-07

Number of observations: 250, Error degrees of freedom: 246

Root Mean Squared Error: 0.227

R-squared: 0.594, Adjusted R-Squared 0.589

F-statistic vs. constant model: 120, p-value = 6.35e-48

Stepwise regression Vuln. genes vs pathology at time 8

- 1. Adding x9, FStat = 195.0446, pValue = 4.293155e-33
- 2. Adding x7, FStat = 58.1532, pValue = 5.22543e-13
- 3. Adding x14, FStat = 24.2021, pValue = 1.5885e-06

mdl =

Linear regression model:

 $y \sim 1 + x7 + x9 + x14$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.25288 0.042413 -5.9624 8.5844e-09 x7 0.58111 0.087717 6.6247 2.1753e-10 0.099194 x9 1.0493 10.578 8.4578e-22 x14 0.50485 0.10262 4.9196 1.5885e-06

Number of observations: 250, Error degrees of freedom: 246

Root Mean Squared Error: 0.242

R-squared: 0.587, Adjusted R-Squared 0.582

F-statistic vs. constant model: 117, p-value = 4.81e-47

Stepwise regression cell types vs pathology at time 2

- 1. Adding x10, FStat = 35.9348, pValue = 7.15746e-09
- 2. Adding x3, FStat = 18.7039, pValue = 2.21683e-05

mdl =

Linear regression model:

 $v \sim 1 + x3 + x10$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) 0.033813 0.01547 2.1857 0.029778 x3 -0.53852 0.12452 -4.3248 2.2168e-05 x10 0.76176 0.10463 7.2803 4.4342e-12

Number of observations: 250, Error degrees of freedom: 247

Root Mean Squared Error: 0.208

R-squared: 0.188, Adjusted R-Squared 0.181

F-statistic vs. constant model: 28.6, p-value = 6.72e-12

Stepwise regression cell types vs pathology at time 4

- 1. Adding x9, FStat = 148.963, pValue = 3.813018e-27
- 2. Adding x6, FStat = 35.74, pValue = 7.84688e-09
- 3. Adding x16, FStat = 27.643, pValue = 3.16796e-07

mdl =

Linear regression model:

 $y \sim 1 + x6 + x9 + x16$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.059704 0.021268 -2.8072 0.0053973 x6 0.3528 0.057196 6.1683 2.8173e-09 x9 0.53058 0.070875 7.4861 1.2624e-12 x16 0.45979 0.087451 5.2577 3.168e-07

Number of observations: 250, Error degrees of freedom: 246

Root Mean Squared Error: 0.217

R-squared: 0.509, Adjusted R-Squared 0.503

F-statistic vs. constant model: 85.1, p-value = 8.27e-38

Stepwise regression cell types vs pathology at time 6

- 1. Adding x9, FStat = 188.1784, pValue = 3.007557e-32
- 2. Adding x10, FStat = 40.9471, pValue = 7.79277e-10
- 3. Adding x16, FStat = 31.8695, pValue = 4.53155e-08
- 4. Adding x6, FStat = 22.7694, pValue = 3.14082e-06

mdl =

Linear regression model:

 $y \sim 1 + x6 + x9 + x10 + x16$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept)	-0.06982	9 0.02201	5 -3.17	19 0.0017075
x6	0.3012	0.063121	4.7717	3.1408e-06
x9	0.60625	0.074885	8.0957	2.6721e-14
x10	0.39548	0.083717	4.724	3.8975e-06
x16	0.5302	0.090592	5.8526	1.5447e-08

Number of observations: 250, Error degrees of freedom: 245

Root Mean Squared Error: 0.225

R-squared: 0.605, Adjusted R-Squared 0.598

F-statistic vs. constant model: 93.8, p-value = 2.94e-48

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Stepwise regression cell types vs pathology at time 8

- 1. Adding x9, FStat = 208.2751, pValue = 1.097535e-34
- 2. Adding x6, FStat = 39.6741, pValue = 1.36438e-09
- 3. Adding x16, FStat = 38.8523, pValue = 1.97226e-09
- 4. Adding x13, FStat = 20.058, pValue = 1.15266e-05

mdl =

Linear regression model:

 $y \sim 1 + x6 + x9 + x13 + x16$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept)	-0.07200	6 0.022893	1 -3.145	6 0.001862
x6	0.34853	0.062603	5.5673	6.7791e-08
x9	0.63535	0.079275	8.0146	4.5132e-14
x13	0.36704	0.081955	4.4786	1.1527e-05

x16 0.60602 0.092829 6.5284 3.7977e-10 Number of observations: 250, Error degrees of freedom: 245 Root Mean Squared Error: 0.23 R-squared: 0.626, Adjusted R-Squared 0.62 F-statistic vs. constant model: 103, p-value = 3.49e-51 Stepwise regression Vuln. genes vs pathology at time 2 No terms to add to or remove from initial model. mdl =Linear regression model: y ~ 1 **Estimated Coefficients:** Estimate SE tStat pValue 0.014571 3.8433 0.00015414 (Intercept) 0.056 Number of observations: 250, Error degrees of freedom: 249 Root Mean Squared Error: 0.23 Stepwise regression Vuln. genes vs pathology at time 4 1. Adding x2, FStat = 28.7596, pValue = 1.87642e-07 mdl =Linear regression model: $y \sim 1 + x2$ **Estimated Coefficients:** Estimate SE tStat pValue (Intercept) -0.24609 0.080122 -3.0715 0.0023675 x2 0.67089 0.1251 5.3628 1.8764e-07

Number of observations: 250, Error degrees of freedom: 248 Root Mean Squared Error: 0.292

R-squared: 0.104, Adjusted R-Squared 0.1

F-statistic vs. constant model: 28.8, p-value = 1.88e-07

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Stepwise regression Vuln. genes vs pathology at time 6
1. Adding x2, FStat = 35.1741, pValue = 1.0071e-08
mdl =
Linear regression model:
  y \sim 1 + x^2
Estimated Coefficients:
           Estimate
                       SE
                              tStat
                                       pValue
  (Intercept) -0.31619 0.091181 -3.4677 0.00061861
  x2
             0.84436  0.14237  5.9308  1.0071e-08
Number of observations: 250, Error degrees of freedom: 248
Root Mean Squared Error: 0.333
R-squared: 0.124, Adjusted R-Squared 0.121
F-statistic vs. constant model: 35.2, p-value = 1.01e-08
Stepwise regression Vuln. genes vs pathology at time 8
1. Adding x2, FStat = 32.3245, pValue = 3.6554e-08
mdl =
Linear regression model:
  y \sim 1 + x2
Estimated Coefficients:
           Estimate
                       SE
                                       pValue
                              tStat
  (Intercept) -0.28978 0.096608 -2.9996 0.0029789
  x2
             0.85761 0.15084 5.6855 3.6554e-08
Number of observations: 250, Error degrees of freedom: 248
Root Mean Squared Error: 0.352
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R-squared: 0.115, Adjusted R-Squared 0.112

F-statistic vs. constant model: 32.3, p-value = 3.66e-08