Single-cell copy number variant detection reveals the dynamics and diversity of adaptation: S1 Text

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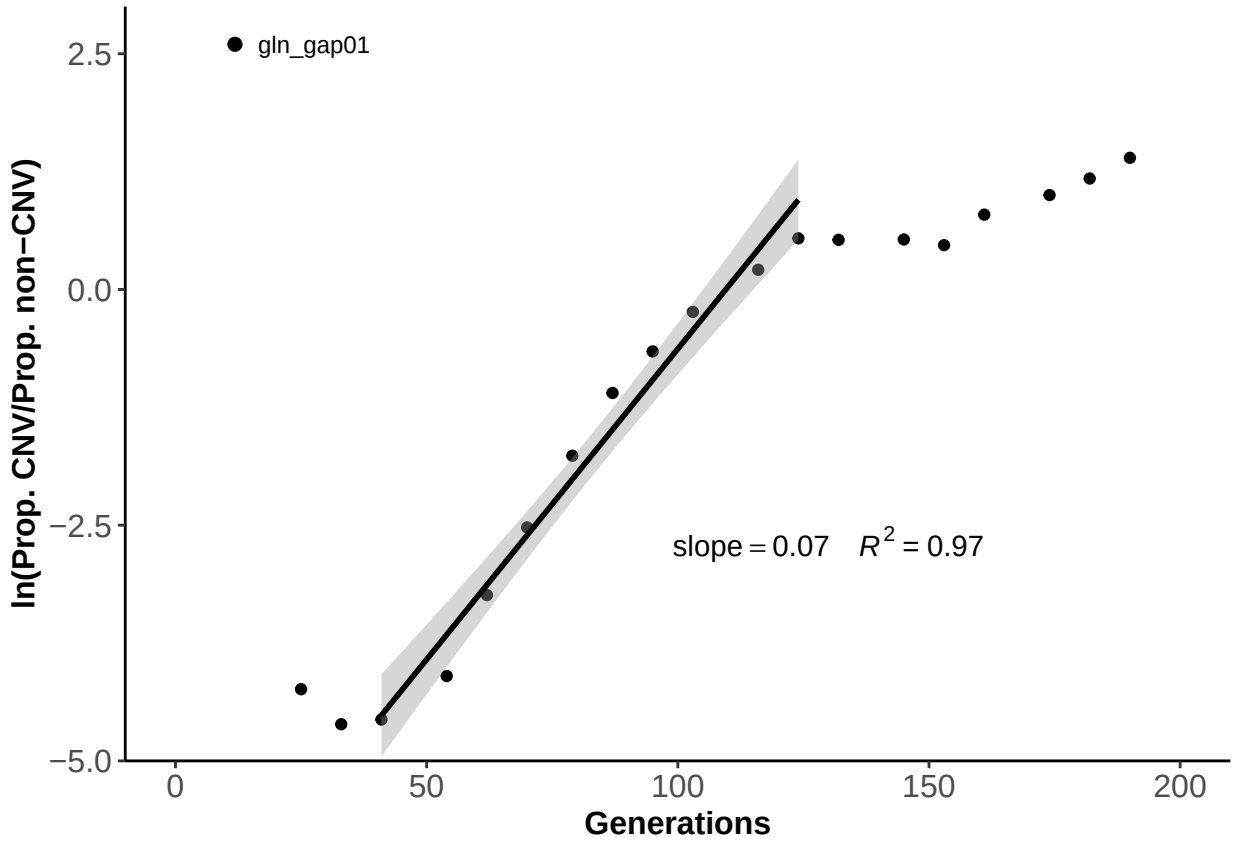
We performed linear regression to determine the relative fitness of the CNV subpopulation in each evolving population. The linear phase was determined using the variance explained (R^2) as indicated for each population below.

1 Quantification of CNV subpopulation dynamics for original evolution experiment

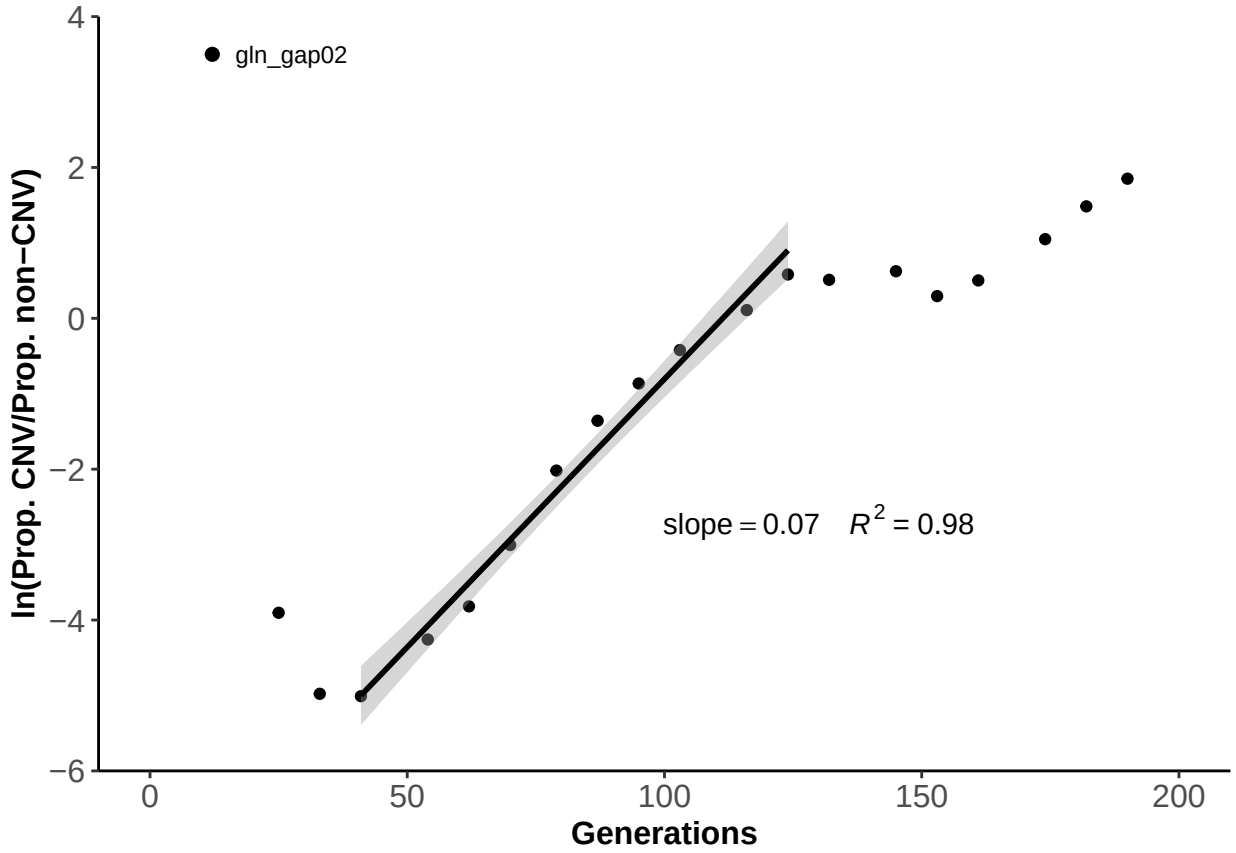
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -7.21808      0.06588
```




```
## [1] 0.003828795
```

```
##                  2.5 %     97.5 %
## Generation 0.05705222 0.07471065
```

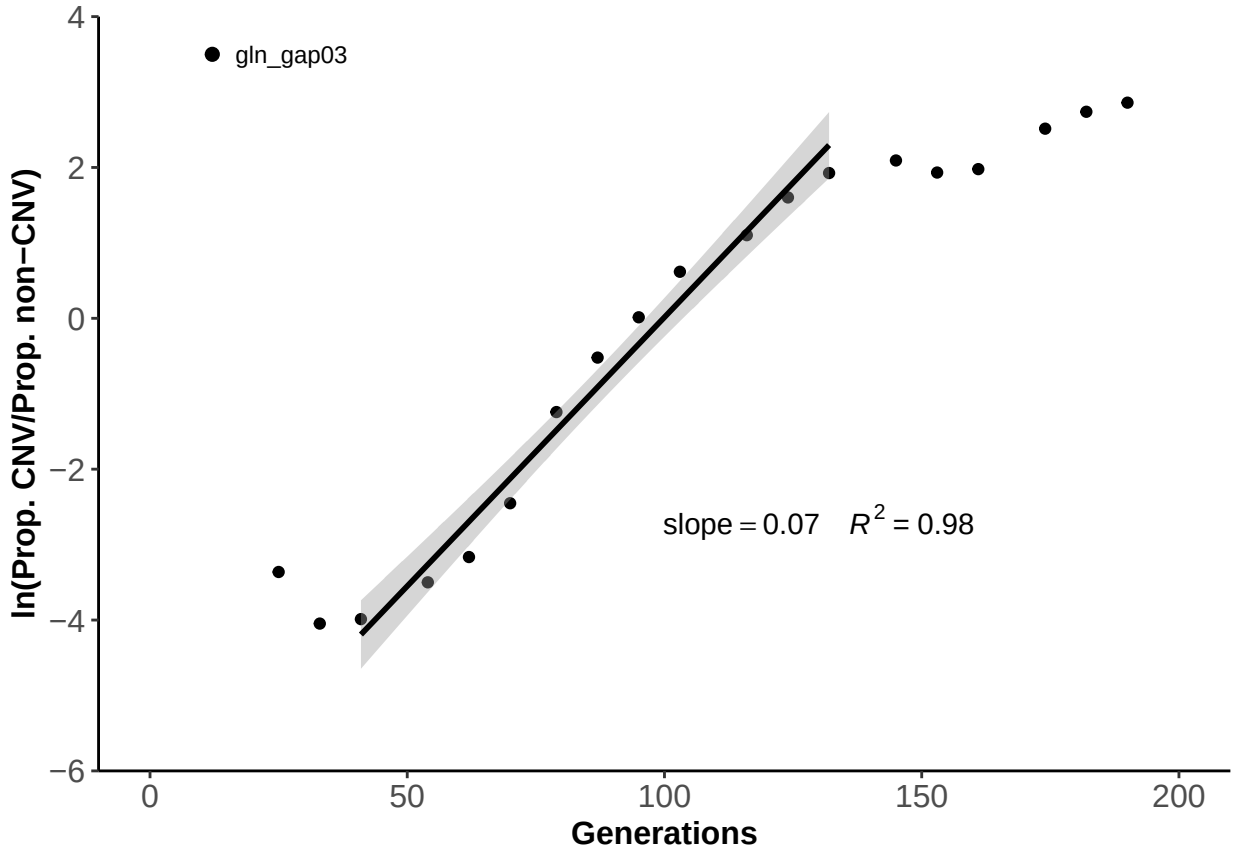
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##     -7.9143       0.0711
```




```
## [1] 0.003440376
```

```
##                  2.5 %     97.5 %
## Generation 0.06316211 0.07902915
```

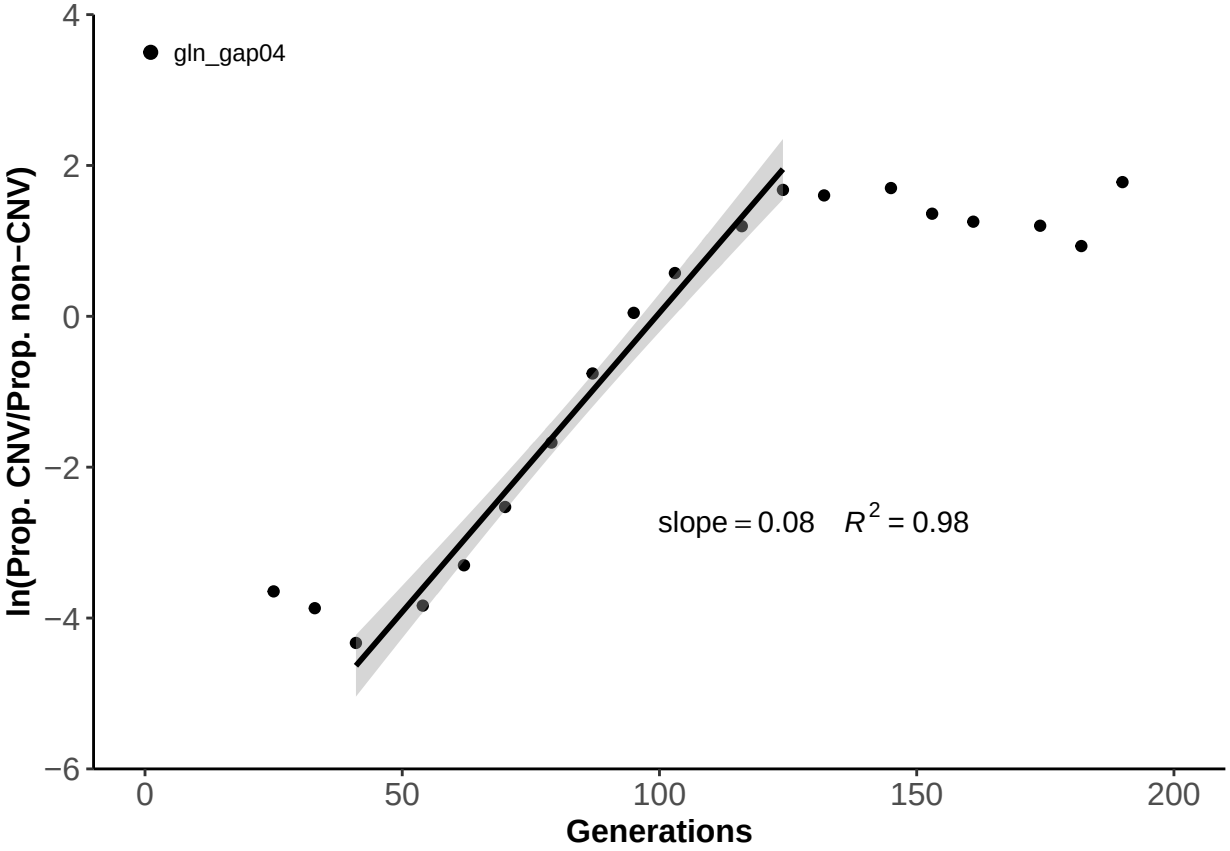
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -7.11582      0.07131
```




```
## [1] 0.003686966
```

```
##                  2.5 %     97.5 %
## Generation 0.06296517 0.07964616
```

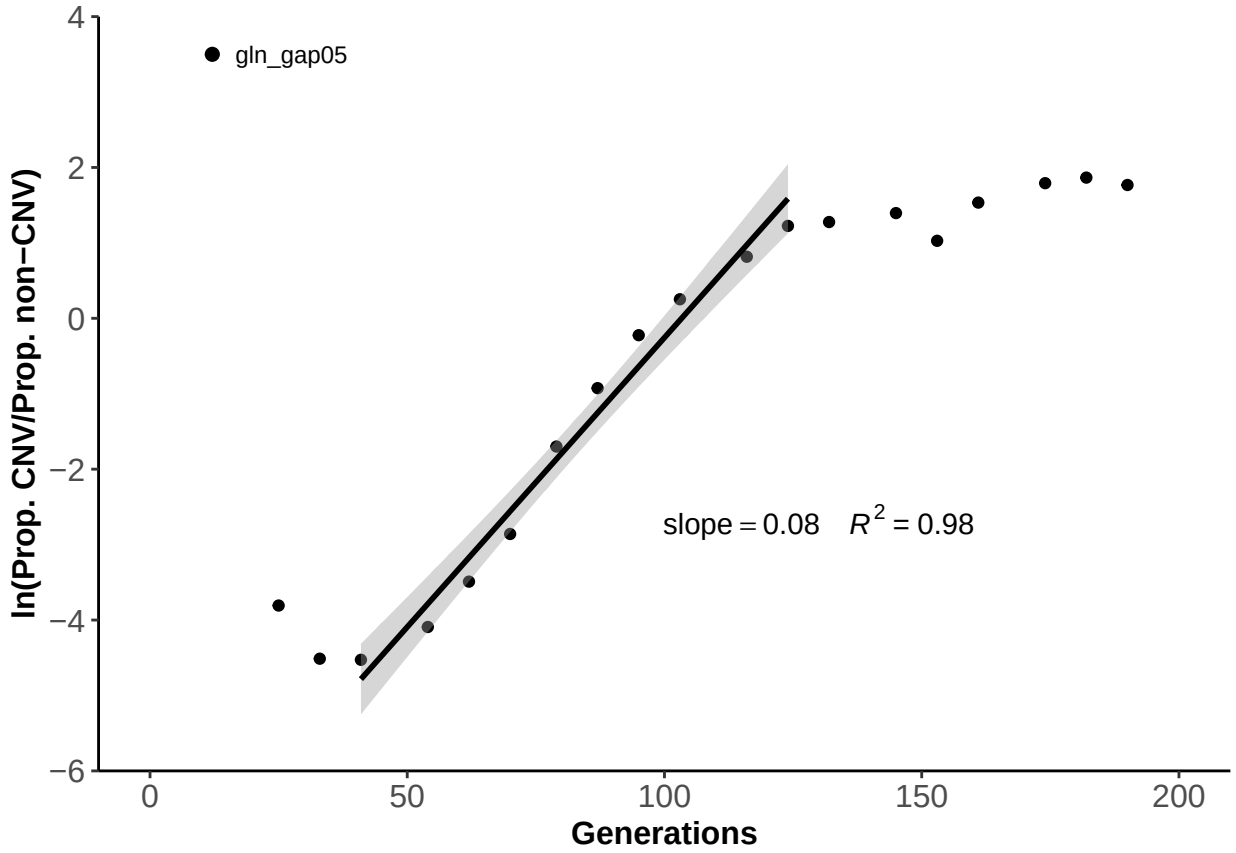
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -7.88506      0.07932
```




```
## [1] 0.003598147
```

```
##                 2.5 %     97.5 %
## Generation 0.07102378 0.08761847
```

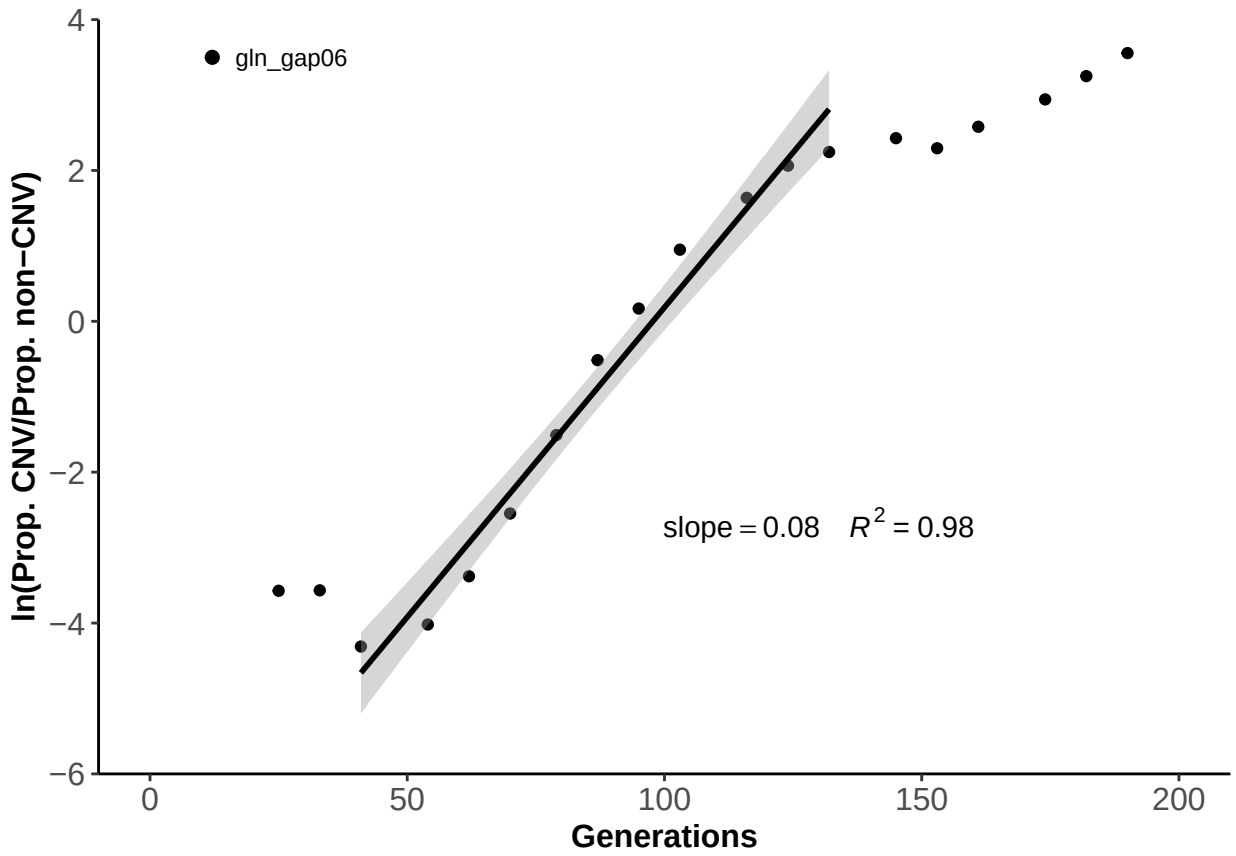
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -7.92949      0.07674
```




```
## [1] 0.004123018
```

```
##                  2.5 %     97.5 %
## Generation 0.06723107 0.08624646
```

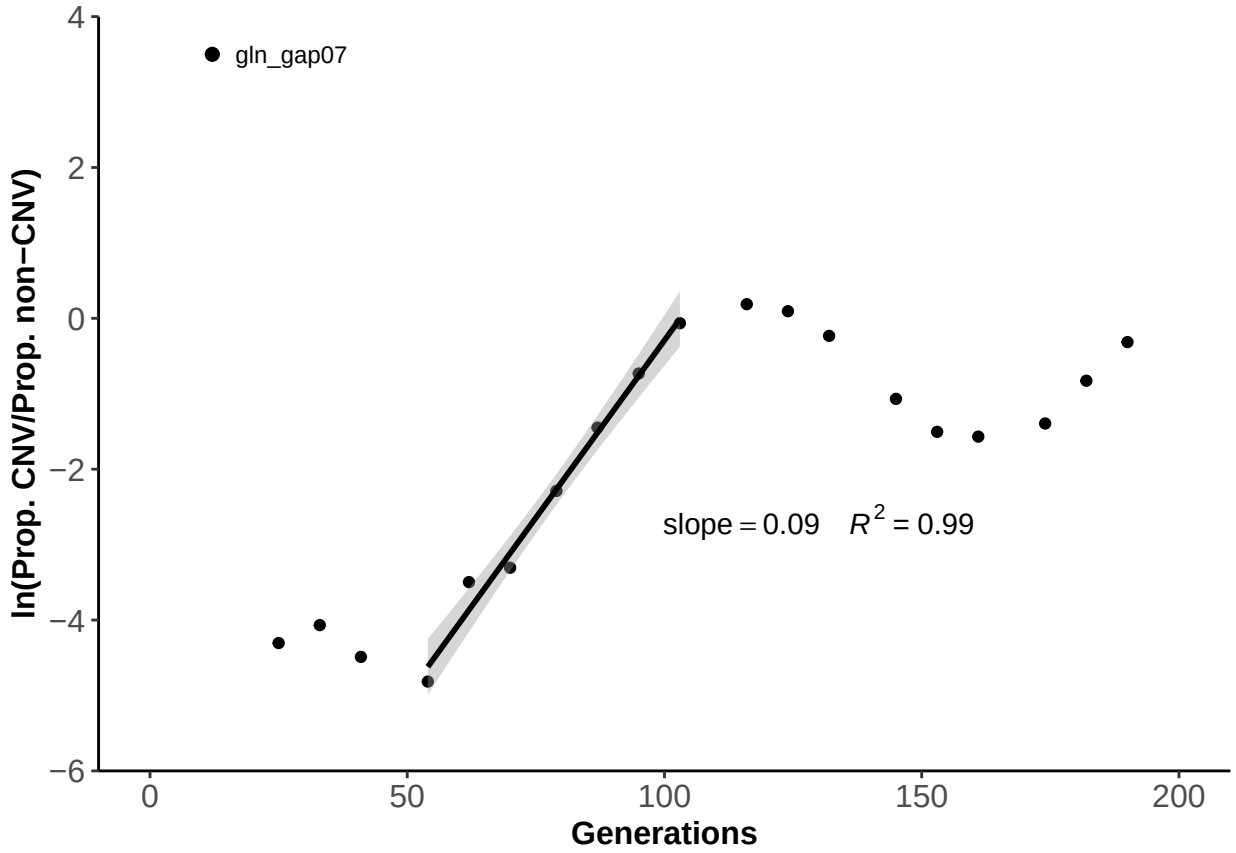
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -8.02689      0.08212
```




```
## [1] 0.004348782
```

```
##                  2.5 %     97.5 %
## Generation 0.07227934 0.09195459
```

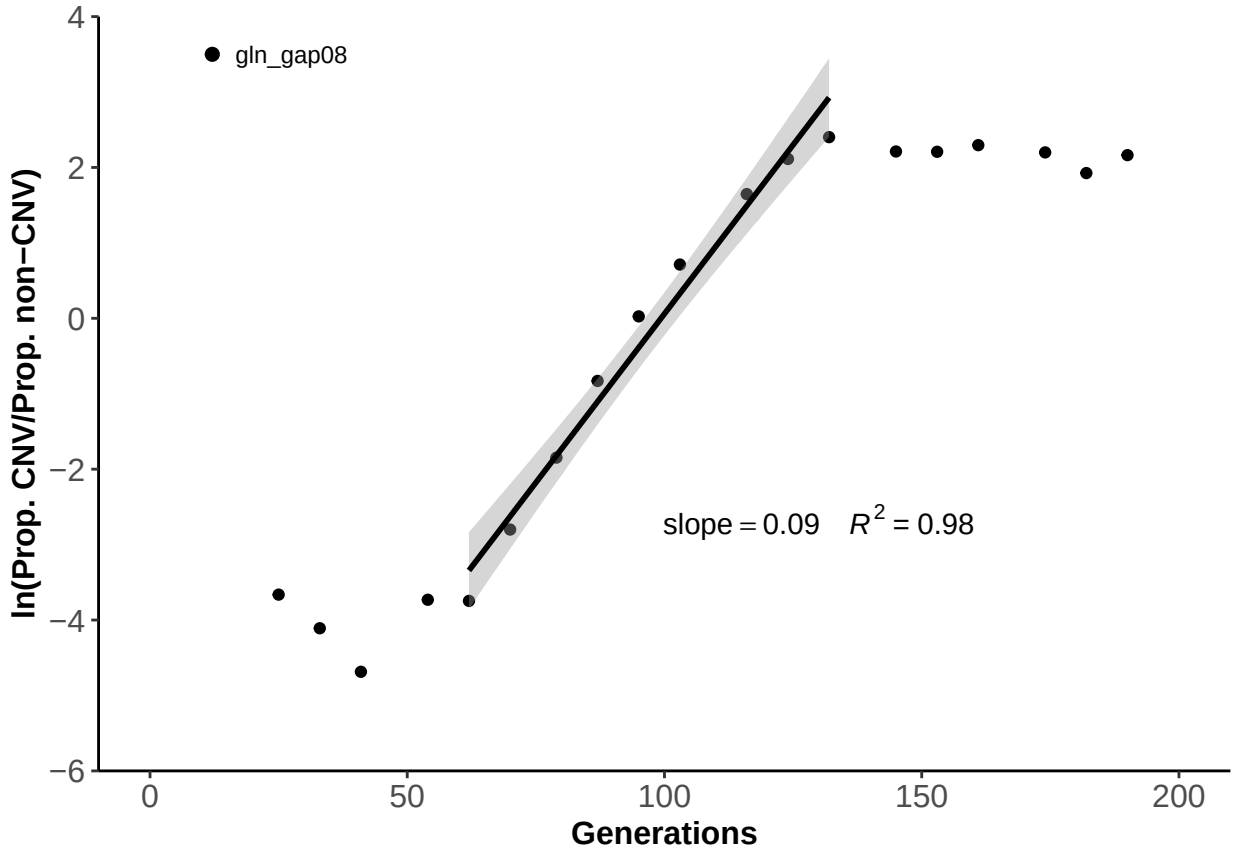
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -9.70093      0.09409
```




```
## [1] 0.004838433
```

```
##                  2.5 %    97.5 %
## Generation 0.08165719 0.1065324
```

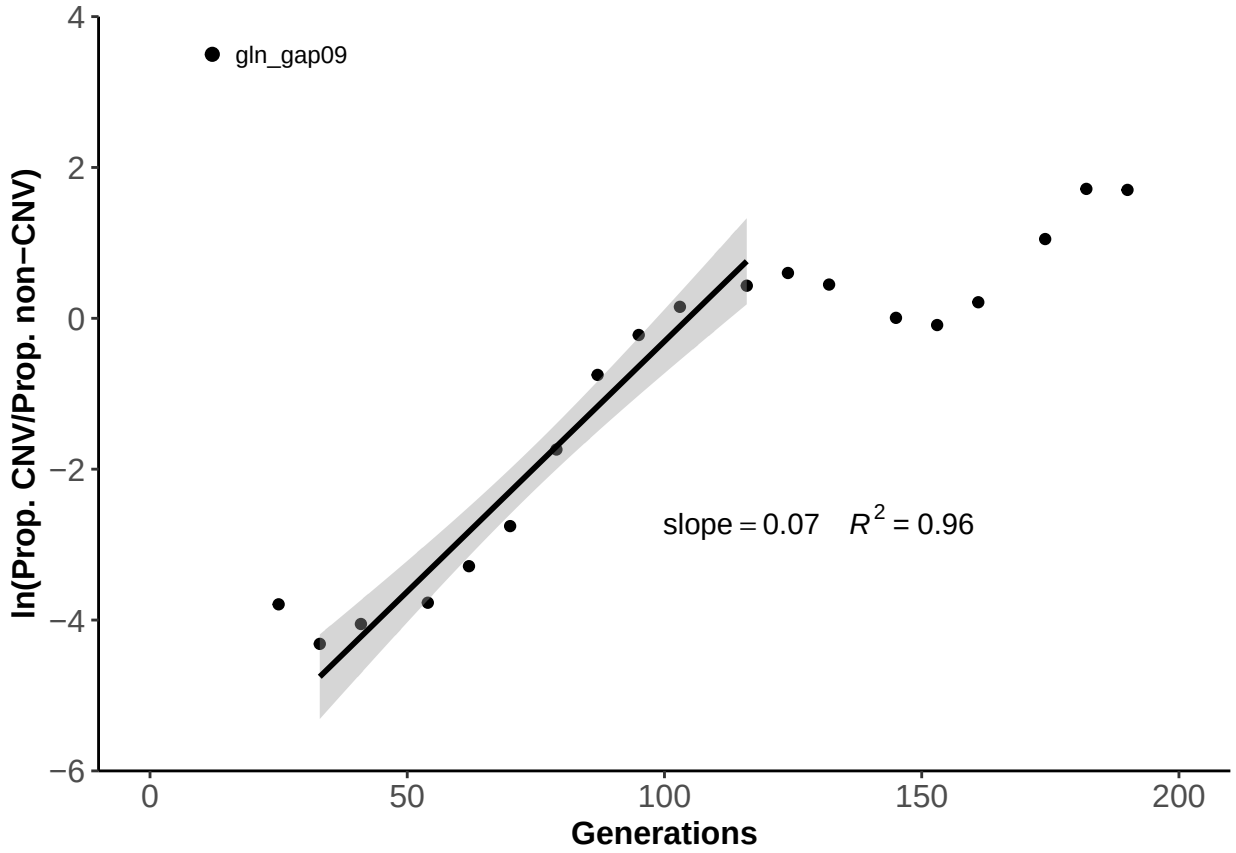
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -8.89468      0.08955
```




```
## [1] 0.00519789
```

```
##                  2.5 %    97.5 %
## Generation 0.07725805 0.1018402
```

```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -6.94183      0.06637
```

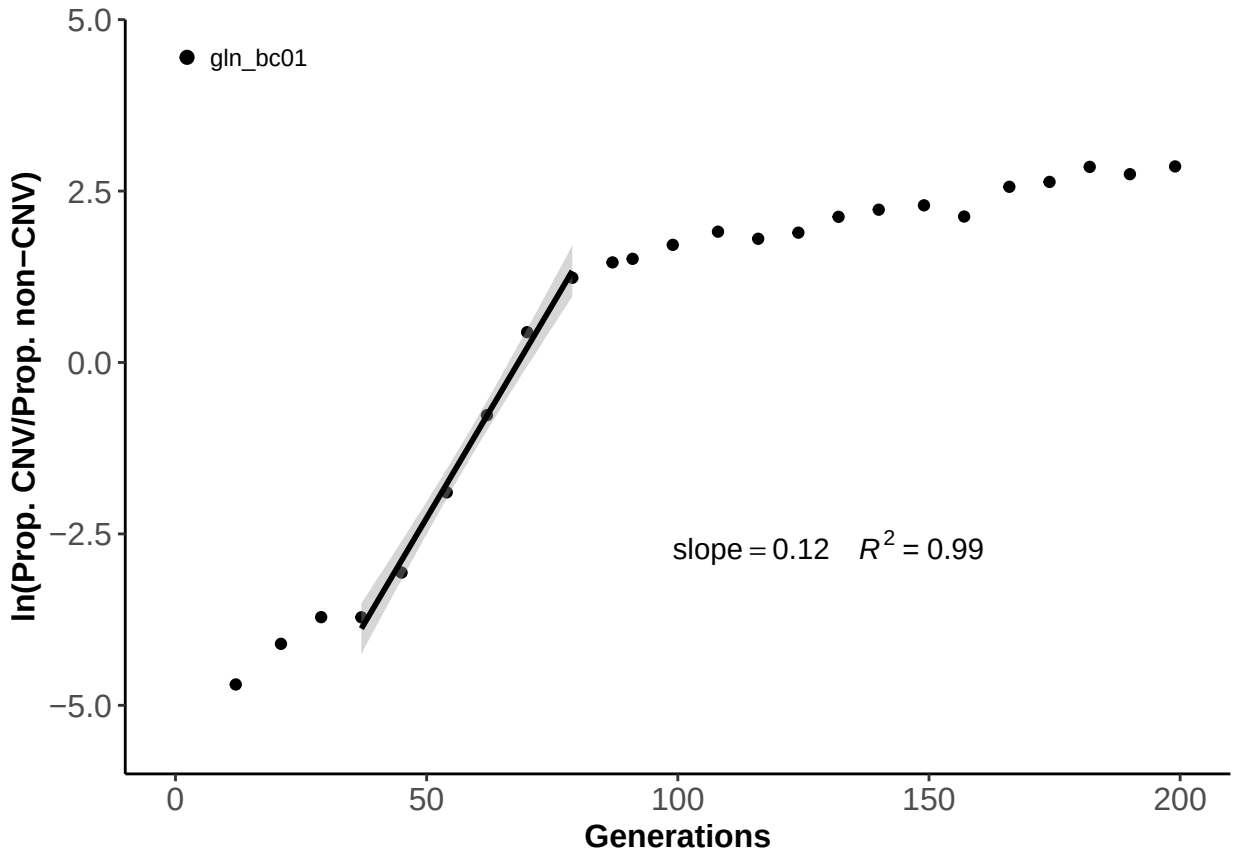



```
## [1] 0.00503076
```

```
##                  2.5 %     97.5 %
## Generation 0.05476645 0.07796836
```

2 Quantification of CNV subpopulation dynamics for barcode evolution experiment

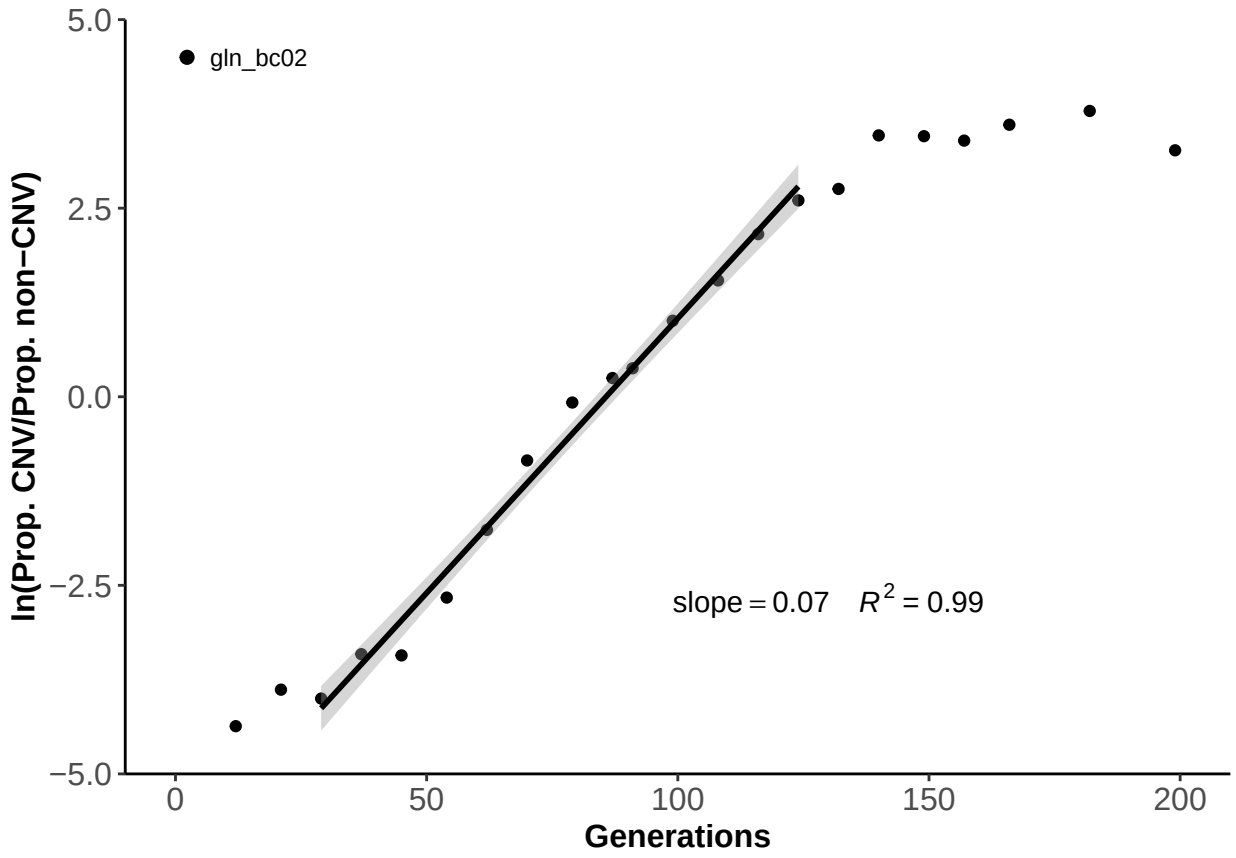
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##     -8.4747       0.1242
```




```
## [1] 0.005234006
```

```
##                2.5 %    97.5 %
## Generation 0.1096185 0.1386823
```

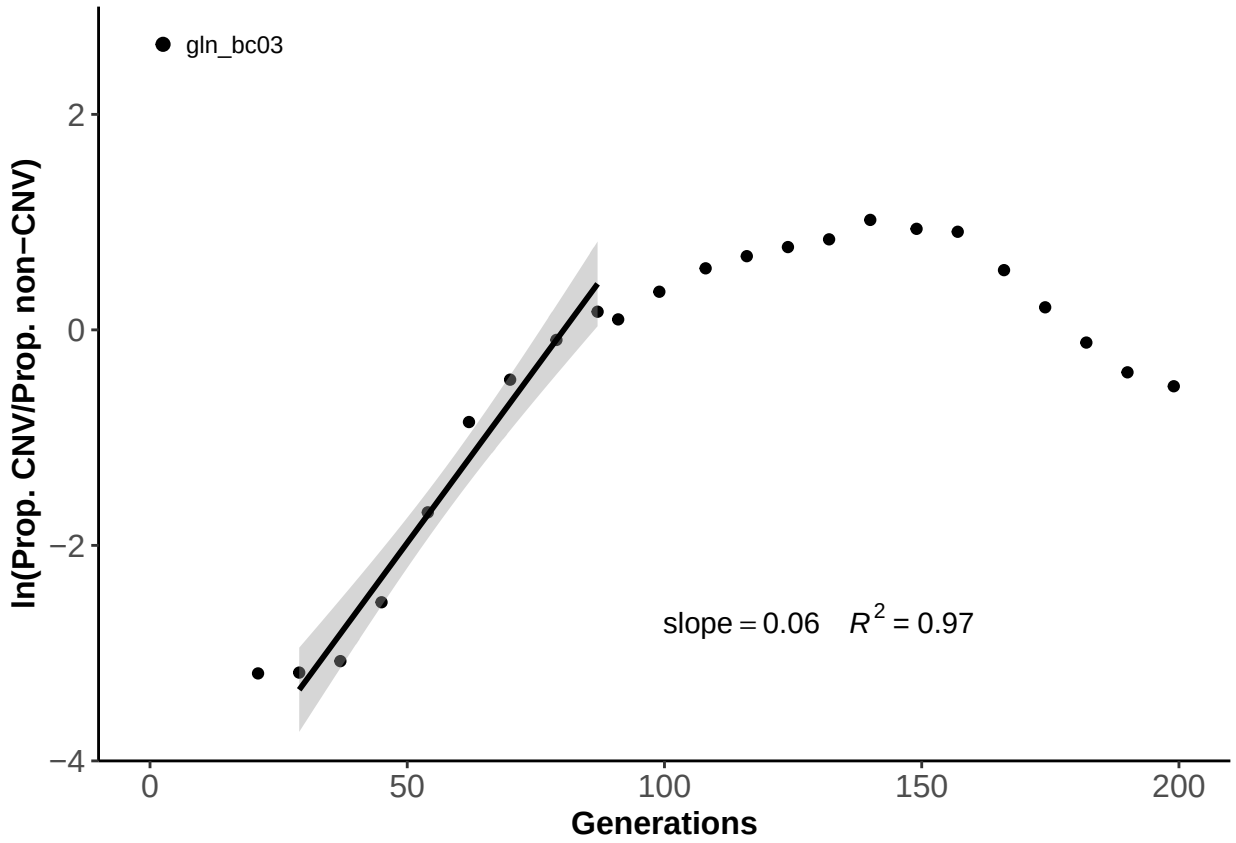
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -6.24177      0.07281
```




```
## [1] 0.002390899
```

```
##                  2.5 %     97.5 %
## Generation 0.06755061 0.07807527
```

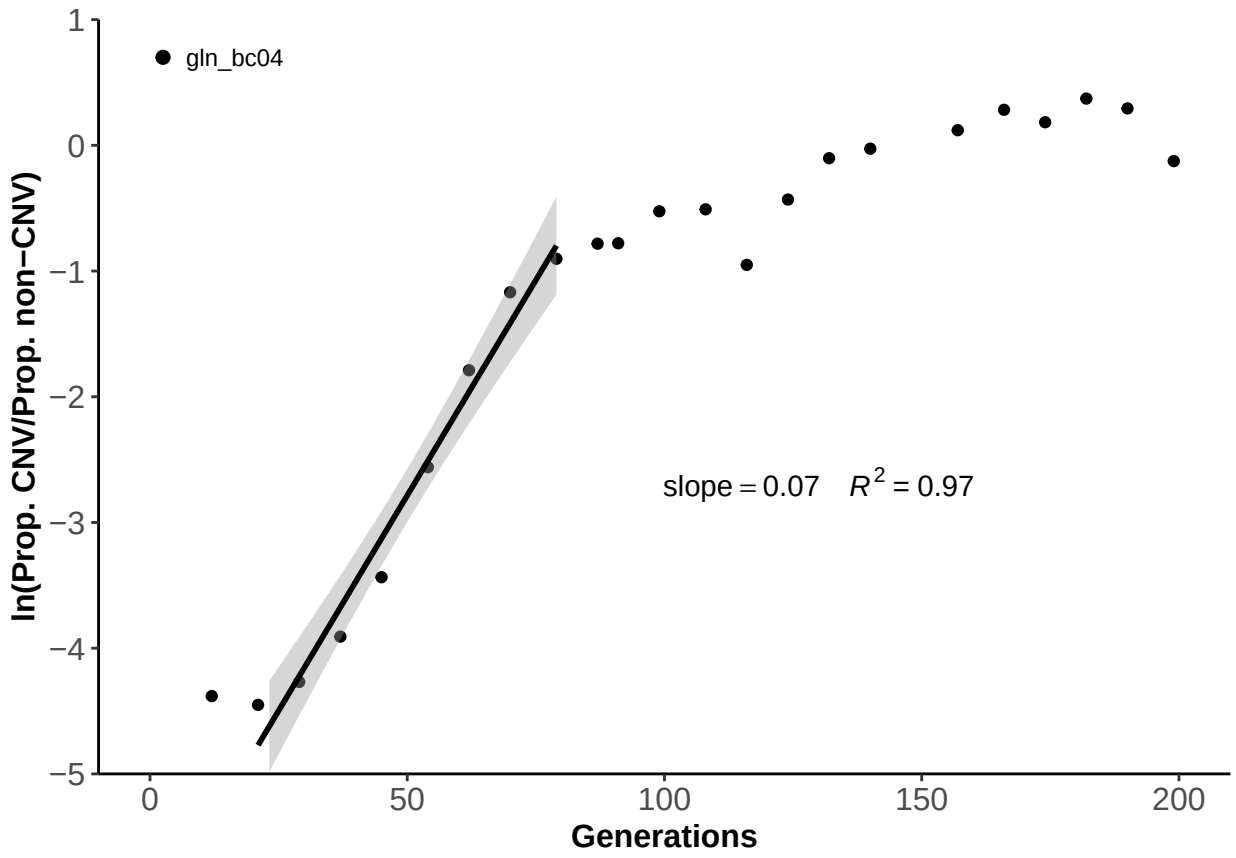
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -5.22360      0.06495
```




```
## [1] 0.004613785
```

```
##                  2.5 %     97.5 %
## Generation 0.05365888 0.07623793
```

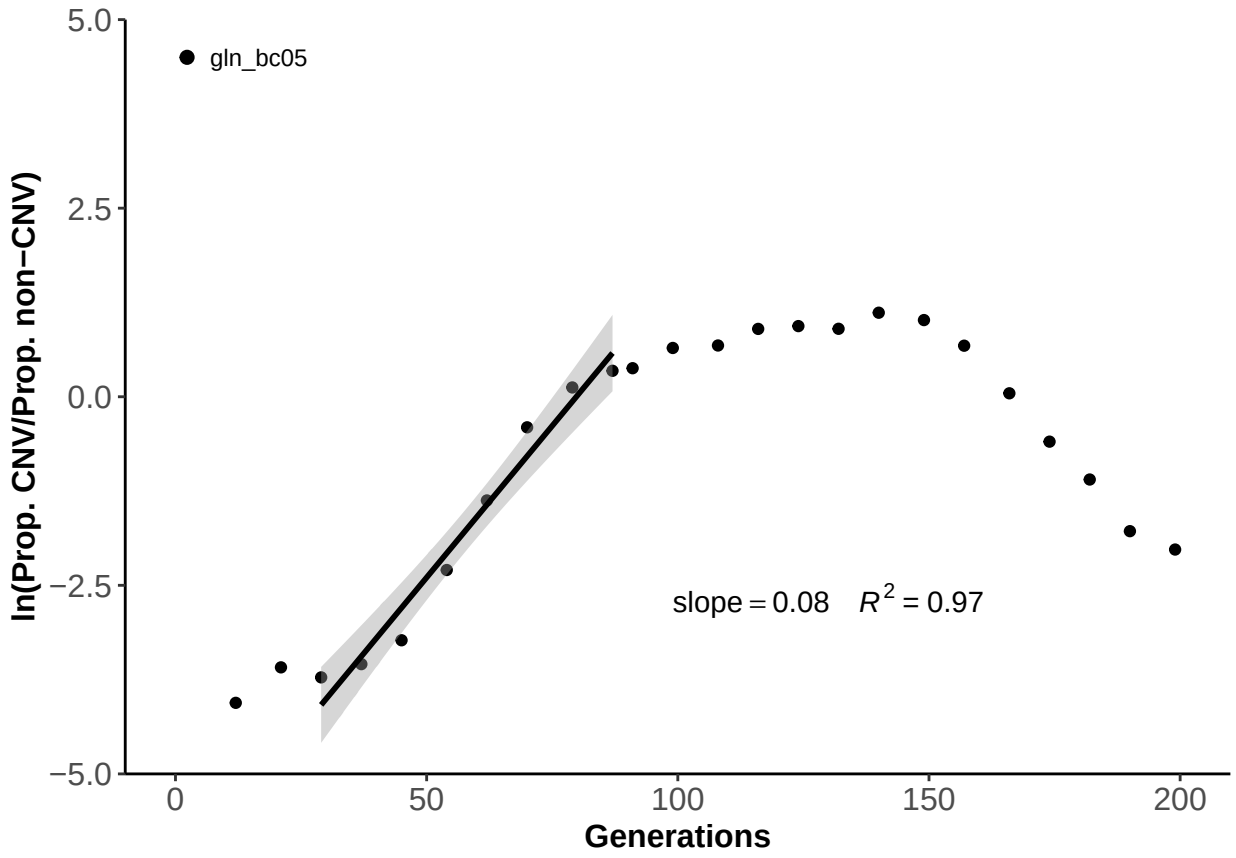
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##     -6.2100       0.0685
```




```
## [1] 0.004553106
```

```
##                  2.5 %     97.5 %
## Generation 0.05736273 0.07964483
```

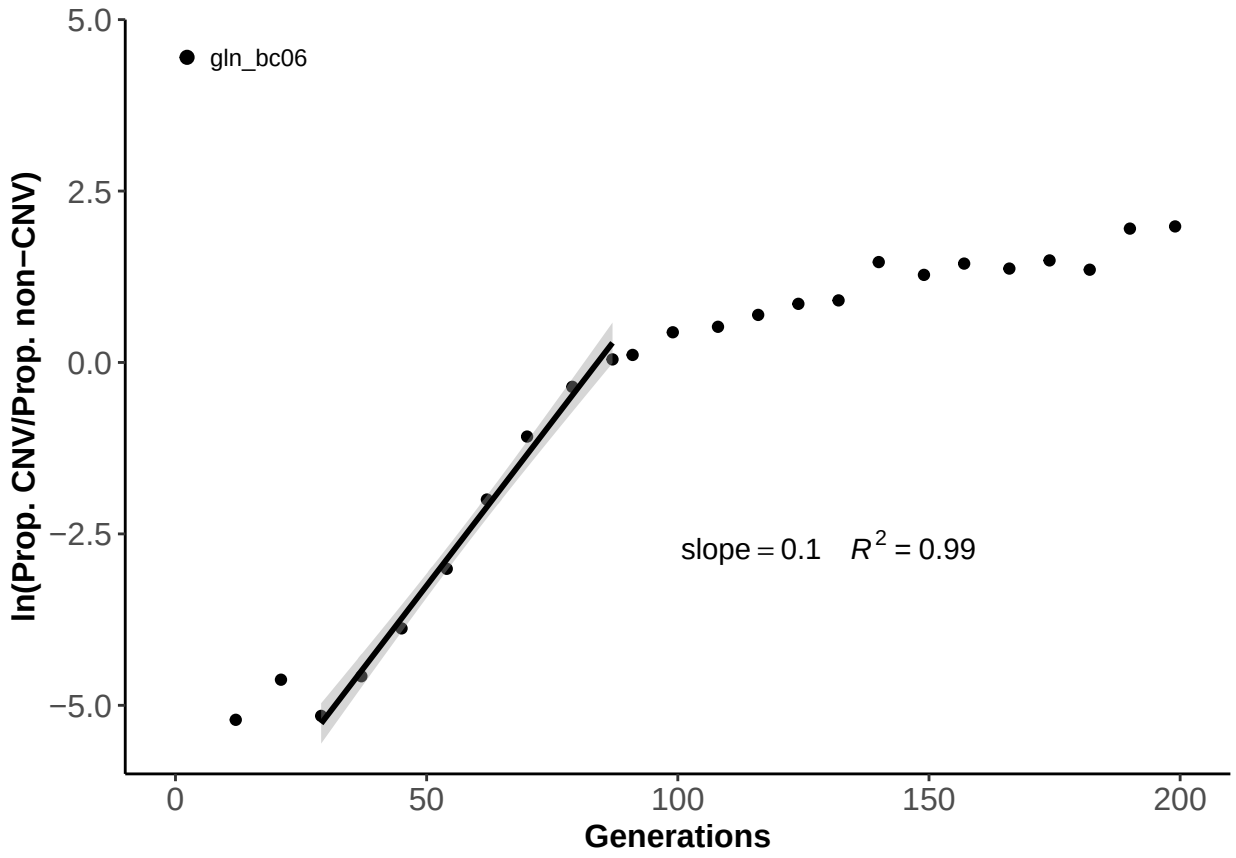
```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##    -6.41715      0.08042
```




```
## [1] 0.00594899
```

```
##                2.5 %    97.5 %
## Generation 0.0658626 0.0949759
```

```
##
## Call:
## lm(formula = logECNV_noCNV ~ Generation, data = test)
##
## Coefficients:
## (Intercept)   Generation
##     -8.0400       0.0957
```




```
## [1] 0.003472746
```

```
##                  2.5 %    97.5 %
## Generation 0.08720731 0.1042023
```