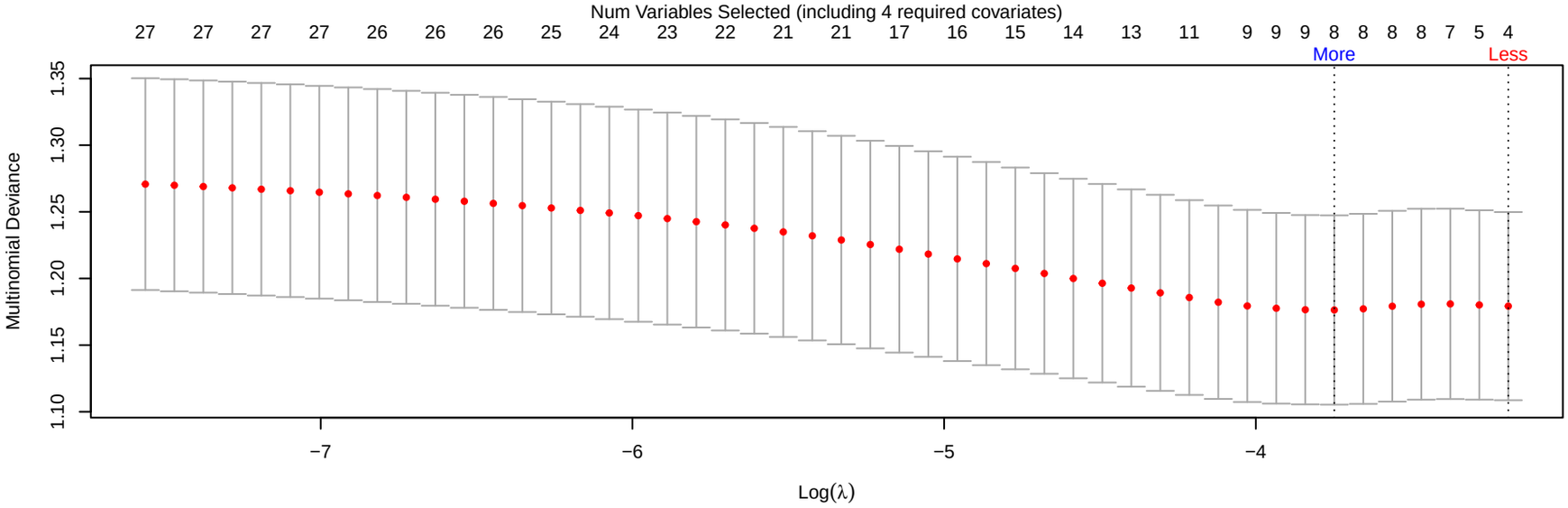
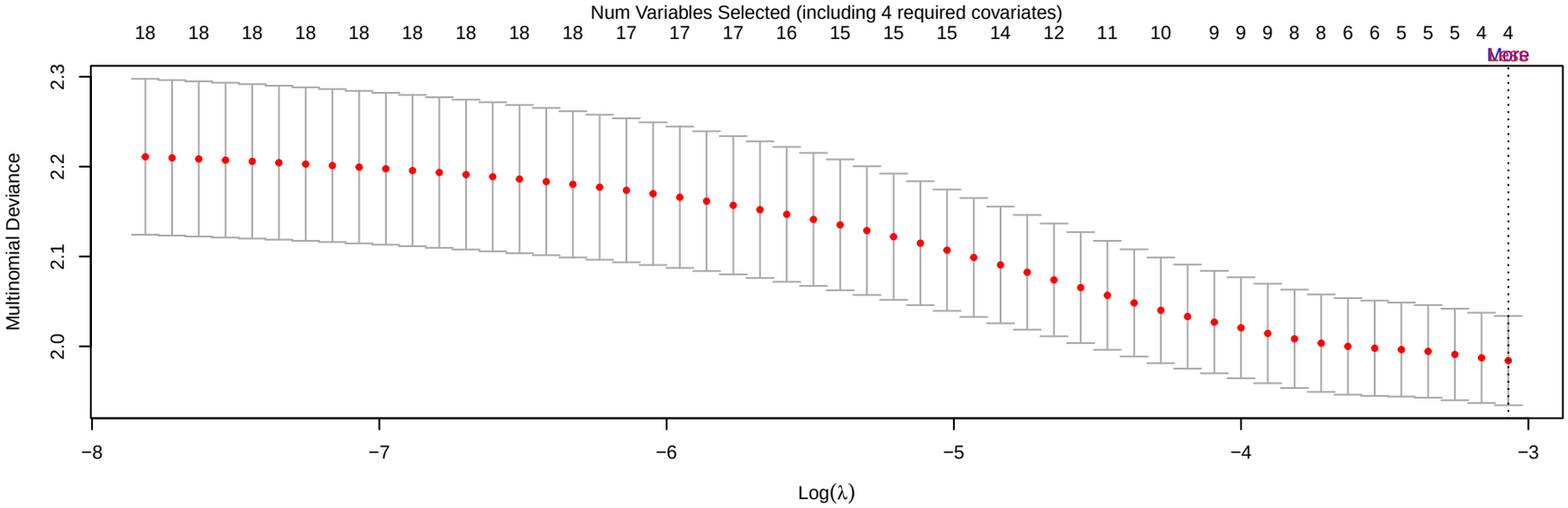
```
../LassoSelect_MultinomialResponses.r

    Factors File: comorbcl_allsnps.tsv
 Responses File : response.lst
 Covariates File: covariates.lst
Targ. Var.  File: Inflam27.lst
     Output Root: results
```

```
Target Vars:
 [1] "chr1_159205564_G_A"  "chr1_169507088_G_A"  "chr2_32264782_T_C"
 [4] "chr2_224010157_G_A"  "chr3_42864624_T_C"   "chr3_46415921_T_C"
 [7] "chr3_123136052_T_C"  "chr4_3444364_G_T"    "chr4_73896666_T_G"
[10] "chr4_76668758_C_G"   "chr5_69386709_A_C"   "chr6_43957870_G_A"
[13] "chr7_81729735_C_T"   "chr9_2686273_A_T"    "chr9_34649445_A_G"
[16] "chr10_6053965_C_A"   "chr10_63267850_A_T"  "chr11_112138882_C_T"
[19] "chr15_81299298_G_A"  "chr15_101450115_C_T" "chr17_36443746_C_T"
[22] "chr19_50727476_C_T"  "chr22_23908608_C_G"

Covariates:
[1] "age"             "isMale"          "current_smoker"  "smoking_history"

Responses:
[1] "K02" "K03" "K04" "K05" "K06" "K07" "K08" "K09" "K10"
```

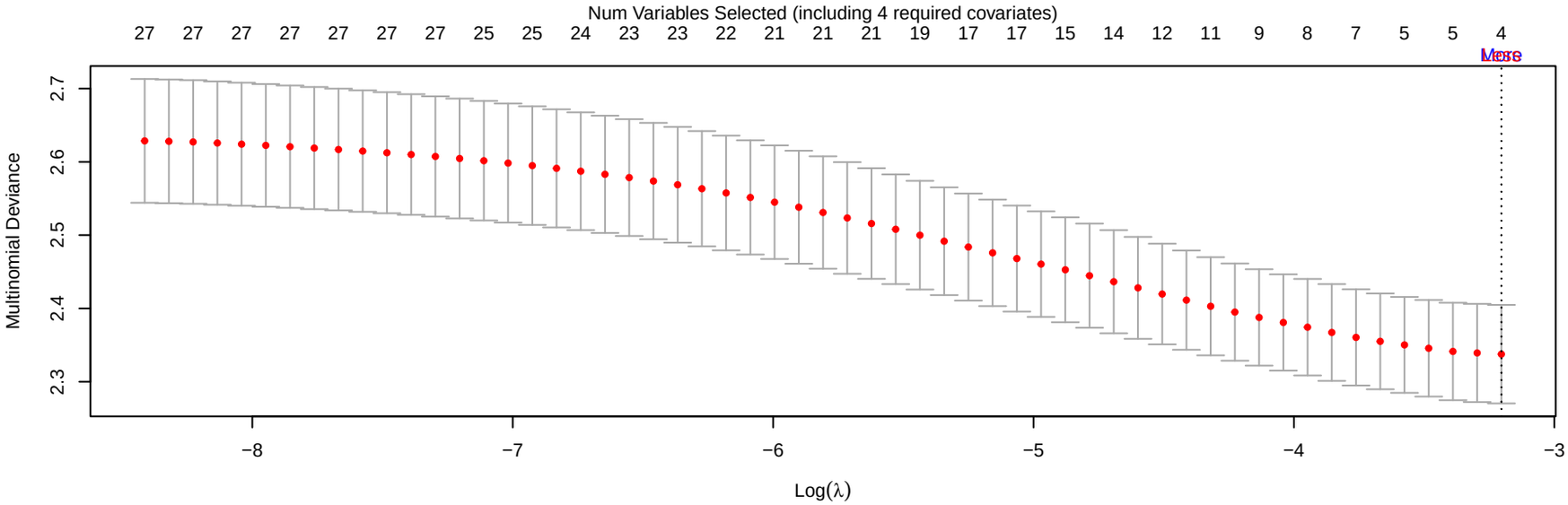
Response: K02

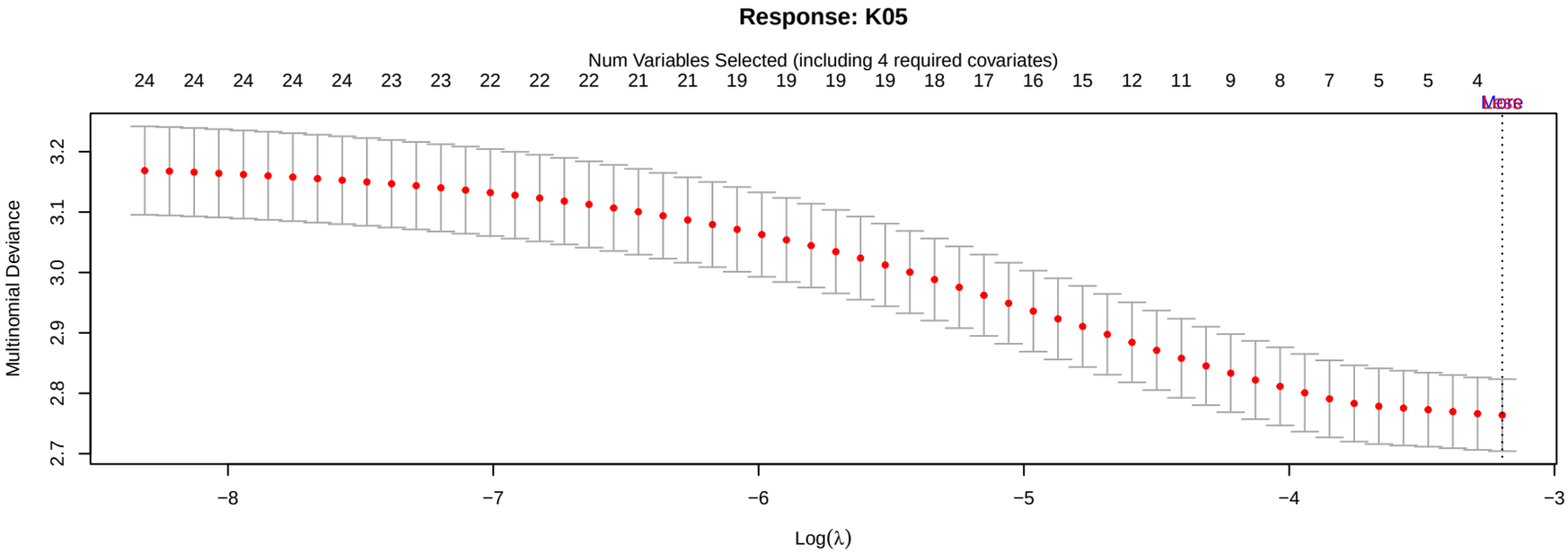


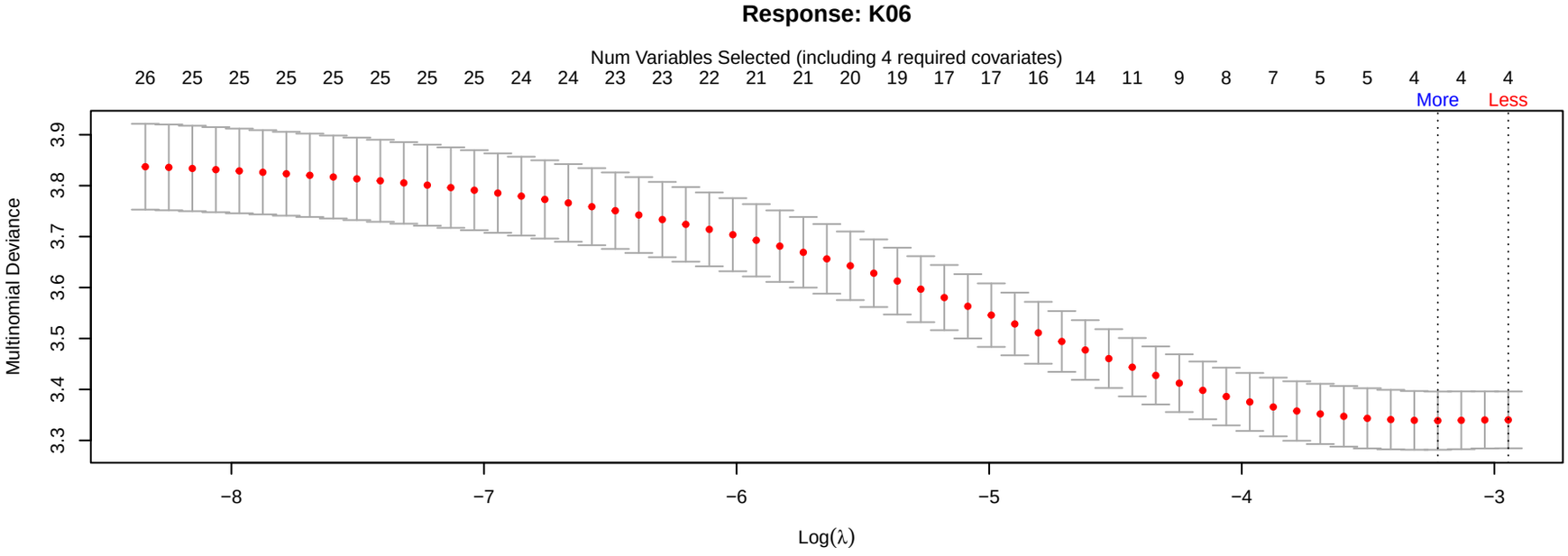
Response: K03

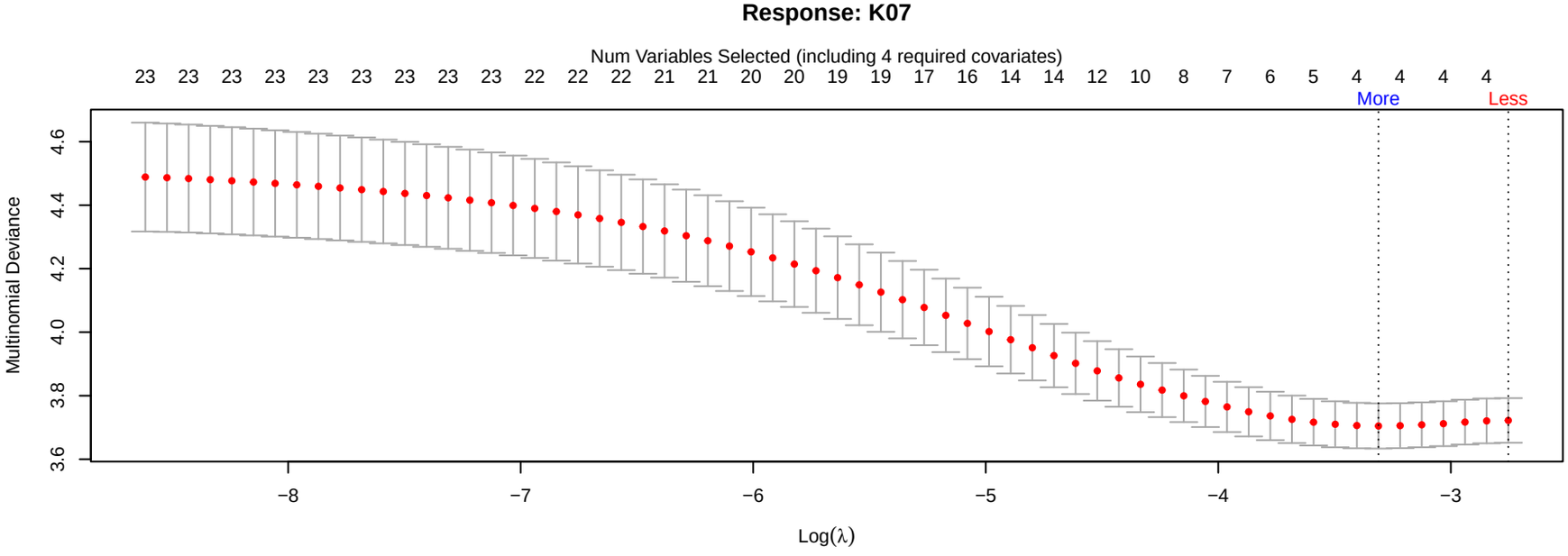


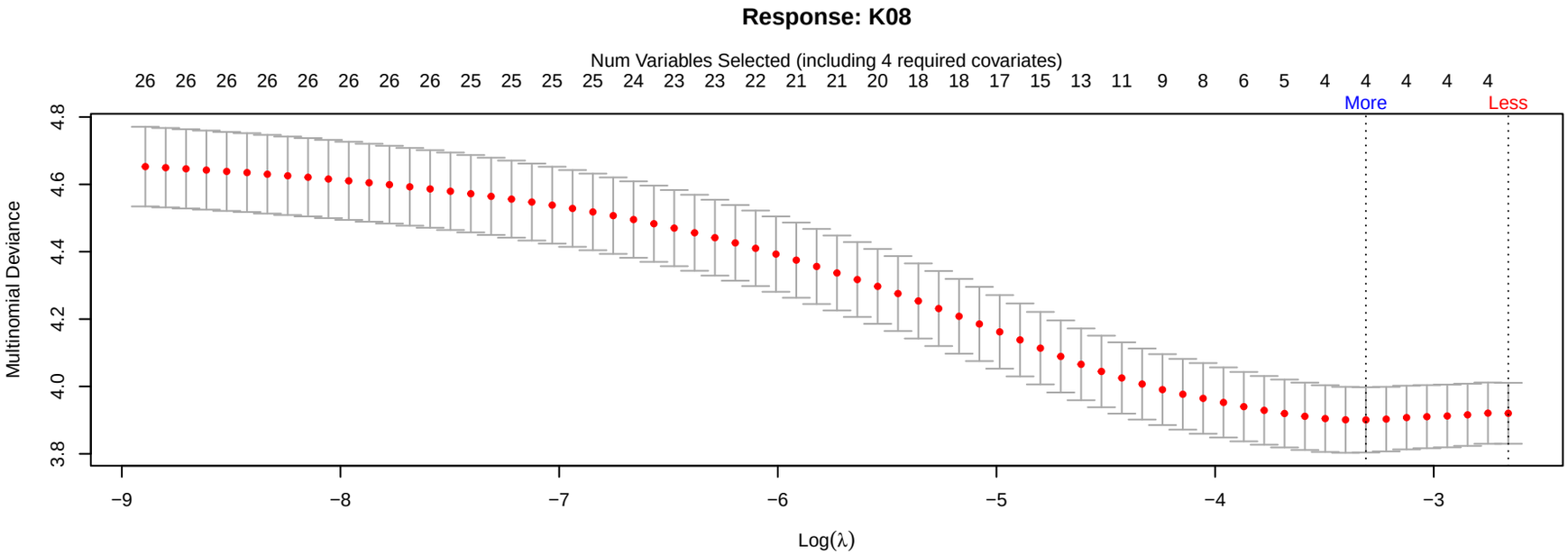
Response: K04

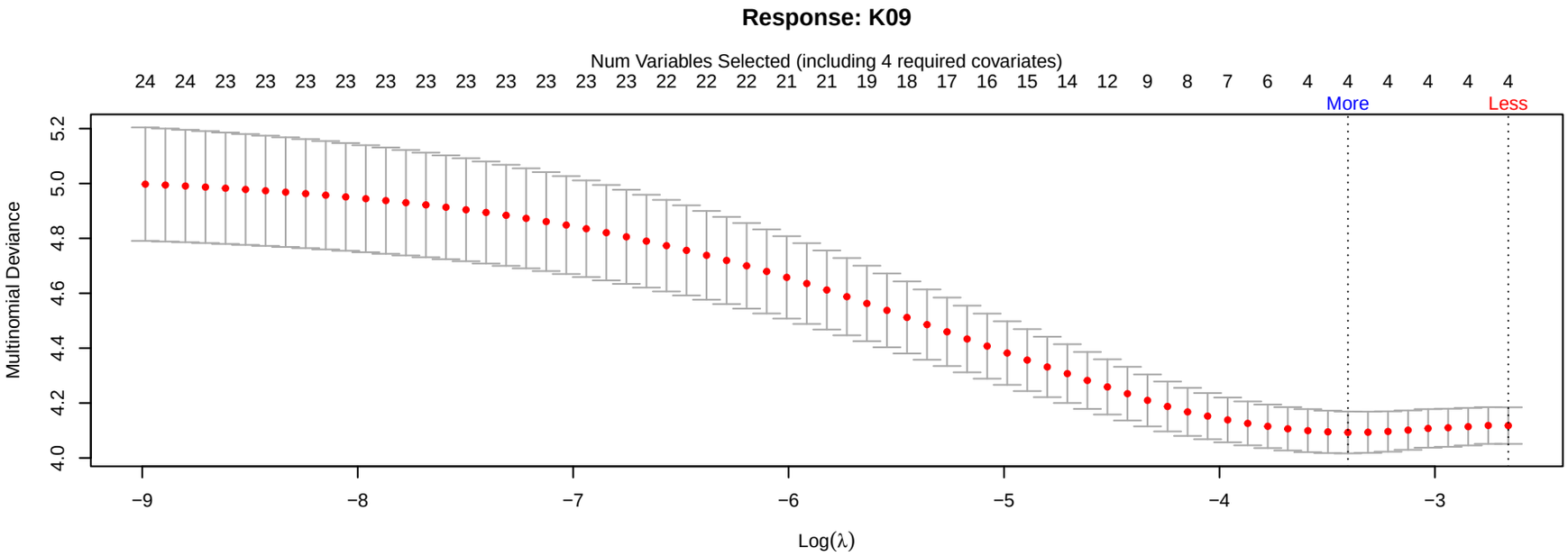


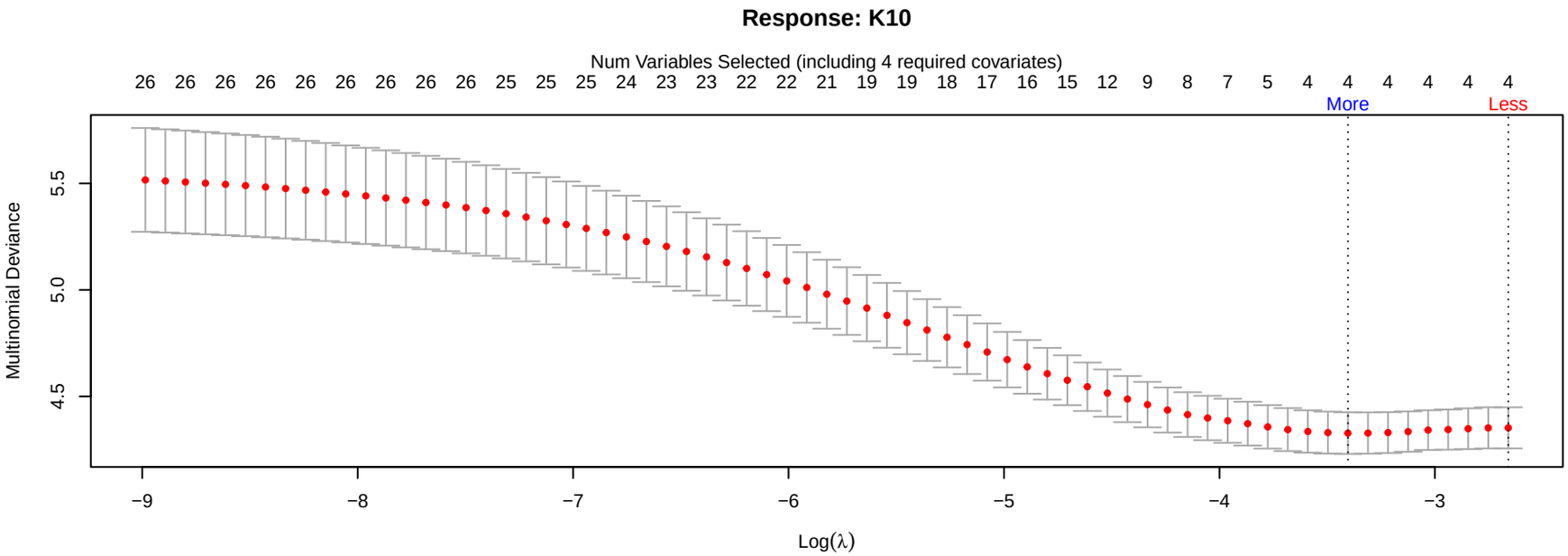

Response: K05
Num Variables Selected (including 4 required covariates)
24 24 24 24 24 23 23 22 22 22 21 21 19 19 19 19 18 17 16 15 12 11 9 8 7 5 5 4
More
Less
Multinomial Deviance
3.2
3.1
3.0
2.9
2.8
2.7
−8
−7
−6
−5
−4
−3
Log(λ)


Response: K06
Num Variables Selected (including 4 required covariates)
26 25 25 25 25 25 25 25 24 24 23 23 22 21 21 20 19 17 17 16 14 11 9 8 7 5 5 4 4 4
More
Less
Multinomial Deviance
3.9
3.8
3.7
3.6
3.5
3.4
3.3
−8
−7
−6
−5
−4
−3
Log(λ)


Response: K07
Num Variables Selected (including 4 required covariates)
23 23 23 23 23 23 23 23 23 22 22 22 21 21 20 20 19 19 17 16 14 14 12 10 8 7 6 5 4 4 4 4
More
Less
Multinomial Deviance
4.6
4.4
4.2
4.0
3.8
3.6
−8
−7
−6
−5
−4
−3
Log(λ)


Response: K08
Num Variables Selected (including 4 required covariates)
26 26 26 26 26 26 26 26 25 25 25 25 24 23 23 22 21 21 20 18 18 17 15 13 11 9 8 6 5 4 4 4 4 4
More
Less
Multinomial Deviance
3.8
4.0
4.2
4.4
4.6
4.8
−9
−8
−7
−6
−5
−4
−3
Log(λ)


Response: K09
Num Variables Selected (including 4 required covariates)
24 24 23 23 23 23 23 23 23 23 23 23 23 22 22 22 21 21 19 18 17 16 15 14 12 9 8 7 6 4 4 4 4 4 4
More
Less
Multinomial Deviance
4.0
4.2
4.4
4.6
4.8
5.0
5.2
−9
−8
−7
−6
−5
−4
−3
Log(λ)


Response: K10
Num Variables Selected (including 4 required covariates)
26 26 26 26 26 26 26 26 26 25 25 25 24 23 23 22 22 21 19 19 18 17 16 15 12 9 8 7 5 4 4 4 4 4 4
More
Less
Multinomial Deviance
4.5
5.0
5.5
−9
−8
−7
−6
−5
−4
−3
Log(λ)

All Variables
Selected Variables (Min Lambda / Max Variables):

	K02	K03	K04	K05	K06	K07	K08	K09	K10	NumResp
chr1_159205564_G_A	.	.	.	.	.	.	.	.	.	0
chr1_169507088_G_A	.	.	.	.	.	.	.	.	.	0
chr2_32264782_T_C	X	.	.	.	.	.	.	.	.	1
chr2_224010157_G_A	.	.	.	.	.	.	.	.	.	0
chr3_42864624_T_C	X	.	.	.	.	.	.	.	.	1
chr3_46415921_T_C	.	.	.	.	.	.	.	.	.	0
chr3_123136052_T_C	.	.	.	.	.	.	.	.	.	0
chr4_3444364_G_T	.	.	.	.	.	.	.	.	.	0
chr4_73896666_T_G	.	.	.	.	.	.	.	.	.	0
chr4_76668758_C_G	X	.	.	.	.	.	.	.	.	1
chr5_69386709_A_C	.	.	.	.	.	.	.	.	.	0
chr6_43957870_G_A	.	.	.	.	.	.	.	.	.	0
chr7_81729735_C_T	.	.	.	.	.	.	.	.	.	0
chr9_2686273_A_T	.	.	.	.	.	.	.	.	.	0
chr9_34649445_A_G	X	.	.	.	.	.	.	.	.	1
chr10_6053965_C_A	.	.	.	.	.	.	.	.	.	0
chr10_63267850_A_T	.	.	.	.	.	.	.	.	.	0
chr11_112138882_C_T	.	.	.	.	.	.	.	.	.	0
chr15_81299298_G_A	.	.	.	.	.	.	.	.	.	0
chr15_101450115_C_T	.	.	.	.	.	.	.	.	.	0
chr17_36443746_C_T	.	.	.	.	.	.	.	.	.	0
chr19_50727476_C_T	.	.	.	.	.	.	.	.	.	0
chr22_23908608_C_G	.	.	.	.	.	.	.	.	.	0
NumSelected	4	0	0	0	0	0	0	0	0	

Total (Unique) Selected Variables: 4

Selected Variables

Selected Variables (Min Lambda / Max Variables):

	K02	K03	K04	K05	K06	K07	K08	K09	K10	NumResp
chr2_32264782_T_C	X	.	.	.	.	.	.	.	.	1
chr3_42864624_T_C	X	.	.	.	.	.	.	.	.	1
chr4_76668758_C_G	X	.	.	.	.	.	.	.	.	1
chr9_34649445_A_G	X	.	.	.	.	.	.	.	.	1
NumSelected	4	0	0	0	0	0	0	0	0	

Total (Unique) Selected Variables: 4