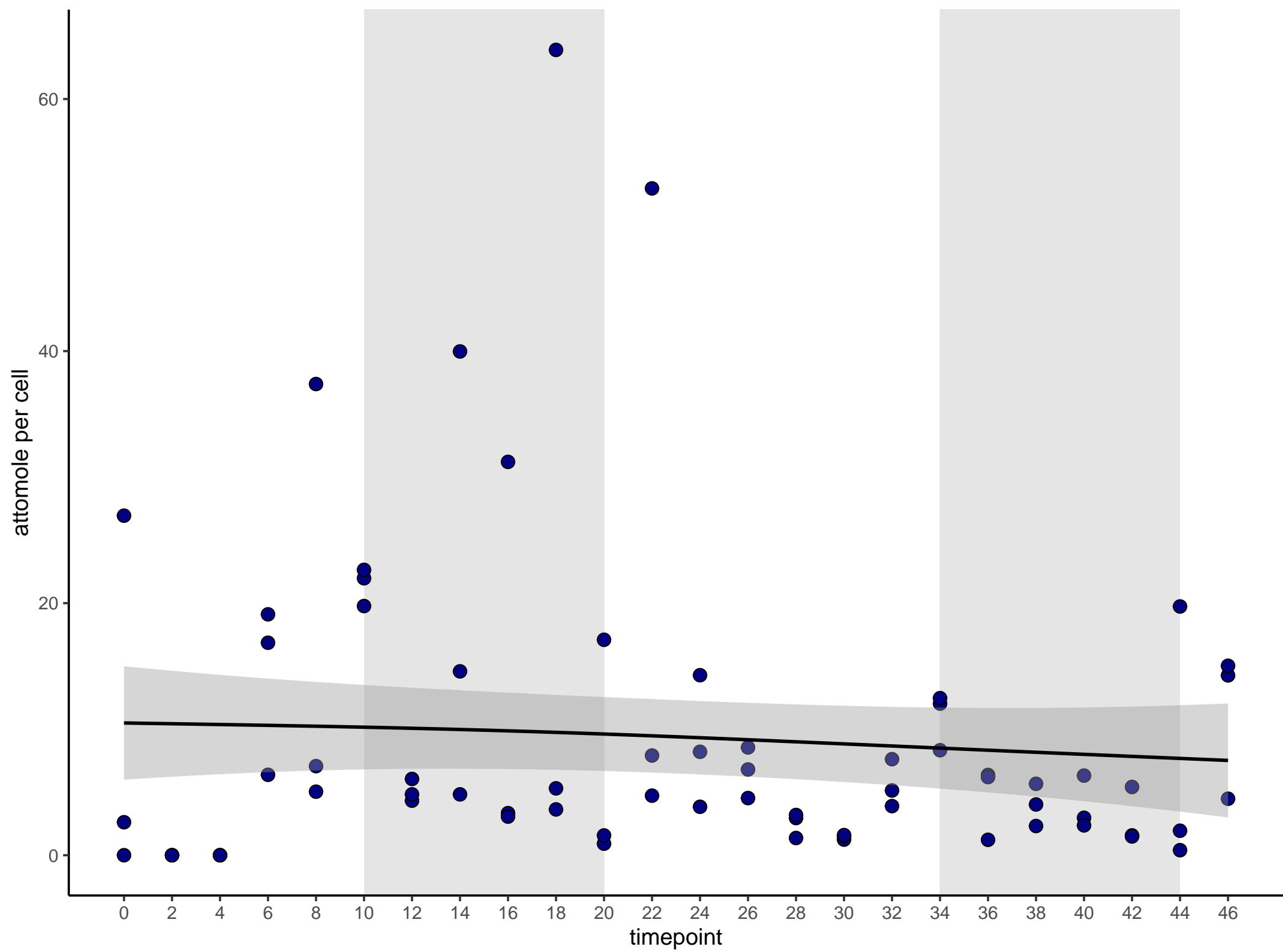
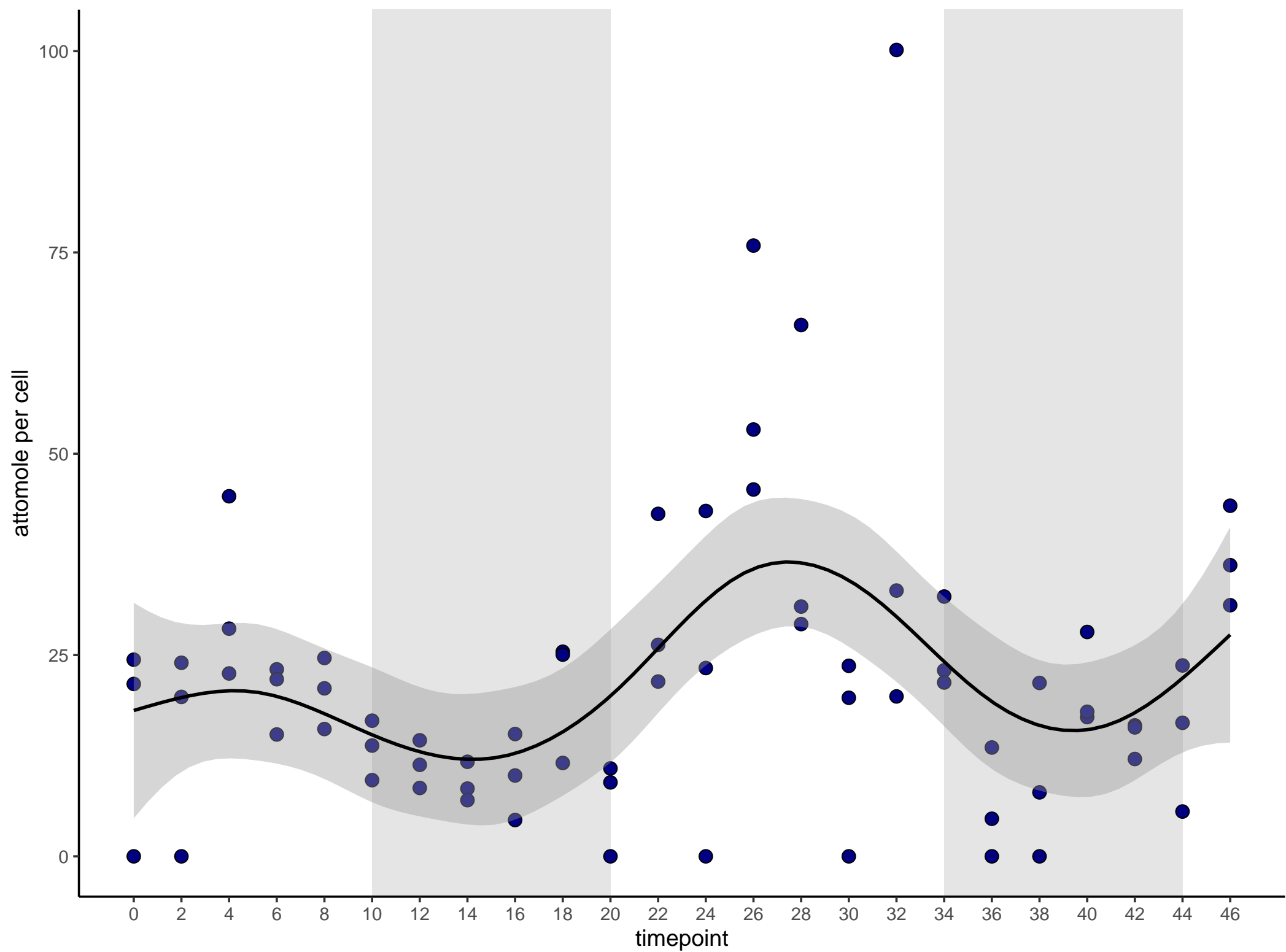


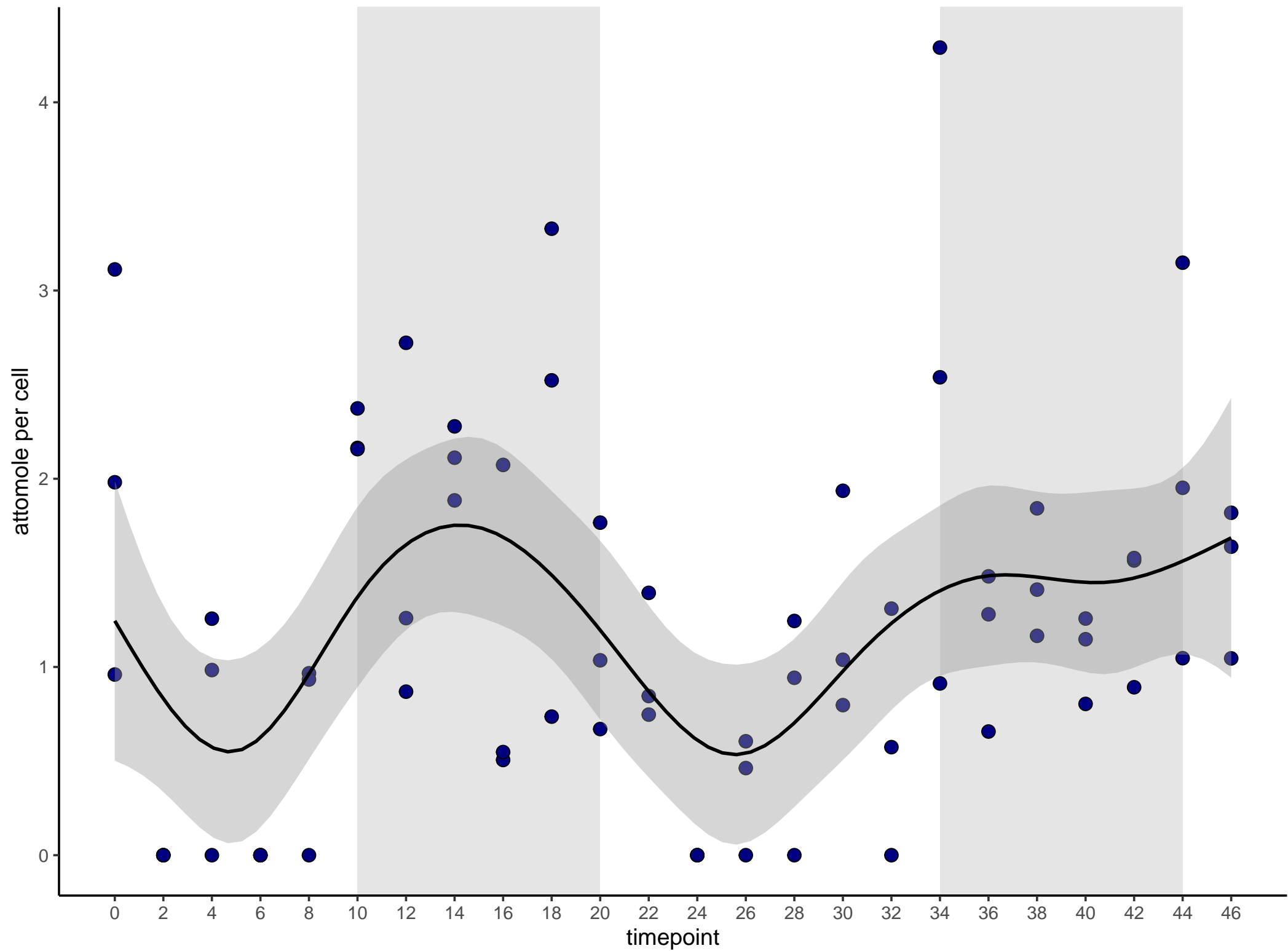
glutamine



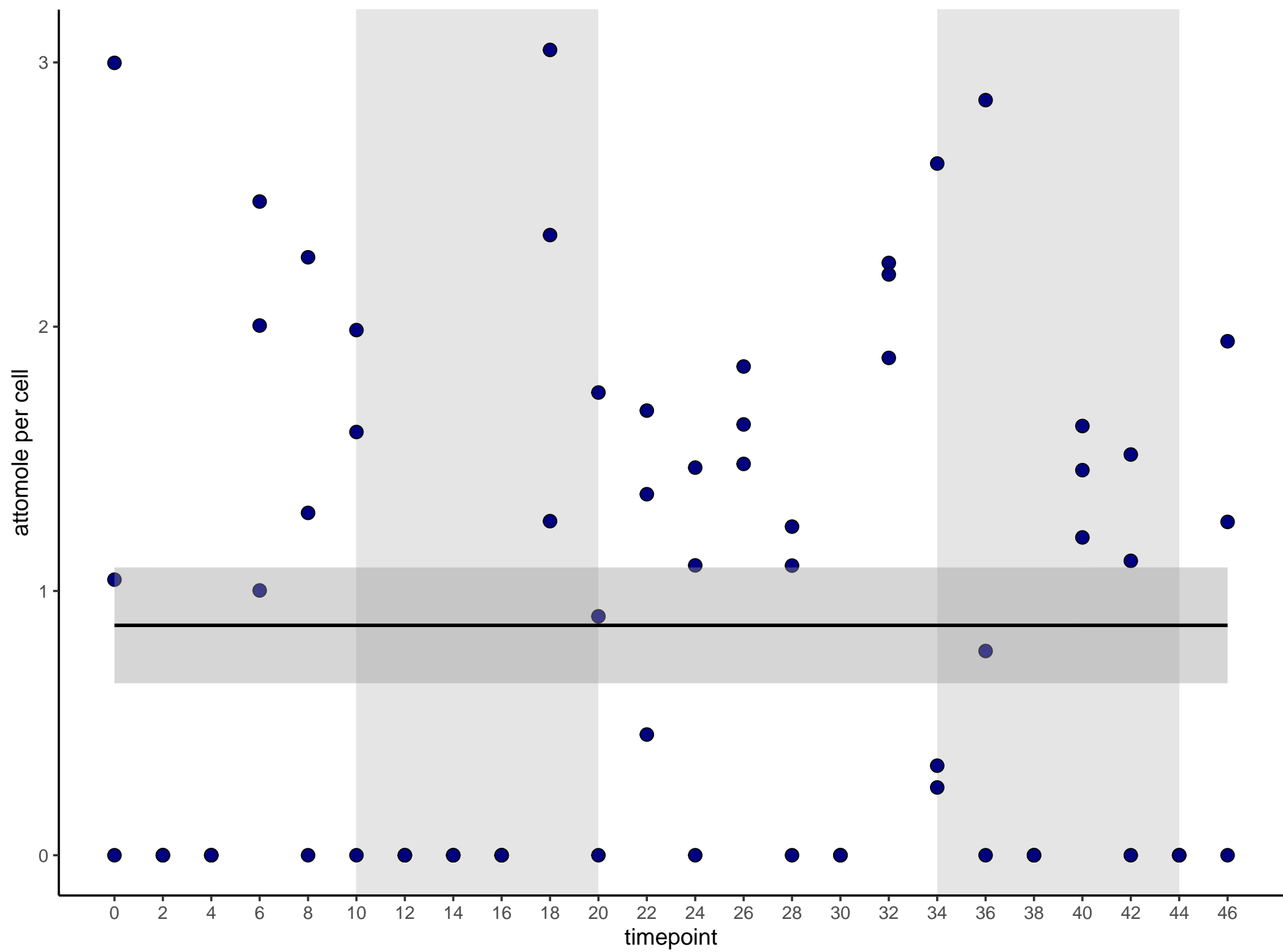
# adenosine 5'-monophosphate pos



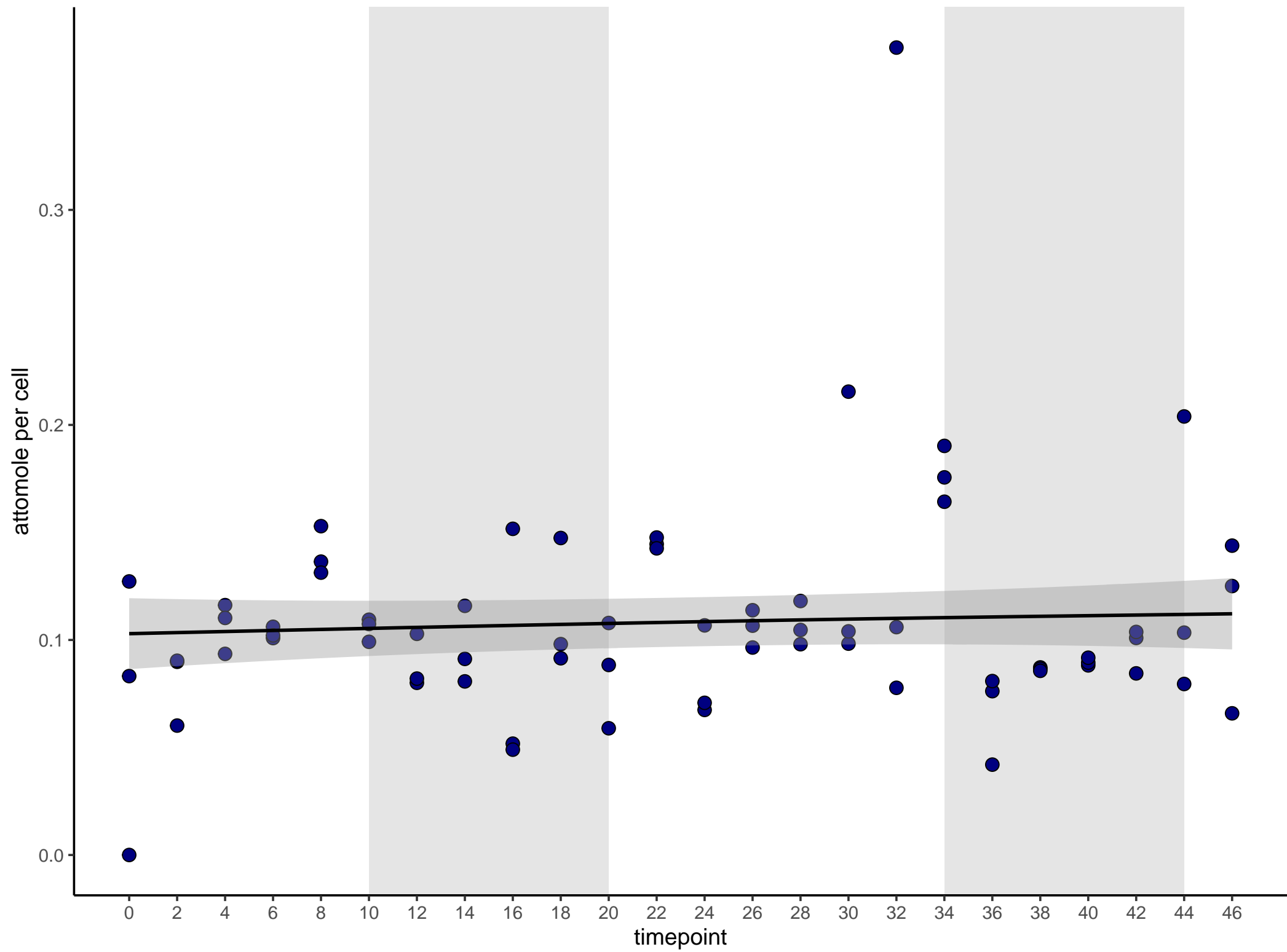
# 3-methyl-2-oxobutanoic acid



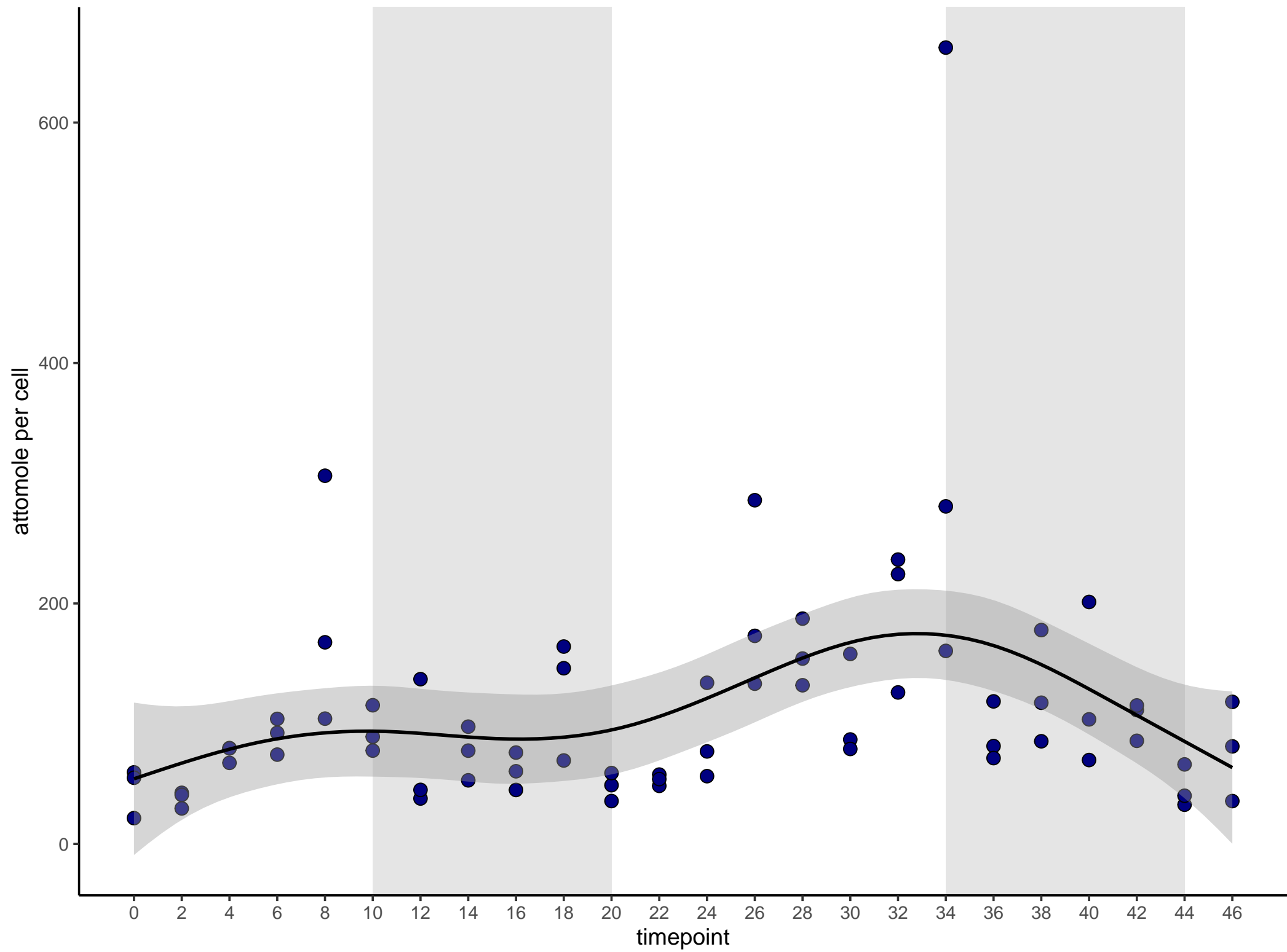
guanine



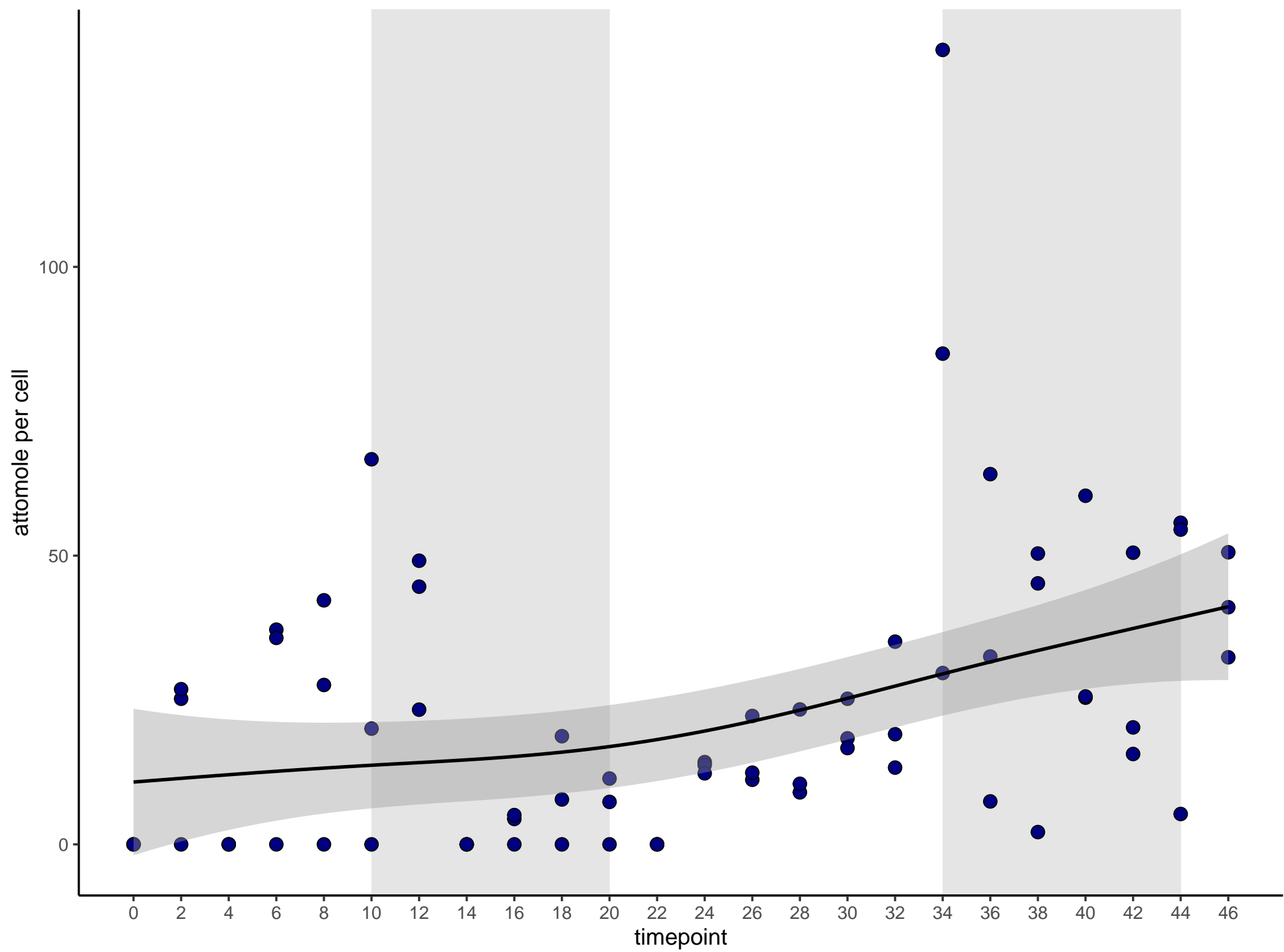
guanosine pos



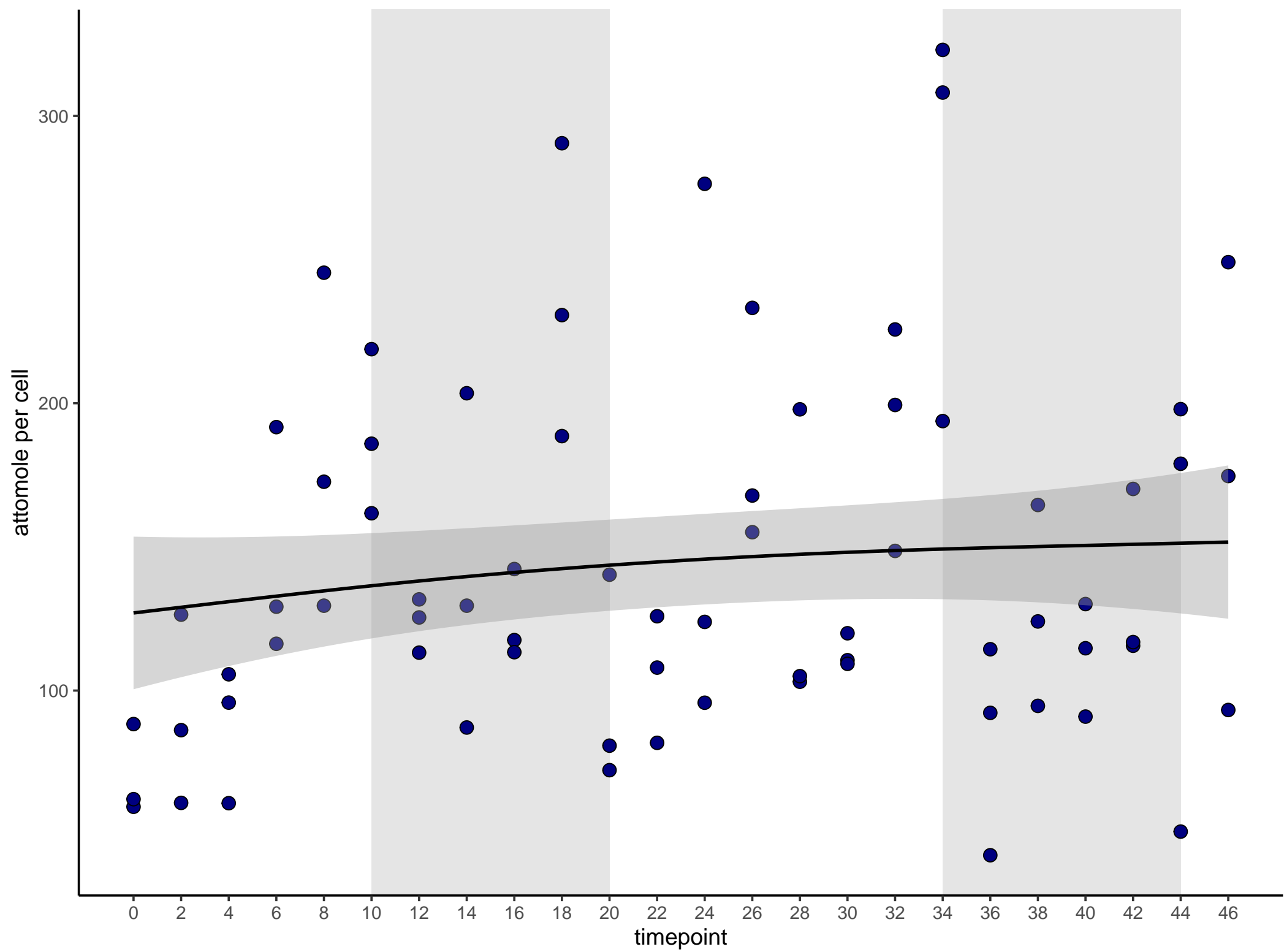
glutathione oxidized



glutathione pos



# n-acetylglutamic acid





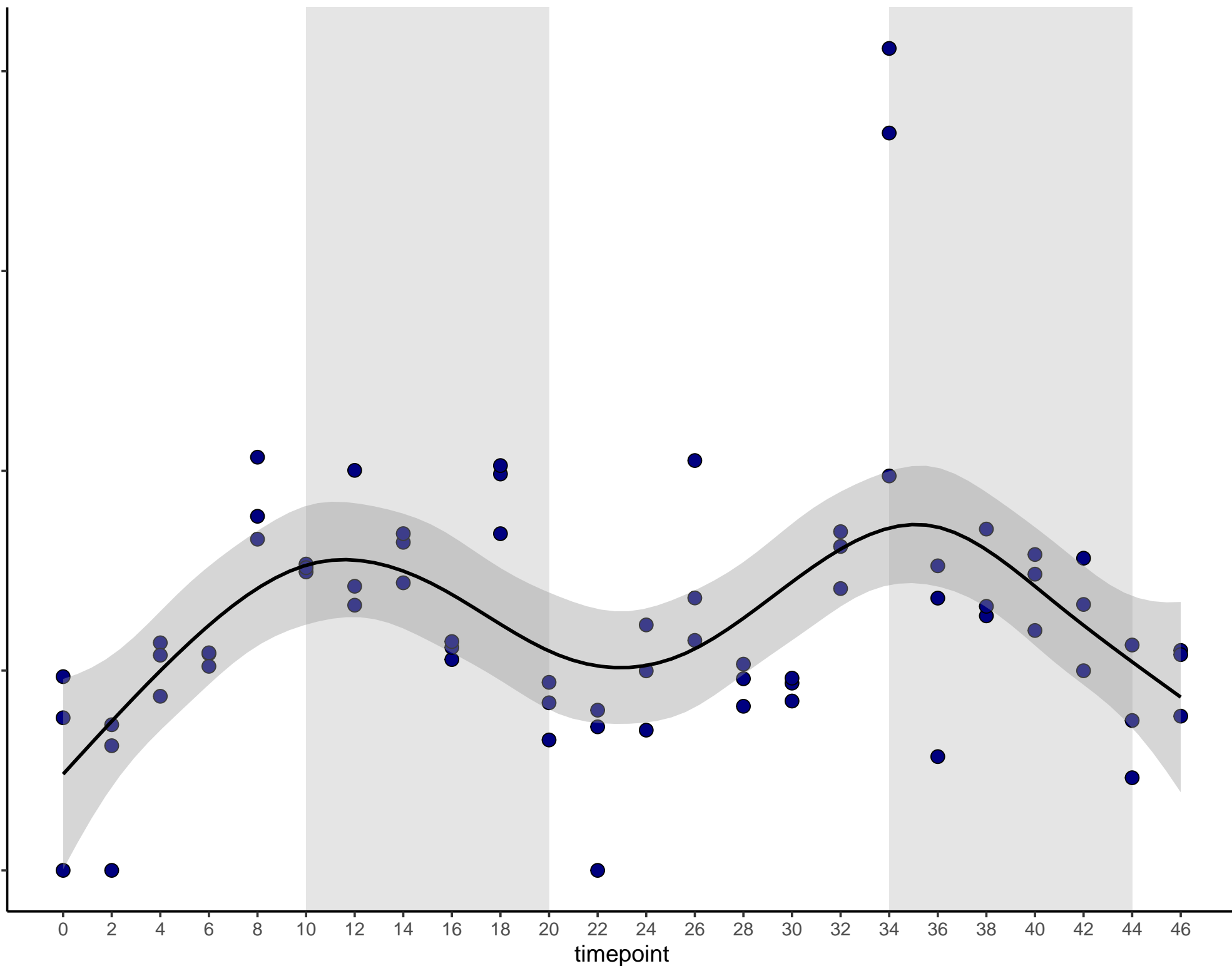
NAD

attomole per cell

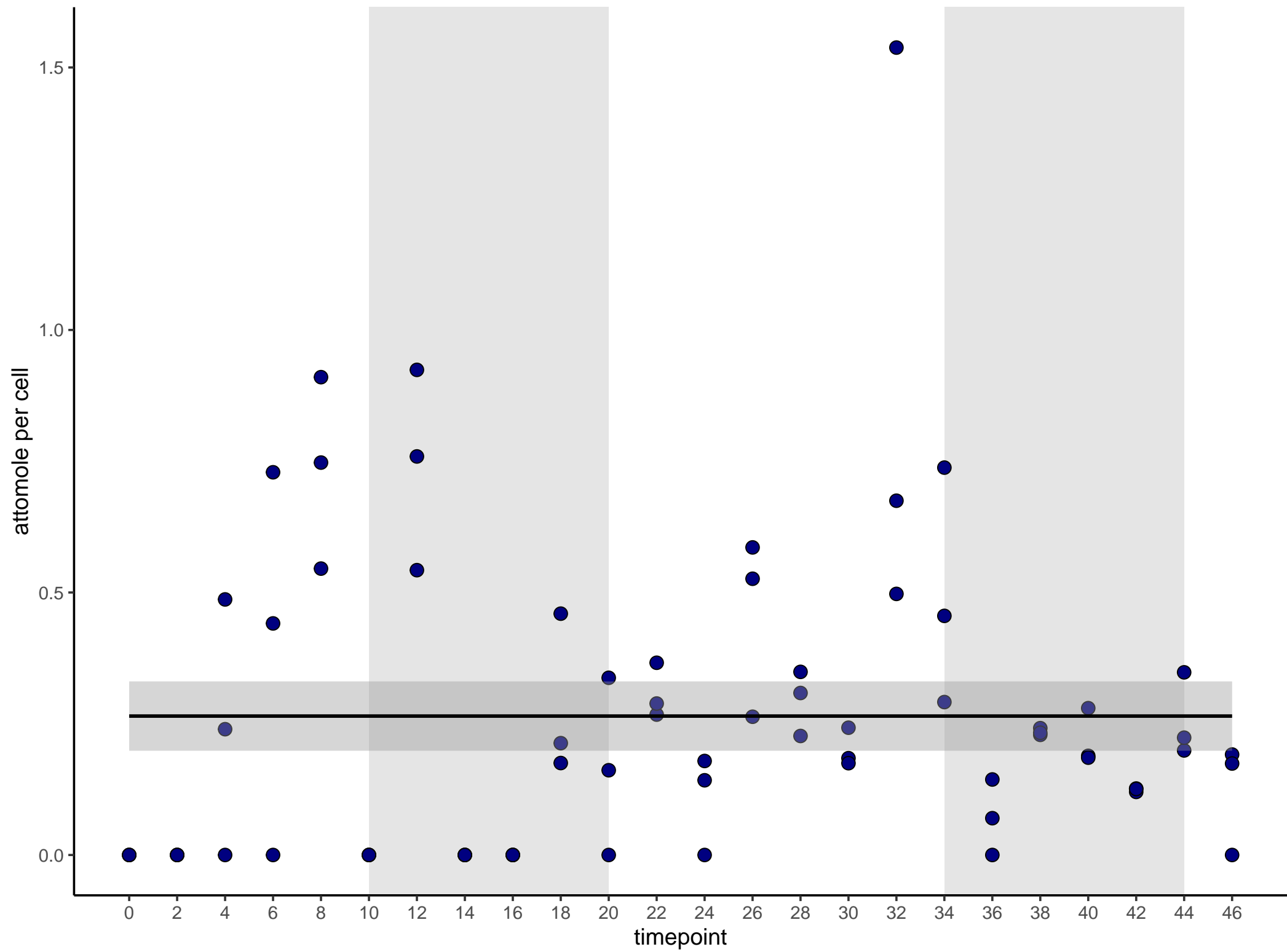
100  
75  
50  
25  
0

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46

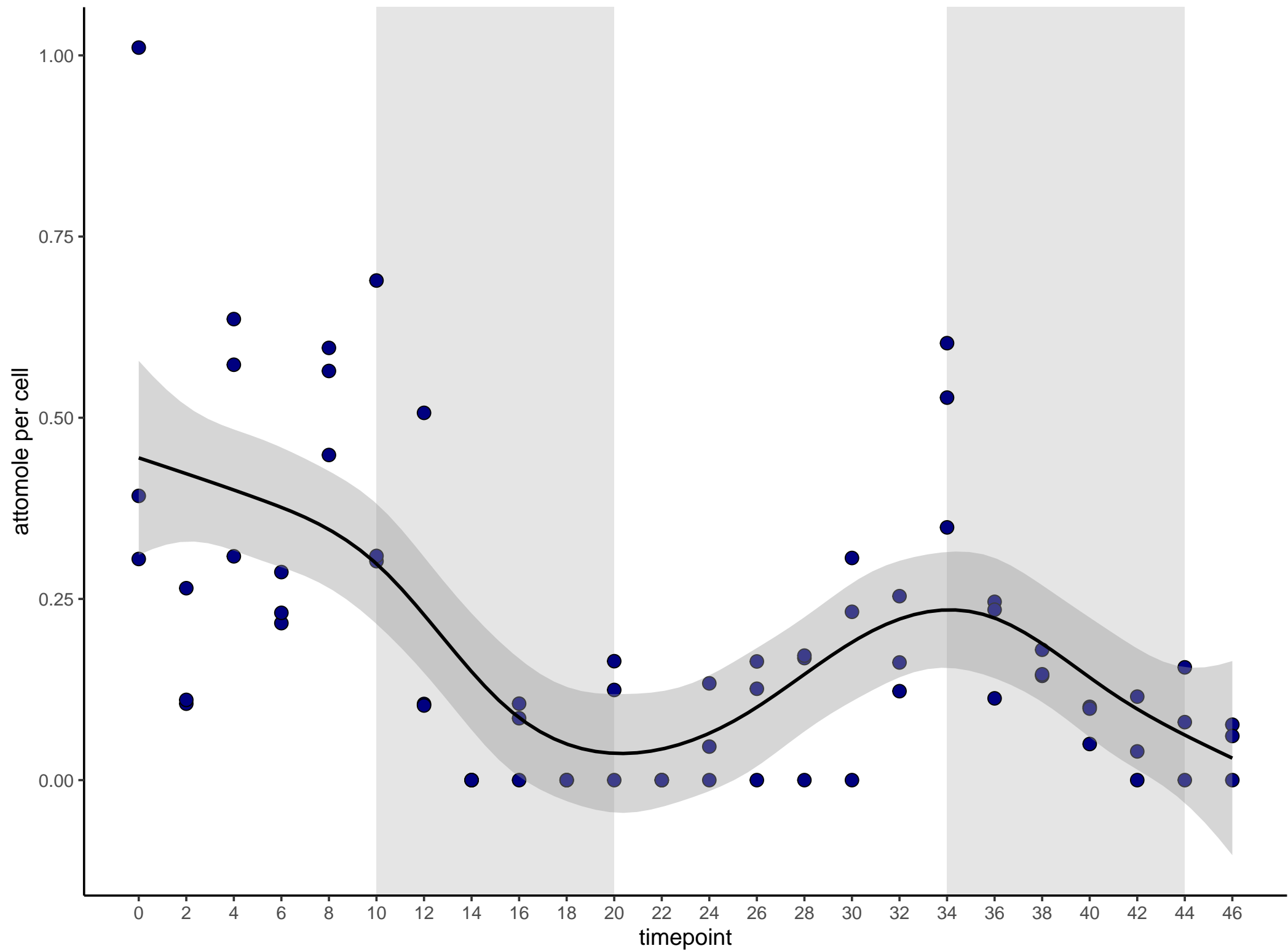
timepoint



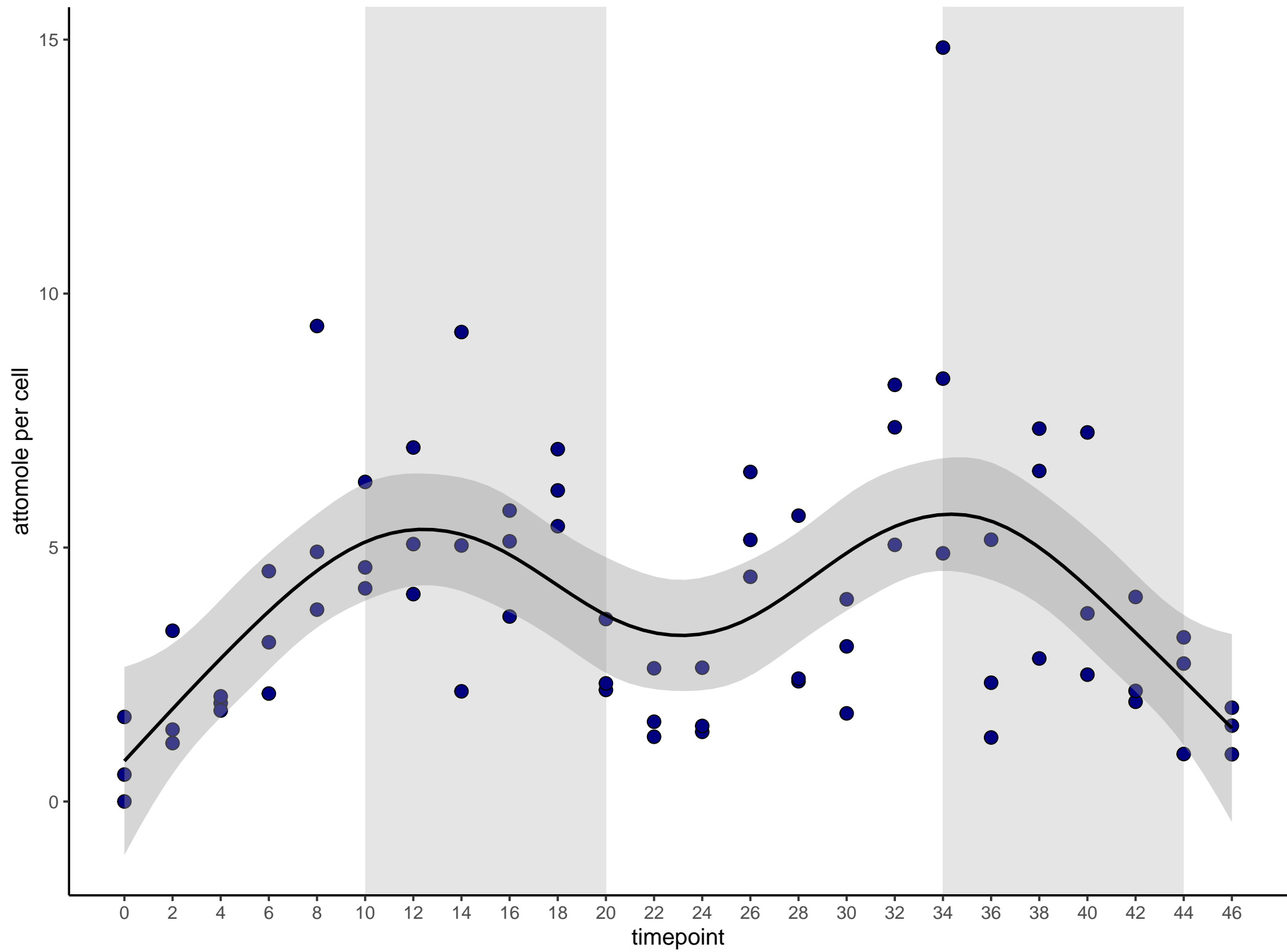
# hexose-6-phosphate



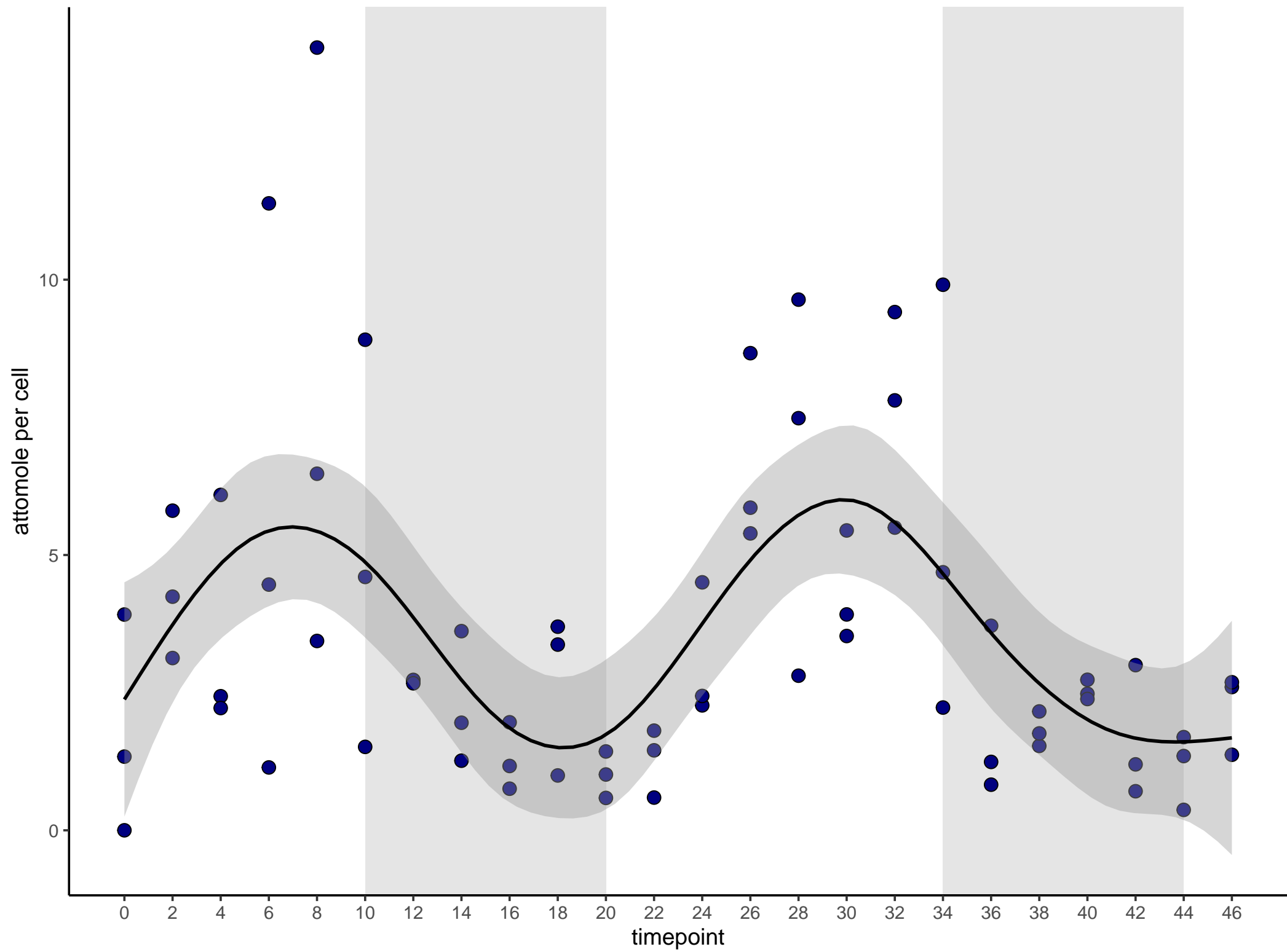
# 4-hydroxybenzoic acid



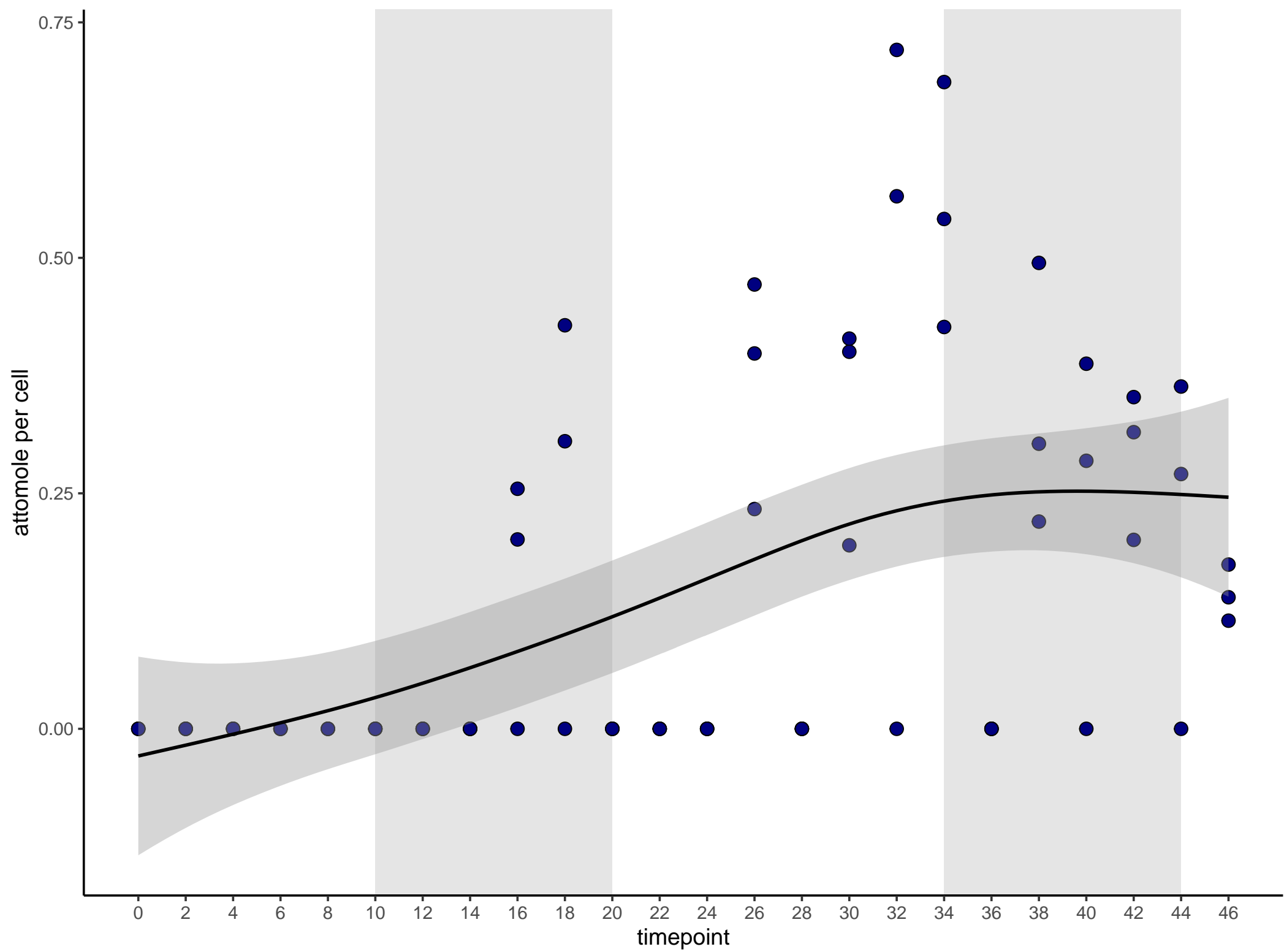
citrulline



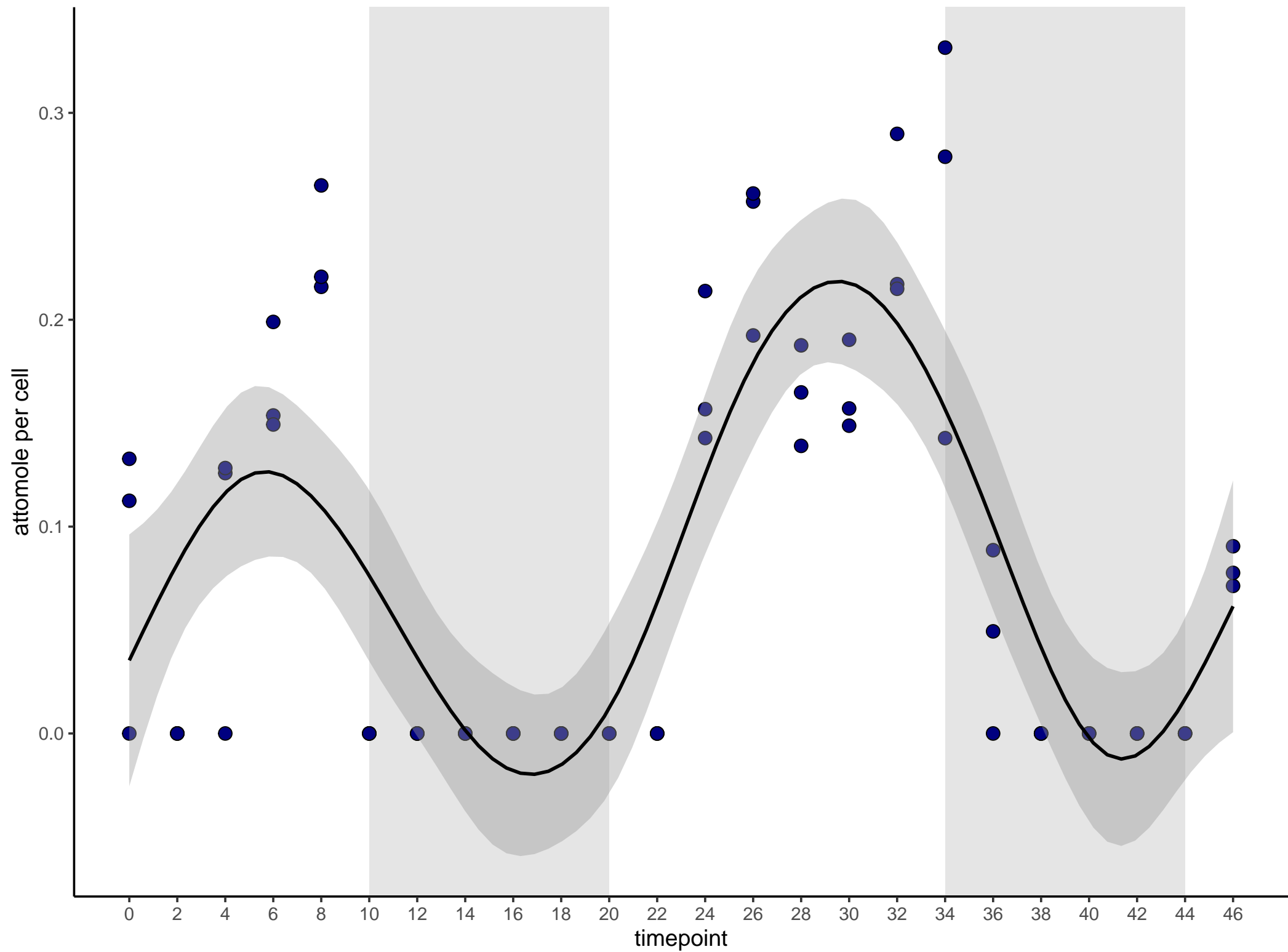
cytidine pos



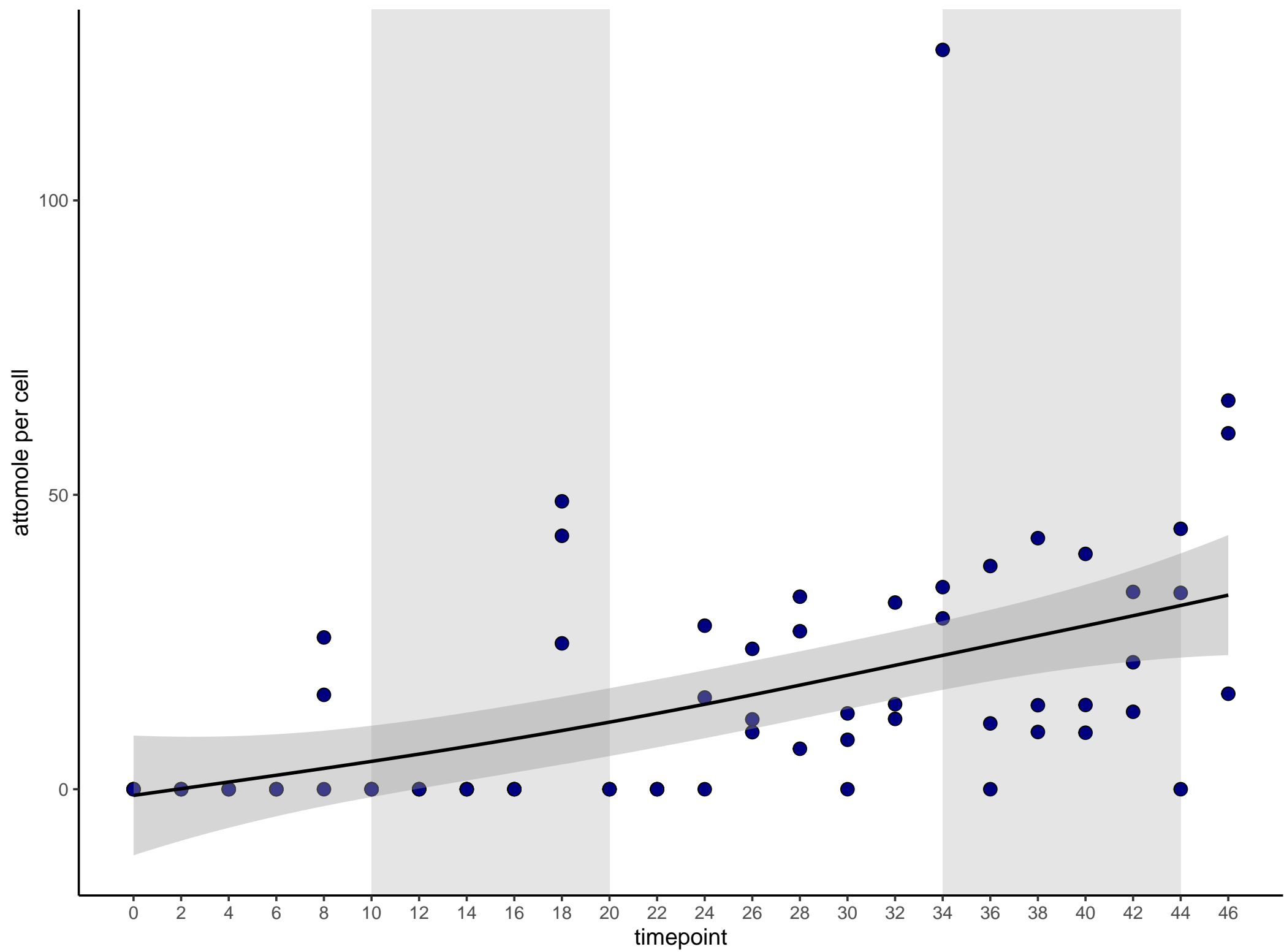
cytosine



desthiobiotin

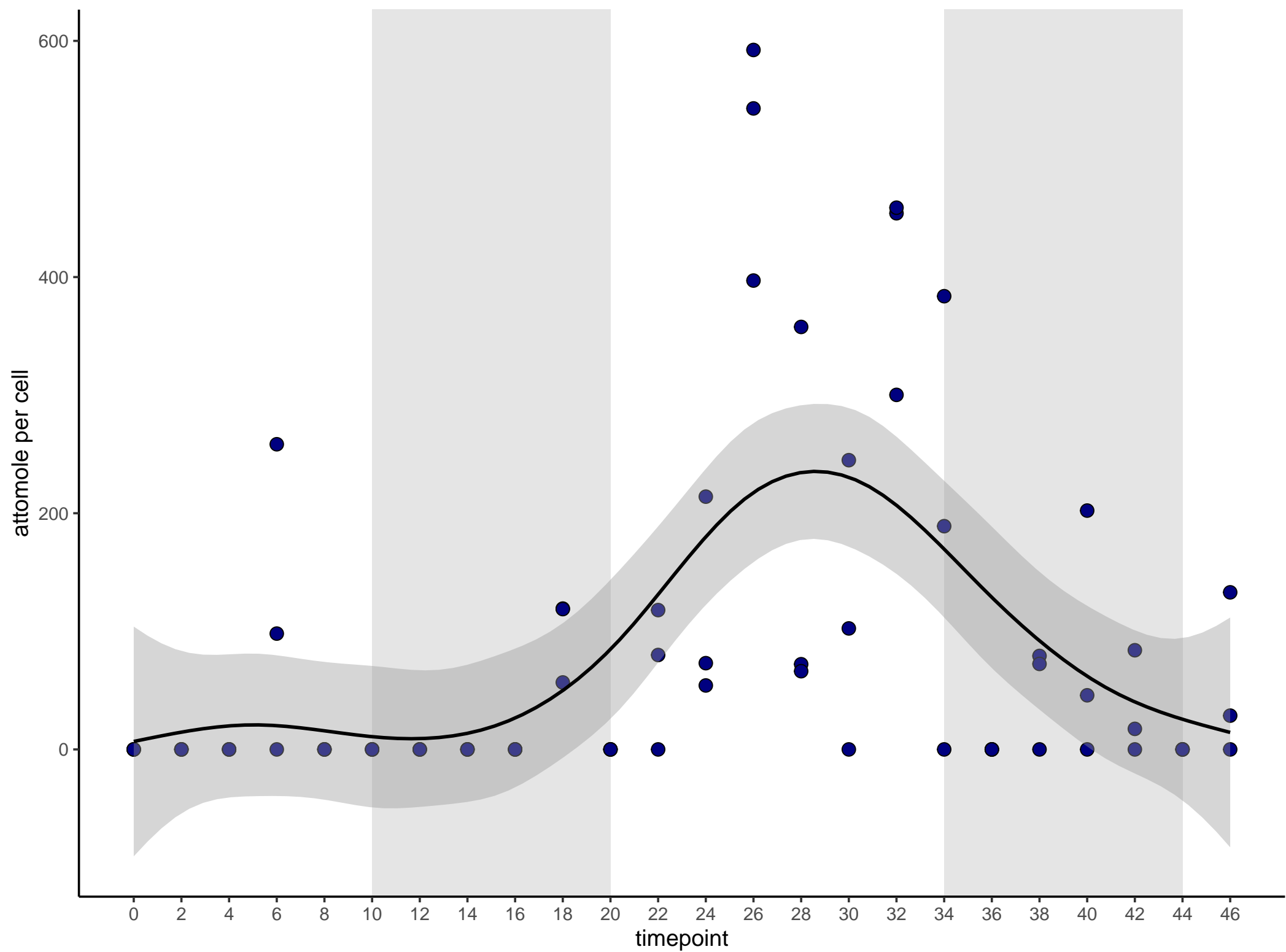


spermidine

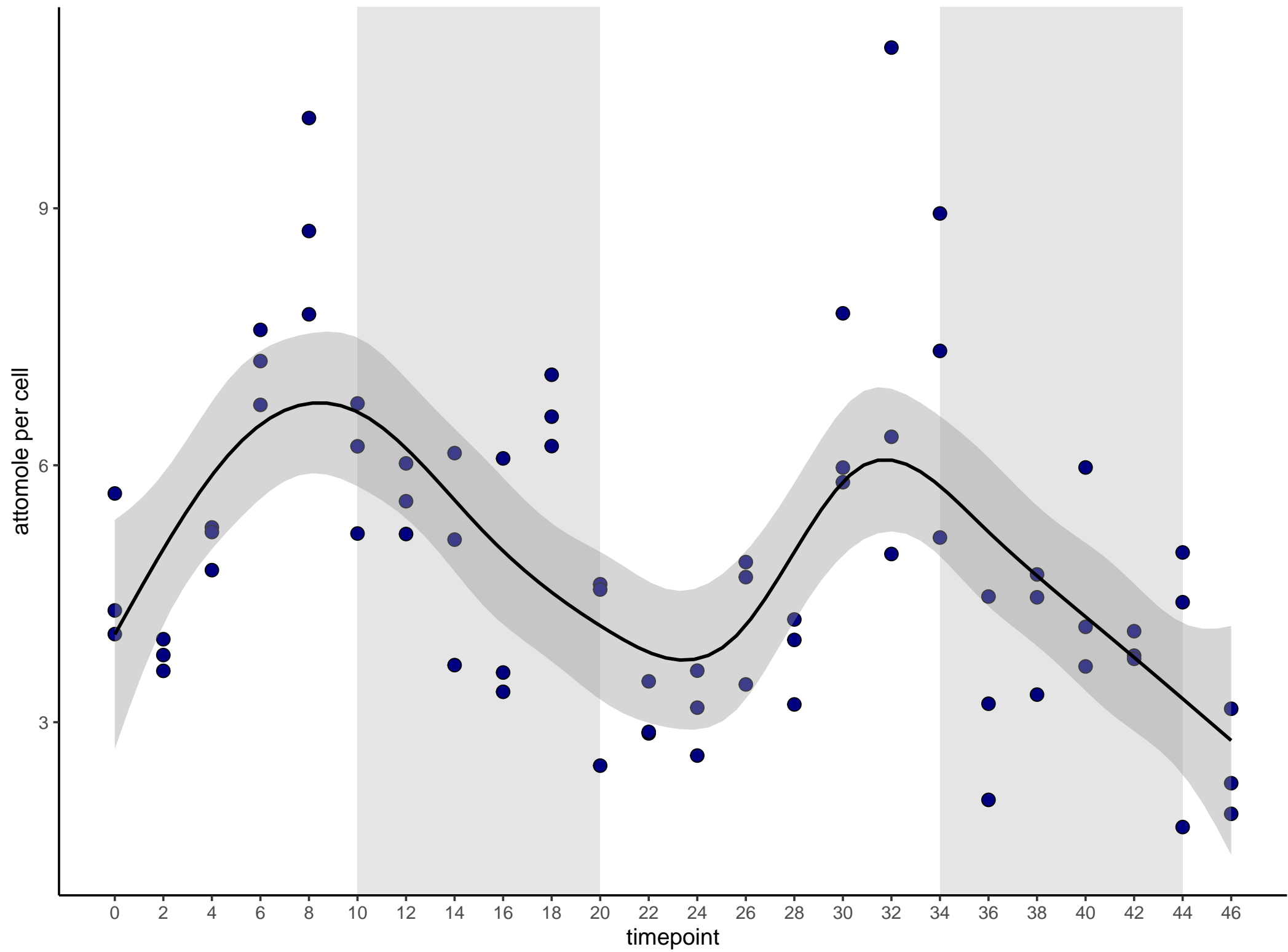




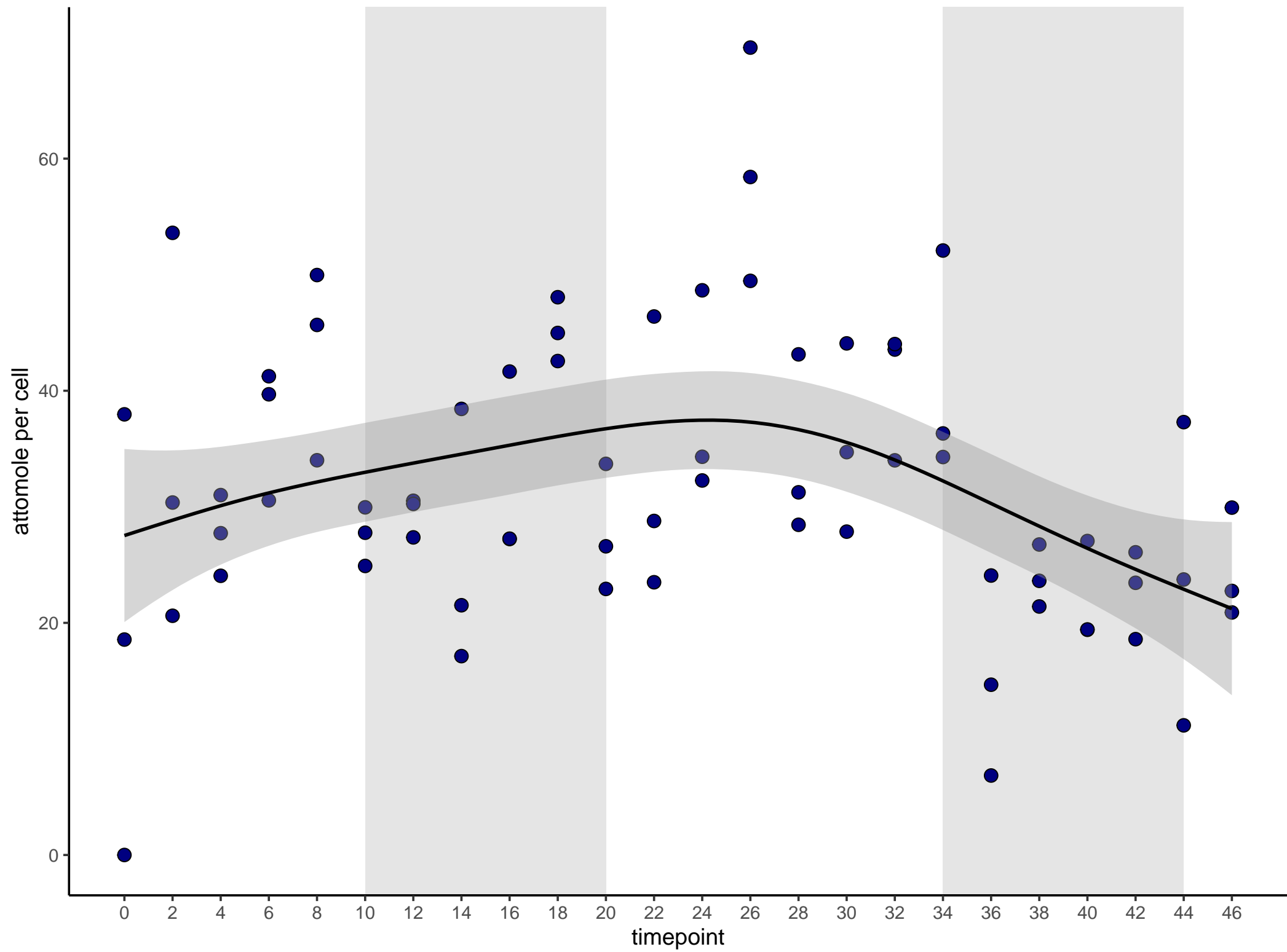
threonine (isom. homoserine)



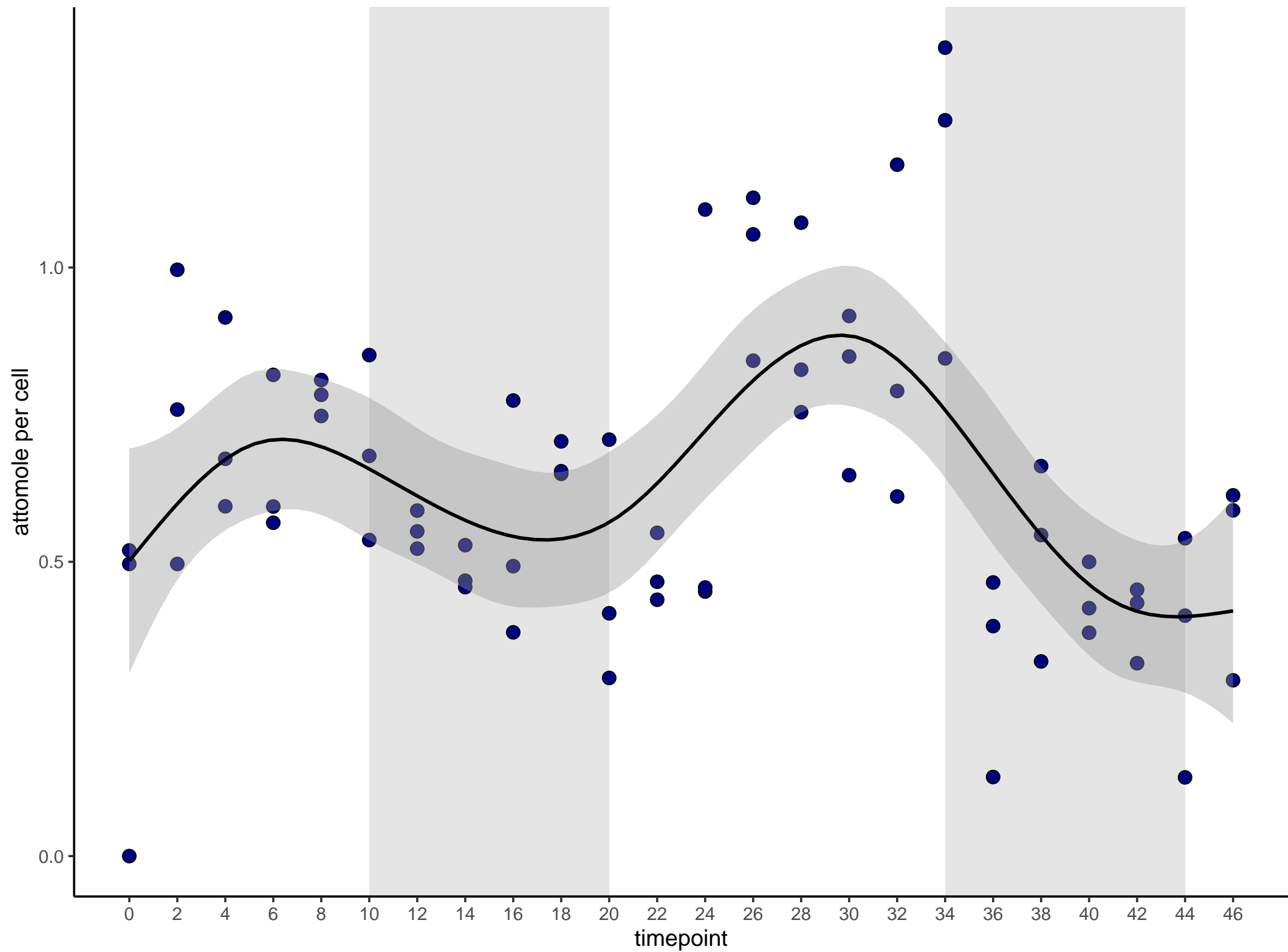
phenylalanine



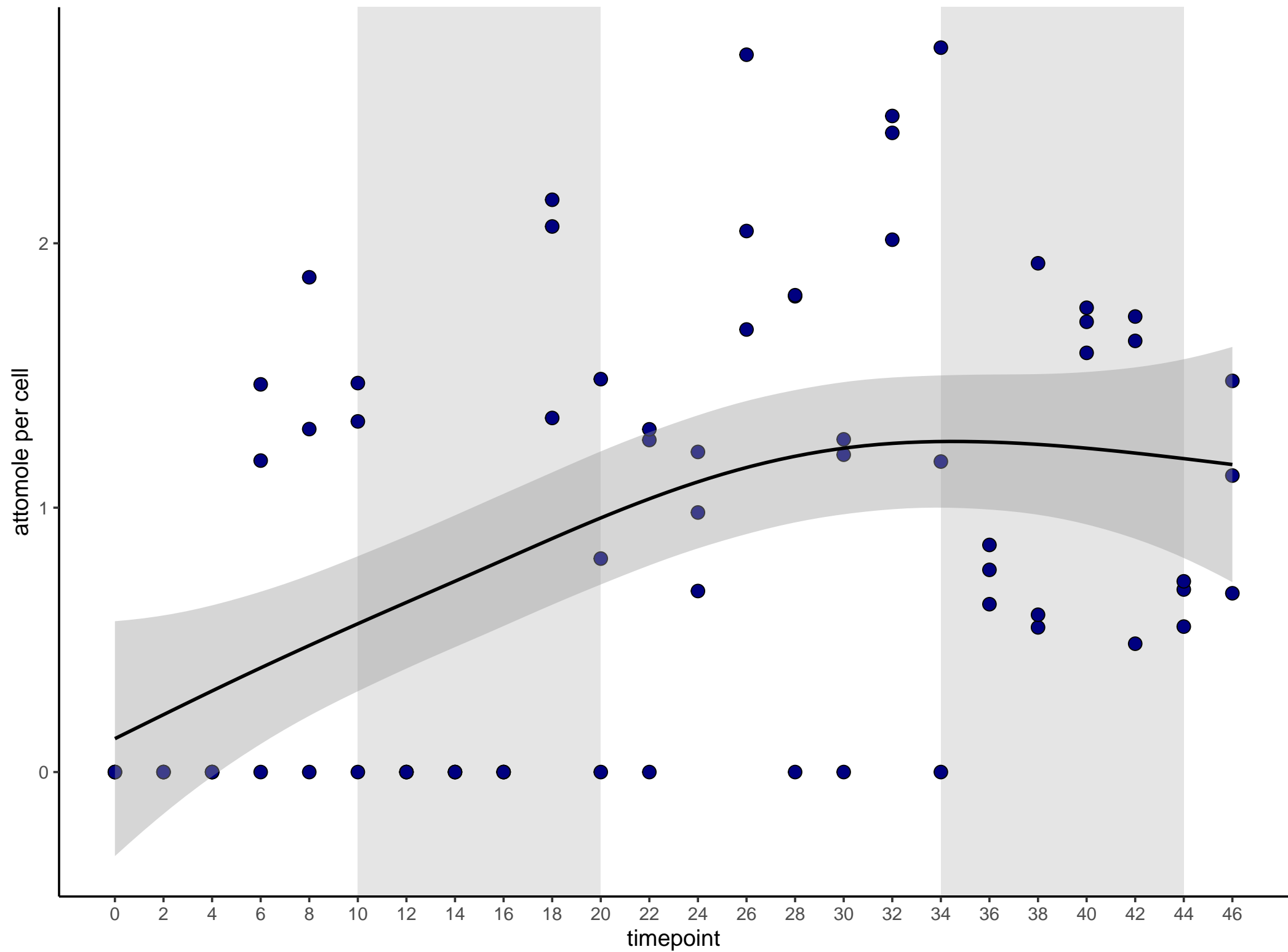
proline



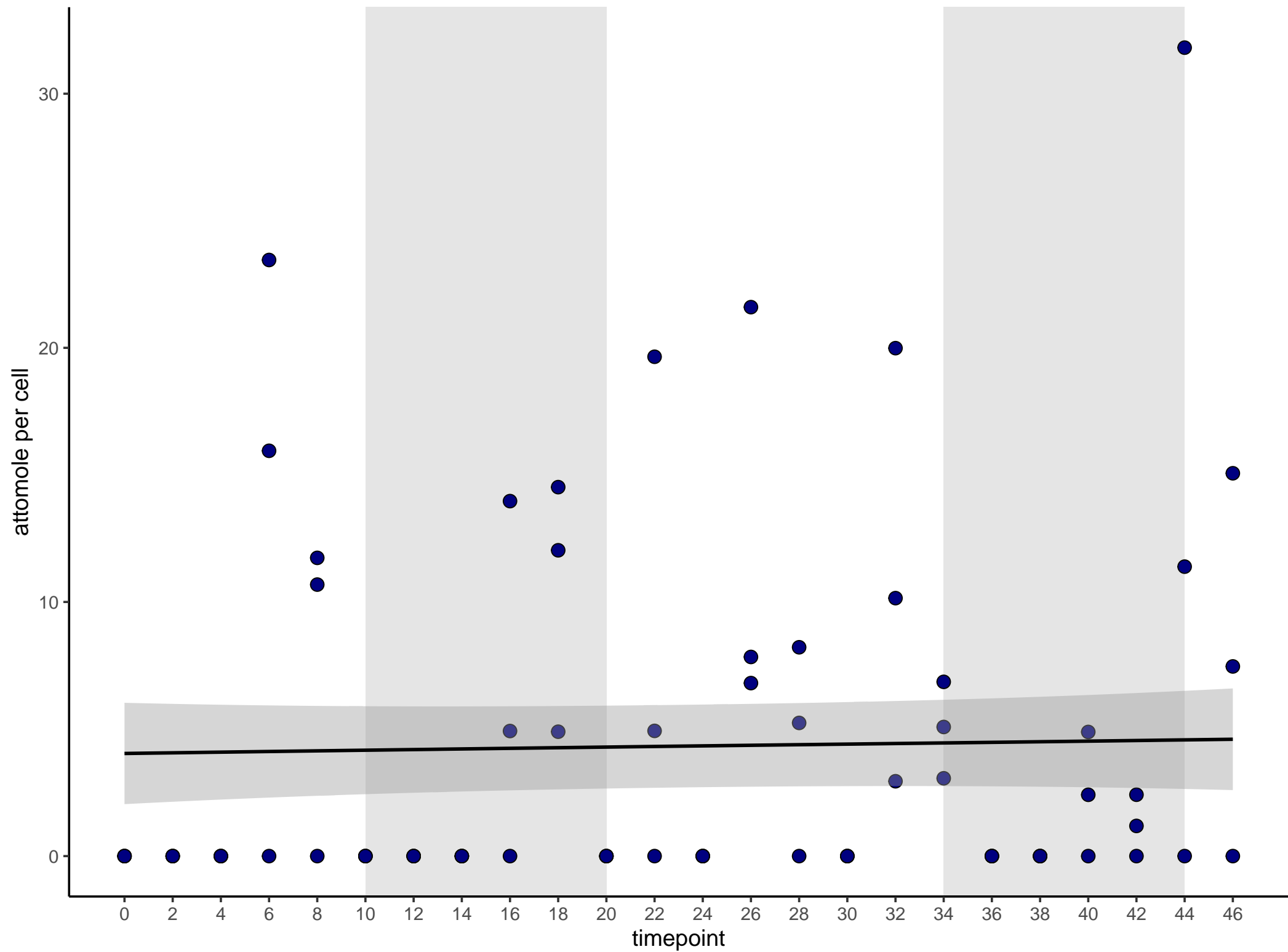
s-(5'-adenosyl)-L-homocysteine pos



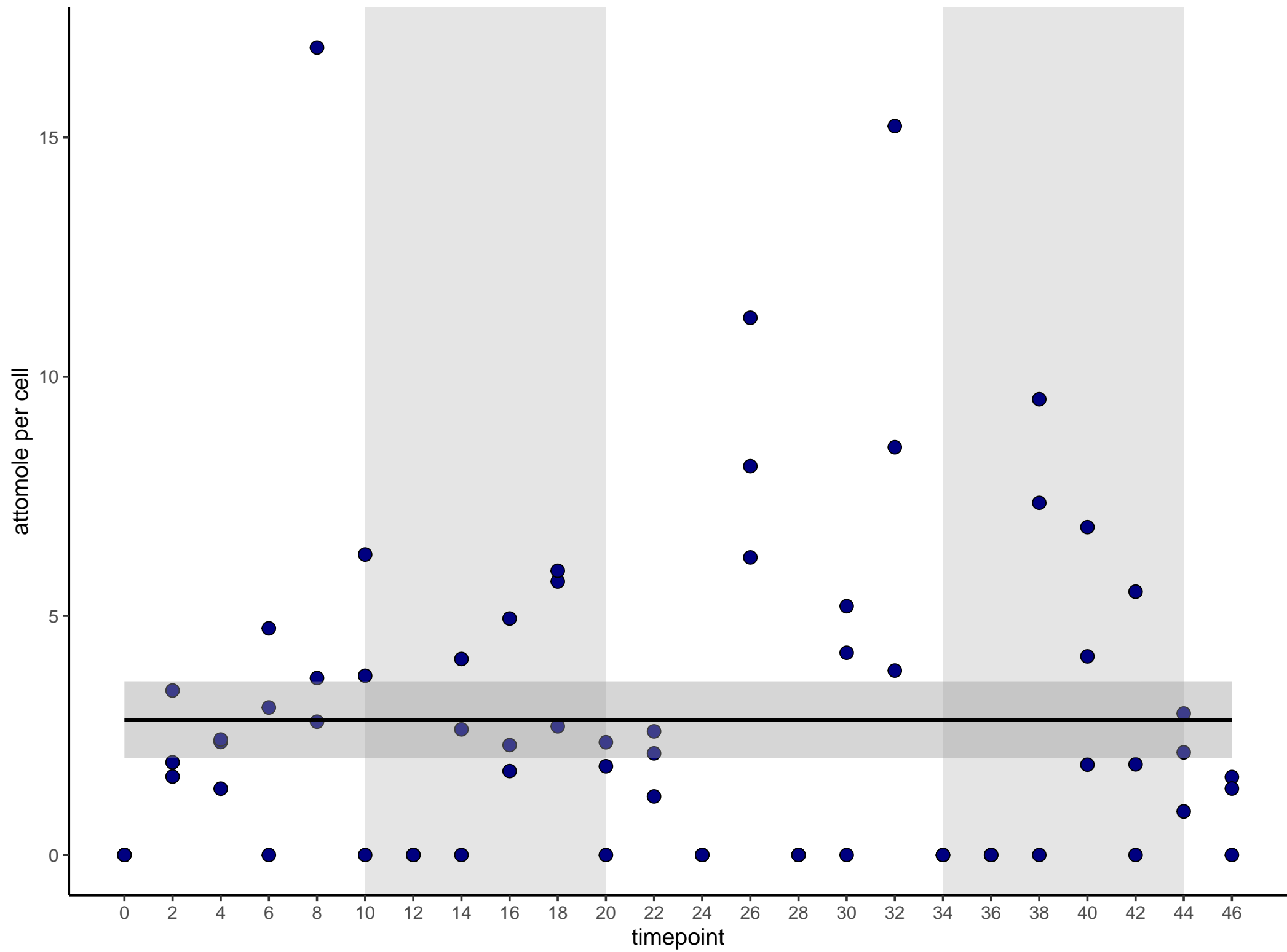
adenine pos



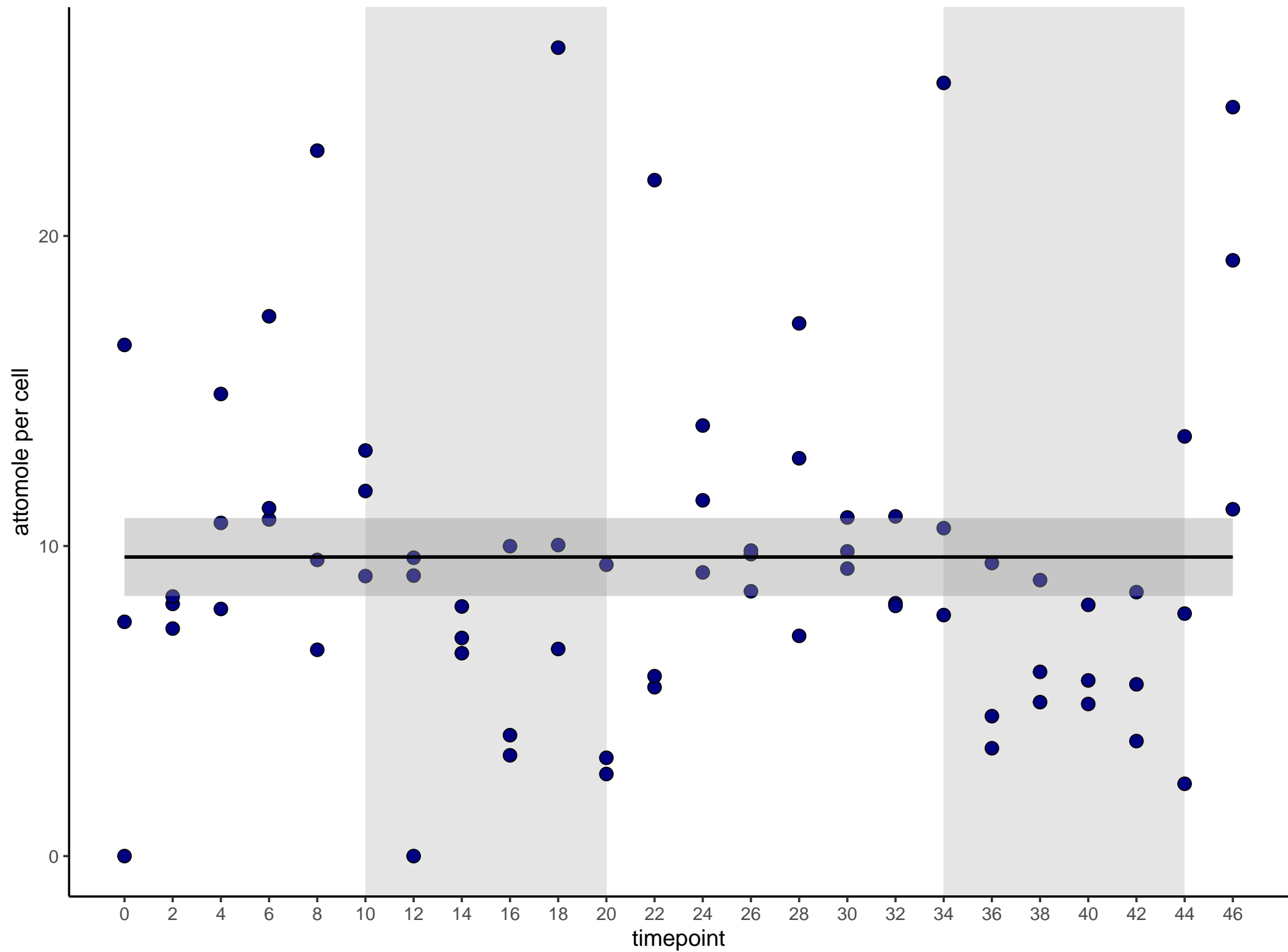
# alpha-ketoglutaric acid



aspartic acid neg

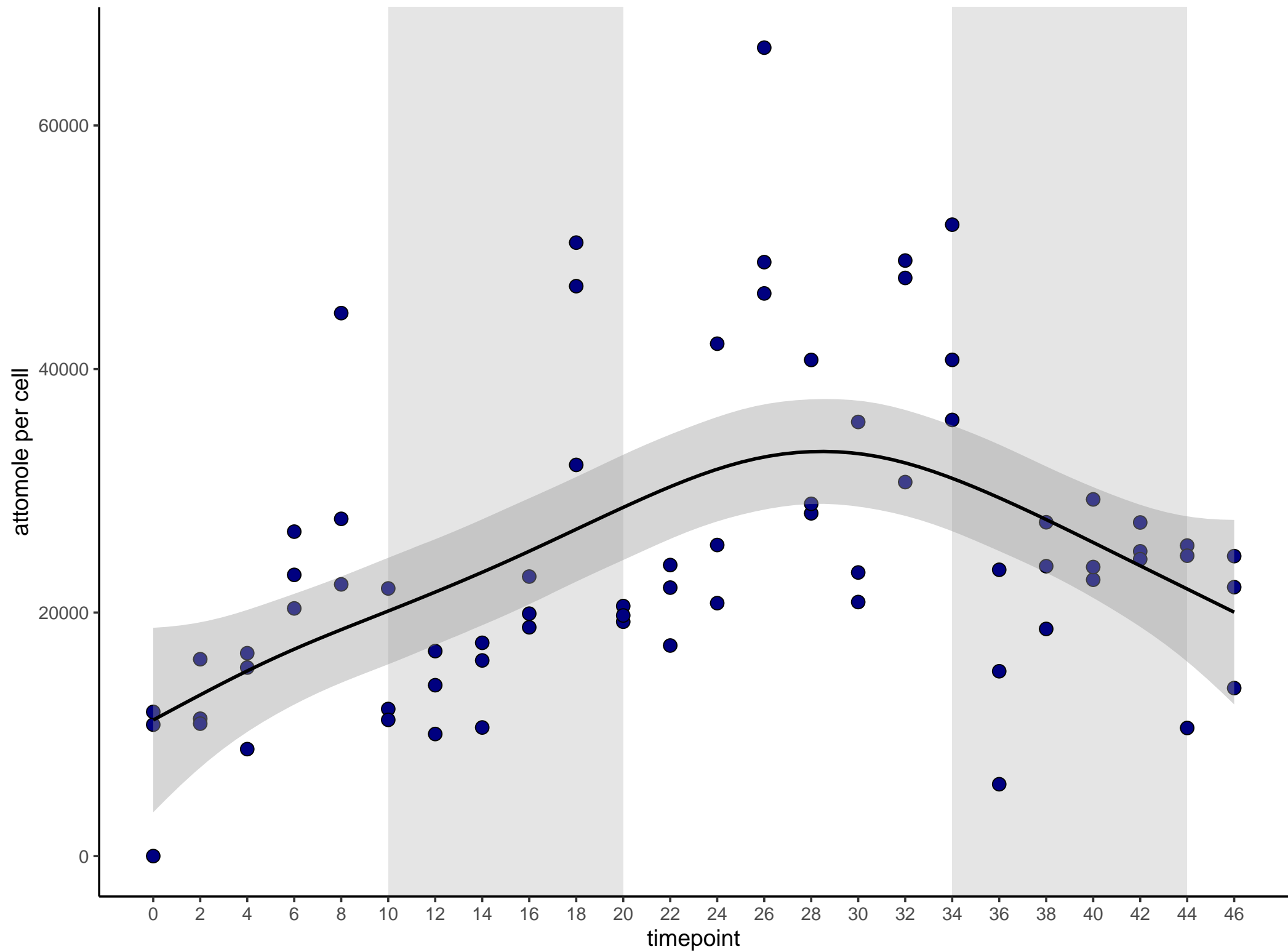


# s-adenosyl-l-methionine

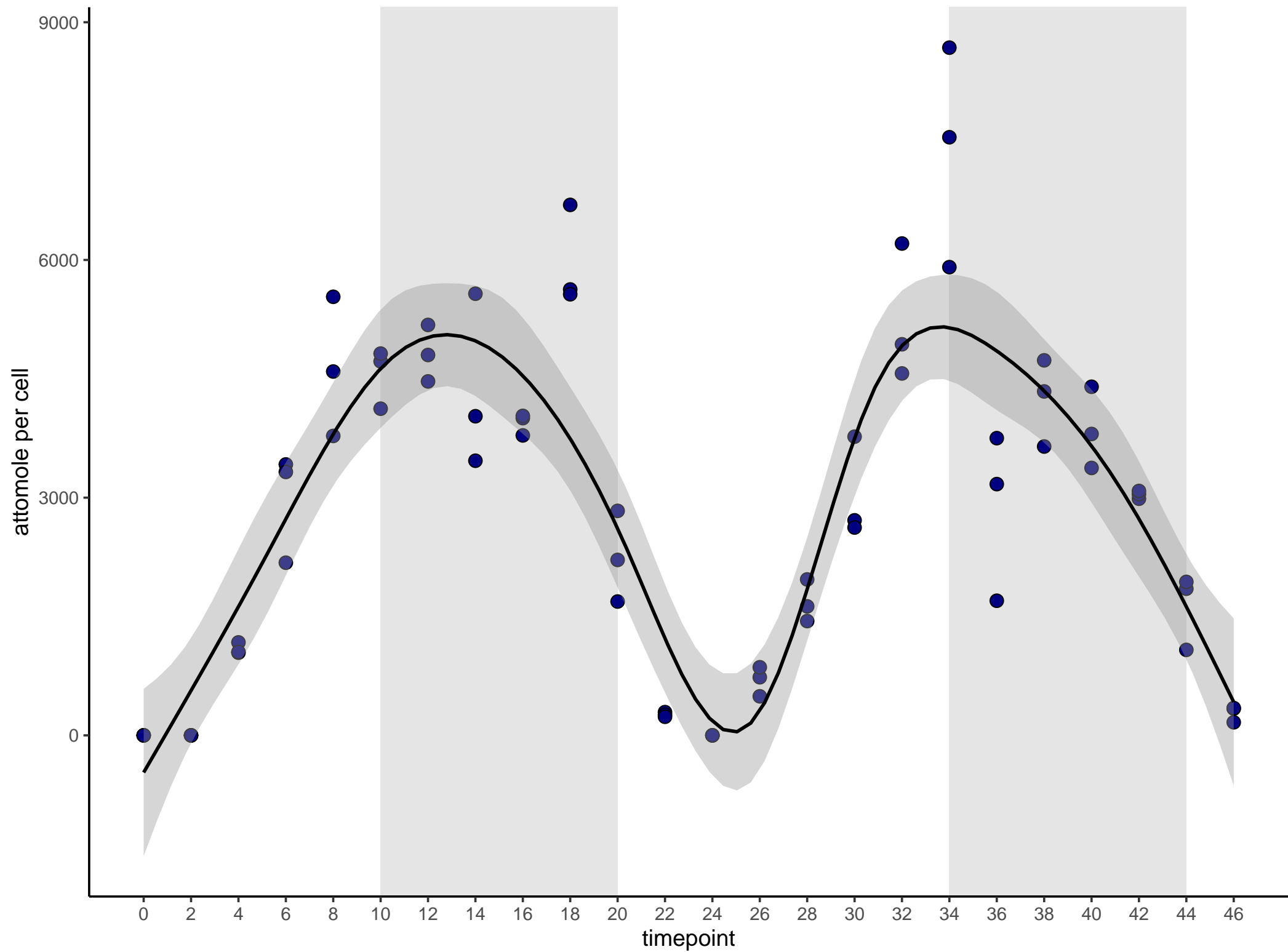




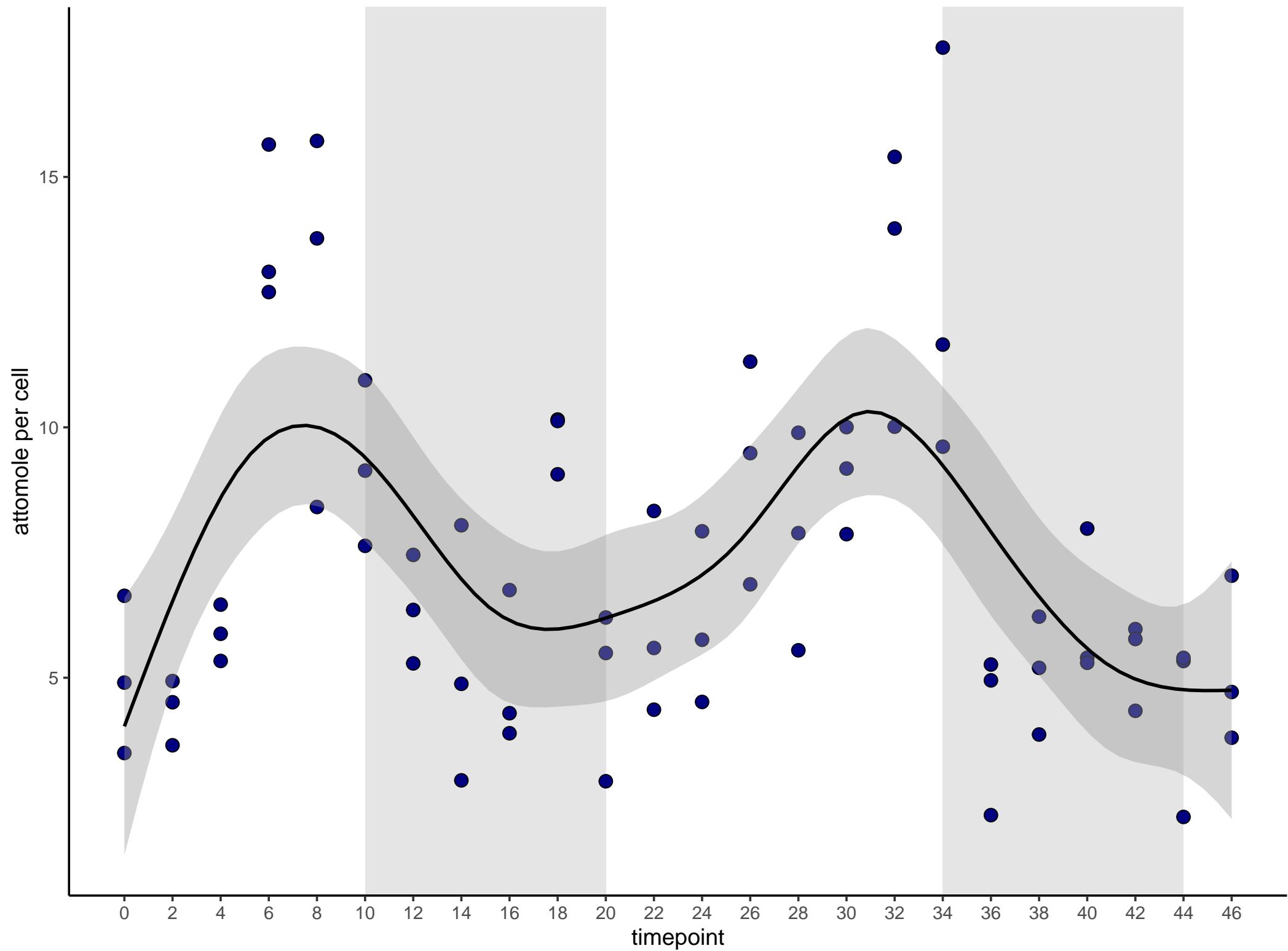
glutamic acid neg



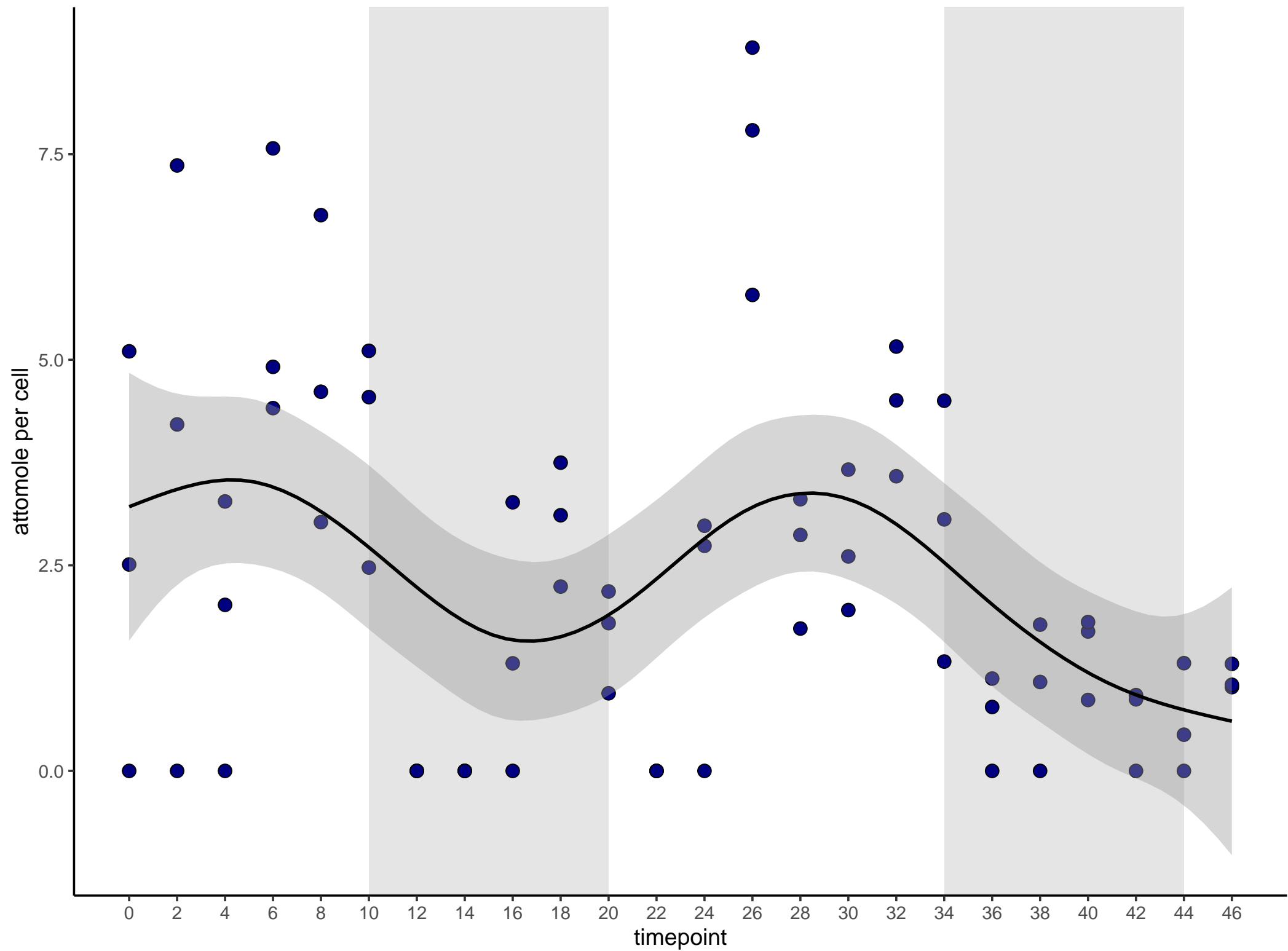
sucrose387 neg



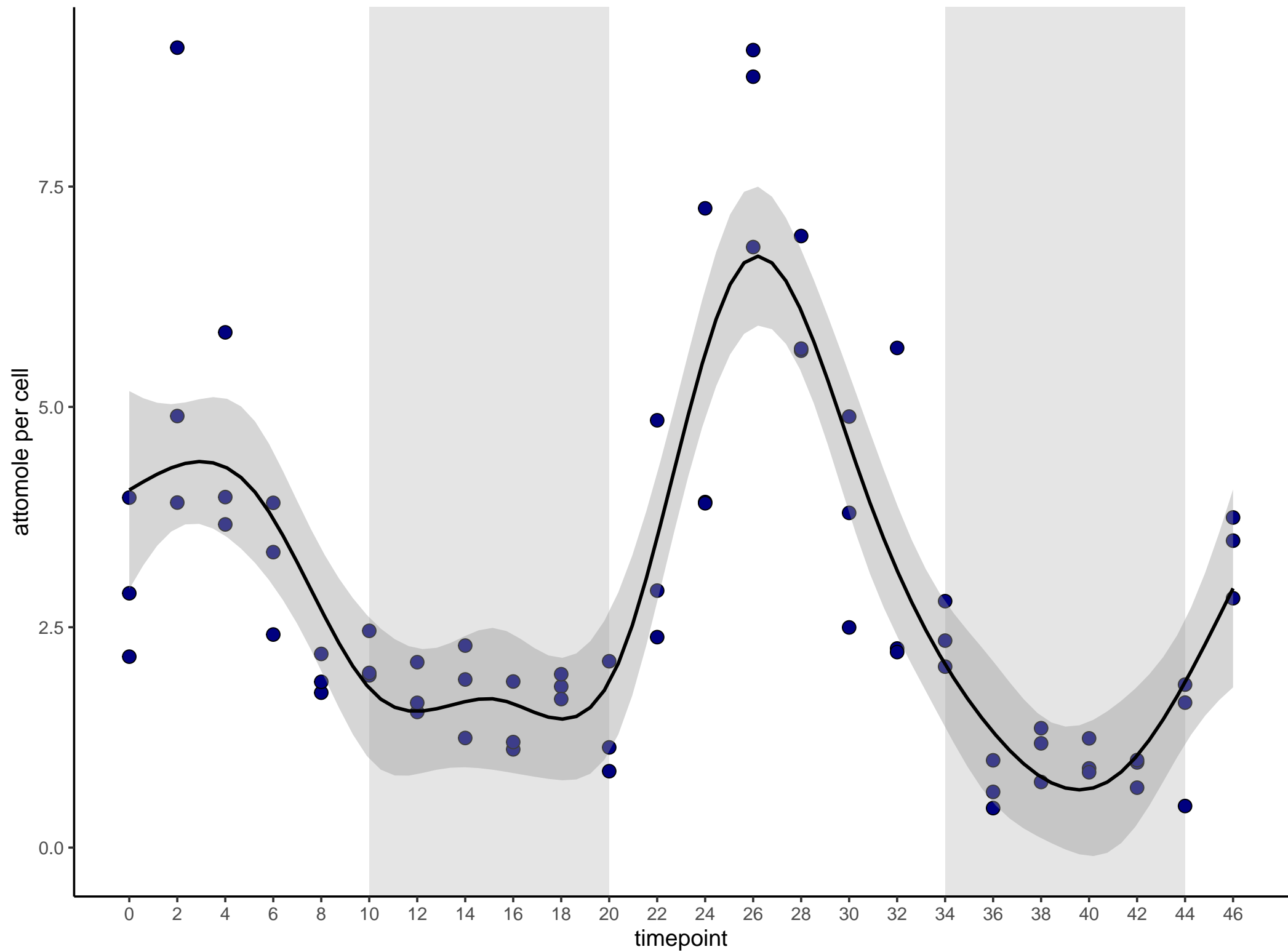
tyrosine



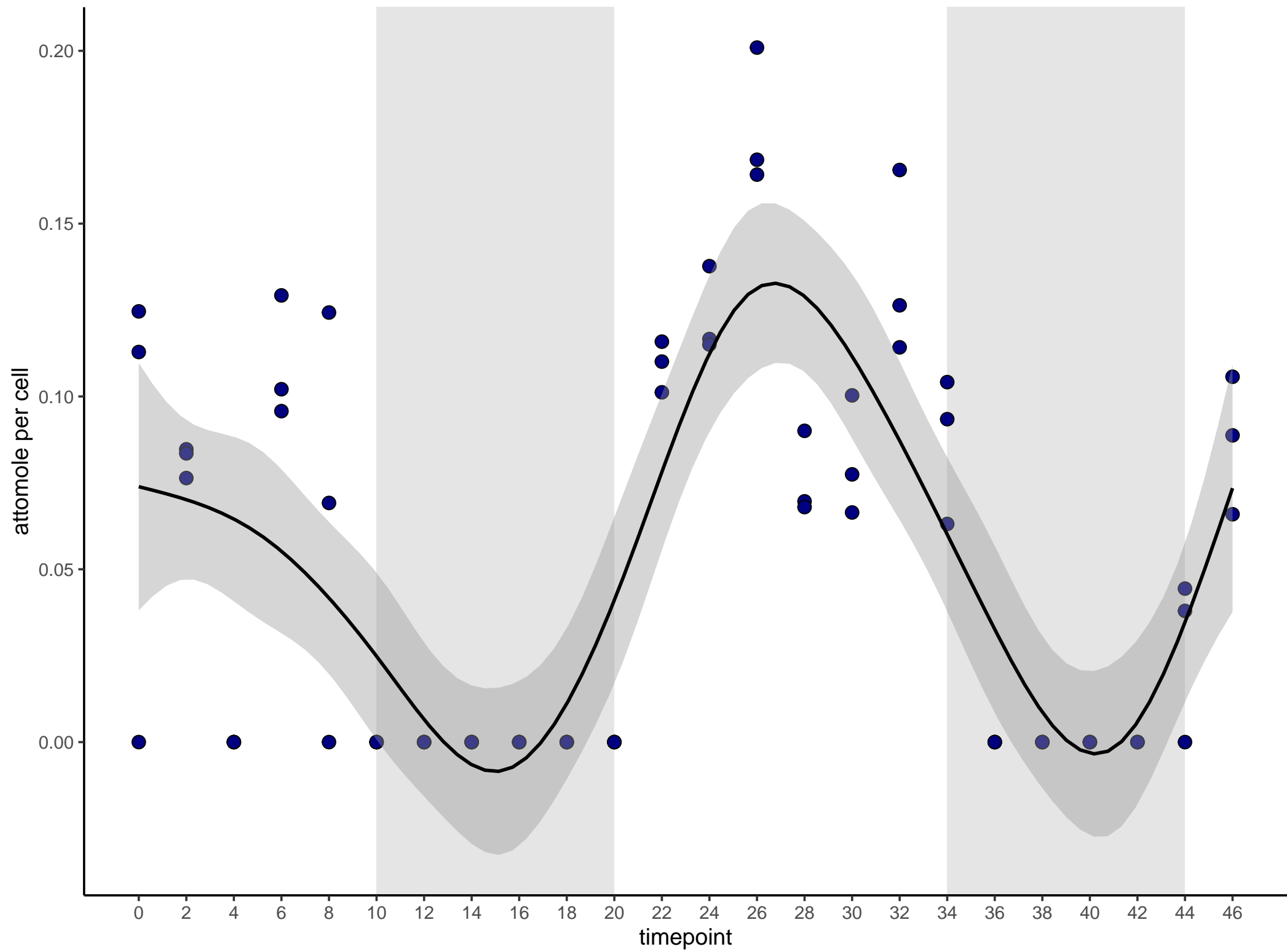
# UDP-glucose



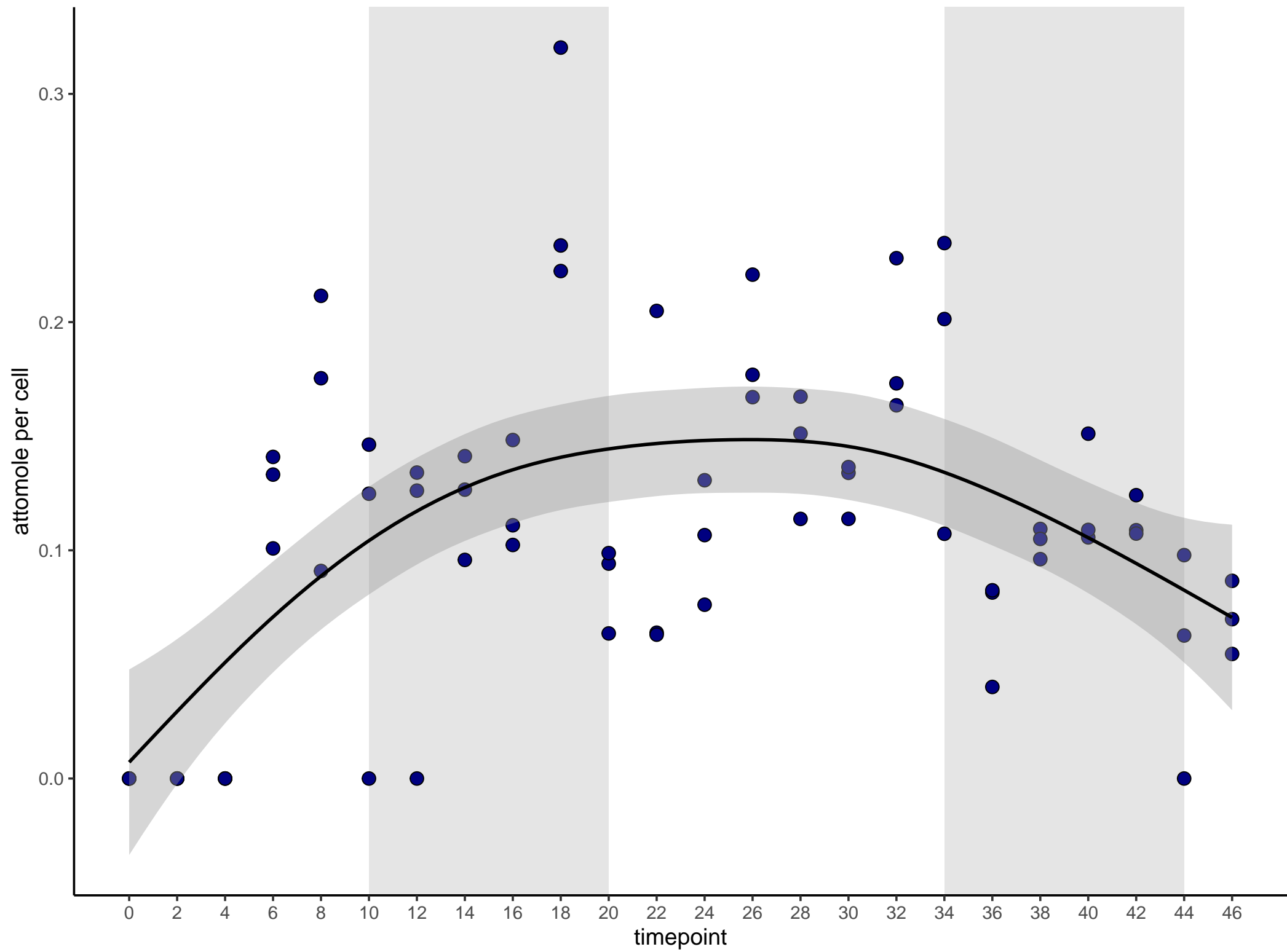
# uridine 5-monophosphate pos



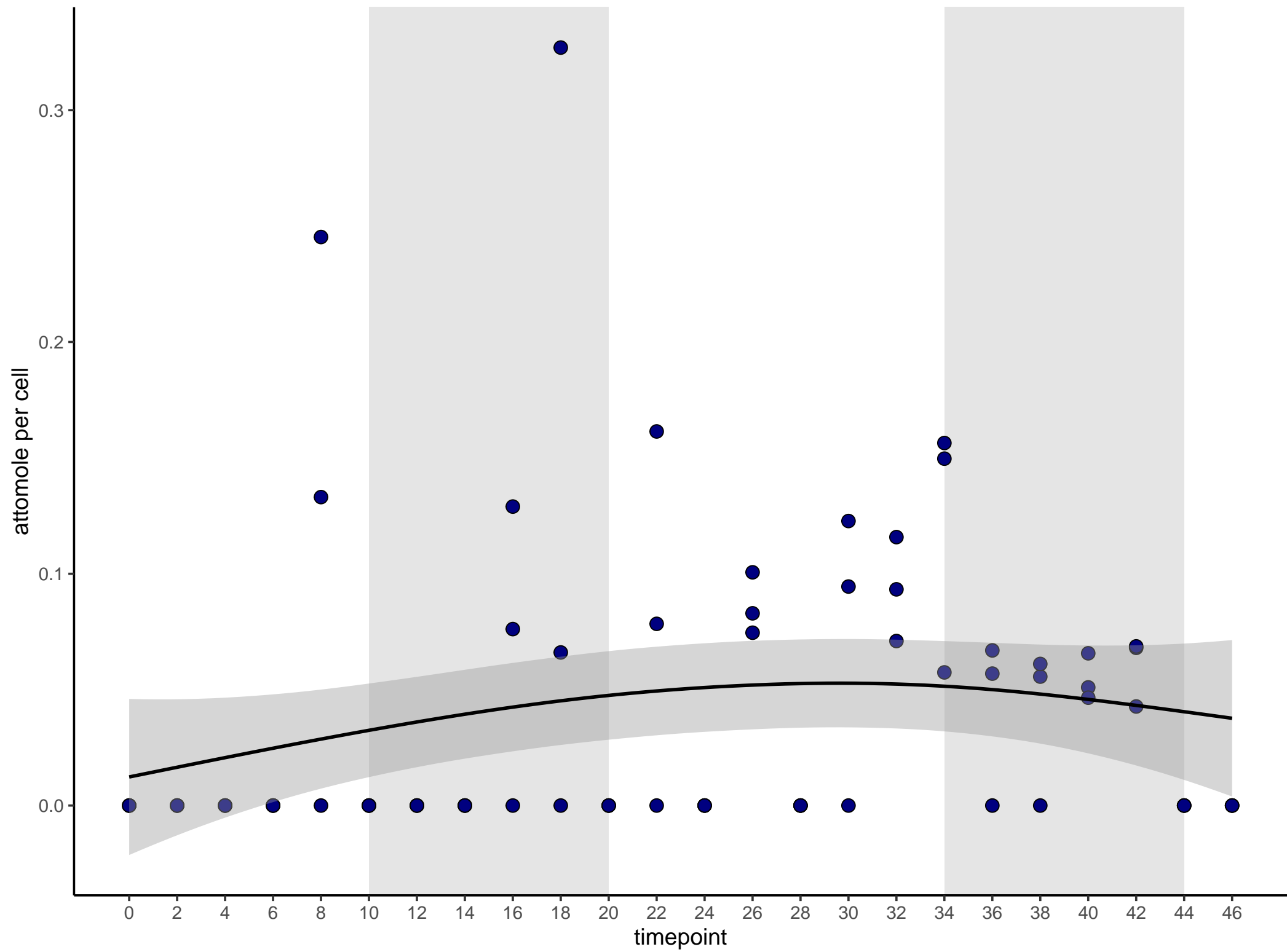
xanthosine neg



pantothenic acid neg



kynurenine





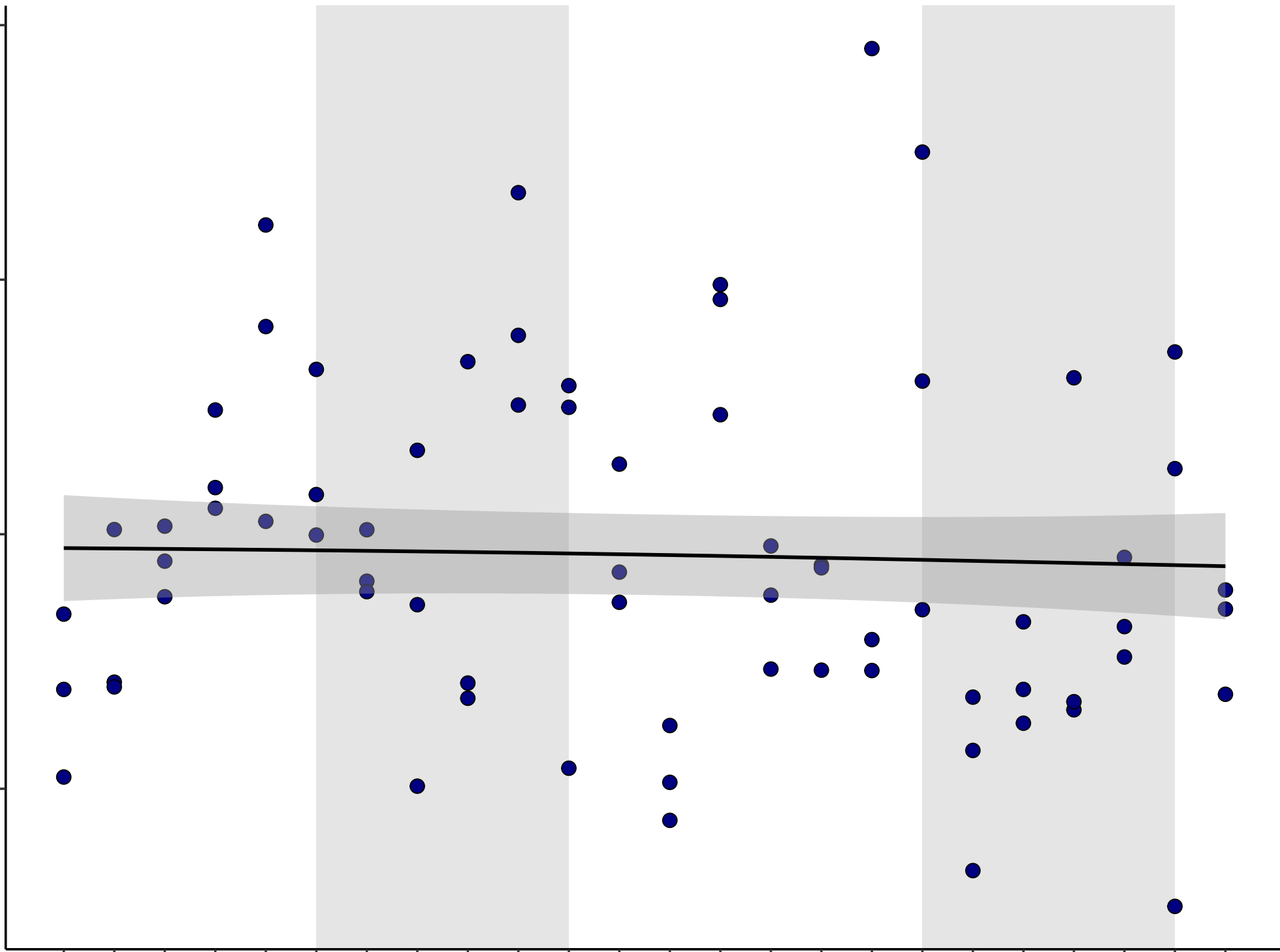
leucine

attomole per cell

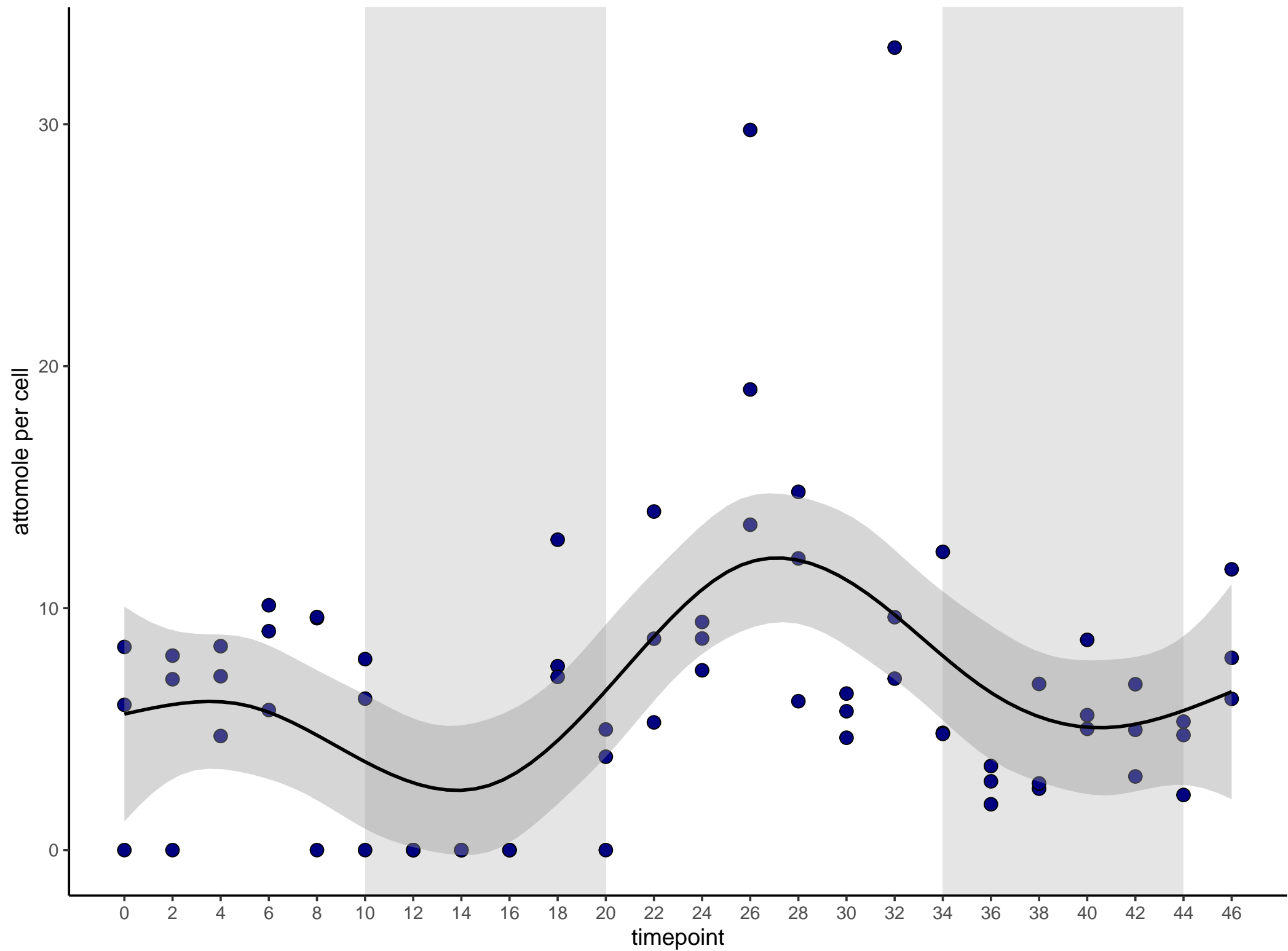
10.0  
7.5  
5.0  
2.5

timepoint

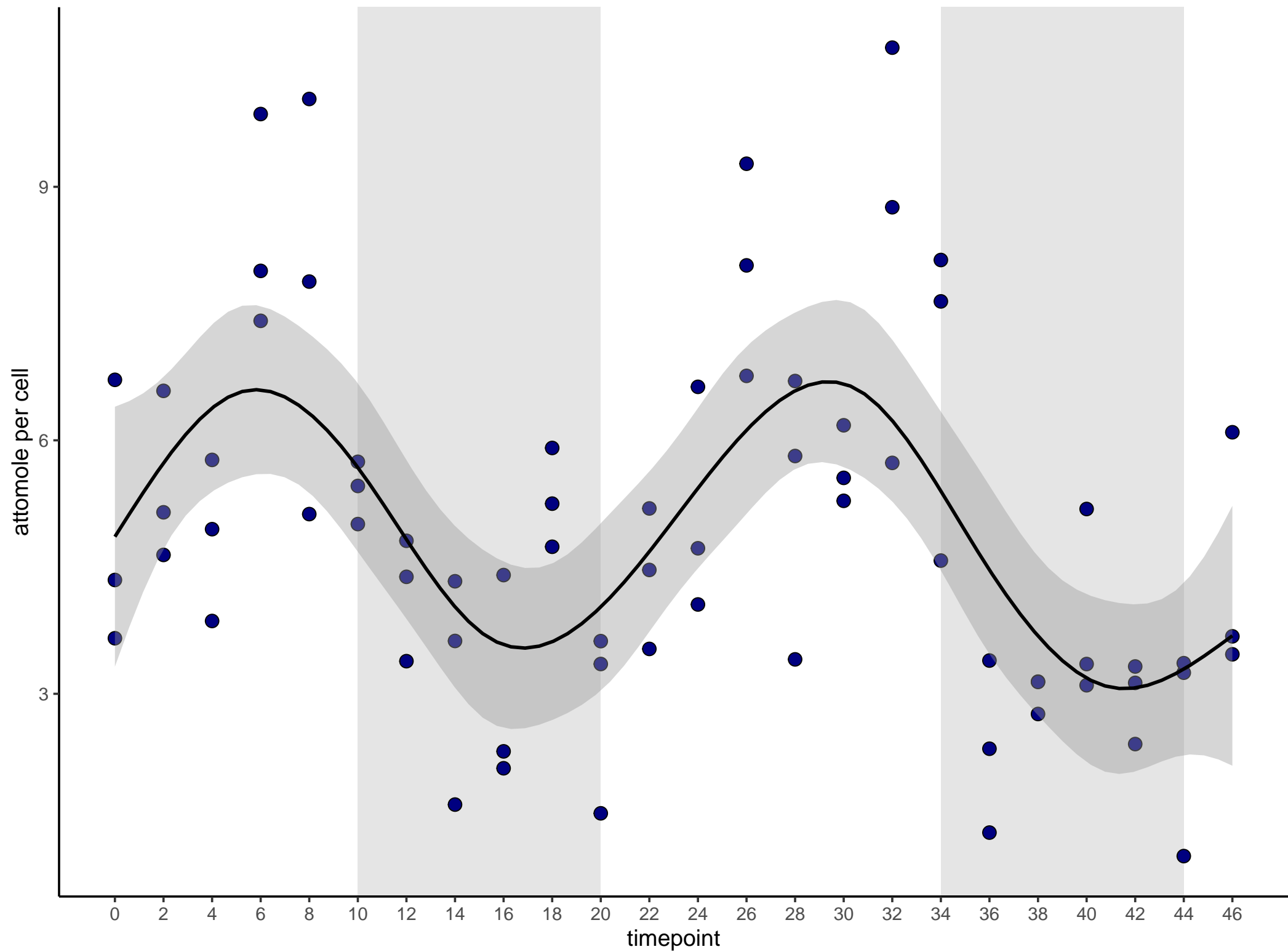
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46



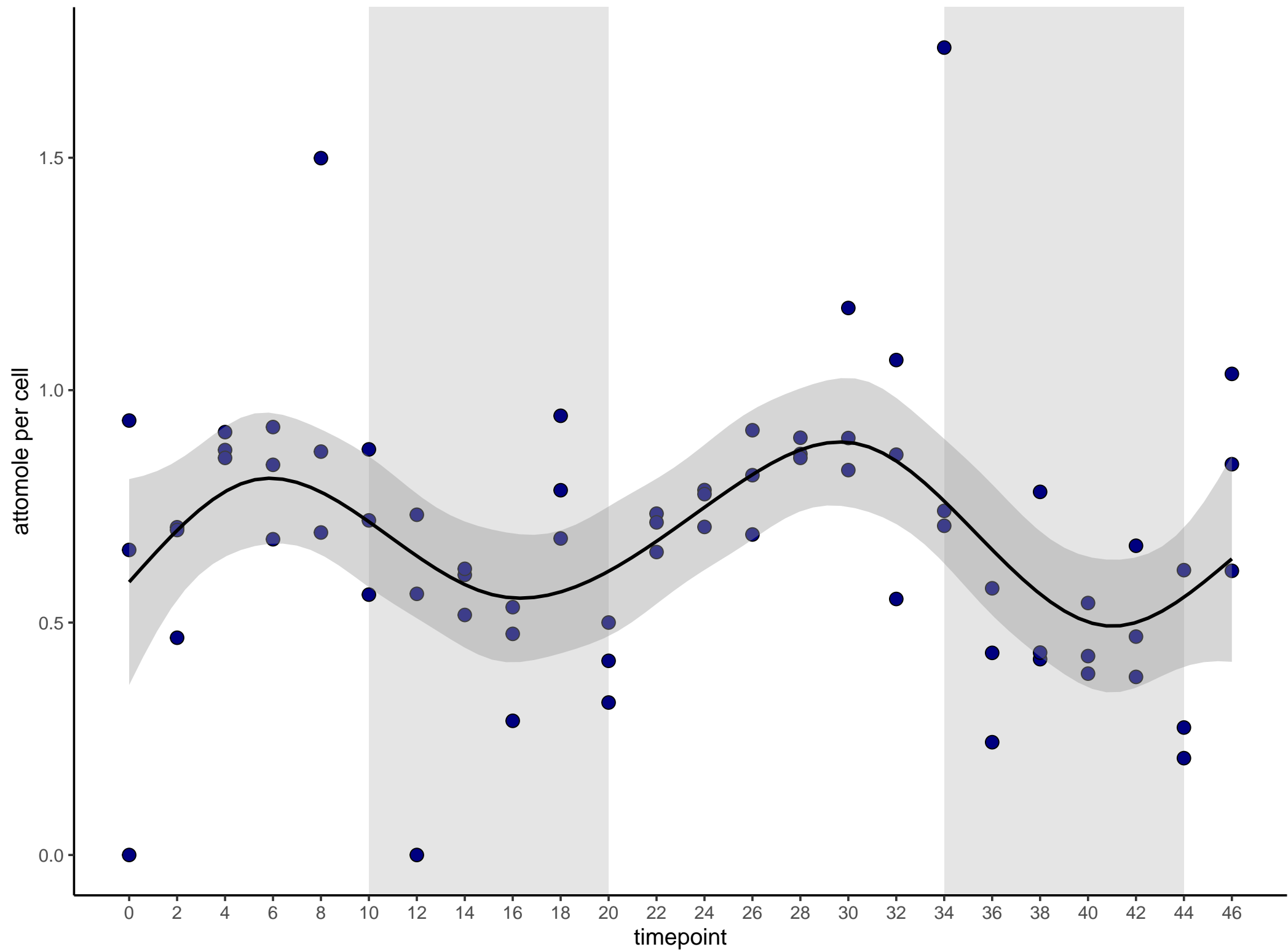
# inosine 5-monophosphate pos



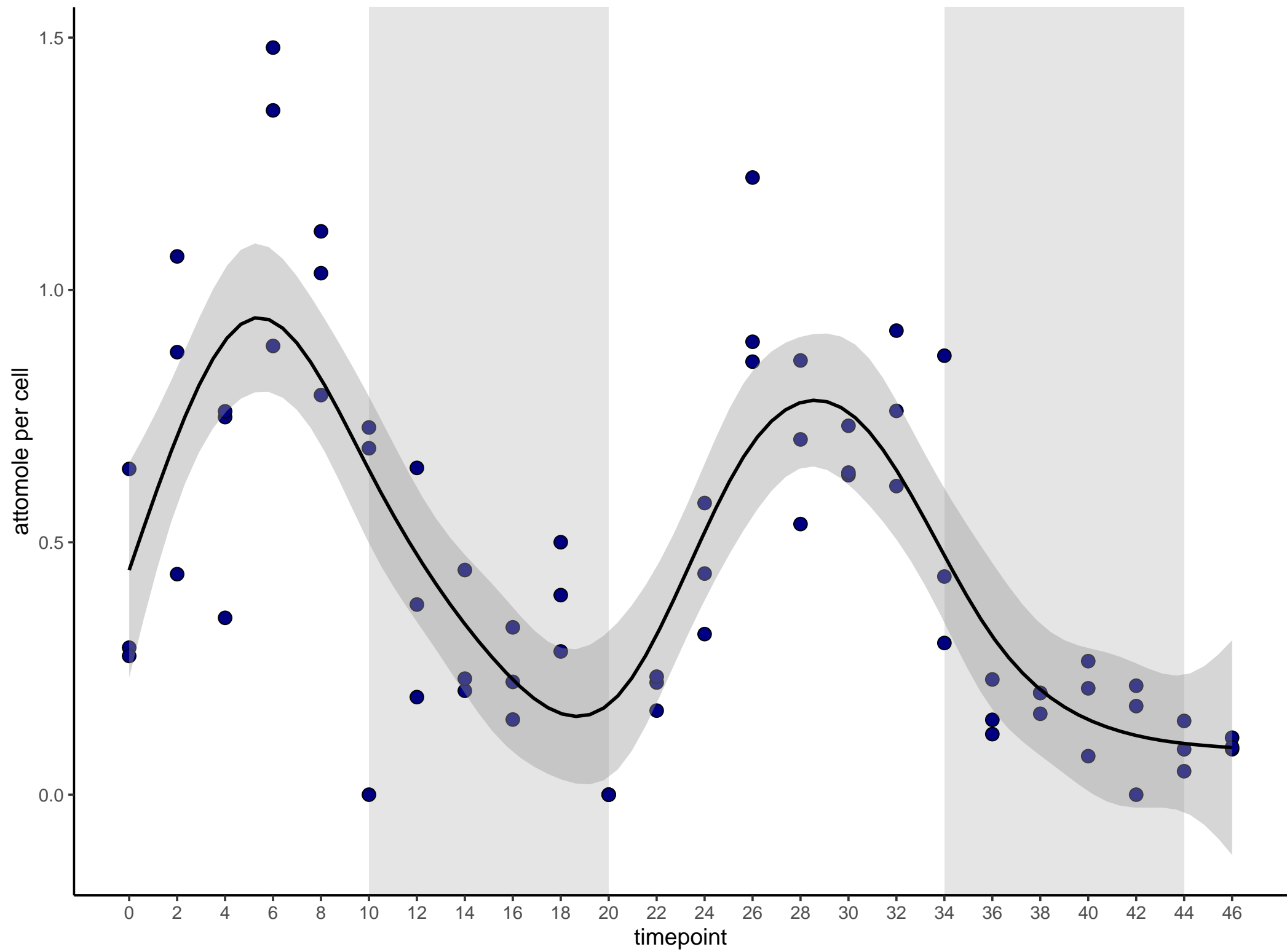
isoleucine



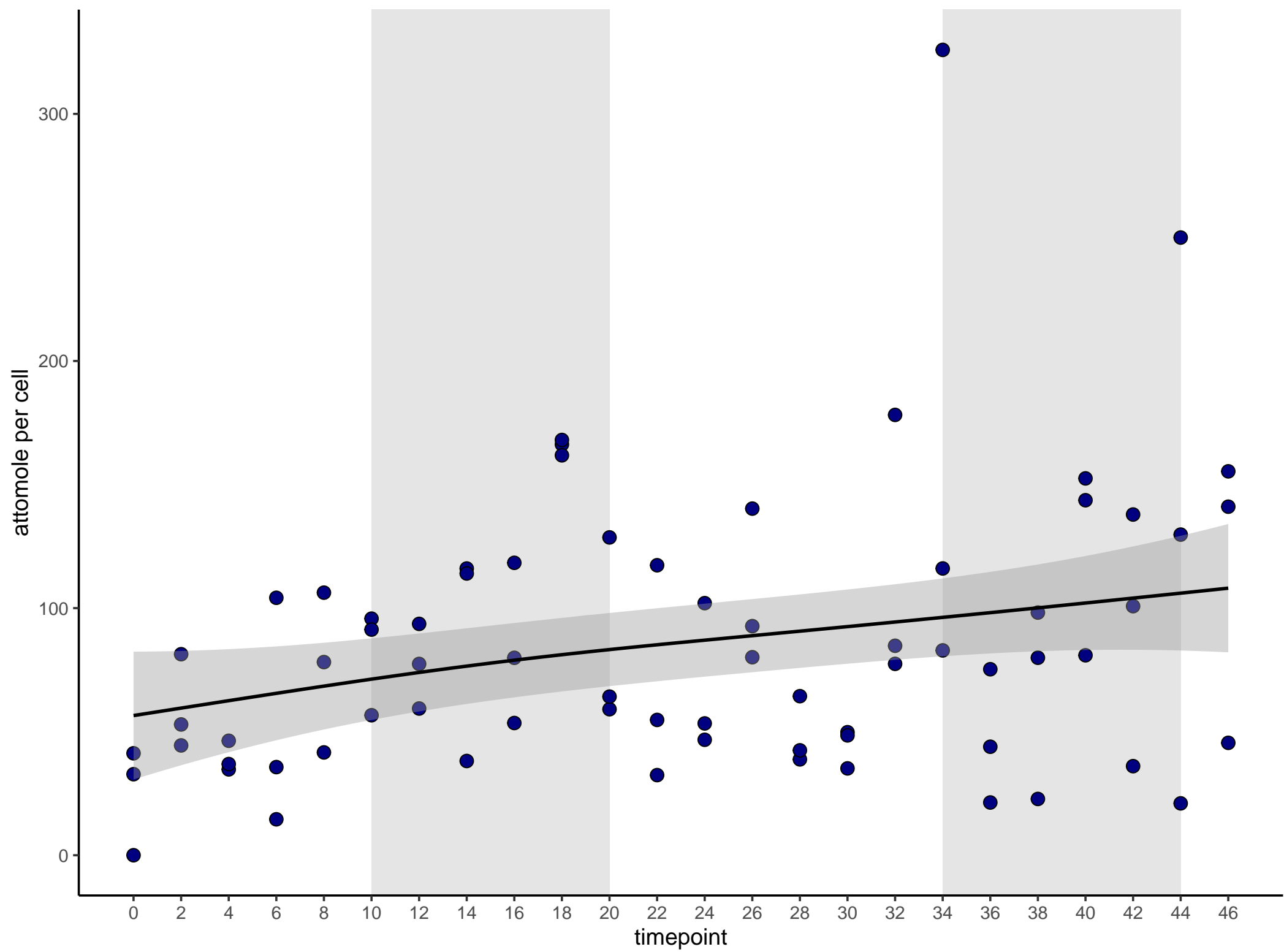
MTA



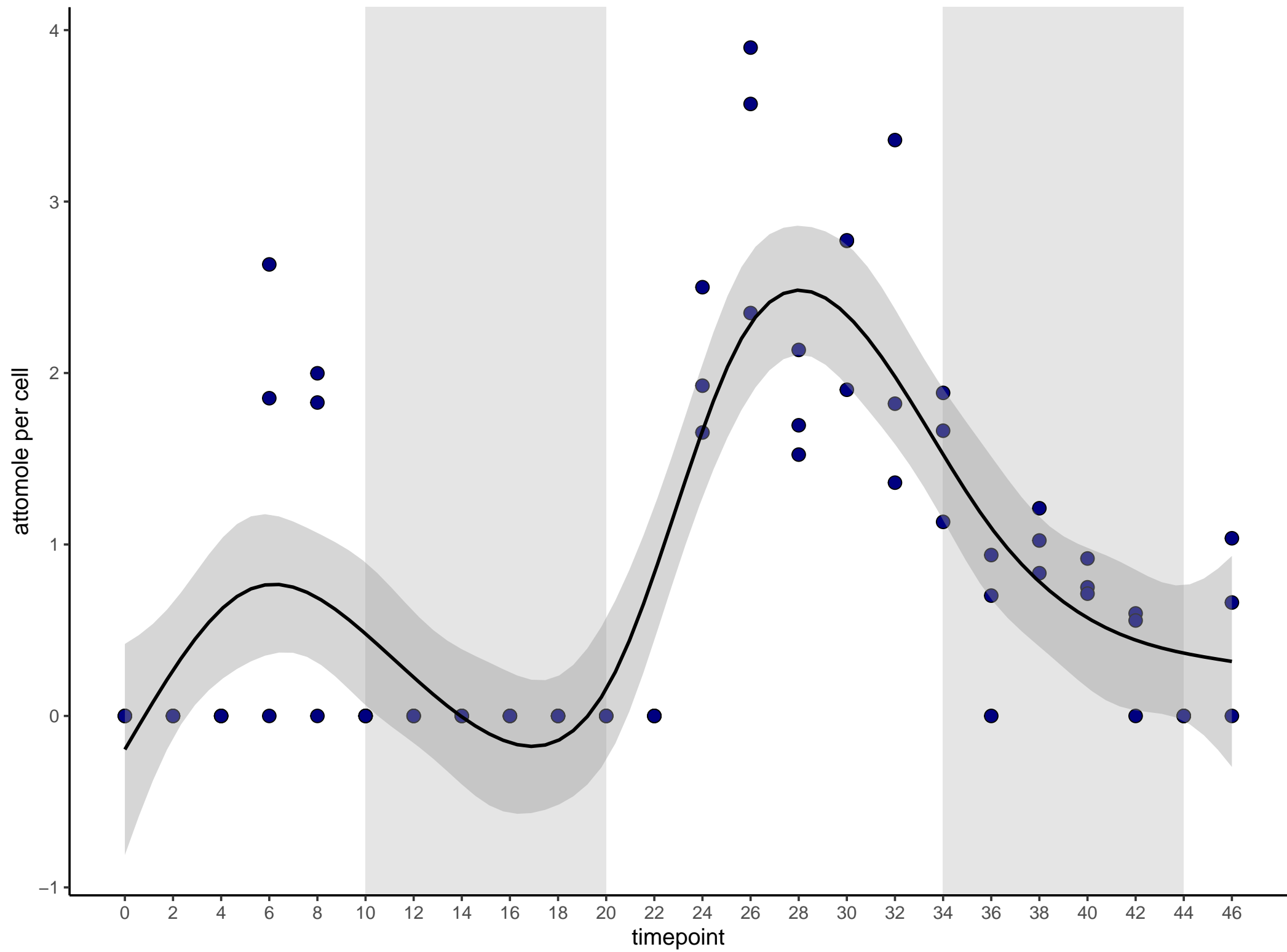
n-acetylglucosamine204



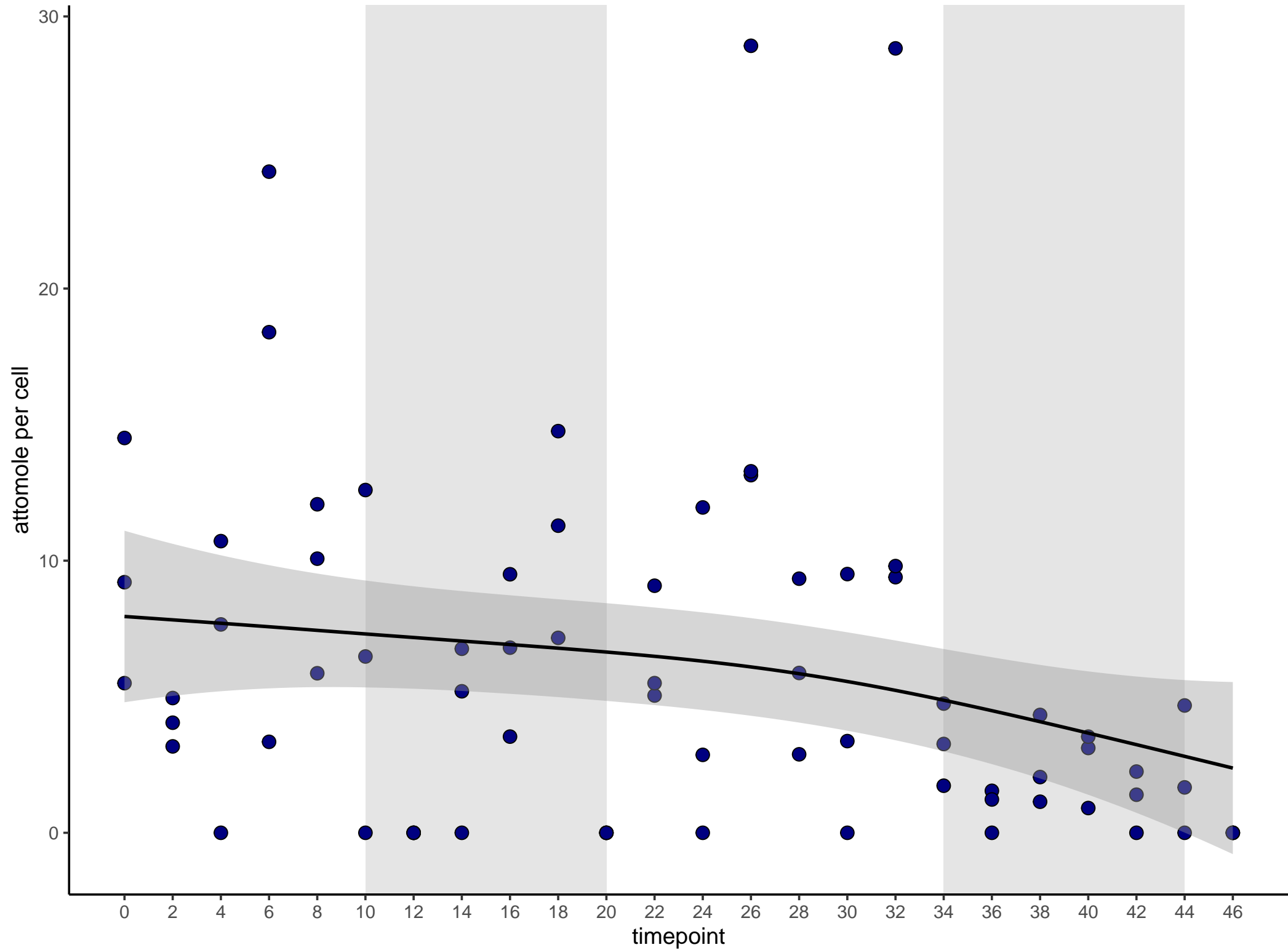
citric acid



methionine

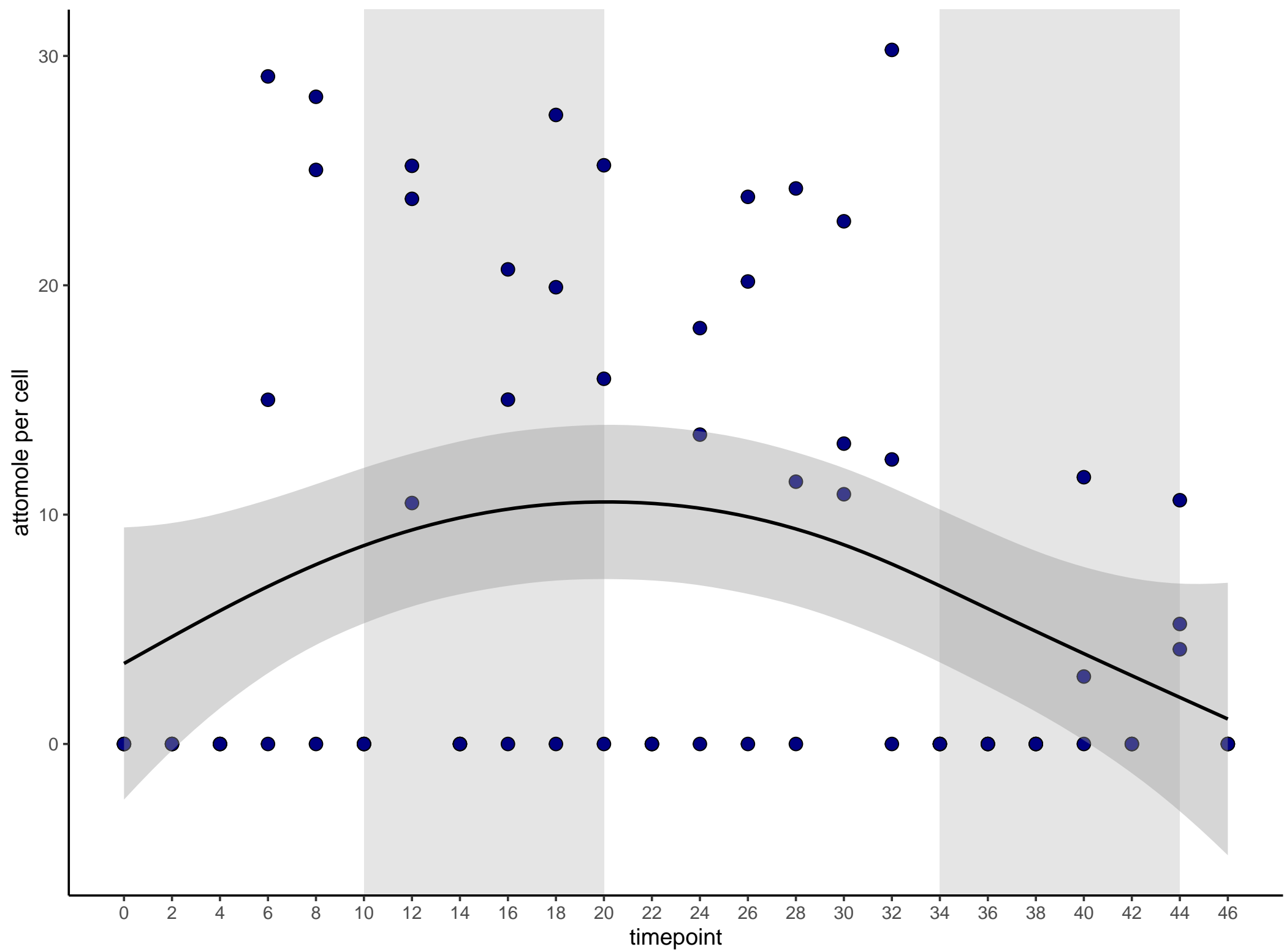


# succinic acid

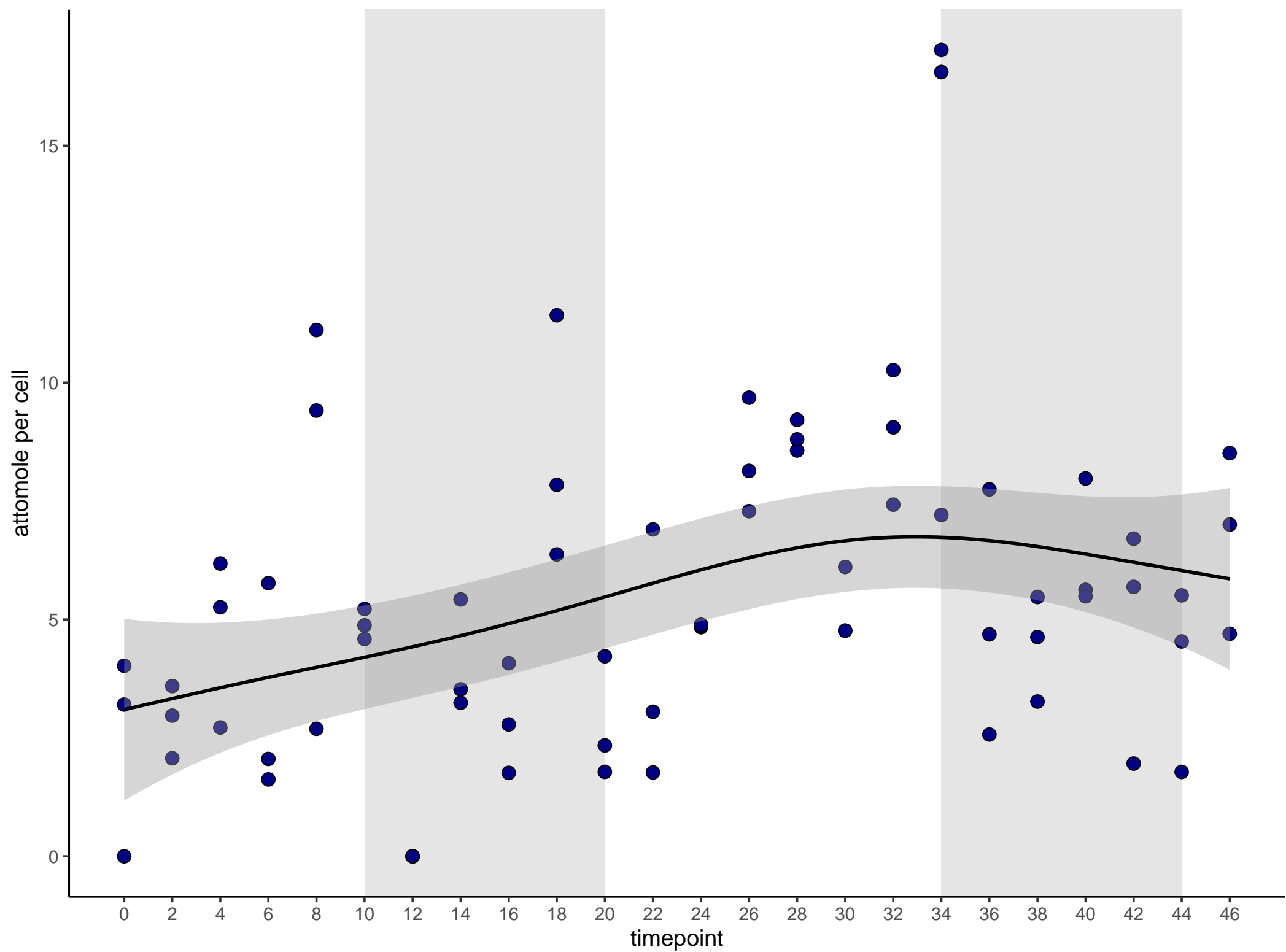




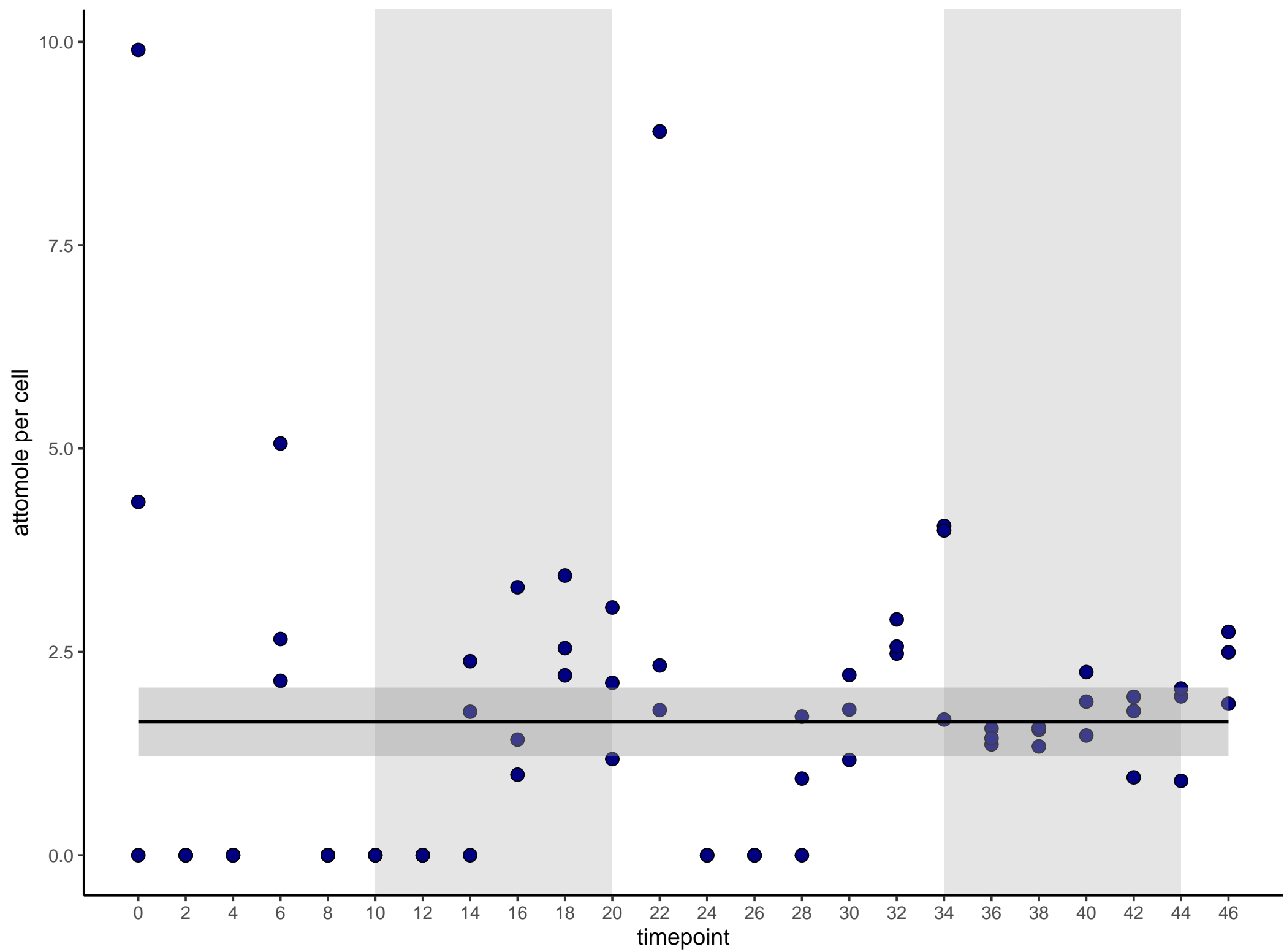
T\_90to30



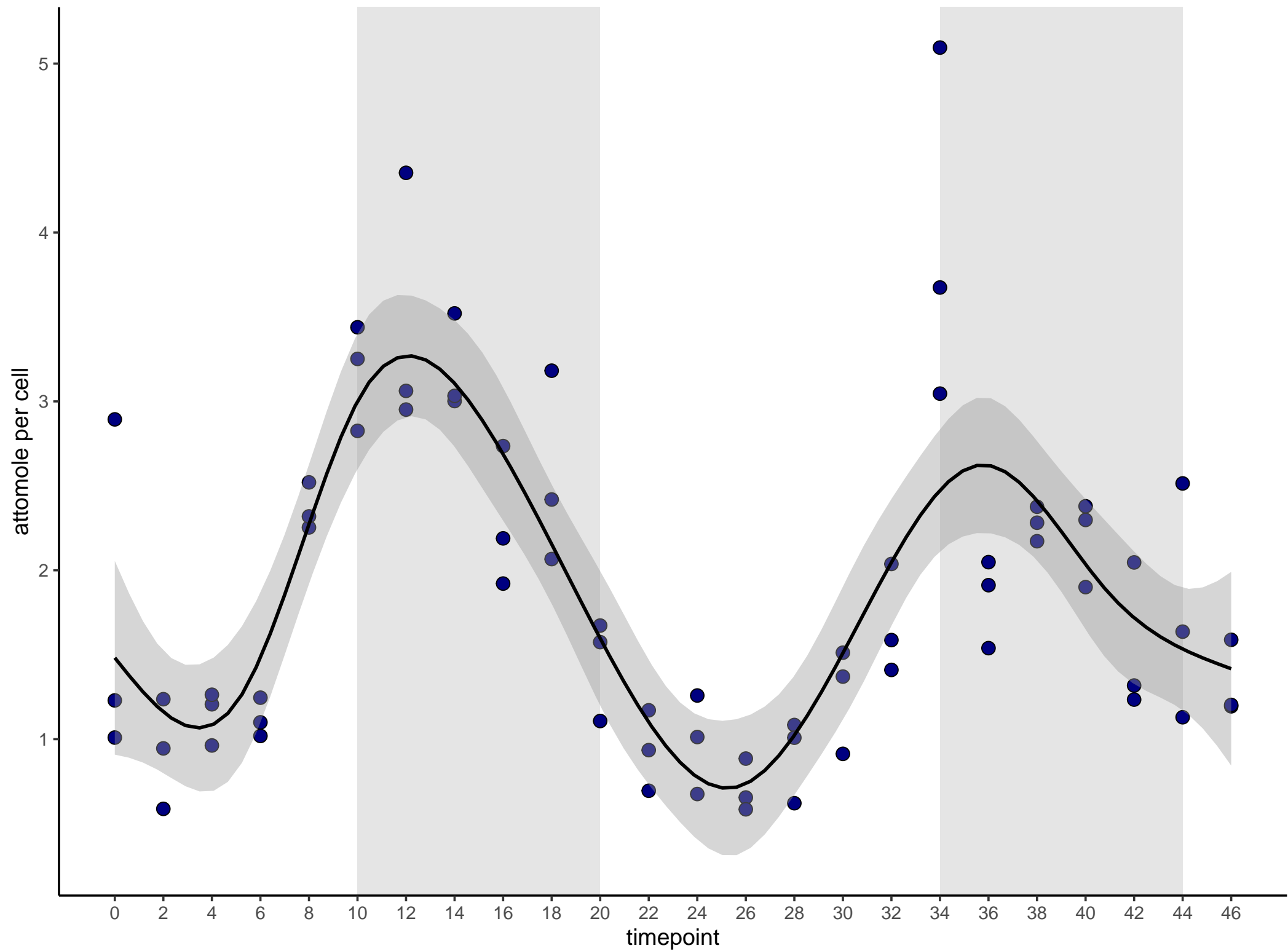
NADP



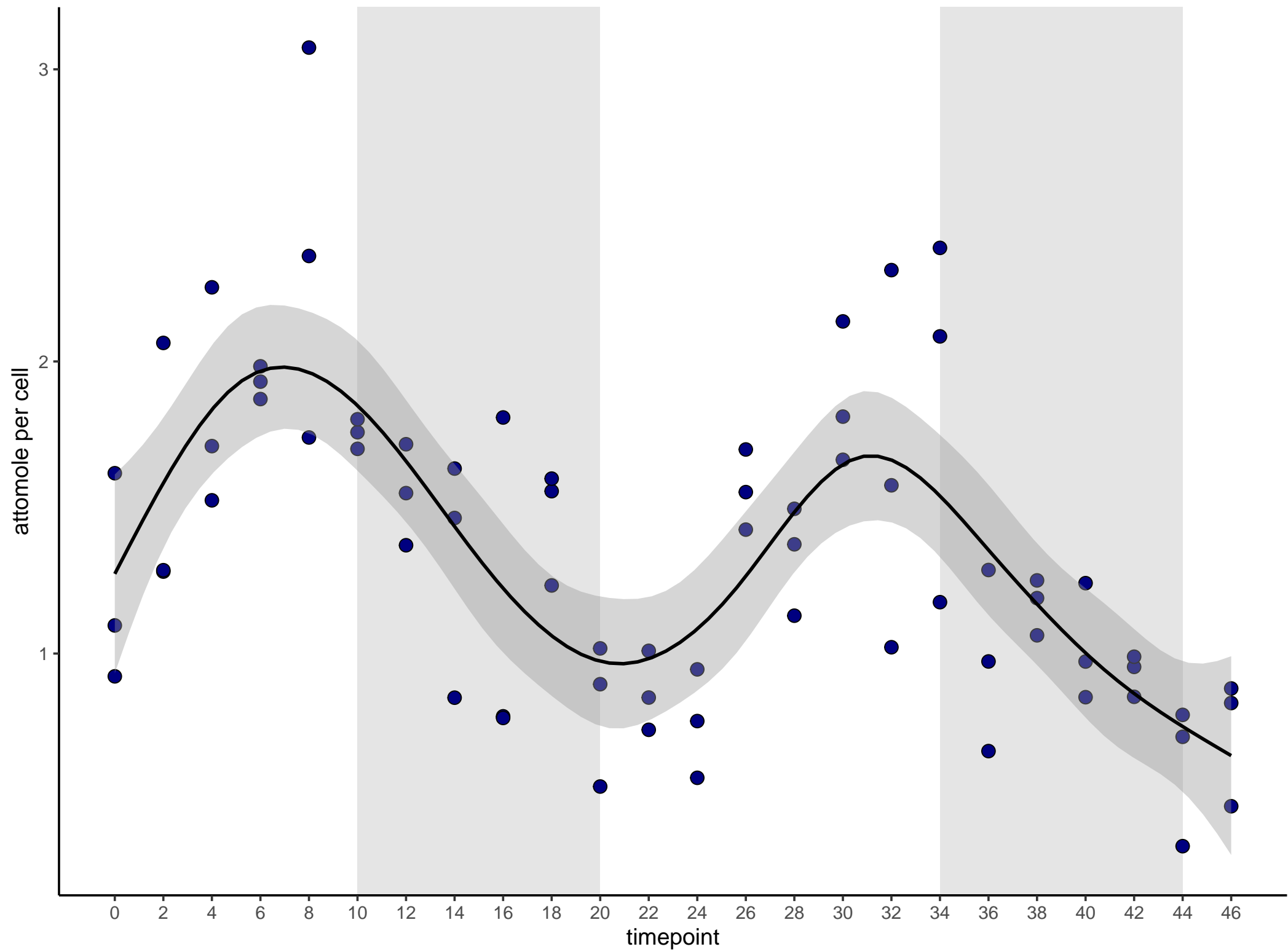
nicotinamide



thymidine



tryptophan



T\_90to62

attomole per cell

1000

500

0

timepoint

0

2

4

6

8

10

12

14

16

18

20

22

24

26

28

30

32

34

36

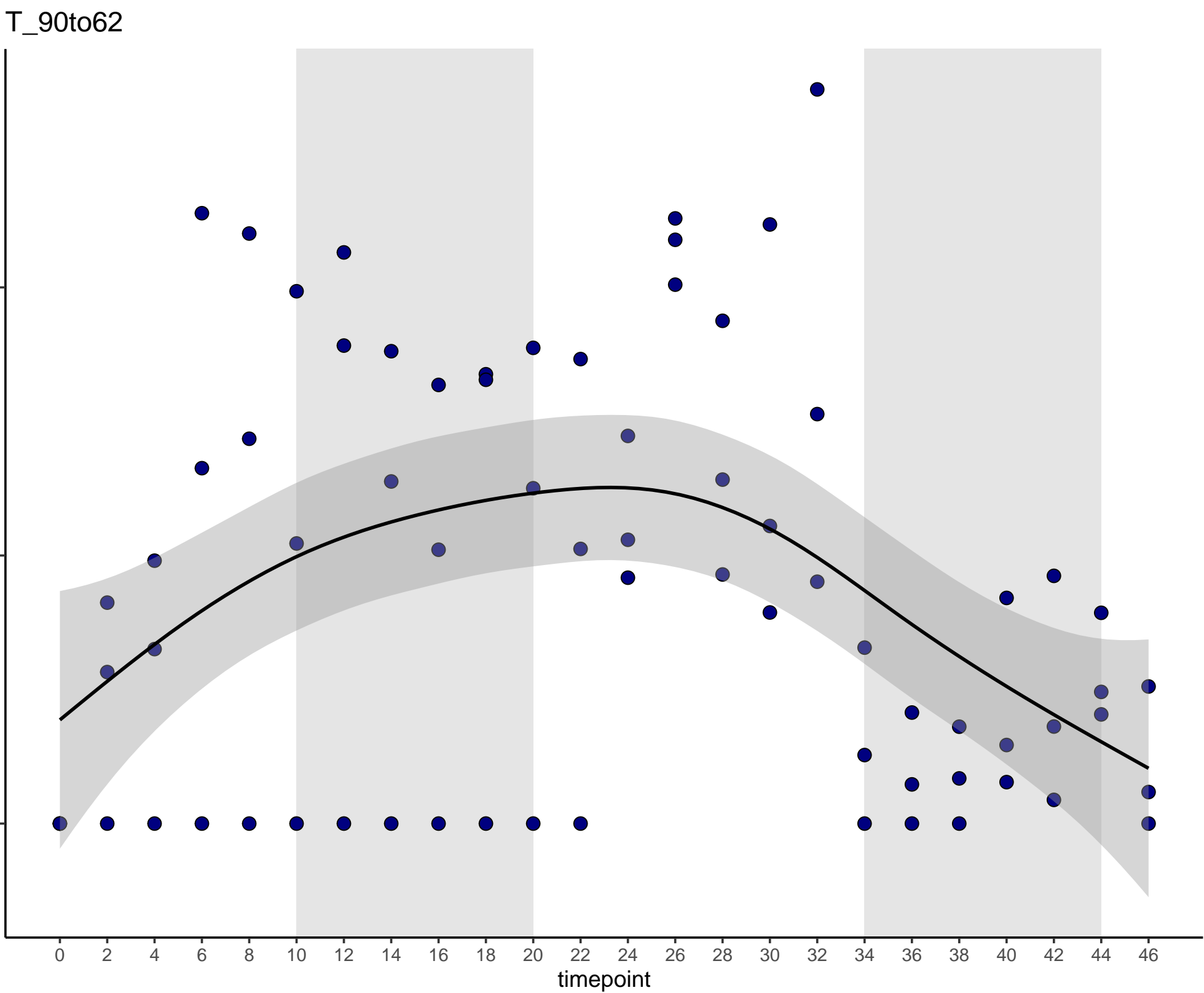
38

40

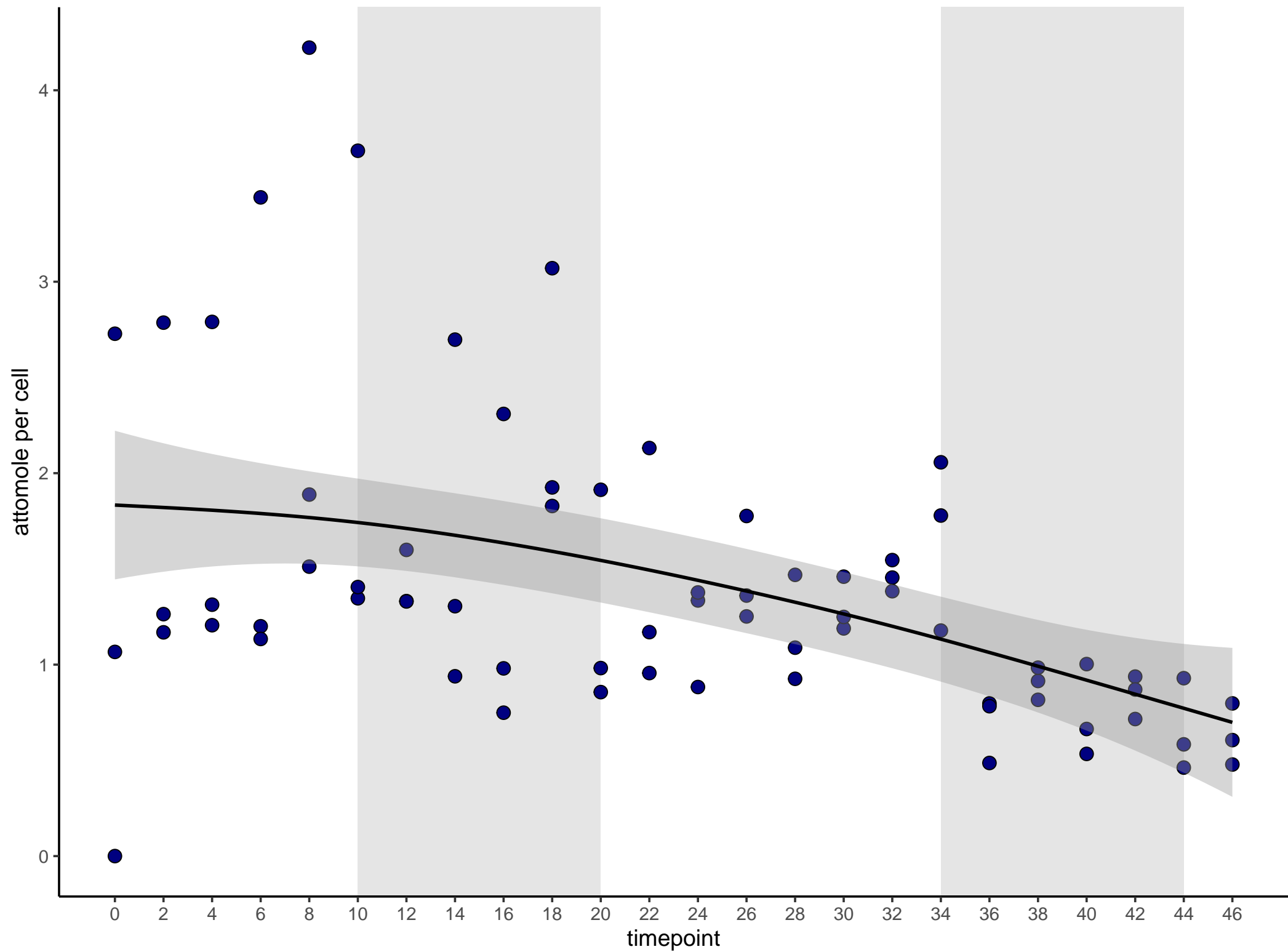
42

44

46



Iumichrome



tetrahydrobiopterin240

