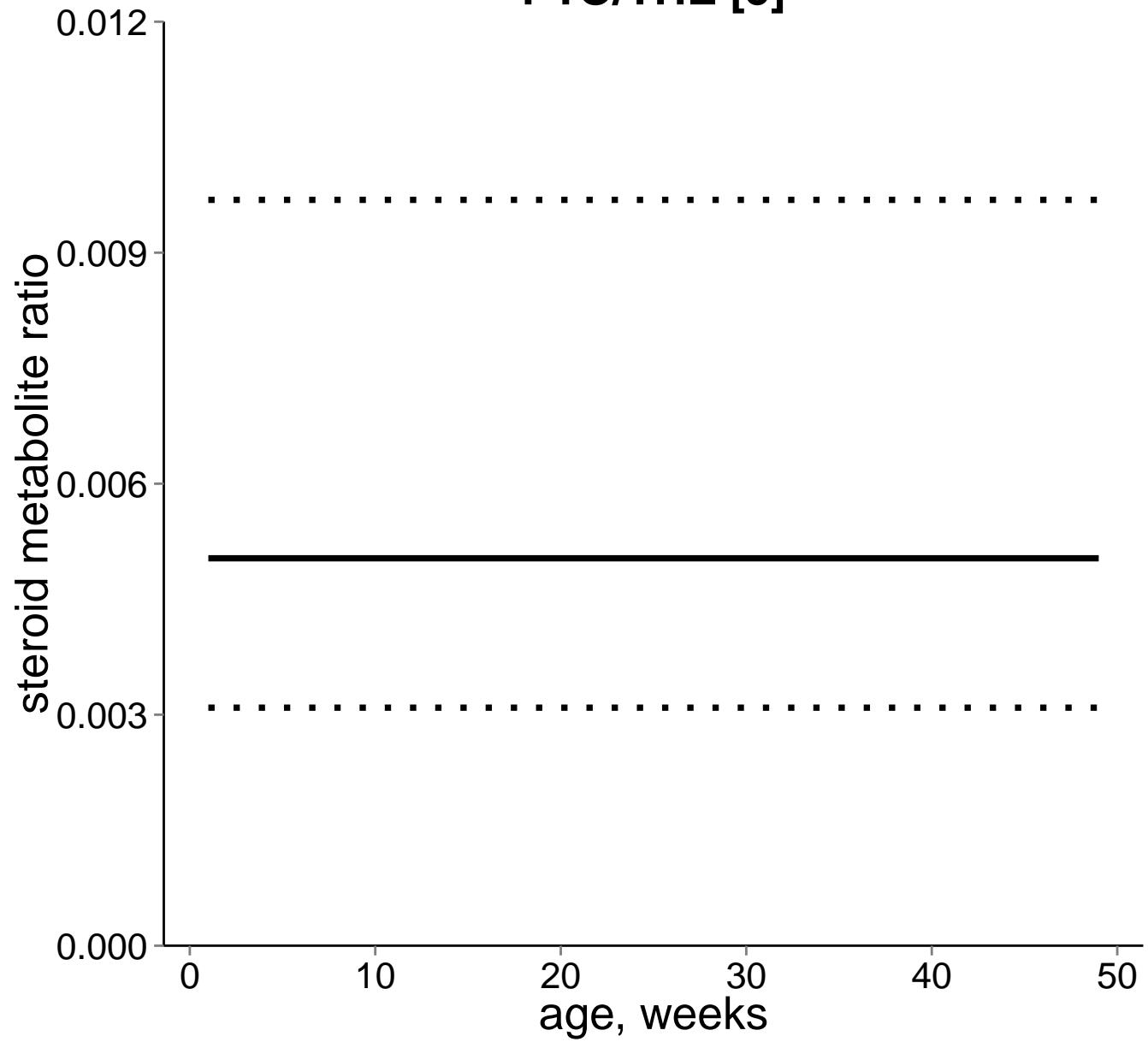


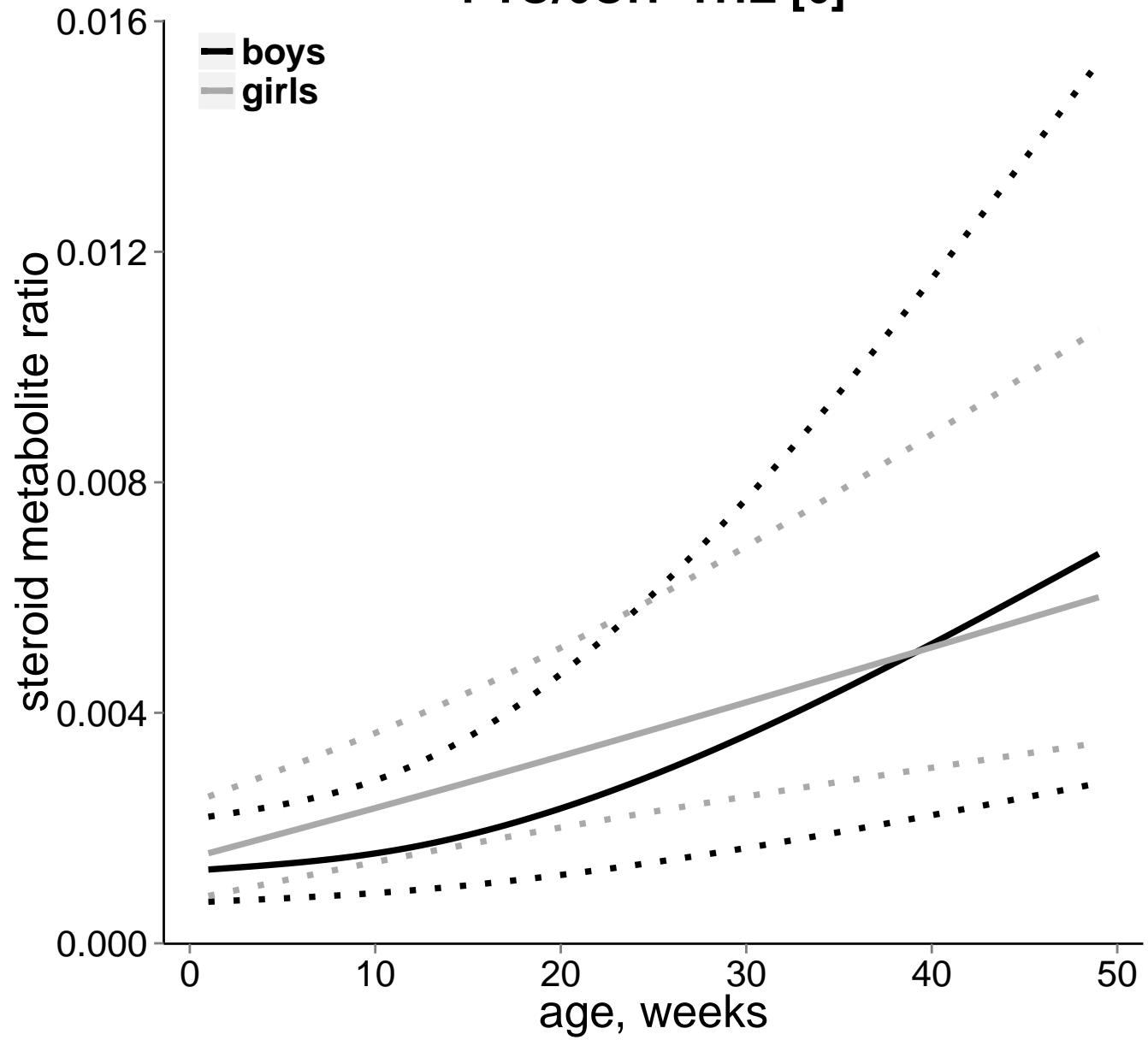
21-hydroxylase

PTO/THE [5]



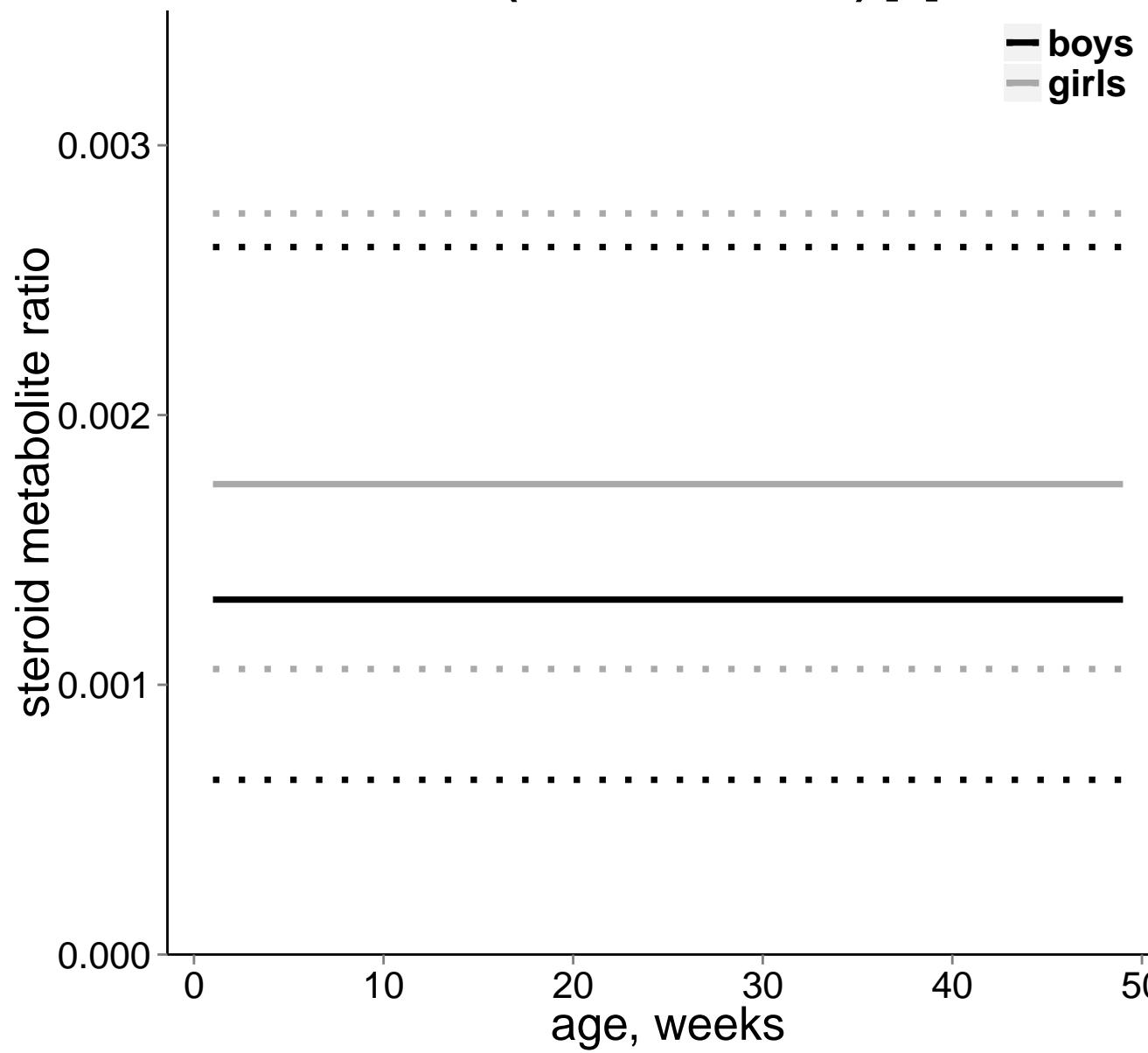
21-hydroxylase

PTO/6OH-THE [6]



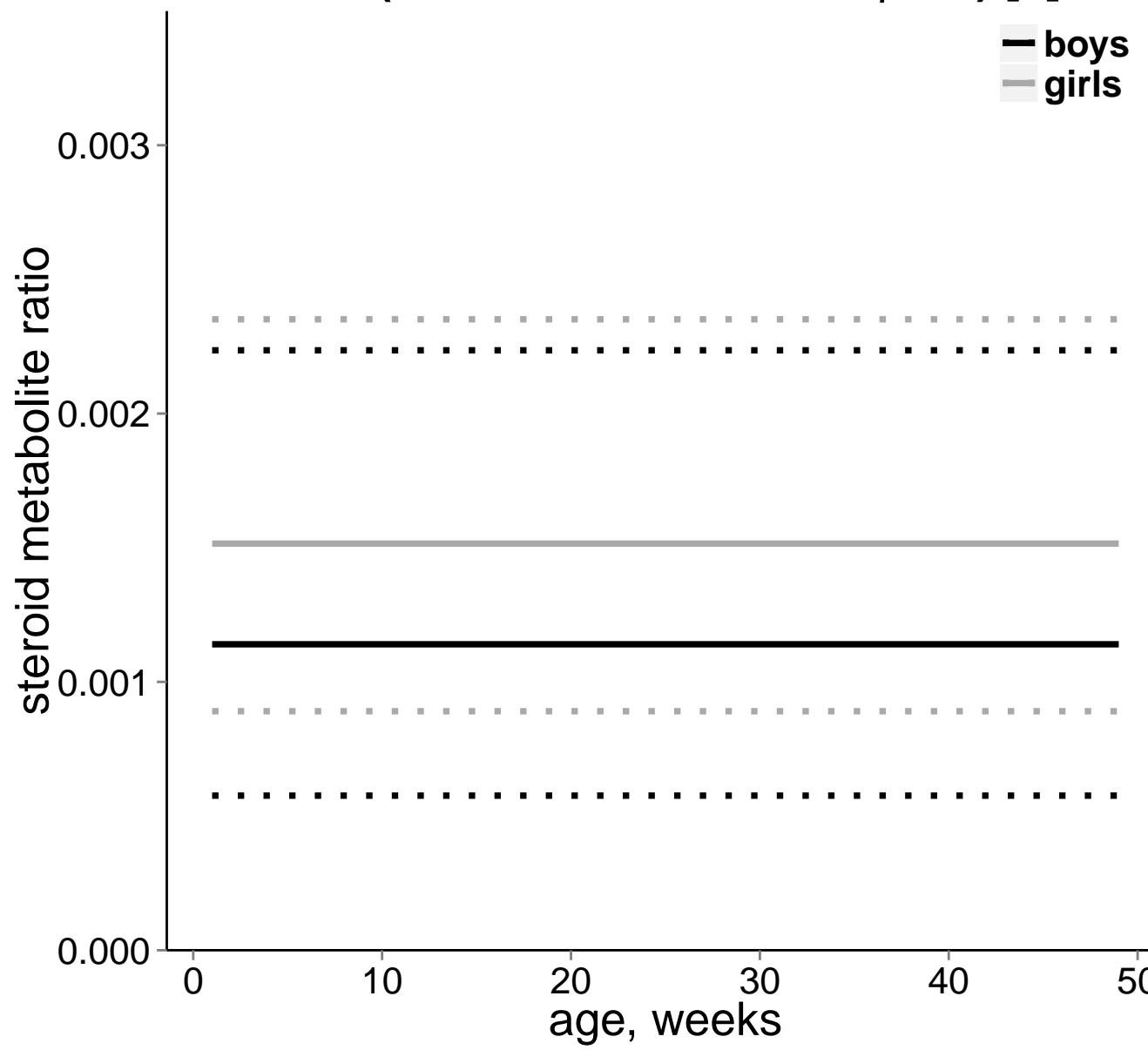
21-hydroxylase

PTO/(THE+6OH-THE) [7]

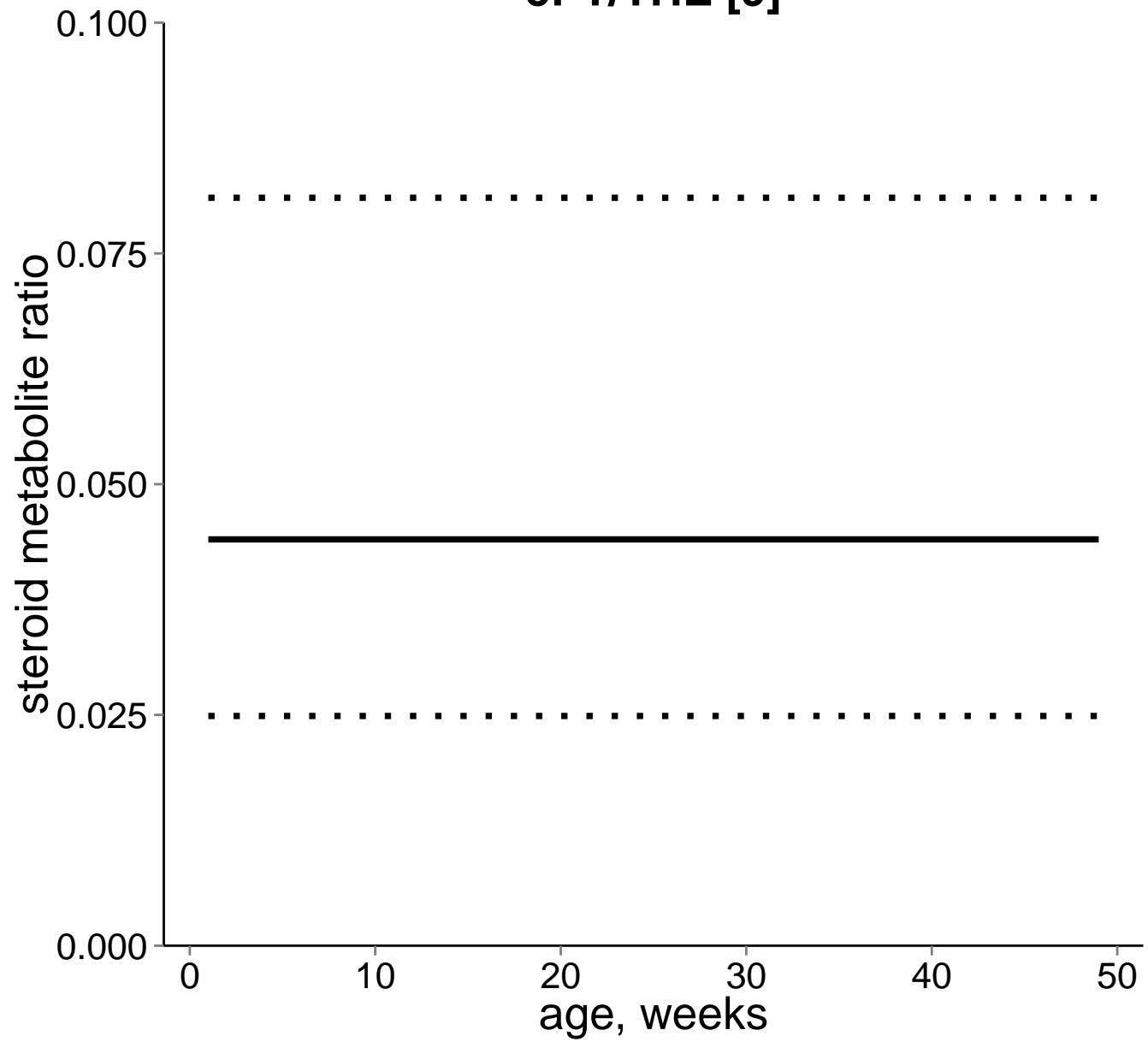


21-hydroxylase

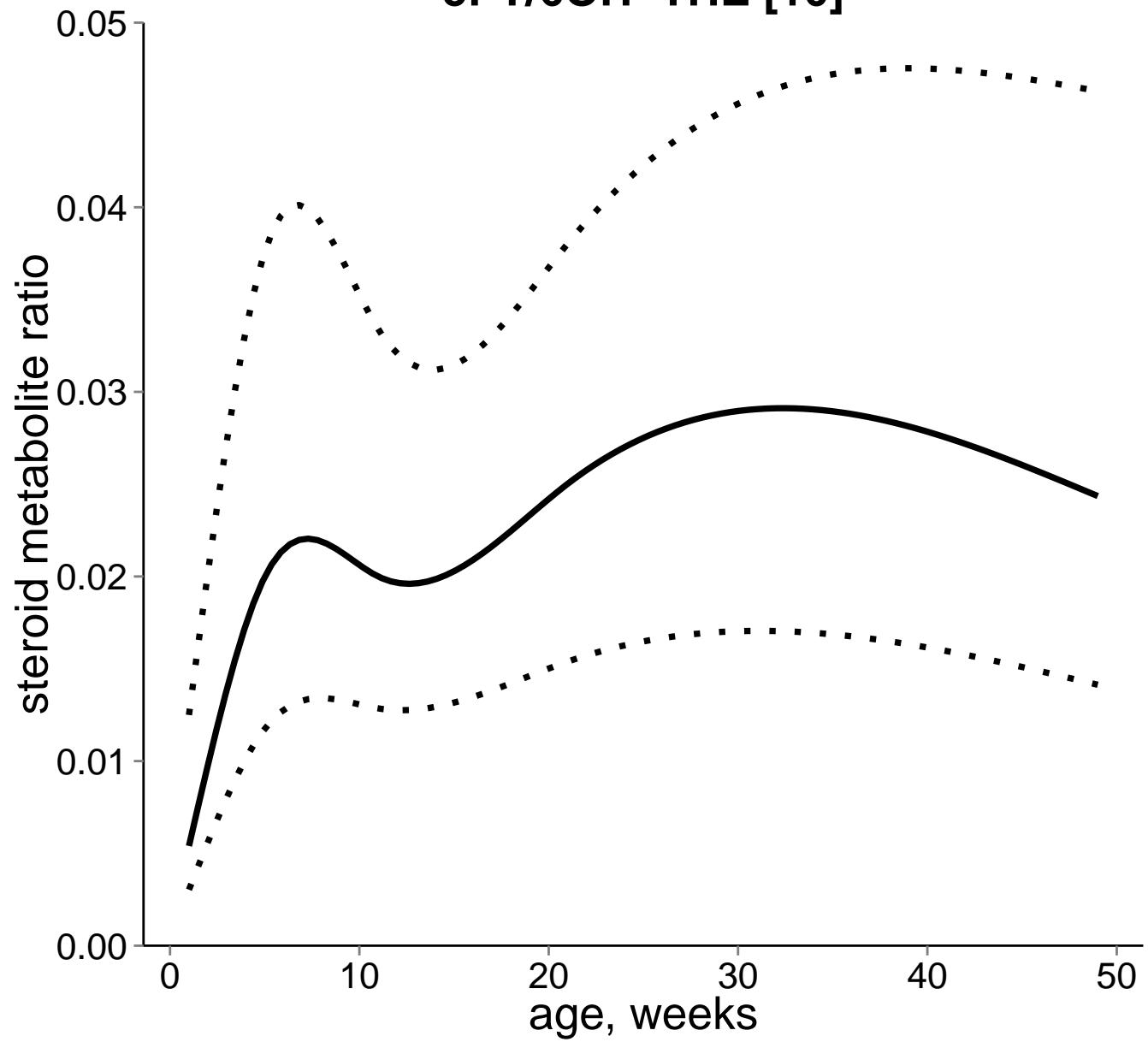
PTO/(THE+6OH-THE+6OH- β -Cl) [8]



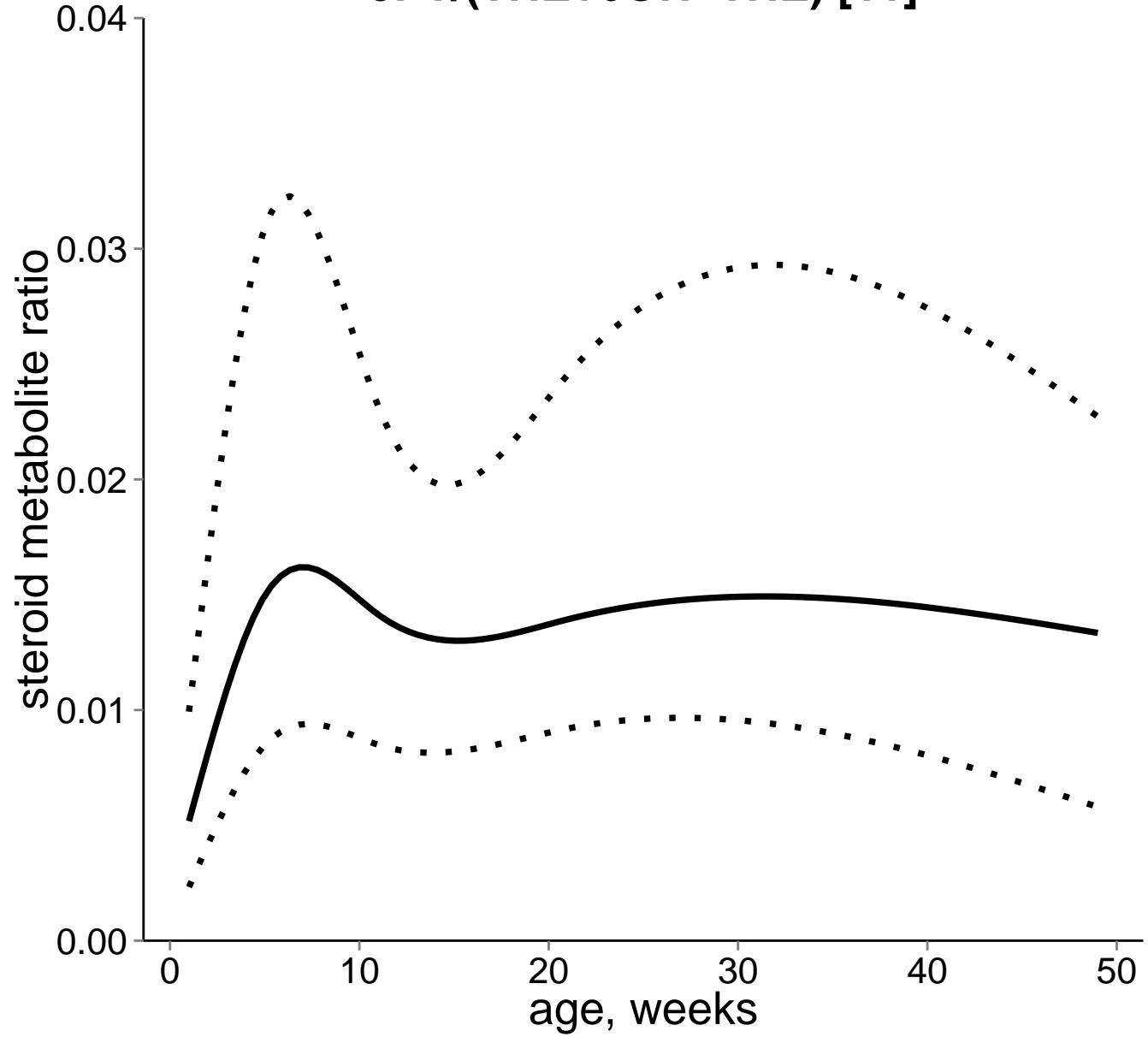
**3β -HSD
5PT/THE [9]**



3β -HSD
5PT/6OH-THE [10]

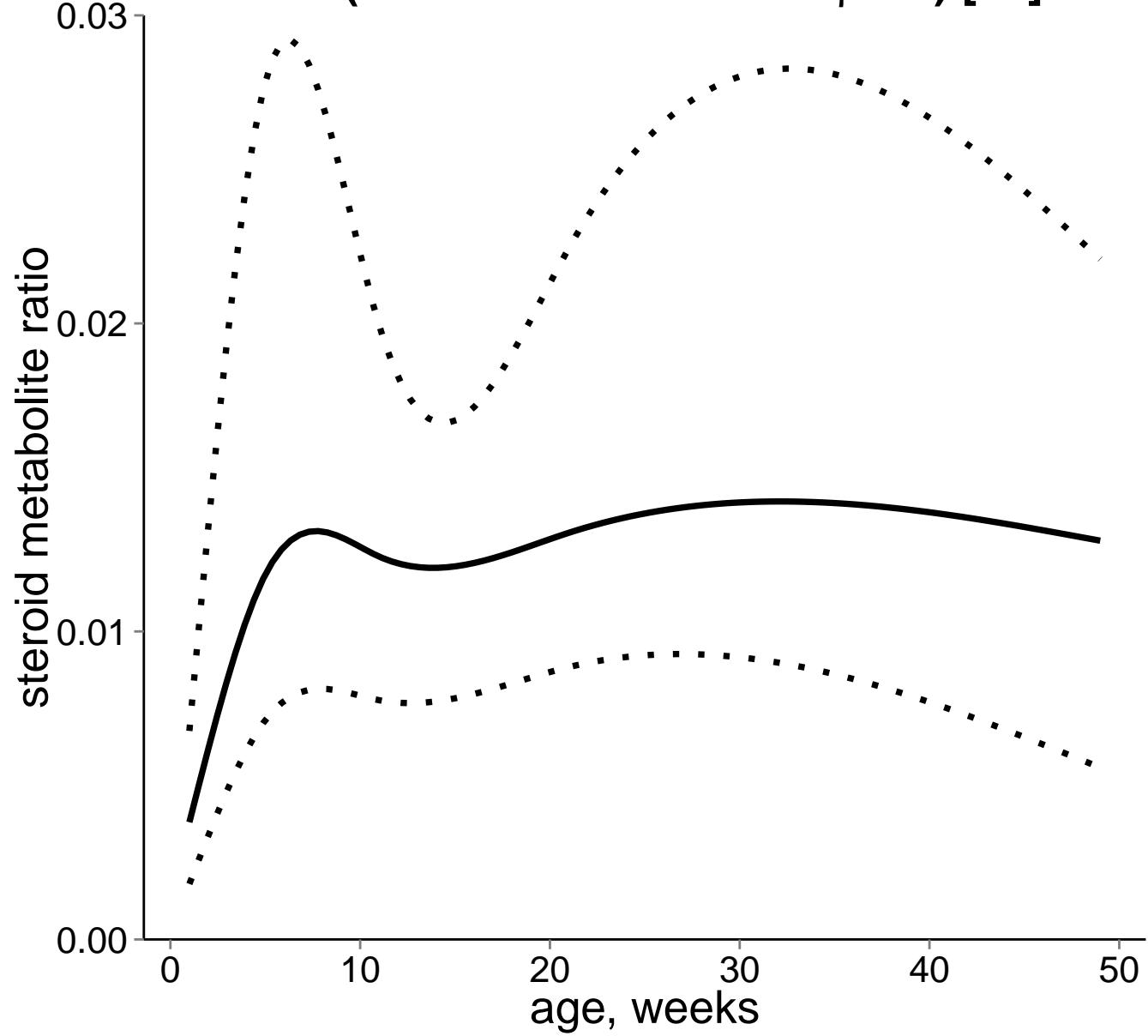


3β -HSD
5PT/(THE+6OH-THE) [11]

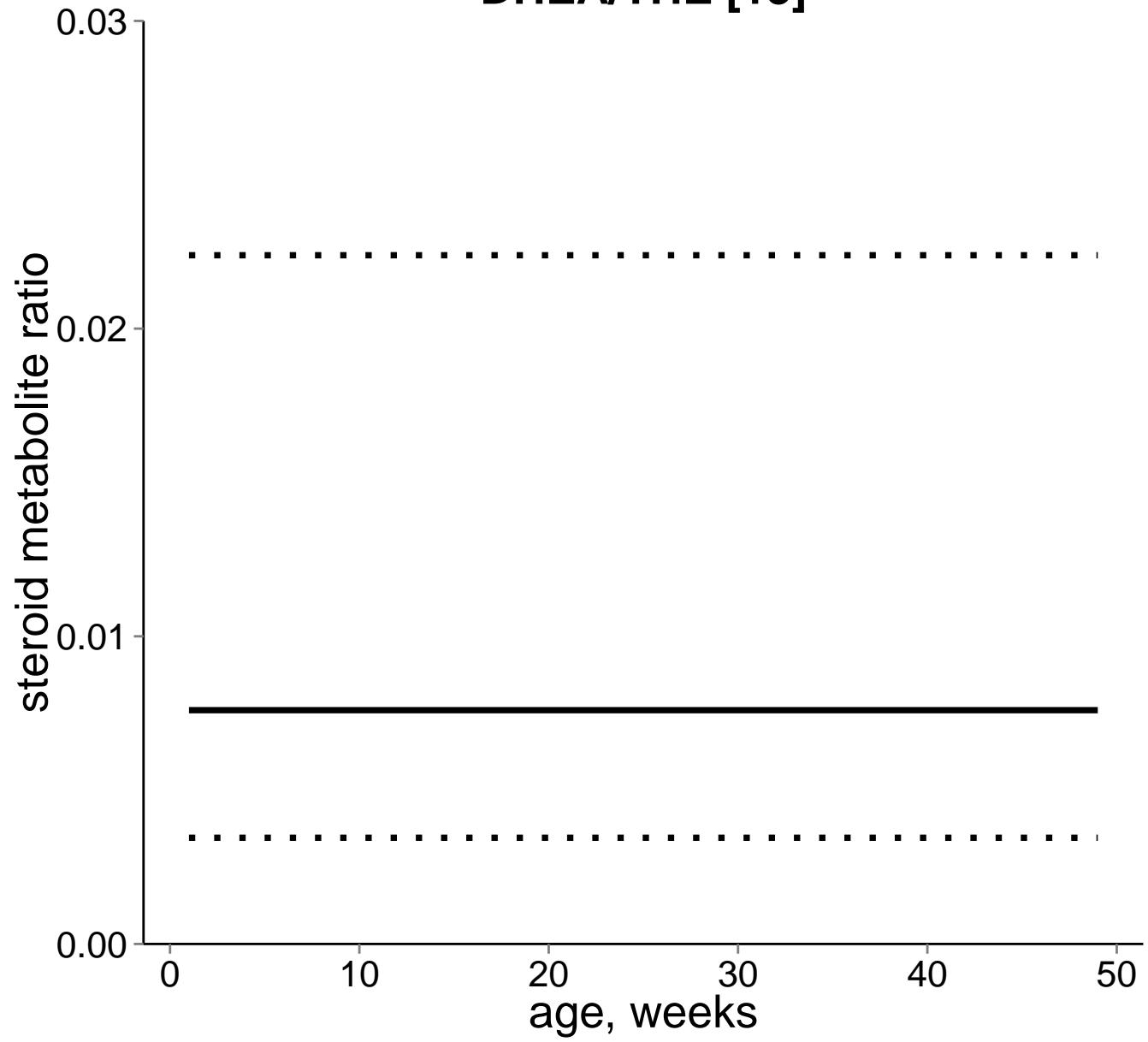


3β -HSD

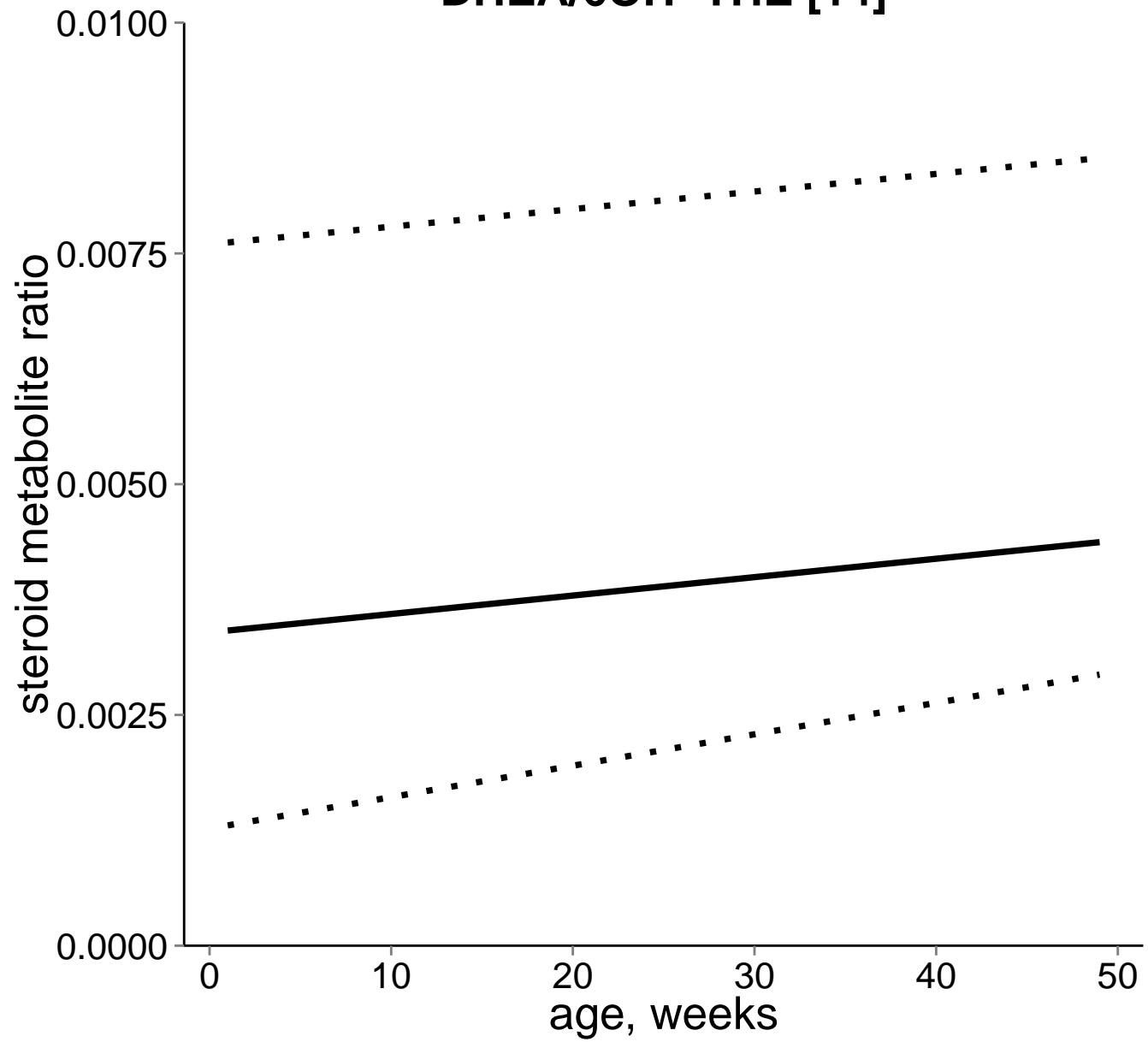
5PT/(THE+6OH-THE+6OH- β -CI) [12]



3β -HSD
DHEA/THE [13]

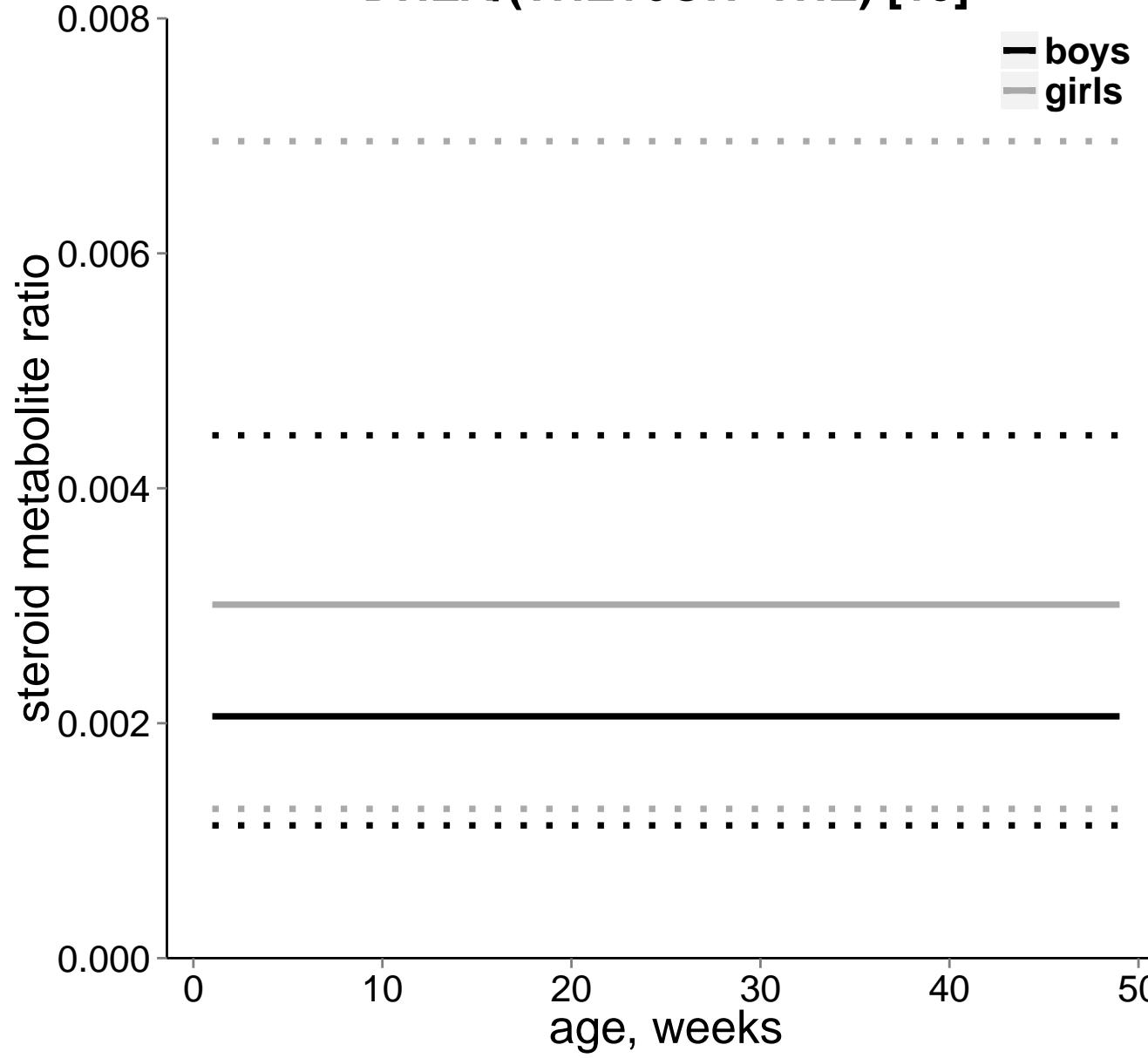


3β -HSD
DHEA/6OH-THE [14]



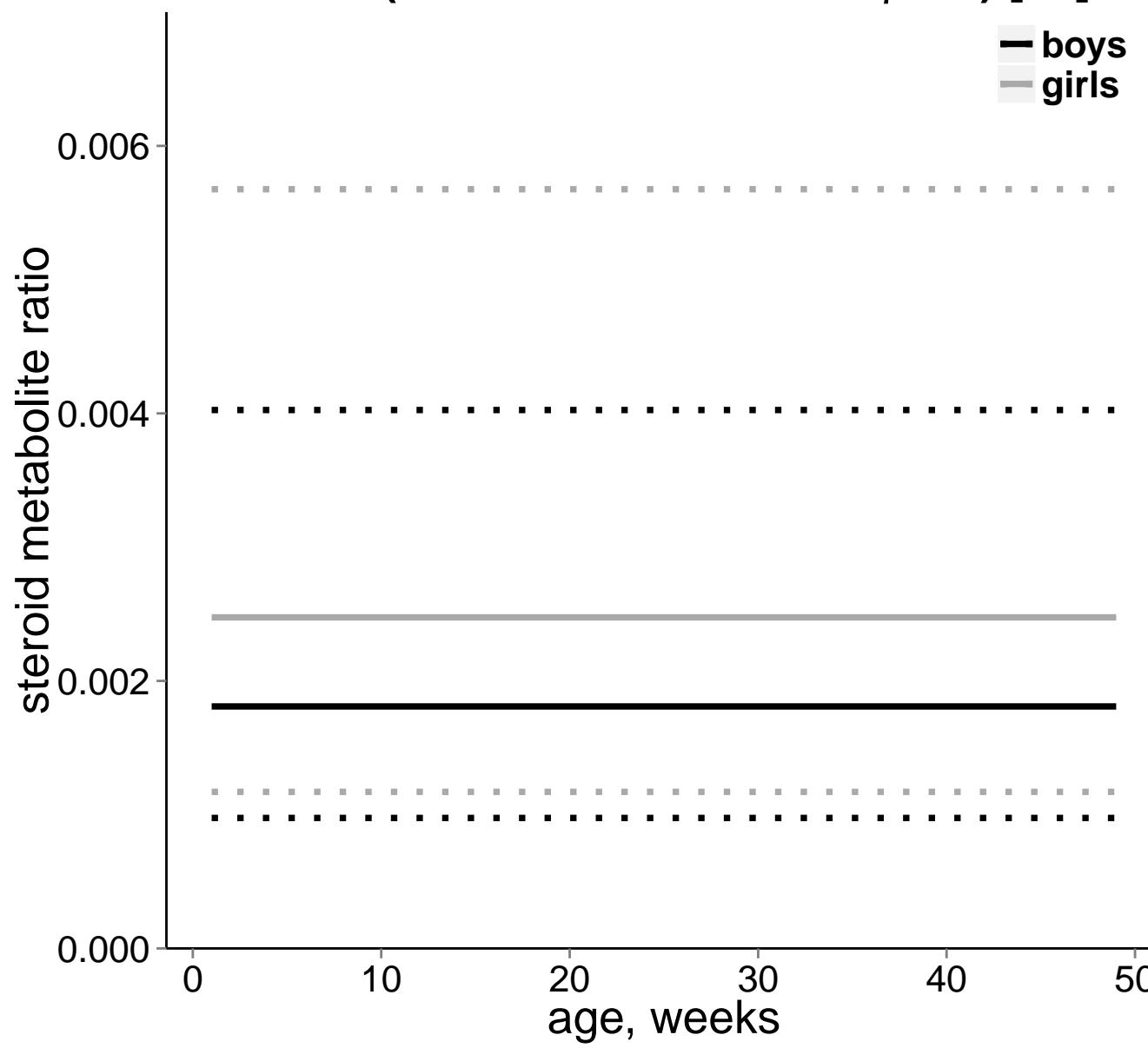
3β -HSD

DHEA/(THE+6OH-THE) [15]

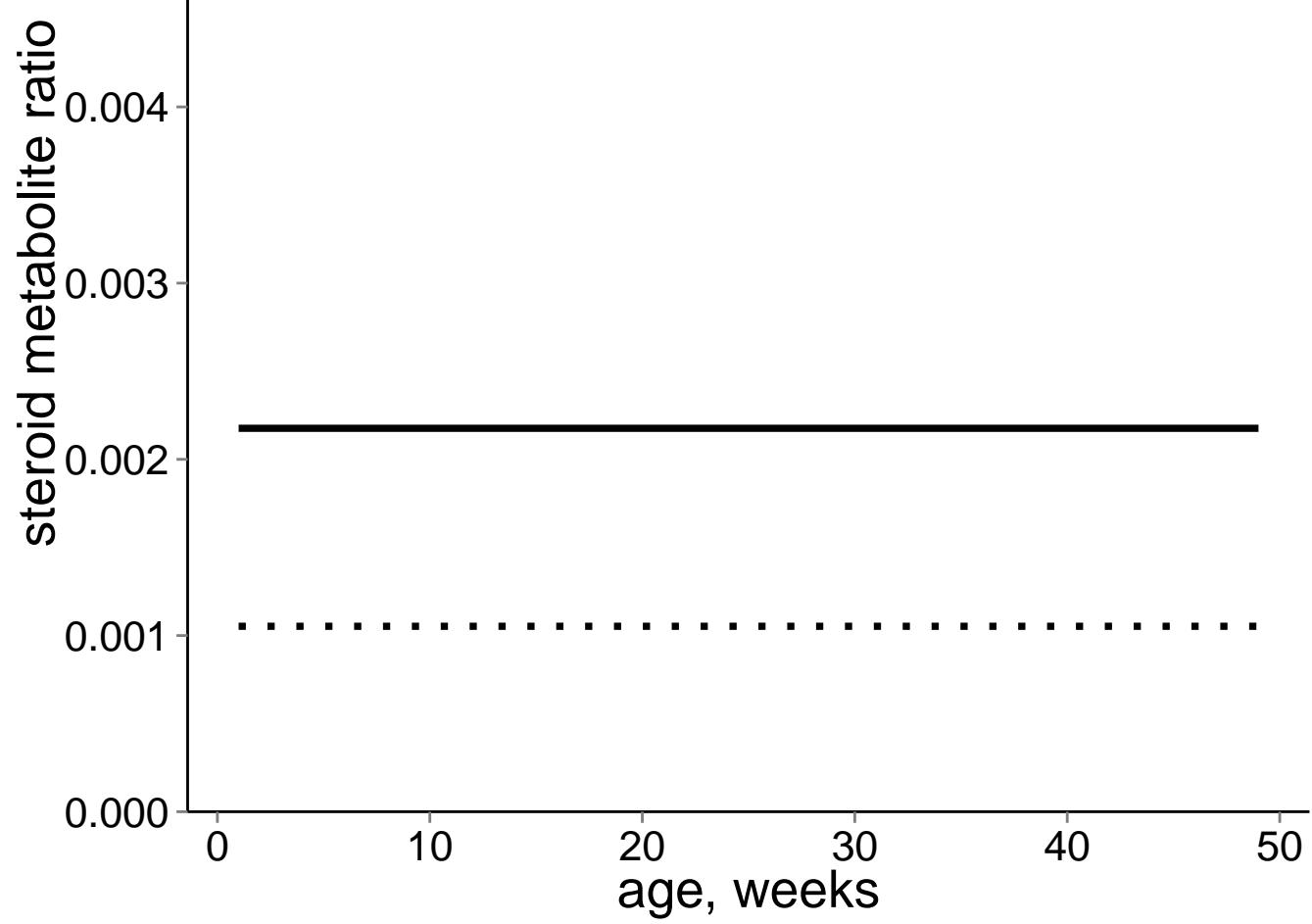


3β -HSD

DHEA/(THE+6OH-THE+6OH- β -Cl) [16]

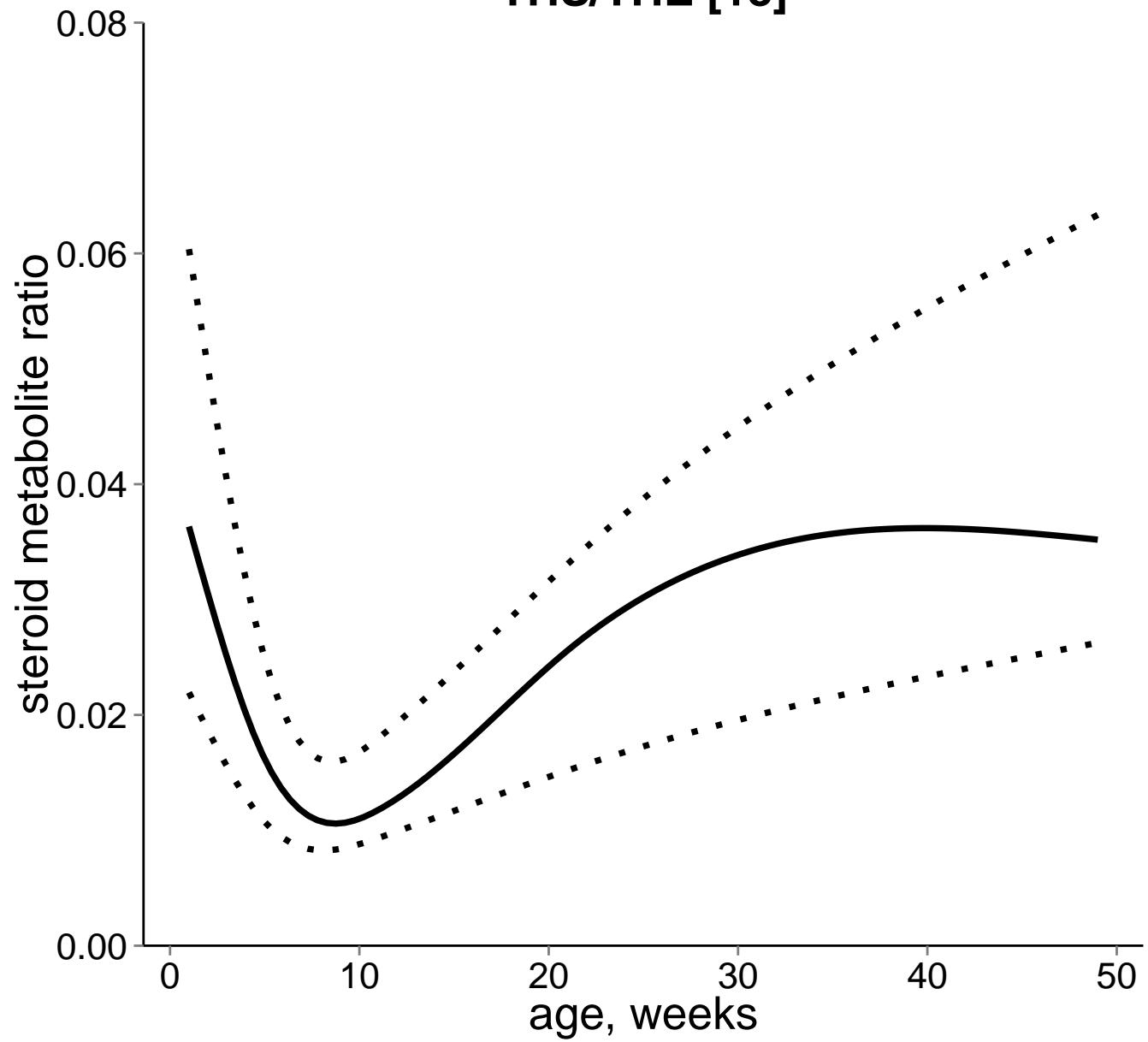


To distinguish 21-hydroxylase from 3β -HSD 5PT/PTO [17]

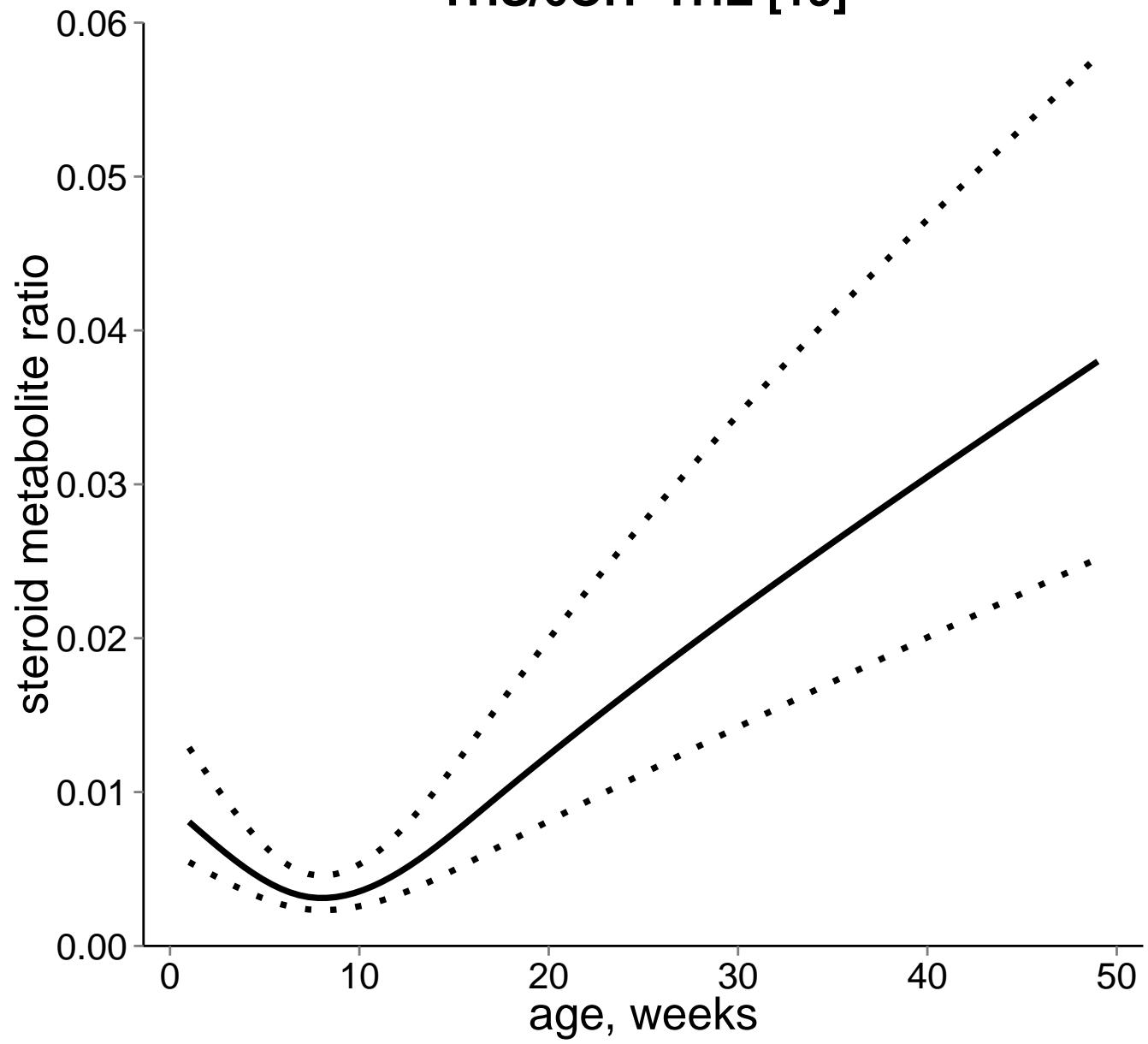


11β -hydroxylase

THS/THE [18]



**11β -hydroxylase
THS/6OH-THE [19]**



**11β -hydroxylase
THS/(THE+6OH-THE) [20]**

steroid metabolite ratio

0.03

0.02

0.01

0.00

0

10

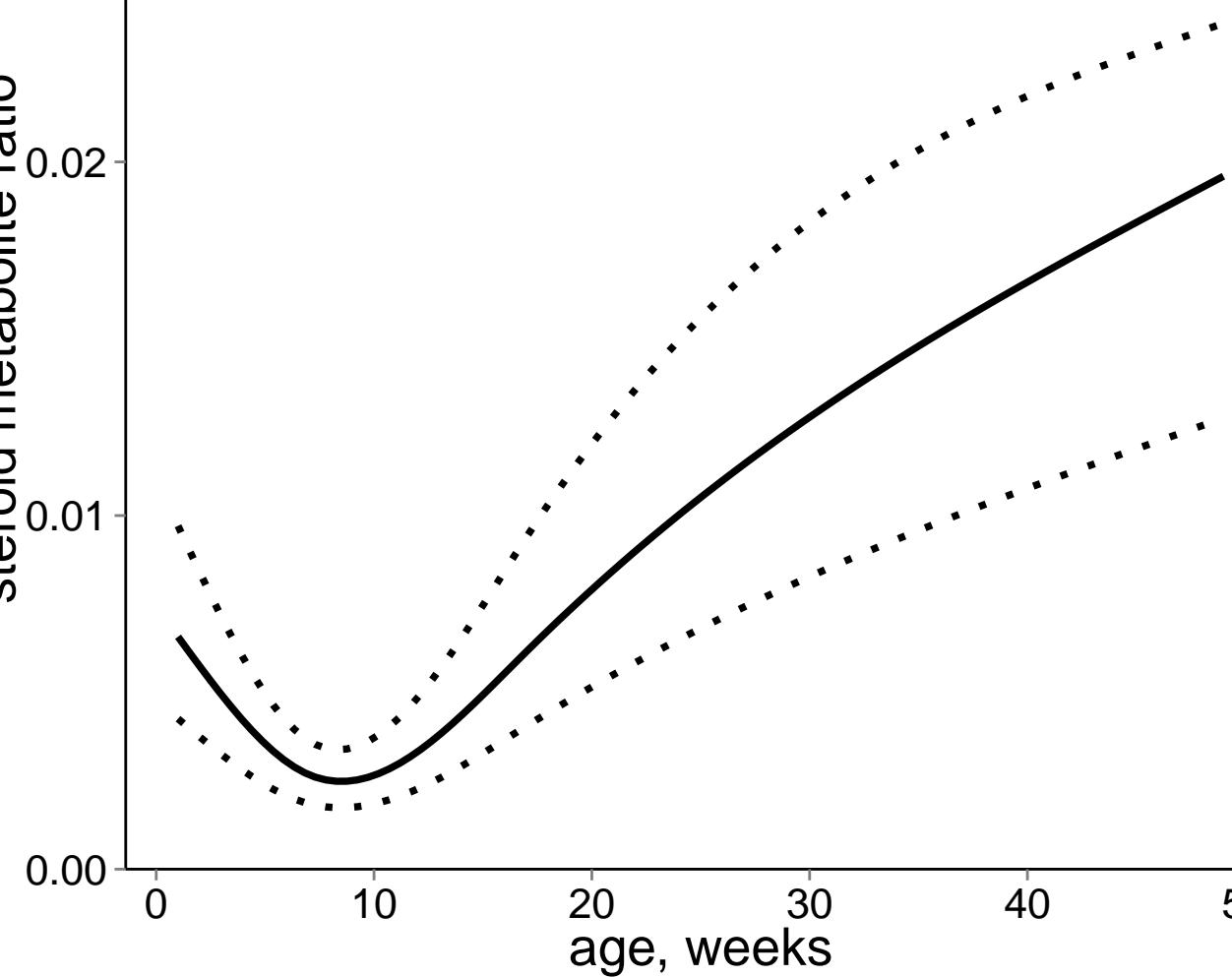
20

30

40

50

age, weeks



11 β -hydroxylase
THS/(THE+6OH-THE+6OH- β -Cl) [21]

steroid metabolite ratio

0.03

0.02

0.01

0.00

0

10

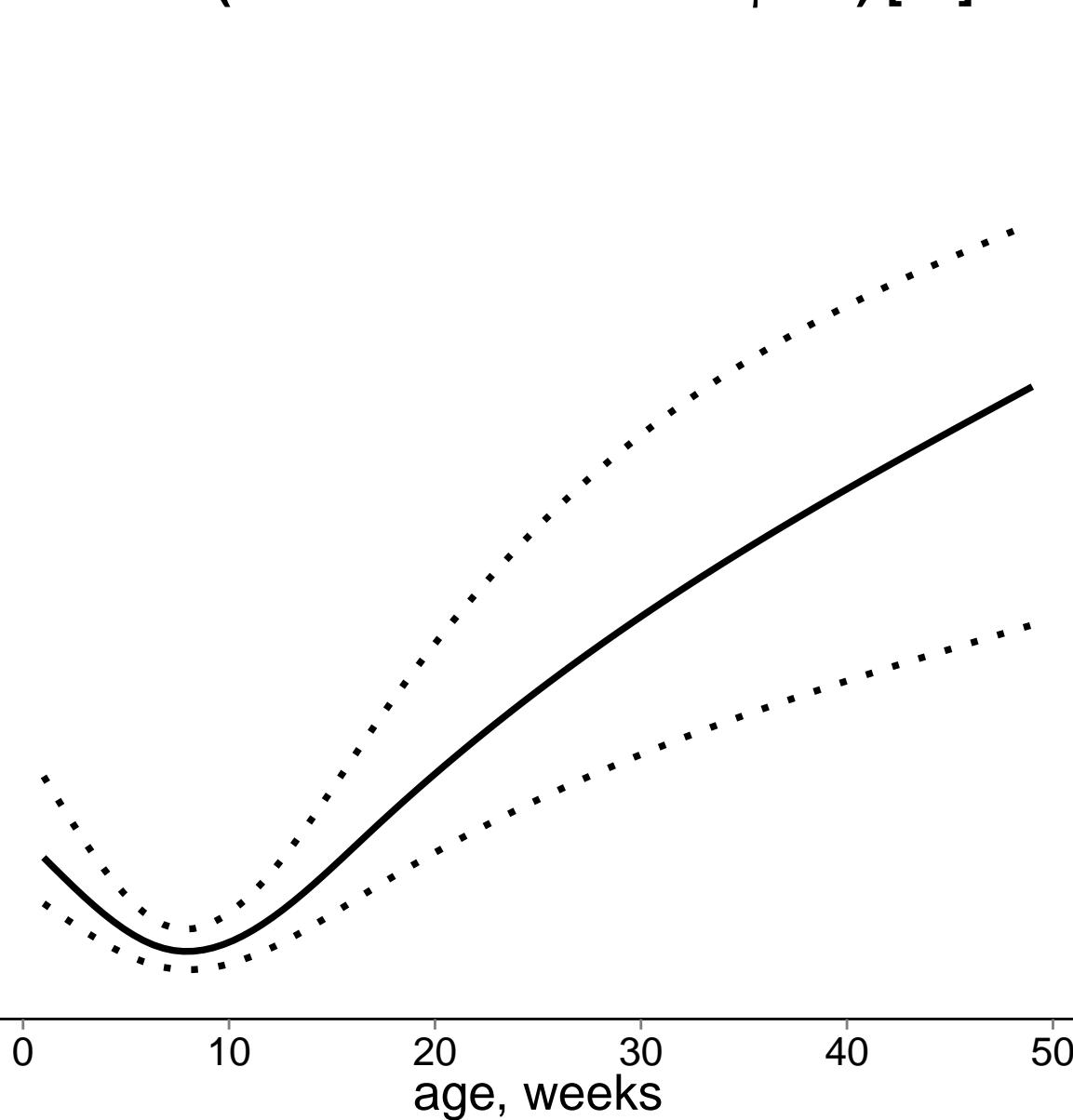
20

30

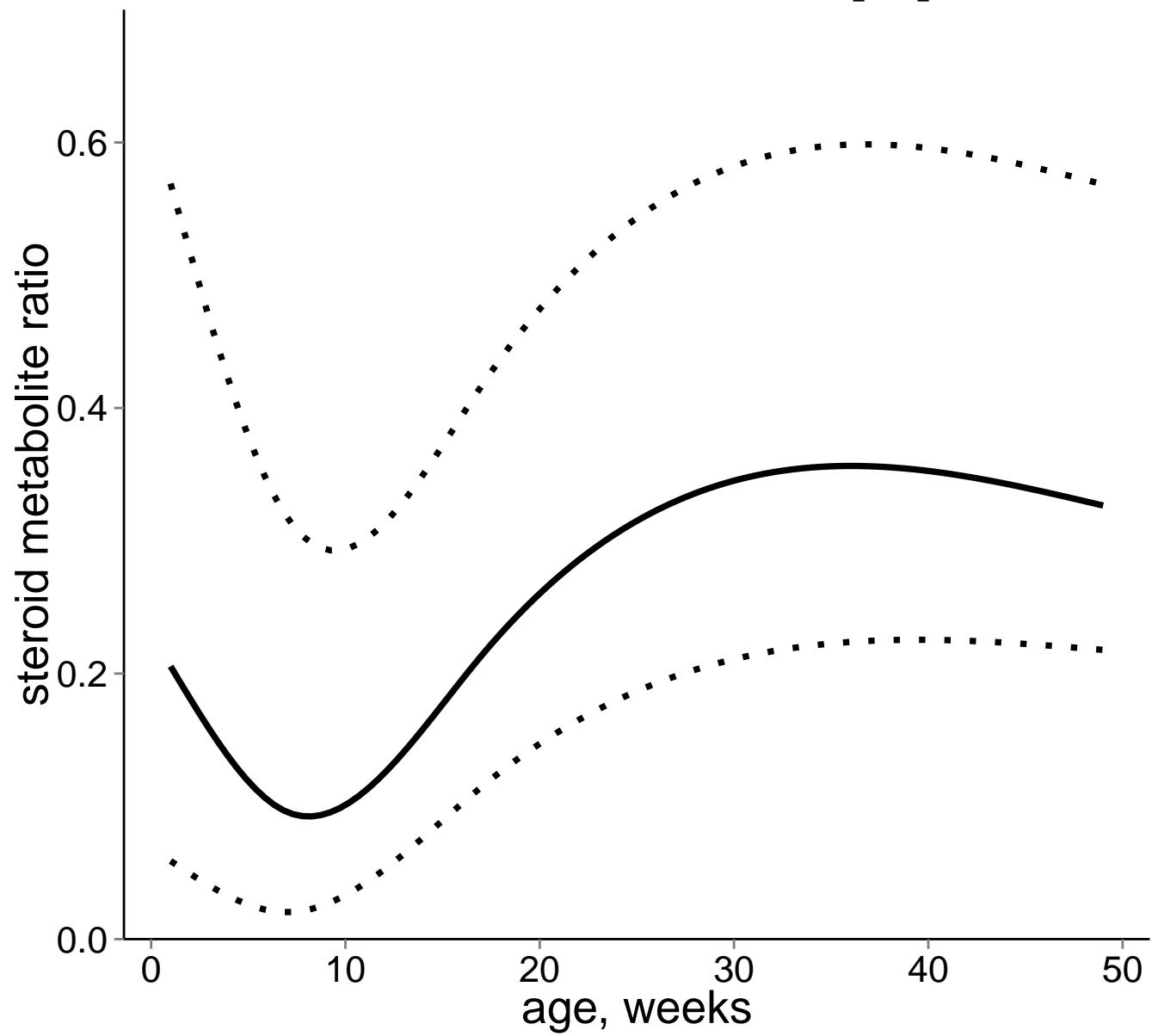
40

50

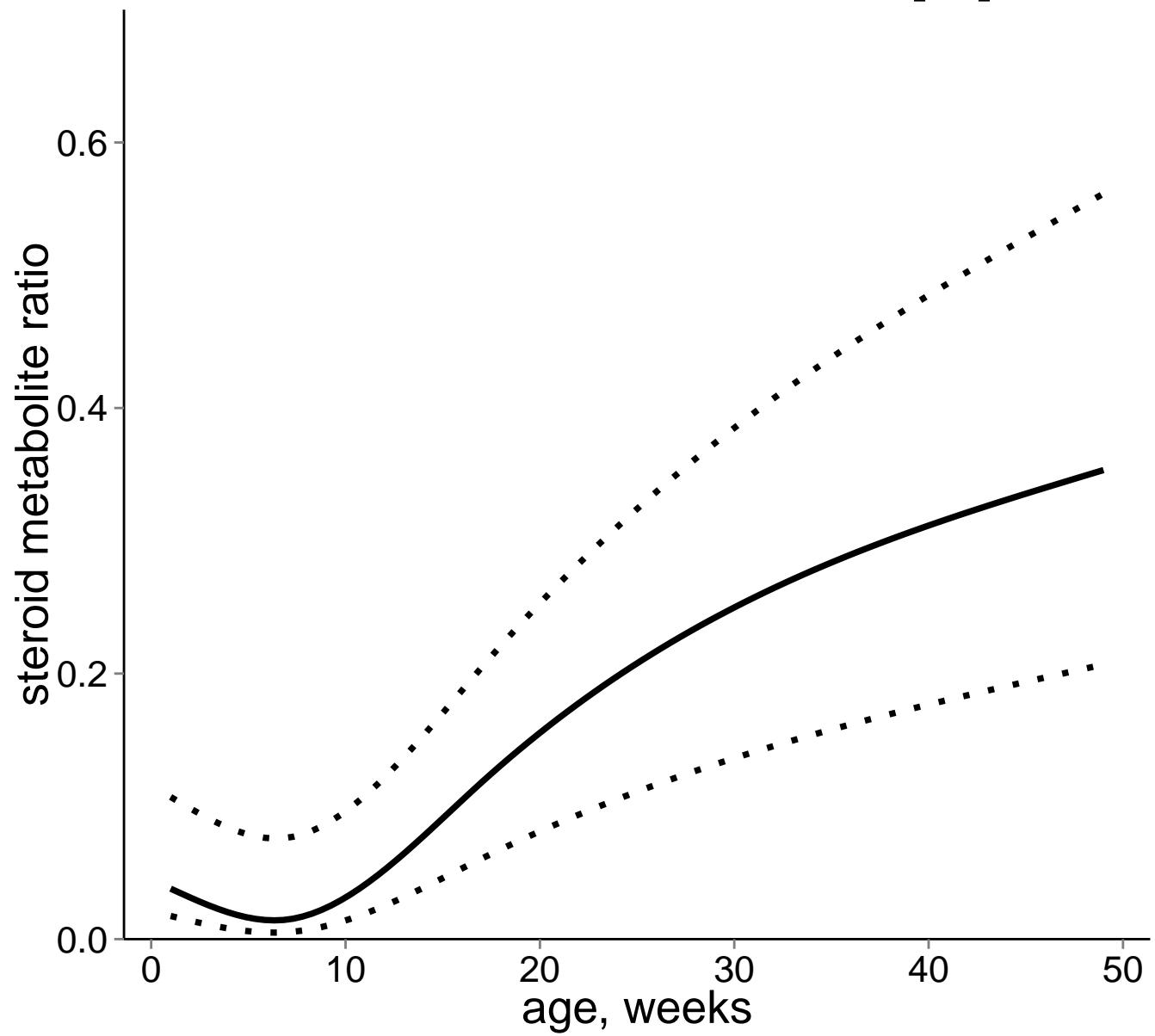
age, weeks



**17 α -hydroxylase
THA+THB+5 α THB/THE [22]**

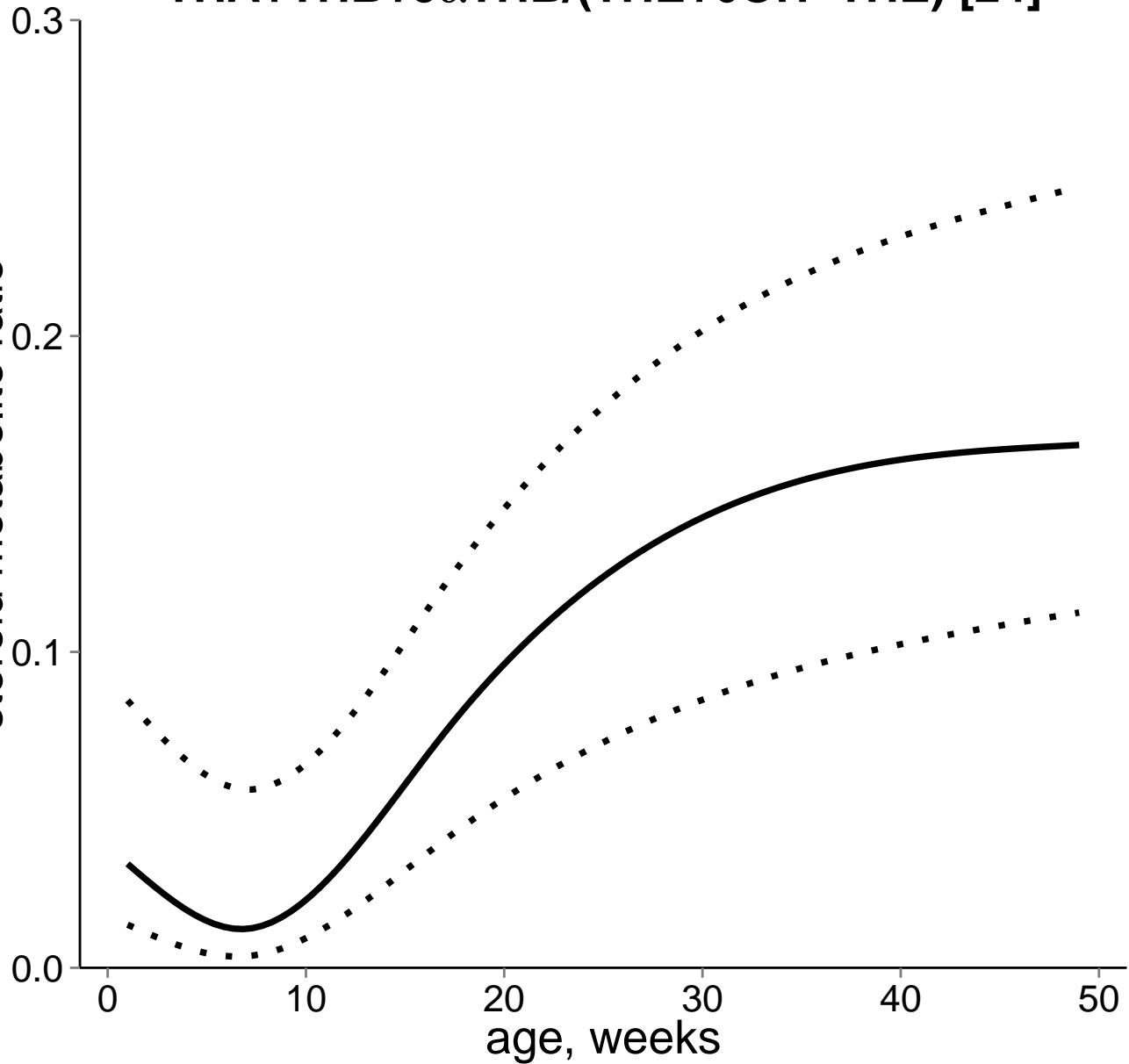


**17 α -hydroxylase
THA+THB+5 α THB/6OH-THE [23]**

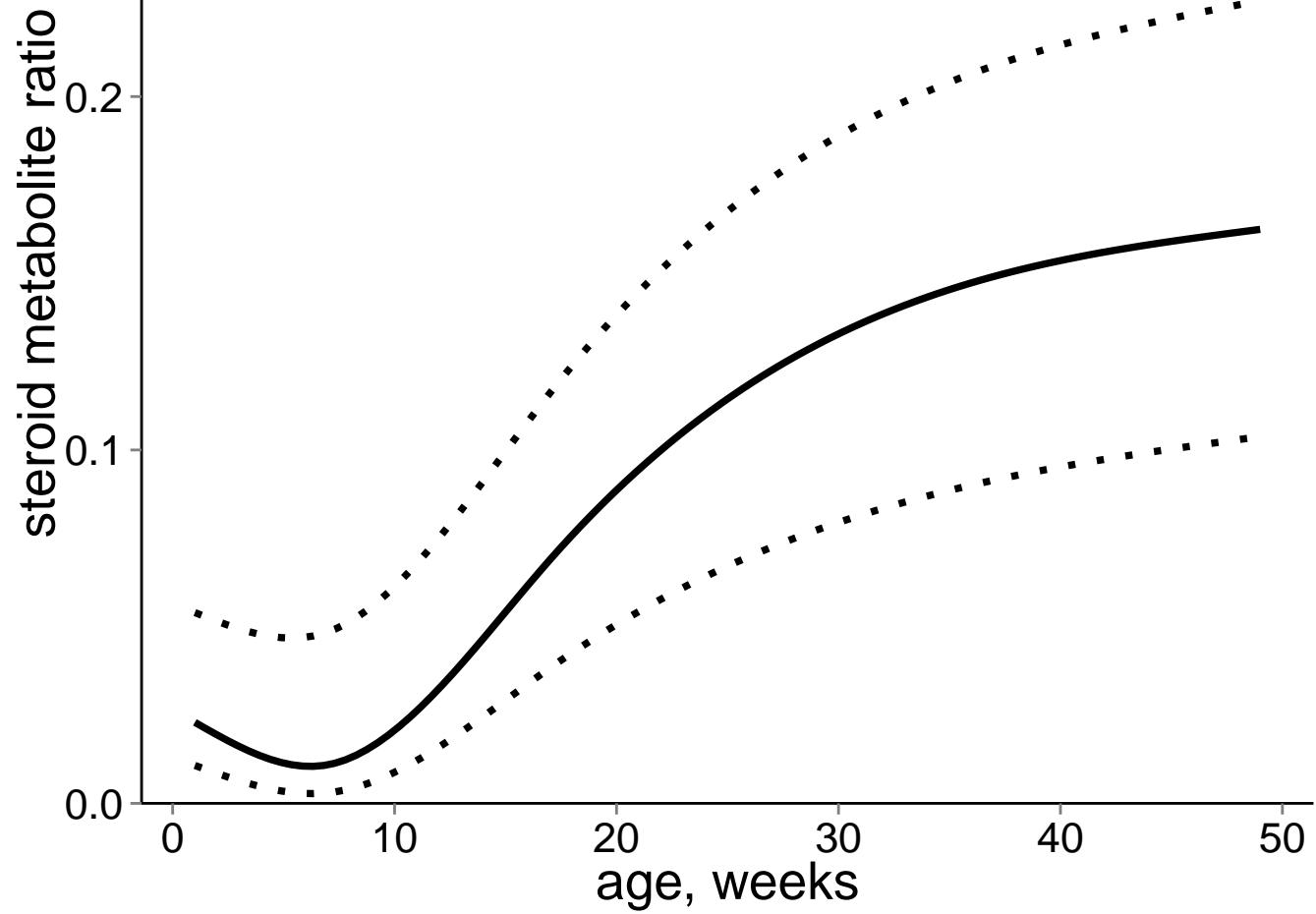


17 α -hydroxylase
THA+THB+5 α THB/(THE+6OH-THE) [24]

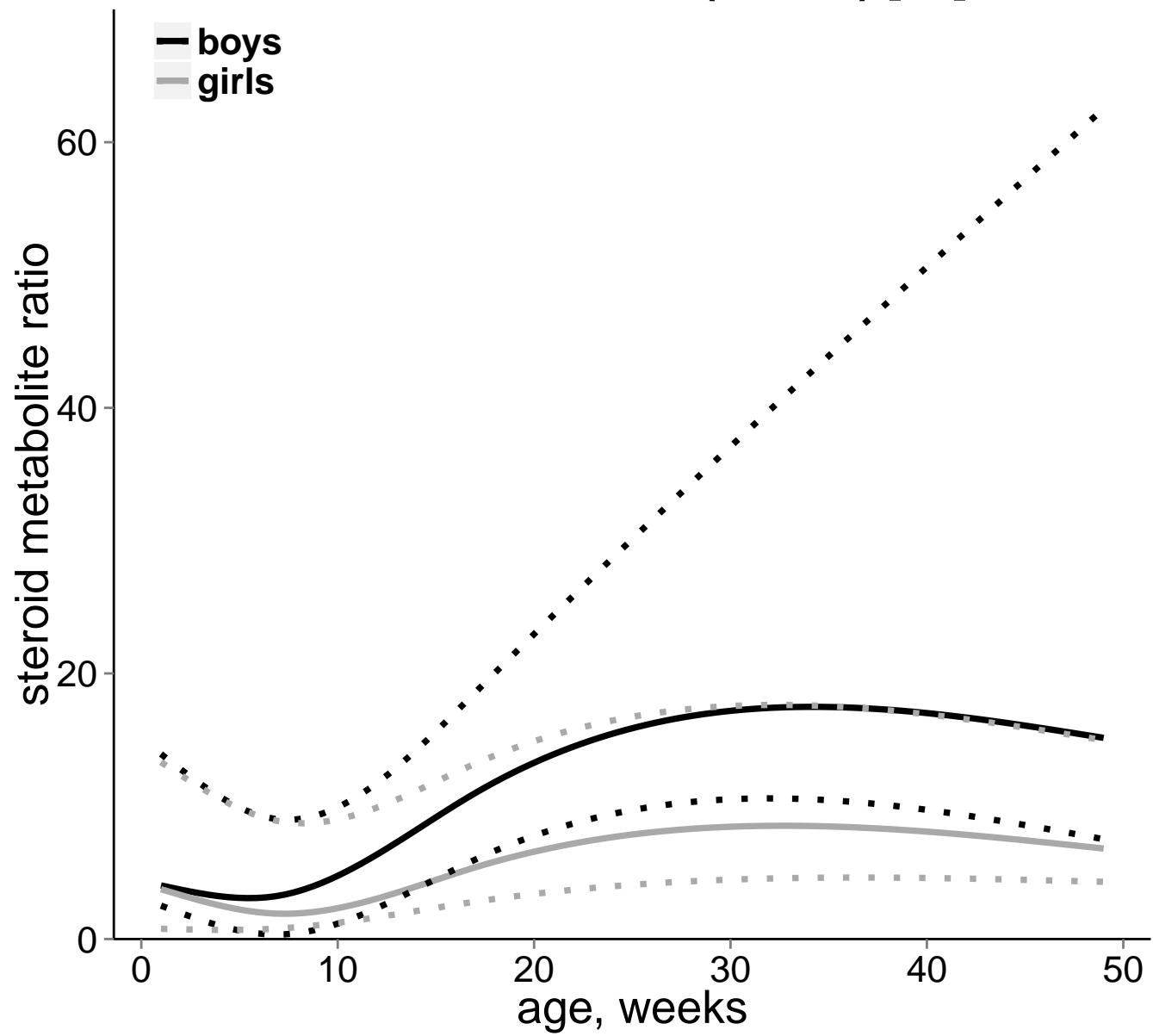
steroid metabolite ratio



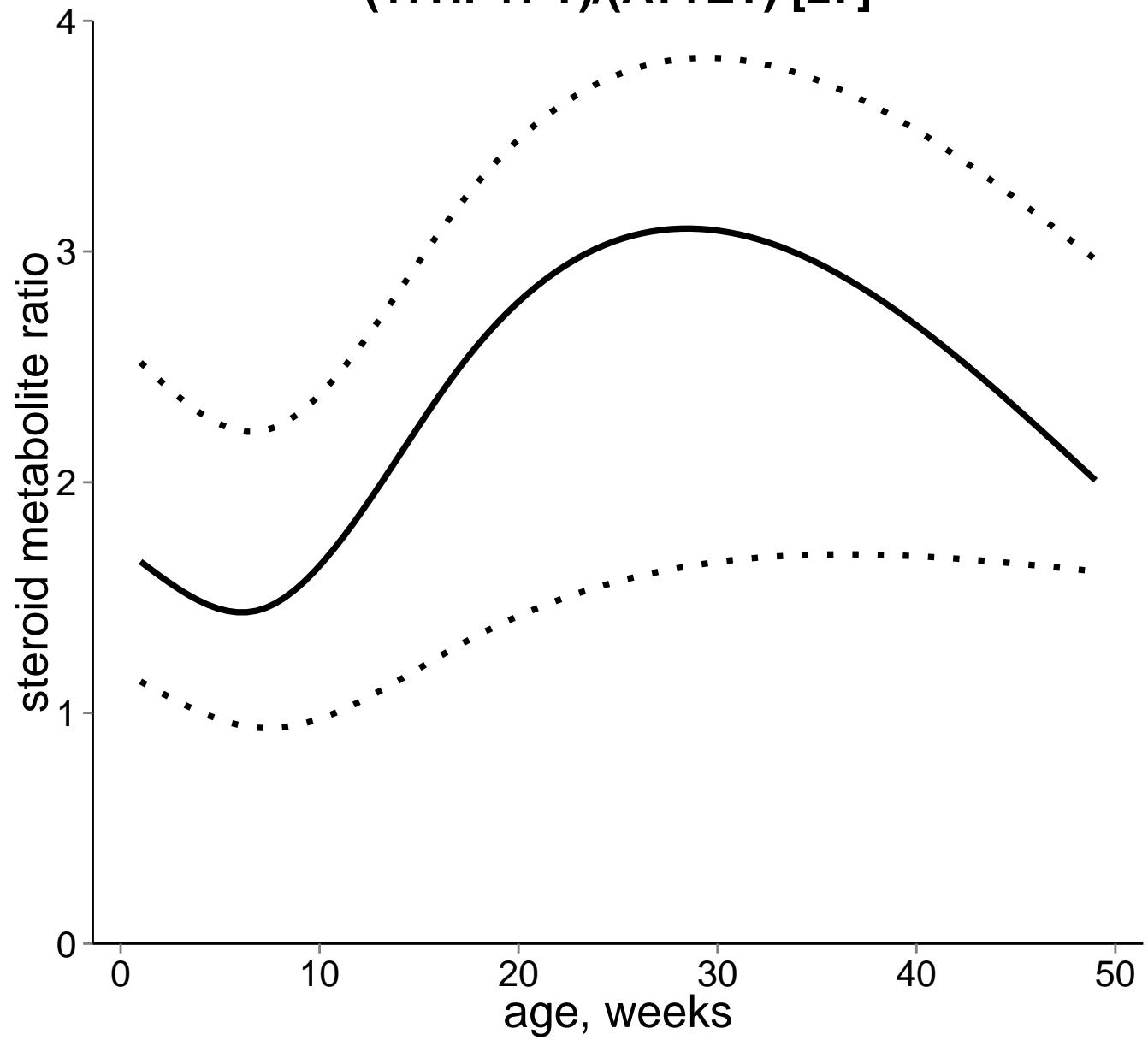
17 α -hydroxylase: THA+THB+
5 α THB/(THE+6OH-THE+6OH- β -Cl) [25]



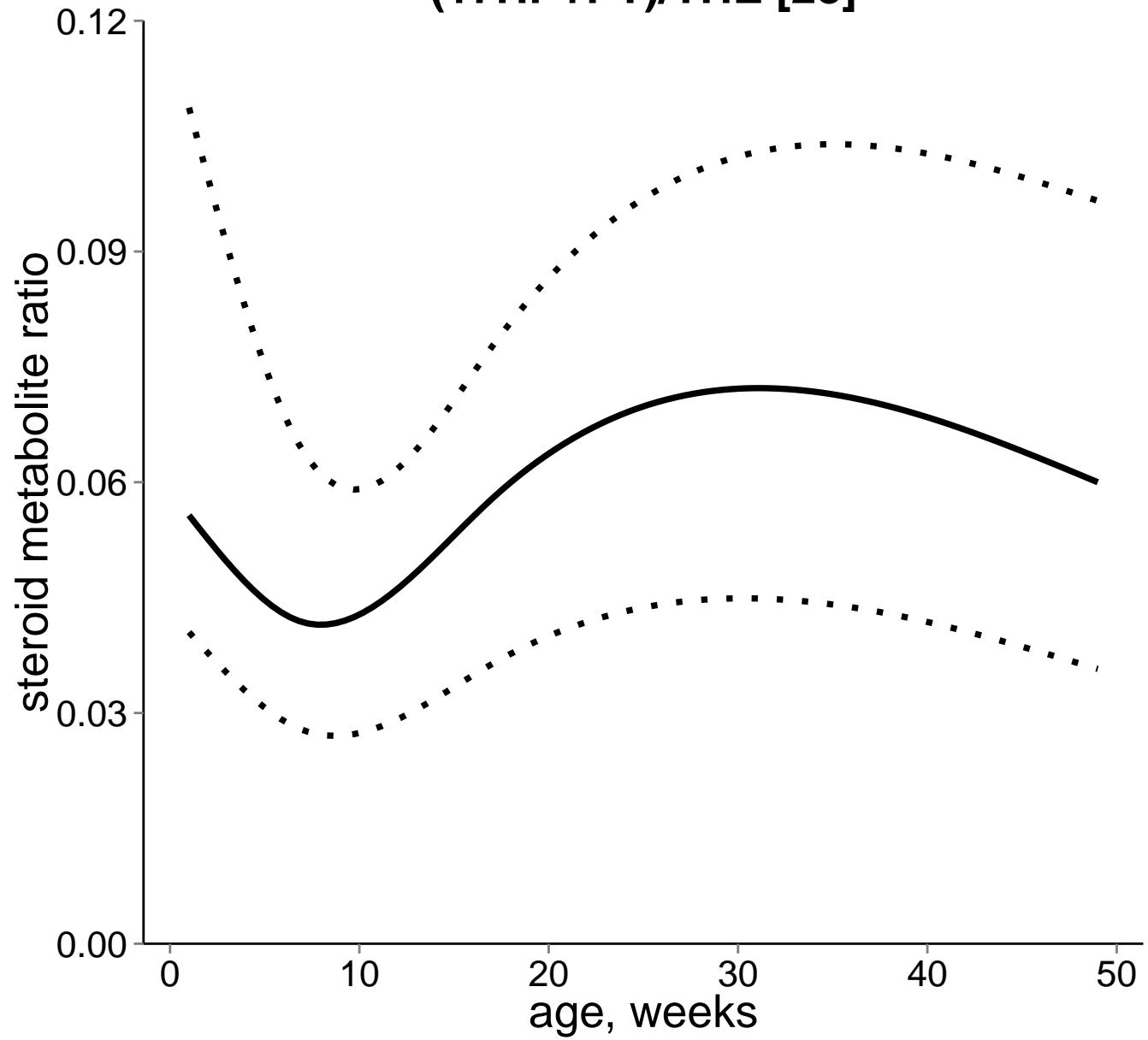
17α -hydroxylase
THA+THB+ 5α THB/(AT+ET) [26]



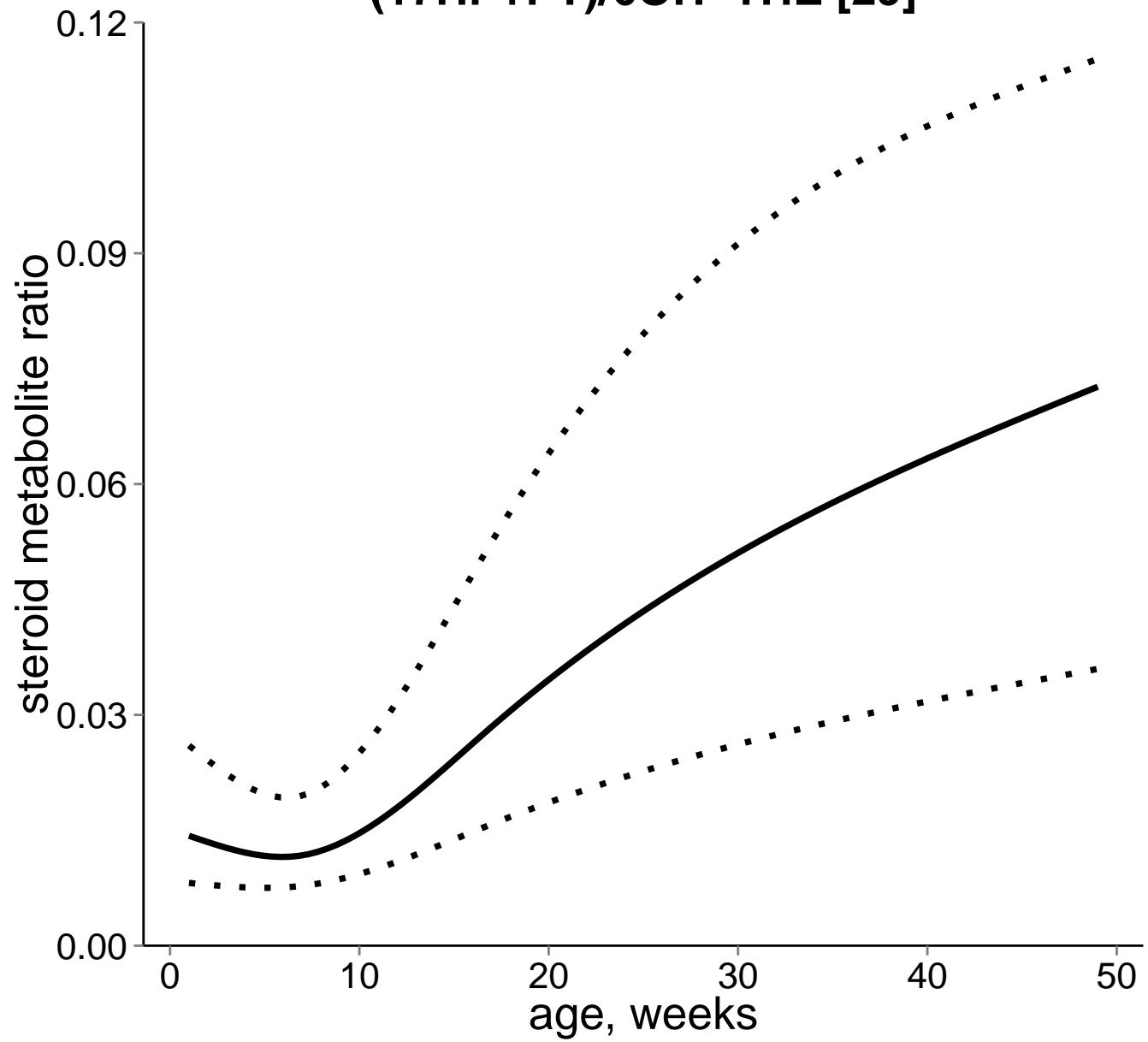
P450 oxidoreductase $(17\text{HP}+\text{PT})/(\text{AT}+\text{ET})$ [27]



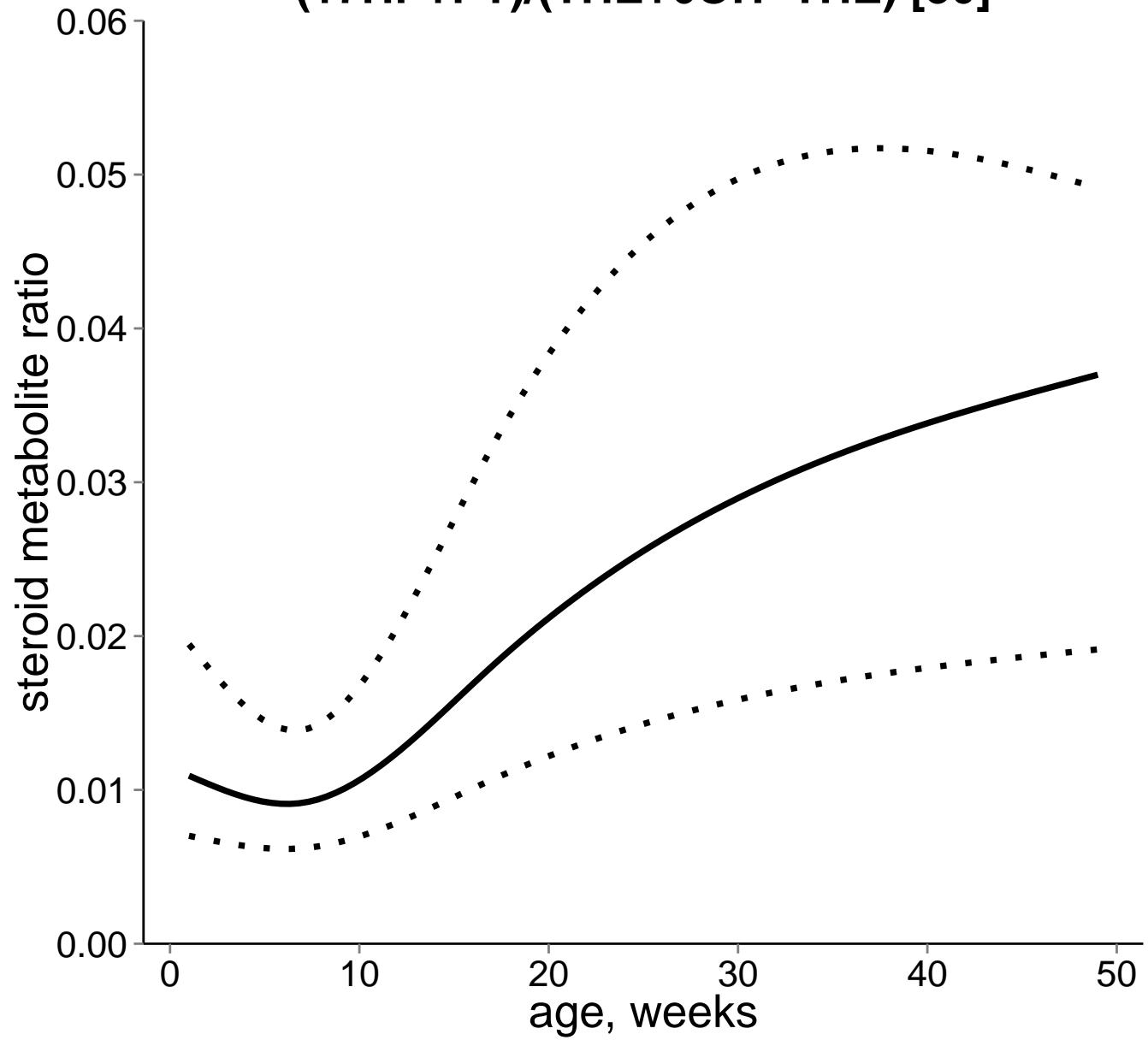
P450 oxidoreductase (17HP+PT)/THE [28]



P450 oxidoreductase (17HP+PT)/6OH-THE [29]

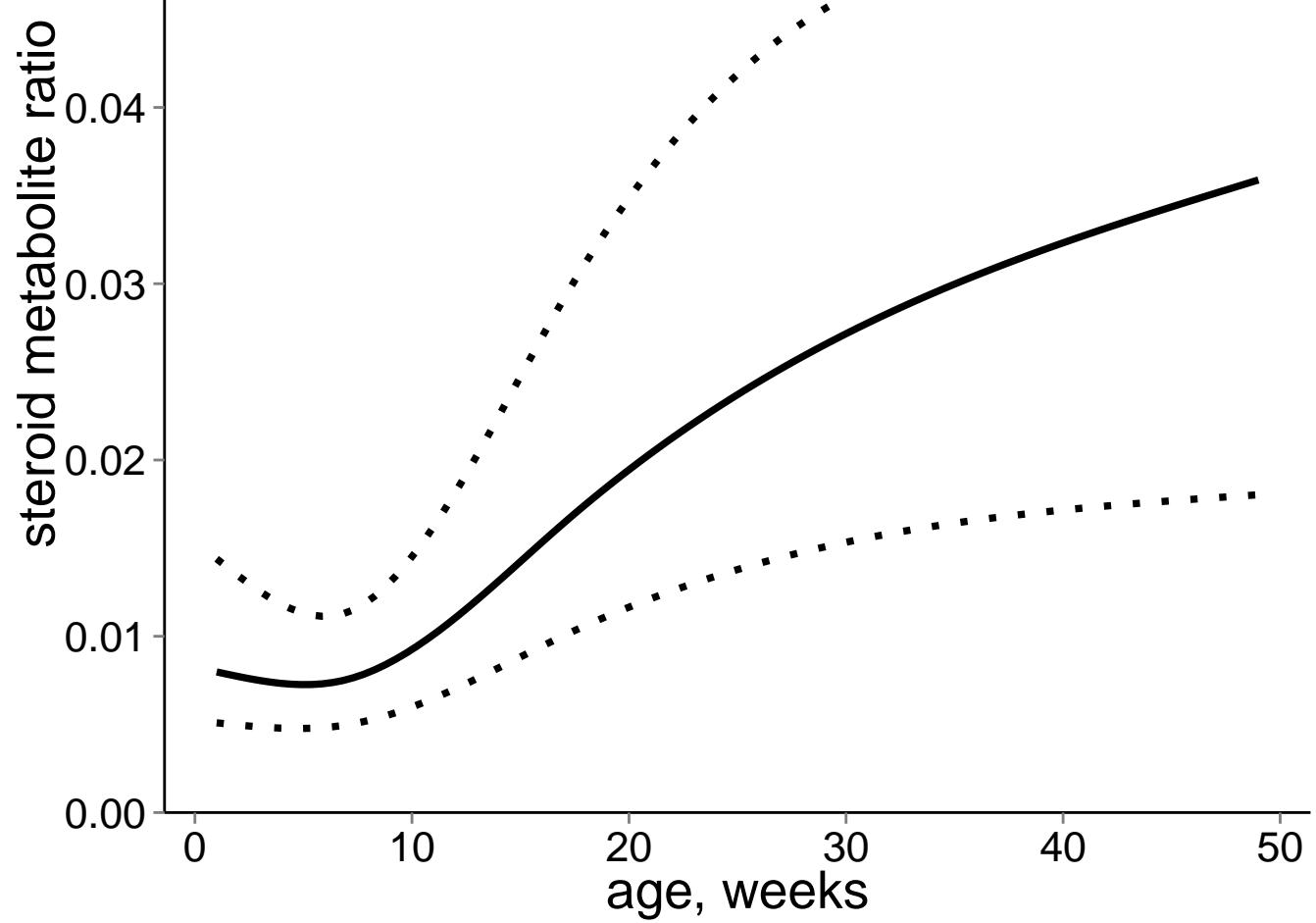


P450 oxidoreductase
 $(17\text{HP}+\text{PT})/(\text{THE}+6\text{OH}-\text{THE})$ [30]



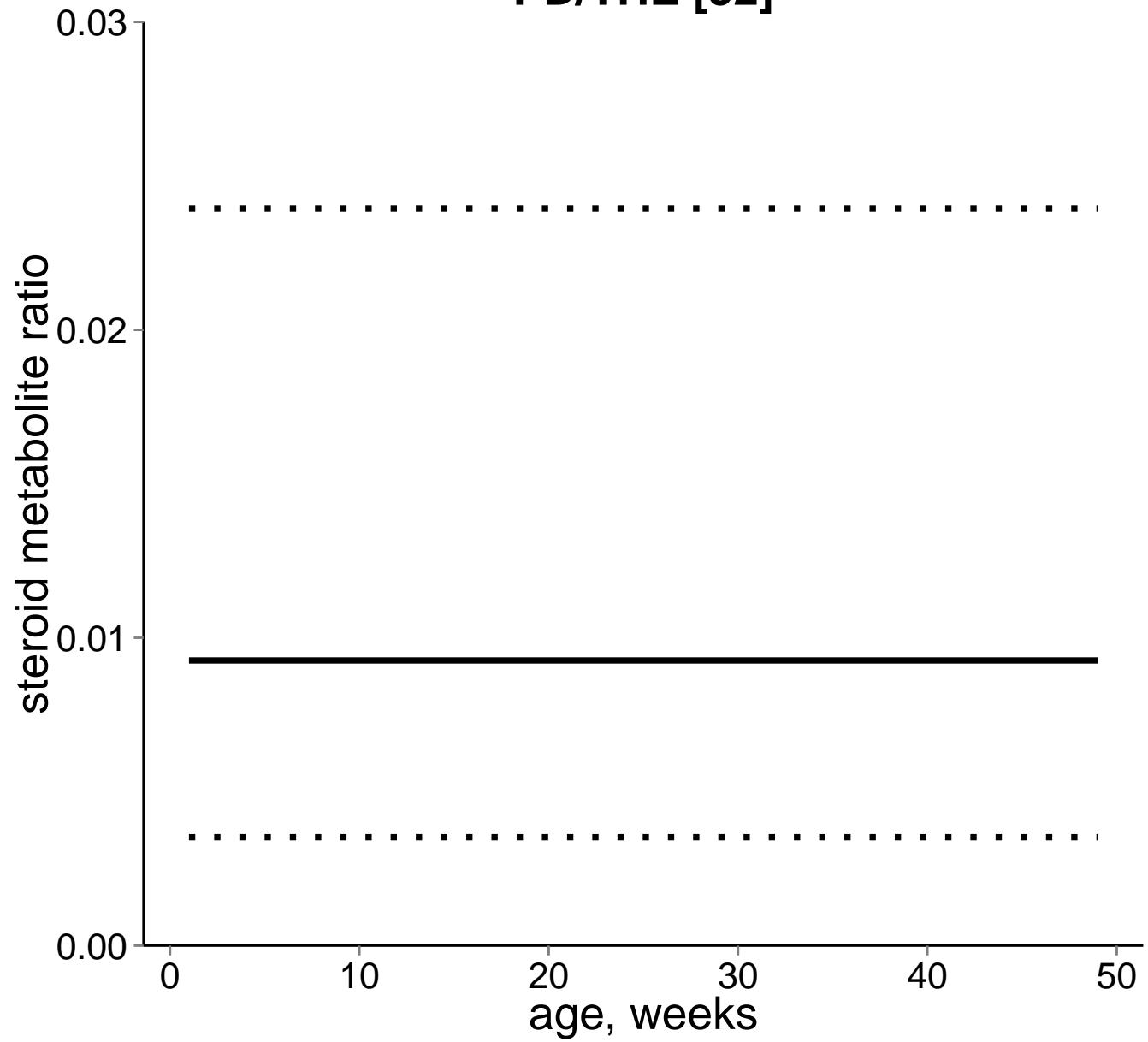
P450 oxidoreductase

$(17\text{HP}+\text{PT})/(\text{THE}+\text{6OH-THE}+\text{6OH-\beta-Cl})$ [31]



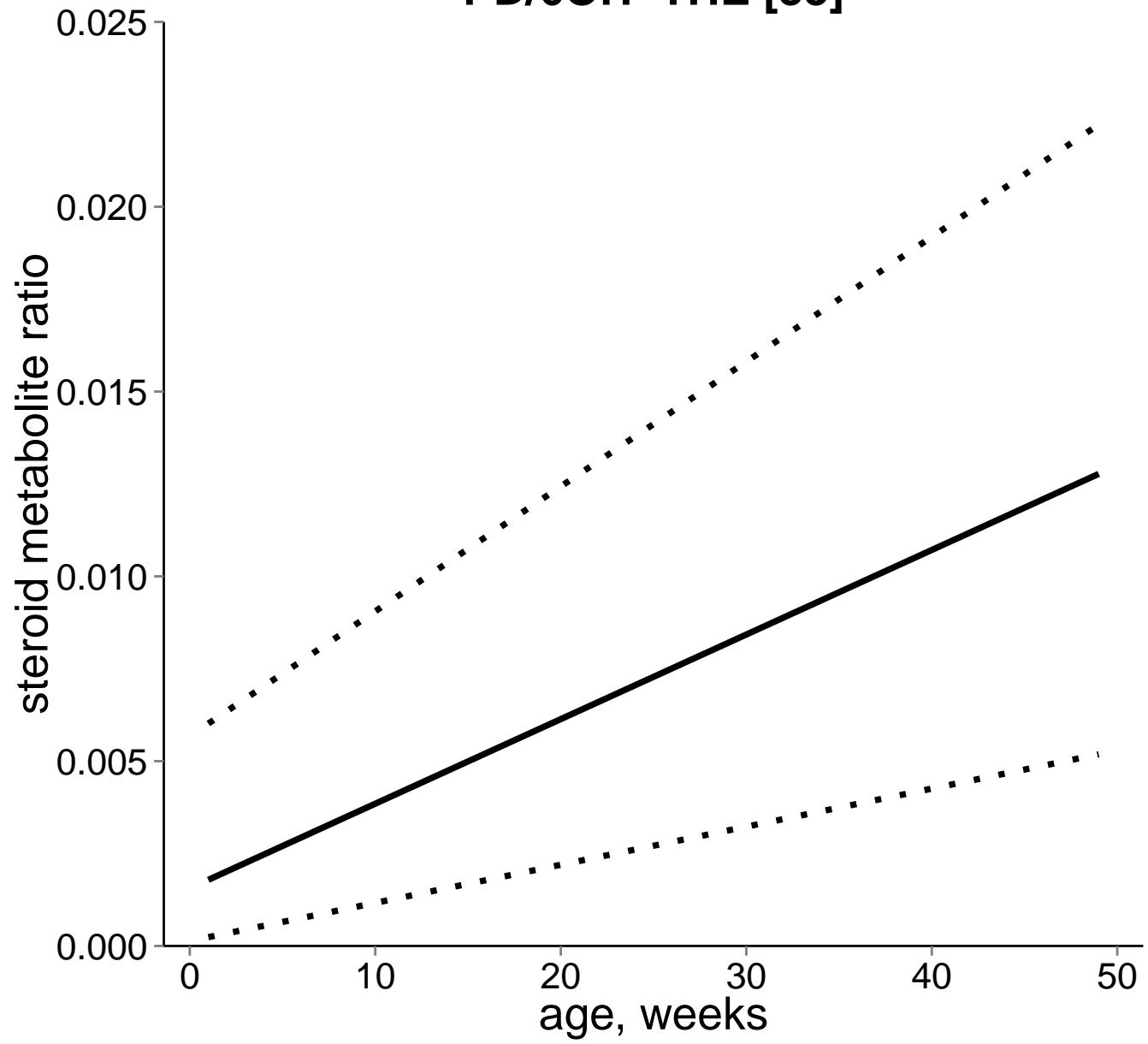
P450 oxidoreductase

PD/THE [32]



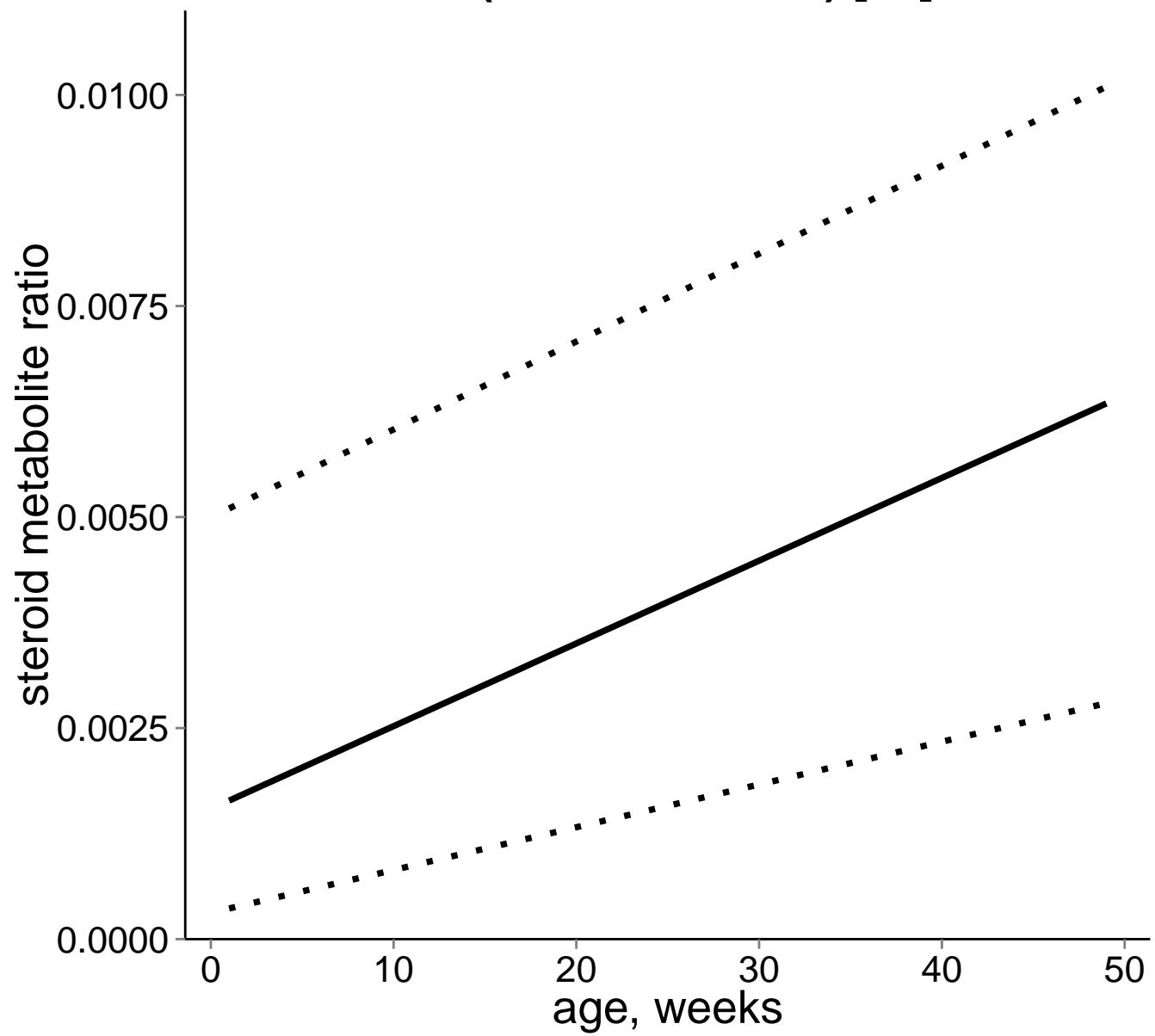
P450 oxidoreductase

PD/6OH-THE [33]



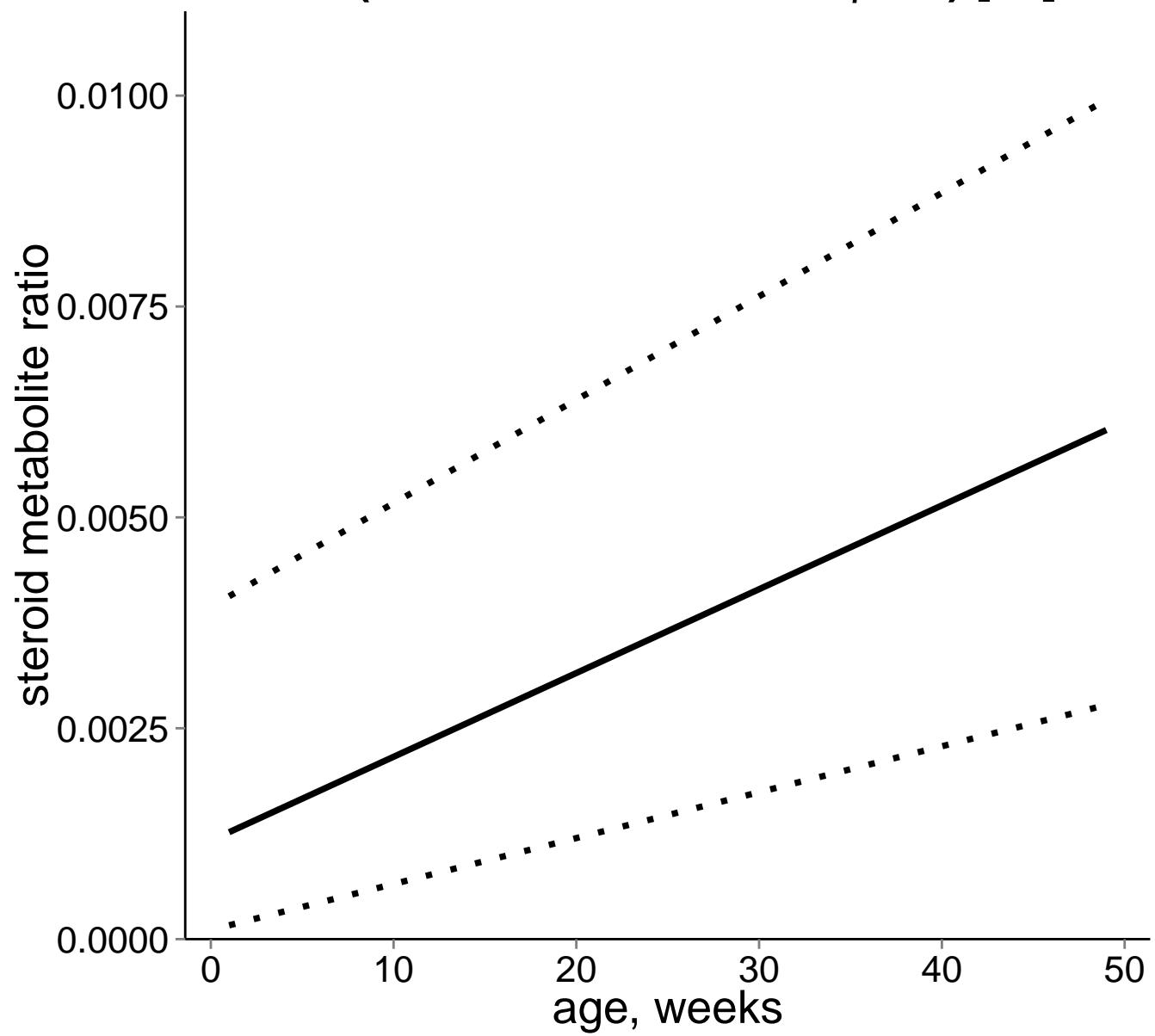
P450 oxidoreductase

PD/(THE+6OH-THE) [34]



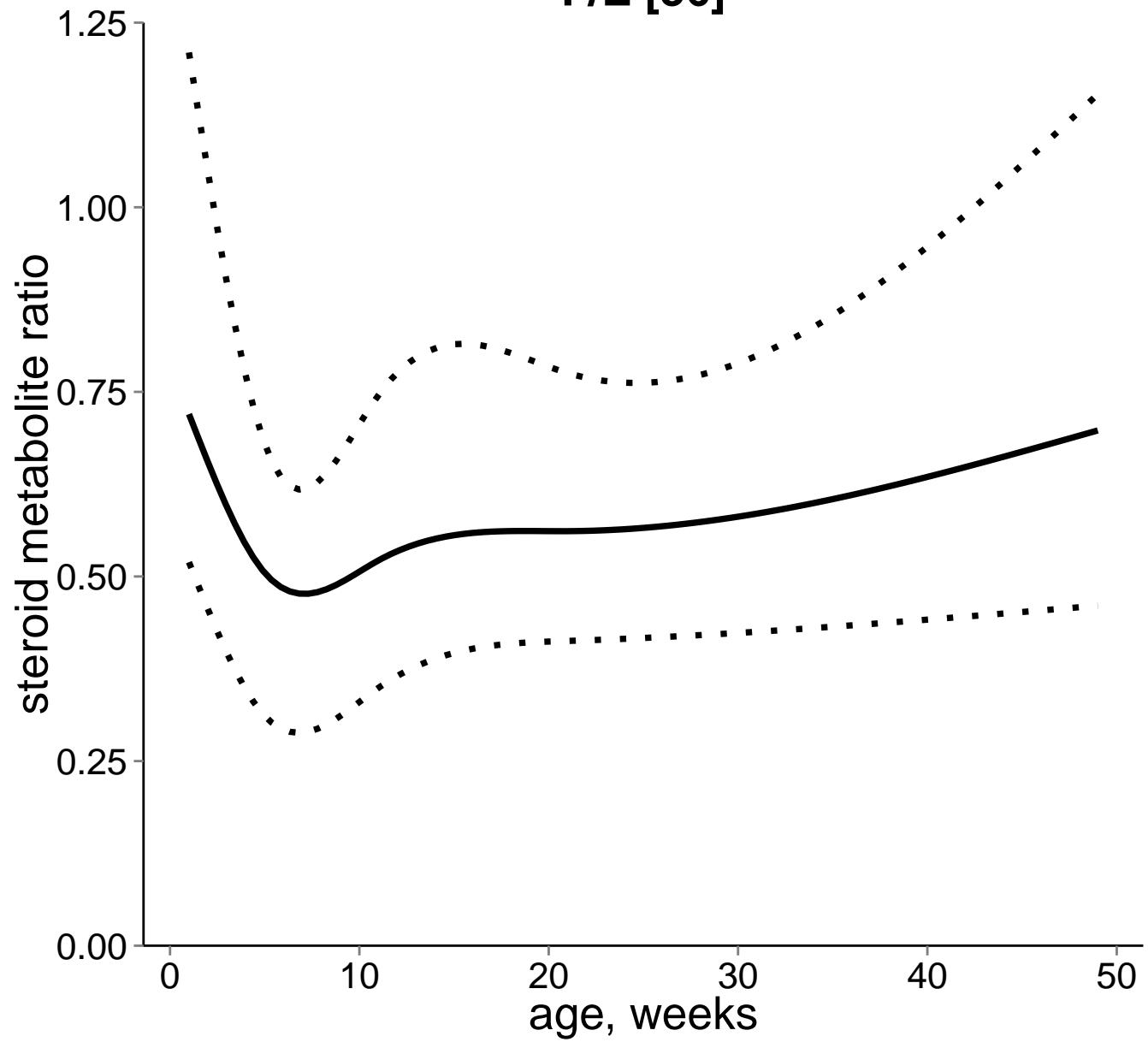
P450 oxidoreductase

PD/(THE+6OH-THE+6OH- β -Cl) [35]

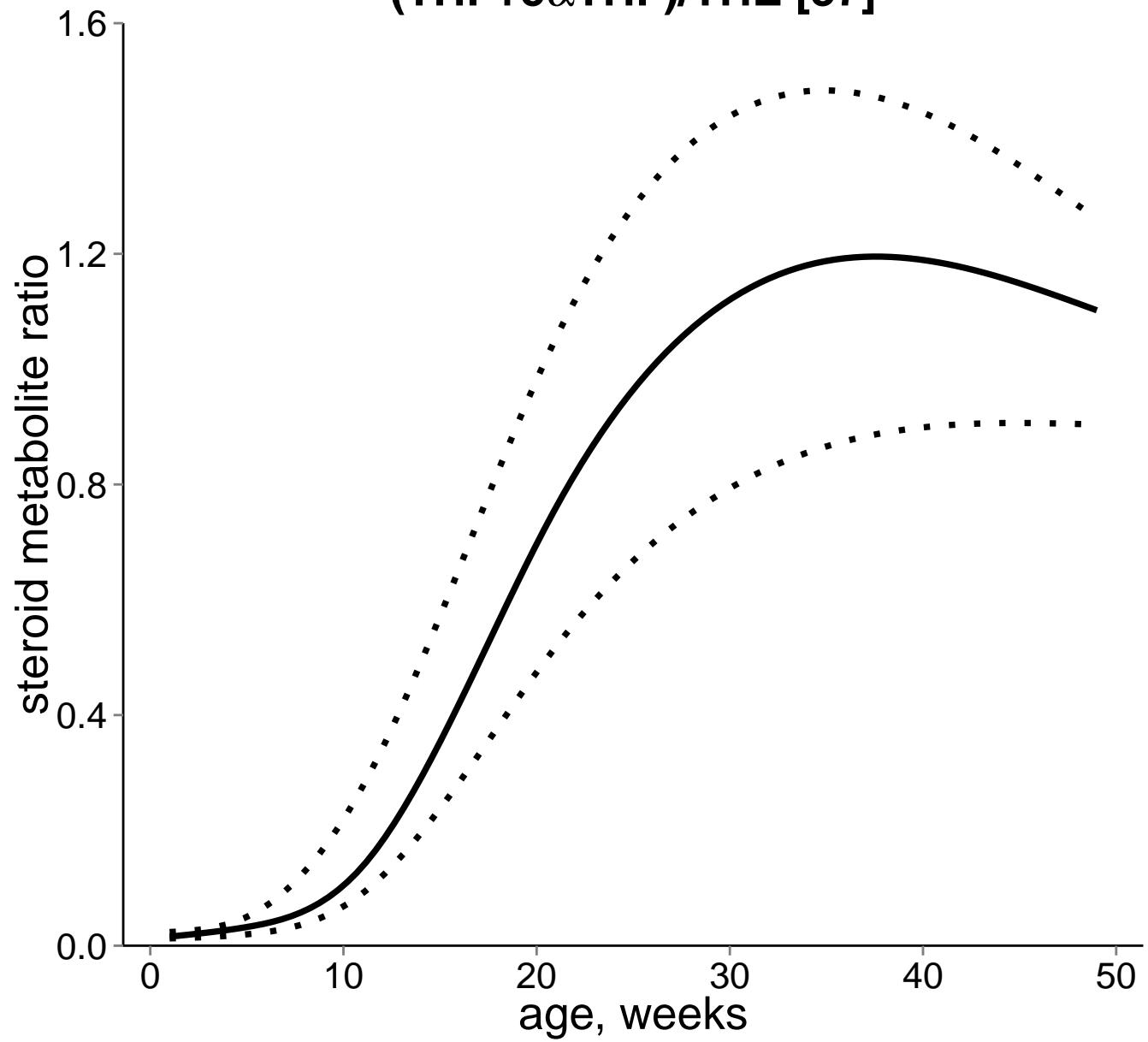


11β -HSD type 2

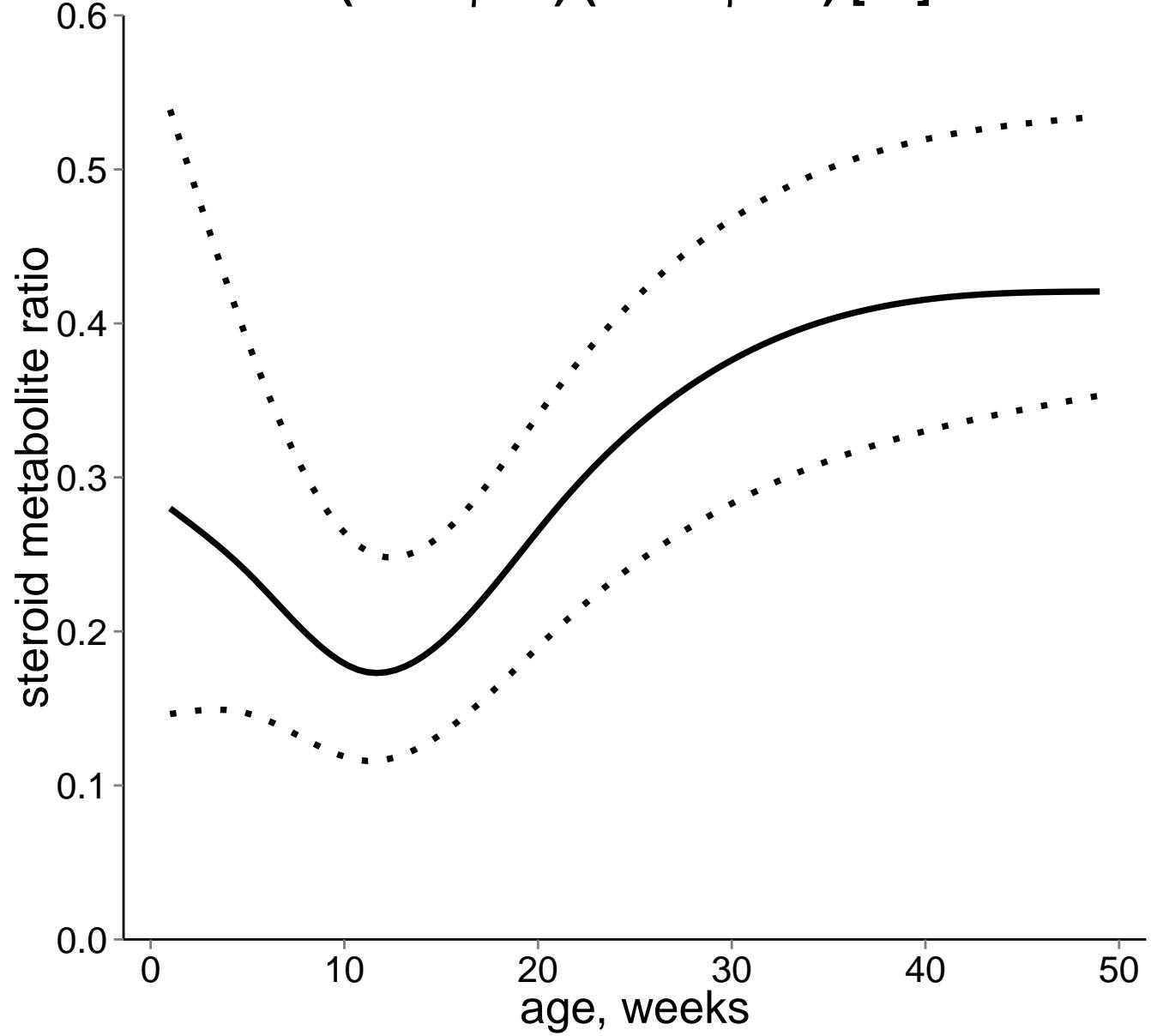
F/E [36]



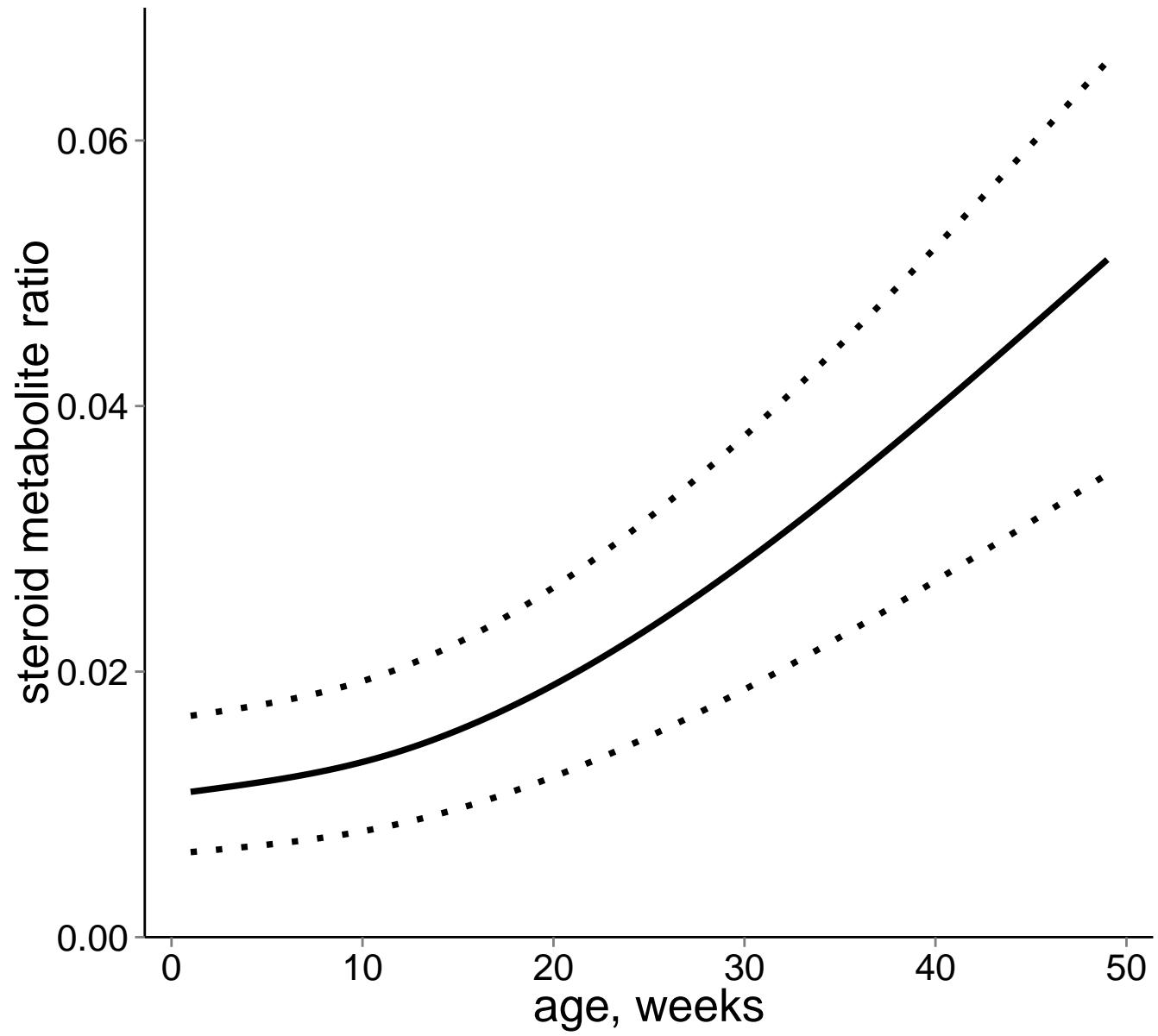
**11β -HSD type 2
(THF+ 5α THF)/THE [37]**



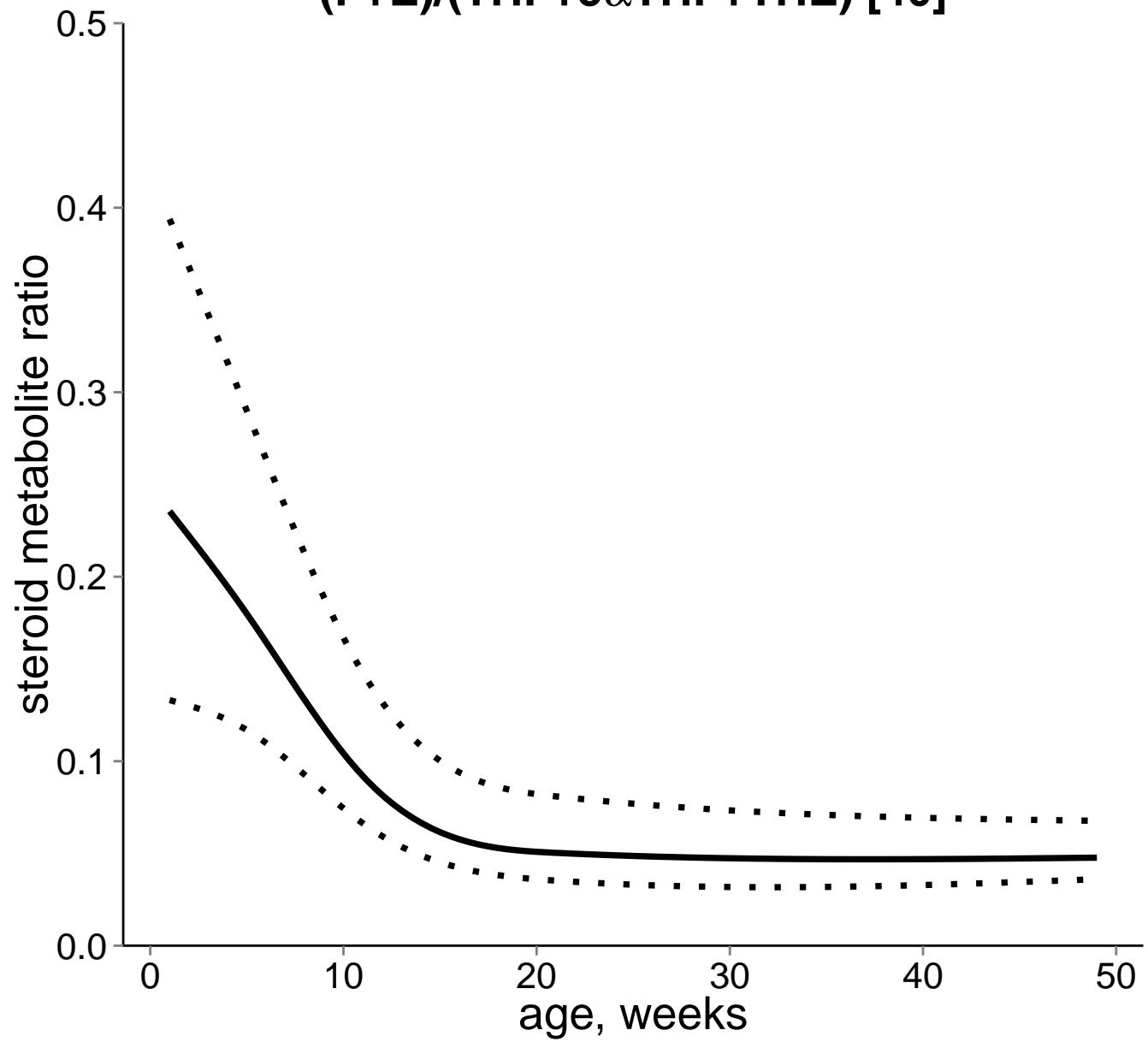
11 β -HSD type 2
 $(\alpha\text{-C}+\beta\text{-C})/(\alpha\text{-Cl}+\beta\text{-Cl})$ [38]



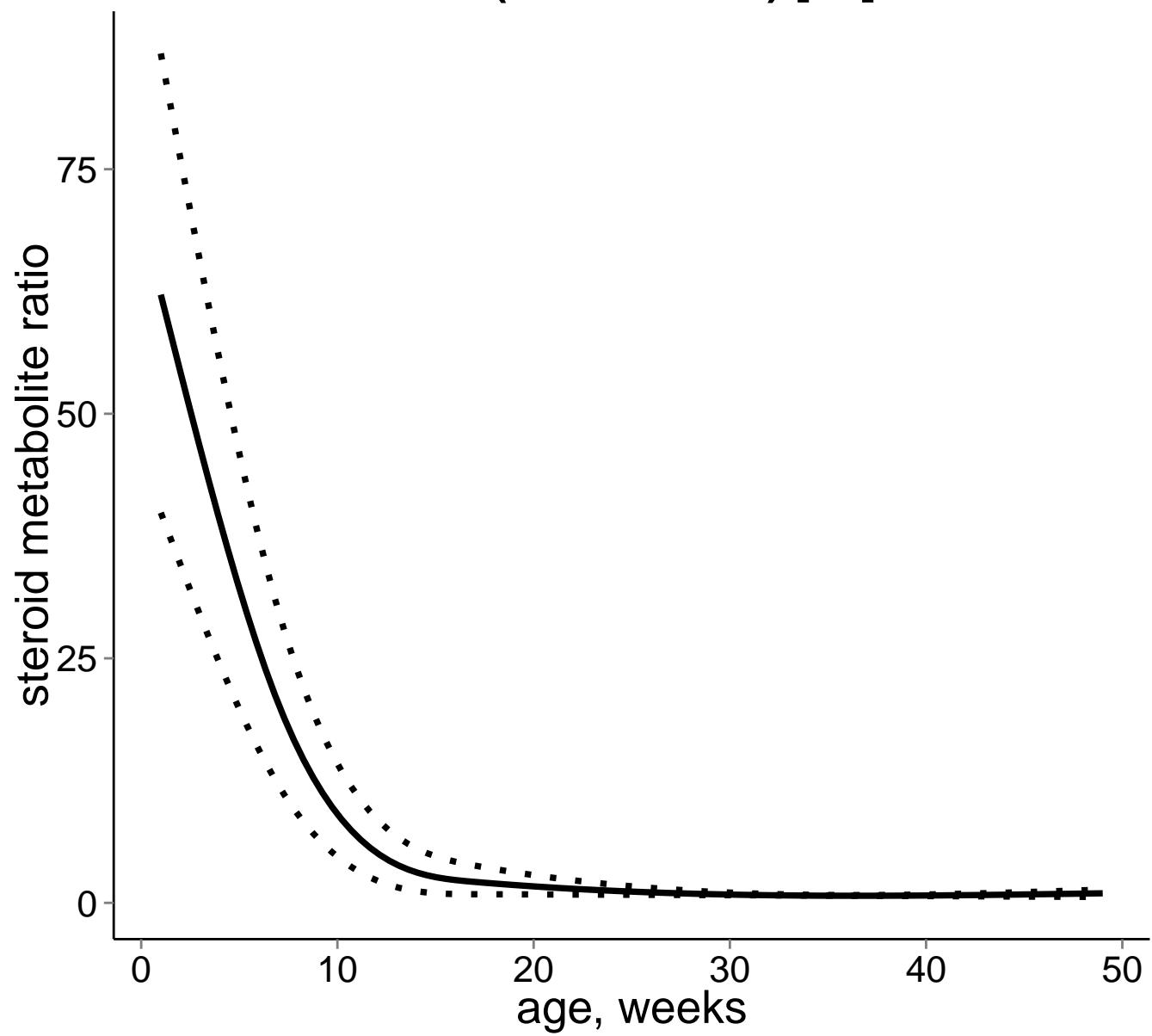
**11 β -HSD type 2: ($\alpha\text{C}+\beta\text{C}$)/
($\alpha\text{Cl}+\beta\text{Cl}+6\text{OH}\alpha\text{Cl}+1\beta\text{OH}\beta\text{Cl}+6\text{OH}\beta\text{Cl}$) [39]**



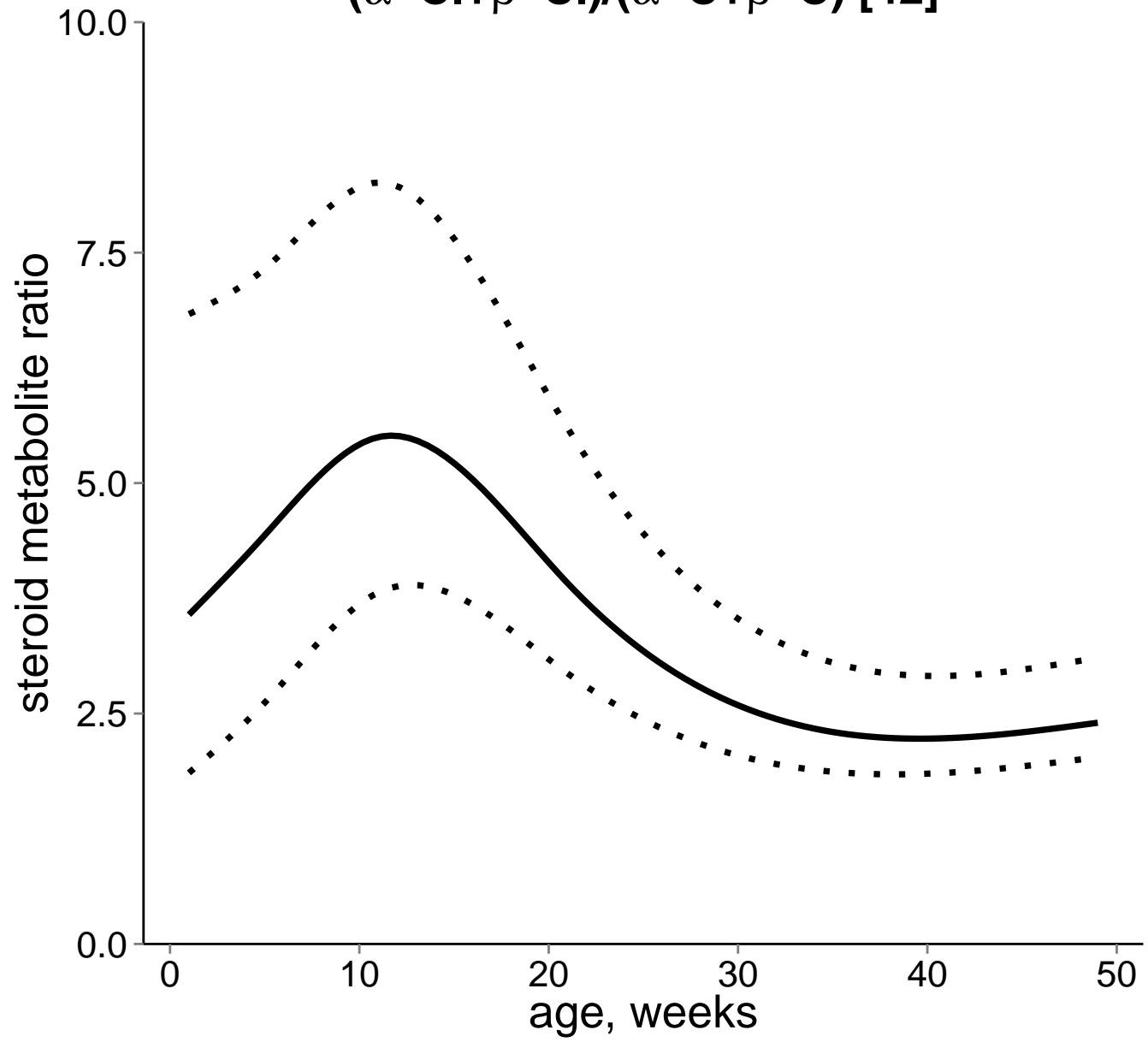
**11β -HSD type 2
 $(F+E)/(THF+5\alpha THF+THE)$ [40]**



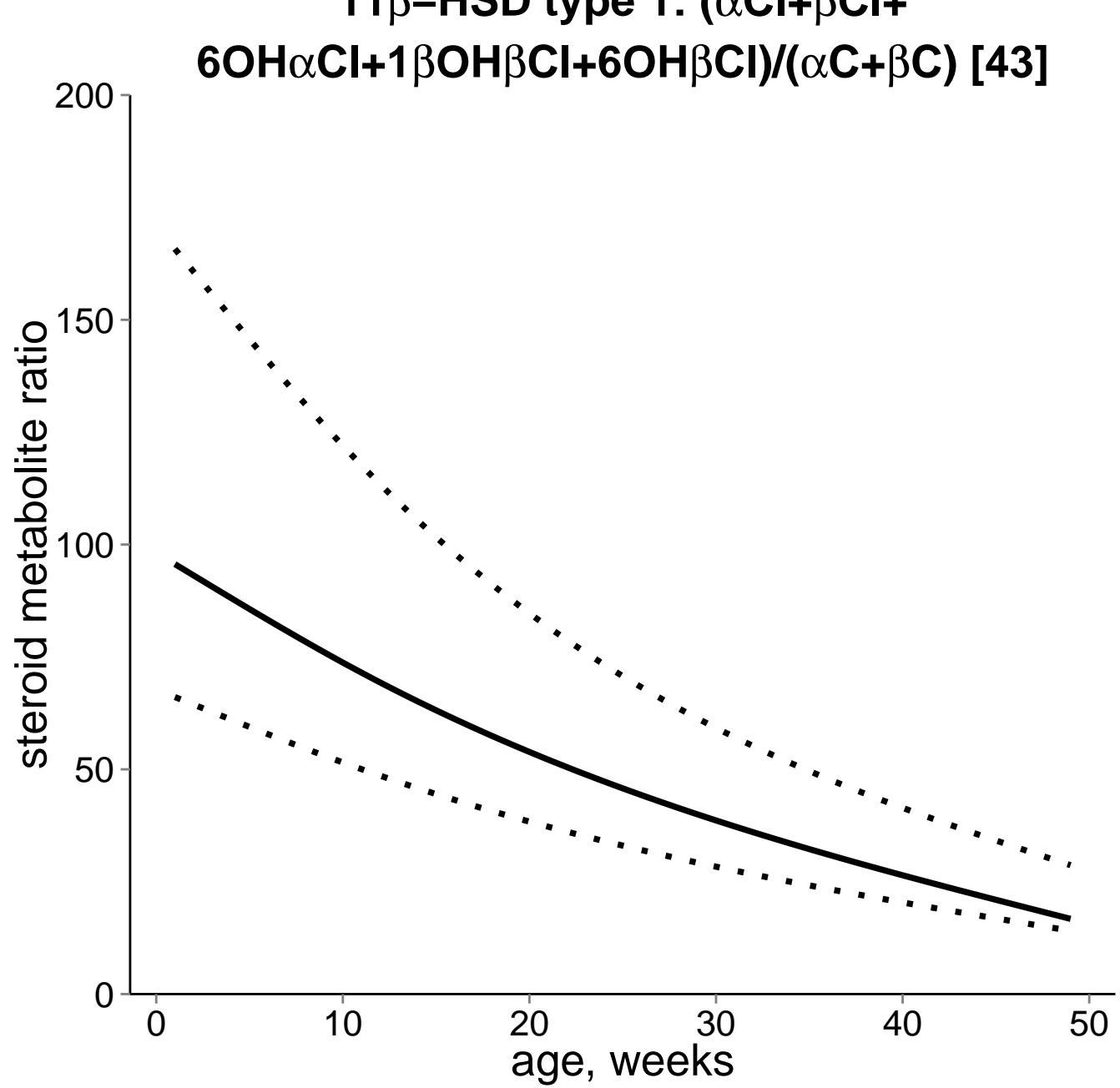
**11β -HSD type 1
THE/(THF+ 5α THF) [41]**



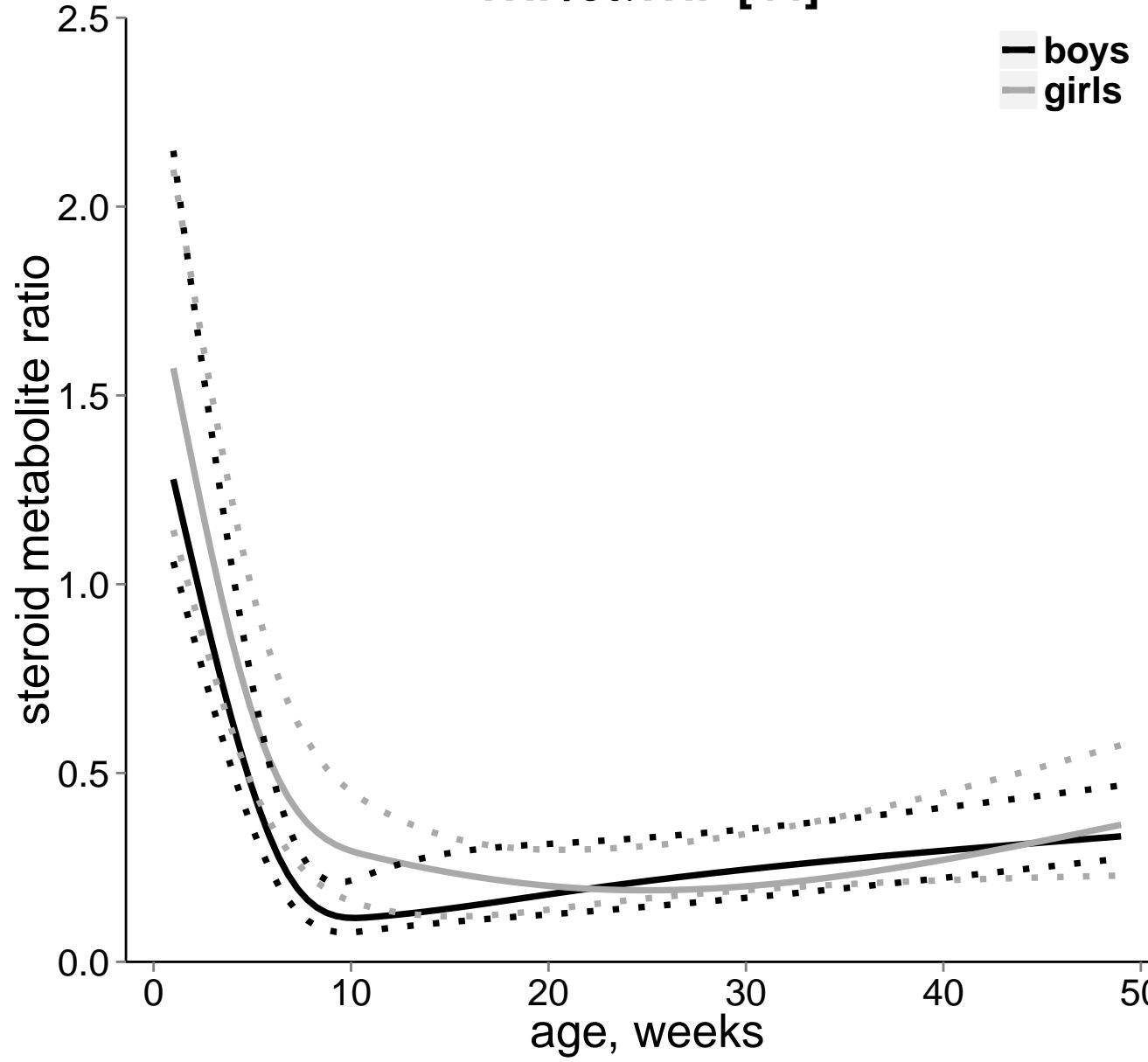
11β -HSD type 1
 $(\alpha\text{-Cl}+\beta\text{-Cl})/(\alpha\text{-C}+\beta\text{-C})$ [42]



**11 β -HSD type 1: (α Cl+ β Cl+
6OH α Cl+1 β OH β Cl+6OH β Cl)/(α C+ β C) [43]**



5α -reductase
THF/ 5α THF [44]



5α -reductase

THB/ 5α THB [45]

