

Parameter	Value	Source
μ	1/80 Average of male and female.	https://ukhsa.blog.gov.uk/2021/03/31/life-expectancy-in-england-in-2020/
β	1/18	https://pmc.ncbi.nlm.nih.gov/articles/PMC7539122/
γ	0.088	https://www.cdc.gov/tobacco/php/data-statistics/smoking-cessation/index.html

Table 1: showing each parameter's value that was used in Eqs. (4)-(6), to obtain figure 1.

Parameter	Value	Source
μ	1/80	https://ukhsa.blog.gov.uk/2021/03/31/life-expectancy-in-england-in-2020/
μ_P	1/78	https://ukhsa.blog.gov.uk/2021/03/31/life-expectancy-in-england-in-2020/
μ_L	1/70	https://pmc.ncbi.nlm.nih.gov/articles/PMC1117323/
μ_S	1/65	https://www.medicalnewstoday.com/releases/9703#1
μ_Q	1/72	https://pmc.ncbi.nlm.nih.gov/articles/PMC1117323/
β	1/18	https://pmc.ncbi.nlm.nih.gov/articles/PMC7539122/
γ	0.088	https://www.cdc.gov/tobacco/php/data-statistics/smoking-cessation/index.html
k	0.11	https://publications.ersnet.org/content/erj/63/4/2301768
ζ	0.1	https://pmc.ncbi.nlm.nih.gov/articles/PMC2658905/
δ	0.5	https://www.tobaccoinduceddiseases.org/Smoking-relapse-reasons-among-current-smokers-with-nprevious-cessation-experience,167963,0,2.html
α	0.1	https://pmc.ncbi.nlm.nih.gov/articles/PMC7539122/

Table 2: showing each parameter's value that was used in Eqs. (7)-(10), to obtain figure 2.

All web pages were accessed on 01/03/2025.