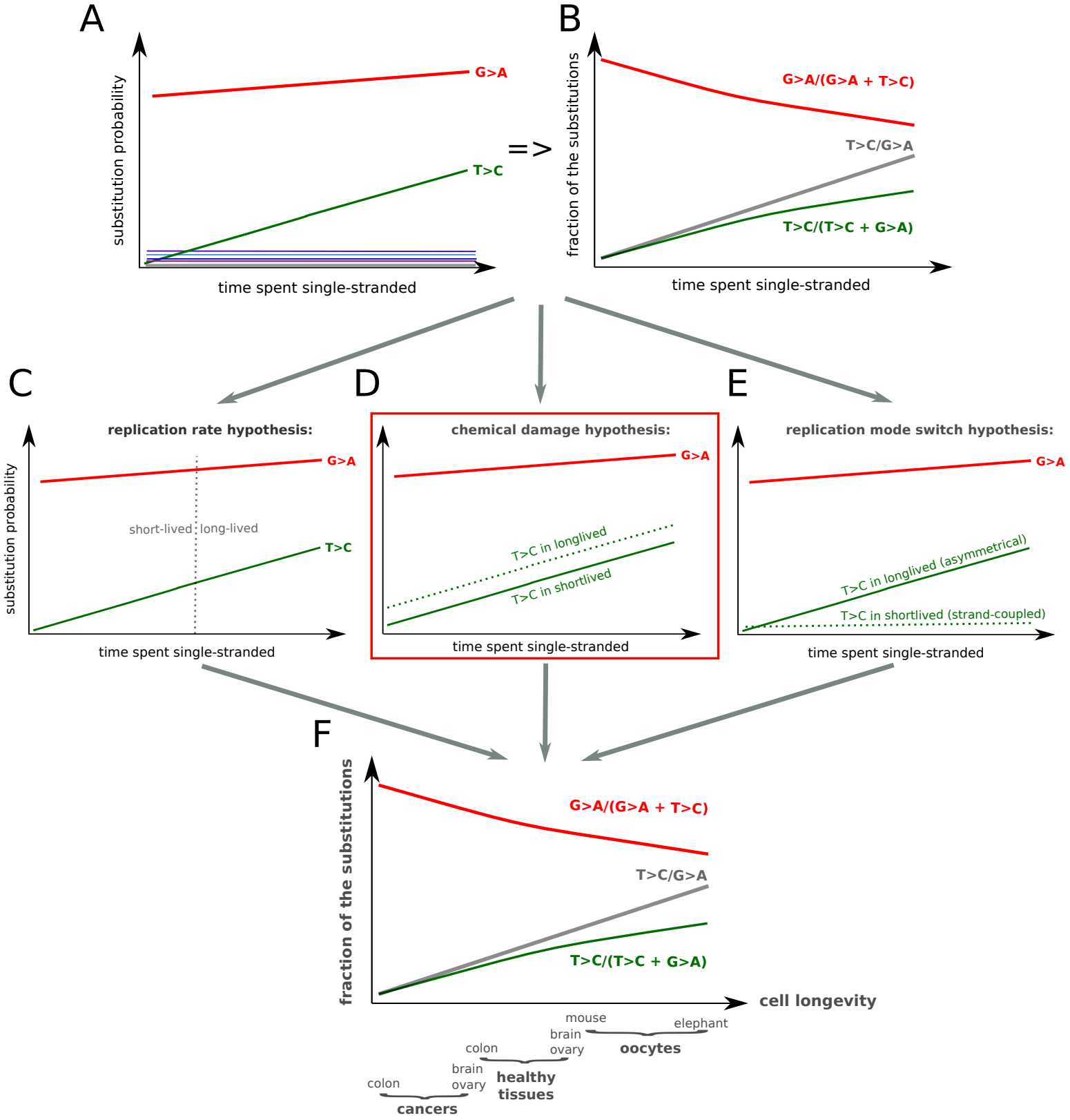
A
substitution probability
G>A
T>C
time spent single-stranded
=>
B
fraction of the substitutions
G>A/(G>A + T>C)
T>C/G>A
T>C/(T>C + G>A)
time spent single-stranded
C
replication rate hypothesis:
substitution probability
G>A
short-lived
long-lived
T>C
time spent single-stranded
D
chemical damage hypothesis:
G>A
T>C in longlived
T>C in shortlived
time spent single-stranded
E
replication mode switch hypothesis:
G>A
T>C in longlived (asymmetrical)
T>C in shortlived (strand-coupled)
time spent single-stranded
F
fraction of the substitutions
G>A/(G>A + T>C)
T>C/G>A
T>C/(T>C + G>A)
cell longevity
mouse
brain
ovary
elephant
oocytes
colon
brain
ovary
healthy tissues
colon
cancers

Figure 5