

7. Warfarin is a drug that reduces the risk of blood clots.

Alleles for two genes, 1 and 2, affect how quickly Warfarin is metabolised.

Alleles for gene 1 can be G or A.

Alleles for gene 2 can be C_1 , C_2 or C_3 .

The table shows the recommended Warfarin dose for patients with each genotype.

Gene 1 genotypes	Warfarin dose (mg/day)					
	Gene 2 genotypes					
	C_1C_1	C_1C_2	C_1C_3	C_2C_2	C_2C_3	C_3C_3
GG	6.0	6.0	3.5	3.5	3.5	1.2
GA	6.0	3.5	3.5	3.5	1.2	0.8
AA	3.5	3.5	1.2	1.2	1.2	0.5

A patient is known to have the GA genotype for gene 1 and is homozygous for the C_3 allele.

What is the recommended Warfarin dose for this patient?

- A 0.8 mg/day
- B 1.2 mg/day
- C 3.5 mg/day
- D 6.0 mg/day