Table 2.1. Stroke candidate genes.

Candidate Gene	Chromosome Locus	Description	Association	Reference
Factor V R506Q (Factor V Leiden)	1q21-25	Polymorphism	Coagulation system	(Pezzini *et al.*, 2003)
Factor VII R353Q	13q34	Polymorphism -with this polymorphism one is to show to have cerebrovascular ischaemia before 60 years old.	Coagulation system	(Funk et al., 2006)
Factor XIII V34L	Xq28	Polymorphism -Val34Leu, patients with cerebral infraction are with 34Leu allele	Coagulation system	(Catto et al., 1998) (Corral et al., 2000)
Prothrombin G20210A	11p11-q12	Polymorphism	Coagulation system	(Kim *et al.*, 2003)
β-fibrinogen 148C/T	4q28	Polymorphism -One with (C/T + T/T) allele compared to while type (C/C) is at 32% greater risk to have cerebral infraction.	Coagulation system	(Chen *et al.*, 2007)

Table 2.1. Continued

Candidate Gene	Chromosome Locus	Description	Association	Reference
5-N-methyltetrahydrofolate reductase C677T (MTHFR)	1p36.3	Polymorphism -T allele dose dependant	Homeocystein metabolism	(Kim *et al.*, 2003) (Banerjee *et al.*, 2007)
Angiotensin-converting enzyme (ACE I/D)	17q23.3	Polymorphism - DD genotype	Rennin angiotensin-aldosteron system	(Casas *et al.*, 2004) (Ariyaratnam et al., 2007)
Angiotensin II Type-1 receptor A1166C (AGTR-1)	3q24	Polymorphism - 5' end of 3'-untranslated region	Rennin angiotensin-aldosteron system	(Szolnoki et al., 2006)
Apolipoprotein 4 (APOE4)	19q13.2	Polymorphism -ε4, ε3, and ε2 alleles	Lipid metabolism	(Casas *et al.*, 2004) (Ariyaratnam *et al.*, 2007)
eNOS G894T	7q36	Polymorphism -GG allele in lacuna stroke only	Endothelial nitric oxide	(Elbaz et al., 2000)
Interlukin 1 receptor antagonist (IL-1RA)	2q14.2	Polymorphism -variable numbers of 86 base pair identical tandem repeat	Inflammatory molecules	(Hung *et al.*, 2002)

Table 2.1. Continued

Candidate Gene	Chromosome Locus	Description	Association	Reference
Phosphodiesterase 4D (PDE4D)	5q12	Polymorphism	Second messenger, cAMP degradation	(Gretarsdottir et al., 2003)
5-lipoxygenase activating poly protein, FLAP (ALOX5AP)	13q12	Polymorphism	Leukotirene syntetase	(Pouladi, 2004)