



## Lack of association between potential prothrombotic genetic risk factors and arterial and venous thrombosis

F.C.G. Evangelista<sup>1</sup>, D.R.A. Rios<sup>2</sup>, D.D. Ribeiro<sup>3</sup>, M.G. Carvalho<sup>1</sup>,  
L.M.S. Dusse<sup>1</sup>, A.P. Fernandes<sup>1</sup> and A.P. Sabino<sup>1</sup>

<sup>1</sup>Laboratório de Hematologia Clínica,  
Departamento de Análises Clínicas e Toxicológicas, Faculdade de Farmácia,  
Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil

<sup>2</sup>Laboratório de Hematologia Clínica, Departamento de Farmácia,  
Campus Centro Oeste Dona Lindu, Universidade Federal de São João del-Rei,  
Divinópolis, MG, Brasil

<sup>3</sup>Faculdade de Medicina, Universidade Federal de Minas Gerais,  
Belo Horizonte, MG, Brasil

Corresponding author: A.P. Sabino  
E-mail: [adriansabin01@gmail.com](mailto:adriansabin01@gmail.com)

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**ABSTRACT.** Recent studies have shown an association between thrombosis and factor VII (FVII), tissue factor (TF), and angiotensin-converting enzyme (ACE). This suggests that individuals with FVII-402 G/A, FVII-401 G/T, TF+5466 A/G, and ACE-287 insertion/deletion (I/D) polymorphisms present an increased risk of venous thrombosis, heart disease, and ischemic stroke compared with controls. In this study, we investigated the frequencies of these polymorphisms and their association with arterial and venous thrombosis. For the FVII-402 G/A polymorphism, there were 57.3% heterozygote (HT) genotypes and 8.3% homozygote (HM) genotypes in the patients, and 45.2% HT genotypes and 15.4% HM genotypes in the controls. For

the FVII-401 G/T polymorphism, there were 37.5% HT genotypes and 3.1% HM genotypes in the patients, and 32.7% HT genotypes and 4.8% HM genotypes in the controls. The polymorphism TF+5466 A/G was not found in any of the samples analyzed. For the ACE-287 I/D polymorphism, there were 43 (40.6%) HT genotypes and 63 (59.4%) HM genotypes in the controls and 28 (45.2%) HT genotypes and 34 (54.8%) HM genotypes in the patients. No significant difference was observed by comparing patients and controls. In this study, no association was found between the presence of the evaluated polymorphisms and the occurrence of thrombotic events.

**Key words:** Polymorphisms; Tissue factor; Factor VII; Thrombosis; Angiotensin-converting enzyme