Abstract
Pantethine, the stable disulfide form of pantetheine, is the major precursor of coenzyme A, which plays a central role in the metabolism of lipids and carbohydrates. Coenzyme A is a cofactor in over 70 enzymatic pathways, including fatty acid oxidation, carbohydrate metabolism, pyruvate degradation, amino acid catabolism, haem synthesis, acetylcholine synthesis, phase II detoxification, acetylation, etc. Pantethine has beneficial effects in vascular disease; it is able to decrease the hyperlipidaemia, moderate platelet function, and prevent lipid peroxidation. Moreover, its neuro-endocrinological regulating role, its good influence on cataract and cystinosis are also proved. This molecule is a well-tolerated therapeutic agent; the frequency of its side-effect is very low and mild. Based on these preclinical and clinical data, it could be recommended using this compound as adjuvant therapy.