

Preface

The research work of the thesis entitled “Preclinical investigation of piracetam and biomaterials against ischemic reperfusion injury” is based on the identification of a novel therapeutic approach for the treatment of Ischemic reperfusion injury. The whole work has compiled into six chapters: Chapter 1 described the introduction of the topic and its importance. Chapter 2 investigated the pharmacokinetic and brain penetration study of piracetam in focal cerebral ischemic rats. Chapter 3 illustrated the study of pharmacological effect of barium containing bioactive glass (BaBG) and silver containing bioactive glass (AgBG) for the treatment of cerebral ischemic reperfusion injury. Chapter 4 investigated the acute and subacute toxicity studies of BaBG and AgBG in Wistar rats. Chapter 5 illustrated the study of the pharmacological effect of barium containing bioactive glass in ischemic and other gastro-duodenal ulcers. Chapter 6 summarized the entire study completed with its important outcomes.