Research Highlights

- The LC-MS/MS approach was established for the first time to simultaneously quantify eight active ingredients in GHI.
- It is the first time to confirm that GHI treats MI/R injury by regulating CK-MB, IMA, cTn I, and α-HBDH.
- Eight effective components of GHI and four pharmacodynamic indicators in plasma were first quantified to fit the PK-PD model equation, investigating the dynamic process of concentration-effect-time of GHI in treating MI/R injury.
- PLSR was first used to explore the deep relationship between eight effective components and four pharmacodynamic indicators in the plasma of MI/R injury model rats after GHI administration, identifying the main pharmacodynamic components of GHI in the treatment of MI/R injury.