

administration: 0.16, 0.33, 0.50, 0.75, 1.00, 1.33, 1.66, 2.00, 2.50, 3.00, 4.00, 5.00, 6.00, 8.00, 10.00, 12.00 hours.

A standard breakfast and a standard lunch were offered to all subjects 4 and 9 hours respectively post drug administration. The subjects were supervised throughout the period of the study.

The blood samples (5 ml) were collected into 5 ml tubes using heparin as anticoagulation agent. After sampling, the tubes with blood were immediately centrifuged (4000 rpm, 21° C, for 5.0 min), the separated plasma were transferred into a polypropylene tubes, immediately frozen and stored at a temperature below -30° C.

Rhein, the active metabolite of diacerein, is light sensitive; therefore, all samples processed during experimental work should be handled under yellow light which will minimize UV exposure.

The plasma samples were transferred frozen from the hospital to the laboratories of Jordan Center for Pharmaceutical Research (JCPR) and kept frozen at a minimum of -30° C till time of analysis.

- The second stage of the study: in preparation of stage two, subjects are given a quantity of glucosamine sufficient for double oral dose of 500 mg glucosamine capsule for a period of 5 days prior to diacerein administration.

Subsequently, subjects are hospitalized again before the start of the final part of the second stage. They remained there for 12 hours post drug administration, received a standard dinner before 7.30 pm and they fasted overnight for ten