**ناوی توێژەر / توێژەرەکان Name of the researcher / researchers**

**1-Parween Abdulsamad Ismail 2-Araz Muhammad Yousif 3- Idris Muhammad Tahir Harki**

**ناوی توێژینەوە: Name of research:**

**The impact of multiple myeloma on Chemokines, Cytokines and Complement system**

**: Research Start Date**

**ڕێکەوتی دەست پێکردنی توێژینەوە : 1 / 2 / 2023**

**Time required to complete the research:**

**ماوەی پێویست بۆ تەواوکردنی توێژینەوەکە:**

**7 Months**

**A summary on the research plan:**

**پوختەیەک لەسەر پلانی توێژینەوەکە:**

The aim of this case-control study is to assess the impact of the multiple myeloma on serum levels of Chemokines, Cytokines and Complement system. In this study 88 samples will be collected with age range (25-65) years. Two independent group of samples will be included in this study. Group (1) will compose of peoples confirmed with multiple myeloma (n=50). Group (2) consist of healthy people (n=38) as healthy controls. After diagnosing of multiple myeloma, blood samples (5 ml) will be taken from study participants and stored in a disposable small tube containing no anticoagulant and will be preserved via freezing at -20 C until the date of analysis. The samples will be transferred to laboratory to measure for serum parameters (Chemokines, Cytokines and Complement system) levels in patients and healthy controls by ELISA technique.

توێژەر توێژەر توێژەر توێژەر

**1-Parween Abdulsamad Ismail 2-Araz Muhammad Yousif 3- Idris Muhammad Tahir Harki**