

Chapter 3

AN OVERVIEW OF DIAGNOSTIC VALUES OF IRISIN AND CYSTATIN C

Turan AKDAĞ¹

INTRODUCTION

Biochemical parameters plays a vital role in diagnosis and prognosis of many diseases. Biochemical parameters (now referred to as biomarker) are indicators of the biological process that may reveal changes in different diseases and health status. The term 'biomarker' was first used in the US National Academy of Sciences Report (US NRC, 1989b) ⁽¹⁾. Also, this term was described by the National Cancer Institute (NCI) as a biological molecule which found in body fluids, blood or tissues to predict abnormal/normal condition of diseases ⁽²⁾. Proteins, metabolites, chemical compounds, intermediates, exosomes and enzymes are currently used as biomarker in medicine. Studies have shown that more than 70% of the medical decisions made are based on laboratory analysis results.

According to present knowledges, biomarkers are commonly classified as: detection of a particular disease (diagnostic), monitoring a disease in progressive (prognostic), evaluation of specific drug treatment (predictive) and optimize patients treatments with drug efficacy (pharmacodynamic) ⁽³⁾. With the development of technology and science, new proteins can be easily identified and examined. Nowadays, responsive and well identified proteins

¹ Necmettin Erbakan University, Meram Vocational School, e-mail adress: turanakdag570@gmail.com

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