

Introduction

The complex composition of tear fluid presents as a future biomarker for systemic and ocular diseases. By analyzing the proteomics, glycomics, lipidomics and metabolics of tears, diseases can be pre-ordinately diagnosed. Tear collection is inexpensive, non-invasive, and easily replicated. Using the Schirmer's tear collection method, the components of tears extracted from the eye of a diseased patient can be compared to the tears of a healthy human eye. This comparison allows for the identification of abnormal levels of chemicals or hormones on the surface of the eye. Because ocular health is impacted by disparity in other regions of the body, tear fluid shifts in its hormones and chemicals in accordance to the imbalance of homeostasis. The elevated or depleted levels of these substances in