A Plasma Protein Diagnostic of Alcohol Consumption and Alcohol Abuse

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Alcohol Consumption

Technology Summary

Alcohol abuse exacts a tremendous cost on society. Over $170 billion is lost each year to the effects of excess drinking. The clinical treatment community lacks a reliable test to monitor at-risk populations such as the recovering alcoholics, pregnant women, and critical members of the community (public transportation, active duty military, and healthcare providers). The disclosed invention is a highly sensitive and specific biomarker assay panel which can differentiate between non-drinking, appropriate alcohol use, and alcohol abuse. This panel of plasma protein biomarkers has a number of potential applications in clinical and public safety settings. The specific proteins in the biomarker panel reflect changes in multiple organ systems and suggest rapid and robust changes in the plasma proteome with excessive drinking.

Application & Market Utility

A test that could accurately classify individuals as alcohol abusers would have the clear commercial potential to fill the unmet clinical and public safety need for identifying, monitoring, and treating alcohol abuse and alcoholism. The solution disclosed here is appropriately sensitive and accruate. It is adaptable with little optimization required; solution phase analytical tools already exist. Multiplexing technologies would permit ready assessment in a single assay format.

Next Steps

Seeking industry partner for clinical trials and commercialization.

TECHNOLOGY READINESS LEVEL 4-7

Seeking

Investment | Licensing | Research

Keywords

- alcoholism
- abusive drinking
- clinical biomarkers

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