Docket #: S19-500

Early diagnosis and treatment of eye cancer

Stanford researchers have applied large-scale proteomic platforms to identify biomarkers that can be used to diagnose uveal melanoma and subtype eye tumors according to their gene expression profile (GEP) class or PRAME status. These biomarkers can be used alone or in combination with one or more additional biomarkers or relevant clinical parameters in prognosis, diagnosis, or monitoring treatment of eye cancer. The earlier identification of uveal melanoma will expedite the schedule of treatment and increase survival.

Related Technology:
S18-559 "Biomarkers Differentiate Types of Uveitis"

Stage of Development

- Identified over 20 candidate vitreous biomarkers
- To be validated in a larger cohort of patients

Applications

- **Early diagnosis and treatment of eye cancers**
- Precision Health

Advantages

- **Faster and more precise** than current methods
- **Point-of-care processing**
- Uses **proteomic platform** analysis
- Earlier diagnosis and treatment will lead to better survival outcomes

Publications

- Velez G, Nguyen HV, Chemudupati T, Ludwig CA, Toral M, Reddy S, Mruthyunjaya P, Mahajan VB. Liquid biopsy proteomics of uveal melanoma reveals biomarkers associated with metastatic risk. Mol Cancer. 2021 Feb 24;20(1):39.

Patents

- Published Application: WO2021155235
- Published Application: 20230152322

Innovators

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