HLIQ™ ONCOLOGY

HUMAN LONGEVITY, INC.

INFORMATION FOR PATIENTS

FREQUENTLY ASKED QUESTIONS

Cancer is a diagnosis that nobody wants to receive. It is an overwhelming time for patients, their families and clinicians. That's where Human Longevity, Inc. (HLI) steps in to be your health intelligence partner. Our HLIQ Oncology program is designed to analyze solid-state cancer tumors enabling individualized therapy selection and cancer management.

Among a suite of products to utilize advancements in genomics and computing advances to inform and improve health outcomes, we offer HLIQ Oncology Analysis. Below are Frequently Asked Questions to help guide your understanding.

Q: WHAT IS THE GENETIC CODE?

A: DNA holds the genetic code—the instructions for how our body is made and how it works. A, C, G and T are the shorthand for bases and the chemical "letters" of DNA. The DNA that makes up each gene has a unique sequence of these four bases.

Q: WHAT IS AN EXOME?

A: About 1.5% of our DNA is the code for making proteins, the molecules that are the basis for the structure and function of our cells. The exome is the name for this protein-coding part of your DNA, or genetic code. Some variants in some genes are strongly associated with health risk or disease.

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Q: WHAT IS HLIQ ONCOLOGY ANALYSIS?

A: HLIQ Oncology analyzes a patient's exome sequence to identify variants or mutations that can be targets for oncology treatments, personalized specifically to a patient's cancer tumor cells.

HLIQ Oncology provides exome sequencing of a patient's normal (or germline) DNA and tumor DNA are sequenced to identify the targets that may be driving the patient's specific cancer. HLIQ Oncology provides additional information on the mutational burden of the tumor to further guide treatment options, including if a patient may be a candidate for immunotherapy.

HLIQ ONCOLOGY CAN:

- Confirm diagnosis
- Identify related mutations specific to the tumor that may explain the cancer
- Identify if a patient may benefit from immunotherapy
- Determine inherited cancer risk
- Identify opportunities for off-label use of an approved drug
- Identify opportunities for clinical trial participation

Q: HOW IS HLIQ ONCOLOGY DIFFERENT?

A: HLI applies pioneering techniques utilizing the latest in genomics and technology to customize cancer insights. HLIQ Oncology provides your physician with an in-depth analysis of your cancer to explore how it can guide their decisions towards personalized cancer therapy selection based on the specific genetic mutations of your cancer employing state-of-the-art genomic profiling.

Other tests that do genetic testing on cancers typically provide a much more limited scope of testing than the HLIQ Oncology. HLIQ Oncology analyzes the full exome of the patient and their tumor as opposed to a few cancer genes, or limited panels of genes.

Q: WHAT IS NEEDED TO ORDER THE HLIQ ONCOLOGY ANALYSIS?

A: HLI will need to obtain two specimens from you to process HLIQ Oncology Analysis. These include both a blood sample and the tissue sample from your tumor. HLI will engage your oncologist to obtain the necessary samples and medical history required to perform HLIQ Oncology Analysis.

HLI will perform whole exome sequencing of both specimens to identify the genetic variants that may be targets for cancer treatment. By comparing both specimens, HLI is able to identify specifically the ones in your tumor cells to better target your cancer to help your Oncologist identify potential treatments.

Q: HOW CAN I REQUEST AN HLIQ ONCOLOGY ANALYSIS?

A: HLI works directly with oncologists, academic medical centers, and cancer treatment centers. If you want to have your physician order this test for you, please call 844.838.3322, option 2, or contact clientservices@humanlongevity.com.

Q: WHAT IS CLIA? WHY IS IT IMPORTANT?

A: HLIQ Oncology Analysis is processed in a CLIA-certified laboratory. The Clinical Laboratory Improvement Amendments of 1988 or CLIA are a set of US Federal regulations designed to ensure the quality of diagnostic tests performed at testing labs. In the US, tests that are to be used to diagnose or treat a patient must be CLIA validated or FDA approved.

Q: WHAT DOES "DRUG MATCHING" MEAN? WHAT DOES "CLINICAL TRIALS MATCHING" MEAN?

A: The HLIQ Oncology report provides a catalog of the genetic mutations that are

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specifically present in the tumor. Sometimes specific drugs are known to be effective for cancers with specific mutations. "Drug matching" refers to tabulating these instances for the observed mutations.

With the guidance of your oncologist, drug matching may be useful for relating mutations to drugs that are already FDA approved for treatment of cancers. Prior to such approval, drugs go through a series of clinical trials. These are controlled research studies of volunteer patients who are undergoing experimental therapy. To enter such a study, there are a variety of criteria that must be met, some of which may involve specific mutations being present or absent in the tumor. "Clinical trials matching" refers to identifying the clinical trials for which the client may be eligible, based on the mutations observed in their tumor.

Q: I HAVE HAD MULTIPLE SAMPLES REMOVED FROM DIFFERENT SURGERIES—WHICH ONE WOULD BE IDEAL?

A: The HLI Oncology team will work with your physician to help make this decision about which sample is most informative for genomic analysis. In general, it is desirable to have the most recent samples, and ones that provide the highest quality tumor tissue for analysis.