

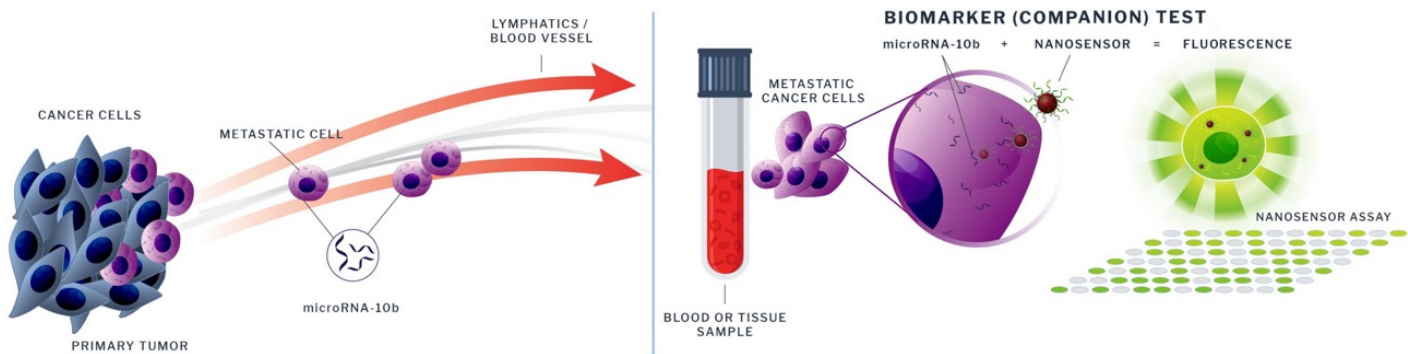
Targeting Early Cancer Detection

TCDx-miR-XXX

Predictive biomarker of metastasis

TransCode Therapeutics is continuing research and development on a specific biomarker assay (TCDx-miR-XXX) that has the potential to quantify microRNA expression in patient serum and blood. TransCode's microRNA assay is designed to address a major unmet need in the areas of cancer biology, diagnosis, and therapy by introducing a tool that could permit the analysis of microRNA expression in blood.

- TransCode's predictive biomarker screening assay has the unique capability of microRNA profiling in blood samples
- The fluorescent read-out generated by the assay is highly specific and has nanomolar sensitivity
- The assay is inexpensive and rapid. It can be used to monitor treatment response with TTX-MC138 in clinical trials



Potential utility of biomarker test for microRNA-10b

TransCode's assay could address a major unmet need in the areas of cancer biology, diagnosis, and therapy by analyzing microRNA expression in blood. Early diagnosis has previously shown to reduce mortality in cancer patients.

- TransCode's patented biomarker test is currently being optimized to measure the expression of microRNA-10b in patients
- This test could provide unique information about cancer staging, disease progression, metastatic potential and ultimately survival, and could have an impact as a guide to therapy

TransCode's assay has the potential to address a major unmet need in the areas of cancer biology, diagnosis, and therapy by analyzing microRNA expression in blood.

Measuring microRNA-10b levels in the tumor before beginning treatment could better inform therapeutic decisions as evidenced in recent studies:

- MicroRNA-10b expression has been shown to be negatively correlated to sensitivity to 5-fluorouracil (5-FU)-based therapies
- MicroRNA-10b expression has been shown to induce greater tamoxifen resistance
- MicroRNA-10b expression has shown to discriminate between high-risk and low-risk disease with the potential to identify the presence of metastasis

Complementary Screening Assay

TransCode Therapeutics has developed an RNA-based screening assay which has the potential to inform earlier therapeutic treatment along with clarity of response to therapy. Potentially it could serve as targeted companion diagnostic to the therapeutics that are being developed by TransCode because they can directly measure the abundance of the therapeutic target in the course of treatment.

This could mean that patients could be stratified pre-treatment based on target biomarker expression and during treatment based on efficacy of target engagement – an approach representing a prime example of personalized medicine.

- The staple of reducing mortality due to cancer has been early detection
- Currently there is no one single test that can aid in diagnosing metastatic disease at an early stage
- Detection of microRNA expression in cancer patients could be a promising early predictive biomarker in metastatic cancer



TransCode is in the process of identifying biomarkers that are relevant in cancer diagnosis which could inform earlier therapeutic treatment along with clarity of response to therapy.

T R A N S C O D E
T H E R A P E U T I C S TM

TTX is an investigational platform encompassing therapeutic candidates (including TTX-MC138) and diagnostics which remain in development. Their safety and efficacy have not yet been evaluated by the FDA or any other regulatory agency.