



# BESPOKE study of ctDNA guided immunotherapy (IO)

**Signatera detects and tracks circulating tumor DNA (ctDNA) using a personalized, tumor-informed assay**

Prospective, multi-center clinical study examining the role of ctDNA in immune checkpoint blockade treatment response monitoring

**Our goal:** BESPOKE IO study seeks to quantify the impact of Signatera molecular residual disease (MRD) test results on treatment decisions and outcomes.

**Signatera test:** Signatera is a personalized, patient-specific, bespoke ctDNA assay for tracking tissue-derived clonal mutations in blood for MRD determination and molecular monitoring.

**Description:** This is a prospective data collection study of patients with advanced solid tumors who will receive standard-of-care immunotherapy while being monitored with Signatera testing. The correlation between Signatera test results and subsequent treatment decisions will be examined. Over 1,500 patients will be prospectively enrolled from eligible study sites; additional information will be collected from historical control cases.

**Study sites:** Up to 100 sites will be selected.

**Date:** Multicenter clinical trials will begin enrollment in Q2 2021.

**Funding:** The budget will be sponsored by Natera's clinical trials department. The budget will accommodate institutional review board (IRB) approval, on-site coordination, data collection, and analysis.

## Tumor types enrolled:



Non-small cell lung cancer



Melanoma



Colorectal cancer



Eligible patients can enroll up to four weeks before they initiate immunotherapy.



Up to 100 sites



Clinical utility and outcome data: Up to 2 years

For additional information about the BESPOKE IO study, please contact the study team at:

[BESPOKEIOSStudy@natera.com](mailto:BESPOKEIOSStudy@natera.com)

## BESPOKE IO trial design

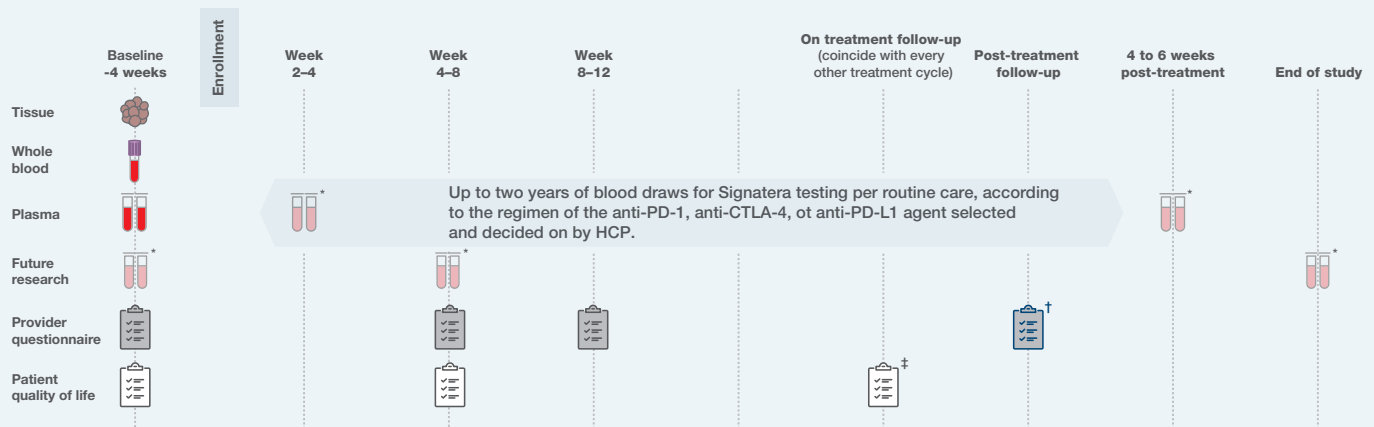
### Eligibility

- › 18 years of age or older, with ECOG performance status 0–2
- › Documented metastatic or locally advanced unresectable cancer of the following types: melanoma, non-small cell lung cancer, colorectal cancer
- › Clinically eligible and plan to receive therapy with an anti-neoplastic agent that works by immune checkpoint blockade (anti-PD-1, anti-CTLA-4, or anti-PD-L1)
- › At least one lesion that is measurable by RECIST criteria and that has at least one dimension >10 mm
- › Able to follow the study’s visitation schedule and willing to provide up to 20 mL of peripheral blood samples at the indicated time points

### Endpoints

- › **Primary**  
Percentage of patients who continued or changed their immunotherapy treatment regimen because of a post-treatment Signatera ctDNA result
- › **Secondary**  
Comparisons between patient cohorts as defined by change in ctDNA levels of:
  - Progression-free survival
  - Overall survival
  - Partial or complete response
  - Duration of response
  - Percentage of patients with six-month durable clinical response
  - Treatment confidence (patient and physician)
  - Anxiety levels and well-being in patients receiving Signatera ctDNA results

## Study design



\*Optional blood draws.

†To be completed when a change in treatment recommendation occurs.

‡To be completed month 12, and every 3 months thereafter until study completion for patients continuing immunotherapy treatment.

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