

When to use Signatera

Neoadiuvant

Adjuvant therapy

Surveillance

Metastatic

Response monitoring

May be considered for select "watch and wait" patients to support a nonsurgical approach.

Postsurgical MRD assessment

Use Signatera after surgery to evaluate the need for adjuvant chemotherapy and potentially avoid unnecessary treatment.

Recurrence monitoring

Use Signatera along with CEA testing to detect recurrence earlier while tumor may still be resectable.

Assess treatment response

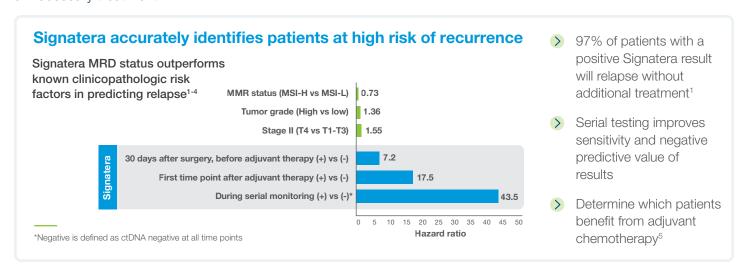
Signatera enables realtime monitoring of ctDNA dynamics for early and sensitive evaluation of treatment response.

Before surgery

Tailor neoadjuvant treatment or surgical strategies based on MRD status using biopsy (eg, rectal cancer TNT)

In the adjuvant setting

Use Signatera after surgery to evaluate the need for adjuvant chemotherapy and potentially avoid unnecessary treatment



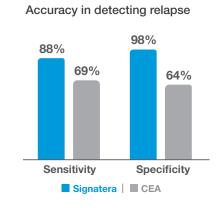
In the surveillance setting

Use Signatera along with CEA testing to detect recurrence earlier, to enable surgical resection or other early intervention

Signatera detects relapse more accurately than CEA with clinically meaningful lead times over CT scans¹

- Get clarity when evaluating patients with indeterminate CEA levels or CT scans
- Signatera facilitates shared decision-making and confident treatment planning

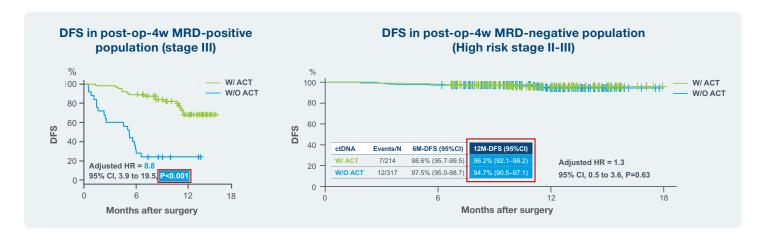
CEA = carcinoembryonic antigen
CT = computed tomography
ctDNA = circulating-tumor DNA





The largest prospective MRD study to date evaluates the clinical utility of ctDNA analysis in colorectal cancer (CRC)

MRD-positive CRC patients at 4w post-op benefit significantly from chemotherapy while MRD-negative patients at 4w post-op do NOT derive any significant treatment benefit⁵



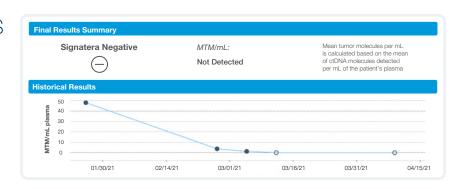
Ordering Signatera for colorectal patients

Signatera is custom-designed for each patient using their own tumor tissue.

	RECURRING ORDER PROGRAM MRD & Recurrence Monitoring Program	IMMUNOTHERAPY & TREATMENT Monitoring Program
Clinical Use Case	Order before or after surgery to help inform surgical and/or theraputic intervention	Use Signatera to determine treatment effectiveness, or to help rule out disease progression
Medicare Coverage	Stage II-III colorectal cancer and Stage IV oligometastatic cancer	Pan-cancer immunotherapy monitoring

Tracks ctDNA dynamics to enable longitudinal monitoring

Signatera reports presence/absence of ctDNA and ctDNA quantity in terms of MTM/mL for longitudinal assessment







Just like no two tumors are alike—Signatera is personalized for each patient





Tumor-informed MRD assay for individualized care

• Customized for each patient's unique tumor signature by targeting the top clonal mutations



Optimized sensitivity and specificity for accurate MRD assessment

- By only tracking tumor-specific variants, sensitivity is maximized with a LOD down to 0.01% VAF⁶
- Filters out germline and CHIP mutations to reduce background noise and to minimize false positives

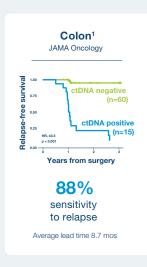


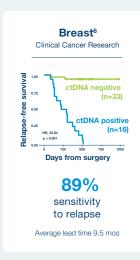
Reliable longitudinal monitoring for confident decision-making

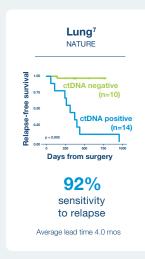
- By following clonal mutations that persist as the tumor evolves, full disease burden is reflected
- Tracks ctDNA dynamics by MTM/mL to enable longitudinal monitoring with a simple blood draw

LOD = limit of detection; CHIP = clonal hematopoiesis of indeterminate potential; VAF = Varient allele frequency

Signatera is validated across multiple tumor types^{1,6-8}









References

- 1. Reinert T, Henriksen TV, Christensen E, et al. Analysis of Plasma Cell-Free DNA by Ultradeep Sequencing in Patients With Stages I to III Colorectal Cancer. *JAMA Oncol.* 2019.
- 2. Sinicrope FA, Foster NR, Thibodeau SN, et al. DNA Mismatch Repair Status and Colon Cancer Recurrence and Survival in Clinical Trials of 5-Fluorouracil-Based Adjuvant Therapy. *J Natl Cancer Inst.* 2011;103(11):863–875.
- 3. Aoyama, Oba K, Honda M, et al. Impact of postoperative complications on the colorectal cancer survival and recurrence: analyses of pooled individual patients' data from three large phase III randomized trials. Cancer Med. 2017;6(7):1573–1580.
- 4. Yothers G, O'Connell MJ, Lopatin M, et al. Validation of the 12-gene colon cancer recurrence score in NSABP C-07 as a predictor of recurrence in patients with stage II and III colon cancer treated with fluorouracil and leucovorin (FU/LV) and FU/LV plus oxaliplatin. *J Clin Oncol.* 2013;31(36):4512-4519.
- Kotaka et al. Association of circulating tumor DNA dynamics with clinical outcomes in the adjuvant setting for patients with colorectal cancer from an observational GALAXY study in CIRCULATE-Japan. ASCO GI 2022
- 6. Coombes RC, Page K, Salari R, et al. Personalized Detection of Circulating Tumor DNA Antedates Breast Cancer Metastatic Recurrence. *Clin Cancer Res.* 2019;25(14):4255-4263.
- 7. Abbosh C, Birkbak NJ, Wilson GA, et al. Phylogenetic ctDNA analysis depicts early-stage lung cancer evolution. *Nature*. 2017;545(7655):446-451.
- 8. Christensen E, Birkenkamp-Demtroder K, Sethi H, et al. Early Detection of Metastatic Relapse and Monitoring of Therapeutic Efficacy by Ultra-Deep Sequencing of Plasma Cell-Free DNA in Patients With Urothelial Bladder Carcinoma. *J Clin Oncol.* 2019;37(18):1547-1557.

Learn more about Signatera:

Tel: +1.650.489.9050 | Email: signateraquestions@natera.com | Visit: natera.com/oncology

