

# OncoBEAM™ BRAF Kit (RUO)

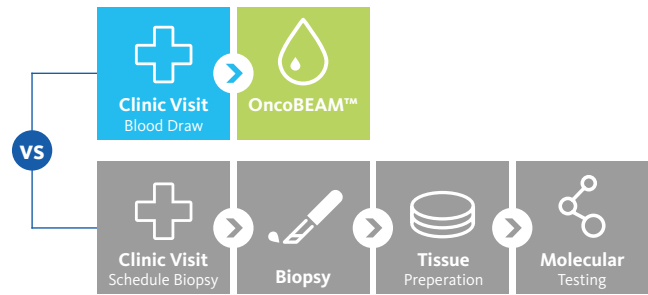
Highly Sensitive Liquid Biopsy for Transforming Clinical Care



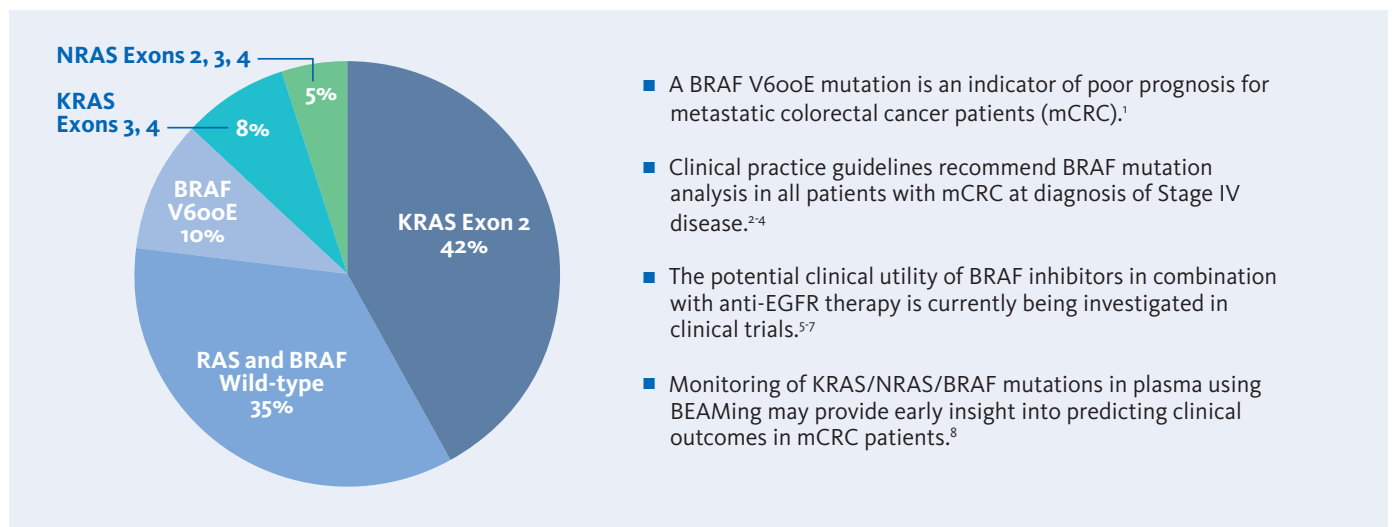
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# Detection of Cell-Free Tumor DNA in Metastatic Colorectal Cancer Patients Through a Simple Blood Draw

- Detection of BRAF V600E mutation
- Highly sensitive BEAMing digital PCR technology
- A more rapid and minimally invasive assessment of BRAF V600E mutation, as compared to tissue biopsy



## Clinical Significance of BRAF V600E Mutations and RAS/BRAF Somatic Mutation Frequency in Colorectal Cancer



- A BRAF V600E mutation is an indicator of poor prognosis for metastatic colorectal cancer patients (mCRC).<sup>1</sup>
- Clinical practice guidelines recommend BRAF mutation analysis in all patients with mCRC at diagnosis of Stage IV disease.<sup>2-4</sup>
- The potential clinical utility of BRAF inhibitors in combination with anti-EGFR therapy is currently being investigated in clinical trials.<sup>5,7</sup>
- Monitoring of KRAS/NRAS/BRAF mutations in plasma using BEAMing may provide early insight into predicting clinical outcomes in mCRC patients.<sup>8</sup>

## Our Test Menu

<b>OncoBEAM™ BRAF Kit (RUO)</b>	<b>Gene</b> BRAF	<b>Amino Acid Change</b> V600E	<b>Nucleotide Change</b> c.1799T>A
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[1] Van Cutsem E et al. Cetuximab plus irinotecan, fluorouracil, and leucovorin as first-line treatment for metastatic colorectal cancer: updated analysis of overall survival according to tumor KRAS and BRAF mutation status. *J Clin Oncol* 2011; 29(15): 2011-2019.

[2] NCCN Clinical Practice Guidelines in Oncology: Colon Cancer Version 2.2017.

[3] Van Cutsem E et al. ESMO consensus guidelines for the management of patients with metastatic colorectal cancer. *Ann Oncol* 2016; 27(8):1386-1422.

[4] Sepulveda AR et al. Molecular biomarkers for the evaluation of colorectal cancer: guideline summary from the American Society for Clinical Pathology, College of American Pathologists, Association for Molecular Pathology, and American Society of Clinical Oncology. *J Oncol Pract* 2017; 13(5):333-337.

[5] Hong DS et al. Phase 1B study of vemurafenib in combination with irinotecan and cetuximab in patients with metastatic colorectal cancer with BRAFV600E mutation. *Cancer Discov* 2016; 6(12):1352-1365.

[6] Yaeger R et al. Pilot trial of combined BRAF and EGFR inhibition in BRAF-mutant metastatic colorectal cancer patients. *Clin Cancer Res* 2015; 21(6):1313-1320.

[7] Tabernero J et al. Phase 2 results: Encorafenib (ENCO) and cetuximab (CETUX) with or without alpelisib (ALP) in patients with advanced BRAF-mutant colorectal cancer (BRAFM CRC). ASCO Annual Meeting 2016; Abstract 3544

[8] Toledo RA et al. Clinical validation of prospective liquid biopsy monitoring in patients with wild-type RAS metastatic colorectal cancer treated with FOLFIRI-cetuximab. *Oncotarget* 2017; 8(21): 35289-35300.