



Optimizing strategies for the treatment of colorectal cancer in the biomarker era



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Expert panel



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Agenda

Evidence-based first-line treatment choices for patients with CRC

Implementing biomarker testing in the clinic: Practical considerations

Will novel combination regimens be the future of CRC treatment?

Evidence-based first-line treatment choices for patients with CRC

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Established and emerging biomarker-guided treatment options for mCRC

Biomarker	Targeted drugs	Resistance
RAS	Small molecules targeting G12C mutation	Confers anti-EGFR agent resistance
BRAF	BRAF inhibitors	Negative predictor of response to anti-EGFR therapies
Microsatellite instability	Pembrolizumab, nivolumab (PD-1 inhibitors), ipilimumab (CTLA4 inhibitor)	
HER2	Trastuzumab, lapatinib, pertuzumab, trastuzumab deruxtecan	Predict resistance to anti-EGFR therapies
NTRK	Entrectinib, larotrectinib	

BRAF, v-Raf murine sarcoma viral oncogene homolog B; CTLA4, cytotoxic T-lymphocyte-associated protein 4; EGFR, epidermal growth factor receptor; HER2, human epidermal growth factor receptor 2; mCRC, metastatic colorectal cancer; NTRK, neurotrophic tyrosine receptor kinase; PD-1, programmed cell death protein 1; RAS, rat sarcoma virus. Crutcher M, Waldman S. *Front Med.* 2022;9:1062423.

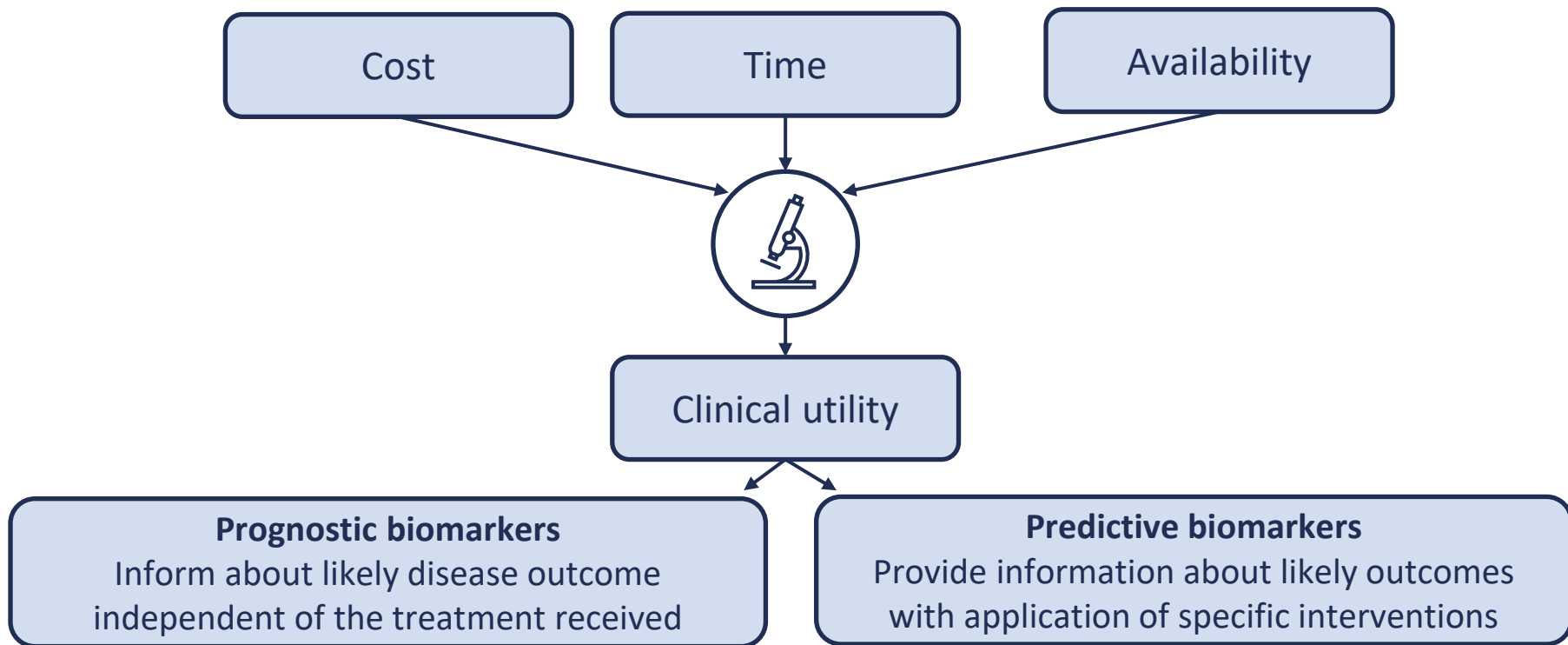
Implementing biomarker testing in the clinic: Practical considerations

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Practical considerations for biomarker testing



Will novel combination regimens be the future of CRC treatment?

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Combination therapies

Many combination therapies for CRC using different biomarker analysis are under investigation including:

***KRAS G12C* mutation**

- Sotorasib + panitumumab (NCT04185883)
- Sotorasib + bevacizumab-awwb (NCT04185883)

***BRAF V600E* mutation**

- Encorafenib + cetuximab ± binimetinib (NCT02928224)
- Encorafenib + binimetinib + cetuximab (NCT03693170)

MSI-H/dMMR

- Atezolizumab + bevacizumab (NCT02997228)
- Nivolumab + ipilimumab (NCT02060188)

HER2 positive

- Trastuzumab emtansine + pertuzumab (NCT03225937)
- Trastuzumab + pyrotinib (NCT04380012)