BRAF STATUS +

Optimized BRAF testing informs appropriate treatment

Inaccurate test results can lead to suboptimal disease management[1]

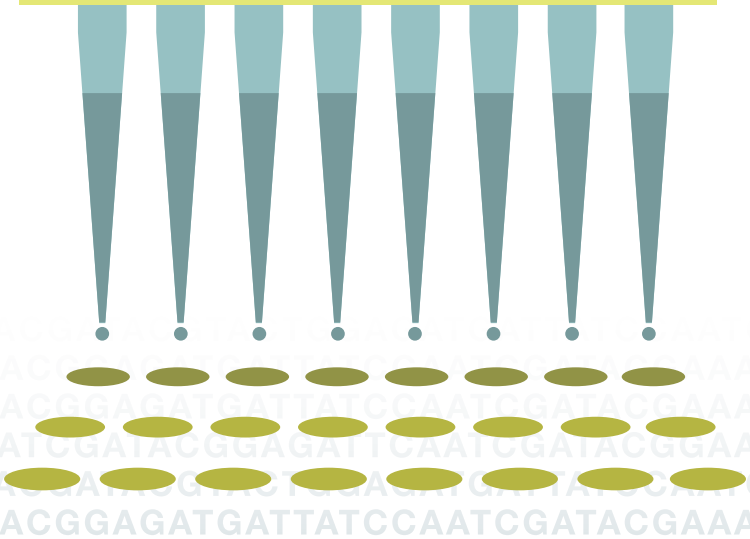
An incorrect molecular diagnostic test result can drive inappropriate and ineffective treatment choices[1]

- False-negative test results can deprive patients of certain therapies that have been shown to help them the most[2,3]
- False-positives may lead to treatment with a therapy that is ineffective for those patients[4,5]

Mutations undetected by a particular BRAF test can compromise disease management[2]

- In melanoma, BRAF status has significant clinical relevance for treatment decisions[1]
- A wide range of mutations has been associated with melanoma[6]
- Certain therapies are not prescribed in patients who test negative for certain mutations[2,3]

Rapidly identifying a mutation and initiating proper treatment may be critical for improving outcomes[1]



Patients with a BRAF mutation were associated with poorer survival—unless treated with a BRAF inhibitor[3]

Results of quality BRAF testing assist in making accurate melanoma treatment decisions[1]

Key considerations in selecting a BRAF testing method

✓ Sensitivity

Avoids false-negatives by accurately recognizing mutations that are present[1]

✓ Limit of detection

Avoids false-negatives by detecting mutations present in low concentrations[1]

✓ Specificity

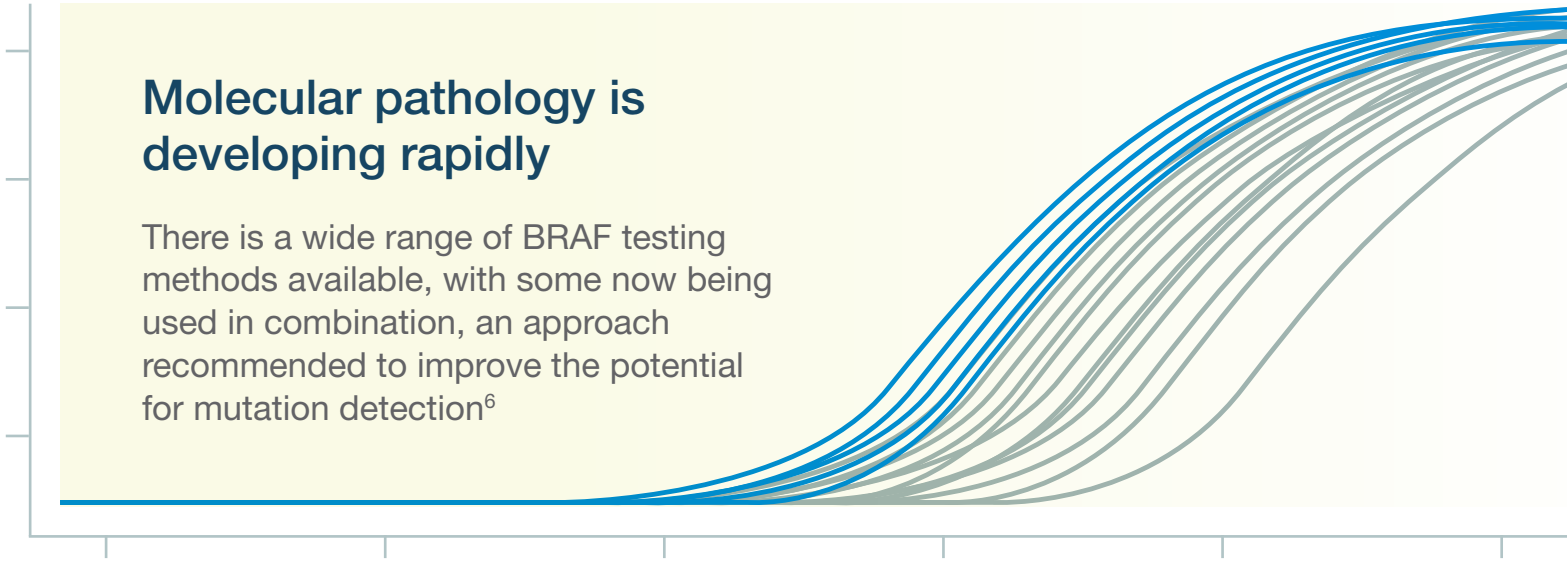
Avoids false-positives by detecting mutations only when they are actually present[1]

✓ BRAF V600 mutations detected

Although V600E is the most common *BRAF* mutation, V600K and V600D/M/R may also be present; mutation type may influence treatment decisions[2-4,7]

Molecular pathology is developing rapidly

There is a wide range of BRAF testing methods available, with some now being used in combination, an approach recommended to improve the potential for mutation detection[6]



Ensure your BRAF testing method delivers accurate, complete results for maximum confidence in your treatment plan

For more information, please visit www.brafV600.com

References: 1. Gonzalez D, Fearfield L, Nathan P, et al. *BRAF* mutation testing algorithm for vemurafenib treatment in melanoma: recommendations from an expert panel. *Br J Dermatology.* 2013;168: 700-707. **2.** Longshore J, Banawan S, Aidon H, et al. Comparison of molecular testing methods for detecting BRAF V600 mutations in melanoma specimens with challenging attributes. *J Mol Biomark Diagn.* 2015;6:1-7. **3.** Long GV, Menzies AM, Nagrial AM, et al. Prognostic and clinicopathologic associations of oncogenic *BRAF* in metastatic melanoma. *J Clin Oncol.* 2011;29:1239-1246. **4.** Janku F, Huang HJ, Claes B, et al. *BRAF* mutation testing in cell-free DNA from the plasma of patients with advanced cancers using a rapid, automated molecular diagnostics system. *Mol Cancer Ther.* 2016;15:1397-1404. **5.** Hatzivassiliou G, Song K, Yen I, et al. RAF inhibitors prime wild-type RAF to activate the MAPK pathway and enhance growth. *Nature.* 2010;464:431-436. **6.** Ihle MA, Fassunke J, König K, et al. Comparison of high resolution melting analysis, pyrosequencing, next generation sequencing and immunohistochemistry to conventional Sanger sequencing for the detection of p.V600E and non-p.V600E *BRAF* mutations. *BMC Cancer.* 2014;14:1-13. **7.** Janku F, Claes B, Huang HJ, et al. *BRAF* mutation testing with a rapid, fully integrated molecular diagnostics system. *Oncotarget.* 2015;6:26886-26894.

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