

DROPLET DIGITAL™ PCR (DDPCR™)

**BIO-RAD**



# What *do* *you* **Gene**?

## KRAS MUTATIONS

**A Crucial Factor in Colorectal Cancer**

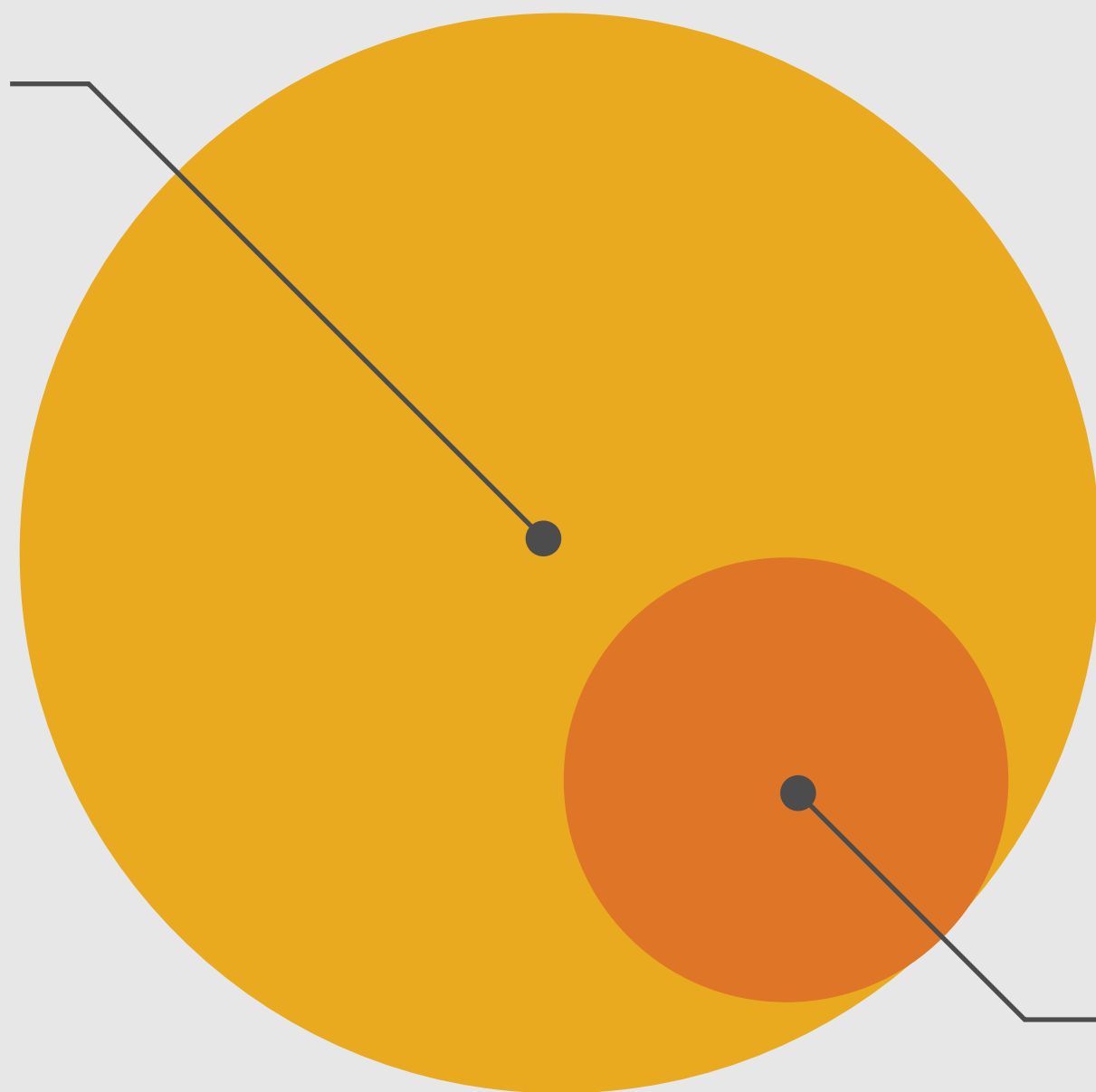
# 2nd IN THE USA

A stylized representation of the American flag, consisting of a black canton in the upper left corner and several horizontal stripes alternating between black and white.

**Colorectal cancer (CRC) is the  
2nd leading cause of  
cancer-related deaths.**

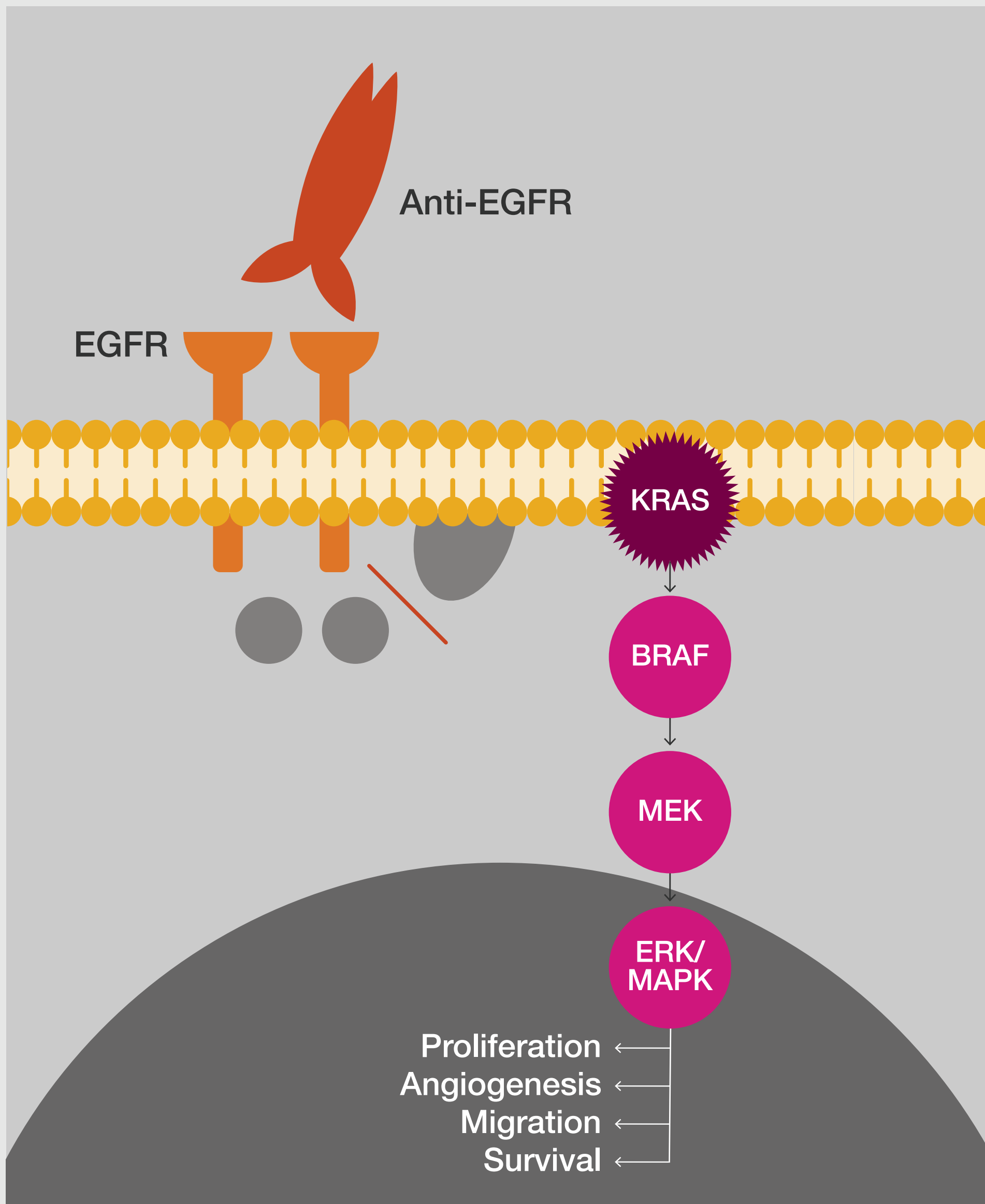
# 2020

**147,950**  
estimated  
new cases



**53,000**  
deaths  
anticipated

# Inhibiting EGFR signaling is a major treatment option for CRC.



**Mutated *KRAS* continuously activates EGFR signaling, which is an important driver of CRC.**





**36 to 40%**

**of CRC patients have mutations  
in the *KRAS* gene.**

***KRAS* mutations in  
CRC patients block  
the benefits of  
anti-EGFR therapy.**





**DETECT  
MUTATIONS  
AT CODONS**

**12, 13, 61**

**OF THE KRAS GENE**

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## **DROPLET DIGITAL PCR (ddPCR) PRODUCTS FROM BIO-RAD**

- Bio-Rad offers ddPCR KRAS screening kits that can detect the majority of mutations occurring at codons 12, 13, and 61 of the KRAS gene. For research use only
- Screen for other major cancer biomarkers with high sensitivity using a wide range of products from Bio-Rad

Visit [bio-rad.com/digital-assays](https://www.bio-rad.com/digital-assays) for more information. For research use only.



## References

American Cancer Society (2018). Cancer Facts and Figures 2018. [cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2018.html](https://cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2018.html), accessed July 6, 2018.

Chan E (2015). KRAS in Colorectal Cancer. My Cancer Genome. [mycancergenome.org/content/disease/colorectal-cancer/kras/](https://mycancergenome.org/content/disease/colorectal-cancer/kras/), accessed July 8, 2015.

American Cancer Society (2020). Colorectal Cancer Facts & Figures 2020-2022. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf>

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