

Review of: "RAS mutations that have a major impact on current cancer genomic medicine"

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Potential competing interests: Dr. Wei Zhang is a consultant for the following companies that develop cancer biomarkers: Epican Technology Ltd. and Tempus.

Exploiting genomic medicine to guide treatment for cancer patients still has a lot of challenges. One such challenge is that the database used for cancer genomic testing is not constantly updated with the most current information and knowledge. In this study, the authors showed specific examples of *RAS* mutations in metastatic colorectal cancer and response to anti-EGFR therapy. Specifically, a previously predicted oncogenic or pathogenic mutation in *RAS* (Q61K) has been shown to have the possibility of being non-functional due to altered splicing events. Overall, this short communication provides important insights from the authors' clinical observations in a pretty large cohort of patients. The major finding is clearly presented and will be of interest to both oncologists and basic researchers. In addition, this study shows again the promise of using genomic testing to realize precision medicine in oncology, e.g., using liquid biopsy-based methods in the future. Future larger studies in more diverse populations may help evaluate whether this finding is generalizable in other racial backgrounds.

Minor comments:

1. In Table 1, there appears to be a typo to list "G61" for Patient #5.
2. Reference # 8 is not complete.