

58P Clinically Actionable Outcomes of Next-generation Gene Sequencing Test in Advanced Solid Tumours in an Eastern Caribbean Nation

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Introduction

Next Generation Gene Sequencing Studies have been extremely helpful in providing targeted care for a subset of malignancies and are moving towards a definitive role in oncological management.¹

In this study we look at the applicability of next generation genomic profiling testing in solid tumours.

Methods & Material

In this study ten patients with a biopsy proven diagnosis of solid malignancy had their tissue or blood sample tested for FoundationOne® genomic profiling.

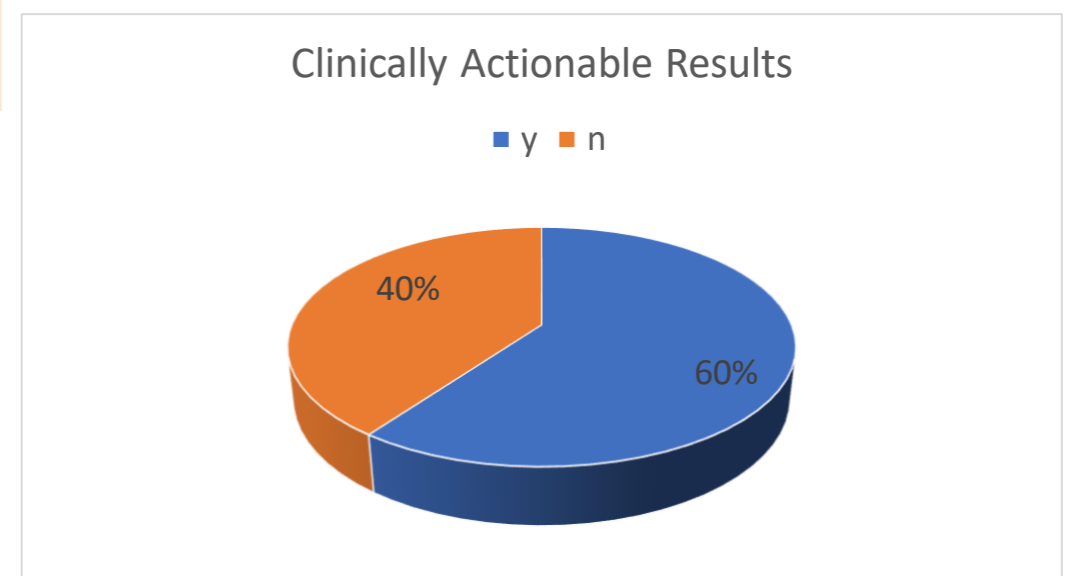
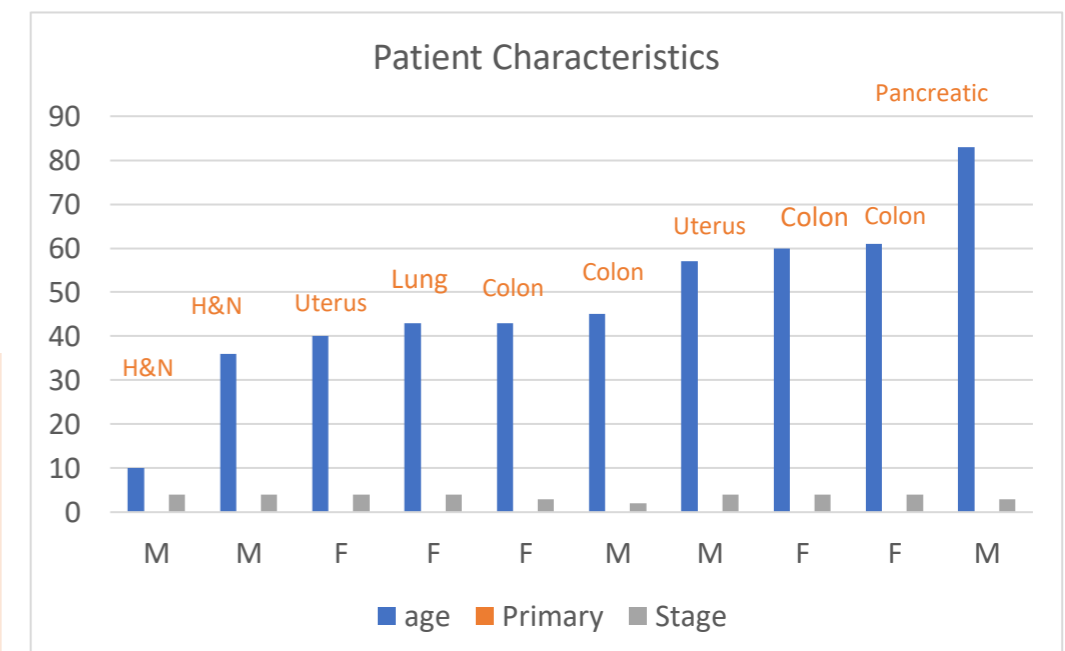
Age : The mean age was 47yrs with the youngest patient 10yrs and the oldest 83yrs.

Gender : There was an equi-distribution of patients with 5 males and females each respectively.

Results

Microsatellite Status(MSI) and Tumour Mutational Burden (TMB): There was a good correlation between the two, as none Tumour Mutational Burden were more than 5 muts/mb in MS -Stable sample. The only sample which had MSI – high had a TMB of 16 muts/mb.

Clinically Actionable Results : The reports provided with a meaningful and clinically applicable results in 60% of the cases.



Conclusion

The practice of Oncology is changing at a rapid pace and precision Oncology providing individualized care is the future. As such more strategies need to be in place to make studies such as Next Generation Gene profiling a standard inclusion in oncological practice.

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1. Zhu, Jason, et al. "Clinical utility of FoundationOne tissue molecular profiling in men with metastatic prostate cancer." Urologic Oncology: Seminars and Original Investigations. Vol. 37. No. 11. Elsevier, 2019.