DECIDE Survey (Decision-making, Experience, and Confidence In Determining Genomic Evaluation) – Updated Results by the PRECISION Registry Study Team

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Background: PARP inhibitors (PARPis) have heralded the era of "precision medicine" with multiple PARPis FDA-approved for use in men with metastatic castration-resistant prostate cancer (mCRPC). A key need is to understand challenges to implementation of genomic testing, which informs candidacy for PARPis. The PRECISION Registry was developed to gain deeper insights into PARPi outcomes, and the study team developed and deployed the DECIDE Survey (Decision-making, Experience, and Confidence In Determining Genomic Evaluation) to collect information regarding utility, understanding, and self-efficacy with genomic testing from a spectrum of healthcare providers, scientists, and genomic stakeholders. Here we report updated results from the DECIDE Survey, which illustrate the current knowledge gaps and barriers to genomic testing for men with mCRPC.

Methods: The DECIDE Survey was an online survey administered from October 2022 to January 2023 and included 18 multiple response questions. Survey domains included self-confidence with ordering and interpreting germline and somatic genomic tests, process of testing and use of results, decision-making factors, and challenges and barriers to genomic testing based on previously published or validated measures and adapted for this study. Descriptive statistics were used to evaluate counts and percentages of responses, most of which were on a 4-to-6 point Likert scale depending on the question. Missing responses varied by question.

Results: 122 participants completed the survey. The majority were medical oncologists (70%) and affiliated with academic medical centers (89%). Geographic regions represented included US (44.3%), Canada (24.6%), European continent (21.3%), and other (33.8%). Self-confidence was high in knowing the indications for genomic testing (82% respondents) but lower in interpretation of results, especially from ctDNA (52% high confidence). Confidence varied in interpreting pathogenic variants (65% high confidence), variants of unknown significance (47%), and incidental findings from genomic tests (35%). Common barriers to testing included difficulty obtaining tissue (71%) and cost (35%). Testing utility was sometimes limited by inability to obtain the treatment recommended on the basis of the reported variants (33%). The majority of respondents (55%) agreed that a lack of education and training of healthcare professionals regarding genomic testing is impeding clinical translation.

Conclusions: The DECIDE survey provided critical insight regarding challenges to implementation of genomic testing for prostate cancer, spanning factors impacting provider self-efficacy for ordering, interpreting genomic tests, and practice barriers. The results inform next steps to enhance education of prostate cancer providers and to collectively improve genomic testing and reporting of results for prostate cancer.

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