

## Use of a Modified Delphi Panel to Define Value of Combination Therapy in Oncology

Michael Broder<sup>1</sup>, Harshali Patel<sup>2</sup>, Zac Wessler<sup>2</sup>, Sarah Gibbs<sup>1</sup>, Irina Yermilov<sup>1</sup>, Jeffrey Lemay<sup>2</sup>

<sup>1</sup>Partnership for Health Analytic Research, LLC

<sup>2</sup>Amgen, Inc

**Background:** Treatment regimens involving 2+ novel oncologics have improved health outcomes in several tumor types. These regimens have significantly higher costs than single agents and older treatments (e.g., chemotherapies), which are still widely used to treat different cancers. Our goal was to determine if current concepts of “value,” such as those described by ICER and other frameworks, adequately capture the value of combination therapies.

**Methods:** Using a RAND/UCLA modified Delphi panel, 8 experts from various backgrounds were provided with a review of current concepts of value and asked to rate them on measurability, relevance, and necessity to determine a combination therapy’s value from 4 perspectives (patient, physician, payer, society). After the first round of ratings, panelists met in person and discussed areas of disagreement. Ratings were repeated, and results used to quantitatively summarize group opinion on concepts recommended for inclusion in a value definition.

**Results:** In both rating rounds, experts agreed treatment, clinical evidence, and health outcomes as important domains in determining value. Experts disagreed on whether societal/cultural beliefs, disease factors (i.e., rarity of cancer, unmet need, burden of disease), and other elements of value (e.g., insurance value, reduction in uncertainty, treatment affordability) needed to be incorporated into value assessments of combinations. Responses differed by perspective. Concepts on which there was disagreement decreased post-meeting (23% to 9%).

**Conclusions:** Experts agreed that “value” for 2+ novel oncologics would have a similar definition to value for all high cost oncology therapies. Four key research opportunities to characterize the value of combination therapy emerged: societal context and patient preference may affect value assessments but are not widely considered in current models; some important benefits are not recognized by patients and may be missed by traditional value assessments; given typical patient and societal preferences, cancer treatments may be systematically undervalued vis a vis other health conditions; and combination therapies may present challenges for recently promulgated value frameworks.