

# Acceptance and Utilization of Real-World Evidence Among Cancer Care Physicians in the United States

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## INTRODUCTION

- Randomized controlled trials (RCTs) have been the gold standard for assessing oncology interventions
- Real-world evidence (RWE) is increasingly recognized as complementary by regulatory bodies
- The extent to which US physicians who treat cancer incorporate RWE remains poorly characterized

## METHODS

- Cross-sectional national survey (November 2024) of US physicians who treat cancer (n=128)
- Random selection from ASCO member directory proportional to state populations
- Survey measured: (1) RWE familiarity/usage; (2) comparative reliance on RWE vs. RCTs across clinical contexts; (3) attitudes; (4) barriers; (5) facilitators
- Statistical analysis: descriptive statistics, chi-square tests, paired t-tests (p<0.05)

## Reliance on RWE vs. RCT Data by Clinical Decision Context

	Mean (SD)	Proportion by Preference Category		
Context	(0-10)	<5 ("Prefers RCT")	=5 ("Equal RCT/RWE")	>5 ("Prefers RWE")
Treatment Selection	3.03 (1.73)	106 (83%)	16 (12%)	6 (5%)
Dosing Decisions	3.67 (2.03)	84 (65%)	20 (16%)	24 (19%)
Outcome Predictions	3.84 (2.02)	72 (56%)	31 (24%)	25 (20%)
Paired Comparisons		Mean Difference		p-value
Treatment Selection vs. Dosing Decisions		-0.6		<0.001
Treatment Selection vs. Outcome Predictions		-0.8		<0.001
Dosing Decisions vs. Outcome Predictions		-0.2		0.282

## RESULTS

- Statistical Test Results:
  - Familiarity vs. Confidence: 94% familiar but only 49% confident interpreting RWE
  - Reliance scales (0-10): Treatment selection (3.03), Dosing (3.67), Outcomes (3.84)
  - Significant difference for treatment vs. dosing/outcomes (p<0.001)
- Barriers and Facilitators:
  - Top barriers: reconciling conflicting evidence (85%), potential bias (84%)
  - Key facilitators: improved standardization (93%), guideline integration (85%)

## KEY FINDINGS

- Despite high familiarity (94%), confidence in interpretation remains limited (49%)
- Physicians apply RWE selectively by context (lower for treatment decisions)
- Late-career physicians show lower confidence and preference for RCTs
- Prior RWE research experience significantly associated with higher confidence

## RECOMMENDATIONS

- Address the familiarity-confidence gap through targeted training (96% endorsed)
- Position RWE as complementary to RCTs rather than competing evidence
- Strengthen methodological rigor and standardization
- Support physicians across career stages with different approaches

## RWE/RWD Familiarity and Usage

