ROI Analysis of Pharmaceutical Promotion (RAPP): An Independent Study
Executive Summary

Background

This independent study uniquely compares the ROIs of four leading industry promotional tactics. The research was conducted by Dr. Scott Neslin (Albert Wesley Fry Professor of Marketing, Amos Tuck School of Business, Dartmouth College) under an unrestricted educational grant by the Association of Medical Publications (AMP). Data were provided by Scott-Levin and PERQ/HCI directly to Dr. Neslin.

Study Objectives

- To measure the ROIs for detailing (DET), direct-to-consumer advertising (DTC), medical journal advertising (JAD), and physician meetings & events (PME)
- To understand how the ROIs differ according to brand size ($25-$50 million, $50-$200 million, $200+ million) and launch date (≤1993, 1994-1996, 1997-1999)

Overall Approach

- Used historical data (the benefit being that this is not an experiment, but reality in the marketplace)
- Analyzed the data using a standard statistical technique (ordinary least squares regression)
  - Regression analysis examines all the brands in all the months in which they were marketed. It then analyzes how changes in expenditures over time correlate with changes in script levels over time. Regression will conclude that a marketing variable has a high ROI if that variable can consistently explain changes in script levels
- Evaluated the data in aggregate to calculate the ROIs for:
  - Overall median brand profile
  - Median brand profile according to brand size/launch date

Data

- Evaluated 391 drugs (all brands with ≥$25MM in revenues in 1999)
- Covered the time period 1995-1999
- Yielded a total of 16,696 monthly observations

Results

- Overall median brand profile ROI:

	ROI	Margin of Error (95% confidence)
DET:	$1.72	±$0.19
DTC:	$0.19	±$0.52
JAD:	$5.00	±$0.88
PME:	$3.56	±$1.92

- Median Brand Profile ROI by Size/Launch Date

DET

	Year of Launch		
	≤1993	1994-1996	1997-1999
$25-$50MM	$1.27	$1.41	$1.45
$50-$200MM	$1.78	$2.68	$3.70
$200+MM	$2.34	$6.76	$10.29

DTC

	≤1993	1994-1996	1997-1999
$25-$50MM	n.s.	n.s.	$0.25
$50-$200MM	n.s.	$0.43	$0.59
$200+MM	n.s.	n.s.	$1.37

JAD

	≤1993	1994-1996	1997-1999
$25-$50MM	$3.50	$2.58	$2.22
$50-$200MM	$5.29	$4.54	$4.47
$200+MM	$6.79	$6.86	$5.42

n.s. = not statistically different from zero, two-tailed test, 0.05 significance level.

Conclusions

- Detailing (DET)
  - Overall ROI of $1.72 suggests that DET pays off even at very high levels of expenditure
  - DET had a wide range of ROIs ($1.27-$10.29), depending on brand size/launch date
  - ROI for DET was higher for large and more recently launched brands
- Direct-to-Consumer Advertising (DTC)
  - DTC ROI ranged up to $1.37, depending on brand size/launch date
  - DTC was most effective for large and more recently launched brands
- Medical Journal Advertising (JAD)
  - JAD's overall ROI of $5.00 was the highest among the four marketing variables evaluated
  - JAD's high ROI, plus its small share of total promotional budget, suggests that JAD is underutilized
  - ROI for JAD spanned $2.22-$6.86, depending on brand size/launch date
  - ROI for JAD was higher for larger and older brands
- Physician Meetings & Events (PME)
  - PME's overall ROI of $3.56 was second highest
  - PME's high ROI, plus its small share of total promotional budget, suggests that PME is underutilized