

# ENGAGING YOUR MARKET

Analyzing treatment trends to understand drug utilization



## Revealing perception vs. reality

- **Challenge:** Determine how the study subject drug for treating multiple myeloma is actually being used regionally and nationally, vs. clinical perceptions of use.
- **Competition:** Thalidomide, lenalidomine and several other drugs.
- **Solution:** Create the Multiple Myeloma Treatment Trends Project, a unique forum of 50 leading hematology and oncology practices identified via the eobONE® proprietary database.
- **Action:** Published\* the project's results, demonstrating how our customer's drug was being prescribed as a first-, second- and third-line therapy—and most importantly, revealing that it was underutilized per FDA-approved use.

\* *Managed Care Pathways, a Cardinal Health publication.*

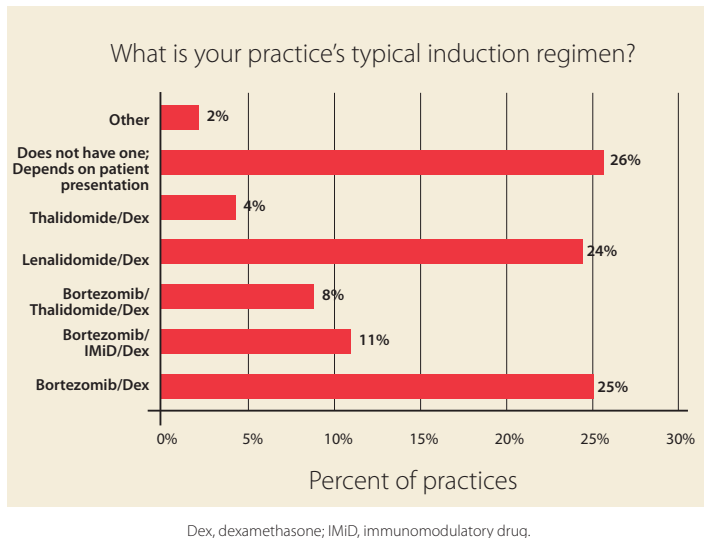
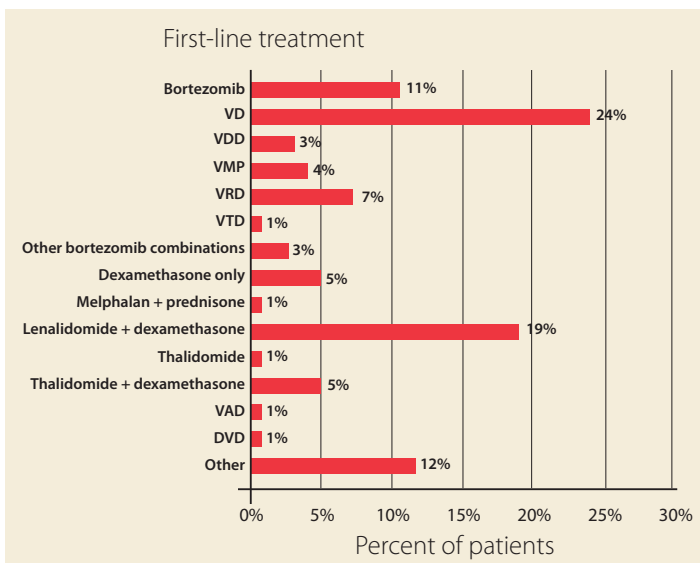
Part I: *Practice Pattern Perceptions. Summer, 2012. Volume 1, Issue 1, pp. 20-41.*

Part II: *Actual Practice Patterns. Fall, 2012. Volume 1, Issue 2, pp. 32-51.*

## New data insights

- The study subject drug was most commonly used as a leading, first-line induction therapy.
- Perceived practice patterns matched reality for our customer's drug.
- While perceptions were accurate, the study subject drug was being underutilized per FDA guidelines, hampering optimal patient outcomes.

**Result:** Real-world data reveals that the study subject drug is underutilized—an invaluable insight that redefined the strategy.



Dex, dexamethasone; DVD, pegylated liposomal doxorubicin-vincristine-dexamethasone; VAD, vincristine-doxorubicin-dexamethasone; VD, bortezomib-dexamethasone; VDD, bortezomib-doxorubicin-dexamethasone; VMP, bortezomib-melphalan-prednisone; VRD, bortezomib-lenalidomide-dexamethasone; VTD, bortezomib-thalidomide-dexamethasone.

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# IMPROVING OUTCOMES

How dose modification improves patient management



## Succeeding in a competitive market

- **Challenge:** Determine how dose modification impacts administration persistence of the study drug, the latest for treating metastatic breast cancer (MBC).
- **Competition:** 17 single-agent chemotherapeutic options—and even more combination regimens.
- **Solution:** Access our proprietary eobONE® database to reveal the Relative Dose Intensity (RDI) of the study drug, based on real-world patient data and analysis available nowhere else.
- **Action:** Presented the results at an ASBD (American Society of Breast Disease) conference—demonstrating how dose modification improved the drug’s profile: decreasing side effects, prolonging treatment and improving patient outcomes.

## New data insights

- As adverse events (AEs) increased, RDI decreased, demonstrating that dose modification was being used to reduce side effects.
- Administrations doubled when both dose delays and dose reductions were used (from 4.5 to 9 doses). Clinicians were using dose modification to increase persistence and duration of treatment.

**Result:** Our customer was able to use real world data to educate clinicians with the goal of improving patient outcomes.

	Overall	Pts w/ no dose modification	Pts w/ dose delay	Pts w/ dose reduction	Pts w/ dose delay and dose reduction
RDI (mean)	78%	100%	66%	61%	57%
# of admin (mean)	6.2	4.5	7.2	8.2	9.0
			60%	82%	100%
Patients w/ >80% RDI	246 (58%)	143 (100%)	90 (36%)	25 (23%)	12 (15%)
Sample (n)	424	143 (34%)	253 (60%)	110 (26%)	82 (19%)

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# OPTIMIZING COSTS

How total cost analysis reveals the most cost-effective therapy



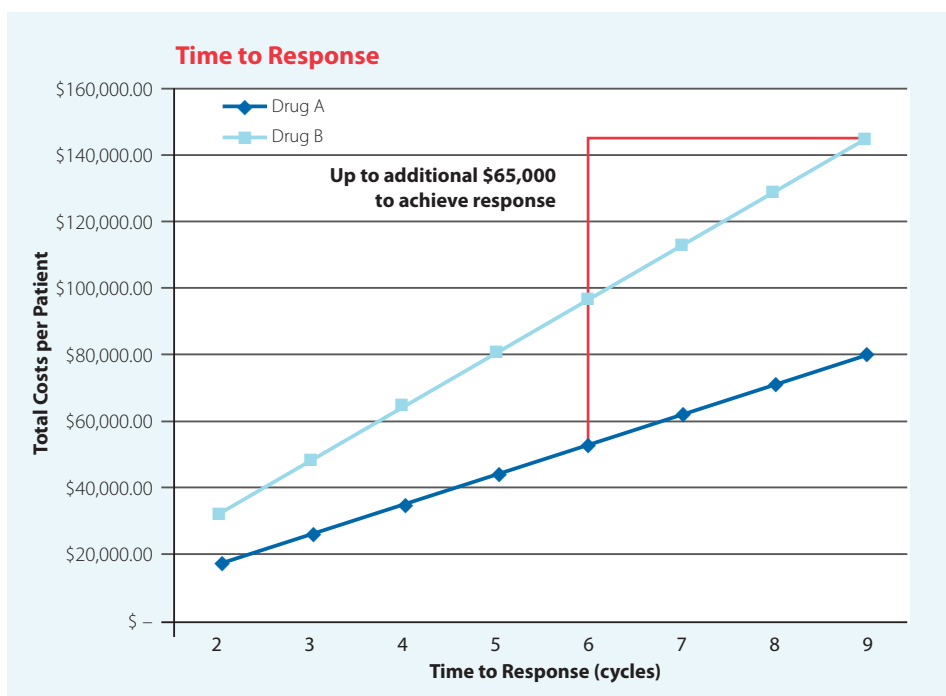
## Succeeding in a competitive market

- **Challenge:** Demonstrate that the study subject drug for treating Myelodysplastic Syndrome (MDS) provides the lowest total cost of care and is the best value for first-line therapy—even though it has a higher acquisition cost than competitors.
- **Competition:** Supportive care and a major hypomethylating agent with a lower acquisition cost.
- **Solution:** Create the first-ever total cost analysis comparing the study subject drug to the leading competitors, accessing our proprietary eobONE® database for real-world claims data available nowhere else.
- **Action:** Presented the results at an ASH (American Society of Hematology) conference, revealing how the study subject drug optimizes costs in a managed care environment—without impacting quality of care—and paves the way to treating a wider range of MDS patients.

## New data insights

- Across 1.3 million patient records, the study subject drug consistently cost less, demonstrating its greater value in a broad range of clinical settings nationwide.
- Sensitivity analysis revealed the cost advantages of the study subject drug across three models: Time-to-Response, Ongoing Treatment and Complete Treatment—reinforcing its value no matter how results are analyzed.

**Result:** Now, our customer has real-world evidence to support it as a cost-effective first-line therapy.



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# REVEALING TRENDS

Using real-world patient data to understand a new drug's potential



## Winning in a crowded marketplace

- **Challenge:** Develop a data driven strategy for a global pharmaceutical company's new drug, the latest for treating metastatic breast cancer (MBC).
- **Competition:** 17 single-agent chemotherapeutic options—and even more combination regimens.
- **Solution:** Access real-world patient data and analysis available nowhere else—our proprietary eobONE® database—to reveal actual adoption rates and patterns of drug use nationwide.
- **Action:** Published\* the study's results to raise awareness of the use and value of the study subject drug. By characterizing current patients that the drug benefits most, our customer had a new, data-based foundation for improving its commercialization and patient targeting strategies.

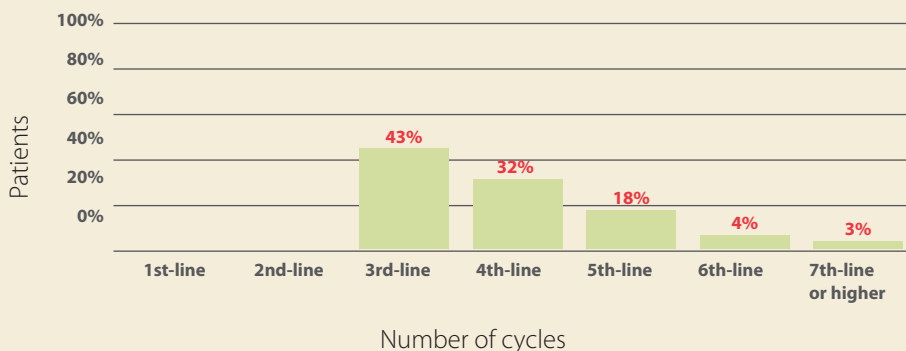
\**Managed Care Pathways, a Cardinal Health publication. Fall, 2012. Volume 1, Issue 2, pp. 27-29.*

## New data insights

- Clinicians were inconsistent with when the study subject drug was administered: 43% of the time it was a third-line therapy, followed by fourth-line (32%) and fifth-line (18%). Our customer now knew when the drug was being administered most effectively.
- The majority of patients received three or more cycles of the customer's drug—revealing that dose modification was mitigating side effects and increasing the duration of treatment.

**Result:** Our customer has demonstrated a new, data-driven strategy for helping clinicians improve patient outcomes: when to administer the study drug and how often.

### Most Common Line of Therapy for Eribulin



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