

TREATMENTTRENDS®: US NEPHROLOGY

This quarterly report series covers the management of dialysis and mid-late stage CKD patients from the perspective of nephrologists. Emphasis is on anemia management (ESAs and IV Iron), calcium-phosphorus metabolism (phosphate binders) and secondary hyperparathyroidism (vitamin D and calcimimetic agents). TreatmentTrends are syndicated report series that provide longitudinal information on market dynamics. They provide insight into practice patterns, attitudes and perceptions, and current and projected use of various products. They evaluate perceived product advantages and disadvantages, as well as sales and messaging efforts of key market players

SAMPLE FRAME AND METHODOLOGY

45 minute online quantitative survey with several open-ended questions for qualitative feedback

200 nephrologists complete the survey in Q1, Q2, and Q3 (100 complete the bone and mineral section and 100 complete the renal anemia section)

300 nephrologists in the Q4 sample

Nephrologist Screening Criteria:

- In practice between 2 and 30 years
- Minimum of 50 dialysis or 100 CKD-ND (Stage 3 and 4) patients under management

PRODUCT COVERAGE

Approved: Epogen, Aranesp, Procrit, Venofer, Ferrlecit, Feraheme, INFeD, Dexferrum, Sensipar, Zemplar, Hectorol, Calcijex, Renagel, Renvela, PhosLo, Fosrenol

In Development: Hematide, Bardoxolone, HIF inhibitors, Soluble Ferric Pyrophosphate

RELATED 2011 REPORTS

TreatmentTrends®: Renal Dietitians
TreatmentTrends®: Anemia Managers
TreatmentTrends®: Bone and Mineral (EU)
TreatmentTrends®: Renal Anemia (EU)
ChartTrends® Bone and Mineral in Dialysis
ChartTrends®: Bone and Mineral in CKD-ND
ChartTrends®: Renal Anemia in Dialysis
ChartTrends®: Renal Anemia in CKD-ND

PROJECT OBJECTIVES

- Understand nephrology patient load and practice demographics
- Assess current and expected treatment prevalence for renal anemia and bone and mineral metabolism agents among dialysis and later stage CKD patients, as well as brand utilization within each drug class
- Understand the most important product attributes by product class and the key advantages and disadvantages associated with each product
- Assess the variance in attitudes among nephrologists with regard to different treatment approaches and disease awareness issues such as beliefs about ESA safety, calcium load, complications of SHPT, and hyperphosphatemia
- Compare sales and messaging efforts of companies with products in the renal anemia and bone and mineral metabolism space
- Assess awareness of and interest in renal products in development

DELIVERABLES

- Final report in powerpoint format
- Complete set of frequency tables, summary statistics and cross-tabulations
- Proprietary slide deck and frequency tables
 - Clients purchasing prior to fielding will have the opportunity to include up to three proprietary questions in each wave
 - Responses to proprietary questions will be provided only to those sponsors and will not be included in the syndicated version of the report but provided under separate cover

REPORT DATES

Wave	Date comments/proprietary questions are due	Field date	Publication date
1	February 11, 2011	February 24, 2011	March 31, 2011
2	May 13, 2011	May 26, 2011	June 30, 2011
3	August 12, 2011	August 26, 2011	September 30, 2011
4	November 7, 2011	November 18, 2011	December 30, 2011

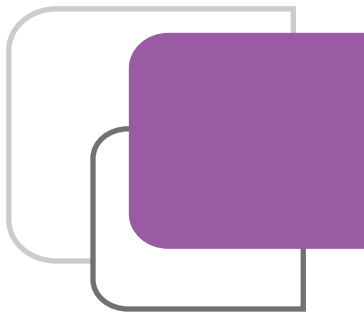


TABLE OF CONTENTS

- Introduction..... 4
 - Background and Objectives
 - Design and Method
 - Market News

- Executive Summary..... 13

- Market Overview..... 25
 - Dialysis Patients: Prevalence by Modality
 - Prevalent Hemodialysis Patient Demographics
 - Nephrologist Practice Demographics and Patient Load
 - Pre-Dialysis Care
 - Relative Danger in CKD-ND and Dialysis
 - Perceived Need for New Therapies
 - New Therapies in Development
 - Use of ACEs and ARBs in CKD-ND
 - Bardoxolone: Familiarity, Interest, Appropriate Patients
 - Organizational Memberships and ASN Attendance
 - Anticipated Changes in 2011
 - Acceptance of Generics

- Renal Anemia Overview..... 53
 - Thought Leaders
 - Recent Changes in Anemia Management
 - Order of Anemia Agent Initiation in CKD-ND
 - Anemia Agent Perceived Brand Interchangeability

- ESA Market..... 59
 - Treatment Prevalence Over Time by Patient Type
 - Recent ESA Protocol Changes
 - Hemoglobin Initiation and Hold Levels Over Time
 - ESA Dosing Frequency
 - ESA Administration in CKD-ND
 - ESA Stocking in Nephrology Offices
 - Impact of Managed Care on ESA Use
 - ESA Method of Administration in Hemodialysis Patients
 - ESA Market Share Over Time by Patient Type
 - Representative Contact Rates and Message
 - Overall Satisfaction with ESA Brands
 - ESA Attribute Importance (Stated vs. Derived) and Brand Perception
 - Safety Concerns with ESAs
 - Familiarity and Impact of TREAT
 - Awareness of New ESAs in Development
 - Familiarity with and Interest in Hematide
 - Familiarity with and Interest in HIF Inhibitors

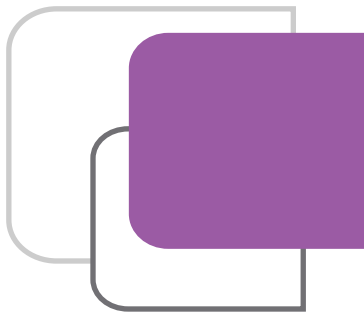


TABLE OF CONTENTS

- IV Iron Market..... 90
 - Treatment Prevalence Over Time by Patient Type
 - Recent IV Iron Protocol Changes
 - IV Iron Stocking in Nephrology Offices
 - IV Iron Administration in CKD-ND
 - Impact of Managed Care on IV Iron Use
 - IV Iron Dosing
 - IV Iron Market Share Over Time by Patient Type
 - Unaided Awareness of New Information about Feraheme
 - Representative Contact Rates and Message
 - Overall Satisfaction with IV Iron Brands
 - IV Iron Attribute Importance (Stated vs. Derived) and Brand Perception
 - Safety Concerns with IV Iron
 - Familiarity with and Interest in Soluble Ferric Pyrophosphate

- Bone and Mineral Metabolism Overview..... 125
 - Thought Leaders
 - Unaided Awareness of New Information
 - KDIGO CKD-MBD Guideline: Awareness, Perceptions, and Influence
 - Order of Bone and Mineral Metabolism Agent Initiation in CKD-ND

- Phosphate Binder Market..... 134
 - Treatment Prevalence Over Time by Patient Type
 - Beliefs about Hyperphosphatemia
 - Reasons Phosphorus is Difficult to Control
 - Phosphorus Level at Binder Initiation in CKD-ND and Dialysis
 - Combination Therapy
 - Phosphate Binder Market Share Over Time by Patient Type
 - Phosphate Binder Formulation Preference
 - Preferred First Line Binder
 - Representative Contact Rates and Message
 - Overall Satisfaction with Phosphate Binders
 - Phosphate Binder Attribute Importance (Stated vs. Derived) and Brand Perception
 - Concerns with Phosphate Binders
 - Perceived Brand Interchangeability
 - Familiarity with FGF-23

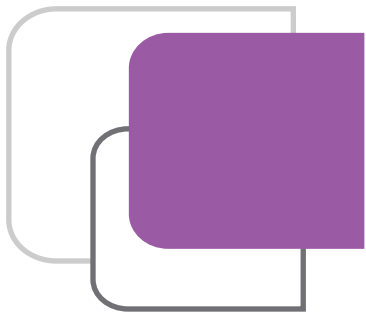


TABLE OF CONTENTS

- PTH Modifier Market..... 165
 - Nutritional Vitamin D Treatment Prevalence Over Time by Patient Type
 - Measurement of 25D Levels
 - Active Vitamin D Treatment Prevalence Over Time by Patient Type
 - Perceived Need for Active Vitamin D
 - Frequency of PTH Measurement
 - Active Vitamin D Market Share Over Time by Patient Type
 - Reaction to DaVita Formulary Change
 - Active Vitamin D Formulation (IV vs. Oral) in Hemodialysis
 - Representative Contact Rates and Message
 - Overall Satisfaction with PTH Modifiers
 - PTH Modifier Attribute Importance (Stated vs. Derived) and Brand Perception
 - Perceived Brand Interchangeability
 - Sensipar Treatment Prevalence Over Time by Patient Type
 - Sensipar Use Dynamics

- Appendix..... 194