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Disease Intelligence
ThoughtLeader Insight

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Immediate Impact of ASH 2013 on the Treatment of Multiple Myeloma

Complimentary Report

Impact of 55th ASH Annual Meeting on the Treatment of Multiple Myeloma

Source: **MDoutlook ® Global OncoPoll™ Survey**

Sample Size: 126
Fielded: December 2013

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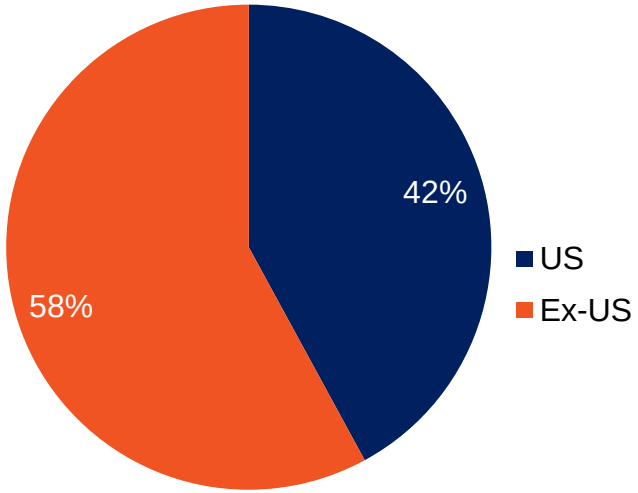
Global Response from 26 Countries and 126 Respondents

26 Countries

US	53
France	6
Germany	10
Italy	9
Spain	6
UK	4
Rest of Europe (ROE)	27
Rest of World	11
Total	126

n=126



ROE

- Austria, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Greece, Hungary, Netherlands, Norway, Portugal, Romania, Serbia, Slovenia, Sweden, Turkey

ROW

- Argentina, Australia, Chile, China, Egypt, Japan, Jordan, Russia, Yemen

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma
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Executive Summary

-Survey was fielded 2 days post-55th Annual ASH Meeting to gauge physician outlook on impact of new information on the treatment of multiple myeloma

-Survey sent to MDoutlook network of 12k verified and validated hematology treaters from over 37 countries

-This was an independently run MDoutlook activity; no honorarium provided

Patient Flow

- Nearly even distribution of newly diagnosed patients and relapsed refractory patients seen by US and Ex-US respondents
  - Large difference in proportion of transplant ineligible patients in Ex-US versus US may be due to strict requirement for transplant in Ex-US countries

Lenalidomide Maintenance Therapy

- US respondents plan to increase lenalidomide maintenance therapy by 28% for their transplant ineligible patients, usage in post-transplant patients will decrease by 29%
- Ex-US respondents plan to increase lenalidomide usage for transplant ineligible patients by 55% in the next 12 months, usage in post-transplant patients will increase by 11%

New Therapies in Multiple Myeloma

- Both US and Ex-US respondents rated the impact of carfilzomib higher than the impact of filanesib for the treatment of multiple myeloma patients
- Filanesib impact rating is relatively high for a therapy in phase II clinical trials

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma
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Survey Respondent Characteristics and Patient Flow

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma
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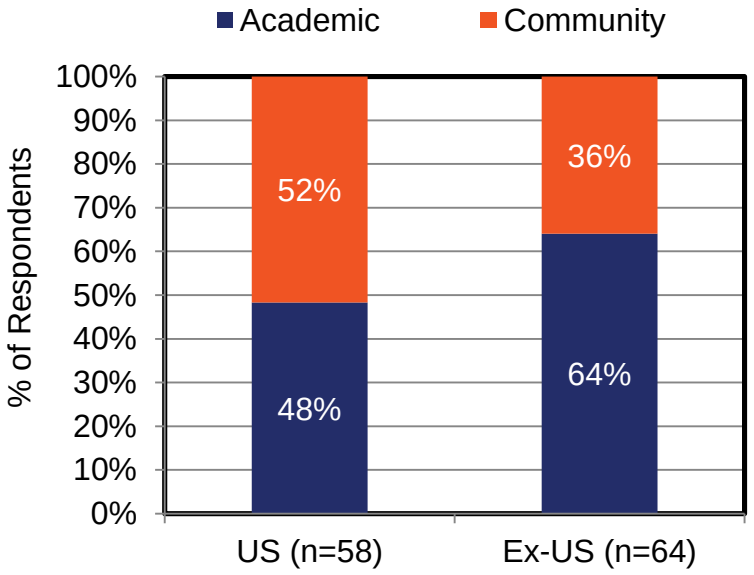
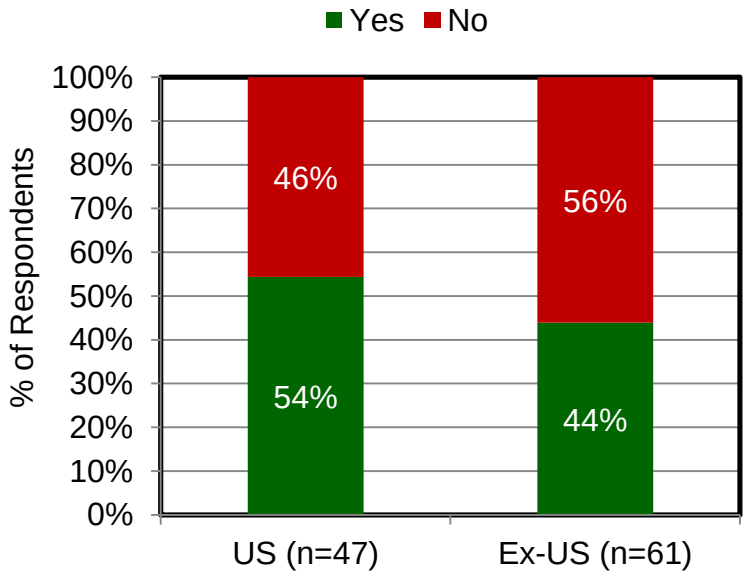
Respondent Practice Classification and Meeting Attendance: Higher Attendance Amongst US Respondents Than Ex-US

Practice Classification



ASH Attendance



Key Conclusions

- More US respondents practiced in community settings rather than academic ones. Majority attended the ASH annual meeting
- Respondents outside the US (Ex-US) had a 2:1 split between academic and community settings. 44% of Ex-US respondents attended the ASH annual meeting

Survey Question: How would you classify your practice setting?
Did you attend the 55th ASH Annual Meeting in New Orleans, LA?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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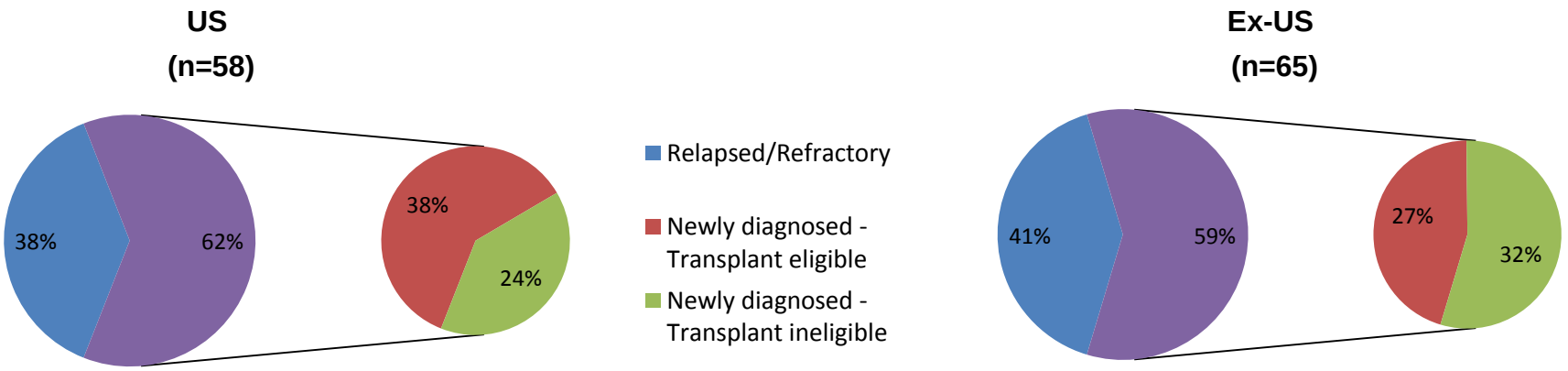
Multiple Myeloma Patient Flow: Newly Diagnosed Multiple Myeloma Patients Represent Largest Proportion for US and Ex-US

Distribution of Multiple Myeloma Patients



Key Conclusions

- Nearly even distribution of newly diagnosed patients and relapsed refractory patients seen by US and Ex-US respondents
  - Large difference in proportion of transplant ineligible patients in Ex-US versus US may be due to strict requirement for transplant in Ex-US countries

Survey Question: In the past 12 months, how many patients with Multiple Myeloma have you personally treated?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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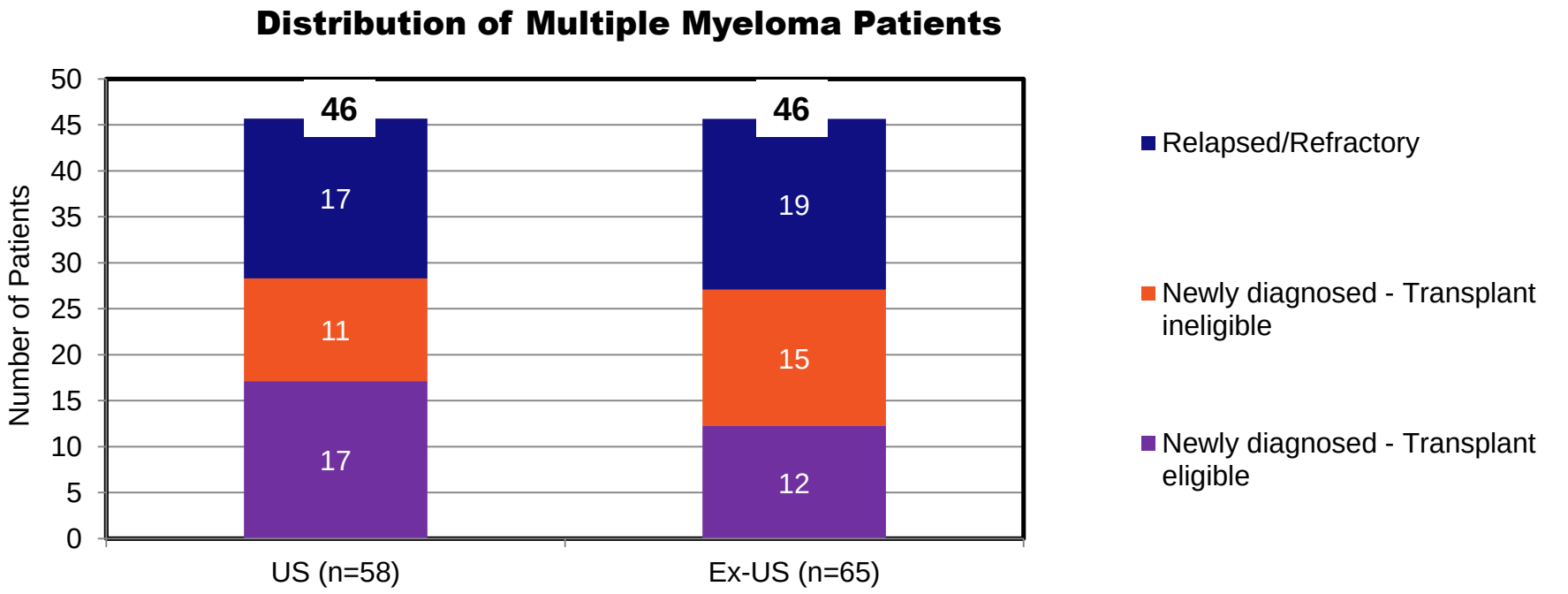
Multiple Myeloma Patient Flow: US and Ex-US Respondents Treat Same Number of Multiple Myeloma Patients with Similar Breakdown



Key Conclusions

- US and Ex-US respondents averaged 46 patients in past 12 months
  - Us respondents reported treating greater numbers of transplant eligible patients than Ex-US respondents

Survey Question: In the past 12 months, how many patients with Multiple Myeloma have you personally treated?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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Impact of FIRST and IFM 2005-02 Clinical Trials on Lenalidomide Maintenance Therapy

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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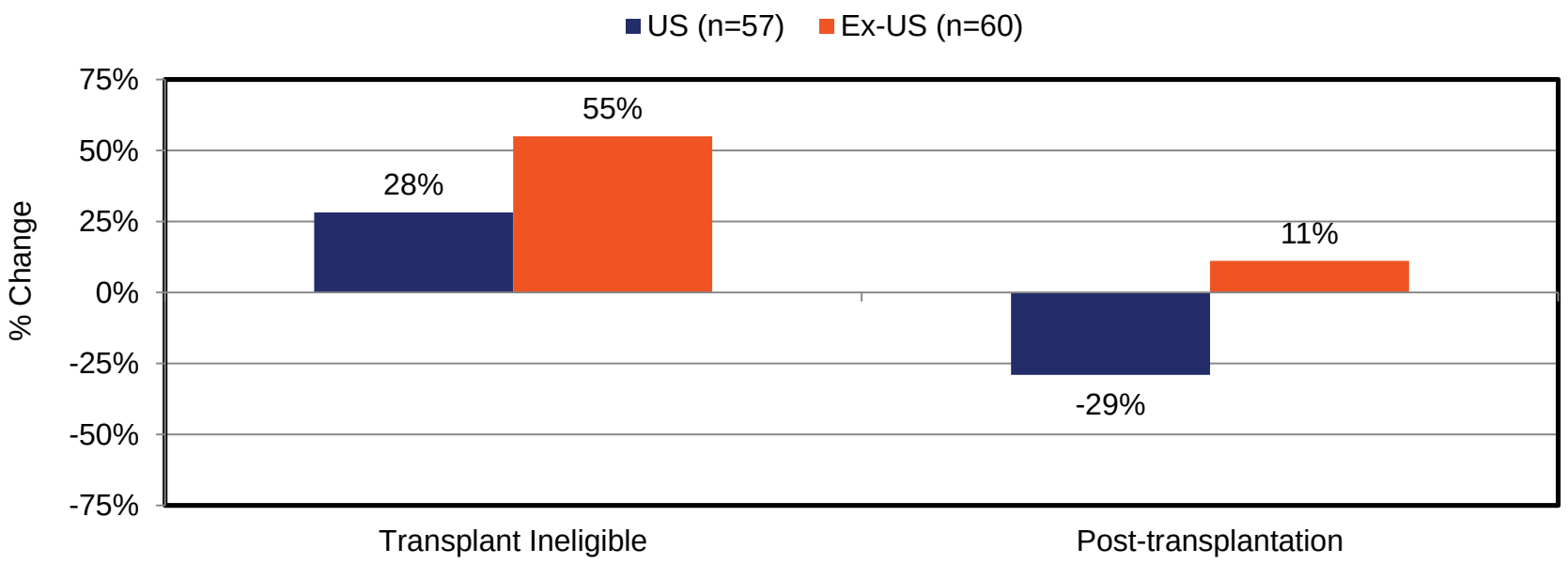
Lenalidomide Maintenance Therapy: Significant Increase Expected in Transplant Ineligible Patients

Change in Lenalidomide Usage



Key Conclusions

- US respondents plan to increase lenalidomide maintenance therapy by 28% for their transplant ineligible patients, usage in post-transplant patients will decrease by 29%
- Ex-US respondents plan to increase lenalidomide usage for transplant ineligible patients by 55% in the next 12 months, usage in post-transplant will increase by 11%

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma
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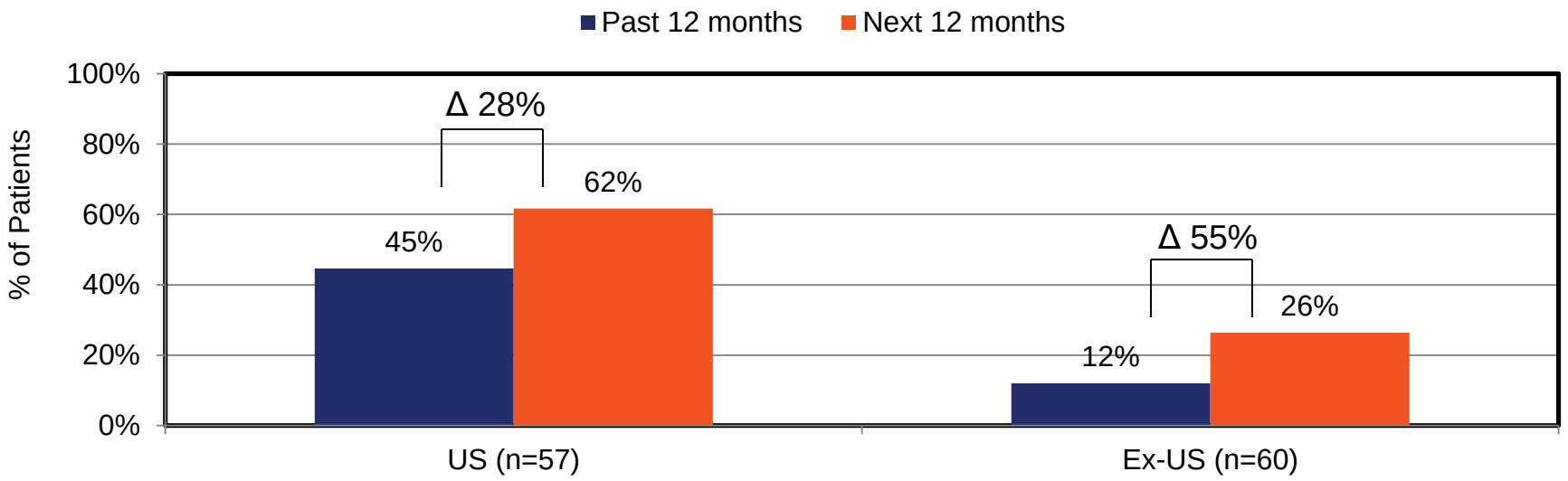
Lenalidomide Maintenance Therapy: US and Ex-US Respondents Will Increase Lenalidomide Maintenance for Transplant Ineligible Patients

Impact of FIRST Trial on Lenalidomide Maintenance for Transplant Ineligible Newly Diagnosed Multiple Myeloma Patients



Key Conclusions

- 45% of newly diagnosed transplant ineligible patients in the US received lenalidomide treatment
  - Only 12% of patients treated by Ex-US respondents received lenalidomide treatment in past 12 months
- Both US and Ex-US treaters plan to increase their usage of lenalidomide in the next 12 months
  - 62% of patients in the US and 26% of Ex-US patients (data indicates more room for potential growth in Ex-US)

Survey Question: In the PAST 12 months what proportion of your newly diagnosed, transplant ineligible multiple myeloma patients have you placed on lenalidomide maintenance therapy? Based on all currently available data, what proportion of these patients do you expect to place on lenalidomide maintenance therapy in the NEXT 12 months?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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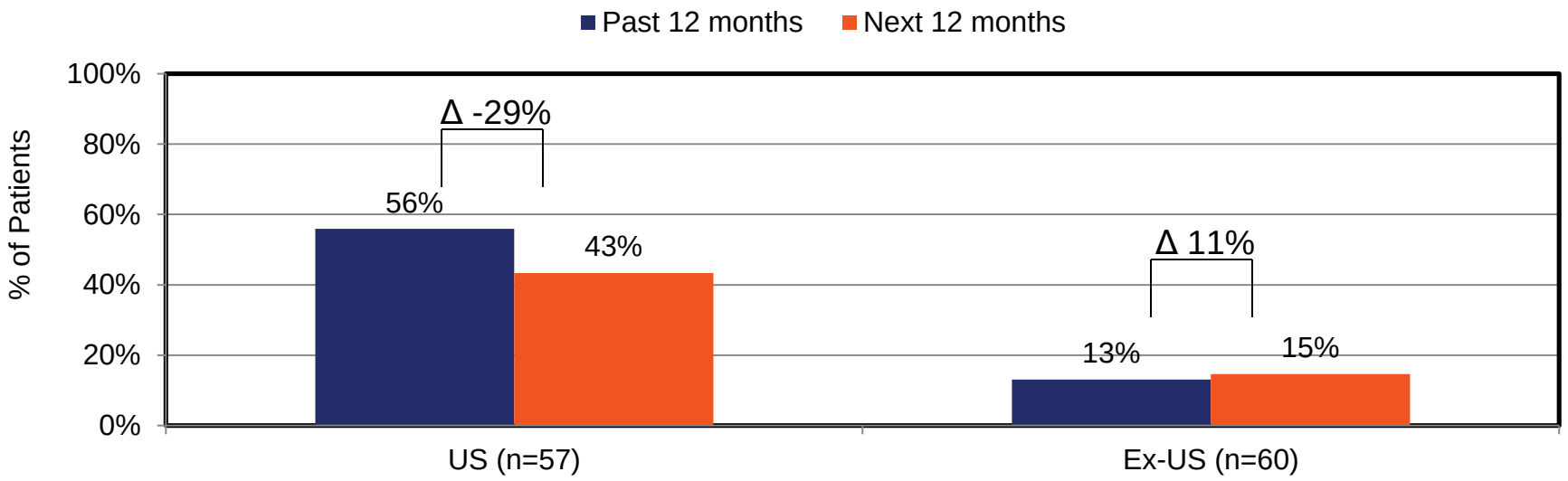
Lenalidomide Maintenance Therapy: US Respondents Will Decrease Lenalidomide Maintenance for Patients Following Stem Cell Transplant

Impact of IFM 2005-02 Trial on Lenalidomide Maintenance for Patients Following Stem Cell Transplant



Key Conclusions

- 56% of patients, who received stem cell transplant, in the US received lenalidomide treatment in past 12 months
  - 13% of patients, who received stem cell transplant, treated by Ex-US respondents received lenalidomide treatment
- Only US respondents plan to decrease usage of lenalidomide maintenance therapy for these patients

Survey Question: In the PAST 12 months what proportion of post-transplantation multiple myeloma patients have you placed on lenalidomide maintenance therapy? Based on all currently available data, what proportion of these patients do you expect to place on lenalidomide maintenance therapy in the NEXT 12 months?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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Impact of New Therapies on Multiple Myeloma Treatment

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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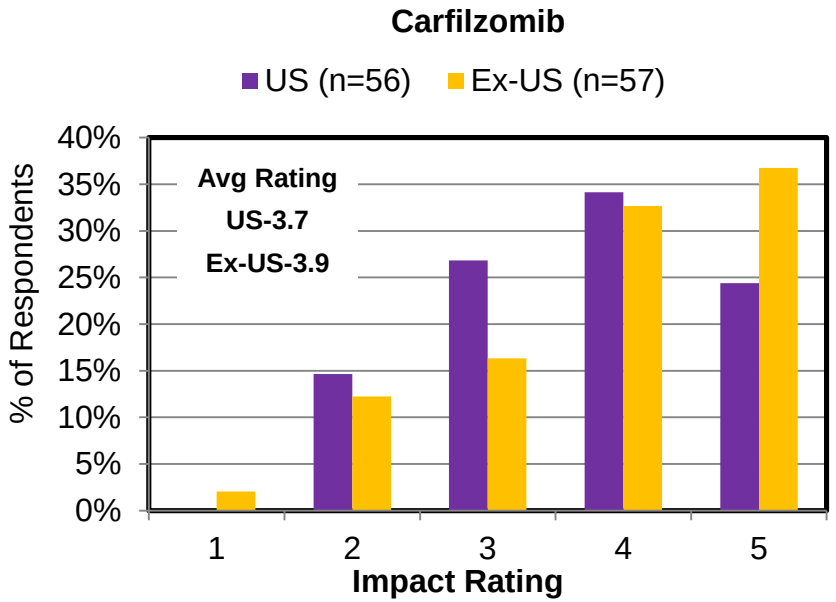
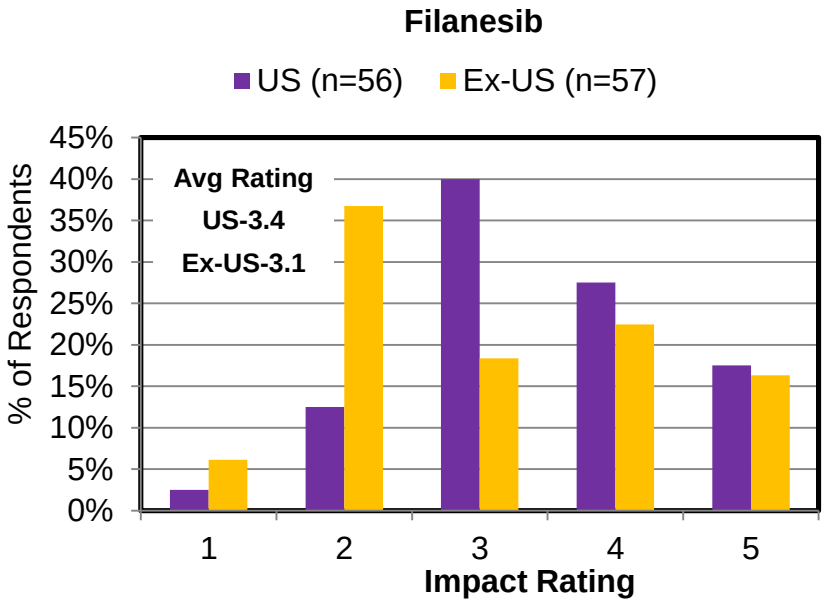
New Therapies: Both Carfilzomib and Filanesib Expect To Have Large Impact on the Treatment of Multiple Myeloma

Impact of New Therapies





Key Conclusions

- Both US and Ex-US respondents rated the impact of carfilzomib higher than the impact of filanesib for the treatment of multiple myeloma patients
- Filanesib impact rating is relatively high for a therapy in phase II clinical trials
  - Over 40% of US and Ex-US rated filanesib 4 or 5

Survey Question Based on the reported data how impactful do you think carfilzomib and filanesib will be for patients with multiple myeloma? (Please rate 1=No impact to 5=Great impact)

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma
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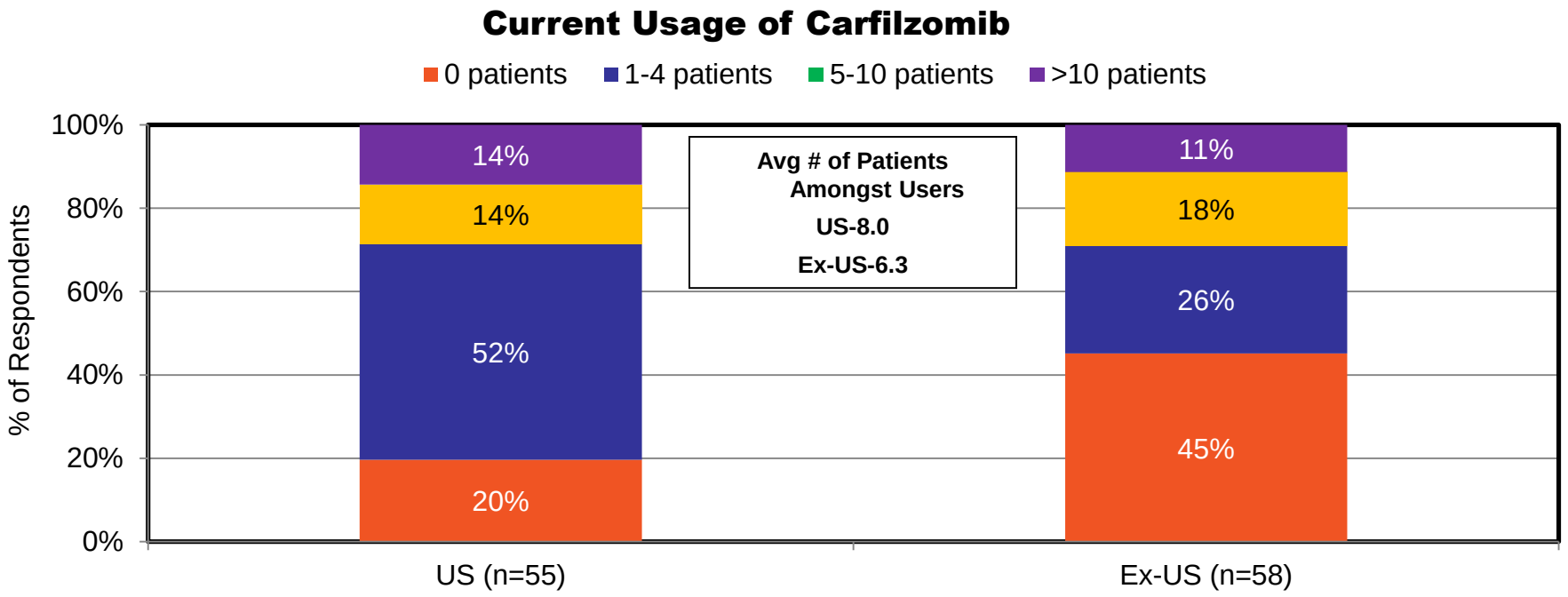
New Therapies: US Respondents Report Higher Usage of Carfilzomib than Ex-US Counterparts



Key Conclusions

- Overall usage of carfilzomib, in the past 3 months, was higher in the US than Ex-US. 80% of US respondents have used carfilzomib
  - 19% of US respondents and 53% of Ex-US respondents reported not using carfilzomib in the past 3 months (large difference in non-usage may be attributable to many Ex-US respondents not having access)

Survey Question If Carfilzomib is available to you, how many multiple myeloma patients with relapsed/refractory disease have you place on Carfilzomib treatment in the past 3 months?

Source: MDoutlook: ASH 2013 OncoPoll on Multiple Myeloma

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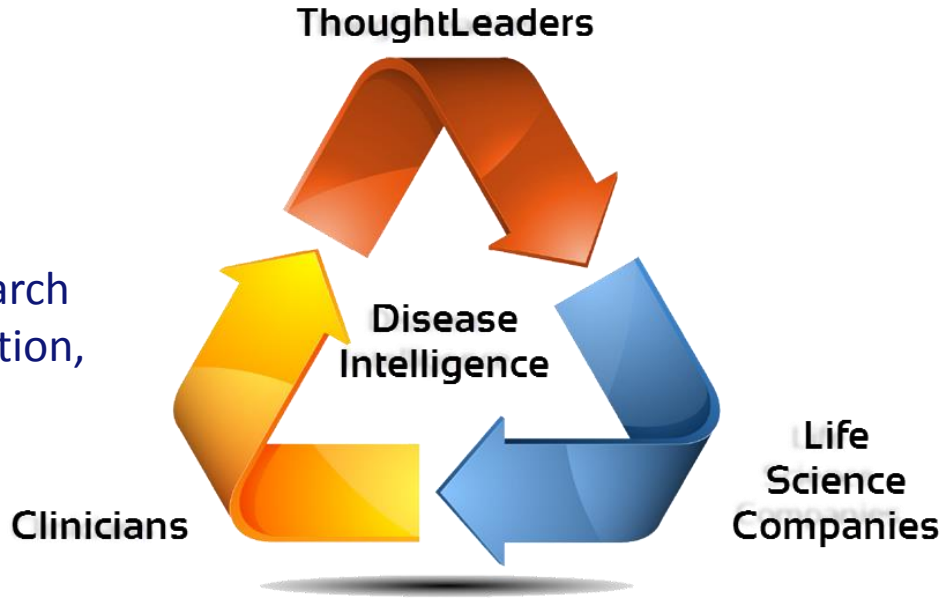
Providing deep insight customized to your specific needs

- Governed by ThoughtLeaders
- Driven by in-house disease experts
- Powered by access to proprietary network of treaters
- Integrated, delivered with speed and efficiency

Solutions

- Disease intelligence & market research
- Treater & ThoughtLeader identification, influence mapping and profiling
- Physician engagement
- Strategy development



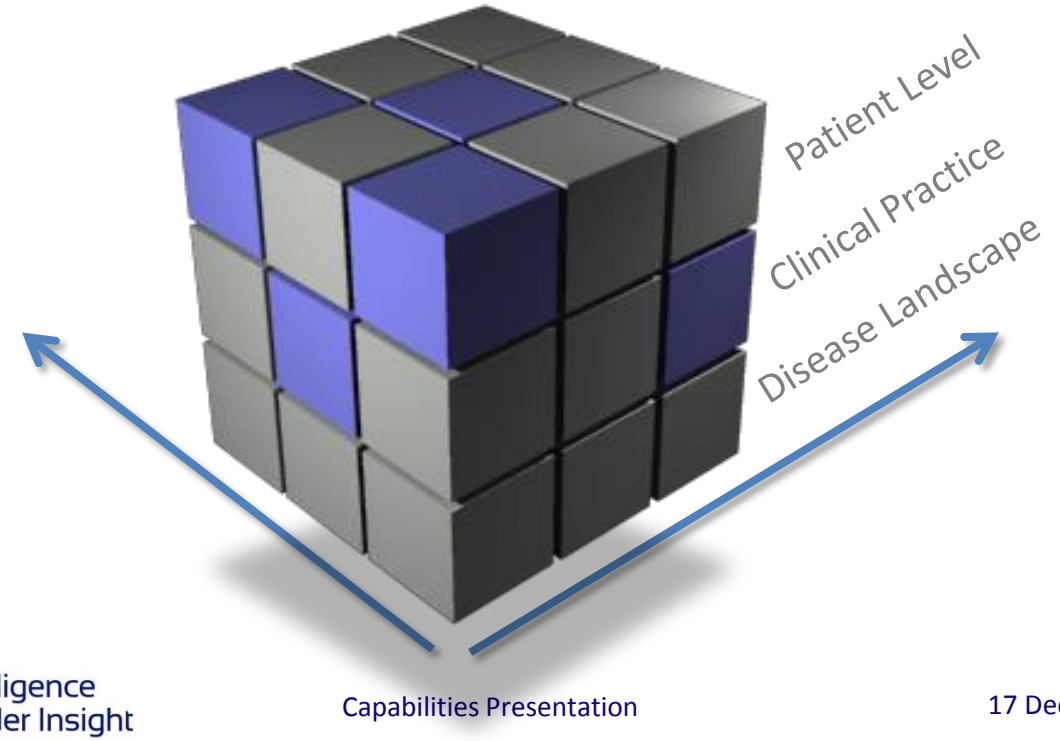
Disease Intelligence Redefined

Providing deep insight and solutions customized to your specific needs

- Covering all business drivers
- Capturing at relevant levels of treatment
- Global disease and regional coverage

Business Drivers

- Treatment Drivers
- Diagnostics
- ThoughtLeader Identification
- Disease Landscape
- Treater Engagement
- ThoughtLeader Engagement
- And more



Specialty Diseases

- Focus on complex issues
- Strong presence in:
  - Cancer
  - Immunology
  - Niche diseases

All Regions

- USA
- EU
- BRIC
- RoW

MDoutlook Value

Unique platform delivering a comprehensive intelligence:

- WHO are the disease specific ThoughtLeaders and treaters that have the greatest impact on your success
- WHAT treatment decisions are being made with current products and what are attitudes towards current and pipe-line products
- WHEN are specific decisions being made - by stage, line, drug, dose, formulation & duration
- WHERE are centers of excellence (both community & academic) and key community practices
- WHY are specific treatment decisions being made / attitudes being formed

MDoutlook = ACTIONABLE DISEASE INSIGHT

Governed by Independent ThoughtLeaders

- Approach was developed with direct input from physicians
- Experts provide insight into disease area and analysis
- Ensure direct and clinical relevance of intelligence provided
- Multi-disciplinary composition
- Current ThoughtLeader Advisers include:

Lauren Pinter Brown, MD

Alexander Eggermont, MD, PhD

Keith Flaherty, MD

William Gradishar, MD

Axel Hauschild, MD

Peter Heald, MD

John Kirkwood, MD

Peter Mohr, MD

Suresh Ramalingam, MD

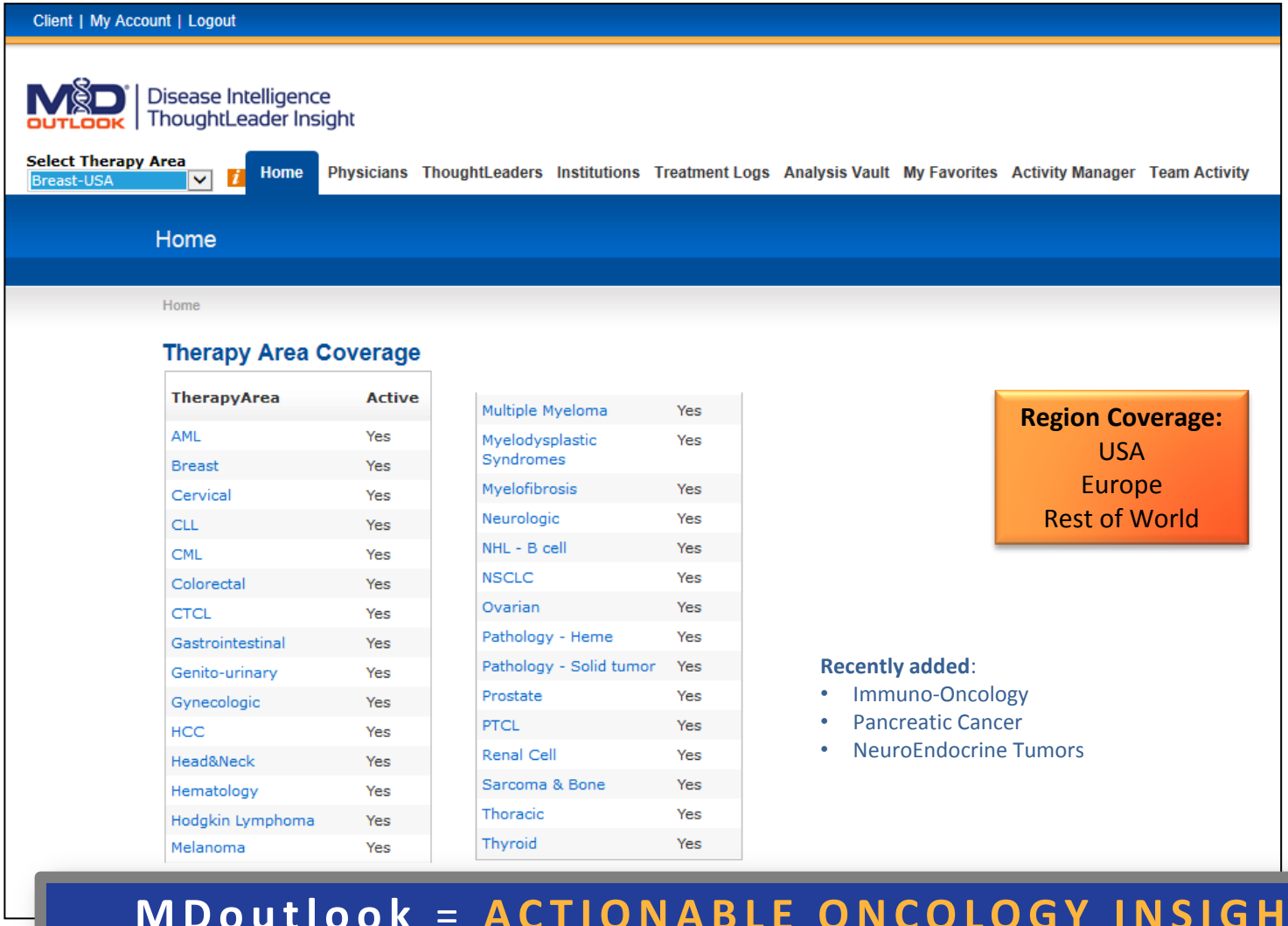
Caroline Robert, MD, PhD

Joyce O'Shaughnessy, MD

Orlando Silva, MD, JD

Nicholas Thatcher, MD, PhD

MDoutlook – Global Oncology Coverage



Therapy Area Coverage

TherapyArea	Active
AML	Yes
Breast	Yes
Cervical	Yes
CLL	Yes
CML	Yes
Colorectal	Yes
CTCL	Yes
Gastrointestinal	Yes
Genito-urinary	Yes
Gynecologic	Yes
HCC	Yes
Head&Neck	Yes
Hematology	Yes
Hodgkin Lymphoma	Yes
Melanoma	Yes
Multiple Myeloma	Yes
Myelodysplastic Syndromes	Yes
Myelofibrosis	Yes
Neurologic	Yes
NHL - B cell	Yes
NSCLC	Yes
Ovarian	Yes
Pathology - Heme	Yes
Pathology - Solid tumor	Yes
Prostate	Yes
PTCL	Yes
Renal Cell	Yes
Sarcoma & Bone	Yes
Thoracic	Yes
Thyroid	Yes

Region Coverage:
USA
Europe
Rest of World

Recently added:
- Immuno-Oncology
- Pancreatic Cancer
- NeuroEndocrine Tumors

MDoutlook = ACTIONABLE ONCOLOGY INSIGHT

Multi-Channel Intelligence Assets

- Uses proprietary on-line network to engage physicians – guided by ThoughtLeaders
- Physicians are targeted by a wide range of criteria, including medical specialty, clinical specialty, practice setting (community vs. academic) geographic location (including country, region, city), institution
- All physician screening and validation is performed within the system

Unique and Valuable Data Bank

75,000+
Global Cancer* Treater Profiles

230+
Research Studies

5,000+
ThoughtLeader Profiles

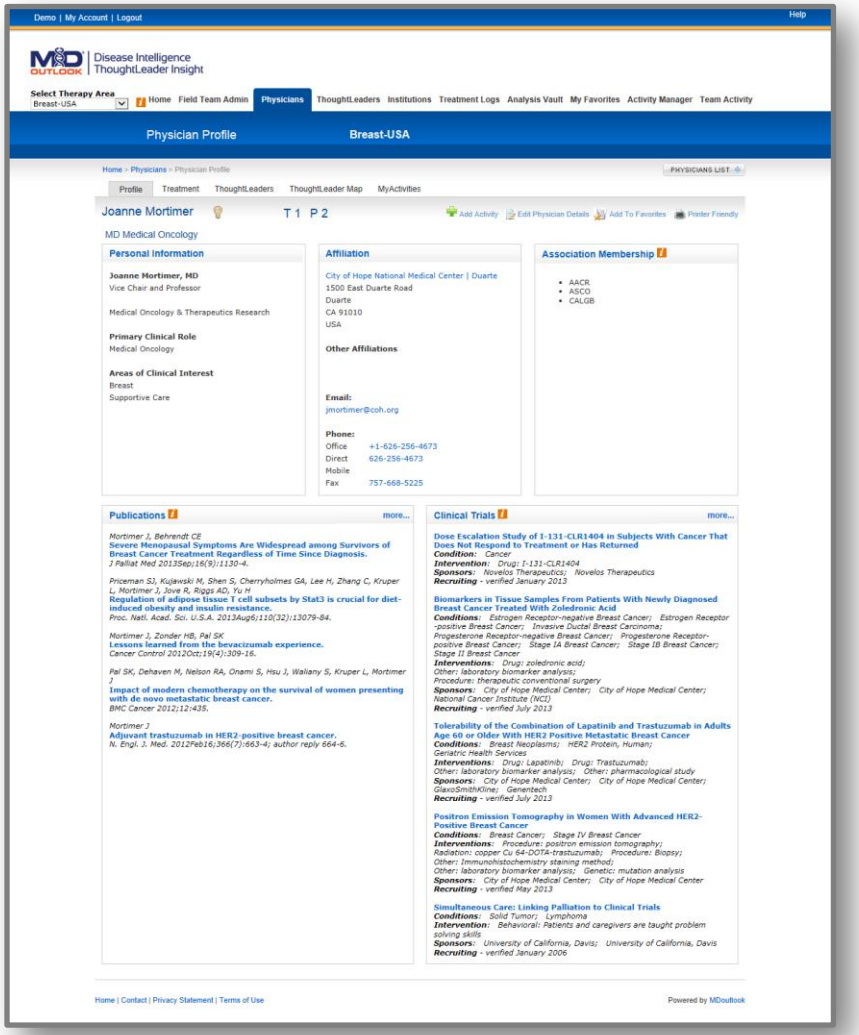
22,500+
Completed Responses

10,000+
Patient Treatment Log Decisions

** Now expanding into other complex diseases with dbase of 1M+ Treater Profiles*

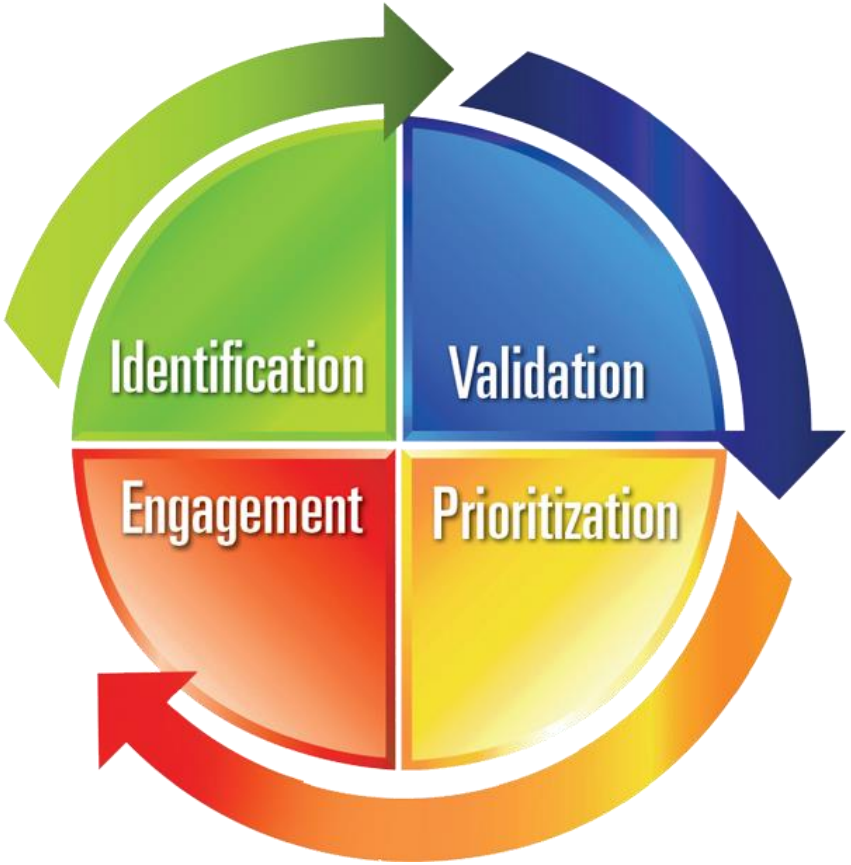
Superior Targeting of Treaters

- **Covers 1M+ treaters globally**
  - Multi-disciplinary composition
- **Rich individual profiles for clinicians, ThoughtLeaders, Institutions - updated 2x/year**
- **Disease-specific treatment profile available per treater**
- **Real-time intelligence feeds**



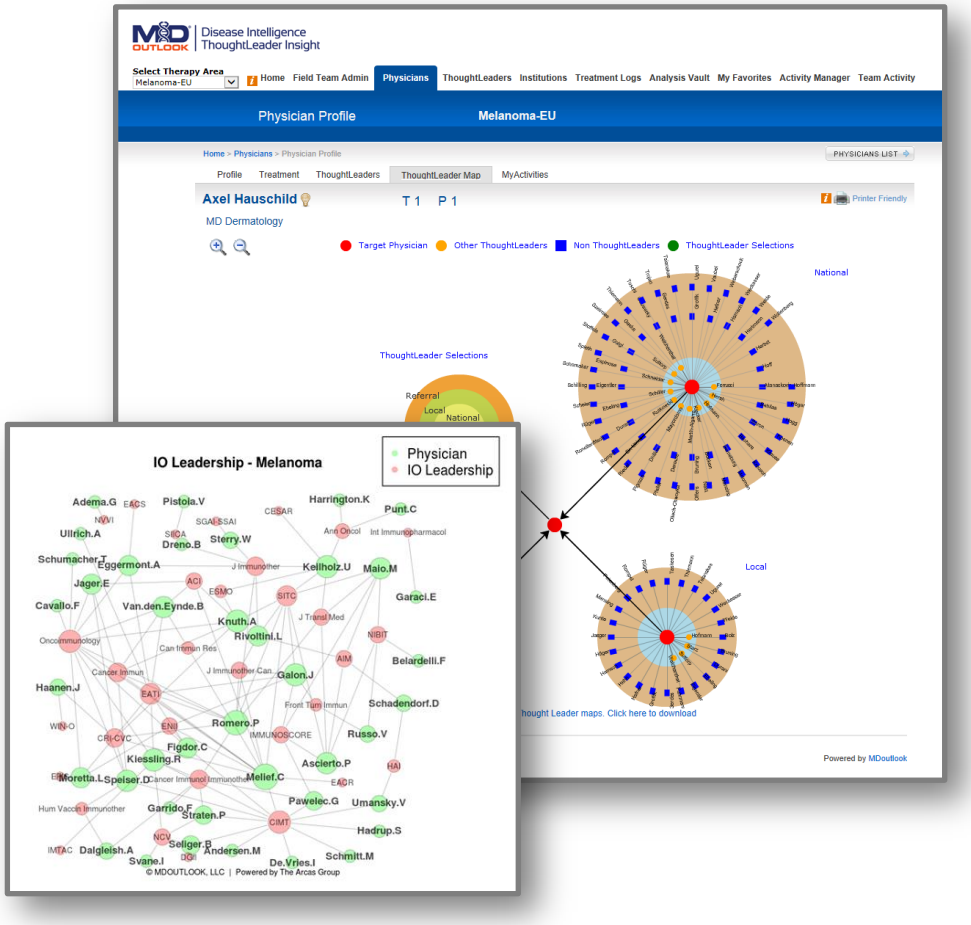
Delivering Comprehensive ThoughtLeader Insight and Engagement

Exclusive MDoutlook ThoughtLeader **Attribute Dial™**



Market-driven ThoughtLeader Identification & Mapping

- Peer-nominated, bottom-up identification of ThoughtLeaders
- Interactive network mapping at different levels of complexity, providing insight into their real sphere of influence
- Multi-level classification showing national/ international experts, regional experts and referral physicians
- Identifies referral patterns up-to 3 levels deep



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For more information or to schedule a capabilities discussion, please feel free to contact us.