



# The value of IV treatment choice

for moderately to severely active rheumatoid arthritis

Janssen Biotech, Inc.



# Presentation overview

## Disease Burden of RA

Prevalence and characteristics • Economic burden  
• Common comorbidities • Risk of infection

## Role of IV Biologics in the Treatment of RA

Allows for control during administration • Physician perceptions vs  
patient-reported openness to biologic modes of administration •  
Need for multiple effective treatment options in RA • Impact of SQ first policies

## Summary

need something here to allow for consistent structure...  
said "Value overview" at one time



# The value of IV treatment choice

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# Disease Burden of RA

A chronic disease that can greatly impact patients and the healthcare system



Disease Burden of RA

Role of IV Biologics  
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Summary

# RA affects an estimated 1.5 million US adults<sup>1</sup>

## Characteristics of RA

A systemic inflammatory disease that affects the joints, causing **pain, stiffness, and swelling**<sup>2,3</sup>

Commonly appears between the **ages of 30 and 60**<sup>1</sup>

Higher rate of occurrence in **women** than in men<sup>1</sup>

**RA is a chronic, progressive disease characterized by synovial inflammation and can lead to destruction of joint architecture.<sup>2</sup>**



**REFERENCES:** 1. Arthritis Foundation. <http://www.arthritis.org/conditions-treatments/disease-center/rheumatoid-arthritis/>. Accessed June 19, 2014. 2. Goronzy JJ, Weyand, CM. In: Klippel JH, et al, eds. *Primer on the Rheumatic Diseases*. 12th ed. Atlanta, GA: Arthritis Foundation; 2001:209-217. 3. Lee DM, Weinblatt ME. *Lancet*. 2001;358(9285):903-911.



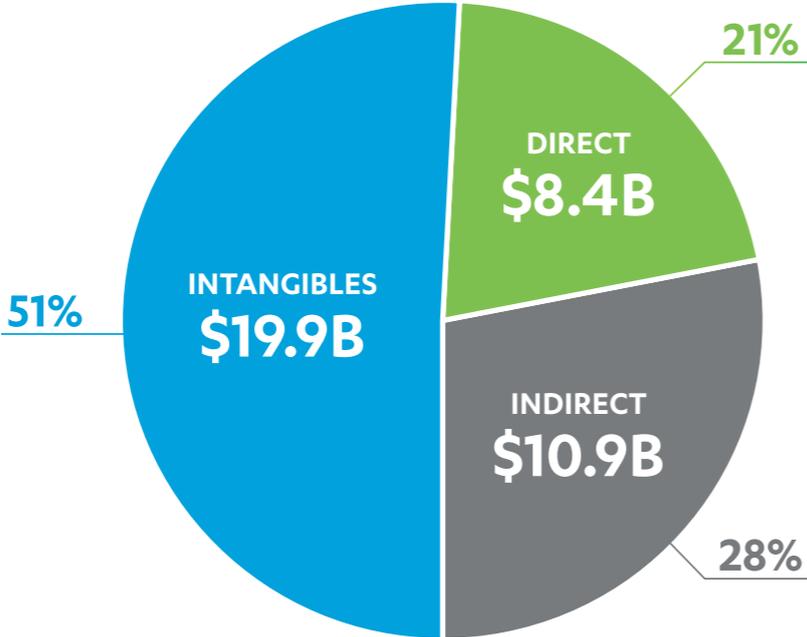
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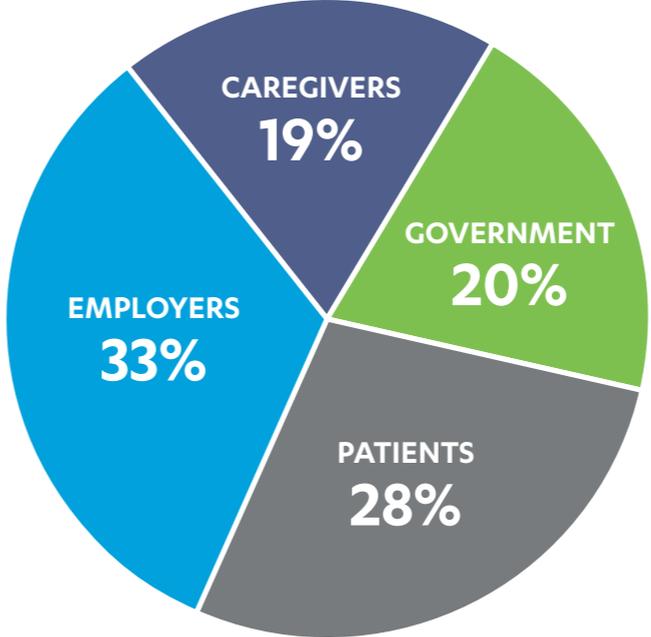
# RA presents a substantial economic burden to our healthcare system

Total societal costs of RA



Total \$39.2 billion<sup>1</sup>

Allocation of costs



**STUDY DESIGN:** Administrative claims databases covering privately insured and Medicare and Medicaid beneficiaries in the US were used to compute the excess payer and beneficiary-paid costs per patient with RA compared with matched controls. Similarly, per-person excess costs for caregivers and uninsured patients with RA were estimated. Costs were estimated for other burdens, including costs of work-loss to employers, adaptations to home and work environments, lost on-the-job productivity, informal and hired care/household help, and job turnover costs. Intangible costs associated with quality-of-life deterioration were estimated based on legal system jury awards, whereas costs for premature mortality were based on lifetime earnings data. Per capita cost estimates were weighted by the relevant population to estimate societal costs. Because data were incomplete, several assumptions were required; these assumptions could lead to an over- or under-estimation of cost burdens.

**REFERENCE: 1.** Birnbaum H, Pike C, Kaufman R, et al. Societal cost of rheumatoid arthritis patients in the U.S. *Curr Med Res Opin.* 2010;26(1):77-90.



# Patients with RA are at increased risk of developing comorbidities

A large cross-sectional, multicenter study of 3920 patients with RA found a high prevalence of comorbidities<sup>1\*</sup>

## Common Comorbidities in Patients With RA<sup>1</sup>

**COPD**

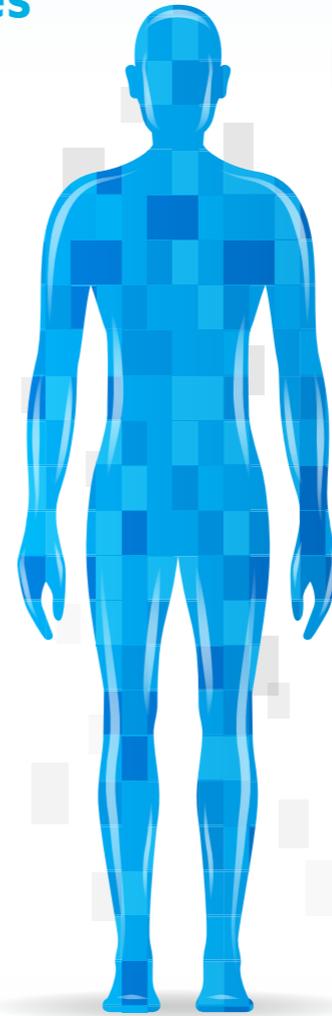
**Asthma**

**Solid malignancies**

**Gastrointestinal ulcers**

**Cardiovascular events**

**Depression**



There was also a high prevalence of risk factors for cardiovascular disease<sup>1</sup>

COPD = chronic obstructive pulmonary disease.

\*One of the objectives of this study was to evaluate variability in the prevalence of comorbidities and their risk factors. A total of 4586 adult patients were recruited by investigators in the 17 participating countries between 2011 and 2012.

**REFERENCE:** Dougados M, et al. *Ann Rheum Dis.* 2014;73(1):62-68.



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# Role of IV Biologics in the Treatment of Moderately to Severely Active RA

An important option for patients, providers, and health plans



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# As a treatment option, IV therapy allows for control during administration



Administered in a clinically controlled environment in the **presence of a healthcare professional**



Close monitoring allows **hands-on management** and control during administration



Provides opportunity to **observe patient progress** when administered in a physician's office



Regularly scheduled infusion appointments may help HCPs know that treatment was **received on schedule**



**One-on-one interaction** with patients can help create a positive infusion experience



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## SURVEY OVERVIEW

# Openness to Dosing and Administration Attributes of Biologic Therapy: Patient and Prescriber Perspectives

This survey sought to:

**Assess** bio-naïve RA patient's openness to dosing and administration attributes of biologic therapy

**Evaluate** prescriber perceptions of patient openness to dosing and administration attributes of biologic therapy

**Compare** prescriber perceptions to actual RA patient openness

	Patient Survey	Prescriber Survey
Data Collection	~30 minute, self-administered, Internet-based questionnaire Surveys conducted from 01/2013 to 03/2013	~15 minute, self-administered, Internet-based questionnaire Surveys conducted from 12/2012 to 01/2013
Sample	243 US adults (aged ≥18 years), diagnosed with RA, currently treated by a rheumatologist, currently taking DMARDs, and with no history of biologic use but have discussed biologics with their physician	103 board certified rheumatologists, practicing for 2-25 years, who spent >50% of their time in a clinical setting seeing ≥50 RA patients per month, not employed by or consultants to pharmaceutical companies, and not government employees

**REFERENCE: 1.** Bolge SC, et al. Openness to and Preference for Biologic Therapy Among Patients With Rheumatoid Arthritis Prior to Biologic Initiation: Patient and Prescriber Perspectives. [Poster] Presented at American Association of Nurse Practitioners. 28th National Conference, Las Vegas, NV. June 19-23, 2013



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## SURVEY OVERVIEW

# Openness to Dosing and Administration Attributes of Biologic Therapy: Patient and Prescriber Perspectives

### MODE OF ADMINISTRATION

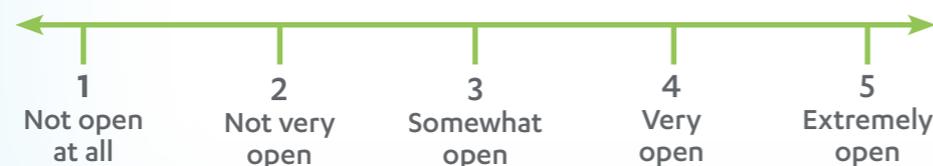
## Patient Openness:

Patients were asked two separate questions<sup>1</sup>:

How open are you to having your RA medication administered through IV by an HCP if your Rheumatologist suggested it?

How open are you to having your RA medication administered at home by self-injection if your Rheumatologist suggested it?

	IV	SC
Open to IV Only	3-5	1-2
Open to SC Only	1-2	3-5
Open to both IV and SQ	3-5	3-5
Open to Neither	1-2	1-2



**REFERENCES:** 1. Bolge SC et al. Openness to and Preference for Biologic Therapy Among Patients With Rheumatoid Arthritis Prior to Biologic Initiation: Patient and Prescriber Perspectives. [Poster] Presented at American Association of Nurse Practitioners. 28th National Conference, Las Vegas, NV. June 19-23, 2013. 2. Data on file. Janssen Biotech, Inc.

### MODE OF ADMINISTRATION

## Physician-perceived patient openness:

Physicians were asked:

What percentage of patients would be open to or willing to consider each of the following methods of administration?

Response options were<sup>2</sup>:

### OPEN TO IV ONLY

% open to or willing to consider IV infusion only

### OPEN TO SC ONLY

% open to or willing to consider SC injection only

### OPEN TO IV and SQ

% open to or willing to consider both SC injection and IV infusion

### OPEN TO NEITHER

% not open to or willing to consider SC injection and IV infusion

Means were calculated for each of the above categories.



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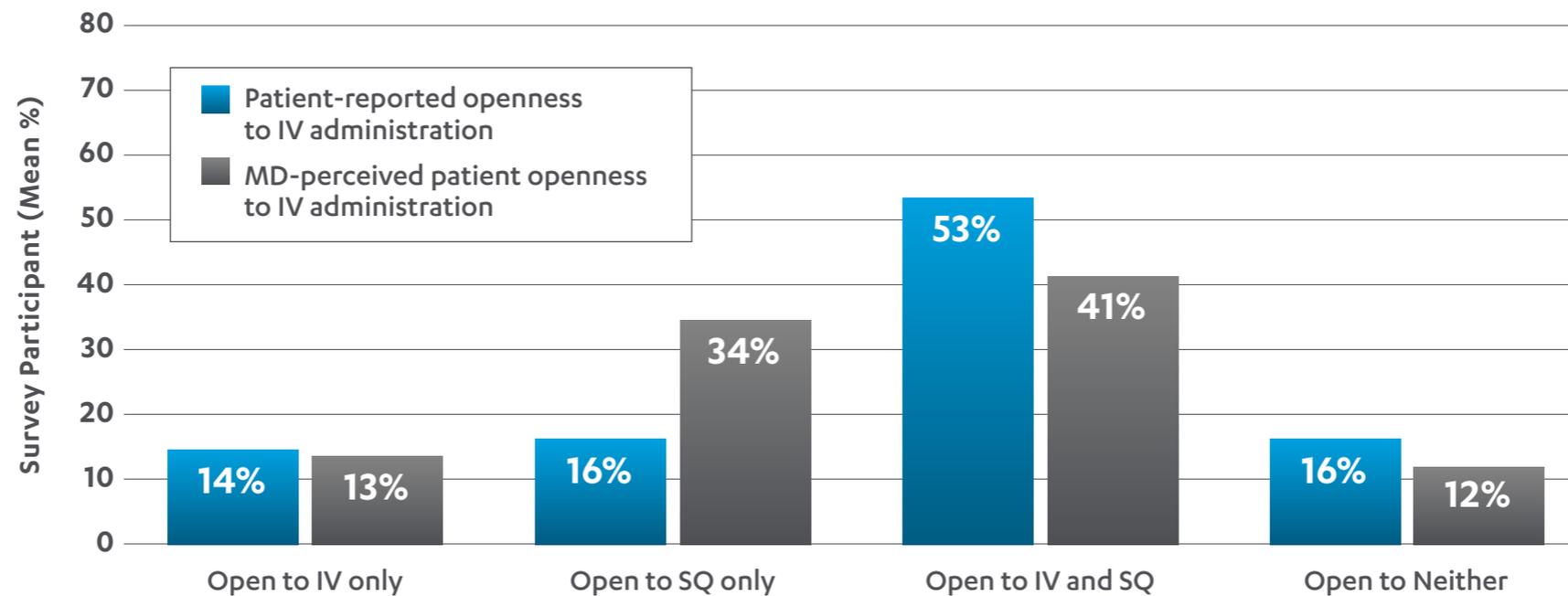
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## SURVEY FINDINGS

# Comparing physician perceptions with patient-reported openness to biologic modes of administration

### Mode of Administration: Patient vs Physician Perceptions<sup>1</sup>



REFERENCE: 1. Bolge SC, et al. Presented at: American Association of Nurse Practitioners 28th National Conference; June 19-23, 2013; Las Vegas, NV.



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# In moderately to severely active RA, health plans provide access to multiple effective treatment options

## Patient response to biologic therapies varies, requiring multiple options<sup>1</sup>

NCQA evaluates health plans on the percentage of patient usage of DMARDs for RA<sup>2</sup>

**HEDIS 2014 Summary Table of Measures, Product Lines<sup>3</sup>**

HEDIS 2014 Measures	Applicable to		
	Commercial	Medicaid	Medicare
<b>EFFECTIVENESS OF CARE</b> Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	✓	✓	✓

**Plans with Health Plan Accreditation may receive up to 4 stars.<sup>4</sup>**

DMARDs = disease-modifying antirheumatic drugs.

**REFERENCES:** 1. Data on file. Janssen Biotech, Inc. 2. National Quality Forum. Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (0054). [http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2014/List\\_of\\_HEDIS\\_2014\\_Measures.pdf](http://www.qualityforum.org/QPS/QPSTool.aspx#qpsPageState={%22TabType%22%3A1,%22TabContentType%22%3A2,%22SearchCriteriaForStandard%22%3A{%22TaxonomyIDs%22%3A[],%22SelectedTypeAheadFilterOption%22%3A{%22ID%22%3A13887,%22FilterOptionLabel%22%3A%22rheumatoid+arthritis%22,%22TypeOfTypeAheadFilterOption%22%3A1,%22TaxonomyId%22%3A0},%22Keyword%22%3A%22rheumatoid+arthritis%22,%22PageSize%22%3A%2225%22,%22OrderType%22%3A3,%22OrderBy%22%3A%22ASC%22,%22PageNo%22%3A1,%22IsExactMatch%22%3Afalse,%22QueryStringType%22%3A%22%22,%22ProjectActivityId%22%3A%220%22,%22FederalProgramYear%22%3A%220%22,%22FederalFiscalYear%22%3A%220%22,%22FilterTypes%22%3A2},%22SearchCriteriaForPortfolio%22%3A{%22Tags%22%3A[],%22FilterTypes%22%3A0,%22PageStartIndex%22%3A1,%22PageEndIndex%22%3A25,%22PageNumber%22%3Anull,%22PageSize%22%3A%2225%22,%22SortBy%22%3A%22Title%22,%22SortOrder%22%3A%22ASC%22,%22SearchTerm%22%3A%22%22},%22ItemsToCompare%22%3A[],%22SelectedStandardIdList%22%3A[],%22StandardID%22%3A1222,%22EntityTypeID%22%3A1}. Accessed September 9, 2014. 3. NCQA. <a href=). Accessed June 27, 2014. 4. NCQA. [http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2014/List\\_of\\_HEDIS\\_2004\\_Measures.pdf](http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2014/List_of_HEDIS_2004_Measures.pdf). Accessed June 27, 2014.



# SQ first policies have not demonstrated decreased use of IV treatments

## Share of Utilization of Infused Biologic Products for ST Plans Were Evaluated vs 3 Cohorts of Varying ST Control\*

### Uncontrolled comparison†

ST policy plans have lower IV share (-5.1%) compared to all other plans

### Partially controlled comparison‡

ST policy plans have greater IV share (+7.0%) compared to matched plans

### Fully controlled comparison§

ST policy plans showed greater IV share (+2.8%) after vs before implementation

**Policies intended to restrict IV therapy may have little impact on the proportion of patients receiving them, and may not be cost-saving to the plan.**

ST = step therapy.

\*The share of utilization of biologic products for 16 plans identified with ST policies were evaluated versus a comparison cohort using three separate methodologies. ST plans were first identified using data from Symphony Health Solutions Corp.'s ProMetis database.

†Compared the percentage of patients with biologic claims for plans with ST policies with all other plans in the database during the same time period (2010).

‡Compared the percentage of patients with biologic claims for plans in 2010 with ST policies with a set of plans matched roughly to the ST plans based on region and relative size.

§Included data from 1/1/2006 through 4/30/2011 for plans with a known ST implementation date (index date) and with available biologic claims within 365 days before and after this index date. This analysis evaluated the period after ST policy implementation to the period before implementation.

**REFERENCE:** Ingham M et al. *Arthritis Rheum.* 2013;65(suppl 10):208



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# Summary

## IV biologic therapy for moderately to severely active RA

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## SUMMARY

# IV therapy is an important treatment option in RA



RA is a chronic disease with a substantial impact on patients, families, and the healthcare system<sup>1</sup>



IV treatment has an important role in the care of patients with RA

As a treatment option, IV therapy allows for **control during administration**

There is a difference between **patient-reported openness** to biologic modes of administration and physician perceptions<sup>2</sup>

Health plan **performance ratings can improve** through access to appropriate treatment<sup>3</sup>

**REFERENCE: 1.** Birnbaum H, Pike C, Kaufman R, et al. Societal cost of rheumatoid arthritis patients in the U.S. *Curr Med Res Opin.* 2010;26(1):77-90. **2.** Bolge SC, et al. Presented at: American Association of Nurse Practitioners 28th National Conference; June 19-23, 2013; Las Vegas, NV. **3.** National Quality Forum. Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (0054). [http://www.qualityforum.org/QPS/QPSTool.aspx#qpsPageState={%22TabType%22%3A1,%22TabContentType%22%3A2,%22SearchCriteriaForStandard%22%3A{%22TaxonomyIDs%22%3A\[\],%22SelectedTypeAheadFilterOption%22%3A{%22ID%22%3A13887,%22FilterOptionLabel%22%3A%22rheumatoid+arthritis%22,%22TypeOfTypeAheadFilterOption%22%3A1,%22TaxonomyId%22%3A0},%22Keyword%22%3A%22rheumatoid+arthritis%22,%22PageSize%22%3A%2225%22,%22OrderType%22%3A3,%22OrderBy%22%3A%22ASC%22,%22PageNo%22%3A1,%22IsExactMatch%22%3Afalse,%22QueryStringType%22%3A%22%22,%22ProjectActivityId%22%3A%220%22,%22FederalProgramYear%22%3A%220%22,%22FederalFiscalYear%22%3A%220%22,%22FilterTypes%22%3A2},%22SearchCriteriaForForPortfolio%22%3A{%22Tags%22%3A\[\],%22FilterTypes%22%3A0,%22PageStartIndex%22%3A1,%22PageEndIndex%22%3A25,%22PageNumber%22%3Anull,%22PageSize%22%3A%2225%22,%22SortBy%22%3A%22Title%22,%22SortOrder%22%3A%22ASC%22,%22SearchTerm%22%3A%22%22},%22ItemsToCompare%22%3A\[\],%22SelectedStandardIdList%22%3A\[\],%22StandardID%22%3A1222,%22EntityTypeID%22%3A1}](http://www.qualityforum.org/QPS/QPSTool.aspx#qpsPageState={%22TabType%22%3A1,%22TabContentType%22%3A2,%22SearchCriteriaForStandard%22%3A{%22TaxonomyIDs%22%3A[],%22SelectedTypeAheadFilterOption%22%3A{%22ID%22%3A13887,%22FilterOptionLabel%22%3A%22rheumatoid+arthritis%22,%22TypeOfTypeAheadFilterOption%22%3A1,%22TaxonomyId%22%3A0},%22Keyword%22%3A%22rheumatoid+arthritis%22,%22PageSize%22%3A%2225%22,%22OrderType%22%3A3,%22OrderBy%22%3A%22ASC%22,%22PageNo%22%3A1,%22IsExactMatch%22%3Afalse,%22QueryStringType%22%3A%22%22,%22ProjectActivityId%22%3A%220%22,%22FederalProgramYear%22%3A%220%22,%22FederalFiscalYear%22%3A%220%22,%22FilterTypes%22%3A2},%22SearchCriteriaForForPortfolio%22%3A{%22Tags%22%3A[],%22FilterTypes%22%3A0,%22PageStartIndex%22%3A1,%22PageEndIndex%22%3A25,%22PageNumber%22%3Anull,%22PageSize%22%3A%2225%22,%22SortBy%22%3A%22Title%22,%22SortOrder%22%3A%22ASC%22,%22SearchTerm%22%3A%22%22},%22ItemsToCompare%22%3A[],%22SelectedStandardIdList%22%3A[],%22StandardID%22%3A1222,%22EntityTypeID%22%3A1}). Accessed September 9, 2014.



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