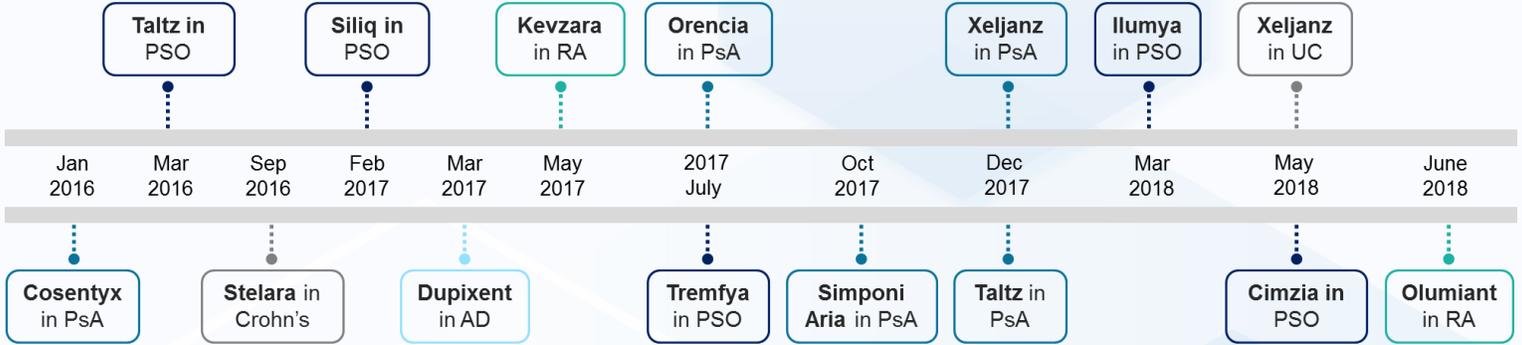


## Cross-Specialty Comparison of the Managed Care Process of Biologic Agents

Spherix's *RealTime Dynamix*™ quarterly offerings span a variety of autoimmune indications, allowing for cross-specialty comparisons and launch benchmarking. Each series tracks every major biologic/small molecule launch for the first 18 months in the market.

Timeline of Approval Dates of Recent Market Entrants Across Indications\*

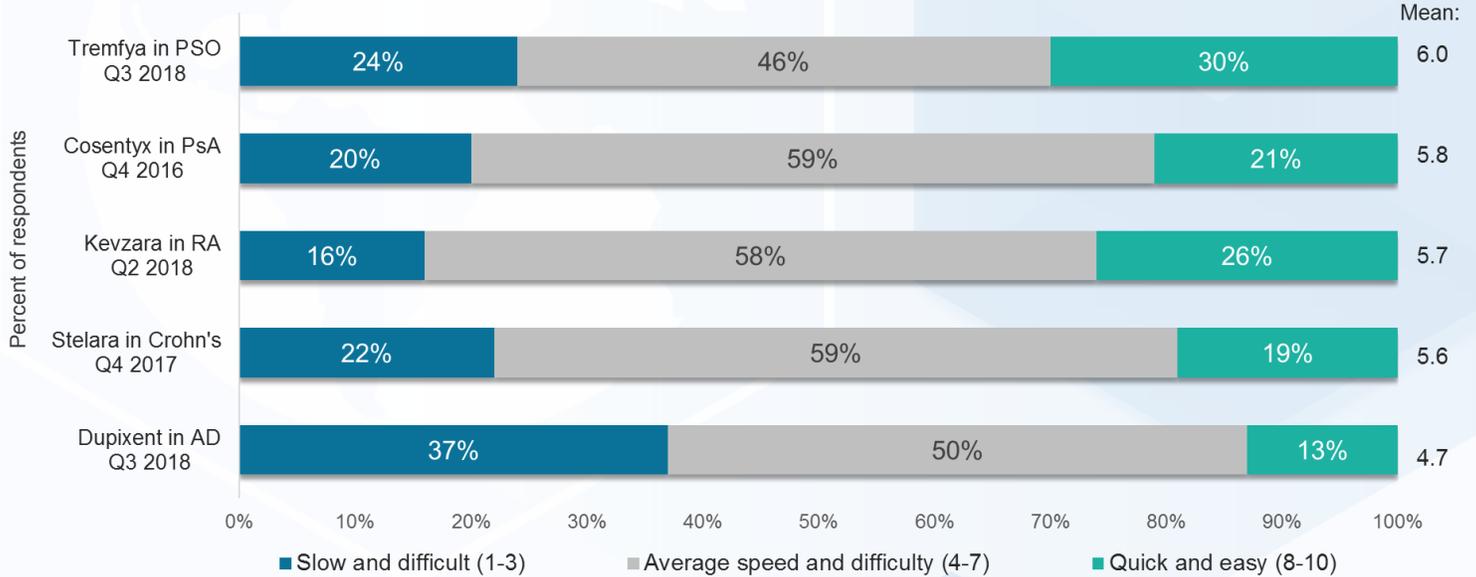


\*Note: timeline reflects approval dates, in some cases product launches have not coincided with approval dates

With the expanding armamentarium of biologic agents for the treatment of these diseases, gaining managed care approval for new agents has become increasingly burdensome for each treating specialist, though some brands have had greater success in securing favorable access than others.

### Ease of Managed Care Approval Process: Cross Launch Comparison Approximately One Year Post-Market Entry

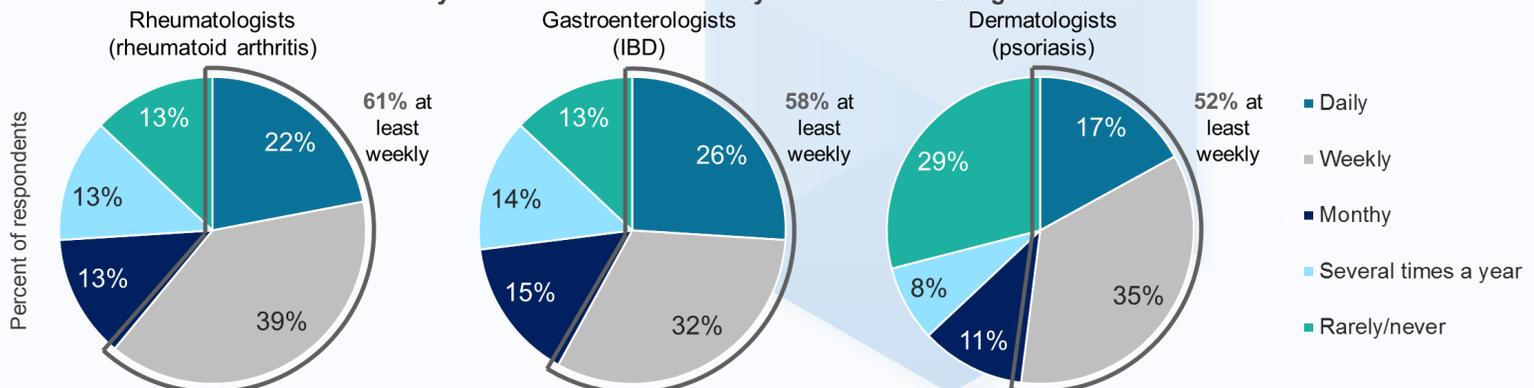
On a scale of 1-10, please rate the managed care approval process for your [agent] use in [indication], where "1" is "Very slow and difficult" and "10" is "Very quick and easy." If you do not have personal experience with the managed care approval process please select, "No personal experience."



Participants who indicated no experience excluded from chart

Data from the Q3 2018 studies reveal that over half of participating specialists (regardless of treating indications) report having at least weekly interaction with payers as it relates to biologic use; however, this metric may be impacted by the presence of a biological coordinator, an aspect regularly included in the quarterly publications.

### Physician Involvement with Payers Related to Biologics Use



# Keep Your Finger On The Pulse

## With the *RealTime Dynamix™* series



### Study Design

*RealTime Dynamix™* provides rapid response trending on the key issues affecting the specific disease market. Each quarter ~100 qualified US-based specialists participate in an online survey. Brand direction, new product uptake, industry contact rates and familiarity with products in development are closely monitored to track market evolution. Product perceptions, disease awareness and attitudes, practice management and other topics are rotated throughout the year to provide an iterative probe into the key drivers of change.

### Objectives

- Benchmark clinical practice patterns
- Map current & evolving treatment paths
- Monitor key market metrics
- Evaluate performance of recent launches
- Understand barriers to therapy adoption
- Document changes in class preference
- Track perceptions of late stage pipeline assets
- Measure industry contacts & perceptions over time
- Capture opinions on current controversies

### Details

- 35 minute online survey
- Participants paid an honorarium for participating

### Screening Criteria

- In practice at least 2 and no more than 35 years
- Must be a board-certified specialist
- Must have at least 50 target patients under management (can vary by report)
- Must spend at least 50% of professional time in clinical practice seeing patients

## Each quarterly report is developed with three distinct sections



### Fixed Content

- Core demographics
- Brand use trends
- Current and future market share
- Industry contact rates
- Awareness and familiarity with products in development
- Sources of information about development compounds

### Launch Metrics

- First 18 months of launch
- Awareness, trial and use
- Patient types and source of business
- Perceptions vs. competitive agents
- Barriers
- Projected use
- Payer influence
- Patient requests
- Satisfaction

### Variable Content

- New content rotated in quarterly
- MOA preferences
- Biosimilar impact
- Attribute analysis
- Promotion emphasis
- Payer emphasis
- Patient demand emphasis
- Practice and policy changes
- Line of therapy analysis

### Other Features Include

- Clients may submit two proprietary questions per quarter
- Frequency tables and summary statistics available upon request
- On-site or webcast presentation included
- Advanced report release for subscribed clients, three day embargo on public distribution