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AB0432

BURDEN OF ILLNESS AND CURRENT UNMET NEEDS AMONG PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH CONVENTIONAL AND ADVANCED DISEASE-MODIFYING THERAPIES: A TARGETED LITERATURE REVIEW

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Background: The development of advanced therapies for the treatment of moderate to severe rheumatoid arthritis (RA) has changed the paradigm of management goals for the condition. However, even with currently available therapies, many patients fail to achieve adequate improvement or disease remission, and thus residual unmet needs exist.

Objectives: To examine the burden of RA with respect to the clinical, humanistic, and economic outcomes among RA patients treated with conventional and advanced disease-modifying therapies.

Methods: A targeted review of the literature published between January 2013 and September 2018 was conducted. EMBASE and MEDLINE databases were searched using terms related to the clinical, humanistic, and economic outcomes associated with conventional and advanced disease-modifying therapies currently available for moderate to severe RA. The search was limited to English-language articles, which reported data from France, Germany, Italy, Spain, United Kingdom, Sweden, Israel, Canada, Brazil, Japan, and Australia. This returned 1,833 records which were assessed for relevance in terms of study methodology, patient population, and outcomes.

Results: A total of 48 articles were included in the qualitative synthesis. Across these studies, disease activity score (DAS) remission rates (DAS28 ≤2.6) ranged from 14.7% to 26.4% over 6–12 months and 10.2% to 53.4% over 3–20 months for patients treated with conventional synthetic disease-modifying antirheumatic drug (csDMARD) monotherapies and biologic monotherapies, respectively. Figure 1 presents country-specific DAS28 remission rates for some of the included regions. Clinical disease activity index (CDAI) remission rates (CDAI ≤2.8) were reported to be <50% among patients who received biologics for a period of up to 12 months. The unemployment rate due to RA was as high as 58.3%, and employed patients lost 1.7 to 16.0 workdays per month at baseline. Following treatment with biologic therapy (over 24–104 weeks), employed patients lost 0.5 to 8.0 working days per month. Costs of treatment with advanced therapies were routinely investigated, but limited data were available regarding the economic burden associated with outcomes such as disability, depression, lack of sleep, and anxiety among RA patients treated with advanced therapies.

Conclusion: Despite advanced treatments, a significant proportion of the RA patient population do not achieve disease remission, and face the substantial burden of reduced productivity and lost work days.

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Figure 1: Country specific disease activity score (DAS 28) remission rates

Country	Treatment	DAS28 remission rate (% of patients)	# of studies
France	TCZ (mono/combo combination therapy)	29% at 4 months	1
Germany	ETN monotherapy	26.6–32.5% at 26–52 weeks	1
	ETN +MTX	31.2–38.8% at 52 weeks	
Italy	ADA/CTZ/ETN/GOL/IFX (mono or combination therapy)	18%, 19% and 21% at 3, 6, 12 months, respectively	1
	TCZ	52–58% at 6 months	
	ABA	33–35% at 6 months	
	anti-TNF	32–34% at 6 months	
United Kingdom	anti-TNF (ADA/ETN/IFX)	24–43.6% at 6–12 months	2
	csDMARDs	13.8–34.6% at 6–12 months	
Canada	CTZ	29.5% at 6 months; 20.0% at 24 months	2
Japan	Biologics monotherapy (ADA/ABA/ETN/GOL/IFX/TCZ+MTX) or csDMARDs monotherapy	10–83% at 24–52 weeks	3
	Biologics + csDMARD combination therapy	32.9–83% (time period not reported)	
Australia	csDMARDs/biologics and/or MTX	41.6% at 12 months	1

DAS: Disease activity score; DAS28 remission defined as DAS28≤2.6

Note: The presented data do not include all the studies from the review.

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TREATMENT PATTERNS AMONG PATIENTS WITH RHEUMATOID ARTHRITIS WHO RECEIVE METHOTREXATE: TARGETED LITERATURE REVIEW

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Background: Methotrexate (MTX) monotherapy or in combination with other disease modifying agents is a common first-line treatment option for patients with rheumatoid arthritis (RA). However, treatment patterns and associated patients' perceptions and preferences of MTX therapy may not be fully understood.

Objectives: To assess treatment patterns of MTX therapy in RA by evaluating real-world adherence and persistence, patients' preferences and reasons for discontinuation, as well as the economic burden of therapy.

Methods: A targeted review of the literature published between January 2010 and March 2018 was conducted by searching the MEDLINE and EMBASE databases. Searches were limited to English-language articles and included original research and reviews. All articles were assessed for relevance, in terms of study methodology, patient population and outcomes by a single reviewer.

Results: The search resulted in 444 hits of which 29 articles were included in the qualitative synthesis. Data pertaining to adherence and patient-reported reasons for non-adherence were extracted from 11 publications. MTX therapy non-adherence was high, with up to 42% of patients reporting not taking MTX as prescribed. Among these patients, many reported taking smaller doses than prescribed (53%) or intentionally skipping doses (52%). Common patient-reported reasons for non-adherence included upcoming surgery, and experience of, or concerns regarding, adverse events (AEs). Data pertaining to therapy discontinuation were extracted from 21 publications. Across the studies sampled, rates of discontinuation at one year were 24–50%. MTX toxicity was responsible for 5–34% of all discontinuations. Among patients who switched from orally to parenterally administered MTX, 29% discontinued due to gastrointestinal AEs within one year. Patient-reported reasons for therapy discontinuation, other than experiencing AEs, included concerns regarding MTX AEs, drug price and lack of perceived need. No studies examining the costs associated with MTX monotherapy monitoring and AE management were identified in the search.

Conclusion: Findings from the review indicated that MTX therapy is associated with substantial non-adherence and discontinuation, thus adding to patient burden. Patient-reported reasons for non-adherence/poor treatment persistence were varied but most commonly included experience of, or concerns regarding AEs.

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