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The Use of Patient Reported Outcome Measures for Rheumatoid Arthritis in Japan: A Systematic Literature Review

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Appendix 1. MEDLINE Search Strategy.

1	“Arthritis, Rheumatoid”[Majr] OR rheumatoid arthritis[Title]
2	“Quality of life”[Majr] OR “Sickness Impact Profile”[Majr] OR “Patient Satisfaction”[Majr]
3	quality of life[tiab] OR QALY[tiab] OR quality adjustment[tiab] OR utility index[tiab] OR utilities index[tiab] OR utility valu*[tiab] OR utilities valu*[tiab] OR health utility[tiab] OR health utilities[tiab] OR EQ-5D[tiab] OR SF-6D[tiab] OR adversit*[tiab] OR satisfaction[tiab] OR satisfied[tiab] OR patient reported outcome[tiab] OR patient reported outcomes[tiab] OR well-being[tiab] OR well being[tiab] OR burden[tiab] OR SF-36[tiab] OR SF-12[tiab] OR HAQ[tiab] OR prefer*[tiab] OR QWB[tiab] OR pain[tiab] OR “morning stiffness”[tiab] OR tiredness[tiab] OR fatigue[tiab] OR symptom*[tiab] OR dysfunction[tiab] OR disability[tiab] OR “mental health”[tiab] OR happiness[tiab] OR depress*[tiab] OR anxiety[tiab] OR function*[tiab] OR “Health Assessment Questionnaire”[tiab]
4	fatigue[Majr] OR Depression[Majr] OR Mental health[Majr] OR Pain[Majr] OR Anxiety[Majr] OR Quality-Adjusted Life Years[Majr] OR Patient Preference[Majr] OR Symptom Assessment [Majr]
5	#2 OR #4
6	#5 AND #1
7	#3 AND #1
8	#6 OR #7
9	(“2014/01/01”[PDAT]: “2015/8/14”[PDAT]) AND English[lang]
10	#8 AND #9

Appendix 2. ICHUSHI search strategy.

1	関節リウマチ/MTH OR 関節リウマチ/II
2	生活の質/MTH OR 疾病影響プロファイル/MTH OR 患者の満足度/MTH
3	生活の質/TA OR QoL/TA OR クオリティオブライフ/TA OR 質調整生存年/TA OR 効用値/TA OR 逆境/TA 満足/TA OR (患者/TA AND アウトカム/TA) OR ウェルビーイング/TA OR 負担/TA OR “quality of life”/TA OR QALY/TA OR “quality adjustment”/TA OR “utility index”/TA OR “utilities index”/TA OR “utility valu”/TA OR “utilities valu”/TA OR “health utility”/TA OR “health utilities”/TA OR EQ-5D/TA OR SF-6D/TA OR HUI/TA OR adversit/TA OR satisfaction/TA OR satisfied/TA OR “patient reported outcome”/TA OR “patient reported outcomes”/TA OR well-being/TA OR “well being”/TA OR burden/TA OR SF-36/TA OR SF-12/TA OR HAQ/TA OR “health state preference”/TA OR 健康状態の嗜好/TA OR QWB/TA OR 痛み/TA OR 朝のこわばり/TA OR こわばり/TA OR 疲れ/TA OR 疲労/TA OR だるさ/TA OR 症状/TA OR 障害/TA OR 身体障害/TA OR 負担/TA OR 精神保健/TA OR 精神/TA OR 幸福/TA OR 抑うつ/TA OR 不安/TA OR 機能/TA
4	#2 OR #3
5	#1 AND #4
6	(DT=2011:2015 AB=Y AND LA=日本語,英語 AND CK=ヒト) NOT (PT=症例報告, 事例,Q&A,講義,レター,症例検討会,コメント)
7	#5 AND #6

Appendix 3. List of included articles.

No.	Author	Year	Title
1	Akagi, K <i>et al</i>	2013	RA patient's convalescence experience during biologics treatment
2	Aoki, A <i>et al</i>	2013	Relation between disease assessment and self efficacy of RA patients health activities
3	Aoyagi, T <i>et al</i>	2013	Factors that affect the efficacy of hand arthroplasty for RA patients
4	Fukuda, K <i>et al</i>	2015	The impact of aging on RA patients' degree of physical activity and disease activity
5	Funahashi, K <i>et al</i>	2013	The seasonality of disease activity and activities of daily living with RA patients
6	Furuya, T <i>et al</i>	2014	Improved prediction of Hip Fracture Using the Health Assessment Questionnaire-Disability Index and FRAX® in Japanese Patients with Rheumatoid Arthritis: A Prospective Observational Study
7	Fusama, M <i>et al</i>	2015	Psychological state is related to the remission of the Boolean-based definition of patient global assessment in patients with rheumatoid arthritis.
8	Fusama, M <i>et al</i>	2013	Improvement of health status evaluated by Arthritis Impact Measurement Scale 2 (AIMS-2) and Short Form-36 (SF-36) in patients with rheumatoid arthritis treated with tocilizumab
9	Goto, K <i>et al</i>	2013	Follow up study on patients who undergone TEA
10	Goto, K <i>et al</i>	2012	Assessment of ADL of RA patients receiving rehabilitation for upper limb - Recent trend based on the survey conducted in the occupational therapy
11	Haji, Y <i>et al</i>	2012	Can Sustained Remission of Rheumatoid Arthritis Be Predicted? an Analysis From the Japanese National Database of Rheumatic Disease (NinJa)
12	Hara, M <i>et al</i>	2014	Safety and efficacy of combination therapy of iguratimod with methotrexate for patients with active rheumatoid arthritis with an inadequate response to methotrexate: An open-label extension of a randomized, double-blind, placebo-controlled trial
13	Hayashi, J	2014	Clinical efficacy of Etanercept on RA
14	Hino, M <i>et al</i>	2014	Relationship between RA outpatient's QOL and biologics treatment
15	Hirano, Y <i>et al</i>	2014	Comparison of three anti TNFs in early stage of clinical trial
16	Horikawa, S <i>et al</i>	2014	Research on the key factors which influence elderly RA patients' joy in life
17	Hoshi, D <i>et al</i>	2015	Profiles of EQ-5D utility scores in the daily practice of Japanese patients with rheumatoid arthritis; Analysis of the IORRA database.
18	Hoshi, D <i>et al</i>	2013	Disability is the major negative predictor for achievement of Boolean-based remission in patients with rheumatoid arthritis treated with tocilizumab
19	Ishida, O <i>et al</i>	2015	Risk factors for established vertebral fractures in Japanese patients with rheumatoid arthritis: Results from a large prospective observational cohort study.
20	Iwata, T <i>et al</i>	2015	Periarticular osteoporosis of the forearm correlated with joint destruction and functional impairment in patients with rheumatoid arthritis.
21	Kitamura, K	2013	Experience on Infliximab (Remicade)
22	Kitamura, K	2013	Experience on Toricitinib
23	Kiyooka, K <i>et al</i>	2012	Relationship between DAS and physical function for Tocilizumab prescribe patients
24	Koike, T <i>et al</i>	2014	Safety and effectiveness of adalimumab in Japanese RA patients: postmarketing surveillance report of 7740 patients
25	Kojima, M <i>et al</i>	2014	Alexithymia, depression, inflammation, and pain in patients with rheumatoid arthritis
26	Kojima, M <i>et al</i>	2013	How do RA patients feel about the change in pharmaco-therapy- A focus group study
27	Kojima, M <i>et al</i>	2011	Epidemiology and QOL of chronic disease patients
28	Koyama, Y <i>et al</i>	2011	Quality of Life of RA patients before and after TKA
29	Kubo, S <i>et al</i>	2015	Comparison of the efficacies of abatacept and tocilizumab in patients with rheumatoid arthritis by propensity score matching
30	Kubo, S <i>et al</i>	2014	Abatacept inhibits radiographic progression in patients with rheumatoid arthritis: a retrospective analysis of 6 months of abatacept treatment in routine clinical practice: The ALTAIR study
31	Kuroki, J <i>et al</i>	2014	Perception survey of RA patients receiving Abatacept treatment in orthopedic clinic
32	Matsubara <i>et al</i>	2013	Expectations RA patients have for their treatment - A comparison of clinical results for biologic and disease-modifying anti-rheumatic drug treated patients using multiple medical cohorts
33	Matsuda, A <i>et al</i>	2011	Relation between QOL and bone analysis of RA patients with osteoporosis
34	Matsuyama, S <i>et al</i>	2013	Self efficacy of RA outpatients
35	Minami, M <i>et al</i>	2013	Psychological state of RA patients taking biologics
36	Mitsubishi, N <i>et al</i>	2011	Performance of long term usage of Adalimumab on RA patients
37	Miwa, Y <i>et al</i>	2014	Gender difference on DAS, ADL, QOL and depression for RA patients using biologics
38	Miwa, Y <i>et al</i>	2014	Relation between degree of efficacy of biologics and degree of depression and QOL improvement of RA patients
39	Miwa, Y <i>et al</i>	2013	Depression is improved when low-dose tacrolimus is given to rheumatoid arthritis patients showing an inadequate response to biologic agents
40	Miwa, Y <i>et al</i>	2012	Does biologic's efficacy have an impact on RA patient's QOL and depression?

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41	Miwa, Y <i>et al</i>	2011	Depression and combination therapy of Tacrolimus for RA patients with invalid example of biologics
42	Miyauchi, H <i>et al</i>	2012	Daily activity for RA outpatients based on applied walking ability
43	Momohara, S <i>et al</i>	2011	Efficacy of total joint arthroplasty in patients with established rheumatoid arthritis: improved longitudinal effects on disease activity but not on health-related quality of life
44	Nagahara, S <i>et al</i>	2012	The effect of rehabilitation and status quo of misuse and overuse of the upper limb of RA patients taking biologics
45	Nagano, J <i>et al</i>	2014	Rational/antiemotional behaviors in interpersonal relationships and the functional prognosis of patients with rheumatoid arthritis: a Japanese multicenter, longitudinal study
46	Nakajima, A <i>et al</i>	2011	Standard treatment in daily clinical practice for early rheumatoid arthritis improved disease activity from 2001 to 2006
47	Nakamoto, C <i>et al</i>	2013	Depression and anxiety of RA patients -Case studies of patients using antidepressants after the cessation of biologics
48	Niki, H <i>et al</i>	2015	Long-term outcome of joint-preserving surgery by combination metatarsal osteotomies for shortening for forefoot deformity in patients with rheumatoid arthritis.
49	Oguma, M <i>et al</i>	2013	Effect of MZR concomitant therapy on biologics resistant RA patients
50	Onuma, K <i>et al</i>	2015	Total wrist arthrodesis with wrist fusion rod in patients with rheumatoid arthritis.
51	Oribe, M <i>et al</i>	2015	Relations between RA patients' reponse, PtGA and DAS
52	Otsuka, M <i>et al</i>	2015	Okada purifying therapy for RA patients -A multi center study
53	Otsuka, M <i>et al</i>	2012	Effect of 3 months of Okada purifying therapy for RA patients
54	Otsuka, M <i>et al</i>	2012	Efficacy of one time Okada purifying therapy on RA patients' reactivity
55	Otsuka, M <i>et al</i>	2012	Efficacy of additional Okada purifying therapy on RA patients
56	Otsuka, M <i>et al</i>	2012	Efficacy of continuous Okada purifying therapy on RA patients
57	Saeki, R <i>et al</i>	2014	The relationship between depression and the burden among caregivers of rheumatoid arthritis patients
58	Sakuma, R <i>et al</i>	2014	Assessment of physical function of RA patients using mHAQ
59	Sakuragi, K <i>et al</i>	2013	The impact of degree of joint destruction on activities of daily living and physical function
60	Sano, M <i>et al</i>	2011	A better guidance on discharge for RA patients - Study on the daily life of RA patients who repeat hospitalization-
61	Sato, E <i>et al</i>	2013	Major depressive disorder in patients with rheumatoid arthritis
62	Sawada, T <i>et al</i>	2013	Disease Activity Of Rheumatoid Arthritis Is Influenced By Seasonal Change, As Analyzed Based On a Nationwide Japanese Cohort Database
63	Sawano <i>et al</i>	2014	Effectiveness of tofacitinib on early RA onset symptoms
64	Seto, Y <i>et al</i>	2013	Functional disability can deteriorate despite suppression of disease activity in patients with rheumatoid arthritis: a large observational cohort study
65	Shidara <i>et al</i>	2013	Sustaining remission as defined by the new acr/eular criteria leads to better quality of life in patients with rheumatoid arthritis
66	Shikanai, H <i>et al</i>	2013	The psycho-behavioral reaction from RA onset till diagnosis
67	Shikanai, H <i>et al</i>	2012	Factors associated with depression in patients with rheumatoid arthritis
68	Sugita, S <i>et al</i>	2014	Clinical characteristics of rheumatoid arthritis patients undergoing cervical spine surgery: an analysis of National Database of Rheumatic Diseases in Japan.
69	Suzuki, K <i>et al</i>	2012	Retrospective analysis of aggressive oral DMARD treatment for RA patients whose onset happened within 2 years
70	Takahashi, N <i>et al</i>	2012	Satisfaction and attitudes toward therapy in patients with rheumatoid arthritis (In Japanese)
71	Takeuchi, T <i>et al</i>	2015	Biologic-free remission of established rheumatoid arthritis after discontinuation of abatacept: a prospective, multicentre, observational study in Japan.
72	Takeuchi, T <i>et al</i>	2014	Research on 1 hour injection of infliximab on RA patients
73	Takeuchi, T <i>et al</i>	2013	The status quo of treat to target guideline implementation in the Japanese RA clinical setting
74	Tamura, M <i>et al</i>	2012	The type of pain and process of acceptance in daily activities for RA patients
75	Tanaka, C <i>et al</i>	2012	A Study on the Selection of DMARDs for the Combination Therapy with Adalimumab
76	Tanaka, R <i>et al</i>	2013	A survey on unmet medical needs of RA patients
77	Tanaka, Y <i>et al</i>	2014	Effect of interleukin-6 receptor inhibitor, tocilizumab, in preventing joint destruction in patients with rheumatoid arthritis showing inadequate response to TNF inhibitors
78	Tanaka, Y <i>et al</i>	2014	Long-term efficacy and safety of certolizumab pegol in Japanese rheumatoid arthritis patients who could not receive methotrexate: 52-week results from an open-label extension of the HIKARI study.
79	Tanaka, Y <i>et al</i>	2014	Attainment of Low Disease Activity Is Predictive of Maintenance of Disease Control upon Adalimumab Discontinuation for Two Years Following Combination Therapy in Japanese Patients with Early Rheumatoid Arthritis
80	Tanaka, Y <i>et al</i>	2012	Structural damages disturb functional improvement in patients with rheumatoid arthritis treated with etanercept
81	Tohma, S <i>et al</i>	2013	The trend of Japanese RA patient's disease activity, physical disability, adverse event and medical cost - A multicenter epidemiology study
82	Tominaga, T <i>et al</i>	2012	Safety and efficacy of Etanercept for RA patients (In Japanese)
83	Tomio, J <i>et al</i>	2012	Disparity in disaster preparedness among rheumatoid arthritis patients with various general health, functional, and disability conditions
84	Tomio, J <i>et al</i>	2011	Impact of natural disasters on the functional and health status of patients with rheumatoid arthritis
85	Torikai, E <i>et al</i>	2012	Effect of increased dosage of MTX 10mg/week on RA patients (In Japanese)

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86	Toyama, S <i>et al</i>	2014	Rheumatoid arthritis of the hand: a five-year longitudinal analysis of clinical and radiographic findings
87	Toyoshima, Y <i>et al</i>	2012	Lower limb surgery for RA patients using biologics (In Japanese)
88	Toyoshima, Y <i>et al</i>	2011	Lower limb surgery on biologic using patients (In Japanese)
89	Uranaka, N <i>et al</i>	2011	Effect of TKA on RA patients' lower limb function (In Japanese)
90	Watabe, T <i>et al</i>	2014	Assessment of physical function of RA patients (In Japanese)
91	Yagi <i>et al</i>	2011	Efficacy of RAQoL for RA patients (In Japanese)
92	Yamamoto, K <i>et al</i>	2013	Satisfaction and expectation on biologics - RA patient's perception of treatment survey
93	Yamanaka, K <i>et al</i>	2011	RA patients' perception survey regarding biologics
94	Yamanaka, K <i>et al</i>	2011	RA patients' survey on the clinical path from diagnosis till treatment
95	Yasuda, H <i>et al</i>	2011	Psychological Distress, Disease Specific QOL, and Life Stress in Patients with Rheumatoid Arthritis
96	Yayama, T <i>et al</i>	2011	The impact of biologics on RA patients' wrist lesion
97	Yokogawa, N <i>et al</i>	2015	Validation of RAPID3 using a Japanese version of Multidimensional Health Assessment Questionnaire with Japanese rheumatoid arthritis patients: characteristics of RAPID3 compared to DAS28 and CDAI.
98	Yonekura, Y <i>et al</i>	2014	Assessment of QOL after TKA
99	Yoshii, I <i>et al</i>	2014	Correlations between each RA parameters and joint lesion and a discussion on applicability of T2T treatment protocol
100	Yoshiike, S <i>et al</i>	2012	Psychological state of RA patients who are using biologics

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