

Healthcare Resource Use by European Patients Enrolled in RA-BE-REAL: 12 Month Data from a Multinational, Prospective, Observational Study of Patients with Rheumatoid Arthritis

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BACKGROUND

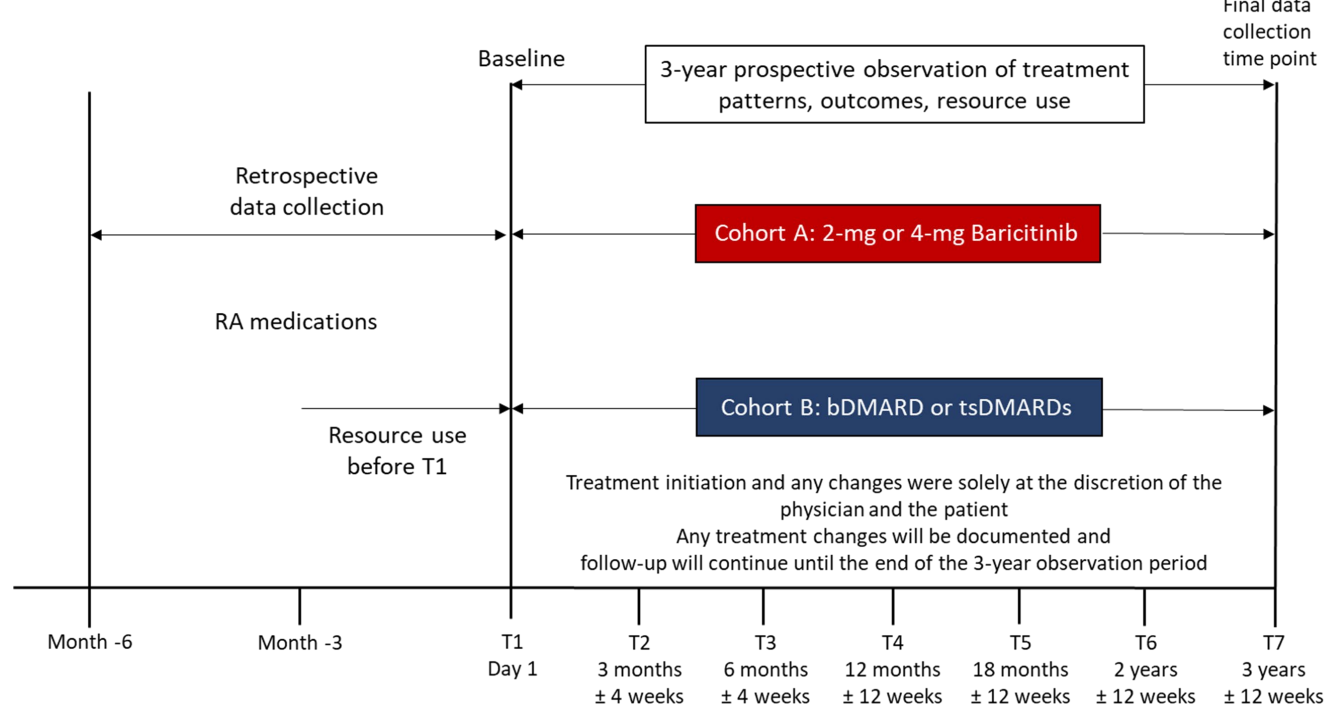
- Baricitinib, an oral selective JAK 1/2 inhibitor, is approved for treating adults with moderate-to-severe active rheumatoid arthritis (RA).
- RA-BE-REAL is a 3-year, multinational, prospective, observational study of adult patients with RA evaluating time to discontinuation of initial RA treatment.

OBJECTIVE

- To report the extent of healthcare resource use (HCRU) by European (France, Germany, Italy, Spain, and UK) patients with RA following 12 months treatment with baricitinib, biologic (b) disease-modifying anti-rheumatic drugs (DMARDs) or any other targeted synthetic (ts)DMARDs.

METHODS AND STUDY DESIGN

- Two patient cohorts were assessed: patients in cohort A initiated treatment with baricitinib (2-mg or 4-mg), and patients in cohort B initiated any other tsDMARD or bDMARD (b/tsDMARD) for the first time in their treatment history.
- This pre-specified interim analysis reports descriptive HCRU by country over 12 months using summary statistics, without any inferential testing.



BASELINE DEMOGRAPHICS

	Cohort A (n=510)	Cohort B (n=563)	Overall (n=1073)
Age (yrs)	59.1 (13.2)	57.0 (13.9)	58.0 (13.6)
Female, n (%)	390 (76.5)	414 (73.5)	804 (74.9)
Disease duration (yrs)	10.1 (9.1)	8.9 (9.7)	9.5 (9.4)
Combination therapy with any csDMARD, n (%)	250 (49.0)	387 (68.7)	637 (59.4)
Previous b/tsDMARD treatment, n (%)			
Naïve	245 (48.0)	344 (61.1)	589 (54.9)
1 b/tsDMARD	68 (13.3)	55 (9.8)	123 (11.5)
2 b/tsDMARDs	111 (21.8)	79 (14.0)	190 (17.7)
>2 b/tsDMARDs	86 (16.9)	85 (15.1)	171 (15.9)
SJC (28-joint)	5.2 (4.8)	4.7 (4.9)	4.9 (4.9)
TJC (28-joint)	7.3 (6.1)	7.8 (6.5)	7.6 (6.3)
PhGA (0-100)	5.6 (2.0)	5.5 (2.1)	5.6 (2.0)
PGA (0-100)	5.9 (2.3)	5.8 (2.4)	5.9 (2.4)
Pain VAS (0-100)	59.0 (23.1)	56.5 (24.3)	57.6 (23.8)
HAQ-DI	1.4 (0.7)	1.3 (0.7)	1.3 (0.7)
EQ-5D-5L	0.5 (0.3)	0.5 (0.3)	0.5 (0.3)

Cohort A: treatment with baricitinib (2-mg or 4-mg); Cohort B: any biologic or any other tsDMARD. Data reported as mean (standard deviation) unless otherwise stated. Results are combination of total participants enrolling in RA-BE-REAL across five European countries.

CONCLUSIONS

- Despite differences in treatment policies, recommendations, and healthcare systems, overall HCRU at 12M was similar between cohorts in the different countries, except in France and Germany where cohort A reported fewer (total and RA-related) visits to other healthcare professionals (specialist nurses, dieticians, physical therapists, psychotherapists) than those in cohort B.
- Although not powered to detect differences in HCRU outcomes, this study presents RA-related HCRU not available from clinical trials.

LIMITATIONS

- Between country comparisons cannot be performed due to differences in local treatment guidelines, and healthcare systems between countries.

HEALTHCARE RESOURCE USE BY COUNTRY AT 12 MONTHS

GERMANY



Total HCRU

Visits to primary care, outpatient, emergency room	4.9 (6.6)	6.3 (8.8)	5.5 (7.7)
Visits to other HCP	4.4 (11.4)	7.8 (23.1)	5.9 (17.8)
Number of hospitalisations	0.6 (3.3)	0.2 (1.0)	0.4 (2.5)
Duration of hospitalisations, days	0.8 (3.9)	1.1 (4.6)	0.9 (4.2)

RA-related HCRU

Visits to primary care, outpatient, emergency room	1.9 (3.2)	2.2 (3.3)	2.1 (3.2)
Visits to other HCP	2.7 (7.9)	4.5 (16.3)	3.5 (12.5)
Number of hospitalisations	0.2 (1.6)	0.0 (0.2)	0.1 (1.2)
Duration of hospitalisations, days	0.1 (0.8)	0.3 (2.1)	0.2 (1.5)

FRANCE



Total HCRU

Visits to primary care, outpatient, emergency room	4.8 (3.6)	4.9 (4.8)	4.8 (4.3)
Visits to other HCP	2.1 (5.6)	10.6 (22.4)	6.6 (17.2)
Number of hospitalisations	0.2 (0.7)	0.1 (0.4)	0.2 (0.5)
Duration of hospitalisations, days	1.0 (4.1)	0.8 (3.0)	0.9 (3.5)

RA-related HCRU

Visits to primary care, outpatient, emergency room	1.8 (2.2)	2.2 (3.2)	2.0 (2.8)
Visits to other HCP	1.0 (2.9)	8.1 (20.4)	4.7 (15.3)
Number of hospitalisations	0.1 (0.5)	0.0 (0.2)	0.1 (0.4)
Duration of hospitalisations, days	0.4 (1.9)	0.1 (0.6)	0.2 (1.4)

UNITED KINGDOM



Total HCRU

Visits to primary care, outpatient, emergency room	5.3 (6.1)	3.4 (3.3)	4.1 (4.4)
Visits to other HCP	2.0 (2.9)	1.4 (2.4)	1.6 (2.6)
Number of hospitalisations	0.0 (0.2)	0.2 (0.4)	0.1 (0.4)
Duration of hospitalisations, days	0.6 (2.8)	0.7 (2.5)	0.7 (2.6)

RA-related HCRU

Visits to primary care, outpatient, emergency room	2.2 (3.4)	1.8 (2.3)	1.9 (2.7)
Visits to other HCP	1.1 (2.6)	1.1 (1.9)	1.1 (2.1)
Number of hospitalisations	0.0 (0.0)	0.0 (0.3)	0.0 (0.2)
Duration of hospitalisations, days	0.0 (0.0)	0.1 (0.7)	0.1 (0.6)

SPAIN



Total HCRU

Visits to primary care, outpatient, emergency room	5.5 (5.8)	6.1 (6.1)	5.9 (5.9)
Visits to other HCP	3.8 (10.9)	2.4 (11.2)	2.9 (11.0)
Number of hospitalisations	0.1 (0.4)	0.1 (0.5)	0.1 (0.5)
Duration of hospitalisations, days	0.4 (1.4)	1.0 (5.1)	0.8 (4.1)

RA-related HCRU

Visits to primary care, outpatient, emergency room	3.2 (4.8)	2.3 (2.9)	2.7 (3.7)
Visits to other HCP	2.6 (8.8)	0.9 (3.2)	1.5 (6.0)
Number of hospitalisations	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Duration of hospitalisations, days	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

ITALY



Total HCRU

Visits to primary care, outpatient, emergency room	4.6 (6.6)	4.4 (6.5)	4.5 (6.5)
Visits to other HCP	1.6 (6.2)	0.8 (2.9)	1.1 (4.5)
Number of hospitalisations	0.0 (0.1)	0.1 (0.3)	0.1 (0.2)
Duration of hospitalisations, days	0.0 (0.1)	0.5 (2.5)	0.3 (1.9)

RA-related HCRU

Visits to primary care, outpatient, emergency room	1.8 (3.4)	1.8 (4.0)	1.8 (3.7)
Visits to other HCP	0.9 (5.6)	0.4 (1.8)	0.6 (3.8)
Number of hospitalisations	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Duration of hospitalisations, days	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

Cohort A: treatment with baricitinib (2-mg or 4-mg); Cohort B: any biologic or any other tsDMARD. Data reported as mean (SD) number of visits, hospitalisations, or hospitalisation days including all patients with available data in the cohort. Other HCP include specialist nurses, dieticians, physical therapists, psychotherapists.

Abbreviations: HCRU: healthcare resource use, bDMARD: biologic disease-modifying antirheumatic drug, CDAI: Clinical Disease Activity Index, csDMARD: conventional synthetic disease-modifying antirheumatic drug, EQ-5D-5L: European quality of life 5 dimensions 5 levels, HAQ-DI: Healthy Assessment Questionnaire-Disability Index, HCP: healthcare professionals, tsDMARDs: targeted synthetic disease-modifying antirheumatic drug, PGA: Patient's global assessment of disease activity, PhGA: Physician's global assessment of disease activity, RA: rheumatoid arthritis, SD: standard deviation, SJC: Swollen joint count, TJC: Tender joint count, VAS: visual analogue scale (mm).

Disclosures: R. Alten has received grants, consulting fees, and payment from AbbVie, BMS, Celltrion, Chugai, Galapagos, Gilead, Janssen, Eli Lilly and Company, Novartis, Pfizer, Roche, and UCB. G. Burmester has received honoraria for lectures and consulting fees from AbbVie, Galapagos, Eli Lilly and Company, Pfizer, BMS, MSD, Sanofi, and Roche. M. Matucci-Cerinic has received grants from MSD, participated in advisory boards or speakers bureau for Biogen, Eli Lilly and Company, and Sandoz, and received consulting fees from Chemomab. A. Östör has received consulting fees, been involved in advisory boards, and/or undertaken clinical trials for AbbVie BMS, Roche, Janssen, Eli Lilly and Company, Novartis, Pfizer, UCB, Gilead, Paradigm. L. Zaremba-Pechmann is an employee of HaaPACS GmbH. T. Treuer, K. Ng, J. Gerwien, and K. Gibson are current employees and shareholders of Eli Lilly and Company. B. Fautrel has received grants/ research support from Abbvie, and Eli Lilly and Company and has received consulting fees from Abbvie, MSD, Pfizer, Eli Lilly and Company, Biogen, BMS, Celgene, Janssen, Medac, NORDIC Pharma, Novartis, Roche, Sanofi-Aventis, SOBI and UCB.

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BACKGROUND

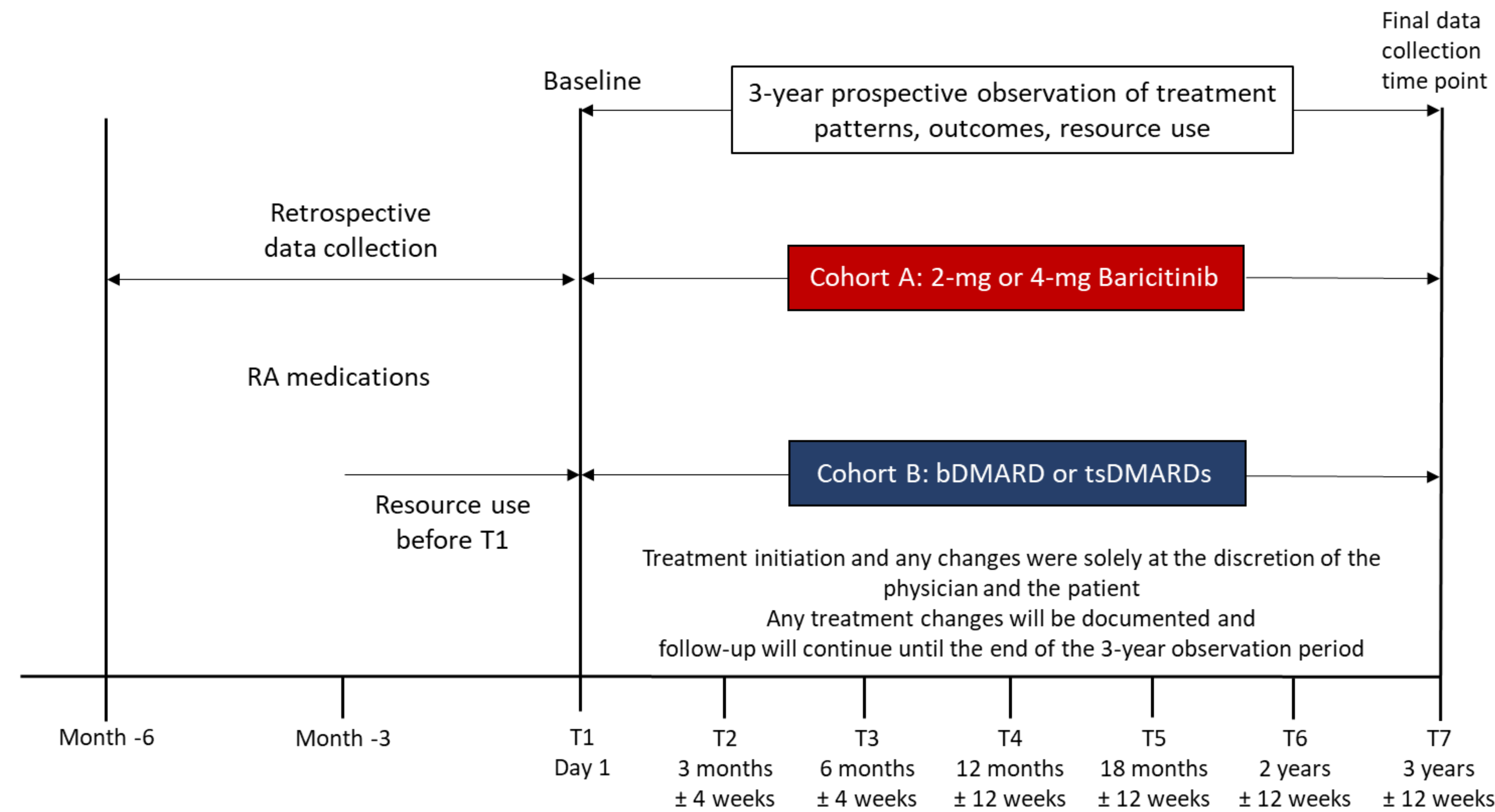
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- Two patient cohorts were assessed: patients in cohort A initiated treatment with baricitinib (2-mg or 4-mg), and patients in cohort B initiated any other tsDMARD or bDMARD (b/tsDMARD) for the first time in their treatment history.
- This pre-specified interim analysis reports descriptive HCRU by country over 12M using summary statistics, without any inferential testing.



BASELINE DEMOGRAPHICS

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PhGA (0-10)	5.6 (2.0)	5.5 (2.1)	5.6 (2.0)
PGA (0-10)	5.9 (2.3)	5.8 (2.4)	5.9 (2.4)
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HAQ-DI	1.4 (0.7)	1.3 (0.7)	1.3 (0.7)
EQ-5D-5L	0.5 (0.3)	0.5 (0.3)	0.5 (0.3)

HRCU by Country over 12 months



Total HCRU

- Visits to primary care, outpatient, emergency room
- Visits to other HCP
- Number of hospitalisations
- Duration of hospitalisations, days


RA-related HCRU

- Visits to primary care, outpatient, emergency room
- Visits to other HCP
- Number of hospitalisations
- Duration of hospitalisations, days

Cohort A (n=175) Mean (SD)	Cohort B (n=148) Mean (SD)	Overall (n=323) Mean (SD)
4.9 (6.6)	6.3 (8.8)	5.5 (7.7)
4.4 (11.4)	7.8 (23.1)	5.9 (17.8)
0.6 (3.3)	0.2 (1.0)	0.4 (2.5)
0.8 (3.9)	1.1 (4.6)	0.9 (4.2)
1.9 (3.2)	2.2 (3.3)	2.1 (3.2)
2.7 (7.9)	4.5 (16.3)	3.5 (12.5)
0.2 (1.6)	0.0 (0.2)	0.1 (1.2)
0.1 (0.8)	0.3 (2.1)	0.2 (1.5)

Cohort A: treatment with baricitinib (2-mg or 4-mg); Cohort B: any biologic or any other tsDMARD. HCP; Healthcare Professionals. Data reported as mean (SD) number of visits, hospitalisations, or hospitalisation days including all patients with available data in the cohort. Other HCPs include specialist nurses, dieticians, physical therapists, psychotherapists.

HRCU by Country over 12 months

FRANCE		Cohort A (n=88) Mean (SD)	Cohort B (n=101) Mean (SD)	Overall (n=189) Mean (SD)
	Total HCRU			
	Visits to primary care, outpatient, emergency room	4.8 (3.6)	4.9 (4.8)	4.8 (4.3)
	Visits to other HCP	2.1 (5.6)	10.6 (22.4)	6.6 (17.2)
	Number of hospitalisations	0.2 (0.7)	0.1 (0.4)	0.2 (0.5)
	Duration of hospitalisations, days	1.0 (4.1)	0.8 (3.0)	0.9 (3.5)
	RA-related HCRU			
	Visits to primary care, outpatient, emergency room	1.8 (2.2)	2.2 (3.2)	2.0 (2.8)
	Visits to other HCP	1.0 (2.9)	8.1 (20.4)	4.7 (15.3)
	Number of hospitalisations	0.1 (0.5)	0.0 (0.2)	0.1 (0.4)
	Duration of hospitalisations, days	0.4 (1.9)	0.1 (0.6)	0.2 (1.4)

Cohort A: treatment with baricitinib (2-mg or 4-mg); Cohort B: any biologic or any other tsDMARD. HCP; Healthcare Professionals. Data reported as mean (SD) number of visits, hospitalisations, or hospitalisation days including all patients with available data in the cohort. Other HCPs include specialist nurses, dieticians, physical therapists, psychotherapists.

UNITED KINGDOM



Total HCRU

- Visits to primary care, outpatient, emergency room
- Visits to other HCP
- Number of hospitalisations
- Duration of hospitalisations, days


RA-related HCRU

- Visits to primary care, outpatient, emergency room
- Visits to other HCP
- Number of hospitalisations
- Duration of hospitalisations, days

Cohort A (n=32) Mean (SD)	Cohort B (n=56) Mean (SD)	Overall (n=88) Mean (SD)
5.3 (6.1)	3.4 (3.3)	4.1 (4.4)
2.0 (2.9)	1.4 (2.4)	1.6 (2.6)
0.0 (0.2)	0.2 (0.4)	0.1 (0.4)
0.6 (2.8)	0.7 (2.5)	0.7 (2.6)
2.2 (3.4)	1.8 (2.3)	1.9 (2.7)
1.1 (2.6)	1.1 (1.9)	1.1 (2.1)
0.0 (0.0)	0.0 (0.3)	0.0 (0.2)
0.0 (0.0)	0.1 (0.7)	0.1 (0.6)


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HRCU by Country over 12 months

<div><div>SPAIN</div></div>			

Cohort A: treatment with baricitinib (2-mg or 4-mg); Cohort B: any biologic or any other tsDMARD. HCP; Healthcare Professionals. Data reported as mean (SD) number of visits, hospitalisations, or hospitalisation days including all patients with available data in the cohort. Other HCPs include specialist nurses, dieticians, physical therapists, psychotherapists.

HRCU by Country over 12 months

ITALY		Cohort A (n=56) Mean (SD)	Cohort B (n=84) Mean (SD)	Overall (n=140) Mean (SD)
	Total HCRU			
	Visits to primary care, outpatient, emergency room	4.6 (6.6)	4.4 (6.5)	4.5 (6.5)
	Visits to other HCP	1.6 (6.2)	0.8 (2.9)	1.1 (4.5)
	Number of hospitalisations	0.0 (0.1)	0.1 (0.3)	0.1 (0.2)
	Duration of hospitalisations, days	0.0 (0.1)	0.5 (2.5)	0.3 (1.9)
	RA-related HCRU			
	Visits to primary care, outpatient, emergency room	1.8 (3.4)	1.8 (4.0)	1.8 (3.7)
	Visits to other HCP	0.9 (5.6)	0.4 (1.8)	0.6 (3.8)
	Number of hospitalisations	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
	Duration of hospitalisations, days	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

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CONCLUSIONS

- Despite differences in treatment policies, recommendations, and healthcare systems, overall HCRU at 12M was similar between cohorts in the different countries, except in France and Germany where cohort A reported fewer (total and RA-related) visits to other healthcare professionals (specialist nurses, dieticians, physical therapists, psychotherapists) than those in cohort B.
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LIMITATIONS

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Abbreviations: HCRU; healthcare resource use, M; months, bDMARD; biologic disease-modifying antirheumatic drug, CDAI; Clinical Disease Activity Index, csDMARD; conventional synthetic disease-modifying antirheumatic drug, EQ-5D-5L; European quality of life 5 dimensions 5 levels, HAQ-DI; Healthy Assessment Questionnaire-Disability Index, HCP; healthcare professionals, tsDMARDs; targeted synthetic disease-modifying antirheumatic drug, PGA; Patient's global assessment of disease activity, PhGA; Physician's global assessment of disease activity, RA; rheumatoid arthritis, SD; standard deviation, SJC; Swollen joint count, TJC; Tender joint count, VAS; visual analogue scale (mm).