Survey of cardiovascular disease and risk factor management in patients with rheumatoid arthritis across 5 world regions: results from the SURF-RA

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Background: Patients with rheumatoid arthritis (RA) are at high risk for cardiovascular disease (CVD).

Purpose: The aim of this survey was to evaluate updated information on CVD risk factors, comorbidities, RA disease characteristics, RA and CVD preventive medication in patient with RA.

Methods: The audit is termed SUrvey of cardiovascular disease Risk Factors in patients with Rheumatoid Arthritis (SURF-RA) and was performed in 53 centres/19 countries/5 world regions in 2014–2019. SURF-RA have been performed in patients with coronary heart disease, in primary care, and now in patients with stroke, SLE and antiphophlipid syndrome. The survey was approved by the Data Protection Officer (2017/7243) and a GDPR evaluation has been performed (10/10–2018).

Results: Among 14 503 patients with RA in West (n=8 493) and East (n=923) Europe, Latin (n=407) and North (n=4 030) America and Asia (n=650) the mean (SD) age was 59.9 (13.6) years, and 2/3 or more were female (table). RA disease duration was comparable across the world regions, ranging from 9.9 to 12.6 years. The prevalence of atherosclerotic

CVD (ASCVD) was lowest in Latin America (2.5%) and highest in East Europe (21.4%), and this pattern was similar regarding familial premature CVD. The mean prevalence (% of each entity) of blood pressure above 140/90 mmHg was 5.3%, of low density lipoprotein cholesterol >2.5 mmol/L: 63.3%. Overall, 29% used antihypertensive medication, lowest in West Europe (17.4%) and highest in East Europe (57.0%), and 26.4% used lipid lowering agent(s), lowest in Asia (7.2%) and highest in North America (31.1%). Body mass index >30 kg/m² was present in 26.6%, with the smallest waist circumference in Asia [mean (SD): 84.1 (13.6) cm] and highest in East Europe [92.5 (15.5) cm]. The proportion of current smokers was on average: 16.2%, lowest in Asia (7.8%) and highest in East Europe (28.5%).

Conclusion: The high prevalence of CVD risk factors and ASCVD in patients with RA across five world regions shows that there is still an unmet need for vigilance and improved implementation of preventive measures in this high CVD risk patient population.

Table 1							
	All	West Europe	East Europe	Latin America	North America	Asia	p-value
Number of patients	14503	8493	923	407	4030	650	
Age, mean (SD)	59.8 (13.6)	60.7 (13.2)	58.8 (11.8)	52.8 (11.6)	59.4 (14.8)	55.7 (13.1)	< 0.001
Sex, female (%)	74.5	74.1	78.5	92.4	72.2	77.3	
ACVD (%)	13.3	11.4	21.4	2.5	16.2	10.3	< 0.001
LLT (%)	26.4	25.1	28.5	22.4	31.1	7.2	< 0.001
Any anti-HT (%)	29.0	17.4	57.0	24.8	46.8	31.8	< 0.001