

How expensive is treating patients in a center of excellence for rheumatoid arthritis in Colombia?

N. J. Alvis-Zakzuk; P. Santos-Moreno; L. Villarreal Peralta; N. Alvis-Guzmán; M. Carrasquilla

Abstract

We aimed to estimate the cost of treating patients with rheumatoid arthritis (RA) in a Center of Excellence (CoE) for rheumatic diseases located in Bogotá, Colombia. We performed a cost analysis from the standard cost estimation of a CoE program for RA care. We estimated costs of consultations, laboratory and imaging tests, and pharmacological treatment from the measurement of the health care resource utilization of the CoE standard protocol according to the activity level of the disease (DAS28). Costing process was done following the recommendation of the Colombian Institute of Health Technology Assessment (IETS, in Spanish). Mean, minimum and maximum costs were reported annually for a type case depending on severity and classified as Remission, low disease activity (LDA), moderate disease activity (MDA) and severe disease activity -SDA- (with and without bDMARD). All costs were reported in American dollars, using the average exchange rate from January to December of 2018, reported by Banco de la República de Colombia: US\$1 = \$2,951.3 Colombian pesos. Mean total direct medical cost to treat a patient in remission is US\$235.7 (213.0-336.4), in LDA is US\$325.2 (288.0-464.6) and in MDA is US\$835.5 (\$573.1-\$2,187.1). There is a considerable increase in direct medical costs from a patient in SDA and SDA+Biologics: US\$2,555.5 (\$2,301.1-\$3,890.9) to US\$8,032.4 (\$7,564.4-\$8,400.3). The largest share of the cost was related to drugs, representing 39.9% for Remission, 53.6% for LDA, 75.2 for MDA, and in SDA and SDA+Biologics the proportion of what is spent on drugs for RA treatment is 88.5% and 96.7%, respectively. As the severity of the disease increases, the expenditure rate on drugs rises over the total of each activity level. With the introduction of the biological therapy, the treatment of RA is expensive, however, the CoE is an efficient way of care for RA.