Acknowledgements: This work has been supported by a research grant from FOREUM Foundation for Research in Rheumatology.

Disclosure of Interests: Anne Kerola Speakers bureau: Boehringer-Ingelheim, Consultant of: Pfizer, Gilead, Boehringer-Ingelheim, Joseph Sexton: None declared, Grunde Wibetoe: None declared, Silvia Rollefstad: None declared, Cynthia S. Crowson: None declared, Espen Haavardsholm: None declared, Tore K. Kvien Speakers bureau: Amgen, Celltrion, Egis, Evapharma, Ewopharma, Hikma, Oktal, Sandoz, Sanofi, Consultant of: AbbVie, Amgen, Biogen, Celltrion, Eli Lilly, Gilead, Mylan, Novartis, Pfizer, Sandoz, Sanofi, Grant/research support from: research funding to Diakonhjemmet Hospital from AbbVie, Amgen, BMS, MSD, Pfizer and UCB, Anne Grete Semb Speakers bureau: AbbVie, Bayer, Lilly, Novartis, and Sanofi, Consultant of: Sanofi, Grant/research support from: collaborative research support from Lilly, outside the submitted work.

DOI: 10.1136/annrheumdis-2021-eular.975

POS0030 SARCOIDOSIS INCIDENCE IN A NORTHERN SPANISH HEALTH REGION.

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Background: Sarcoidosis is a systemic and potentially severe disease (1). Its incidence varies widely worldwide.

Objectives: The aim of this study was to estimate the sarcoidosis incidence in a Northern Spanish population-based cohort.

Methods: All incident cases of sarcoidosis between January 1999 and December 2019 in a tertiary hospital were reviewed. Inclusion criteria were a) diagnosis of sarcoidosis according to ATS/ERS/WASOG (*Eur Respir J*. 1999; 14:735-7) and b) patients residing in our health region. Incidence between 1999 and 2019 was estimated by sex, age, and year of diagnosis.

Results: From a total of 384 patients diagnosed with sarcoidosis, 234 (129 women/ 105 men) met the inclusion criteria and were finally included in the study. Mean age of the cohort at diagnosis was 48.43±14.83 years (46.95±14.50 in males; 49.63±15.04 in females, p=0.12). Annual incidence during 1999-2019 period was 3.56 per 100,000 population (3.32 per 100,000 in males and 3.72 per 100,000 in females). An upward trend in annual incidence over time was observed with rates ranging from 1.73 per 100,000 inhabitants in 1999 to 6.91 per 100,000 inhabitants in 2016 (Figure 1). Overall, sarcoidosis was predominantly diagnosed during middle adulthood. A bimodal distribution of age-specific incidence rates was observed in both sexes with two peaks in the age groups of 30-39 (4.98 per 100,000) and 60-69 years (5.12 per 100,000) in men, and in 40-49 (6.45 per 100,000) and 60-69 years (5.94 per 100,000) in women.

Comparative studies with other regions are summarized in Table 1.

Conclusion: A progressive increase in incident sarcoidosis is observed. The estimated incidence of sarcoidosis in this study (3.56 per 100,000) was like that of other Mediterranean countries (2). No gender predominance was observed. Demographics variations, changes in practice patterns or diagnostic test improvements could explain the upward trend in sarcoidosis incidence detected in our study. Consistent with previous studies, male presented an incidence peak 10 years earlier than female (3-5).

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Figure 1. Annual incidence of sarcoidosis in 1999-2019 (A)

Table 1. Sarcoidosis incidence rates reported in the literature.

Study, year	Country, data source	Time period	Incident cases	Incidence per 100,000 persons-year
Pietinalho, 1995	Finland, hospital database	1984	1,378	11.4
Pietinalho, 1995	Japan, Hokkaido, hospital database	1984	288	1.0
Yigla, 2002	Israel, hospital database	1980-1996	120	0.8
Byg, 2003	Denmark, Danish National Patient Registry	1980-1994	5,536	7.2
Gribbin, 2006	UK, Health Improvement Network	1990-2003	1,019	5.0
Gillman, 2007	Australia, Victoria, hospital database	1995-2005	122	4.4-6.3
Haraldsdottir, 2007	Iceland, hospital database	1981-2003	235	3.8
Musellin, 2009	Turkey, healthcare providers	2004-2006	293	4.0
Deubelbeiss, 2010	Switzerland, Swiss Federal Office for Statistics	2002-2005	2,925	7.0
Kowalska, 2014	Poland, Katowice, National Health Fund	2006-2010	1,217	3.8-4.5
Arkema, 2016	Sweden, National Patient Register	2003-2013	10,787	10.4-14.8
Baughman, 2016	USA, Optum Health Care Database	2010-2013	29,372	African American: 17.8; Caucasian: 8.1; Hispanic: 4.3; Asian: 3.2
Duchemann, 2017	France, Seine-Saint-Denis County	2012	361	4.9
Škopljanc, 2017	Croatia, Split-Dalmatia County, hospital database	1986-2015	318	3.1-3.4
Yoon, 2018	Korea, National Health Insurance	2007-2016	4,791	0.85
Fidler, 2019	Canada, Ontario, health administrative data	1996-2015	18,550	6.8-7.9
Fernandez, 2011	Spain, Leon, hospital database	2001-2008	118	4.51
Present study, 2020	Spain, Santander, hospital database	1999-2019	234	3.56

Disclosure of Interests: Carmen Álvarez-Reguera: None declared, Raúl Fernández-Ramón: None declared, Jorge Javier Gaitán-Valdizán: None declared, José Luis Martín-Varillas: None declared, Lara Sanchez-Bilbao: None declared, David Martínez-López: None declared, Iñigo González-Mazón: None declared, Rosalía Demetrio-Pablo: None declared, Miguel Á. González-Gay Speakers bureau: Abbvie, Pfizer, Roche, Sanofi and MSD., Grant/research support from: Abbvie, MSD, Jansen and Roche, Ricardo Blanco Speakers bureau: Abbvie, Pfizer, Roche, Bristol-Myers, Janssen, Lilly and MSD., Grant/research support from: Abbvie, MSD and Roche.

DOI: 10.1136/annrheumdis-2021-eular.1870