

# BSR AND BHPR ORAL PRESENTATION OF ABSTRACTS

## BIOLOGICS AND INFLAMMATORY ARTHRITIS

### O07. FIRST RESULTS OF A EUROPEAN REGISTRIES COLLABORATIVE PROJECT TO DESCRIBE THE SPECTRUM OF LYMPHOMAS ACROSS DIFFERENT DRUG TREATMENT GROUPS IN RHEUMATOID ARTHRITIS

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**Background:** RA is associated with a 2–3 fold increased risk of both Hodgkin and non-Hodgkin lymphoma (HL, NHL). The risk of

lymphoma, in particular diffuse large B-cell lymphoma (DLBCL) is greatest in patients with persistently active RA: those patients that are also most likely to receive biologics. There has been a concern that TNF inhibitors (TNFis) could increase the risk of lymphoma via reduced immunosurveillance. Conversely, TNFis may, by improving disease control, decrease the lymphoma risk, especially risk of DLBCL. This abstract describes a EULAR initiative to describe the spectrum of lymphomas occurring in biologic-naïve patients with RA and those treated with biologics.

**Methods:** Patients with RA were included from 11 European biologics registers in 8 countries and followed prospectively for the occurrence of first ever lymphoma, confirmed with histology. Patients were considered to be exposed to a biologic agent after receiving the first dose and lymphomas were attributed to the most recently received biologic drug. For the TNFi cohort, prior exposure to biologic drugs was not permitted. Prior exposure to TNFi was allowed for other biologic drugs. Frequency of lymphoma subtypes was recorded for each drug class.

**Results:** Data for 130 462 patients were available for the analysis (Sweden,  $n=61\,527$ ; Denmark,  $n=21\,454$ ; UK,  $n=17\,907$ ; Germany,  $n=12\,581$ ; Portugal,  $n=5031$ ; Spain,  $n=4590$ ; France,  $n=4512$ ; Czech Republic,  $n=2860$ ): the mean age was 59 years and 74% female. In total, 520 lymphomas with subtype information were included in Table 1. Patient-years were available for 493 lymphomas, corresponding to an overall crude incidence rate (IR) of 8.3 (95% CI 7.6, 9.1). DLBCL was the most frequent subtype (37% of all lymphomas; Table 1). 9% of lymphomas were HL and 6% were T cell, with no cases of hepatosplenic T cell lymphoma. Importantly, the distribution of subtypes was similar across treatment groups.

**Conclusion:** This large collaborative analysis of European registries has successfully collated subtype information on more than 500 lymphomas. There was no evidence of modification of the distribution of lymphoma subtypes reported in patients following exposure to biologics. This collaboration facilitates more detailed analyses, accounting for age, sex, country and specific TNFi, as well as RA-related factors.

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O07 TABLE 1. Subtypes of lymphoma reported in biologic-naïve and cohorts of patients with RA

	All	Biologic-naïve	TNFi	Rituximab	Tocilizumab	Abatacept
Patients in cohort, $n$	130462	71866	41078	9880	4800	2838
Total follow up time, person-years	592245	322422	226080	30606	7122	6015
Female, %	774	72	77	79	80	78
Age, mean	59	61	55	58	56	57
Total number of lymphomas	520 <sup>a</sup>	288	219 <sup>a</sup>	6	5	2
Lymphoma subtypes, $n$ (% of cohort)						
Hodgkin lymphoma	45 (9)	21 (7)	24 (11)	0	0	0
B cell lymphomas	389 (75)	220 (76)	157 (72)	5 (83)	5 (100)	2 (100)
Chronic lymphocytic / small cell	55 (11)	28 (10)	24 (11)	1 (17)	2 (40)	0
B cell HHL lymphoplasmacytic (Waldenström macroglobulinaemia)	11 (2)	4 (1)	6 (3)	1 (17)	0	0
Marginal zone	9 (2)	1 (0)	8 (4)	0	0	0
Follicular	67 (13)	33 (11)	32 (15)	1 (17)	0	1 (50)
Mantel cell	5 (1)	5 (2)	0	0	0	0
Diffuse large B cell	194 (37)	113 (39)	75 (34)	2 (33)	3 (60)	1 (50)
Unspecified B cell	48 (9)	36 (13)	12 (5)	0	0	0
T cell lymphomas	32 (6)	17 (6)	14 (6)	1 (17)	0	0
Peripheral T cell	12 (2)	6 (2)	5 (2)	1 (17)	0	0
Angioimmunoblastic	5 (1)	3 (1)	2 (1)	0	0	0
Anaplastic large cell	1 (0)	1 (0)	0	0	0	0
LGL T cell	0	0	0	0	0	0
Pleomorphic T cell	2 (0)	0	2 (1)	0	0	0
Hepatosplenic T cell	0	0	0	0	0	0
Unspecified T cell	12 (2)	7 (2)	5 (2)	0	0	0
Unspecified non-Hodgkin lymphoma/lymphoma	53 (10)	30 (10)	23 (11)	0	0	0

All percentages represent the % of the total number of patients with lymphoma in that cohort with Hodgkin lymphoma, B and T cell lymphomas and unspecified non-Hodgkin lymphoma or lymphoma (totalling 100%). <sup>a</sup>27 lymphomas, but no follow-up time, are included from the RATIO registry, France. HHL: heavy-heavy and heavy-light chains; LGL: large granular lymphocytic.