OP0091

TREATMENT OF OCULAR SARCOIDOSIS. STUDY OF 65 PATIENTS OF A SERIES OF 384 PATIENTS FROM A SINGLE UNIVERSITY HOSPITAL

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Background: Ocular involvement is a relatively frequent and potentially severe complication of sarcoidosis. Oral corticosteroids (OCS) are the first-line treatment. Conventional immunosuppressive agents (cIS) and biological therapy (BT) can be used in refractory cases (1-5).

Objectives: To evaluate the treatment and visual outcomes of a cohort of patients diagnosed with ocular sarcoidosis.

Methods: Study of a large cohort (n=384) of all consecutive patients diagnosed with sarcoidosis from January 1, 1999 to December 31, 2019 at a single University Hospital. Finally, 344 patients were included according the ATS/ERS/WASOG criteria (*Eur Respir J.* 1999; 14:735-7). Different ocular manifestations and the following systemic treatments were assessed: **a)** OCS, **b)** cIS, **c)** monoclonal TNF inhibitors, **d)** Etanercept (ETN), **e)** Tocilizumab (TCZ). Best Corrected Visual Acuity (BCVA) according to different systemic treatments was compared at diagnosis and after one year of follow-up (Kruskall Wallis test).

Results: 344 patients were reviewed. From these, 65 (18.9%) presented ocular manifestations as uveitis (83.1%), orbital lesions (7.7%), retinal vasculitis (6.2%), dry eye (6.2%) and scleritis (1.5%). All of them received systemic treatment. BT was particularly used in patients with retinal vasculitis (100%), panuveitis (75%) and orbital lesions (40%). Systemic treatment and BCVA outcome according to

Table 1. Median BCVA at onset and after one year according to ocular manifestations and type of systemic therapy.

Type of ocular affection	n (%)	Median BCVA at onset [IQR]	Median BCVA after 1 year [IQR]	OCS n (%)	cIS n (%)	monoclonal TNFi n (%)	ETN n (%)	TCZ n (%)
Uveitis	54 (83.1)	0.6 [0.3-0.8]	0.9 [0.6-1]	44 (81.5)	29 (53.7)	16 (29.6)	3 (5.5)	3 (5.5)
-Anterior	31 (47.7)	0.7 [0.3-0.8]	0.8 [0.5-1]	22 (70.9)	12 (38.7)	2 (6.5)	2 (6.5)	0
-Intermediate	2 (3.1)	0.5 [0.3-0.8]	0.7 [0.5-1]	2 (100)	1 (50)	1 (50)	1 (50)	1 (50)
-Posterior	5 (5.2)	0.5 [0.3-0.8]	0.9 [0.5-1]	4 (80)	4 (80)	3 (60)	0	0
-Panuveitis	16 (24.6)	0.4 [0.2-0.7]	0.9 [0.5-1]	16 (100)	12 (75)	10 (62.5)	0	2 (12.5)
Orbital lesions	5 (7.7)	0.5 [0.3-0.8]	1 [0.6-1]	4 (80)	2 (40)	2 (40)	0	1 (20)
Retinal vasculitis	4 (6.2)	0.6 [0.5-0.8]	1 [0.6-1]	4 (100)	4 (100)	1 (25)	0	1 (25)
Dry eye	4 (6.2)	1 [0.5-0.8]	0.9 [0.6-1]	2 (50)	1 (25)	0	0	0
Scleritis	1 (1.5)	1 [0.5-0.8]	1 [0.6-1]	1 (100)	0	0	0	0

Abbreviations: BCVA: Best Corrected Visual Acuity; IQR: Interquartile Range; OCS: Oral Corticosteroid; cIS: Conventional Immunosuppressants; Monoclonal TNFi: monoclonal tumour necrosis factor inhibitors; ETN: Etanercept; TCZ: Tocilizumab.

Figure 1. Median [25,75 IQR] BCVA after one year follow up according to type of systemic treatment in sarcoid uveitis. Median BCVA after one year Systemic treatment. **Abbreviations:** BCVA: Best Corrected Visual Acuity; OCS: Oral Corticosteroids; Conventional IS: Conventional immunosuppressants; Monoclonal TNFi: monoclonal tumour necrosis factor inhibitors; ETN: Etanercept; TCZ: Tocilizumab.

ocular manifestations are shown in table. Median BCVA at onset and after one year was 0.6 [interquartile range (IQR) 0.3-0.8] and 0.9 [0.6-1], respectively. No statistically significant differences were observed between systemic treatments in BCVA of patients with uveitis after 1 year of follow-up (Figure).

Conclusion: Panuveitis, intermediate uveitis and orbital lesions, require a more aggressive treatment than other manifestations of ocular sarcoidosis. In uveitis, an important improvement in BCVA after 1 year of follow-up was observed regardless of the type of treatment used.

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OP0092

LONG-TERM SAFETY AND EFFECTIVENESS OF CANAKINUMAB IN CRYOPYRIN-ASSOCIATED PERIODIC SYNDROMES (CAPS) – 30-MONTH DATA FROM THE RELIANCE REGISTRY

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Background: In clinical trials as well as in real-life, the IL-1β inhibitor canakinumab leads to rapid remission of symptoms in the treatment of CAPS, a monogenic autoinflammatory disease with severe systemic and organ inflammation.

Objectives: The RELIANCE registry is designed to explore long-term safety and effectiveness of canakinumab under routine clinical practice conditions in pediatric (≥2 years) and adult patients with CAPS, including Muckle-Wells syndrome (MWS), familial cold autoinflammatory syndrome (FCAS), and neonatal onset multisystem inflammatory disease (NOMID)/chronic infantile neurological cutaneous and articular syndrome (CINCA).

Methods: This prospective, non-interventional, observational study with a 3-year follow-up enrolls patients with clinically confirmed diagnoses of CAPS routinely receiving canakinumab. In 6-monthly visits, clinical data, physician assessments and patient-reported outcomes are evaluated starting at baseline with last update at 30 months of follow-up in the total cohort including the cohort with severe CAPS subtypes (NOMID/CINCA).

Results: 91 CAPS patients (50% female; 14 [15%] NOMID/CINCA subtypes) were enrolled by December 2020 (Table 1). At baseline, median age was 20.5 years and median duration of prior canakinumab treatment was 6 years. 11 drug related severe adverse events per 100 patient years were reported. 68% of patients

reached disease remission by physicians' assessment along with rates of 40-61% absent disease activity in PGA. Patients reported stable low level disease activity, fatigue and Auto-Inflammatory Diseases Activity Index scores (AIDAI, figure 1). CAPS was impairing social life in 50% of patients and another 50% reported days off from school/work. Lab parameters were within normal limits.

Table 1. Patient and physician assessment of clinical CAPS disease activity and laboratory markers over time.

	Baseline		12 months		30 months	
	Total cohort	NOMID/CINCA	Total cohort	NOMID/CINCA	Total cohort	NOMID/CINCA
Number of patients, N	91	14	67	8	28	4
Number (%) of patients with days absent from work/school during last 6 months	30 (34)	4 (29)	28 (42)	2 (25)	17 (61)	4 (100)
Number (%) of patients in disease remission (physician assessment)	61 (68.5)	11 (78.6)	42 (66.7)	4 (66.7)	19 (67.9)	4 (100.0)
Physician Global Assessment, percentage of absent/mild-moderate/severe rating, %	40 / 53 / 2	57 / 36 / 0	33 / 60 / 2	33 / 50 / 0	61 / 39 / 0	75 / 25 / 0
Patient assessment of current disease activity; 0-10, median (min; max)	2.0 (0; 7)	1.0 (0; 6)	1.0 (0; 7)	1.0 (0; 5)	0.0 (0; 7)	0.0 (0; 4)
Patient assessment of current fatigue; 0-10, median (min; max)	3.0 (0; 9)	2.0 (0; 6)	3.0 (0; 8)	2.0 (0; 8)	1.0 (0; 8)	4.0 (0; 5)
Number (%) of patients without impairment of social life by the disease	32 (52.5)	4 (50.0)	31 (62.0)	3 (42.9)	11 (47.8)	1 (33.3)
CRP, median (mg/dl)	0.1	0.2	0.1	0.5	0.0	0.2
SAA, median (mg/dl)	0.3	0.4	0.5	0.9	0.3	0.1
ESR, median (mm/h)	5.0	6.0	5.0	3.5	5.0	5.5
SAE	Number of events		Incidence rate per 100 patient years			
	Total cohort	NOMID/CINCA	Total cohort	NOMID/CINCA		
All types of SAE	39	3	14.72	11.72		
SADR	20 ^a	0	10.69	0.00		

^a Alport's syndrome, appendicitis, blister, cardiovascular disorder, chest pain, circulatory collapse, erythema, febrile convulsion, glomerulonephritis, haemophilus test positive, pneumonia, premature delivery, skin discolouration, tonsillectomy, tonsillitis bacterial, tonsillitis streptococcal (all N=1 event), pyrexia (N=3 events), not yet coded (inpatient admission, N=1 event) CRP, c-reactive protein; ESR, erythrocyte sedimentation rate; n. a., not annotated; SAA, serum amyloid A; SADR, serious adverse drug reaction; SAE, serious adverse event

Figure 1: Median AIDAI score (0-390) of the CAPS cohort (N = 91 at baseline) over 30 months

Conclusion: The 30-month interim analysis of the RELIANCE study demonstrates that long-term canakinumab treatment is safe and effective in patients with any subtype of CAPS. However, impairment of social life and days off school/work still exists.

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OP0093

RETENTION RATE OF IL-1 INHIBITORS IN PATIENTS WITH SCHNITZLER'S SYNDROME

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Background: Schnitzler's syndrome is an autoinflammatory disease characterized by monoclonal gammopathy and recurrent episodes of urticaria accompanied by clinical and laboratory signs of acute inflammation. Interleukin (IL)-1 inhibitors proved to be useful in the treatment, but data on long-term safety and efficacy of these agents are sparse.

Objectives: To evaluate the retention rate of IL-1 inhibitors in patients with Schnitzler's Syndrome.

Methods: Retrospective analysis of an Italian multicenter cohort (9 Centers). All patients fulfilled Strasbourg diagnostic criteria. Data are expressed as median [IQR].

Results: We identified 15 patients (8 females, 7 males) who received a total of 24 treatment courses with IL-1 inhibitor treatment (16 anakinra and 8 canakinumab) between January 2001 and December 2019, with a median treatment duration of 19 months [8.5-51.3]. Median age at diagnosis was 64.0 years [56.0-72.5] and median follow up was 5.0 years [2.0-8.0]. Before the biological treatment, all patients were treated with corticosteroids and 11 with at least one conventional synthetic disease-modifying antirheumatic drug (csDMARD): methotrexate (5), colchicine (5), cyclosporine (3), azathioprine (1), mycophenolate mofetil (1), cyclophosphamide (1).

Fifteen patients received 16 courses of Anakinra, which was the 1st line biological treatment in 14 patients. Seven patients continued it with benefit, while 7 patients discontinued it: 3 for secondary inefficacy; 3 for adverse events (2 injection site reactions, 1 severe allergic reaction); 1 for secondary inefficacy and leukopenia. Anakinra was used as 2nd line treatment in 1 case (after tocilizumab failure); in 1 patient anakinra was resumed after temporary discontinuation and an attempt with infliximab. One patient died for multiple myeloma progression while on treatment with anakinra. The median duration of the courses with anakinra was 20.0 months [6.0-58.3].

Seven patients received 8 courses of canakinumab (150 mg/8weeks in 5 cases and 150 mg/4weeks in 3). In 5 cases the drug was administered as 2nd line biological treatment (after anakinra failure) and in 2 cases as 3rd line treatment (1 after tocilizumab and anakinra failures and 1 after anakinra and adalimumab failure). In 1 patient, it was resumed after temporary discontinuation and an attempt with etanercept. One patient died while on treatment with canakinumab due to a presumably unrelated adverse event. The median duration of canakinumab treatment courses was 19.0 months [13.5-31.0].

At last follow-up visit, all patients were on treatment with an IL-1 inhibitor: 8 with anakinra (7 at the dosage of 100 mg/day, 1 at the dosage of 200 mg/day) and 7 with canakinumab (2 at the dosage of 150 mg/8 weeks, 4 at the dosage of 150 mg/4 weeks and 1 at the dosage of 300 mg/4 weeks). Notably, in 3 patients the dosage of canakinumab was increased since the start of the treatment.