Conclusion: This study defined three criteria for IVIG resistance in KD prior to treatment: Duration of fever before IVIG ≥ 9.5 days, CRP ≥ 88 mg/L and NLR value ≥ 1.69 . Presence of two of these three criteria were found as a significant risk factor for IVIG resistance. Following initial therapy with IVIG, if NLR value is ≥ 1.25 , it also predicted ongoing inflammation and IVIG resistance, possibly a need for steroid therapy instead of second IVIG.

Based on the clinical and laboratory features, we established a new risk-scoring system for predicting IVIG resistance in Turkish children with KD. This may be useful for choosing optimal treatment for KD before coronary artery involvement.

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Disclosure of Interests: Serkan Turkucar: None declared, Kaan Yildiz: None declared, Ceyhan Acari: None declared, Hatice Adiguzel Dunder: None declared, Mustafa Kir: None declared, Erbil Unsal Grant/research support from: Novartis, AbbVie, Roche, Koçak Pharma, Speakers bureau: Novartis, AbbVie, Roche, Koçak Pharma

DOI: 10.1136/annrheumdis-2019-eular.1341

THU0321 CLINICAL OUTCOMES OF PATIENTS WITH GIANT CELL ARTERITIS AND POLYMYALGIA RHEUMATICA SYMPTOMS TREATED WITH TOCILIZUMAB IN ROUTINE CLINICAL PRACTICE

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Background: Approximately 50% of patients with giant cell arteritis (GCA) also have polymyalgia rheumatica (PMR) symptoms.¹

Objectives: To determine whether the presence of PMR symptoms upon GCA diagnosis impacts GCA clinical outcomes and to evaluate the effectiveness of tocilizumab (TCZ) for controlling PMR symptoms in patients with GCA.

Methods: Retrospective analysis of patients with GCA treated with TCZ at a single center (2010-2018). Disease flares, defined as re-appearance of clinical manifestations (eg, cranial or PMR signs or symptoms), were assessed among patients with or without PMR at the time of GCA diagnosis. PMR symptoms during disease flares were assessed before and after TCZ initiation.

Results: A total of 60 patients with GCA (71.7% female; mean age, 69.3 years) were followed for a mean (SD) of 2.3 (2.17) years. At diagnosis, 32 had PMR symptoms (2 patients with PMR symptoms only). **Table 1** shows baseline patient characteristics. Among patients with PMR at diagnosis, 75% (n = 24) had a total of 60 flares before TCZ initiation and 34.3% (n = 11) had a total of 23 flares after TCZ initiation (**Table 2**). Among 28 patients without PMR at diagnosis, 67.9% (n = 19) had a total of 42 flares before TCZ initiation and 25% (n = 7) had a total of 14 flares after TCZ initiation (**Table 2**). TCZ was associated with a significant reduction in the annual flare rate both in patients with PMR symptoms ($P = 0.003$) and without PMR symptoms ($P = 0.03$) at diagnosis (**Table 2**). Median time to flare was significantly longer after initiation of TCZ in patients with PMR symptoms (hazard ratio [HR] [95% CI]: 0.18 [0.06 to 0.53]; $P = 0.002$) and without PMR symptoms (HR [95% CI]: 0.21 [0.05 to 0.87]; $P = 0.032$) at diagnosis. Before TCZ initiation, PMR symptoms were observed in 55.9% of flares (57/102) occurring in 43 patients (71.1%). After TCZ initiation, PMR symptoms were observed in 56.8% of flares (21/37) occurring in 18 patients (30%).

Conclusion: TCZ improved clinical outcomes in patients with GCA regardless of the presence or absence of PMR symptoms at diagnosis. These real-world findings suggest that TCZ is also effective in patients with GCA who have symptoms of PMR.

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Abstract THU0321 –Table 1.

Table 1. Patient characteristics at GCA diagnosis and treatment received

	With PMR Symptoms (n = 32)	Without PMR Symptoms (n = 28)
Age, mean (SD)	67.0 (9.27)	71.8 (9.05)
Female, n (%)	23 (71.9)	20 (71.4)
White, n (%)	27 (84.4)	26 (92.9)
Clinical manifestations at disease onset, n (%)		
Localized headache	28 (87.5)	19 (67.9)
Scalp tenderness	15 (46.9)	11 (39.3)
Jaw claudication	16 (50.0)	15 (53.6)
Amaurosis fugax	5 (15.6)	6 (21.4)
Blurry vision	9 (28.1)	9 (32.1)
Permanent vision loss	2 (6.3)	6 (21.4)
Diplopia	1 (3.1)	1 (3.6)
Weight loss	6 (18.8)	14 (50.0)
PMR symptom(s) only, n (%)	2 (6.3)	0
ESR (mm/hr), mean (SD)	67.9 (36.52)	78.3 (29.41)
CRP (mg/L), mean (SD)	63.1 (59.69)	92.4 (84.85)
Positive TA biopsy, n (%)*	14/27 (43.8)	11/24 (39.3)
Disease duration before TCZ initiation, median (IQR), years	0.7 (0.2-1.9)	0.6 (0.2-1.4)
Duration of TCZ treatment (years), median (IQR)	0.6 (0.3-1.3)	0.5 (0.2-1.5)

CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; PMR, polymyalgia rheumatica; TA, temporal artery; TCZ, tocilizumab.

* Of patients with TA biopsies performed.

Abstract THU0221 –Table 2. Clinical outcomes before and after TCZ initiation

	With PMR at Diagnosis (n = 32)		Without PMR at Diagnosis (n = 28)	
	Before TCZ Initiation	After TCZ Initiation	Before TCZ Initiation	After TCZ Initiation
Patients with ≥ 1 flare, n (%)	24 (75.0)	11 (34.3)	19 (67.9)	7 (25.0)
With PMR symptom(s)*	21 (65.6)	8 (25.0)	4 (14.3)	2 (7.1)
Without PMR symptom(s)*	3 (9.4)	3 (9.4)	15 (53.6)	5 (17.9)
No. of flares	60	23	42	14
With PMR symptom(s), n (%)	50 (83.3)	18 (78.3)	7 (16.7)	3 (21.4)
Without PMR symptom(s), n (%)	10 (16.7)	5 (21.7)	35 (83.3)	11 (78.6)
Annual flare rate (95% CI)†	1.34 (0.84 to 2.13)	0.54 (0.28 to 1.05)	1.59 (0.78 to 3.23)	0.71 (0.29 to 1.74)
Time to flare (years), median (IQR)	0.3 (0.2-0.7)	2.1 (0.6-2.6)	0.5 (0.3-0.8)	2.6 (0.9-2.6)

GC, glucocorticoids; GCA, giant cell arteritis; IQR, interquartile range; PMR, polymyalgia rheumatica; TCZ, tocilizumab.

* Symptoms are after GCA diagnosis.

† Rates are estimated from a Poisson regression model with treatment, age, smoking history and new and relapsing GCA as covariates and random patient effect.

Disclosure of Interests: Sebastian Unizony Grant/research support from: F. Hoffmann-La Roche, Genentech, Consultant for: Kiniksa, Sanofi, GSK, Robert Spiera Grant/research support from: Roche-Genentech, GlaxoSmithKline, Bristol-Myers Squibb, Boehringer Ingelheim, Cytro, Chemocentryx, Corbus, Consultant for: Roche-Genentech, GlaxoSmithKline, CSL Behring, Sanofi Aventis, Jinglan Pei Employee of: Genentech, Paris Sidiropoulos Employee of: Genentech, Jennie H. Best Shareholder of: Genentech, Employee of: Genentech, John H. Stone Grant/research support from: F. Hoffmann-La Roche, Genentech, Xencor, Consultant for: Chugain, F. Hoffmann-La Roche, Genentech, Xencor

DOI: 10.1136/annrheumdis-2019-eular.2676

THU0322 CLINICAL CHARACTERISTICS OF BIOPSY-PROVEN IGA VASCULITIS IN CHILDREN AND ADULTS: A RETROSPECTIVE COHORT STUDY

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Background: Differences in both presentation and outcome based on age of diagnosis have been described in patients with IgA vasculitis (IgAV) but data are limited due to cohort size and follow-up duration.

Objectives: To describe the differences in clinical characteristics and outcome between adult- and child-onset biopsy-proven IgA vasculitis (IgAV) in North America.