At the end of the follow-up, 2 patients had died due to lung adenocarcinoma during IFX treatment and 3 patients had died 1 year, 3 and 8 years after IFX discontinuation. The causes of death were with right heart failure due to pulmonary hypertension in 1, and severe nervous system involvement in 2 of the patients.

**Conclusion:** Despite its successful use for the management of potentially organ and life-threatening manifestations in more than half of our patients with BS, long term maintenance was not possible in 42%, mainly due to adverse events, lack of patient compliance and inefficacy.

**REFERENCES:**


**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2021-eular.3262

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**POS0815**

**CLINICAL CHARACTERISTICS, IMAGING PHENOTYPE, AND long-term outcomes of Takayasu arteritis patients with hypertension**

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**Background:** Hypertension occurred in 30-80% of Tak patients around the world. The occurrence of hypertension might severely worsen Tak prognosis. Nevertheless, data describing the specific imaging features in hypertensive TAK patients and the associations between hypertensive severity, blood pressure control status and long-term outcome were still lacking.

**Objectives:** To investigate the characteristics and associations of hypertensive characteristics with adverse events-free survival in Takayasu arteritis (TAK) patients with hypertension.

**Methods:** This research was based on a prospectively on-going observational cohort-East China Takayasu Arteritis (ECTA) cohort. In all, 618 TAK patients, who registered in the ECTA cohort up to December 2019, were enrolled. The main outcome was the adverse-events-free survival among hypertensive TAK patients during the follow-up ended on August 2020.

**Results:** Totally, 204 (33.0%) patients suffered from hypertension, with 48 (23.5%), 62 (30.4%), and 94 (46.1%) mild, moderate, and severe hypertension, respectively. Cluster analysis indicated three imaging phenotypes for hypertensive TAK patients: Cluster 1: involvement of the abdominal aorta and/or renal artery (n=56, 27.5%); Cluster 2: involvement of the ascending aorta, thoracic aorta, and the aortic arch and its branches (n=38, 18.6%); Cluster 3: combined involvement of Cluster 1 and Cluster 2 (n=111, 54.4%). By the end of the follow-up, the blood pressure control rate was 50.8%, while the adverse-events-free survival was 67.9% in the entire hypertensive population. Multivariate Cox regression analysis indicated that well-controlled blood pressure (HR=2.13, 95% CI: 1.32–3.78, p=0.047), co-existence of severe aortic valve regurgitation (HR=0.87, 95% CI: 0.64–0.95, p=0.043), Cluster 1 (HR=0.69, 95% CI: 0.48–0.92, p=0.017) and Cluster 3 (HR=0.72, 95% CI: 0.43–0.94, p=0.048) imaging phenotype was associated with the adverse-events-free survival.

**Conclusion:** Patients with controlled hypertension showed better adverse-events-free survival, while those with the Cluster 1 imaging phenotype were more likely to suffer from worse adverse-events-free survival. Hypertension occurred in 30-80% of TAK patients around the world. The occurrence of hypertension might severely worsen TAK prognosis.

**REFERENCES:**


**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2021-eular.3720

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**POS0816**

**PROGNOSTIC FACTORS FOR AGGRAVATED VASCULAR DAMAGE IN TAKAYASU ARTERITIS**

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**Background:** Takayasu arteritis is a rare disease characterized by inflammation in the aorta and its branches. Some patients were discovered to suffer the aggravated vascular damage (AVD), monitored by imaging techniques, even with the effective anti-inflammation treatment. But the general characteristics and the related prognostic factors of AVD in TA were unclear yet.

**Objectives:** We aimed to describe the characteristics of the AVD and identify its prognostic factors in TA.

**Methods:** From the living East China Takayasu arteritis cohort, patients who underwent at least two magnetic resonance angiography (MRA) examinations at Zhongshan Hospital from April 2009 to April 2019 were enrolled as the derivation cohort to explore the prognostic factors of AVD in MRA. An independent group of patients from May 2019 to July 2020 comprising the validation cohort were used to validate the nomogram formed by these prognostic factors.

**Results:** Among 236 enrolled patients, 69 patients (29.3%) suffered AVD with the median follow-up of 14 months. The limb arteries were the most vulnerable and the aggravated vascular stenosis were the most commonly seen in AVD. Patients with AVD were younger, had higher complement 4 levels at baseline, and lower disease remission rate at 6 months. Multivariate cox regression analysis revealed that younger age (HR: 0.25-0.42, 95%CI: 0.09-0.91), higher CRP levels (HR = 2.57, 95%CI: 1.51–4.36) at baseline, and lower remission rate at 6 months (HR = 0.36, 95%CI: 0.21-0.64) were significant predictors. In the validation cohort of 65 patients, 19 cases had AVD. The predictive nomogram based on these factors achieved C-indices of 0.745 and 0.641 in the derivation and validation cohort respectively.

**Conclusion:** Totally, 29.3% of patients suffered AVD, among which the aggravated vascular stenosis and limb arteries involvement were most commonly seen. Younger age, higher CRP at baseline, and lower disease remission rate at 6 months were prognostic factors for AVD.

**REFERENCES:**


**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2021-eular.3494
was evaluated, using erythrocyte sedimentation rate (ESR) as a reference. Disease activity assessment models were constructed and concordance index (C-index), net reclassification index (NRI), and integrated discrimination index (IDI) were evaluated to compare the benefits of the new modes with ESR and Kell score.

**Results:** In total, 64 (70.3%) cases showed active disease. Higher levels of ESR and CRP, and lower interleukin (IL)-2R levels, were observed in active cases. 18F-FDG-PET/CT parameters, including SUVmean, SUVrati01, SUVrati02, sum of SUVmean, and sum of SUVmax, were significantly higher in active disease groups. The C index threshold of ESR to indicate active disease was 0.78 (95% CI: 0.69-0.88). The new activity assessment model combining ESR, sum of SUVmean, and IL-2R showed significant improvement in C index over the ESR method (0.96 vs. 0.78, P < 0.01; NRI 1.63, P < 0.01; and IDI 0.48, P < 0.01). The new model also demonstrated modest superiority to Kell score assessment (0.96 vs. 0.87, P = 0.03; NRI 1.19, P < 0.01; and IDI 0.33 P < 0.01).

**Conclusion:** A novel 18F-FDG-PET/CT-based method that involves combining the sum of SUVmean with ESR score and IL-2R levels demonstrated superiority in identifying active TA compared to conventional methods.

**REFERENCES:**

**Disclosure of Interests:** None declared

**Title:** POST0818 TREATMENT OF POLYMYALGIA RHEUMATICA WITH TOCILIZUMAB: RESULTS OF AN OBSERVATIONAL RETROSPECTIVE MULTICENTER STUDY

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**Background:** In 2017, TOCILIZUMAB (TCZ) obtained marketing authorization for treatment of giant cell arteritis (GCA); however, this doesn’t extend to polymyalgia rheumatica (PMR). The reasons for TCZ introduction included GC dependence (n=30, 88%), and necessity of quick GC sparing (n=4 patients, 12%). Of all patients, 76% (26 patients) had stopped GC treatment definitively, with a mean time of 9.4 (0-32) months.

**Results:** TCZ was initiated intravenously at 8mg/kg every 4 weeks for 27 patients (79%) and subcutaneously at 162mg/week for 7 patients (21%). The reasons for TCZ introduction included GC dependence (n=30, 88%), and necessity of quick GC sparing (n=4 patients, 12%). Of all patients, 76% (26 patients) had stopped GC treatment definitively, with a mean time of 9.4 (0-32) months.

**Conclusion:** This is the largest cohort presenting results of the use of TCZ in PMR. Despite the small number of participants, our study suggests TCZ is effective as a GC sparing agent in PMR. It is not recommended to replace GC with TCZ in PMR.

**Disclosure of Interests:** None declared

**Title:** POST0819 EMERGENCE OF DE NOVO MANIFESTATIONS DURING INFILIXIMAB TREATMENT IN BEHÇET SYNDROME


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**Background:** Infliximab (IFX) is increasingly used in the management of severe, relapsing or refractory manifestations of Behçet Syndrome (BS). Emergence of de novo manifestations have been reported during IFX treatment, despite efficacy for the initial manifestation that required IFX use.

**Objectives:** We aimed to survey a sizeable cohort of BS patients treated with IFX for the development of de novo manifestations during treatment.

**Methods:** A chart review was conducted to identify all BS patients who were given IFX in our Behçet Disease Research Center between 2004 and 2020. Demographic data, indications for IFX initiation, concomitant drugs, prior treatments, and outcomes were recorded. De novo manifestations were defined as new BS manifestations that had not occurred before IFX treatment.

**Results:** A total of 252 patients used IFX with the main indications being uveitis in 122, vascular involvement in 82, parenchymal central nervous system involvement in 32, gastrointestinal involvement in 11, arthritis in 10, mucocutaneous involvement in 4, and secondary amyloidosis in 1. Of these patients, 17 (6%) had developed a total of 21 de-novo manifestations during a mean follow-up of 38.4 ± 92 (SD) months (Table 1). Vascular involvement was the main indication for IFX in the majority (n=12; 71%) of these 17 patients followed by eye involvement (n=3; 18%), central nervous system involvement (n=1), and joint involvement (n=1). Concomitant medications were prednisolone in 14 patients, azathioprine in 6 patients, mycophenolate mofetil, cyclosporine-A and methotrexate in 1 patient each. Thirteen patients (76%) were in remission for the main indication when de-novo manifestations emerged. In 10 patients IFX treatment was intensified either by increasing the dose to...