($p=0.3$). The median SUVmax was 3.0 [1.8–8.6] without significant difference between GCA and TA: 3.4 (2.1–8.6) versus 2.6 (1.8–7.1) ($p=0.4$), respectively. Eleven PET (61%) were performed under treatment, which consisted of steroids with a median dose at 30 mg/day [3–240]. Among 11 patients with active disease, 8 had inflammatory patterns and 3 had normal PET/MR, i.e. a sensibility of 73%, and the sensibility increased to 100% in patients with active TA disease. Median SUVmax were 4.7 [2.1–8.6] in patients with active disease versus 2 [1.8–2.6] in patients with remission ($p=0.003$).

Conclusions: PET/MR is a new hybrid modality of imaging which is interesting for the diagnosis and the follow-up of large-vessel vasculitis.

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AB0653 PREDICTION OF RELAPSES IN AUTOIMMUNE LARGE-VESSEL VASCULITIS – TOWARDS PERSONALISED IMMUNOSUPPRESSIVE TREATMENT STEWARDSHIP

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Background: Giant cell arteritis (GCA) is an autoimmune disease of the large arteries. Treatment consists in long-term immunosuppression with glucocorticoids (GC). About half of the patients have disease flares ('relapses') despite standard therapy. Tocilizumab (TCZ) – an anti-IL6 receptor antibody – is highly effective in reducing relapses, but has high costs.

Objectives: Here, we tested whether the initial clinical presentation and/or immunological findings might predict a GCA patient subset with poor response to GC. These might benefit from early TCZ therapy.

Methods: We performed a chart review on 113 patients from our prospective GCA cohort over the first two years after diagnosis. All had a follow-up of at least three months (median follow-up 24 months, IQR 12.6–24). Clinical findings at diagnosis, routine labs (at 0, 1, 3, 6, and 12 months) and therapy information (drug and dose) were extracted from the electronic database.

Relapses were defined as the presence of GCA-related symptoms (ischaemic pain, polymyalgia (PMR)) and/or elevated systemic inflammation parameters (CRP, ESR) that responded to an increase in GC-dose. GC receptor (GCR) expression levels in T cells were assessed using flow cytometry. Patients were genotyped for two polymorphisms in the Glucocorticoid receptor gene (NR3C1) that have been associated with steroid-responsiveness in other autoimmune disease (Systemic lupus, Pemphigus...).

Results: Over the first 12 months, 50.6% experienced at least one relapse. The majority of relapses occurred after three months of treatment (median time to relapse 102 days, range 19–312). This is when the GC dose is tapered below 20 mg/d. 'Relapsers' had an average of 1.66 (range 1–4) relapses in the first year. Patients with fever at initial presentation had a 2.2-fold (CI 1.1–5.05) higher risk to experience relapses ($p=0.02$). Other clinical findings were not associated with subsequent relapses. Low lymphocytes after the first month of therapy was the only lab value associated with relapse free follow up (698/ul vs 1021/ul, $p=0.02$). This was independent of the cumulative GC dose that 'non-relapsers' and

'relapsers' received in this period (1747 mg vs. 1710 mg mg, $p=0.4$). Relapsers had lower GCR expression levels, as assessed by flow cytometry.

Conclusions: Fever, lack of lymphocytopenia after one month of therapy and low GCR expression are risk factors for relapses in GCA. Low GCR expression combined with absence of lymphocytopenia during high dose GC therapy points at a constitutional steroid-resistance in relapsers. Whether patient stratification based on these parameters allows to safely adapt ('personalise') the intensity and/or duration of GCA treatment needs to be tested in a prospective clinical trial.

Disclosure of Interest: None declared

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AB0654 CLINICAL PROFILE AND RISK FACTORS OF INFECTIONS IN PATIENTS WITH ANCA-ASSOCIATED VASCULITIS (AAV) – 18-YEAR DATA FROM A SINGLE TERTIARY CENTRE

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Background: Despite advances in the treatment of AAV, there are still considerable morbidities related to treatment-related complications. Infection is one of the most commonly encountered problems in patients on immunosuppressive therapy.

Objectives: This single centre, retrospective study reviewed the clinical features and investigated the risk factors for infections among patients with AAV.

Methods: 104 patients with AAV diagnosed between January 2000 and December 2017 in a tertiary hospital were included. Demographic data and clinical parameters were reviewed. Logistic regression was performed to identify factors predicting infections.

Results: Around two-thirds of the 104 patients included were female (63.5% $n=66$). Mean age at diagnosis was 64.4-year-old. The majority (65.4%, $n=68$) had microscopic polyangiitis (MPA), 19.2% ($n=20$) had granulomatosis with polyangiitis (GPA) and 15.4% ($n=16$) had eosinophilic granulomatosis with polyangiitis (EGPA).

More than half of the patients (58%, $n=61$) experienced at least one episode of infection and 22% ($n=23$) had recurrent sepsis during their disease course. Infection was the leading cause of mortality of the 56 deceased patients in this series. Infections were less frequent in EGPA patients compared to their counterparts with MPA and GPA (37.5% vs 61.8%–65%).

Most infections were bacterial and multiple-drug resistant organisms were the causative agents in 8 patients. Two had neutropenic sepsis. Three had M. tuberculosis and five had herpes zoster. One had concomitant VZV and pneumocystis jiroveci pneumonitis.

Abstract AB0654 – Table 1.

Factors predicting infection	Odds Ratio ($p<0.05$)
– Age	1.034
– Renal insufficiency (serum creatinine ≥ 140 $\mu\text{mol/L}$) at diagnosis	5.452
– Disease-related organ failure	3.006
– Dialysis support	6.504
– Use of cyclophosphamide as induction agent	2.956

Conclusions: Infections were common and often led to significant morbidities and mortalities among AAV patients. Risk factors included age, renal insufficiency (serum creatinine >140 $\mu\text{mol/L}$) on presentation, disease-related organ failure, need for renal supportive therapy, and the use of cyclophosphamide as induction agent.

Disclosure of Interest: None declared

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AB0655 AGREEMENT BETWEEN 18-FDG PET/CT AND CLINIMETRIC TAKAYASU ACTIVITY SCORES

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Background: The 18-FDG PET/CT is an objective tool employed for the diagnosis of Takayasu arteritis and also is used for the assessment of disease activity of this vasculitis.¹ There are few clinimetric scores developed for Takayasu clinical activity assessment such as the Indian Takayasu Clinical Activity Score (ITAS2010/ITAS.A),² the National Institutes of Health criteria (NIH score) from USA³ and the Mexican effort by Dabague-Reyes (DR score).⁴ The validity and