Background Sarcoïdosis is a chronic systemic disease associated with cardiovascular manifestations. Although various inflammatory conditions have become recognized as non-traditional risk factors for cardiovascular disease (CVD), the risk profiles in sarcoïdosis remain uncharacterised due to its rarity. Using a big data approach we evaluated the burden of CVD on patients with sarcoïdosis.

Methods The Algorithm for Comorbidities, Associations, Length of Stay and Mortality (ACALM) study consists of 1816230 patients admitted hospitals in England between 2000–2014. All patients admitted with sarcoïdosis were compared to age and gender matched control groups and multivariate logistic regression analyses were used to evaluate the risk of CVD.

Results 902 sarcoïd patients were compared to an age and gender matched control group of 9020 patients (mean age 50±15, 50.4% male). Both groups were predominantly Caucasian (sarcoïd 50.3% vs. control 78%) but as expected, higher proportions of sarcoïd patients were Afro-Caribbean (18.2% vs. 3.0%) and South Asian (20.2% vs 7.3%). Sarcoïd patients were significantly more likely to have heart failure (Odds ratio, OR 2.2), chronic kidney disease (OR 2.9), hypertension (OR 1.7), hyperlipidaemia (OR 1.3), and type 2 diabetes (OR 2.0). They were less likely to have acute coronary syndrome (OR 0.4).

Conclusion Sarcoïdosis is associated with a marked increase in heart failure and kidney disease, as well as a range of traditional CVD risk factors which need to be managed. These results are illustrated in Table 1.

Conflict of Interest none