# Diagnosing Giant Cell Arteritis (GCA): Can probability scoring improve our Leeds Teaching Hospital Trust (LTHT) diagnostic pathway?

## Authors:

Dr Rahaymin Chowdhury: <a href="mailto:rahaymin.chowdhury@nhs.net">rahaymin.chowdhury@nhs.net</a>

Dr Olivia Richardson: <a href="mailto:olivia.richardson2@nhs.net">olivia.richardson2@nhs.net</a> Mrs Andrea Sweeting: <a href="mailto:andrea.sweeting@nhs.net">andrea.sweeting@nhs.net</a> Professor Ann Morgan: <a href="mailto:A.W.Morgan@leeds.ac.uk">A.W.Morgan@leeds.ac.uk</a>

Dr Sarah Mackie: S.L.Mackie@leeds.ac.uk

# **Background**

Various referral criteria have been proposed for fast-track pathways for GCA diagnosis and/or to select patients for further investigation.

#### **Aim**

To assess suitability of using published probability scores in our pathway to prioritise patients with suspected GCA for treatment and further investigation.

### Method

A retrospective audit involving 100 consecutive patients with possible GCA presenting from 3/6/2016 to 7/3/2017. Each patient's data was run through three published prediction models: Ing, Gonzalez-Lopez and the Southend probability score. The reference standard was the biopsy result.

## Results

43 patients had complete data, of whom 19 were treated as GCA. 14 were biopsy positive. The Gonzalez-Lopez score did not perform well in predicting positive biopsy. The Southend score had 100% sensitivity but only 30% specificity, whereas the Ing scores had 93% sensitivity and 67% specificity.

## Conclusion

- 1. The Southend and Ing scores had high sensitivity making them potentially suitable for use as triage tests, but further data is needed before use in a clinical setting.
- 2. Only 43/100 patients had all the data recorded to allow comparison of these scores. We suggest structured recording of GCA features in clinic to improve quality of decision-making, and have implemented our own in-house checklist to facilitate this.