Mrs N Albutt<sup>1,2</sup>, Miss H Wharton<sup>1,2</sup>, Prof. S Jacob<sup>1,2,3</sup> <sup>1</sup>Birmingham, Solihull and Black Country Diabetic Eye Screening Programme <sup>2</sup>University Hospitals Birmingham <sup>3</sup>Aston University, Birmingham

### Introduction

To assess the incidence of referable diabetic retinopathy (DR) in patients in their 80's looking at rates of progression of disease and determine whether screening interval can be extended safely in this age group.

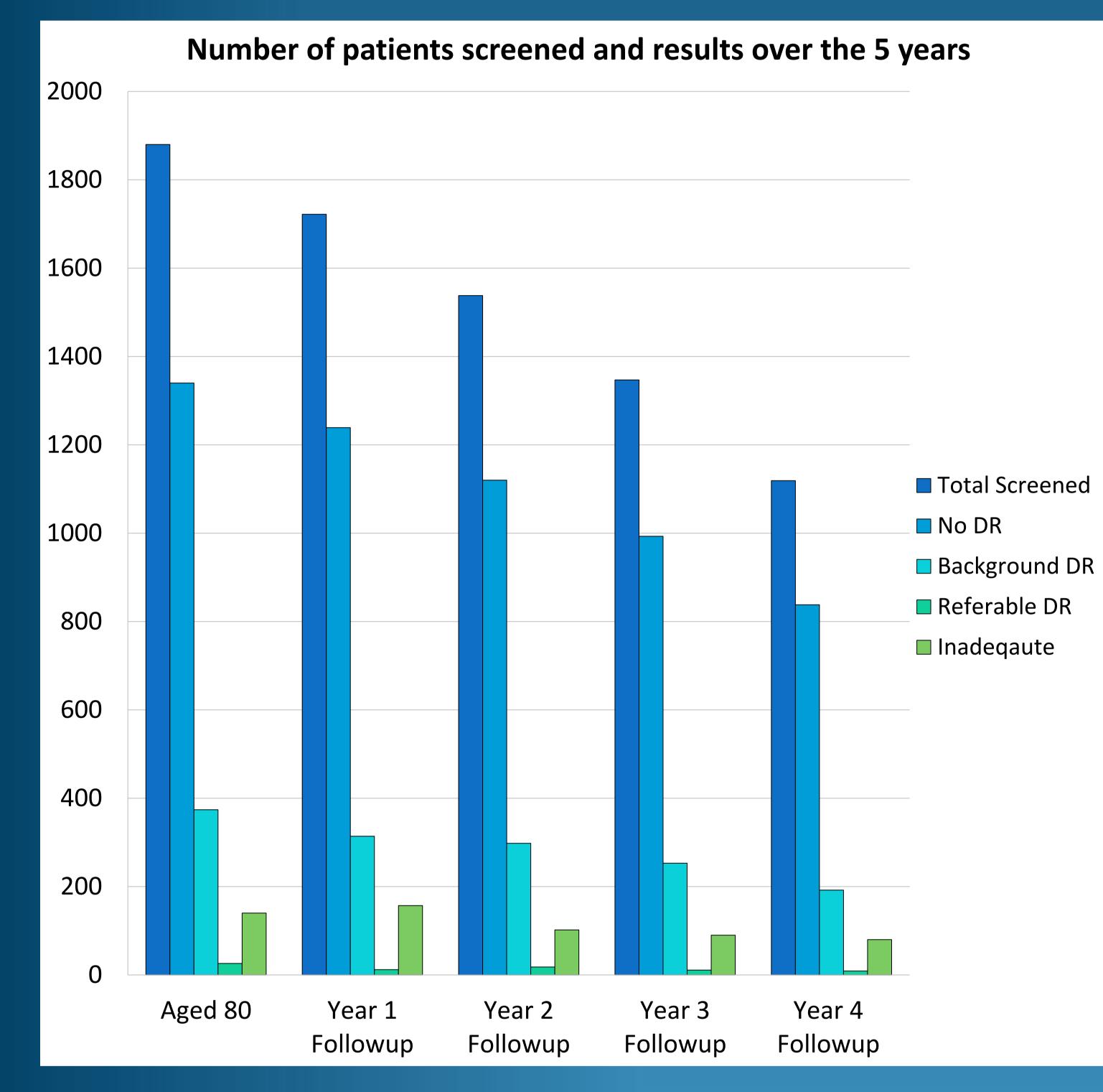
## Methods

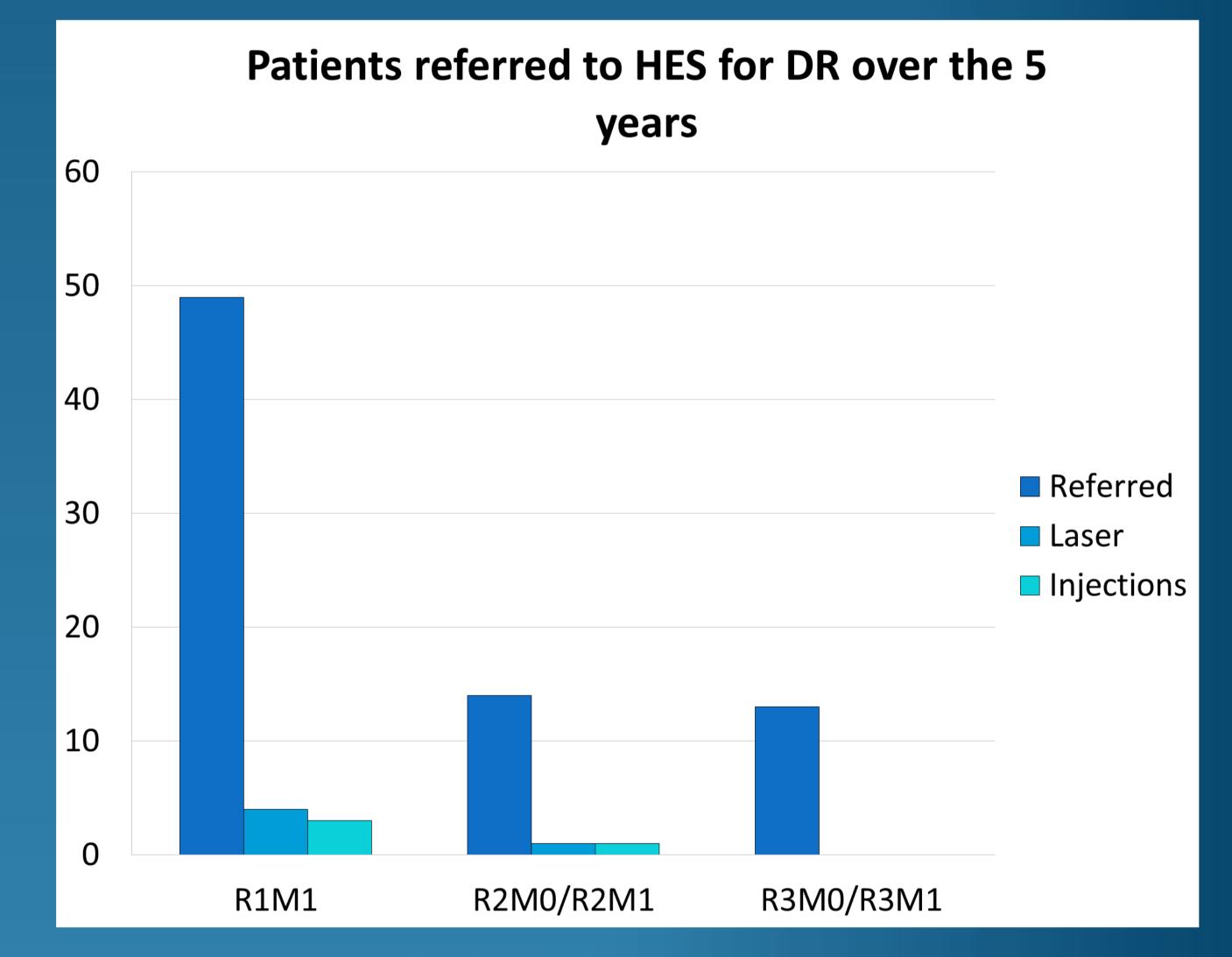
Patients who were aged 80 when they attended screening during April 2014-March 2015 were included. Screening results at baseline and over the next four years were analysed along with the patient demographics. Referable DR was classed as maculopathy, pre-proliferative or proliferative changes.



#### Results

1880 patients aged 80 were included. Average age at their first ever screen was 73 years. 51% were noted to be and the majority were Caucasian 68%, with 21% Asian and 11% Black. Over the course of the FU, 403 (21%) died.

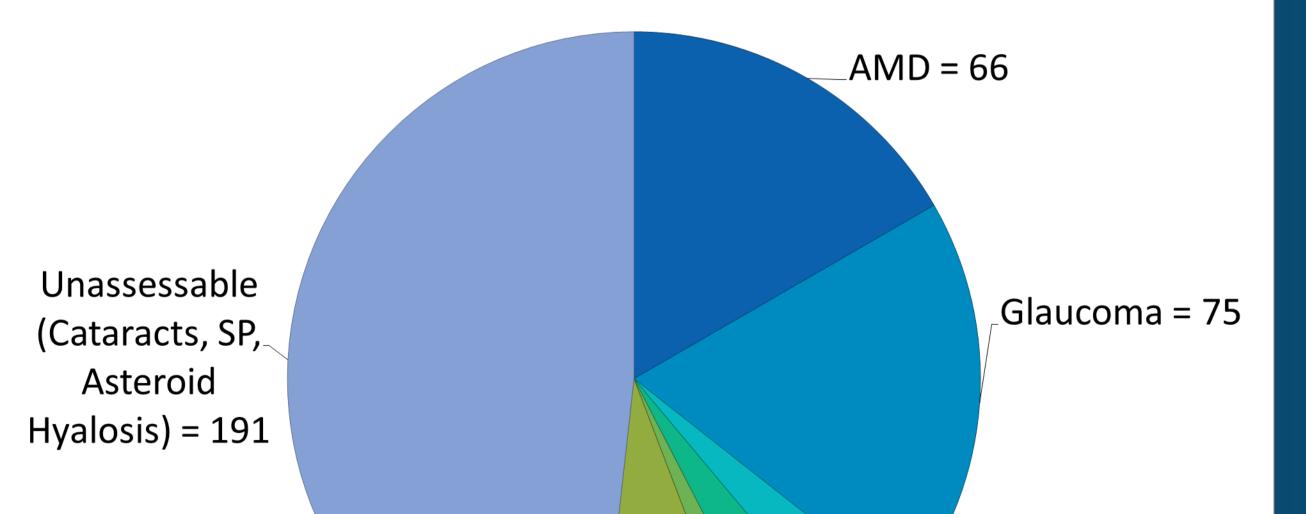




*Figure 1:* At 80 years (baseline screen) 61 (3.2%) had referable DR of which 26 (1.4%) were referred to the hospital eye service (HES). At year 1 follow up (FU) 1722 patients were screened of these 58 (3.4%) had referable DR, 12 (0.7%) were referred to HES. At year 2 FU 1347 were screened of which 53 (3.9%) had referable DR, 18 (1.3%) were referred to HES. At year 3 FU 1538 patients were screened, 52 (3.4%) had referable DR, of which 11 (0.7%) were referred to HES. At year 4 FU 1119 were screened, 37 (3.3%) had referable DR, 9 (0.8%) were referred to HES.

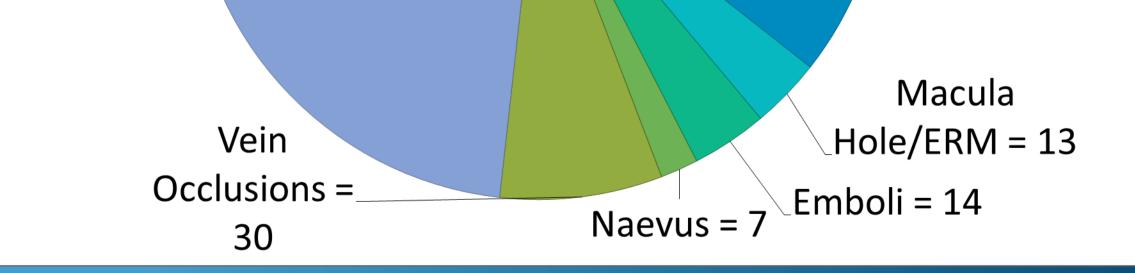
*Figure 2:* In total 76 (4%) were referred HES for DR over the FU period, of which 11 (0.6%) received treatment. R3 cases referred were all stable and previously treated or false positive requiring no treatment.

# Patients referred to HES for other eye conditions over the 5 years



#### Conclusions

- This study showed that the risk of progression of retinopathy is quite low in this elderly age group and only a small proportion of patients developed referable retinopathy requiring any treatment.
- It is possible to consider increasing screening interval in this 80 plus cohort in line with current national recommendation to increase the screening interval in people with low risk of sight loss.
- Screening attendance rates were found to decrease significantly with advancing age due to reasons such as death and other diseases making them no longer suitable for screening.



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*Figure 3:* In total 396 (21%) were referred to HES over the FU period for other eye conditions



NHS



