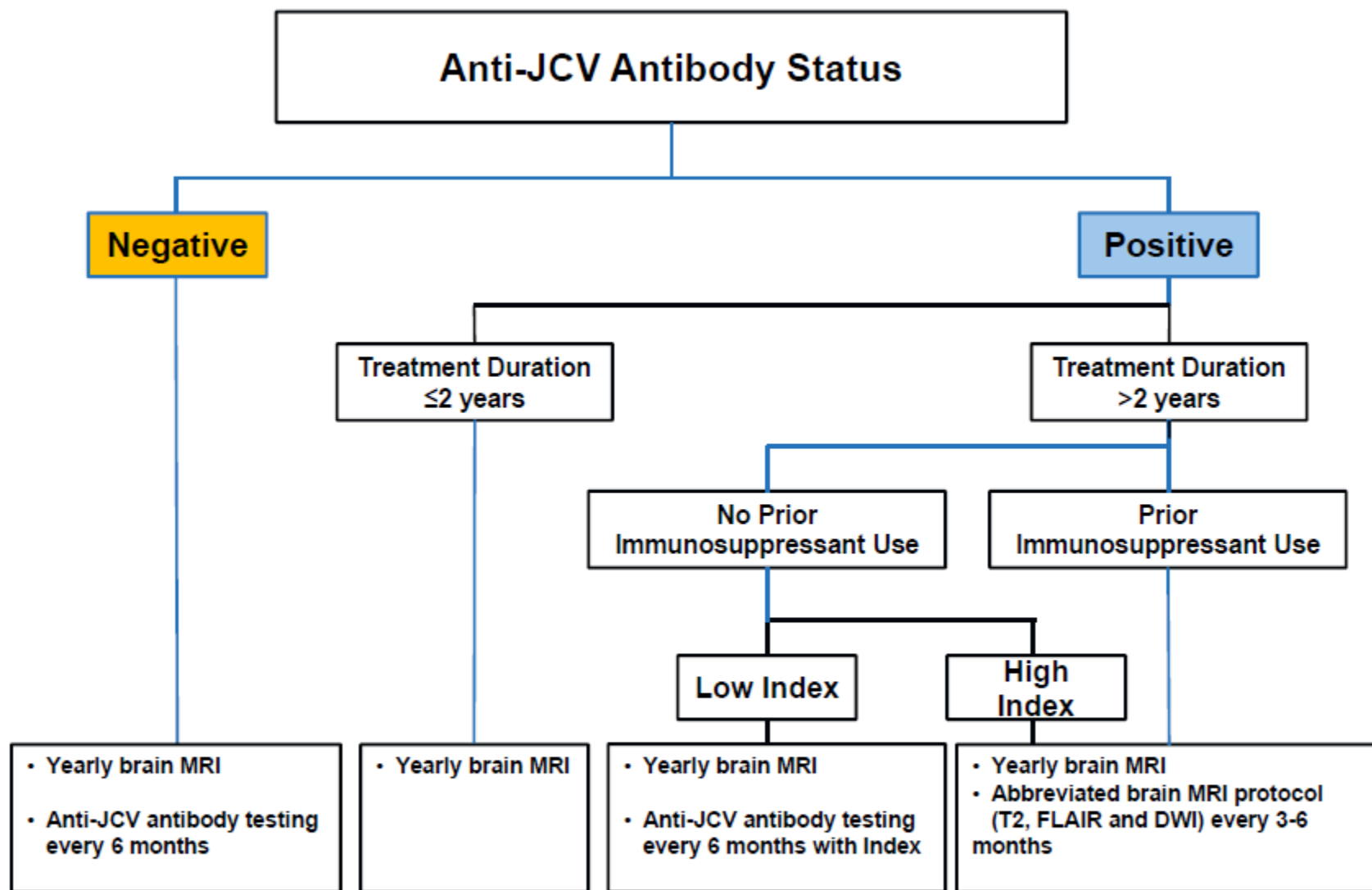


# JCV Ab & MRI monitoring in MS patients receiving Natalizumab

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# Recommended Patient Monitoring Based on PML Risk



Current evidence suggests that the risk of PML is low at index value  $\leq 0.9$ , and increases substantially at values above 1.5 in patients who have been on treatment with natalizumab for longer than 2 years.



# How does it usually work in Nottingham?

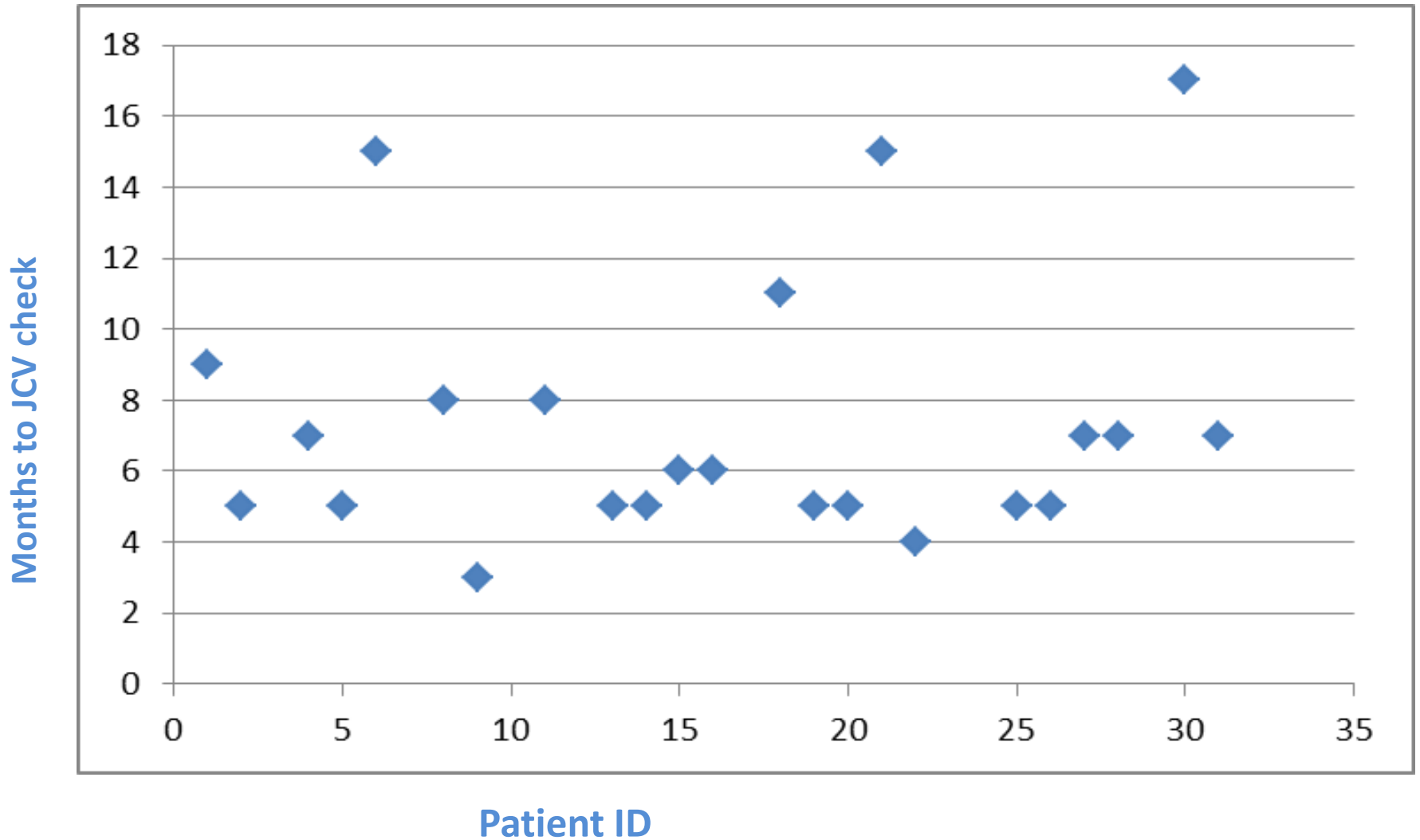
- 1 MS nurse oversees 92 patients receiving Tysabri
- Patients to day case for monthly infusion
- JCV results kept in a folder [ $\pm$  iMed]
- On each of those visits, the nurse checks if the patient is due for
  - [1] JCV Ab check
  - [2] MRI brain
- Nurse prompts consultant to arrange the MRI

# Is this system robust?

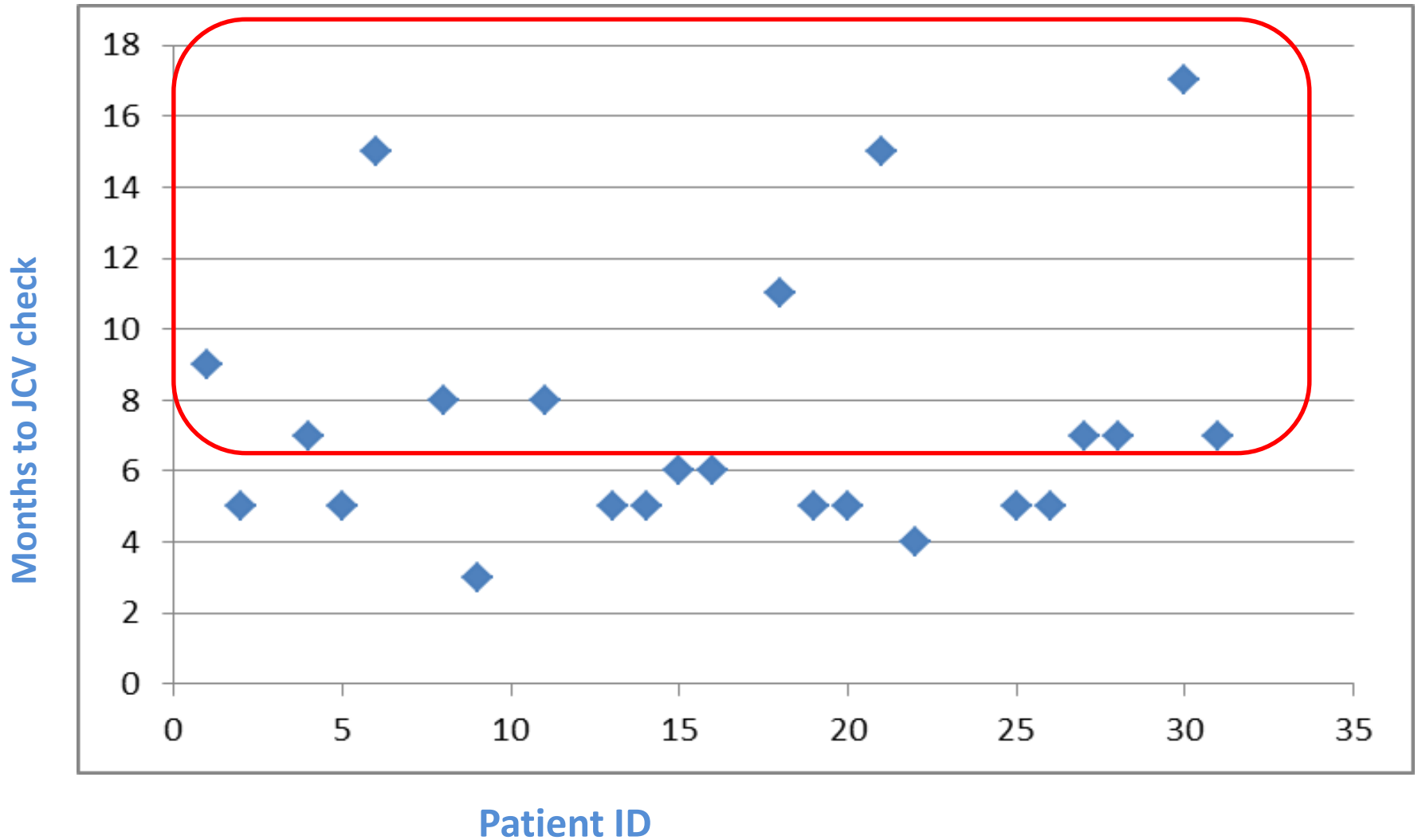
- Audit of
    - JCV Ab status monitoring
    - &
    - MRI monitoring
- ... in 31 patients commenced on Tysabri since Jan 2015

JCV Ab status monitoring

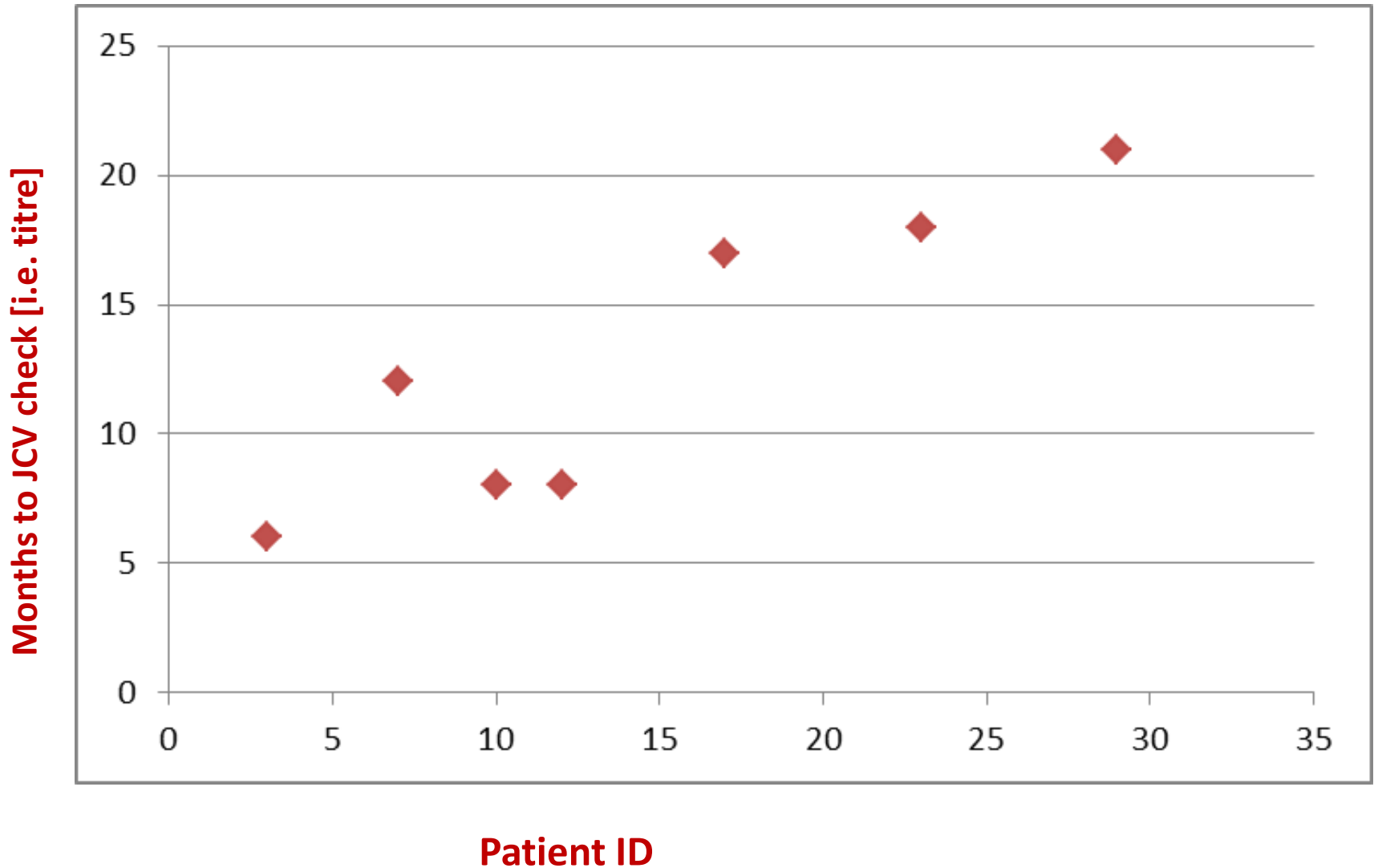
# JC virus negative patients [n = 24]



# JC virus negative patients [n = 24]



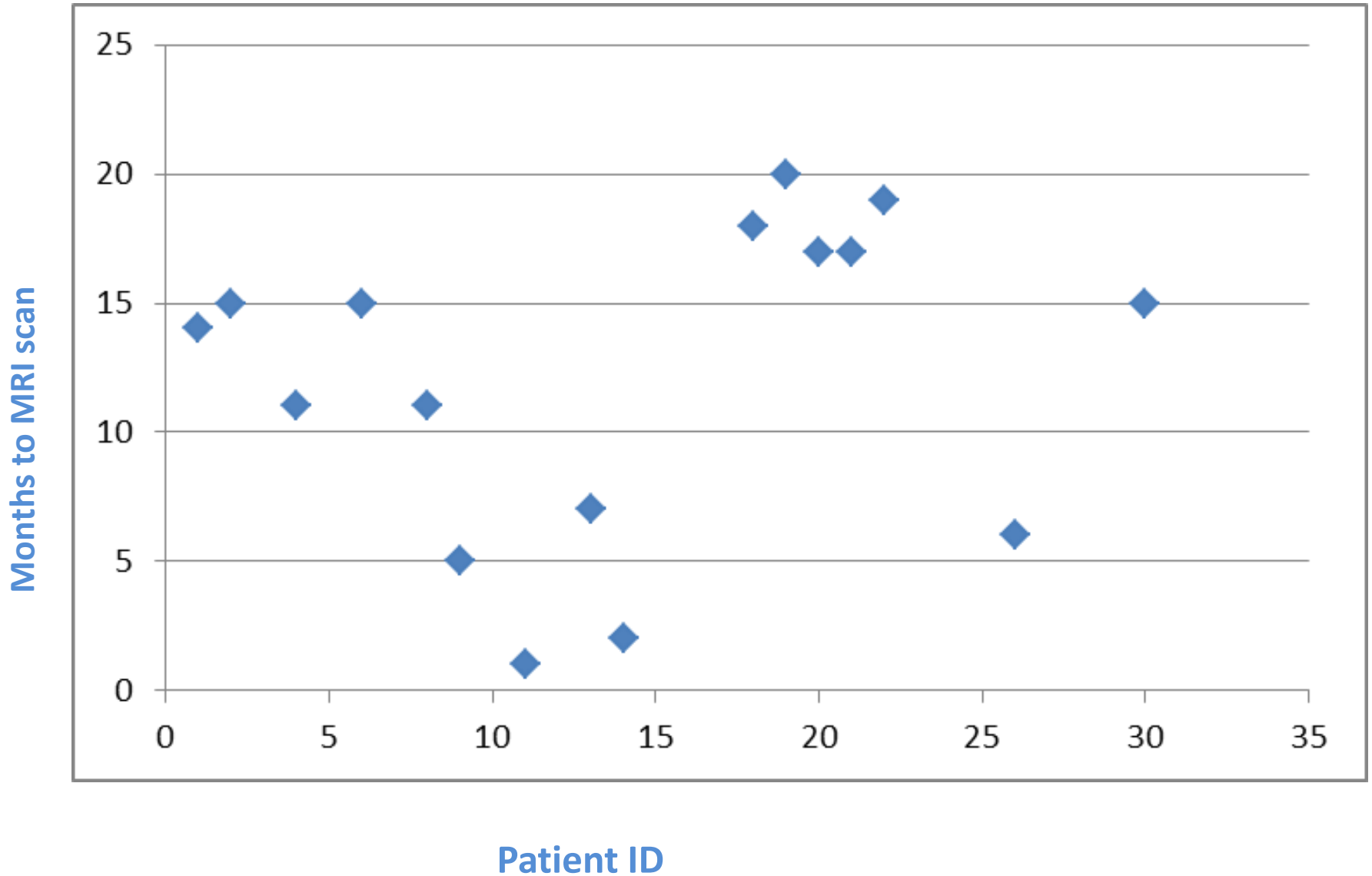
# JC virus positive patients [n = 7]



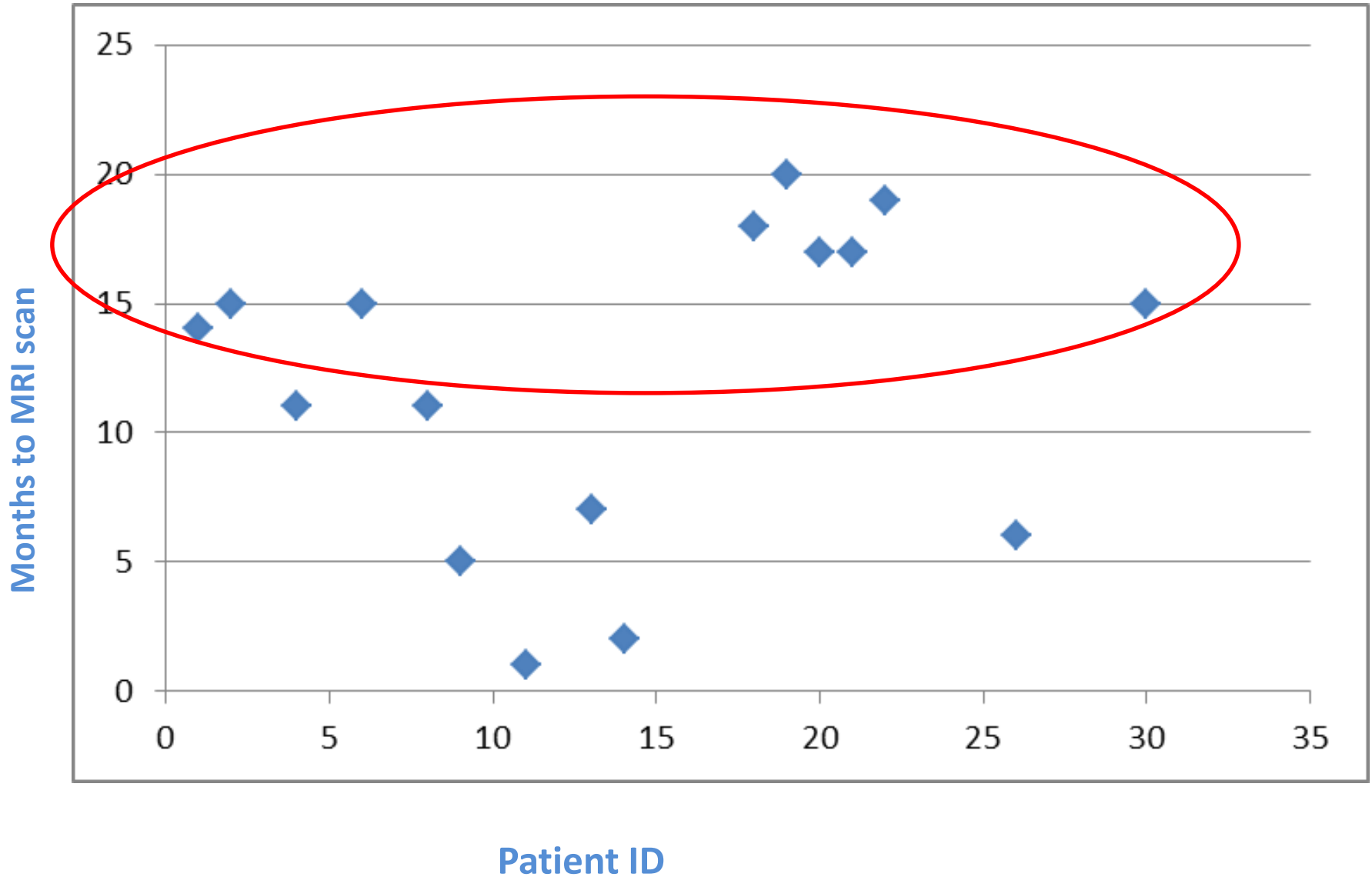


# MRI monitoring

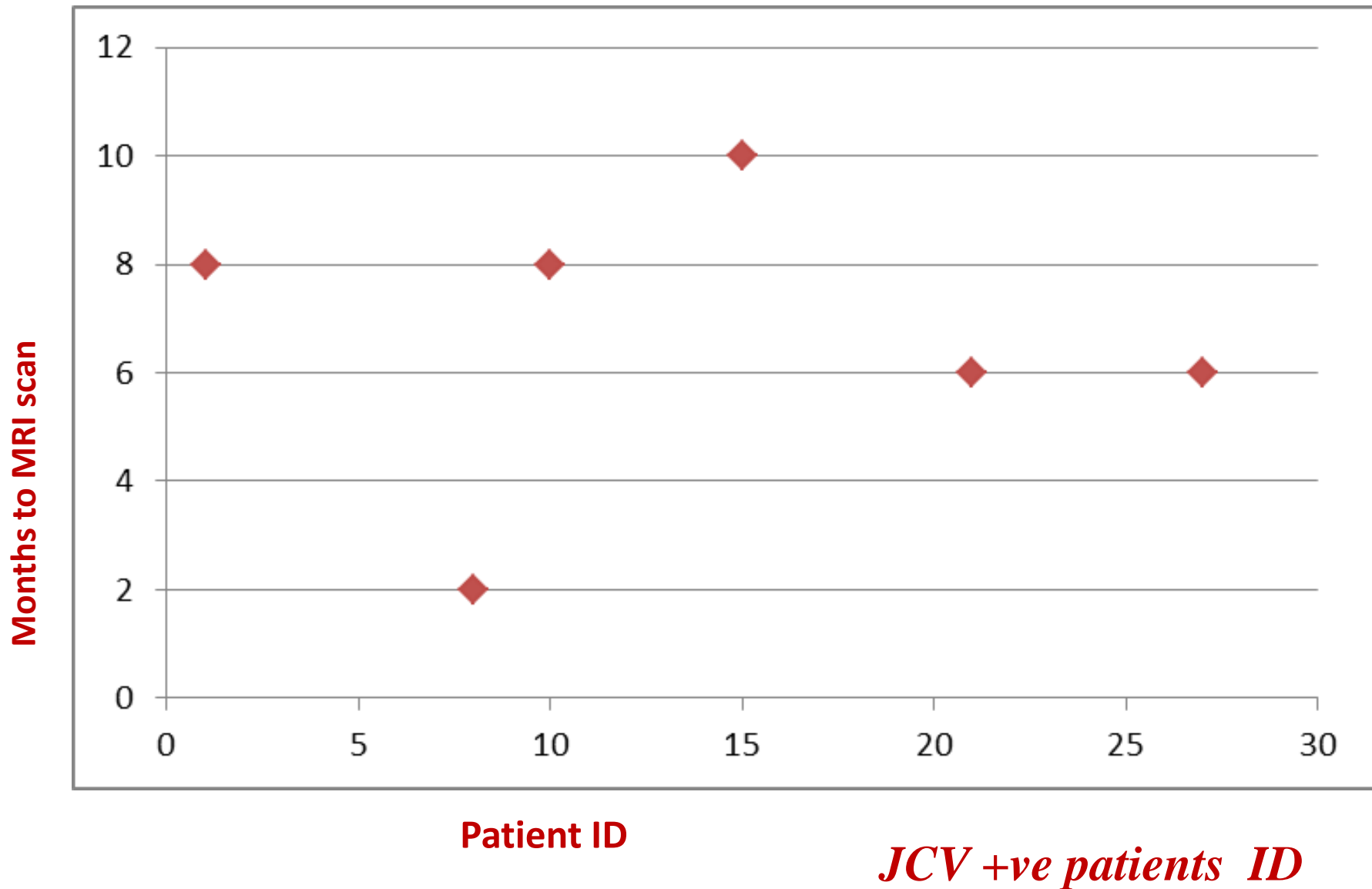
# Time to MRI scan: JC virus negative patients



# Time to MRI scan: JC virus negative patients



# Time to MRI scan: JC virus positive patients



# Recommendations

- Improve record keeping by moving to paperless system → spreadsheet on shared drive, accessible to whole MS team
- **Highlight** high risk patients [JCV Ab +, >2 years on tysabri]
- introduce unified times for JCV checks [twice yearly] at same time of all patients [i.e. test everyone in March and September]