

## with Natalizumab?

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### Introduction

The John Cunningham Virus (JCV) test is offered to patients, both before, and on treatment with, Natalizumab, to assess their risk of developing Progressive Multifocal Leukoencephalopathy<sup>1</sup>

We audited the impact that the JCV result had on patients' decisions as to whether they started, or remained on, Natalizumab treatment.

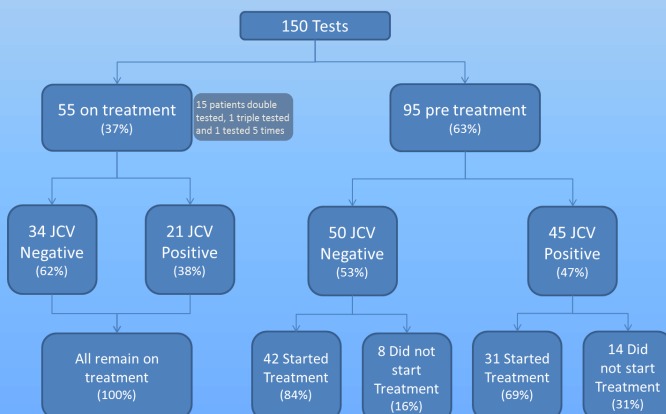
### Methods

A retrospective case note analysis of tests performed between August 2011—June 2014 was undertaken (n=150) to ascertain patient demographics and treatment decisions following the JCV result.

### Demographics

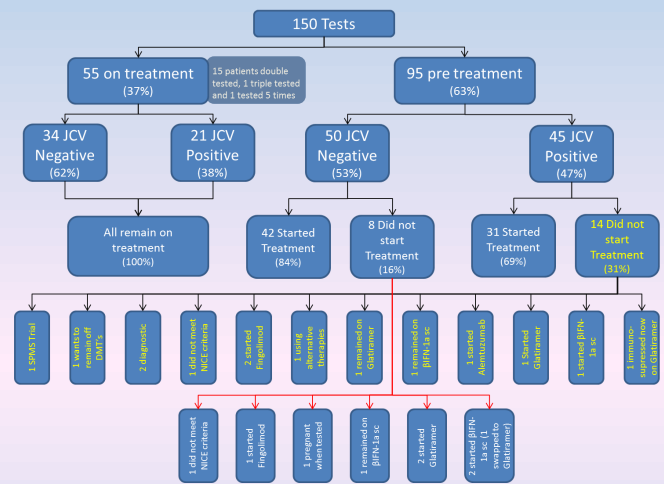
Demographic	Pre Treatment JCV tests	Post Treatment JCV tests	Overall
Age	37.1 (range 18 – 63)	39.4 (range 25 – 57)	37.9 (range 18 – 63)
Gender	64 female (67.4%)	39 female (70.9%)	105 female (68.7%)
Prior Disease Modifying Treatments (DMTs)	0.62 (range 0 – 4)	1.18 (range 0 – 4)	0.83 (range 0 – 4)
Number of DMT Naive Patients	55 (36%)	28 (18%)	82 (54%)
Mean duration of MS to Natalizumab treatment onset	3.37 (range 0 – 32)	6.49 (range 0 – 24)	4.51 (range 0 – 32)

### Results



### (Results continued)

55 patients were tested on treatment and 95 pre treatment with Natalizumab. All patients on treatment elected to continue despite the result. Of these, 21 were positive and 34 negative. Of the 45 positive results pre treatment 9 decided not to start treatment. Of the 50 patients who were JCV negative, only 6 elected not to start Natalizumab.



### Conclusions

JC positivity before treatment reduces the likelihood that patients will elect to commence Natalizumab treatment by 11% (12% vs 23%).

To date, all patients tested who were found to be JCV Positive on treatment, have decided to remain on Natalizumab, even one who sero-converted while on treatment.

To what extent JCV optical index affects patients' treatment decisions requires further work.

### Declarations

All authors have received support from Biogen Idec to attend meetings however the company have had no input into this work or the content of the poster.

### References

1. Biogen Idec. (2013). Tysabri Summary of Product Characteristics. Maidenhead: Biogen Idec.