

# Comparing Patient and Public Preferences for Health States Associated with Age-Related Macular Degeneration

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## Purpose

Health utility values suitable for calculating quality-adjusted life years (QALYs) are increasingly used to assess the cost effectiveness of treatments for age-related macular degeneration (AMD). Health care decision makers disagree whether to use members of the public or patients to provide utilities.

- The public offer an unbiased view of health states, unaffected by the condition they are valuing
- Patients are likely to have a greater understanding of the condition and its effects on quality of life.<sup>[1]</sup>

**Our aim** was to test if utility values for health states associated with AMD elicited directly from patients were different from those calculated from public tariffs for health-related quality of life (HRQoL) questionnaires.

## Methods

### Participants

- 60 UK patients with AMD
- VA = 0.3 to 1.3 logMAR

### Instruments

- Generic preference-based HRQoL questionnaires (EQ-5D and SF-6D)
  - Health utilities representing public preferences were calculated using standard general population tariffs.
- Time tradeoff (TTO)
  - Patient utilities were calculated directly from TTO
- EQ-5D visual analogue scale (VAS)
  - Patient VAS scores on scale from worst imaginable health (0) to perfect health (100)

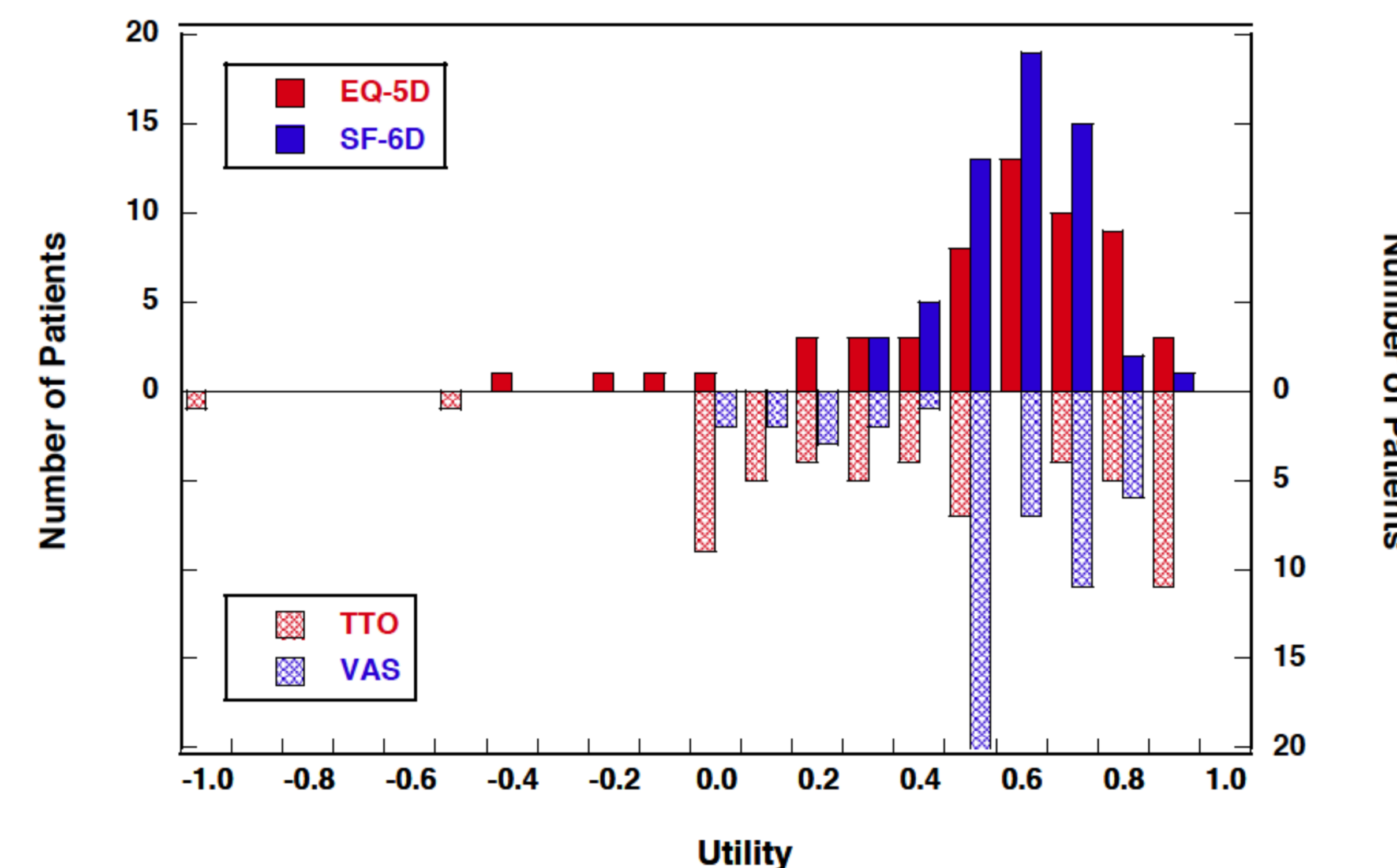
**Table 1. Health status questionnaires**

Instrument	Preferences	Valuation technique
EQ-5D	UK public (EQ-5D-5L interim value set)	TTO (preference-based)
SF-6D	UK public (UK valuation of SF-36 US v1)	Standard gamble (preference-based)
TTO	Patients' own	TTO (preference-based)
EQ-5D VAS	Patients' own	VAS (non-preference-based)

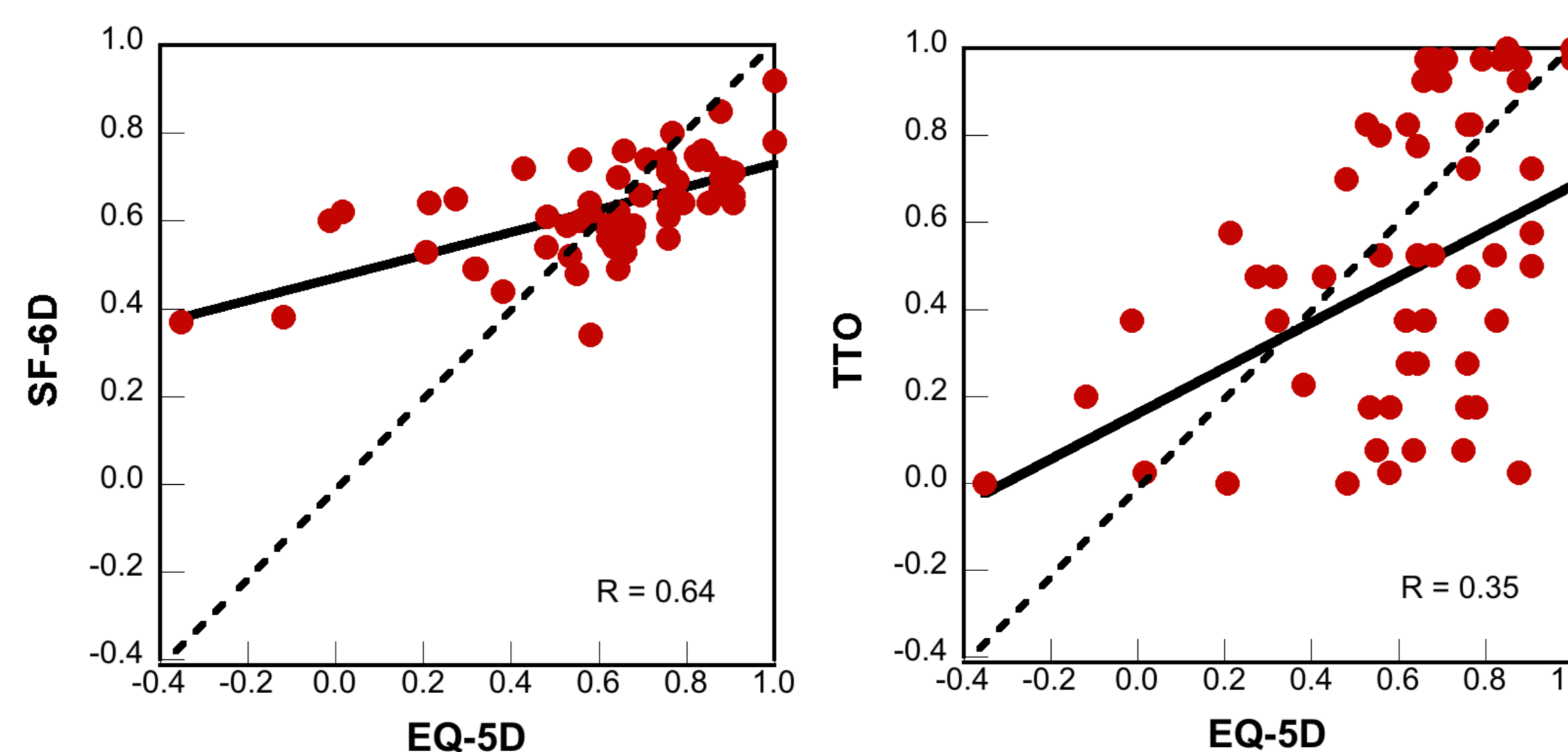
## Results

- Mean utilities derived from the public tariffs were significantly higher than from patients' valuation (see **Figure 1, Table 2**).
- The EQ-5D (public) is highly correlated with the SF-6D (public) but not with the TTO (patient) (see **Figure 2**).
- Visual acuity (VA) in the better-seeing eye was not associated with any utility measure (all  $r < 0.08$ ,  $p > 0.2$ ; see **Figure 3**).

**Figure 1. Frequencies of reported health utilities**



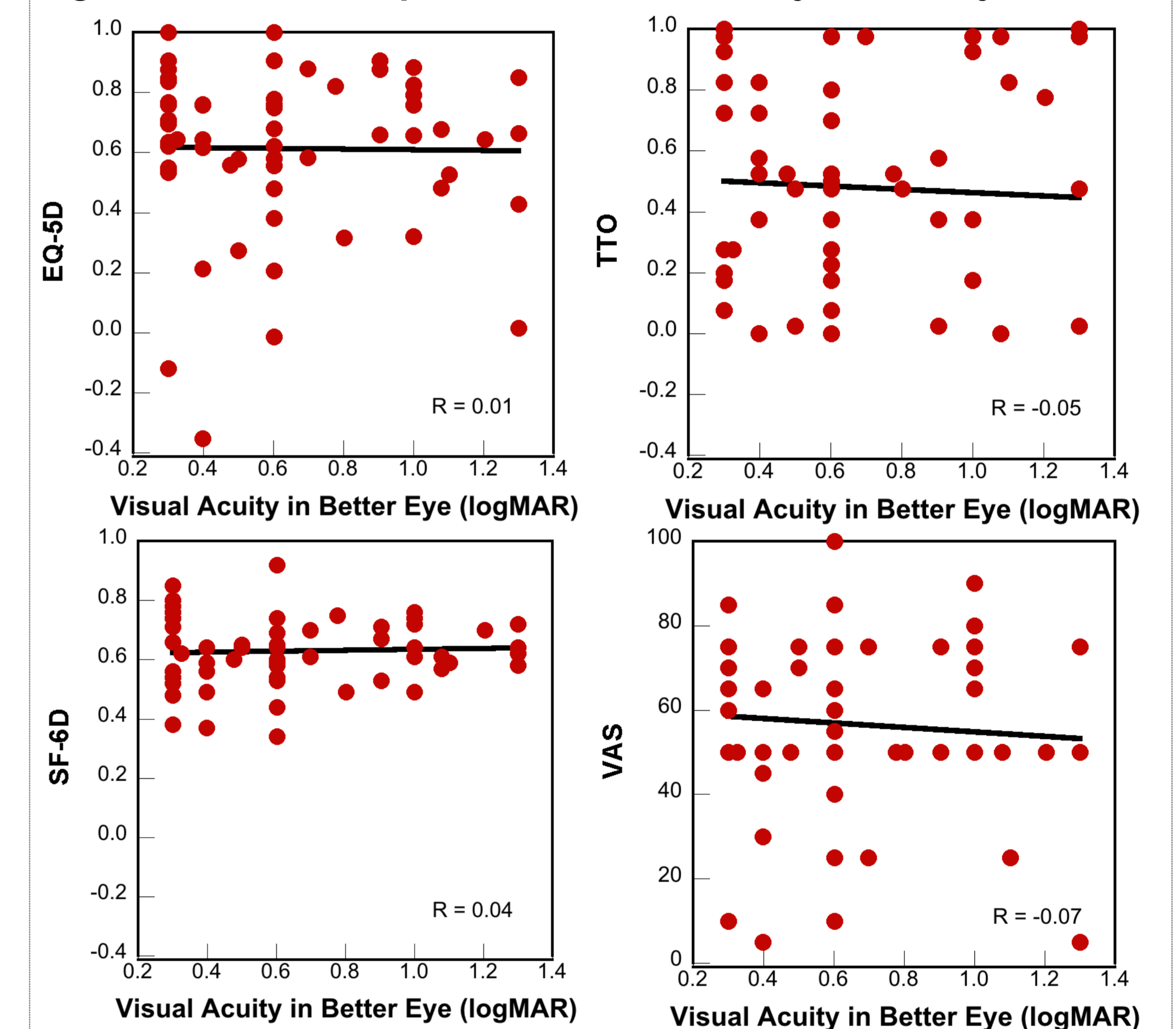
**Figure 2. Comparison of methods for deriving public and patient preferences**



**Table 2. Average health utility values**

Instrument	Mean (SD)	Median
EQ-5D (public)	0.613 (0.275)	0.657
SF-6D (public)	0.628 (0.114)	0.640
TTO (patient)	0.481 (0.411)	0.488
VAS (patient)	56.7 (21.8)	50.0

**Figure 3. Relationship between visual acuity and utility scores**



## Conclusions

- Patient and public preferences for health states associated with AMD are different, with patients valuing their health state more severely than the public tariffs of commonly used HRQoL questionnaires.
- VA did not predict health utility using any measure and therefore care should be taken when using VA as a surrogate measure for utility in health economic analyses.

## Reference

[1] Brazier, J. et al. (2005). Should Patients Have a Greater Role in Valuing Health States? *Applied Health Economics and Health Policy* 4(4) p201-208.