K Breheny, W Hollingworth, R Kandiyali, P Dixon, A Loose, P Craggs, J Sparrow. Assessing the construct validity and responsiveness of Preference Based Measures (PBMs) in cataract surgery patients. Quality of Life Research.

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## Supplementary material

PBM and HRQL Questionnaire Scoring and Development

РВМ	Construct measured	Target population	Description	Scoring	Used in economic evaluation	Use in cataracts patients	Minimum possible score	Maximum possible score	Recall period	Valuation method											
											EQ-5D-3L	HRQL	Generic	Five-dimension PBM	PBM	Yes	Yes	-0.594	1	Today	TTO
											(4)			measuring health							
			status. Questions have																		
			3 response options																		
			and address domains																		
			of usual activities,																		
			mobility,																		
			anxiety/depression,																		
			self-care,																		
			pain/discomfort.																		
EQ-5D-	HRQL	Visual	Six-dimension PBM	PBM	No	Yes	0.284	1	Today	TTO											
3L+VIS		problems	measuring health			(validation															
(12)			status and visual			sample)															
			difficulties. Developed																		
			in response to criticism																		
			that the EQ-5D was																		
			insensitive to visual																		

			problems. It comprises							
			the EQ-5D-3L, and an							
			additional vision-							
			specific question.							
EQ-5D-5L	HRQL	Generic	Updated version of the	PBM	Yes	Yes	-0.594	1	Today	TTO (CW)
CW (9)			EQ-5D-3L. Response				CW			TTO and
EQ-5D-5L			options were				-0.285			DCE
VSE (8)			increased from 3 to 5.				VSE			(VSE)
			Two scoring							
			algorithms are							
			available. 1. A Value							
			Set for England 2. EQ-							
			5D-3L crosswalk.							
ICECAP-O	Capability	Older	A PBM for use in older	PBM	Yes	No	0	1	At the	BWS
(17)	wellbeing	people	adults, measuring						moment	
		aged 65+	broader wellbeing							
			beyond health. It has							
			five attributes cover							
			attachment, security,							
			role, enjoyment and							
			control. Each attribute							
			has 4 response							
			options.							
Cat-	Visual	Cataracts	A five item, Rasch-	Rasch	No	Yes	-9.18	7.45	One	N/A
PROM5	difficulties		scored cataract-	scored					month	
(22)			specific patient							

reported outcome
designed to measure
visual difficulty from
cataracts and relief
from surgery.
Response options
range from 4 to 7.

PBM - Preference based measure

TTO - Time trade off

DCE- Discrete choice experiment

BWS - Best-worst scaling

CW – EQ-5D-5L Crosswalk scoring algorithm

VSE – EQ-5D-5L Value set for England scoring algorithm