## **Electronic Supplementary Material**

	No visible retinopathy	Mild background retinopathy	Observable retinopathy or maculopathy	Referable maculopathy	Referable background or Proliferative retinopathy
state 1	0.9376	0.0624	0	0	0
state 2	0.1743	0.8183	0.0075	0	0
state 3	0	0.4920	0.5069	0.00111	0
state 4	0	0	0.0034	0.8986	0.0980
state 5	0	0	0	0.1430	0.8570

## **ESM Table 6** Emission Matrix Type 2 Diabetes and the 5 State Model

Zero elements are those which were specified in the model as zero