

**Table S2** Individual parameter estimates for the ten untreated macaques obtained by simultaneously fitting our model (Eqs. 13-20) to  $V$ ,  $A_1$  and  $A_2$  across both untreated macaques and responders (Methods and Figure 4).

Macaque	UT1	UT2	UT3	UT4	UT5	UT6	UT7	UT8	UT9	UT10
$V(0)$	52.27	51.93	17.58	3.67	3.22	15.05	1076.07	393.87	243.44	681.12
$\beta$	$1.06 \times 10^{-8}$	$1.13 \times 10^{-8}$	$1.06 \times 10^{-8}$	$9.61 \times 10^{-9}$	$9.68 \times 10^{-9}$	$1.22 \times 10^{-8}$	$9.74 \times 10^{-9}$	$1.11 \times 10^{-8}$	$1.17 \times 10^{-8}$	$8.86 \times 10^{-9}$
$p^*$	$7.83 \times 10^9$	$6.55 \times 10^9$	$7.23 \times 10^9$	$7.85 \times 10^9$	$7.49 \times 10^9$	$5.12 \times 10^9$	$8.56 \times 10^9$	$7.20 \times 10^9$	$7.83 \times 10^9$	$8.07 \times 10^9$
$m^*$	11.30	10.66	10.07	10.79	11.83	10.04	10.39	12.06	10.87	11.34
$d_E$	$8.63 \times 10^{-3}$	$6.93 \times 10^{-3}$	$7.13 \times 10^{-3}$	$7.79 \times 10^{-3}$	$6.57 \times 10^{-3}$	$8.28 \times 10^{-3}$	$7.60 \times 10^{-3}$	$1.23 \times 10^{-2}$	$4.78 \times 10^{-3}$	$1.06 \times 10^{-2}$
$\phi^*$	$1.51 \times 10^{-5}$	$5.44 \times 10^{-6}$	$1.17 \times 10^{-4}$	$3.57 \times 10^{-5}$	$5.85 \times 10^{-5}$	$1.98 \times 10^{-4}$	$1.08 \times 10^{-5}$	$4.49 \times 10^{-5}$	$2.83 \times 10^{-5}$	$5.11 \times 10^{-5}$
$\xi$	0.32	0.18	0.54	0.49	0.29	0.43	0.41	0.56	0.33	0.18