

## From Five MAUI onto AQoL-8D

### (1) From 15D to AQoL-8D (Based on OLS)

$$\text{AQOL8D Utility} = -0.4389979 \times 15D + 1.210921 \times 15D^2 + 0.0230402 \times \text{Male} - 0.0167462 \times \text{Germany} - 0.0174943 \times \text{UK} + 0.1529662$$

### (2) From EQ-5D to AQoL-8D (Based on MM-estimator)

(STEP1)

$$\text{AQOL8D Utility}^* = 0.3384517 \times \text{EQ5D} + 0.3824626 \times \text{EQ5D}^2 + 0.0259432 \times \text{Male} - 0.0245626 \times \text{UK} + 0.1988003$$

(STEP2)

$$\text{AQOL8D Utility} = (\text{AQOL8D Utility}^* + 0.0283914/0.9533051) \times 0.9533051$$

### (3) From HUI3 to AQoL-8D (Based on OLS)

$$\text{AQOL8D Utility} = 0.2929992 \times \text{HUI3} + 0.3381887 \times \text{HUI3}^2 + 0.0394491 \times \text{Male} - 0.0092434 \times \text{Germany} - 0.0163462 \times \text{UK} + 0.2619056$$

### (4) From QWB to AQoL-8D (Based on GLM)

(STEP1)

$$\text{AQOL8D Utility}^* = \exp(5.373593 \times \text{QWB} - 2.565954) / (1 + \exp(5.373593 \times \text{QWB} - 2.565954))$$

(STEP2)

$$\text{AQOL8D Utility} = (\text{AQOL8D Utility}^* - 0.0038286/1.005717) \times 1.005717$$

**(5) From SF-6D to AQoL-8D (Based on GLM)**

(STEP1)

$$\text{AQOL8D Utility}^* = \exp(0.6518463 \times \text{SF6D\_GH} + 0.3121049 \times \text{SF6D\_PF} + 0.7317531 \times \text{SF6D\_BP} + 1.219284 \times \text{SF6D\_VT}^2 + 0.2688438 \times \text{SF6D\_SF}^2 + 1.598846 \times \text{SF6D\_MH}^2 - 1.624952) / (1 + \exp(0.6518463 \times \text{SF6D\_GH} + 0.3121049 \times \text{SF6D\_PF} + 0.7317531 \times \text{SF6D\_BP} + 1.219284 \times \text{SF6D\_VT}^2 + 0.2688438 \times \text{SF6D\_SF}^2 + 1.598846 \times \text{SF6D\_MH}^2 - 1.624952))$$

(STEP2)

$$\text{AQOL8D Utility} = (\text{AQOL8D Utility}^* + 0.0025545/0.9962494) \times 0.9962494$$