Appendix A. Details of the cost analysis for the base case and for the one-way sensitivity analysis.

Estimated Costs: Base Case						
Strategy		**Branch**	**Description**	**Prob1**	**Prob2**	**Cost**
A	Start M; if response inadequate add E; if response still inadequate switch to triple therapy	A1	Mtx	0.35		$1,308.84
		A2.1	Mtx, M+E	0.65	0.5	$48,460.23
		A2.2	Mtx, M+E, Trip	0.65	0.5	$7,169.63
B	Start E; if response inadequate add M; if still inadequate switch to Triple Rx	B1	Etc	0.4		$51,437.88
		B2.1	Etc, E+Mtx	0.6	0.5	$52,637.65
		B2.2	Etc, E+Mtx, Trip	0.6	0.5	$11,345.75
C	Do an n-of-1 trial comparing M vs. E; treat with winner for another 112 weeks; if tie use M; if both fail singly try combination M+E for 13 weeks, treating failures with triple Rx	C1	M wins	0.267		$6,499.60
		C2	E wins	0.3432		$42,489.68
		C3	Tie	0.238		$6,499.60
		C4.1	Both fail individually; combo succeeds	0.1521	0.5	$43,416.56
		C4.2	Both fail individually; combo fails	0.1521	0.5	$11,982.08

Estimated Costs: Sensitivity Analyses						
Sensitivity analysis 1: treat n-of-1 ties with combination therapy (most expensive choice) (affects branch C only)						
Strategy		**Branch**	**Description**	**Prob1**	**Prob2**	**Cost**
C		C1	M wins	0.267		$6,499.60
		C2	E wins	0.3432		$42,489.68
		C3	Tie	0.238		$43,416.56
		C4.1	Both fail	0.1521	0.5	$43,416.56
		C4.2		0.1521	0.5	$11,982.08
Sensitivity analysis 2: use ACR20 as the criterion						
Strategy		**Branch**	**Description**	**Prob1**	**Prob2**	**Cost**
A	Start M; if response inadequate add E; if response still inadequate switdh to triple therapy	A1	Mtx	0.6		$1,308.84
		A2.1	Mtx, M+E	0.4	0.75	$48,460.23
		A2.2	Mtx, M+E, Trip	0.4	0.25	$7,169.63
B	Start E; if response inadequate add M; if still inadequate switch to Triple Rx	B1	Etc	0.65		$51,437.88
		B2.1	Etc, E+Mtx	0.4	0.75	$52,637.65
		B2.2	Etc, E+Mtx, Trip	0.4	0.25	$11,345.75
C	Do an n-of-1 trial comparing M vs. E; treat with winner for another 112 weeks; if tie use M; if both fail singly try combination M+E for 13 weeks, treating failures with triple Rx	C1	M wins	0.267		$6,499.60
		C2	E wins	0.3264		$42,489.68
		C3	Tie	0.3705		$6,499.60
		C4.1	Both fail individually; combo succeeds	0.0196	0.75	$43,416.56
		C4.2	Both fail individually; combo fails	0.0196	0.5	$11,982.08