

**Appendix 2 (as supplied by the authors): All parameters used in used in the model**

<b>Adverse Events</b>				
<b>Description</b>	<b>Baseline<sup>a</sup>/ RR</b>	<b>Lower Limit (95% CrI)</b>	<b>Upper Limit (95% CrI)</b>	<b>Probability Distribution</b>
<b>Treatment-Naive</b>				
<b>Depression</b>				
Reference baseline PR48	0.1381 <sup>a</sup>	0.11	0.1683	Based on NMA (1)
SOF12 + RBV12	0.2861	0.07992	0.958	Based on NMA (1)
SOF24 + RBV24	0.7751	0.165	3.181	Based on NMA (1)
SIM12 + SOF12	0.4174	0.08099	1.534	Assume same as PAR/RIT12 + OMB12 + DAS12
SOF12 + LDV12	0.01888	0.002205	0.09946	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.4174	0.08099	1.534	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.4174	0.08099	1.534	Based on NMA (1)
T12 PR24-48 RGT q8	0.8187	0.35	1.872	Based on NMA (1)
SOF12 + PR12	0.5715	0.2133	1.531	Based on NMA (1)
SOF12 + PR24-48 RGT	0.9319	0.1889	3.359	Based on NMA (1)
SIM12 + PR24-48 RGT	0.7241	0.4215	1.283	Based on NMA (1)
B24 PR28-48 RGT	1.038	0.4271	2.241	Based on NMA (1)
PR24	0.756	0.1592	2.831	Based on NMA (1)
SIM12 + SOF12 + RBV12	0.4174	0.08099	1.534	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12
DCV12 + SOF12	0.5062	0.03573	3.145	Based on NMA (1)
<b>Anemia</b>				
Reference baseline PR48	0.2136 <sup>a</sup>	0.1838	0.2459	Based on NMA (1)
SOF12 + RBV12	0.6949	0.3601	1.309	Based on NMA (1)
SOF24 + RBV24	1.263	0.4806	2.528	Based on NMA (1)
SIM12 + SOF12	0.3454	0.1431	0.7469	Assume same as PAR/RIT12 + OMB12 + DAS12
SOF12 + LDV12	0.05568	0.02193	0.1322	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.3454	0.1431	0.7469	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.3826	0.1549	0.8366	Based on NMA (1)
T12 PR24-48 RGT q8	1.872	1.316	2.496	Based on NMA (1)

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<b>Adverse Events</b>				
<b>Description</b>	<b>Baseline<sup>a</sup>/ RR</b>	<b>Lower Limit (95% CrI)</b>	<b>Upper Limit (95% CrI)</b>	<b>Probability Distribution</b>
SOF12 PR12	1.487	0.8038	2.449	Based on NMA (1)
SOF12 PR24-48 RGT	0.8758	0.4101	1.728	Based on NMA (1)
SIM12 PR24-48 RGT	0.8232	0.5901	1.118	Based on NMA (1)
B24 PR28-48 RGT	1.815	1.266	2.439	Based on NMA (1)
PR24	0.9708	0.4121	2.065	Based on NMA (1)
SIM12 + SOF12 + RBV12	0.3826	0.1549	0.8366	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12
DCV12 + SOF12	0.08548	0.005052	0.6961	Based on NMA (1)
<b>Rash</b>				
Reference baseline PR48	0.1828 <sup>a</sup>	0.1465	0.2186	Based on NMA (1)
SOF12 + RBV12	0.5244	0.167	1.598	Based on NMA (1)
SOF24 + RBV24	0.7655	0.07902	2.721	Based on NMA (1)
SIM12 + SOF12	0.077192 <sup>a</sup>	0.005312	0.502889	Assume same as experienced patients
SOF12 + LDV12	0.2626	0.1415	0.4803	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.2194	0.08837	0.525	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.7214	0.3777	1.301	Based on NMA (1)
T12 PR24-48 RGT q8	1.578	1.038	2.262	Based on NMA (1)
SOF12 PR12	0.8014	0.3667	1.771	Based on NMA (1)
SOF12 PR24-48 RGT	1.597	0.7911	2.955	Based on NMA (1)
SIM12 PR24-48 RGT	1.117	0.8079	1.519	Based on NMA (1)
B24 PR28-48 RGT	1.11	0.6968	1.682	Based on NMA (1)
PR24	1.03	0.3068	2.839	Based on NMA (1)
SIM12 + SOF12 + RBV12	0.237167 <sup>a</sup>	0.047817	0.634031	Assume same as experienced patients
DCV12 + SOF12	0.372	0.05255	1.613	Based on NMA (1)
<b>Treatment-Experienced</b>				
<b>Depression</b>				
Reference baselinePR48	0.1318	0.09864	0.1697	Based on NMA (1)
SOF12 + RBV12	0.4582	0.1368	1.314	Based on NMA (1)
SIM12 + SOF12	0.2691	0.06677	0.9281	Assume same as PAR/RIT12 + OMB12 + DAS12
SOF12 + LDV12	0.002607 <sup>a</sup>	0.000305	0.013735	Assume same as Naive patients
SOF24 + LDV24	0.002607 <sup>a</sup>	0.000305	0.013735	Assume same as SOF12 + LDV12
SOF12 + LDV12 + RBV12	0.6401	0.2198	1.648	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.2691	0.06677	0.9281	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12

<b>Adverse Events</b>				
<b>Description</b>	<b>Baseline<sup>a</sup>/ RR</b>	<b>Lower Limit (95% CrI)</b>	<b>Upper Limit (95% CrI)</b>	<b>Probability Distribution</b>
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.2691	0.06677	0.9281	Based on NMA (1)
T12 PR48 q8	0.6684	0.3521	1.264	Based on NMA (1)
SOF12 PR12	0.078924 <sup>a</sup>	0.029457	0.211431	Assume same as Naive patients
SIM12 PR24-48 RGT	0.099998 <sup>a</sup>	0.058209	0.177182	Assume same as Naive patients
SIM12 PR48	0.912	0.4586	1.765	Based on NMA (1)
SIM12 + SOF12 + RBV12	0.2691	0.06677	0.9281	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12
SOF16 + RBV16	0.4582	0.1368	1.314	Assume same as SOF12 + RBV12
B32 PR36-48 RGT	0.9477	0.4244	1.986	Based on NMA (1)
<b>Anemia</b>				
Reference baseline PR48				Based on NMA (1)
SOF12 + RBV12	0.1901	0.1625	0.2202	Based on NMA (1)
	0.6957	0.2952	1.605	Based on NMA (1)
SIM12 + SOF12	0.009479	7.65E-04	0.07197	Assume same as PAR/RIT12 + OMB12 + DAS12
SOF12 + LDV12	0.02436	0.00283	0.1074	Based on NMA (1)
SOF24 + LDV24	0.02436	0.00283	0.1074	Assume same as SOF12 + LDV12
SOF12 + LDV12 + RBV12	0.3139	0.1473	0.5881	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.009479	7.65E-04	0.07197	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.2731	0.1146	0.6623	Based on NMA (1)
T12 PR48 q8	1.944	1.313	2.792	Based on NMA (1)
SOF12 + PR12	1.016	0.5612	1.692	Based on NMA (1)
SIM12 + PR24-48 RGT	0.8345	0.4458	1.478	Based on NMA (1)
SIM12 + PR48	0.6838	0.3979	1.167	Based on NMA (1)
SIM12 + SOF12 + RBV12	0.2731	0.1146	0.6623	Assume same as PAR/RIT12 + OMB12 + DAS12 + RBV12
SOF16 + RBV16	0.6957	0.2952	1.605	Assume same as SOF12 + RBV12
B32 PR36-48 RGT	2.402	1.547	3.593	Based on NMA (1)
<b>Rash</b>				
Reference baseline PR48				Based on NMA (1)
SOF12 + RBV12	0.1322	0.1071	0.1594	Based on NMA (1)
SIM12 + SOF12	1.112	0.3782	2.734	Based on NMA (1)
SOF12 + LDV12	0.5839	0.04018	3.804	Based on NMA (1)
	0.1656	0.04229	0.5608	Based on NMA (1)

<b>Adverse Events</b>				
<b>Description</b>	<b>Baseline<sup>a</sup>/ RR</b>	<b>Lower Limit (95% CrI)</b>	<b>Upper Limit (95% CrI)</b>	<b>Probability Distribution</b>
SOF24 + LDV24	0.1656	0.04229	0.5608	Assume same as SOF12 + LDV12
SOF12 + LDV12 + RBV12	0.6445	0.3272	1.316	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12	0.05563	0.003309	0.3552	Based on NMA (1)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.6094	0.2367	1.812	Based on NMA (1)
T12 PR48 q8	2.216	1.401	3.796	Based on NMA (1)
SOF12 + PR12	1.39	0.6411	2.806	Based on NMA (1)
SIM12 + PR24-48 RGT	1.019	0.444	2.121	Based on NMA (1)
SIM12 + PR48	1.44	0.8209	2.581	Based on NMA (1)
SIM12 + SOF12 + RBV12	1.794	0.3617	4.796	Based on NMA (1)
SOF16 + RBV16	1.112	0.3782	2.734	Assume same as SOF12 + RBV12
B32 PR36-48 RGT	2.194	1.066	3.943	Based on NMA (1)

<b>Discontinuation Rate</b>				
<b>Description</b>	<b>Base Estimate</b>	<b>Lower Limit (95% CI)</b>	<b>Upper Limit (95% CI)</b>	<b>Probability Distribution/ Note</b>
<b>Treatment-Naive</b>				
PR48	0.173	0.096	0.292	Beta(6.818,32.594)
SOF12 + RBV12	0.089	0.038	0.194	Beta(2.529,25.887)
SOF24 + RBV24	0.054	0.015	0.180	Beta(0.641,11.23)
SIM12 + SOF12	0.033	0.002	0.366	Beta(0.005,0.146) / Assume same as experienced patients
SOF12 + LDV12	0.044	0.023	0.083	Beta(4.823,104.799)
PAR/RIT12 + OMB12 + DAS12	0.005	0.001	0.033	Beta(0.122,24.261)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.015	0.003	0.071	Beta(0.268,17.578)
T12 PR24-48 RGT q8	0.092	0.074	0.114	Beta(63.423,625.957)
SOF12 + PR12	0.108	0.082	0.142	Beta(35.893,296.45)
SOF12 + PR24-48 RGT	0.106	0.045	0.231	Beta(2.466,20.794)
SIM12 + PR24-48 RGT	0.070	0.052	0.093	Beta(34.387,456.862)
B24 PR28-48 RGT	0.212	0.173	0.257	Beta(69.745,259.242)
PR24	0.165	0.096	0.269	Beta(8.242,41.71)
SIM12 + SOF12 + RBV12	0.018	0.001	0.230	Beta(0.01,0.563) / Assume same as experienced patients
DCV12 + SOF12	0.044	0.023	0.083	Assume same as SOF12 + LDV12

<b>Discontinuation Rate</b>				
<b>Description</b>	<b>Base Estimate</b>	<b>Lower Limit (95% CI)</b>	<b>Upper Limit (95% CI)</b>	<b>Probability Distribution/ Note</b>
<b>Treatment-Experienced</b>				
PR48	0.114	0.077	0.166	Beta(16.919,131.495)
SOF12 + RBV12	0.081	0.004	0.684	Beta(0.002,0.023)
SIM12 + SOF12	0.033	0.002	0.366	Beta(0.005,0.146)
SOF12 + LDV12	0.017	0.003	0.079	Beta(0.279,16.111)
SOF24 + LDV24	0.006	0	0.094	Beta(0.012,2.068)
SOF12 + LDV12 + RBV12	0.016	0.005	0.049	Beta(0.909,55.92)
PAR/RIT12 + OMB12 + DAS12	0.005	0.000	0.078	Beta(0.014,2.721)
PAR/RIT12 + OMB12 + DAS12 + RBV12	0.015	0.003	0.071	Beta(0.268,17.578) / Assumed same as naive patients
T12 PR48 q8	0.077	0.059	0.100	Beta(41.303,495.096)
SOF12 + PR12	0.006	0.000	0.091	Beta(0.014,2.288)
SIM12 + PR24-48 RGT	0.038	0.021	0.070	Beta(5.388,136.409)
SIM12 + PR48	0.059	0.040	0.085	Beta(19.323,308.191)
SIM12 + SOF12 + RBV12	0.018	0.001	0.230	Beta(0.01,0.563)
SOF16 + RBV16	0.081	0.004	0.684	Assume same as SOF12 + RBV12
B32 PR36-48 RGT	0.099	0.061	0.155	Beta(11.165,101.61)
DCV12 + SOF12	0.017	0.003	0.079	Assume same as SOF12 + LDV12

<b>Chronic Hepatitis C–Related Mortality</b>				
<b>Description</b>	<b>Base Estimate</b>	<b>Lower Limit (-25%)</b>	<b>Upper Limit (+25%)</b>	<b>Probability Distribution</b>
HCC(2)	0.411	0.31	0.51	Beta (38.6, 55.3)
Decompensated cirrhosis(3)	0.216	0.162	0.27	Beta (49.96, 181.3)
Liver transplant (first year)(4)	0.142	0.124	0.159	Beta (213.4,1289.7)
Liver transplant (> 1 year)(4)	0.034	0.024	0.043	Beta (44.6,1268.1)

## Chronic Hepatitis C–Related Cost

Description	Base Estimate	Lower Limit (-25%)	Upper Limit (+25%)	Probability Distribution
<b>Annual Cost CHC infection Early Phase(5)</b>				
Age 45 to 54 (base case)	\$4,589	\$4,498	\$4,682	Gamma(9739.355,2.122)
Age 35 to 44 (SA)	\$3,888	\$3,812	\$3,967	Gamma(9688.54,2.492)
Age 55 to 64 (SA)	\$5,541	\$5,377	\$5,710	Gamma(4299.945,0.776)
<b>Annual Cost CHC infection Late Phase(5)</b>				
Age 45 to 54 (base case)	\$14,597	\$13,475	\$15,812	Gamma(577.344,0.04)
Age 35 to 44 (SA)	\$12,054	\$11,582	\$12,546	Gamma(2401,0.199)
Age 55 to 64 (SA)	\$12,337	\$11,619	\$13,100	Gamma(1045.755,0.085)
<b>Annual Cost CHC infection Pre-death Phase(5)</b>				
Age 45 to 54 (base case)	\$41,823	\$39,388	\$44,410	Gamma(1045.436,0.025)
Age 35 to 44 (SA)	\$35,544	\$32,811	\$38,504	Gamma(576.779,0.016)
Age 55 to 64 (SA)	\$52,102	\$49,561	\$54,773	Gamma(1522.022,0.029)
<b>Annual Cost Non-CHC infection Before Pre-death Phase(5)</b>				
Age 45 to 54 (base case)	\$2,362	\$2,338	\$2,387	Gamma(35705.882,15.117)
Age 35 to 44 (SA)	\$1,813	\$1,777	\$1,850	Gamma(9604,5.297)
Age 55 to 64 (SA)	\$3,925	\$3,809	\$4,044	Gamma(4351.564,1.109)
<b>Annual Cost Non-CHC infection Pre-death Phase(5)</b>				
Age 45 to 54 (base case)	\$45,207	\$44,312	\$46,120	Gamma(9806.856,0.217)
Age 35 to 44 (SA)	\$42,291	\$40,229	\$44,459	Gamma(1522.08,0.036)
Age 55 to 64 (SA)	\$44,542	\$43,660	\$45,442	Gamma(9797.48,0.22)
<b>Transplant-related Costs</b>				
Cost of transplant(6)	\$120,593	\$90,445	\$150,741	Gamma (64,0.0033)
Annual cost of post-transplant follow-up care(6)	\$19,400	\$14,550	\$24,250	Gamma (64,0.0005)

## Cost of adverse events

Description	Base Estimate	Lower Limit (-25%)	Upper Limit (+25%)	Probability Distribution
Anemia(7, 8)	\$2,060.41	\$1,545.31	\$2,575.51	Gamma (64,0.0311)
Depression(7, 8)	\$981.11	\$735.83	\$1,226.39	Gamma (64,0.0652)
Rash(7, 8)	\$255.90	\$191.92	\$319.87	Gamma (64.0,0.2501)

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