

Supplemental online content for:

## Cost-Effectiveness of Maintenance Olaparib for Germline *BRCA*-Mutated Metastatic Pancreatic Cancer

Bin Wu, PhD, and Lizheng Shi, PhD

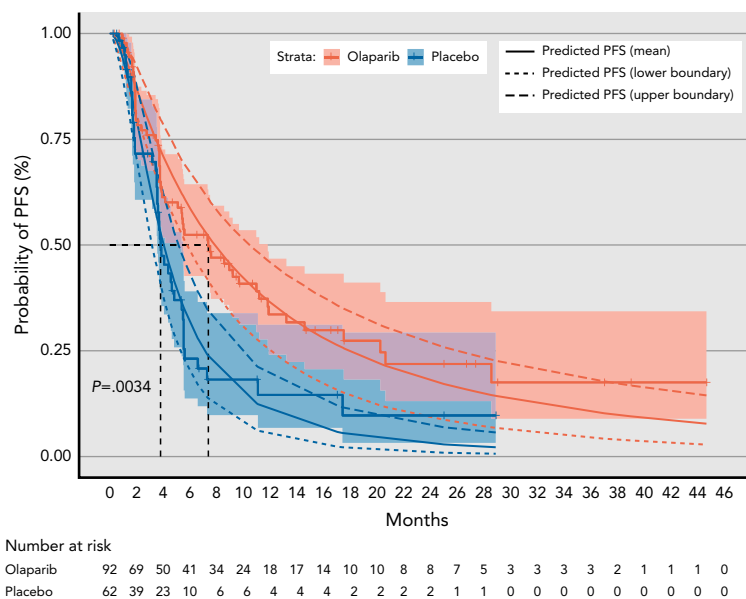
*J Natl Compr Canc Netw* 2020;18(11):1528–1536

**eFigure 1:** Replicated Kaplan-Meier PFS Curves of Maintenance Olaparib and Placebo in the POLO Trial

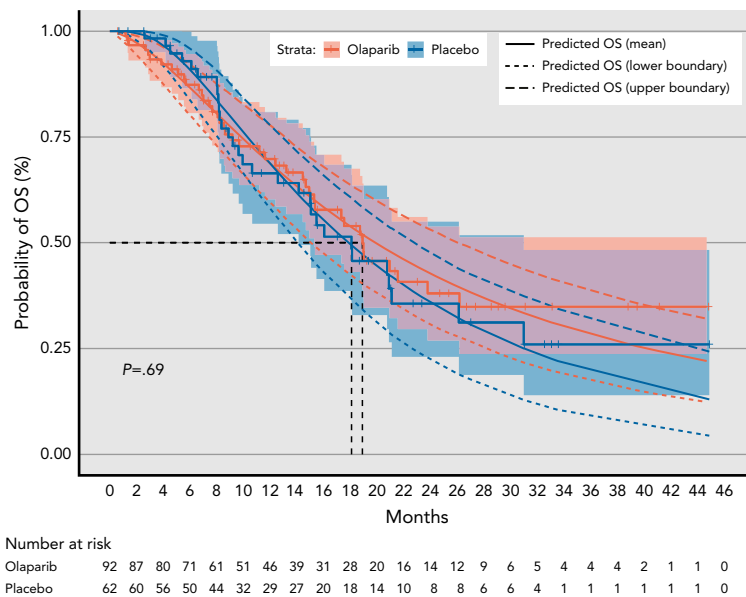
**eFigure 2:** Replicated Kaplan-Meier OS Curves of Maintenance Olaparib and Placebo in the POLO Trial

**eFigure 3:** Probabilistic Results of the Incremental Cost-Effectiveness Difference for Maintenance Olaparib Versus Placebo

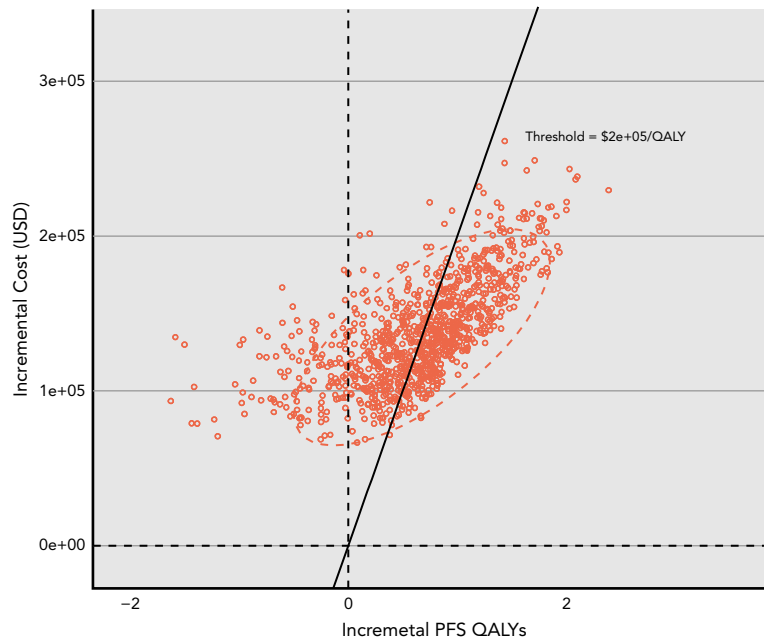
**eTable 1:** Estimated Parameters and Akaike Information Criterion Values From Each Survival Model



**eFigure 1.** Replicated Kaplan-Meier PFS curves of maintenance olaparib and placebo in the POLO trial, based on distribution information shown in Table 1. The solid smooth line indicates the predicted PFS (mean), and the dotted and dashed lines indicate the 95% upper and lower predicted PFS. Abbreviation: PFS, progression-free survival.



**eFigure 2.** Replicated Kaplan-Meier OS curves of maintenance olaparib and placebo in the POLO trial, based on distribution information shown in Table 1. The solid smooth line indicates the predicted OS (mean), and the dotted and dashed lines indicate the 95% upper and lower predicted OS. Abbreviation: OS, overall survival.



**Figure 3.** Probabilistic results of the incremental cost-effectiveness difference for maintenance olaparib versus placebo. The y axis represents the incremental costs, whereas the x axis represents the incremental QALYs gained. The red ellipses surround 95% of the estimates. Abbreviations: PFS, progression-free survival; QALY, quality-adjusted life-year.

**eTable 1. Estimated Parameters and AIC Values From Each Survival Model**

Strategies	Distribution	Parameter	PFS					OS				
			Est	L95%	U95%	SE	AIC	Est	L95%	U95%	SE	AIC
Placebo	Weibull	shape	0.9200	0.7538	1.1229	0.0935	420.64	1.2401	0.9674	1.5897	0.1571	365.46
		scale	13.4944	10.1961	17.8598	1.9297		28.1682	21.6247	36.6916	3.7993	
	Gamma	shape	0.9810	0.7270	1.3239	0.1500	421.32	1.4136	0.9919	2.0145	0.2555	364.67
		rate	0.0726	0.0455	0.1159	0.0173		0.0531	0.0306	0.0920	0.0149	
	Exponential	rate	0.0744	0.0575	0.0963	0.0098	419.34	0.0321	0.0236	0.0436	0.0050	366.07
	Log-logistic	shape	1.3575	1.1012	1.6733	0.1449	408.50	1.5604	1.2100	2.0122	0.2025	362.77
		scale	7.4637	5.6041	9.9402	1.0912		19.8907	15.0544	26.2809	2.8272	
	Log-normal	meanlog	2.0621	1.7826	2.3416	0.1426	405.04	3.0155	2.7068	3.3242	0.1575	362.99
		SDlog	1.2210	1.0092	1.4772	0.1187		1.1509	0.9164	1.4453	0.1338	
	Gompertz	shape	-0.0527	-0.0935	-0.0119	0.0208	413.21	0.0081	-0.0260	0.0421	0.0174	367.86
		rate	0.1092	0.0767	0.1556	0.0197		0.0294	0.0181	0.0477	0.0073	
	Royston/Parma spline model (0 knot)	gamma0	-2.3941	-2.9221	-1.8661	0.2694	420.64	-4.1421	-5.1034	-3.1808	0.4905	365.46
		gamma1	0.9200	0.7367	1.1034	0.0935		1.2408	0.9327	1.5490	0.1572	
	Royston/Parma spline model (1 knot)	gamma0	-3.4324	-4.2928	-2.5720	0.4390	401.88	-4.9572	-6.7122	-3.2021	0.8954	365.83
		gamma1	2.0762	1.4300	2.7224	0.3297		1.8112	0.7898	2.8327	0.5211	
		gamma2	0.1981	0.1052	0.2910	0.0474		0.1200	-0.0750	0.3151	0.0995	
	Royston/Parma spline model (2 knot)	gamma0	-4.0499	-5.2464	-2.8533	0.6105	399.35	-4.7662	-6.5469	-2.9855	0.9085	367.49
		gamma1	3.3322	1.7946	4.8698	0.7845		1.5833	0.3621	2.8045	0.6231	
		gamma2	0.9515	0.1209	1.7820	0.4237		-0.1801	-1.0246	0.6644	0.4309	
		gamma3	-0.4427	-0.9684	0.0830	0.2682		0.4377	-0.8172	1.6927	0.6403	
	Mixture cure model (Weibull)	theta	0.1915	0.1024	0.3297	NA	411.54	0.1915	0.1024	0.3297	NA	411.54
		shape	1.2040	0.9804	1.4784	0.1262		1.2040	0.9804	1.4784	0.1262	
		scale	7.9517	6.1178	10.3353	1.0637		7.9517	6.1178	10.3353	1.0637	
	Mixture cure model (gamma)	theta	0.1959	0.1065	0.3326	NA	409.46	0.1959	0.1065	0.3326	NA	409.46
		shape	1.4893	1.0629	2.0866	0.2563		1.4893	1.0629	2.0866	0.2563	
		rate	0.2034	0.1254	0.3299	0.0502		0.2034	0.1254	0.3299	0.0502	
	Mixture cure model (exp)	theta	0.1718	0.0814	0.3268	NA	412.26	0.1718	0.0814	0.3268	NA	412.26
		rate	0.1210	0.0859	0.1703	0.0211		0.1210	0.0859	0.1703	0.0211	
Mixture cure model (log-logistic)	theta	0.1724	0.0763	0.3442	NA	405.01	0.1724	0.0763	0.3442	NA	405.01	
	shape	1.7314	1.3388	2.2391	0.2272		1.7314	1.3388	2.2391	0.2272		
	scale	5.2705	3.8663	7.1848	0.8332		5.2705	3.8663	7.1848	0.8332		
Mixture cure model (log-normal)	theta	0.1786	0.0831	0.3429	NA	401.39	0.1786	0.0831	0.3429	NA	401.39	
	meanlog	1.6728	1.3750	1.9707	0.1520		1.6728	1.3750	1.9707	0.1520		
	SDlog	0.9449	0.7483	1.1932	0.1125		0.9449	0.7483	1.1932	0.1125		
Mixture cure model (Gompertz)	theta	0.1776	0.0835	0.3387	NA	414.22	0.1776	0.0835	0.3387	NA	414.22	
	shape	0.0071	-0.0577	0.0720	0.0331		0.0071	-0.0577	0.0720	0.0331		
	rate	0.1184	0.0795	0.1763	0.0241		0.1184	0.0795	0.1763	0.0241		
Nonmixture cure model (Weibull)	theta	0.1871	0.0989	0.3255	NA	408.92	0.1871	0.0989	0.3255	NA	408.92	
	shape	1.3565	1.1035	1.6675	0.1429		1.3565	1.1035	1.6675	0.1429		
	scale	11.6445	7.9977	16.9542	2.2320		11.6445	7.9977	16.9542	2.2320		
Nonmixture cure model (gamma)	theta	0.1935	0.1039	0.3317	NA	406.88	0.1935	0.1039	0.3317	NA	406.88	
	shape	1.6561	1.2046	2.2768	0.2690		1.6561	1.2046	2.2768	0.2690		
	rate	0.1587	0.0843	0.2986	0.0512		0.1587	0.0843	0.2986	0.0512		
Nonmixture cure model (exp)	theta	0.1257	0.0342	0.3687	NA	413.21	0.1257	0.0342	0.3687	NA	413.21	
	rate	0.0527	0.0243	0.1143	0.0208		0.0527	0.0243	0.1143	0.0208		

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**eTable 1. Estimated Parameters and AIC Values From Each Survival Model (cont.)**

Strategies	Distribution	Parameter	PFS					OS				
			Est	L95%	U95%	SE	AIC	Est	L95%	U95%	SE	AIC
Placebo (cont.)	Nonmixture cure model (log-logistic)	theta	0.1813	0.0860	0.3425	NA	405.70	0.1813	0.0860	0.3425	NA	405.70
		shape	1.6707	1.2793	2.1819	0.2276		1.6707	1.2793	2.1819	0.2276	
		scale	8.5199	5.1686	14.0440	2.1726		8.5199	5.1686	14.0440	2.1726	
	Nonmixture cure model (log-normal)	theta	0.1746	0.0759	0.3527	NA	401.08	0.1746	0.0759	0.3527	NA	401.08
		meanlog	2.1736	1.5952	2.7519	0.2951		2.1736	1.5952	2.7519	0.2951	
		SDlog	1.0317	0.7738	1.3756	0.1514		1.0317	0.7738	1.3756	0.1514	
	Nonmixture cure model (Gompertz)	theta	0.1783	0.0884	0.3268	NA	414.24	0.1783	0.0884	0.3268	NA	414.24
		shape	0.0417	-0.0195	0.1028	0.0312		0.0417	-0.0195	0.1028	0.0312	
		rate	0.0564	0.0333	0.0952	0.0151		0.0564	0.0333	0.0952	0.0151	
Maintenance olaparib	Weibull	shape	1.0856	0.8786	1.3413	0.1172	253.52	1.5373	1.1675	2.0242	0.2158	256.86
		scale	6.7873	5.1476	8.9493	0.9576		24.4556	19.2737	31.0308	2.9712	
	Gamma	shape	1.3729	0.9567	1.9701	0.2530	251.34	2.1173	1.3708	3.2701	0.4696	254.71
		rate	0.2157	0.1326	0.3510	0.0536		0.0960	0.0535	0.1720	0.0286	
	Exponential	rate	0.1484	0.1101	0.2001	0.0226	252.07	0.0354	0.0248	0.0506	0.0065	262.44
	Log-logistic	shape	1.9399	1.5154	2.4833	0.2444	232.39	2.0892	1.5679	2.7837	0.3059	252.59
		scale	4.0412	3.1815	5.1332	0.4932		17.5577	13.6596	22.5682	2.2490	
	Log-normal	meanlog	1.4487	1.1979	1.6995	0.1280	237.93	2.8832	2.6265	3.1399	0.1310	251.28
		SDlog	0.9159	0.7389	1.1354	0.1004		0.8169	0.6293	1.0604	0.1087	
	Gompertz	shape	-0.0514	-0.1165	0.0138	0.0332	251.16	0.0288	-0.0084	0.0659	0.0189	262.32
		rate	0.1869	0.1266	0.2759	0.0371		0.0257	0.0144	0.0460	0.0076	
	Royston/Parma spline model (0 knot)	gamma0	-2.0793	-2.6344	-1.5243	0.2832	253.52	-4.9147	-6.2391	-3.5903	0.6757	256.86
		gamma1	1.0858	0.8561	1.3155	0.1172		1.5374	1.1143	1.9604	0.2158	
	Royston/Parma spline model (1 knot)	gamma0	-3.3244	-4.3063	-2.3424	0.5010	234.45	-8.3665	-11.9649	-4.7680	1.8360	232.26
		gamma1	2.8794	1.9142	3.8445	0.4925		3.3842	1.6327	5.1356	0.8936	
		gamma2	0.3150	0.1700	0.4601	0.0740		0.5453	0.0845	1.0061	0.2351	
	Royston/Parma spline model (2 knot)	gamma0	-3.2913	-4.3279	-2.2548	0.5289	235.96	-9.0772	-14.4905	-3.6639	2.7619	254.27
		gamma1	2.7541	0.8662	4.6421	0.9633		3.8360	0.7951	6.8769	1.5515	
		gamma2	-0.0291	-1.0954	1.0373	0.5441		0.8583	-1.6571	3.3736	1.2834	
		gamma3	0.3327	-0.4419	1.1072	0.3952		-0.2791	-2.7751	2.2169	1.2735	
	Mixture cure model (Weibull)	theta	0.1063	0.0398	0.2544	NA	239.11	0.1063	0.0398	0.2544	NA	239.11
		shape	1.5208	1.2295	1.8809	0.1649		1.5208	1.2295	1.8809	0.1649	
		scale	4.8227	3.8940	5.9729	0.5263		4.8227	3.8940	5.9729	0.5263	
	Mixture cure model (gamma)	theta	0.1086	0.0411	0.2573	NA	235.47	0.1086	0.0411	0.2573	NA	235.47
		shape	2.3418	1.5856	3.4586	0.4659		2.3418	1.5856	3.4586	0.4659	
		rate	0.5480	0.3408	0.8812	0.1328		0.5480	0.3408	0.8812	0.1328	
	Mixture cure model (Exp)	theta	0.0890	0.0263	0.2614	NA	248.22	0.0890	0.0263	0.2614	NA	248.22
		rate	0.2037	0.1442	0.2878	0.0359		0.2037	0.1442	0.2878	0.0359	
	Mixture cure model (Log-logistic)	theta	0.0962	0.0306	0.2646	NA	233.43	0.0962	0.0306	0.2646	NA	233.43
		shape	2.3880	1.8267	3.1216	0.3264		2.3880	1.8267	3.1216	0.3264	
scale		3.5246	2.8298	4.3900	0.3948		3.5246	2.8298	4.3900	0.3948		
Mixture cure model (Log-normal)	theta	0.1023	0.0353	0.2620	NA	232.69	0.1023	0.0353	0.2620	NA	232.69	
	meanlog	1.2396	1.0180	1.4612	0.1131		1.2396	1.0180	1.4612	0.1131		
	sdlog	0.7169	0.5688	0.9035	0.0846		0.7169	0.5688	0.9035	0.0846		
Mixture cure model (Gompertz)	theta	0.1011	0.0360	0.2533	NA	247.62	0.1011	0.0360	0.2533	NA	247.62	
	shape	0.0753	-0.0053	0.1558	0.0411		0.0753	-0.0053	0.1558	0.0411		
	rate	0.1654	0.1075	0.2545	0.0364		0.1654	0.1075	0.2545	0.0364		

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**eTable 1. Estimated Parameters and AIC Values From Each Survival Model (cont.)**

Strategies	Distribution	Parameter	PFS					OS				
			Est	L95%	U95%	SE	AIC	Est	L95%	U95%	SE	AIC
Maintenance olaparib (cont.)	Nonmixture cure model (Weibull)	theta	0.0925	0.0331	0.2331	NA	235.84	0.0925	0.0331	0.2331	NA	235.84
		shape	1.7922	1.4463	2.2206	0.1960		1.7922	1.4463	2.2206	0.1960	
		scale	7.3573	5.5111	9.8219	1.0846		7.3573	5.5111	9.8219	1.0846	
	Nonmixture cure model (Gamma)	theta	0.1011	0.0367	0.2494	NA	233.65	0.1011	0.0367	0.2494	NA	233.65
		shape	2.5088	1.7480	3.6007	0.4625		2.5088	1.7480	3.6007	0.4625	
		rate	0.3858	0.2090	0.7121	0.1206		0.3858	0.2090	0.7121	0.1206	
	Nonmixture cure model (Exp)	theta	0.0263	0.0005	0.5873	NA	251.16	0.0263	0.0005	0.5873	NA	251.16
		rate	0.0514	0.0145	0.1825	0.0332		0.0514	0.0145	0.1825	0.0332	
	Nonmixture cure model (Log-logistic)	theta	0.0960	0.0319	0.2550	NA	233.25	0.0960	0.0319	0.2550	NA	233.25
		shape	2.2614	1.7095	2.9915	0.3228		2.2614	1.7095	2.9915	0.3228	
		scale	5.6846	3.9389	8.2039	1.0640		5.6846	3.9389	8.2039	1.0640	
	Nonmixture cure model (Log-normal)	theta	0.0892	0.0245	0.2762	NA	233.01	0.0892	0.0245	0.2762	NA	233.01
		meanlog	1.8009	1.3050	2.2969	0.2531		1.8009	1.3050	2.2969	0.2531	
		sdlog	0.8309	0.6184	1.1164	0.1252		0.8309	0.6184	1.1164	0.1252	
	Nonmixture cure model (Gompertz)	theta	0.0840	0.0273	0.2306	NA	247.07	0.0840	0.0273	0.2306	NA	247.07
		shape	0.1487	0.0623	0.2352	0.0441		0.1487	0.0623	0.2352	0.0441	
		rate	0.0557	0.0296	0.1048	0.0180		0.0557	0.0296	0.1048	0.0180	

Abbreviations: AIC, Akaike information criterion; Est, point estimation; L95%, lower boundary of 95% confidence interval; NA, not available; OS, overall survival; PFS, progression-free survival; U95%, upper boundary of 95% confidence interval.