

Table, Supplemental Digital Content 2: One Way Sensitivity Analyses

Parameter	VLPS vs. Ex-fix			VLPS vs. CRPP			VLPS vs. cast			Ex-fix vs. CRPP			Ex-fix vs. Cast			CRPP vs. Cast					
	Low	Base	High	Low	Base	High	Low	Base	High	Low	Base	High	Low	Base	High	Low	Base	High			
Age at time of injury	58	71.1	97	\$1,448	\$2,117	\$7,872	Dominated	Dominated	Dominated	Dominated	Dominated	\$502,449	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$18,569	\$28,717	\$212,528
Life Expectancy (CDC)	82	86	98	\$2,583	\$2,117	\$1,481	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$36,518	\$28,717	\$19,040
<b>Complication Rates</b>																					
<b>VLP</b>																					
Severe CTR	0	0	0.05	\$2,117	\$2,117	\$2,788	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Severe UN neuropathy	0	0	0.02	\$2,117	\$2,117	\$2,410	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Severe Carpal instability	0	0	0.02	\$2,117	\$2,117	\$3,240	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon adhesion	0	0.0133333	0.15	\$1,843	\$2,117	\$4,926	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon rupture	0	0.0133333	0.15	\$1,822	\$2,117	\$5,136	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Malunion (assume VLP revision)	0	0.0133333	0.1	\$807	\$2,117	\$10,627	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Post-op admission	0	0.027	0.03	\$122	\$2,117	\$2,338	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Re-admission for infection	0	0	0.08	\$2,117	\$2,117	\$3,562	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Symptomatic malunion requiring revision surgery	0	0	0	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,715
<b>Exfix</b>																					
Severe CTR	0	0.016667	0.06	\$2,341	\$2,117	\$1,535	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Severe UN neuropathy	0	0.016667	0.02	\$2,361	\$2,117	\$2,068	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Severe Carpal instability	0	0.016667	0.02	\$3,037	\$2,117	\$1,949	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon adhesion	0	0	0	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon rupture	0	0.016667	0.02	\$2,485	\$2,117	\$2,043	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Malunion (assume VLP revision)	0	0.033333	0.3	\$5,259	\$2,117	Dominant	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Post-op admission	0	0.017	0.02	\$3,373	\$2,117	\$1,895	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Re-admission for infection	0	0	0.1	\$2,117	\$2,117	\$310	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Symptomatic malunion requiring revision surgery	0	0.016667	0.5	\$3,863	\$2,117	Dominant	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
<b>Pinning</b>																					
Severe CTR	0	0.019608	0.02	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,445	\$28,717	\$28,723
Severe UN neuropathy	0	0.019608	0.02	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,420	\$28,717	\$28,723
Severe Carpal instability	0	0	0	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon adhesion	0	0	0	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Tendon rupture	0	0.019608	0.02	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,269	\$28,717	\$28,726
Malunion (assume VLP revision)	0	0.019608	0.05	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$26,007	\$28,717	\$33,229
Post-op admission	0	0	0.02	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$30,244
Re-admission for infection	0	0.166667	0.14	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$25,606	\$28,717	\$28,219





VLP	0	11.9	30	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0	28.4	75	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0	11.7	30	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Cast	0	6.9	21	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Retirement age	60	66	70	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Discount Rate	0	0.03	0.07	\$1,760	\$2,117	\$2,606	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$23,159	\$28,717	\$36,923
<b>Utilities</b>																					
Baseline																					
VLP	0.493266	0.522407	0.551548	\$2,132	\$2,117	\$2,102	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0.486214	0.519847	0.553481	\$2,100	\$2,117	\$2,134	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0.497425	0.529886	0.562347	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,951	\$28,717	\$28,487
Cast	0.535179	0.556447	0.577714	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,566	\$28,717	\$28,870
2 week																					
VLP	0.525426	0.547341	0.569256	\$2,139	\$2,117	\$2,095	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0.519718	0.540756	0.561795	\$2,095	\$2,117	\$2,138	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0.494936	0.525267	0.555598	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$29,157	\$28,717	\$28,290
Cast	0.545826	0.56389	0.581954	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,461	\$28,717	\$28,977
6 weeks																					
VLP	0.582134	0.599723	0.617312	\$2,144	\$2,117	\$2,090	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0.538678	0.564812	0.590946	\$2,077	\$2,117	\$2,157	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0.55149	0.578104	0.604718	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$29,299	\$28,717	\$28,158
Cast	0.590784	0.606551	0.622318	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,383	\$28,717	\$29,059
3 month																					
VLP	0.664415	0.692727	0.72104	\$2,207	\$2,117	\$2,034	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0.616986	0.647718	0.678451	\$2,027	\$2,117	\$2,215	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0.640717	0.674091	0.707466	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$30,222	\$28,717	\$27,355
Cast	0.644338	0.666098	0.687857	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$27,814	\$28,717	\$29,681
6 month																					
VLP	0.685632	0.718746	0.751859	\$2,358	\$2,117	\$1,920	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Exfix	0.646745	0.683259	0.719773	\$1,902	\$2,117	\$2,386	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$28,717	\$28,717
Pinning	0.664803	0.704268	0.743732	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$32,863	\$28,717	\$25,500
Cast	0.647088	0.675109	0.70313	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$26,356	\$28,717	\$31,543
12 month																					
VLP	0.66445	0.699867	0.735285	Dominated	\$2,117	\$602	Dominated	Dominated	\$23,813	Dominated	Dominated	\$27,294	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$25,641	\$28,717	\$32,632
Exfix	0.647451	0.689745	0.732039	\$529	\$2,117	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$38,201	Dominated	Dominated	\$32,884	\$28,717	\$28,717	\$28,717
Pinning	0.670185	0.718494	0.766802	\$2,117	\$2,117	\$2,117	\$13,916	Dominated	Dominated	Dominated	Dominated	\$23,473	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$28,717	\$6,249
Cast	0.675333	0.706742	0.738152	\$2,117	\$2,117	\$2,117	Dominated	Dominated	Dominated	\$31,291	Dominated	Dominated	Dominated	Dominated	Dominated	\$64,370	Dominated	Dominated	\$8,886.45	\$28,717	Dominated
Decrement utility Wrist Fusion	-0.108	-0.063	0	\$2,006	\$2,117	\$2,294	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	Dominated	\$27,844	\$28,717	\$30,035