

Reverse Total Shoulder Arthroplasty (rTSA) With the Virtual Implant Positioning™ (VIP) System vs rTSA With Arthrex Implants Without Planning

Purpose

To report the early clinical outcomes of pain, function, and quality of life comparing patients who underwent primary rTSA with the Univers Revers implant and preoperative planning using the VIP^{TM} system to patients who underwent primary rTSA with Arthrex implants without preoperative planning.

Methods

Patients enrolled in the Surgical Outcomes System™ registry who underwent primary rTSA with the Univers Revers implant with preoperative planning using the VIP system or primary rTSA with Arthrex implants without preoperative planning. Standard patient-reported outcomes questionnaires for VAS, ASES Shoulder Function, and Simple Shoulder Test (SST) were administered at standard time points postoperatively. Results were reported from presurgery to 7 years postsurgery. The number of patients included per time point is shown to the right.

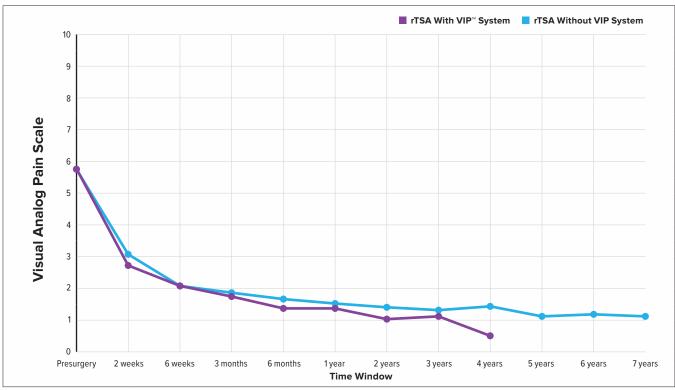
Time Point	# of Compliant rTSA VIP Patients/Total # of Patients	# of Compliant rTSA Without Plan Patients/ Total # of Patients
Presurgery	314/379	1540/1931
2 years	115/203	638/1177
3 years	52/103	376/772
4 years	3/7	241/625
5 years	n/a	154/430
7 years	n/a	11/36

Trend Conclusion

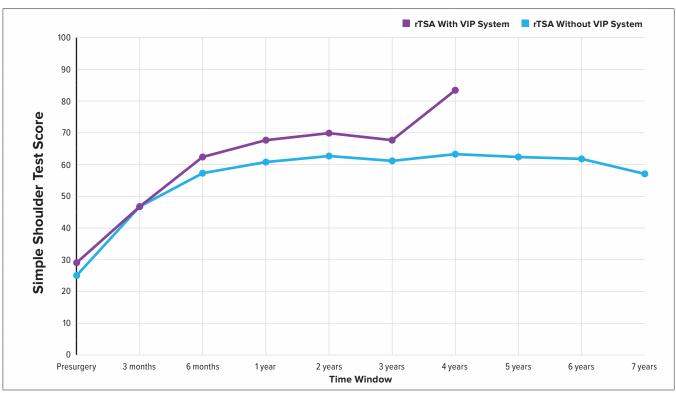
Based on these results, the pain, function, and quality-of-life scores for patients who underwent primary rTSA with the Univers Revers implant and preoperative planning using the VIP system trend toward better outcomes than the scores of patients who underwent primary rTSA with Arthrex implants without preoperative planning. However, no claims can be made on the potential of these results without further statistical analysis. More patients and more scores are needed to evaluate long-term success.

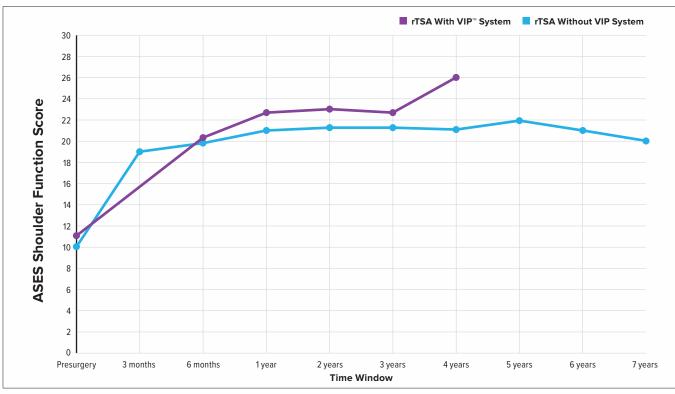


Results



VAS





ASES Function



Time Point	rTSA VIP [™] Avg ± STD VAS	rTSA no Plan Avg ± STD VAS
Presurgery	5.7 ± 2.6	5.7 ± 2.5
2 years	1.0 ± 1.7	1.4 ± 2.0
3 years	1.2 ± 2.0	1.4 ± 2.0
4 years	0.5 ± 0.7	1.5 ± 2.2
5 years	n/a	1.2 ± 1.8
7 years	n/a	1.1 ± 2.3

Time Point	rTSA VIP Avg ± STD ASES Function	rTSA no Plan Avg ± STD ASES Function
Presurgery	10.9 ± 5.2	10.1 ± 5.1
2 years	22.9 ± 6.1	21.3 ± 6.4
3 years	22.7 ± 7.0	21.4 ± 6.0
4 years	26.3 ± 3.5	21.2 ± 6.1
5 years	n/a	21.7 ± 6.1
7 years	n/a	20.1 ± 6.8

Time Point	rTSA VIP Avg ± STD SST	rTSA no Plan Avg ± STD SST
Presurgery	28.6 ± 19.4	23.9 ± 19.5
2 years	70.1± 23.8	63.1 ± 23.9
3 years	67.3 ± 26.8	60.9 ± 23.6
4 years	83.3 ± 16.7	63.9 ± 23.1
5 years	n/a	62.9 ± 22.7
7 years	n/a	56.1 ± 30.8

