# An Observational Study of the Safety and Efficacy of Tissue Stabilized-Guided Subcision to Improve the Appearance of Cellulite

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## BACKGROUND AND OBJECTIVE

- Cellulite refers to the dimpled appearance of skin which is estimated to affect approximately 95% of post-pubertal women of all races
- The appearance of cellulite has been associated with significant social stigma and can
  adversely affect self-esteem
- Tissue stabilized-guided subcision (TS-GS; Cellfina(R) System, Ulthera, Inc.) builds on the proven approach of dermal undermining, or subcision; the system is designed to provide vacuum-assisted control of both the depth and area of tissue release to allow for precise, reproducible and consistently effective treatment results (Figure 1)<sup>1</sup>



- TS-GS is FDA cleared for the long-term improvement in the appearance of cellulite on the buttocks and thighs, with no loss of benefit for up to 3 years (Tables 1 and 2)<sup>13</sup>
- The purpose of this observational study was to collect data on TS-GS treatment administration, safety, and effectiveness in real-life clinical practice

#### Table 1. Pivotal Trial Efficacy. The mean improvement on the Cellulite Severity Scale remained constant through 3 years of follow-up.

Primary Endpoint		3M	1 Year	2 Year	3 Year
	Average Improvement (0-5 scale)	2.1 points	2.0 points	2.0 points	2.0 points
	% of ≥ 1 grade improvement (none, mild, moderate, severe)	93%	94%	88.5%	91%

#### Table 2. Pivotal Trial Subject Satisfaction. Most subjects (≥93%) remained satisfied or very satisfied with the results of their treatment through 3-years.

Satisfaction	Baseline (N=55)		14D (n=54)	1M (n=54)	3M (n-55)	6M (n=52)	1 Y (n=50)	2Y (n=54)	3Y (n=45)
Very Unsatisfied	28	1	0	0	0	0	0	0	0
Unsatisfied	27	10	1	2	1	2	0	0	0
Neutral	0	22	16	9	7	4	3	2	3
Satisfied	0	18	25	29	26	25	24	26	23
Very Satisfied	0	4	12	14	21	21	23	24	19
% Satisfied	0%	33%	69%	80%	85%	88%	94%	96%	93%

## **REGISTRY DESIGN**

- Prospective, multi-center, non-randomized, standard of care, observational registry study
   53 female subjects were enrolled at 8 sites and treated using a TS-GS device by
- 53 female subjects were enrolled at 8 sites and treated using a 15-05 de investigator or sub-investigator according to the sites' standard of care
- Registry Endpoints and Analyses
- Primary:
- Subject-assessed Global Aesthetic Improvement Score (GAIS) at day 180. Secondary:
- Physician Global Aesthetic Improvement Score (GAIS) at Day 180 post-treatment
   Quality of life questionnaire at the treatment visit, 30, 90, and 180 day follow-up visits
   to determine effect of cellulitie on clothing
- (0=no effects at all; 10=very much affects)
   Subjects were asked to rate their level of pain from 0 -10
- Subjects were asked to rate their level of pain from 0 -1 (0 = no pain and 10 = worst possible pain)
- Adverse events and expected treatment effects (effects more than moderate in severity were considered adverse events)

# **REGISTRY RESULTS**

**Treatment Details** 

procedure

minutes

The most frequently used

 Average time for anesthesia delivery: 25 minutes

concomitant medication was

patients received no additional

medications at the time of the

Pain rated on average as a 4.5/10.

Average time for vacuum release: 21

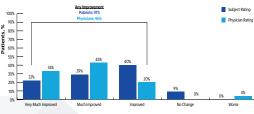
- Pain rated on average as a 1.7/10

dicloxicillin: however 38% of

Table 3. Patient demographics	
Characteristic	Subjects (N=53)
Mean age, y (range)	44.1 (23-61)
Mean baseline BMI (range)	22.3 (17.4-28.6)
Fitzpatrick skin type, n (%)	
1	0 (0)
Ш	18 (33.9)
Ш	23 (43.4)
IV	10 (18.8)
V	0 (0)
VI	2 (3.8)
Ethnicity, n (%)	
Caucasian	48 (90.5)
Aafrican American/Black	1 (1.9)
Hispanic/Latino	0 (0)
Asian	1 (1.9)
Native American/ Alaskan Native	3 (5.7)

### Clinician and Subject GAIS at Day 180

Figure 2. Subject and Physician GAIS Scores at 180 days. Mean physician rating was 2.05, corresponding to "Much Improved."



### Table 4. Treatment areas. Most patients were treated on both the thighs and buttocks.

		Subject	:s, n (%)	Average # of sites treated		
	Both	43	(81.1%)	11.9		
	Buttocks	7	(13.2%)	16.4		
	Thighs	3	(5.7%)	20.6		

### Table 5. Treatment depth. The majority of releases were performed at the 6 mm depth.

		6mm		101	10mm		Both	
Buttock	s (n=50)	30	(60%)	0	(0%)	20	(40%)	
Thighs	(n=46)	41	(89.1%)	1	(2.2%)	4	(8.7%)	

### Adverse Events and Expected Treatment Side Effects

- All subjects experienced some mild treatment effects, but no further treatment was
  required for any subject.
- The majority of procedure-related adverse events resolved by 90 days
- The most common effects were petechiae, bleeding and blanching, red spots from needle punctures, and fluid accumulation
- Mild to moderate
- Only 1 adverse event (induration) was reported
- There were no serious adverse events reported

#### References: 1. Ceilina System [Instructions for use], Mesa, A2: Ulthera, Inc.; 2016; 2. Kaminer MS, et al. Dermatol Surg. 2015;41(3):336-347; 3. Kaminer MS, et al. Dermatol Surg. 2017;43(10):1249-1062. Cellina' is a registered trademark of Ulthera, Inc.

## **3D ANALYSIS**

#### Single Site Analyses

- One of the registry sites conducted additional pilot analyses of efficacy including:
   3D Vectra imaging of the treatment areas to quantitatively assess changes in dimple depth and volume
- Blinded investigator assessment of 2D photography
- A total of 13 patients at this site were included in the 3D image analyses and the blinded investigator assessment of 2D photography

## **3D ANALYSIS RESULTS**

### Single Site Analysis: 3D Analysis of Dimple Depth and Volume

- 145 dimples treated with TS-GS in 13 subjects; 3D Vectra image analyses were conducted using standardized photos
- Mean improvement in volume was 67.4%
- Mean improvement in height of the dimple was 58.4%
- Mean improvement in neight of the dimple was 58.4°

Figure 3. Example Before & After Photos from 3D Image Analysis. Show Quantitative Improvements in Dimple Depth and Volume at 180 Days



#### Single Site Analysis: Blinded Physician Assessment of Improvement

 At 180 days, the majority of patients, the majority of patients were rated >50% improved by blinded physicians (both dimple depth and overall improvement; Table 7)

#### Table 7. Blinded physician assessment at 180 days. The majority of patients were rated >50% improved in terms of dimple depth and overall improvement.

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Degree of Improvement	Improvement Overall, n (%) (N=13)		Improvement in Dimple Depth, n (%) (N=13)					
4 (76-100%)	4	(30.8%)	4	(30.8%)				
3 (51-75%)	4	(30.8%)	5	(38.4%)				
2 (26-50%)	5	(38.4%)	4	(30.8%)				
1 (0-25%)	- 2.8		- 2.9					
Mean								

## CONCLUSIONS

- Information gathered within the registry aligns with the pivotal study conducted previously<sup>2,3</sup>
- All patients experienced mild to moderate treatment effects, but no further treatment was required for any patient
- Quantitative image analysis directly supports the subject- and physician-assessed efficacy data by demonstrating objective improvements in dimple depth
- Results indicate this FDA- cleared long-lasting cellulite treatment that takes an average of under one hour is safe and effective in real-life clinical practice