

LED Technologies Protocol

Protocol Title: A study to determine the efficacy of DPL® Light Therapy utilizing a combination of 600nm-Red and 880nm-Infrared lights for the treatment of pain associated with injury and chronic illness.

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I. Abstract

Light Emitting Diodes (LEDs) treatments has become a popular method of treating injury and chronic pain related ailments. Common treatment results are noted as a temporary relief of pain, increased mobility, enhanced recovery from injuries and reduced swelling. The objective of the study is to evaluate the clinical efficacy and changed in the participant's pain and recovery experience in relation to their experience prior to the use of the DPL® Therapy System.

II. Background

There are many variations and causes of pain but for the purpose of this study pain experiences are grouped into 1) injury related and 2) Chronic Illness to include arthritis, tendonitis, etc. These experiences of pain vary from less than a year to over 10 years of life with pain. The treatment of pain and injury recovery has been well document within the medical journals to have a dramatic positive effect in relieving pain and decreasing recovery time from injury. This study proposes treatments to 22 individuals of varying age, sex and pain related ailments.

III. Study Aims

The Purpose of the Study is to determine the efficacy of pain relief and injury recovery while utilizing the DPL® Therapy System which delivers light energy in the 880nm-IR and 660nm-Red light spectrum. The Study will be performed by 22 individuals over a 5 day treatment period.

IV. Administrative Organization

Subject study sites were the individual's homes with data management center located at 133 CR 117, Elizabeth, CO 80108.

V. Study Design

- a. A randomized, controlled clinical study was performed.
- b. The study population was composed of 10 men and 12 women of varying ages.
- c. The study population comprised of 10 injury related and 12 illness related ailments.
- d. An initial baseline self-examination was recorded.
- e. Study end point was self-examination at the end of 5 days.

VI. Study Procedures

- a. Twenty two subjects were recruited from Metro Denver areas and were screened for study inclusion: 10 subjects experienced pain associated with injury related ailments and 12 subjects experienced pain associated with chronic illness like arthritis or

tendonitis. Subjects agreed to conduct at minimum daily 17 minute treatments for 5 days.

VII. Study Results

In a clinical study to determine the efficacy of the DPL® Therapy System, 22 subject completed the study receiving daily light therapy treatments over 5 days. 100% of the subject reported positive results and improvement in their levels of pain, mobility and recovery.

Temporary Relief of Pain: 91% of the subjects reported over 50% improvement in the general relief of pain with DPL® Therapy treatments. With the average improvement score of 57%

Reduction of Pain impact on daily activity: 86% of subjects reported greater than a 50% reduction on the impact that pain had on their daily activity. With the average improvement score of 59%

Reduction on the reliance of pain medications: 82% of subjects reported more than a 50% reduction on the reliance of pain medications to manage their daily pain. With the average improvement score of 59%

General continued improvement of Pain relief: 100% or the subjects reported continued improvement in the reduction of daily pain with the DPL® Therapy treatments. 86% of subjects reported over a 50% continued improvement. With the average improvement score of 62%

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Clinical Trial – DPL Pain Relief

Study Summary

Participants: 22 people participated in the trial and completed the five day curriculum.

Pain Disclosure: Participants were asked if they suffered from Chronic (on-going) pain or situational (event driven) pain. 19 of the 22 participants (86.4) identified their pain as Chronic and only 3 participants (13.6%) identified their pain as Situational.

Participants were asked how long they have dealt with this pain to determine the ability of the DPL system to effect relief in individuals with Chronic and Situational pain. The responses ranged from 1 to 25 years with a mean average of 5.13 years of dealing with pain issues.

Participants were asked to respond to whether their pain was a result of: 1) injury or trauma event such as ligament or cartilage damage or 2) disease related such as Arthritis or tendonitis. 12 or 55% selected injury and 10 or 45% selected disease related. There was a good selection of injury compared to disease related participants to show DPL's performance across both types of pain related issues.

Lastly participants were asked what body areas where they dealing with pain and the responses included: back, shoulder, hand, knee, ankle, neck, legs and elbow. This is important as is demonstrates DPL's ability to work on multiple body areas with similar results.

Test Results: The following questions were posed to each participant to establish a pain baseline prior to the trial and a pain score post trial to determine the efficacy of DPL Light Therapy on the participant's pain relief. To determine the overall test rating, each respondent's score for each question was tabulated than added to determine a total test score. This total test score was then divided by the 22 (# of Participants) to determine an overall average test score for that specific question. Both baseline (before) and results (after) scores were measured in the similar fashion to determine the % improvement of the participants perceived pain relief. Answers were given based on a ten point scale with zero being the least amount of pain and ten the most.

- 1) **How Intense is your Pain?** (designed to establish a participant's base line)
 - a. Prior to trial the scores ranged from 10 to 5 with a mean average of 7.55
 - b. After the use of DPL Light Therapy scores ranged from 2 to 5 with a mean average of 3.14 or a 58% improvement in pain sensitivity.
- 2) **How much does Pain interrupt your daily activity?**
 - a. Prior to trial the scores ranged from 10 to 4 with a mean average of 7.00
 - b. After the use of DPL Light Therapy scores ranged from 1 to 7 with a mean average of 2.86 or a 59% improvement.
- 3) **How does Pain limit your lifting?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average of 6.86

- b. After the use of DPL Light Therapy scores ranged from 1 to 8 with a mean average of 3.41 or a 50% improvement
- 4) How reliant are you on pain medications?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average score of 7.05
 - b. After the use of DPL Light Therapy scores ranged from 1 to 6 with a mean average score of 2.86 or a 59% improvement
- 5) How much does Pain limit your sitting?**
 - a. Prior to trial the scores ranged from 8 to 1 with a mean average score of 4.14
 - b. After the use of DPL Light Therapy scores ranged from 0 to 4 with a mean average score of 1.77 or a 57 % improvement.
- 6) How much does Pain limit your standing?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average score of 5.32
 - b. After the use of DPL Light Therapy scores ranged from 1 to 6 with a mean average score of 2.32 or a 56% improvement.
- 7) How much does Pain limit your walking?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average score of 5.86
 - b. After the use of DPL Light Therapy scores ranged from 1 to 6 with a mean average score of 2.36 or a 60% improvement.
- 8) How much does Pain limit your sleeping?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average score of 6.32
 - b. After the use of DPL Light Therapy scores ranged from 0 to 5 with a mean average score of 2.73 or a 57% improvement.
- 9) How much does Pain interfere with your Job?**
 - a. Prior to trial the scores ranged from 10 to 1 with a mean average score of 4.73
 - b. After the use of DPL Light Therapy scores ranged from 1 to 8 with a mean average score of 2.23 or a 53% improvement.
- 10) My overall Pain is getting better (1) or worse (10)?**
 - a. Prior to trial the scores ranged from 10 to 5 with a mean average score of 7.73
 - b. After the use of DPL Light Therapy scores ranged from 1 to 6 with a mean average score of 2.95 or a 62% improvement

Overall test results showed the following:

- 1) 86.4% of participants experienced chronic daily pain over an average of 5.13 years.
- 2) Pain was experienced within multiple body areas and covered both injury and disease related issues.
- 3) 100% of participants reported and overall reduction in pain from their original baseline with the overall average score of pain relief participants experienced 57% less pain after daily treatment with DPL Light Therapy

Conclusion:

DPL Light Therapy is an effective pain relief treatment for both chronic and situational pain issues related to both injury and disease ailments.

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Clinical Trial - Pain Relief

Statistical Analysis

Participant	Question									
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
C Keeler	B	A	B	A	B	A	A	B	A	A
D Nelson	6	3	4	1	7	4	3	2	4	1
T Engleman	7	3	7	2	6	2	1	1	2	7
G Nelson	8	3	8	4	10	3	6	1	8	2
Tom Planko	8	3	9	4	10	5	2	1	4	2
Tracey Planko	7	5	6	4	7	6	4	3	3	4
R Russell	8	4	7	5	8	7	3	7	1	8
E Nestigen	7	2	8	2	6	5	2	3	3	3
N McKinney	5	2	4	1	2	1	1	0	4	1
B Engleman	8	4	8	3	10	7	8	6	1	5
T Thatcher	7	4	6	2	5	2	5	3	2	9
G Lipetos	6	2	4	1	6	4	2	1	1	7
D Malafronte	5	2	4	2	5	2	1	1	1	4
G Skurzynski	8	4	10	7	10	6	1	1	1	6
N Ferguson	10	4	5	1	1	7	3	2	1	10
K Ledesma	10	5	10	4	4	6	7	2	10	6
C Stinson	10	4	8	3	9	8	7	2	4	3
D Spinda	10	3	10	4	8	7	7	4	10	2
B Beck	5	2	4	1	3	4	4	2	4	3
DJ Thompson	7	3	5	2	8	4	3	4	5	2
B Duis	9	3	7	2	8	4	8	4	6	7
L Martins	7	2	7	2	9	4	2	3	8	3
	8	2	8	2	9	6	1	3	2	7
Total Score	166	69	154	63	151	75	155	63	91	39
Ave Score	7.55	3.14	7.00	2.86	6.86	3.41	7.05	2.86	4.14	1.77
% Improvement	58%		59%		50%		59%		57%	

Total Score	166	69	154	63	151	75	155	63	91	39	117	51	129	52	139	60	104	49	170	65
Ave Score	7.55	3.14	7.00	2.86	6.86	3.41	7.05	2.86	4.14	1.77	5.32	2.32	5.86	2.36	6.32	2.73	4.73	2.23	7.73	2.95
% Improvement	58%		59%		50%		59%		57%		56%		60%		57%		53%		62%	

Average score is determined by dividing the total score by the number of participants

% improvement is determined by dividing the Average "Before" score by the Average "After" score and subtracting from 1

Formula: $1 - (\text{Ave Before Score} / \text{Ave After Score}) = \% \text{Improvement}$

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Clinical Trial - Pain Relief
User Trial Consolidated Results

Do you currently experience regular pain?
Where is your pain located?

Yes	No
19	3

Back, Shoulder, Hand, Knee, Ankle,
Neck, Legs and Elbow

Is your pain from Injury or Illness?
How many years have you experienced this pain?

Injury	Illness
12	10
5.13 Years	

Please answer the following Questions on a scale of 1-10, 10 being worst	Start of Study	End of Study	% change
How intense is your pain?	7.55	3.14	58%
How much does pain interrupt your daily activity?	7.00	2.86	59%
How much does pain limit your lifting?	6.86	3.41	50%
How reliant are you on pain medications?	7.05	2.86	59%
How much does pain limit your sitting?	4.14	1.77	57%
How much does pain limit your standing?	5.32	2.32	56%
How much does pain limit your walking?	5.86	2.36	60%
How much does pain limit your sleeping?	6.32	2.73	57%
How much does pain interfere with your job?	4.73	2.23	53%
My overall pain is getting better or worse?	7.73	2.95	62%

LED Technologies
Clinical Trial - Pain Relief
User Trial Carolyn Keeler Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

Yes	No
1	
Lower Back	
0	1
5	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
6	3	50%
4	1	75%
7	4	43%
7	3	57%
4	1	75%
3	1	67%
4	1	75%
7	3	57%
4	1	75%
7	2	71%

LED Technologies
Clinical Trial - Pain Relief
User Trial Donna Nelson Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

Yes	No
1	0
Neck and Back	
0	1
4	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	3	57%
7	2	71%
6	3	50%
5	2	60%
2	1	50%
2	1	50%
3	1	67%
6	2	67%
4	2	50%
7	3	57%

LED Technologies
Clinical Trial - Pain Relief
User Trial Tracey Engleman Results

Do you currently experience regular pain?

Yes No

Where is your pain located?

1 0

Is your pain from Injury or Illness?

Hip and Back

How many years have you experienced this pain?

1 0

1

Please answer the following Questions on a scale of 1-10, 10 being worst

Start of Study	End of Study	% change
8	3	63%
8	4	50%
10	3	70%
9	3	67%
6	1	83%
8	2	75%
10	2	80%
9	2	78%
7	2	71%
9	3	67%

How intense is your pain?

How much does pain interrupt your daily activity?

How much does pain limit your lifting?

How reliant are you on pain medications?

How much does pain limit your sitting?

How much does pain limit your standing?

How much does pain limit your walking?

How much does pain limit your sleeping?

How much does pain interfere with your job?

My overall pain is getting better or worse?

LED Technologies
Clinical Trial - Pain Relief
User Trial Garrett Nelson Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

	Yes	No
	0	1
Knee		
	1	0
	1	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
8	3	63%
9	4	56%
10	5	50%
8	1	88%
2	1	50%
8	4	50%
9	3	67%
2	1	50%
4	1	75%
7	2	71%

LED Technologies
Clinical Trial - Pain Relief
User Trial Thomas Pianko Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

	Yes	No
	1	0
Back	0	1
	5	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	5	29%
6	4	33%
7	6	14%
7	3	57%
7	4	43%
6	2	67%
5	1	80%
7	3	57%
3	1	67%
8	4	50%

LED Technologies
Clinical Trial - Pain Relief
User Trial Tracey Pianko Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

Yes	No
1	0
Shoulder and Hip	
0	1
5	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
8	4	50%
7	5	29%
8	5	38%
9	3	67%
5	1	80%
5	2	60%
8	3	63%
7	3	57%
1	1	0%
7	3	57%

LED Technologies
Clinical Trial - Pain Relief
User Trial Ryan Russell Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How many years have you experienced this pain?

	Yes	No
	0	1
Ankle		
	1	0
	1	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	2	71%
8	2	75%
6	1	83%
4	1	75%
1	0	100%
4	1	75%
8	3	63%
1	0	100%
1	1	0%
5	1	80%

LED Technologies
Clinical Trial - Pain Relief
User Trial Eric Nestigen Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

Yes	No
0	1
Lower Leg	
1	0
1	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
5	2	60%
4	1	75%
2	1	50%
2	1	50%
1	0	100%
4	1	75%
3	1	67%
1	1	0%
1	1	0%
5	1	80%

LED Technologies
Clinical Trial - Pain Relief
User Trial Noel McKinney Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

Yes	No
1	0
Lower Back	
0	1
10	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
8	4	50%
8	3	63%
10	7	30%
8	5	38%
6	3	50%
5	2	60%
5	2	60%
8	4	50%
7	3	57%
9	3	67%

LED Technologies
Clinical Trial - Pain Relief
User Trial Brian Engleman Results

Do you currently experience regular pain?

Where is your pain located?

Is your pain from Injury or Illness?

How long have you experienced this pain?

	Yes	No
	1	0
neck	0	1
	4	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?

How much does pain interrupt your daily activity?

How much does pain limit your lifting?

How reliant are you on pain medications?

How much does pain limit your sitting?

How much does pain limit your standing?

How much does pain limit your walking?

How much does pain limit your sleeping?

How much does pain interfere with your job?

My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	4	43%
6	2	67%
5	2	60%
5	2	60%
1	1	0%
1	1	0%
1	1	0%
7	4	43%
1	1	0%
7	3	57%

LED Technologies
Clinical Trial - Pain Relief
User Trial Tawnyetta Thatcher Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Hands		
	0	1
	8	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
6	2	67%
4	1	75%
6	3	50%
8	4	50%
1	1	0%
1	1	0%
1	1	0%
1	1	0%
4	2	50%
7	4	43%

LED Technologies
Clinical Trial - Pain Relief
User Trial Greg Lipetos Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Knee		
	1	0
	6	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
5	2	60%
4	2	50%
5	2	60%
6	2	67%
1	1	0%
4	1	75%
5	2	60%
2	1	50%
1	1	0%
6	3	50%

LED Technologies
Clinical Trial - Pain Relief
User Trial David Malafronte Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

Yes	No
1	0
Shoulder	
1	0
1	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
8	4	50%
10	7	30%
10	8	20%
10	6	40%
1	1	0%
1	1	0%
1	1	0%
8	5	38%
10	8	20%
10	6	40%

LED Technologies
Clinical Trial - Pain Relief
User Trial Gloria Skurzynski Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Knee		
	0	1
	10	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
10	4	60%
10	5	50%
1	1	0%
10	7	30%
3	2	33%
10	6	40%
10	6	40%
9	5	44%
2	1	50%
10	6	40%

LED Technologies
Clinical Trial - Pain Relief
User Trial Norland Ferguson Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Legs	0	1
	7	

Please answer the following Questions on a scale of 1-10, 10 being worst

Start of Study	End of Study	% change
10	5	50%
10	4	60%
4	1	75%
10	6	40%
7	2	71%
10	4	60%
10	5	50%
10	4	60%
4	2	50%
10	3	70%

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

LED Technologies
Clinical Trial - Pain Relief
User Trial Kristen Ledesma Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Back		
	1	0
	2	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
10	4	60%
8	3	63%
9	4	56%
10	2	80%
8	1	88%
7	3	57%
6	2	67%
10	3	70%
8	5	38%
10	2	80%

LED Technologies
Clinical Trial - Pain Relief
User Trial Cheryl Stinson Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
all over	0	1
	15	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
10	3	70%
10	4	60%
8	4	50%
10	3	70%
7	4	43%
10	4	60%
10	4	60%
10	5	50%
10	4	60%
10	3	70%

LED Technologies
Clinical Trial - Pain Relief
User Trial David Spinda Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
neck	1	0
	25	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
5	2	60%
4	1	75%
3	1	67%
4	2	50%
4	2	50%
4	2	50%
4	1	75%
6	2	67%
4	2	50%
5	2	60%

LED Technologies
Clinical Trial - Pain Relief
User Trial Brent Beck Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Back		
	1	0
	5	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	3	57%
5	2	60%
8	4	50%
7	3	57%
8	4	50%
8	4	50%
9	4	56%
6	3	50%
5	2	60%
7	3	57%

LED Technologies
Clinical Trial - Pain Relief
User Trial DJ Thompson Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

	Yes	No
	1	0
Back		
	1	0
	3	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
9	3	67%
7	2	71%
8	4	50%
1	1	0%
8	4	50%
8	4	50%
7	3	57%
8	3	63%
9	3	67%

LED Technologies
Clinical Trial - Pain Relief
User Trial Betsy Duis Results

Do you currently experience regular pain?
 Where is your pain located?
 Is your pain from Injury or Illness?
 How long have you experienced this pain?

Yes	No
1	0
shoulder	
1	0
3	

Please answer the following Questions on a scale of 1-10, 10 being worst

How intense is your pain?
 How much does pain interrupt your daily activity?
 How much does pain limit your lifting?
 How reliant are you on pain medications?
 How much does pain limit your sitting?
 How much does pain limit your standing?
 How much does pain limit your walking?
 How much does pain limit your sleeping?
 How much does pain interfere with your job?
 My overall pain is getting better or worse?

Start of Study	End of Study	% change
7	2	71%
7	2	71%
9	4	56%
9	2	78%
5	2	60%
5	2	60%
6	2	67%
7	3	57%
8	3	63%
8	2	75%

LED Technologies
Clinical Trial - Pain Relief
User Trial Lisa Martins Results

	Yes	No
Do you currently experience regular pain?	1	0
Where is your pain located?		
Is your pain from Injury or Illness?	1	0
How long have you experienced this pain?	1	

Please answer the following Questions on a scale of 1-10, 10 being worst	Start of Study	End of Study	% change
How intense is your pain?	8	2	75%
How much does pain interrupt your daily activity?	8	2	75%
How much does pain limit your lifting?	9	2	78%
How reliant are you on pain medications?	6	1	83%
How much does pain limit your sitting?	3	2	33%
How much does pain limit your standing?	3	2	33%
How much does pain limit your walking?	3	2	33%
How much does pain limit your sleeping?	8	2	75%
How much does pain interfere with your job?	7	2	71%
My overall pain is getting better or worse?	7	3	57%