

# Efficiency and Cost Effectiveness of FLACS two different feeder room models

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# Study Design

**Primary Objective:**

To understand workflow efficiencies and the effect on the patient, staff and surgeon

**Study Design:**

Prospective, IRB approved study to evaluate the time and motion of two different workflow scenarios

Study staff tracked time and motion of the patient, staff and surgeon during the course of the procedure by documenting all activities with a time stamp

To prevent bias, a third party was secured to oversee time and motion data collection

Participation for each subject concluded at the end of their surgical procedure

# Methods

**Group 1:** Automated and integrated devices and femto-guided treatment

- ❑ No manual marking
- ❑ Iris Registration of pre-op image
- ❑ LRI and toric alignment guidance at laser
  
- ❑ N = 29
  - ❑ LRI = 11 (38%)
  - ❑ TIOL = 18 (62%)

**Group 2:** Manual marking with intra-operative guidance

- ❑ Pre-op manual marking at slit lamp
- ❑ Digital registration of pre-op image for toric alignment intraoperatively
- ❑ Pre-op marks used for alignment for LRIs in laser suite
  
- ❑ N = 31
  - ❑ LRI = 15 (48%)
  - ❑ TIOL = 16 (52%)

# Results: Patient Perspective

	Group 1 Integrated / Automated	Group 2 Manual/ Intraop Guided	Group 1 Time Savings	P Value
<b>Patient Time Savings:</b>	N = 29	N = 31		
Total time patient engaged with staff (marking, femto, phaco)	0:30:22	1:21:49	0:51:27	
<b>Total patient time savings</b>			<b>0:51:27</b>	<b>&lt;0.001</b>



Patient marking at slitlamp for LenSx

# Results: Staff Perspective

	<b>Group 1 Integrated / Automated</b>	<b>Group 2 Manual / Intraop Guided</b>	<b>Group 1 Time Savings</b>	<b>P Value</b>
<b>Staff Time Savings:</b>	N = 29	N = 31		
Total time in OR setting (laser room + OR)	0:30:22	0:37:31	0:07:09	0.001
Total time marking (wait + marking)	NA	0:11:40	0:11:40	<0.001
<b>Total staff time savings</b>	<b>0:30:22</b>	<b>0:49:11</b>	<b>0:18:49</b>	<b>&lt;0.001</b>



# Results: Surgeon Perspective

	<b>Group 1 Integrated / Automated</b>	<b>Group 2 Manual / Intraop Guided</b>	<b>Group 1 Time Savings</b>	<b>P Value</b>
<b>Surgeon Time Savings:</b>	N = 29	N = 31		
Marking	0:00:00	0:01:48	0:01:48	<0.001
Docking	0:01:21	0:01:27	0:00:07	0.52
Femto	0:02:13	0:02:23	0:00:10	0.03
Surgical Time	0:06:58	0:10:12	0:03:14	<0.001
<b>Total surgeon time savings</b>	<b>0:10:32</b>	<b>0:15:50</b>	<b>0:05:18</b>	<b>&lt;0.001</b>



# Study Limitations



The number of LRIs vs. toric IOL patients as well as the number of multifocal vs. monofocal IOLs was not compared between groups.



The density of the cataract was not compared between groups.



Patient compliance with fixation instructions, scrub tech experience and experience of the circulator with the intraoperative digital guidance software was not compared between groups.



Further studies including the above data as well as the ease of opening femtosecond corneal incisions between groups may reveal additional differences between marking strategies and platforms.

What this  
means for the  
practice

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Extra Time!! What would you do?

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More cases?

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Go home early?

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Happier Staff

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Happier Patients

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Happier Doctors