4<sup>th</sup> HEPATITIS C
TECHNICAL ADVISORY
GROUP
TAG Meeting

#### SIMPLIFICATION OF PRETREATMENT DIAGNOSTIC EVALUATION AND ON-TREATMENT MONITORING PROCEDURES WITHIN HCV ELIMINATION PROJECT

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#### **Background**

- One of the main aim of HCV Elimination Project diagnosis and treatment of HCV.
- Even in setting of SOF/LDV availability management algorithm can be simplified.

#### **Aims**

#### Primary aims:

- Reduce the patient's unnecessary clinical visits.
- Remove the unnecessary laboratory investigations.
- Reduce the financial expanses per patient.
- Reduce the budget of the Project.

#### Secondary aims:

- Simplified algorithm should not influence on the treatment outcome.
- Make participation in HCV Elimination Project more comfortable.

#### **Methods**

- Location: medical center Mrcheveli & clinic Neolab.
- Patient enrollment time: March May, 2018.
- Pre-Treatment simplification.
- On-Treatment simplification according treatment regimens.
- Control group: patients managed by national guidelines during study period.
- Satisfactory questionnaire filled at the end of treatment (EOT) for both groups.

#### **RBV-containing 12 week regimen**

Procedures	Pre- treatment	2	4	6	8	10	12	Follow Up
Drug Control		X	X	X	X	X	X	
Physicians Consultation	XX		X		X		X	X
PCR / HCVcAg	X		X					X
HCV Genotype	X							
CBC	X		X		X		X	
ALT	X		X		X		X	
AST	X							
Creatinine	X						X	
Bil (tot.)	X						X	
Bil (dir.)	X						X	
Albumin	X							
PT, INR	X							
ALP	X							
GGT	X							
Glucose (f.)	X							
HBsAg, anti-HBc (tot)	X							
Ultrasound	X							
Fibroscan	If needed							

# RBV-containing 12 week regimen (simplified)

Procedures	Pre- treatment	2	4	6	8	40	12	Follow Up
Drug Control		X	X	X	X	X	X	
Physicians Consultation	XX		X		X		X	X
PCR / HCVcAg	X		×					X
HCV Genotype	X							
CBC	X		X		X		X	
ALT	X		X		X		X	
AST	X							
Creatinine	X						×	
Bil (tot.)	X						×	
Bil-(dir.)	X						×	
Albumin	X							
PT, INR	X							
ALP	×							
GGT	X							
Glucose (f.)	X							
HBsAg, anti-HBc (tot)	X							
Ultrasound	X							
Fibroscan	If needed							

#### **RBV-free 12 week regimen**

Procedures	Pre- treatment	2	4	6	8	10	12	Follow Up
Drug Control		X	X	X	X	X	X	
Physicians Consultation	XX		X		X		X	X
PCR / HCVcAg	X		X					X
HCV Genotype	X							
CBC	X		X		X		X	
ALT	X		X		X		X	
AST	X							
Creatinine	X						X	
Bil (tot.)	X						X	
Bil (dir.)	X						X	
Albumin	X							
PT, INR	X							
ALP	X							
GGT	X							
Glucose (f.)	X							
HBsAg, anti-HBc (tot)	X							
Ultrasound	X							
Fibroscan	If needed							

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# RBV-free 12 week regimen (simplified)

Procedures	Pre- treatment	2	4	6	8	40	12	Follow Up
Drug Control		X	X	X	X	X	X	
Physicians Consultation	XX		X		X		X	X
PCR / HCVcAg	X		X					X
HCV Genotype	Х							
CBC	X		X		X		X	
ALT	X		X		X		X	
AST	X							
Creatinine	X						X	
Bil (tot.)	X						X	
Bil (dir.)	¥						X	
Albumin	X							
PT, INR	X							
ALP	X							
<del>GGT</del>	¥							
Glucose (f.)	X							
HBsAg, anti-HBc (tot)	X							
Ultrasound	X							
Fibroscan	If needed							

#### **RBV-containing 24 week regimen**

X

X

X If needed

Glucose (f.)

Ultrasound

Fibroscan

HBsAg, anti-HBc

Procedures	Pre- treatment	2	4	6	8	10	12	14	16	18	20	22	24	Follow Up
Drug Control		X	X	X	X	X	X	X	X	X	X	X	X	
Consultation	XX		X		X		X						X	X
PCR/HCVcAg	X		X											X
HCV Genotype	X													
CBC	X		X		X		X						X	
ALT	X		X		X		X						X	
AST	X													
Creatinine	X						X		X		X		X	
Bil (tot.)	X						X						X	
Bil (dir.)	X						X						X	
Albumin	X													
PT, INR	X													
ALP	X													
GGT	X													

#### RBV-containing 24 week regimen (simplified)

RDV containing 24 week regimen (simplified)										J				
Procedures	Pre- treatment	2	4	6	8	<del>10</del>	12	44	16	<del>18</del>	20	<del>22</del>	24	Follow Up
Drug Control		X	X	X	X	X	X	X	X	X	X	X	X	
Consultation	XX		X		X		X						X	X
PCR/HCVcAg	X		X											X
HCV Genotype	X													
CBC	X		X		X		X						X	

X

X

X

X

X

X

X

X

X

10

X

X

HCV Genotype	)
CBC	>
ALT	<b>)</b>

AST

Creatinine

Bil (tot.)

**Albumin** 

HBsAg, anti-HBc

Ultrasound

Fibroscan

PT, INR

X

X

X

X

X

X

X

X

X

X

X

X If needed

#### **RBV-free 24 week regimen**

X

X

X

X

X

X

X

**X**If needed

Bil (dir.)

Albumin

PT, INR

Glucose (f.)

Ultrasound

Fibroscan

HBsAg, anti-HBc

ALP

GGT

Procedures	Pre- treatment	2	4	6	8	10	12	14	16	18	20	22	24	Follow  Up
Drug Control		X	X	X	X	X	X	X	X	X	X	X	X	
Consultation	XX		X		X		X						X	X
PCR/HCVcAg	X		X											X
HCV Genotype	X													
CBC	X		X				X						X	
ALT	X		X		X		X		X		X		X	
AST	X													
Creatinine	X						X						X	
Bil (tot.)	X						X						X	

X

X

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#### RRV-free 24 week regimen (simplified)

**Follow** 

X

X

12

Up

X

X

X

X

X

X

X

TOV-HEC 24 Week regimen (Simplified)													
Procedures	Pre- treatment	2	4	6	8	40	12	14	16	48	20	22	24
Drug Control		X	X	X	X	X	X	X	X	X	X	X	X
Consultation	XX		X		X		X						X
PCR/HCVcAg	X		X										
<b>HCV Genotype</b>	X												

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X X

X

X

X

X If needed

CBC

ALT

AST

Creatinine

Bil (tot.)

**A**lbumin

PT, INR

Glucose (f.)

HBsAg, anti-HBc

Ultrasound

Fibroscan

GGT

Bil (dir.)

#### Satisfactory questionnaire

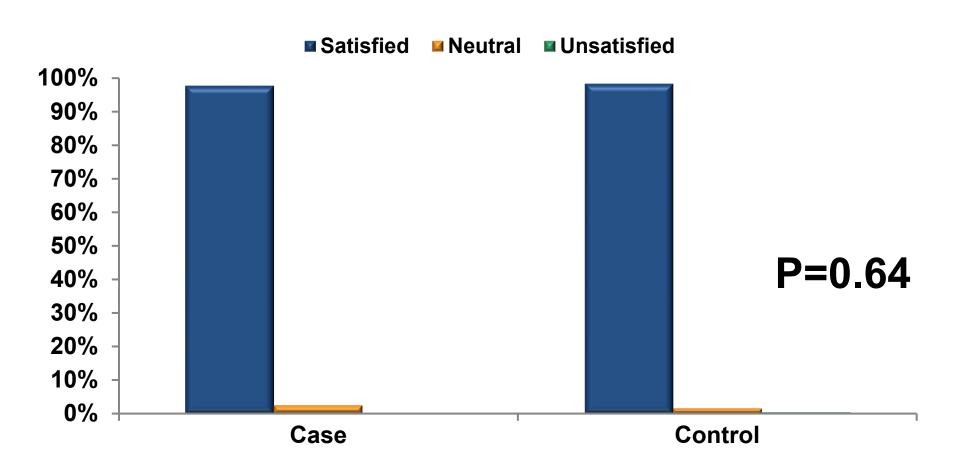
Not sure

14	Ease to understand what the doctor said (the									
	doctor explained medical terms)									
15	Overall, the doctor's consultations during the									
	visits									
16	Ease in obtaining diagnostic test results									
17	Preparation of medical documentations by the									
	clinic for program enrollment									
18	Convenience of procedures related to the									
	registration in HCV elimination program									
19	Convenience of procedures related to the									
	treatment in HCV elimination program									
	Approximately how much money (GEL) have you sees(GEL)	_	_							
	ees ··········(GEE) 🗖 Havercost ········(GEE)	- other cos	(C	ren) (specify	,					
	How many days of work (if any) have you had t	o miss to atter	nd appointment	s related to l	HCV treatm	ent				
prog	gram at this clinic?									
	Tumber of days D N/A (I	don't work								
What would you change/improve in HCV elimination program?										
what would you change, amprove in 12C v eminiation program.										
22.	22. Would you recommend the HCV treatment service you received at this clinic to your friends or family?									
_										

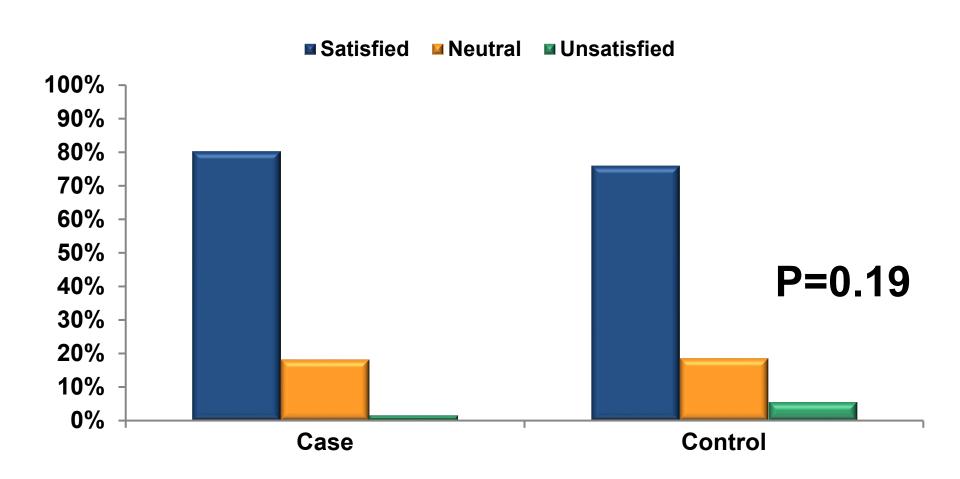
#### **Preliminary Results**

Demographics	Case	Control	P value
Number	127	275	
Sex • Male • Female	64.6% 35.4%	75.6% 24.4%	0.21
Age • <35 • 35-55 • >55	18.9% 51.6% 29.5%	13.5% 67.8% 18.8%	0.01
<ul> <li>Liver damage</li> <li>FIB 4 &lt;1.45/LE <f3< li=""> <li>FIB 4 &gt;3.25/LE - F3/4</li> </f3<></li></ul>	75.2% 24.8%	68.7% 31.3%	0.2

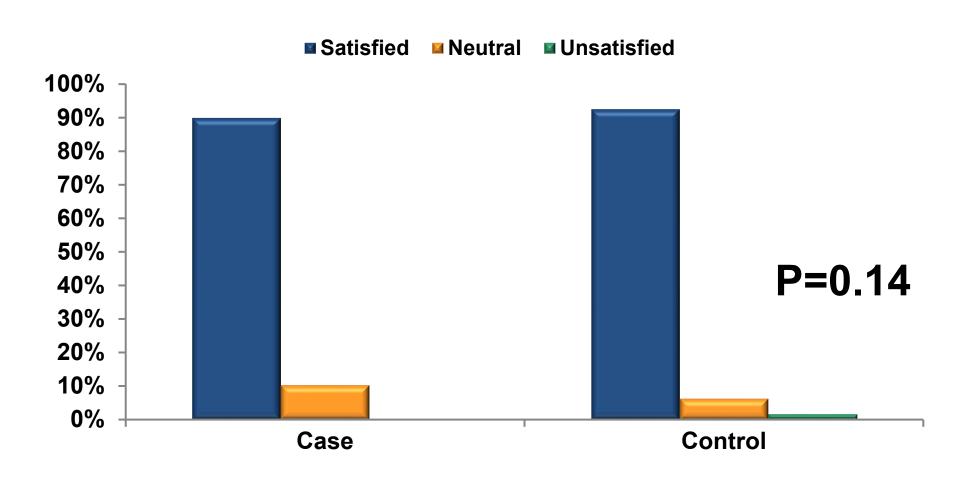
### Q1 - Overall service that you've received at our clinic



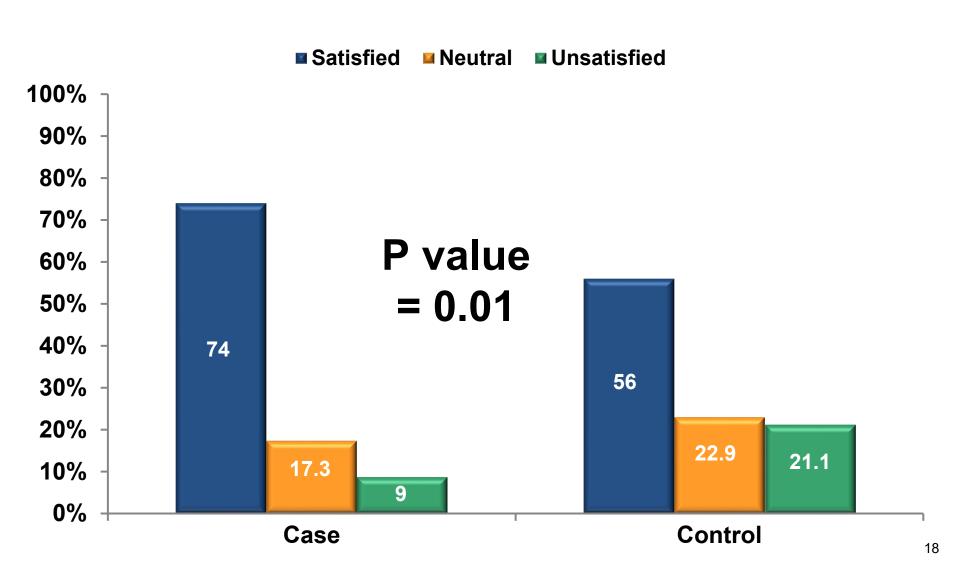
### Q2 - Convenience of our clinic in terms of location



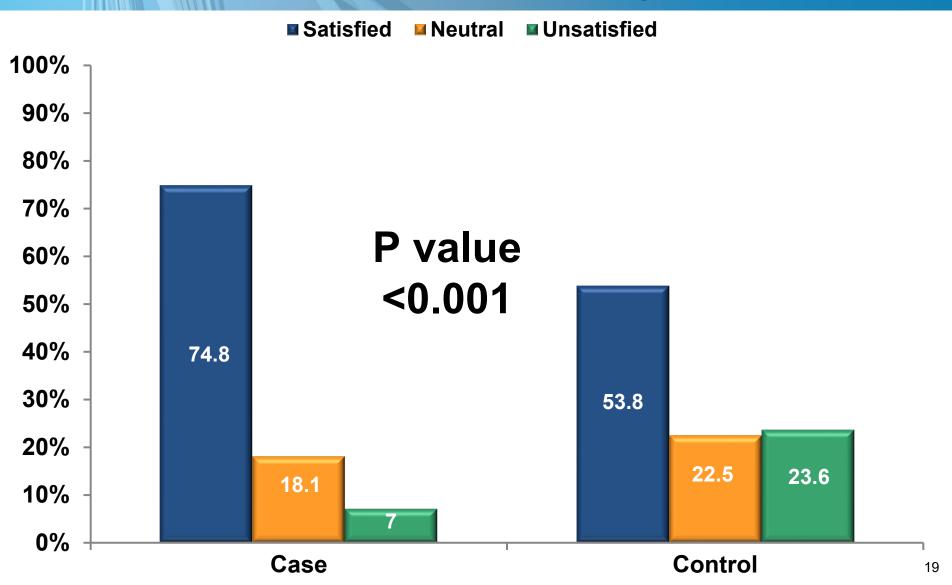
### Q3 - Convenience of office hours when you received medical service at our clinic



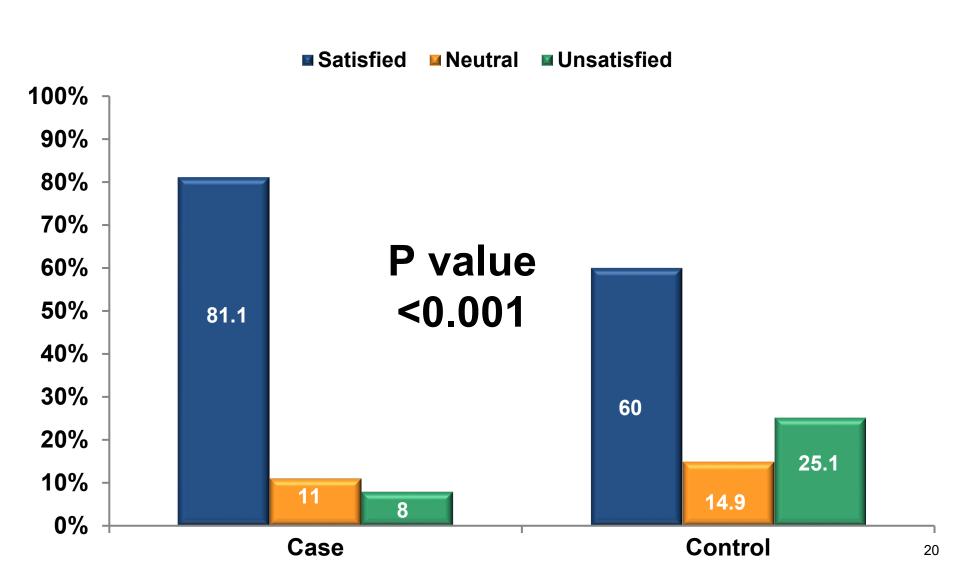
#### Q4 - Cost of pre-treatment diagnostic tests



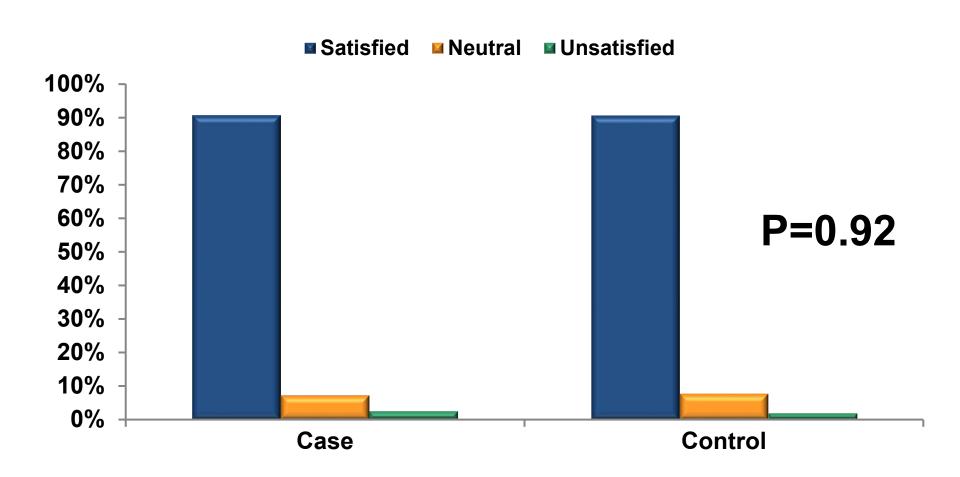
#### Q5 - Cost of on-treatment diagnostic tests



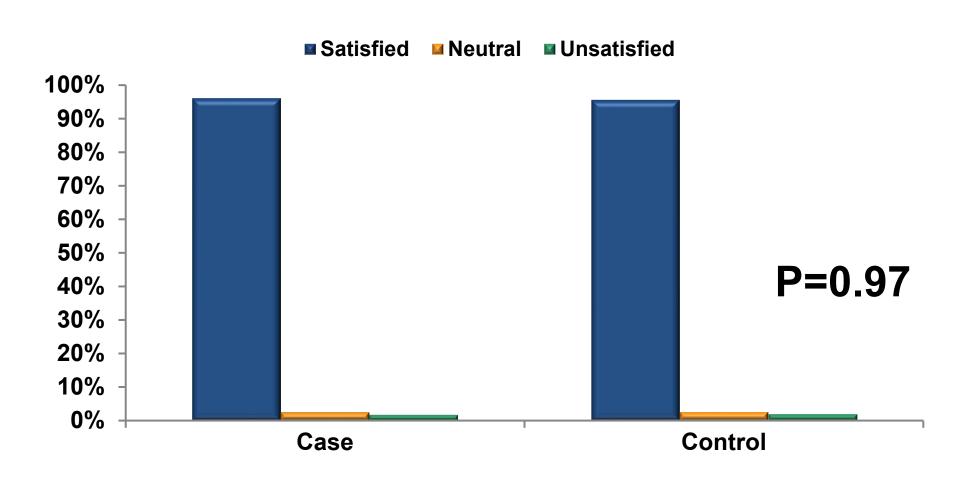
#### Q6 - Number of visits at the clinic



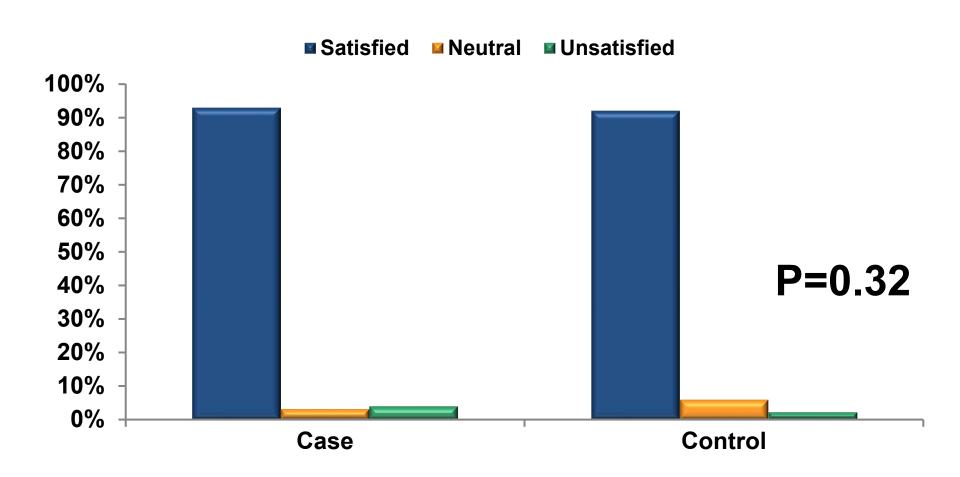
### Q7 - Waiting time during the visits at the clinic



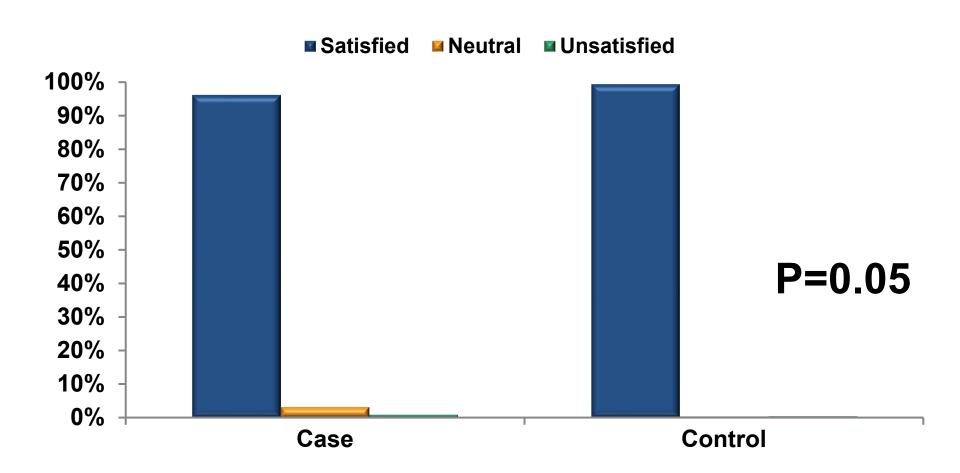
### Q8 - Time that doctor spent with you during the visits



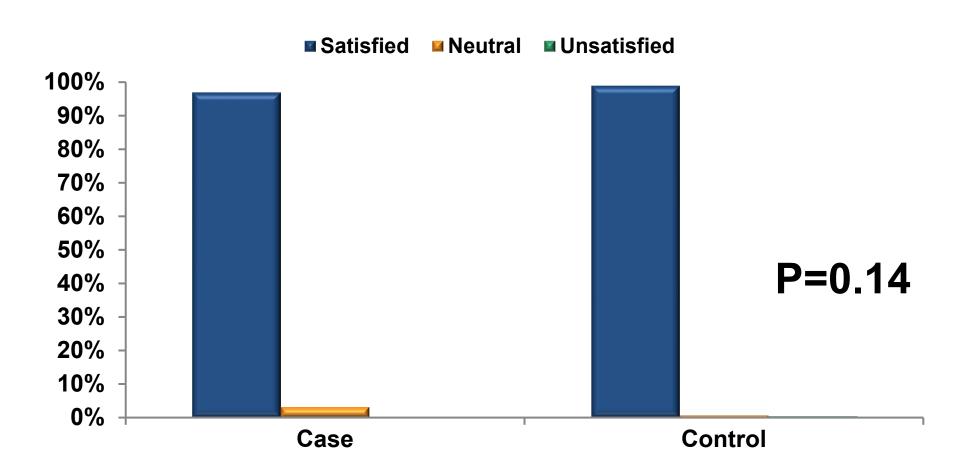
### Q9 - Time that you spent during medical procedures



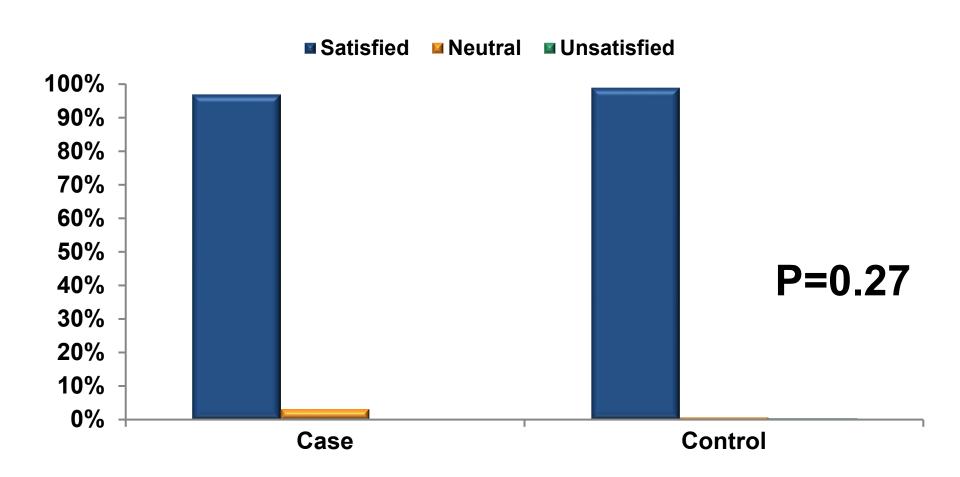
### Q10 - The doctor's explanations about the reasons of diagnostic tests



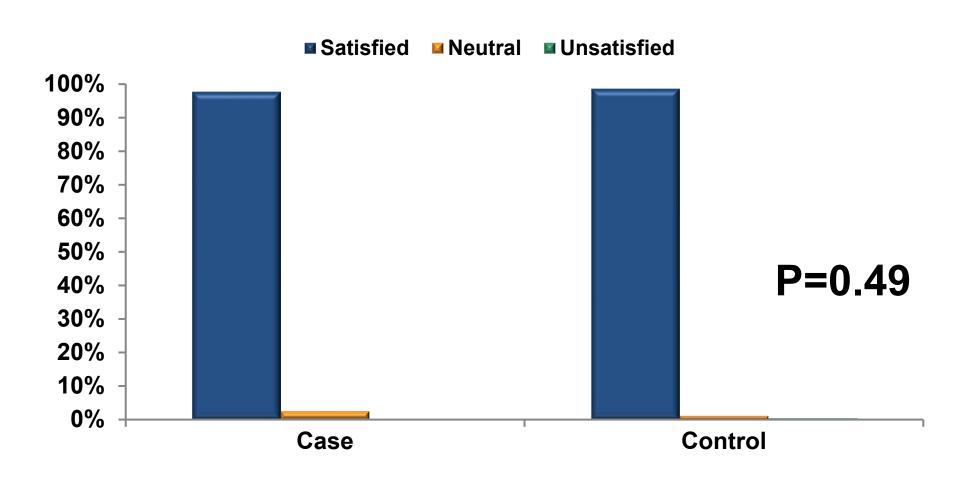
# Q11 - The doctor's explanations about the results of diagnostic tests



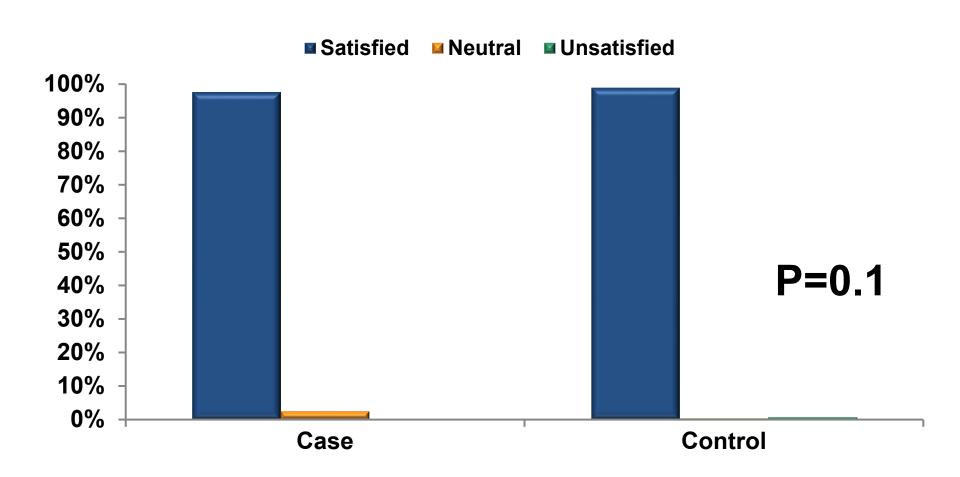
# Q12 - The doctor's instructions how to take medicine(s)



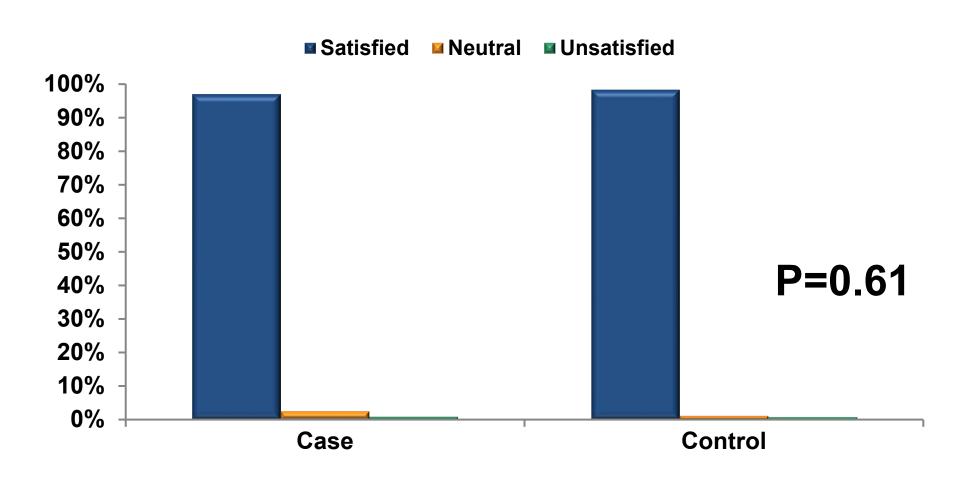
# Q13 - Ease to communicate with the doctor during the visits (I was allowed to say everything that I thought was important)



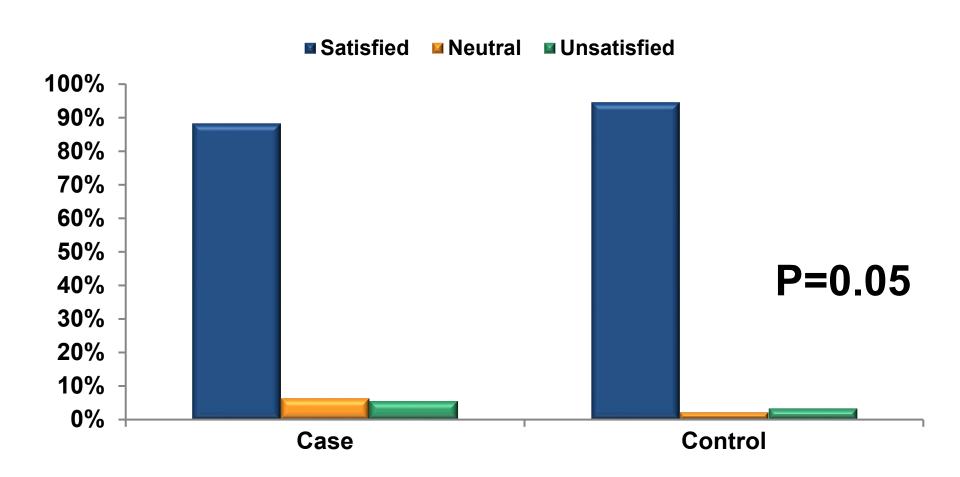
# Q14 - Ease to understand what the doctor said (the doctor explained medical terms)



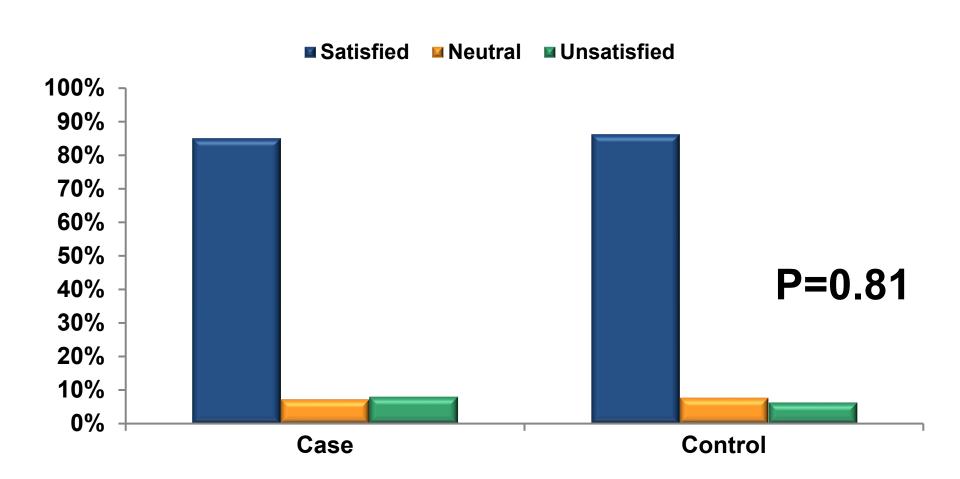
### Q15 - Overall, the doctor's consultations during the visits



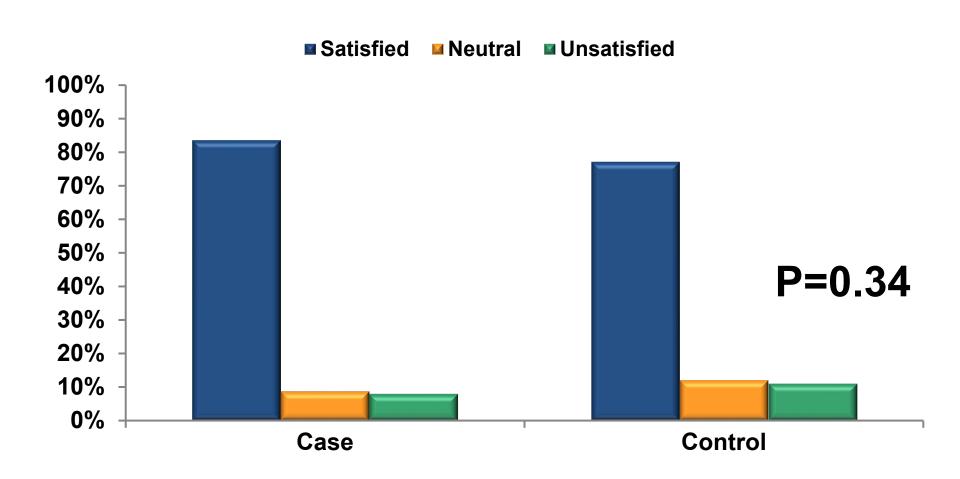
### Q16 - Ease in obtaining diagnostic test results



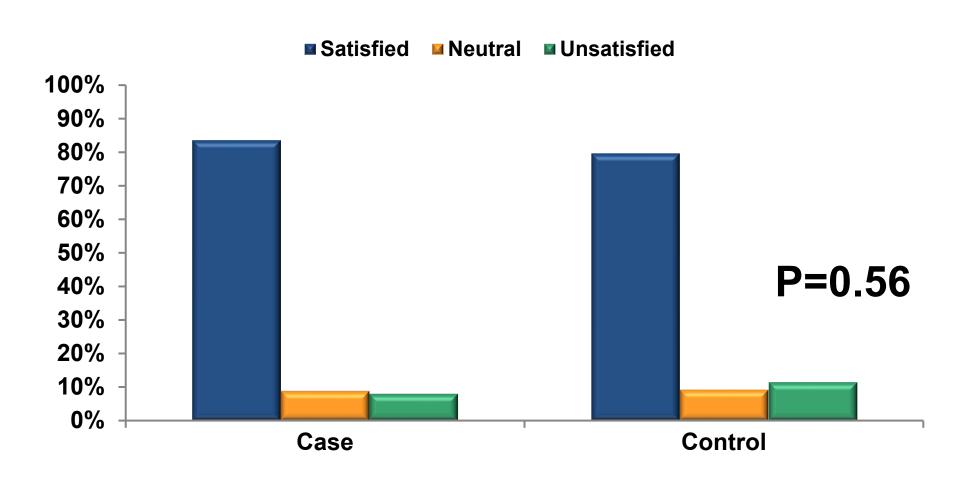
### Q17 - Preparation of medical documentations by the clinic for program enrollment



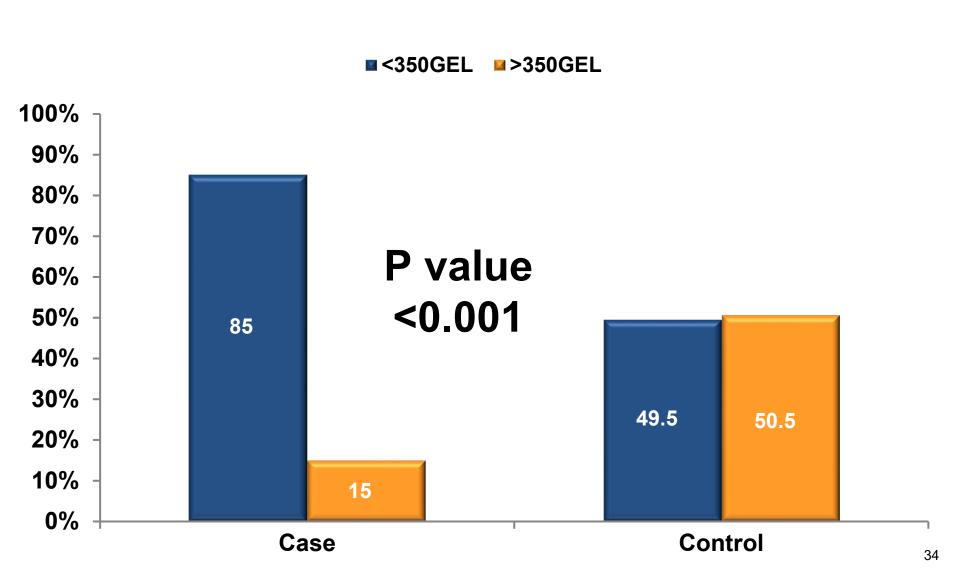
# Q18 - Convenience of procedures related to the registration in HCV elimination program



# Q19 - Convenience of procedures related to the treatment in HCV elimination program



Q20 - Approximately how much money (GEL) have you spent out of pocket for HCV treatment service at this clinic?



#### Conclusions

- Overall satisfaction rates from HCV Elimination Program are high.
- Costs per patient decreased significantly:
  - Pre-Tx (all) 289 GEL → 269 GEL
  - Harvoni 12w 218 GEL → 70 GEL
  - Harvoni/RBV 12w − 227 GEL → 97 GEL
  - Harvoni 24w 277 GEL → 95 GEL
  - Harvoni/RBV 24w 286 GEL → 136 GEL
- Patients are satisfied by decreasing frequent visits in treatment sites.
- Final results are pending SVR rates for case/controls aren't yet collected.