

**10<sup>th</sup> Paris Hepatology Conference**

**Two Programs of HCV Eradication: Follow-up of the  
Georgian and Egyptian programs**

**31 January 2017, Paris, France**

# **National Hepatitis C Elimination Program of Georgia**

**Tengiz Tsertsvadze MD, PhD**

**Director General  
Infectious Diseases, AIDS and Clinical  
Immunology Research Center  
Professor of Medicine, Tbilisi State University**

# GEORGIA



# HCV Epidemiology in Georgia

## HCV in General Population

### 2015 National Survey

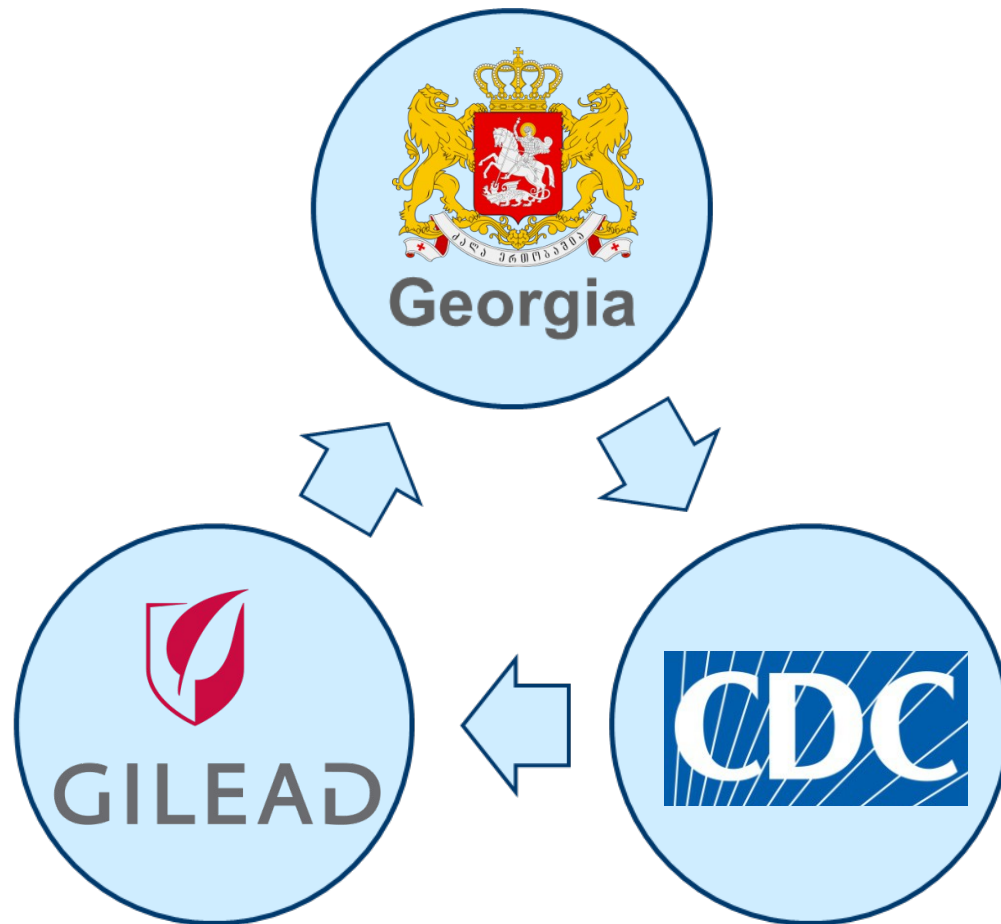
	%	# Persons
anti-HCV+	7.7%	208 800
HCV RNA+	5.4%	<b>150 300</b>

## HCV Genotype Distribution

Note: NS5B and 5'UTR/Core sequencing studies indicate that more than half of HCV genotype 2 patients in Georgia are actually infected with 2k/1b recombinant strain

# National Hepatitis C Elimination Program

Launched in April 2015





**U.S. CDC significantly contributed to the initiation and implementation of elimination program**



**Gilead committed to donate DAAs necessary for implementing elimination program**

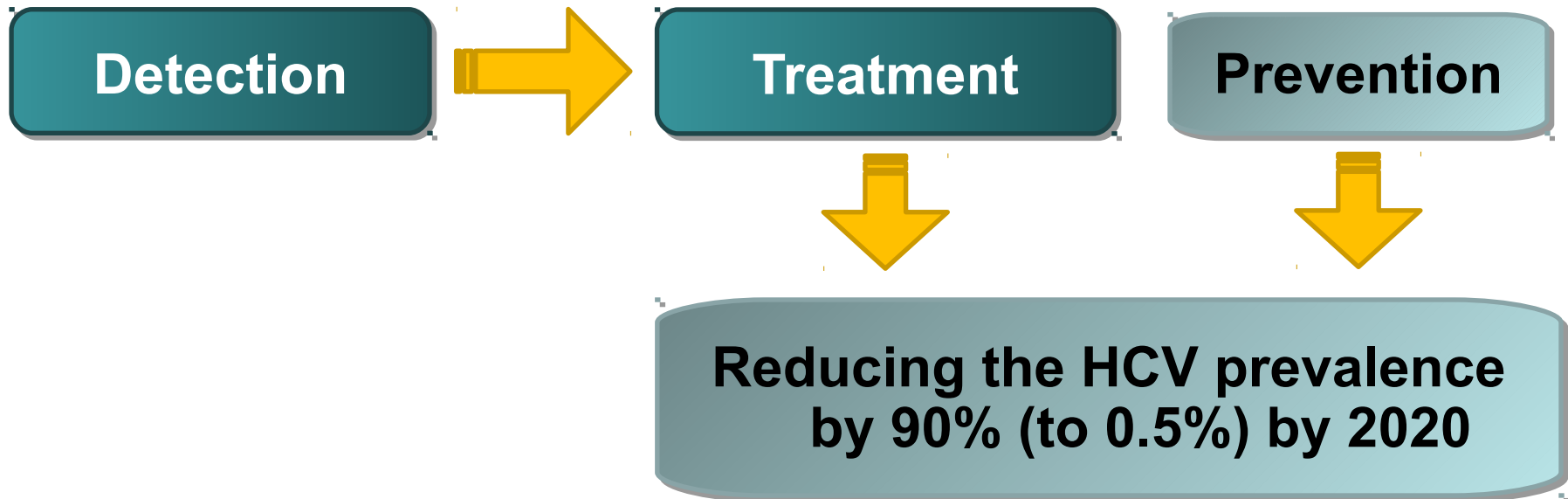


**Key Opinion Leader Guidance and Education for Eliminating Hepatitis C in Georgia**

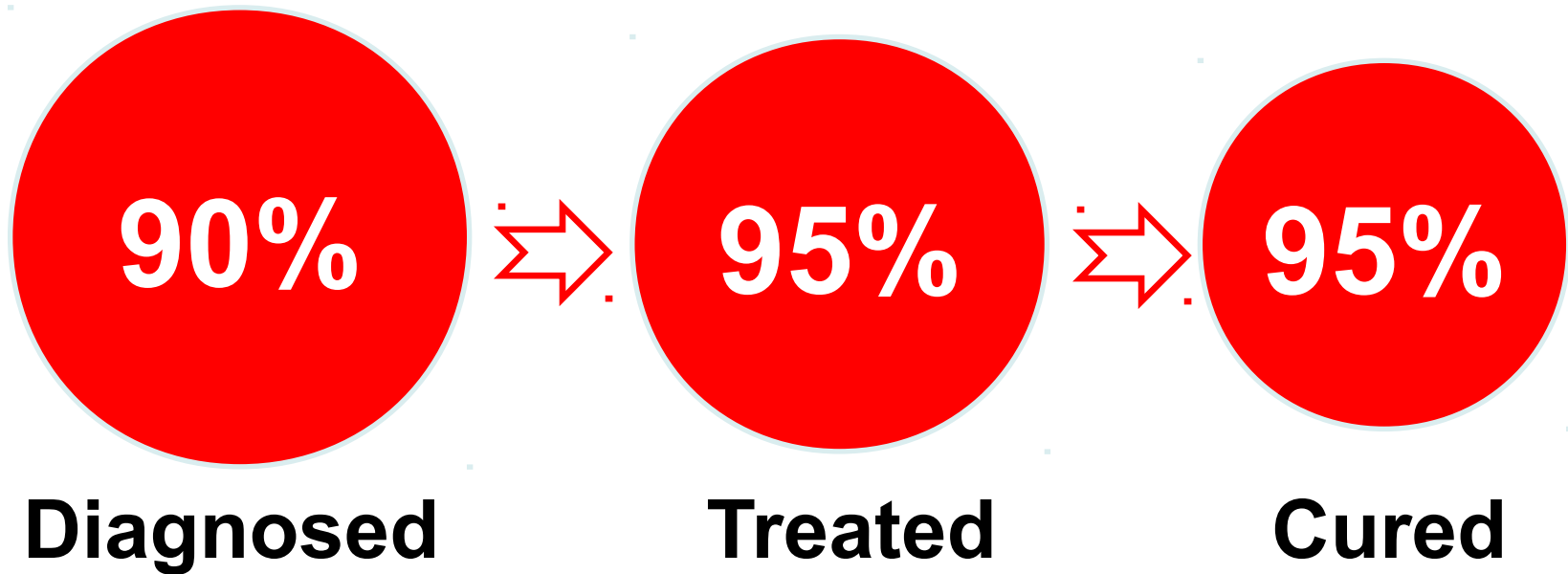


# The Goal of the National Hepatitis C Elimination Program

**Elimination of HCV infection in the country through identifying and treating all hepatitis C patients strengthened by effective prevention interventions**



# Targets: 90-95-95



# How Georgia Differs from Other Countries

## Other countries

- No active case finding
- Only those aware of their disease and referring to physicians are treated
- Treatment prioritization

## Georgia

- Active case finding
- Treatment of all patients (including F0 fibrosis)
- Widescale prevention programs



# Available DAAs and Treatment Protocols

## **April 2015 – March 2016 Sofosbuvir (SOF)**

IFN-containing and IFN-free SOF regimens recommended based on various clinical scenarios (genotype, cirrhosis, previous treatment experience)

## **Since March 2016**

## **Ledipasvir/Sofosbuvir (LDV/SOF)**

LDV/SOF is recommended in all genotypes

Evidence supporting this recommendation included:

- High prevalence of 2k/1b recombinant in Georgia
- Results of some trials and observational studies indicating that LDV/SOF could be more effective than SOF alone
- EMA approval for cirrhotic and treatment experienced G3 patients

# Patient Enrollment in the National Hepatitis C Elimination Program (31 Dec 2016)

**400,000**

**Screened for HCV**



**31,367**

**HCV RNA+ registered in program**



**29,414**

**Started treatment**



**19,000**

**Completed treatment**

# **Treatment Outcomes of SOF-Based Treatment**

# Treatment Outcomes in Patients with Complete SVR Data Receiving Sofosbuvir-Based Regimens September 30, 2016 (n=3,966)

		SVR Rate				
		G1	G2	G3	G4	TOTAL
<b>12 weeks</b>	<b>IFN/SOF/RBV</b>	<b>81%</b> (711/878)	<b>96%</b> (217/227)	<b>96%</b> (928/963)	<b>50%</b> (1/2)	<b>90%</b> (1857/2070)
<b>12 weeks</b>	<b>SOF/RBV</b>	<b>47%</b> (7/15)	<b>75%</b> (240/318)	<b>69%</b> (9/13)		<b>74%</b> (256/346)
<b>20 weeks</b>	<b>SOF/RBV</b>	<b>25%</b> ( 2/8)	<b>75%</b> (210/281)	<b>0%</b> (0/2)		<b>73%</b> (212/291)
<b>24 weeks</b>	<b>SOF/RBV</b>	<b>53%</b> (329/621)	<b>56%</b> (10/18)	<b>81%</b> (426/528)	<b>100%</b> (2/2)	<b>66%</b> (767/1169)
<b>48 weeks</b>	<b>SOF/RBV</b>	<b>48%</b> (21/44)	<b>86%</b> (18/21)	<b>64%</b> (16/25)		<b>61%</b> (55/90)
<b>TOTAL</b>		<b>68%</b> (1070/1566)	<b>80%</b> (695/865)	<b>90%</b> (1379/1531)	<b>75%</b> (3/4)	<b>79%</b> (3147/3966)

Note: This cohort was represented by patients with F3 and F4 fibrosis

# SVR in HCV G2 Patients by Regimen, September 30, 2016 (n=865)

$p < 0.0001$

217/227

240/318

210/281

# Impact of 2k/1b Recombinant on Treatment Outcomes (n=136)

**Total SVR: 97%**

**77%**

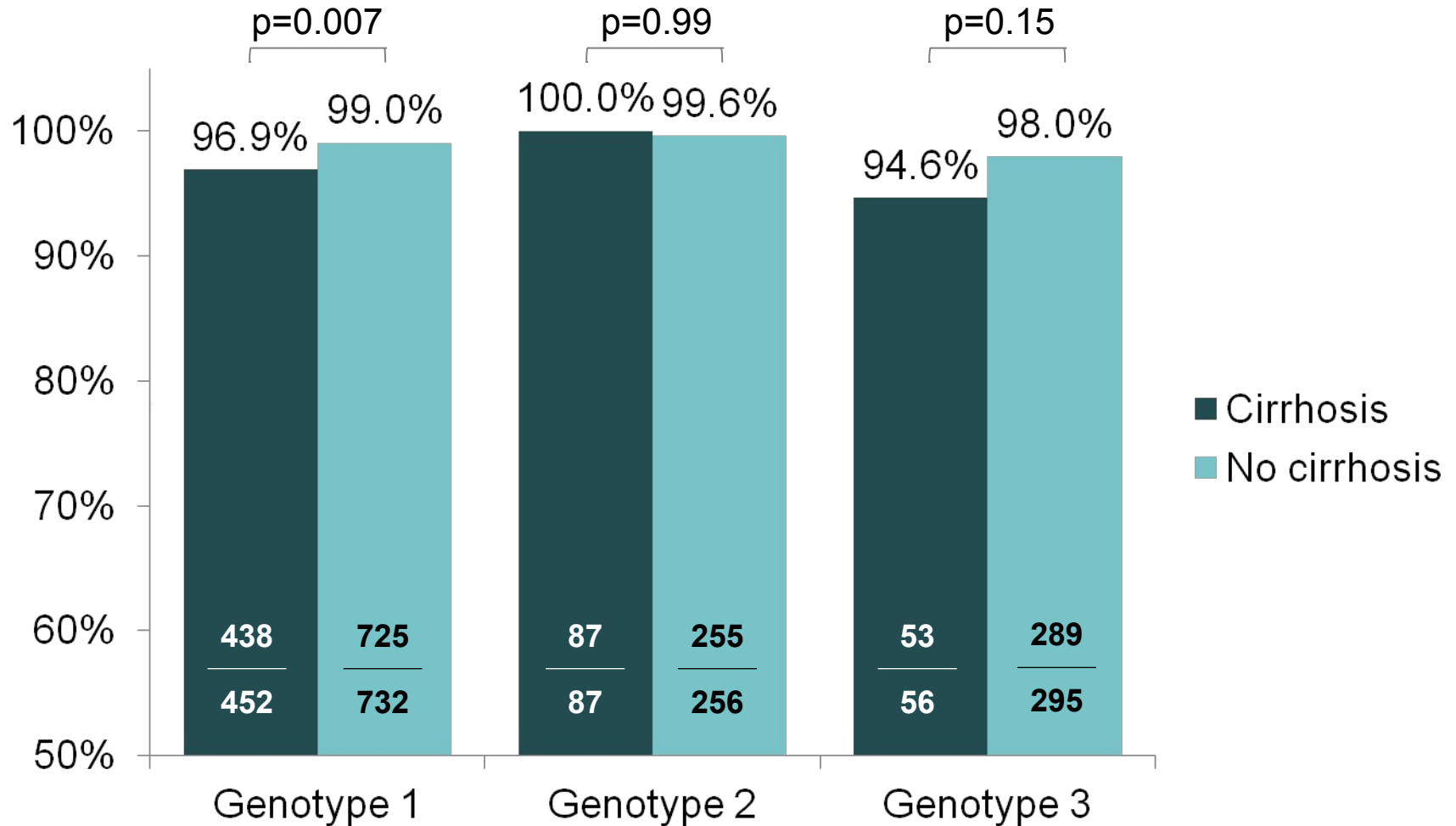
# **Treatment Outcomes of LDV/SOF-Based Treatment**

# SVR in Patients Treated with LDV/SOF Regimens, Dec 31, 2017 (n=1,878)

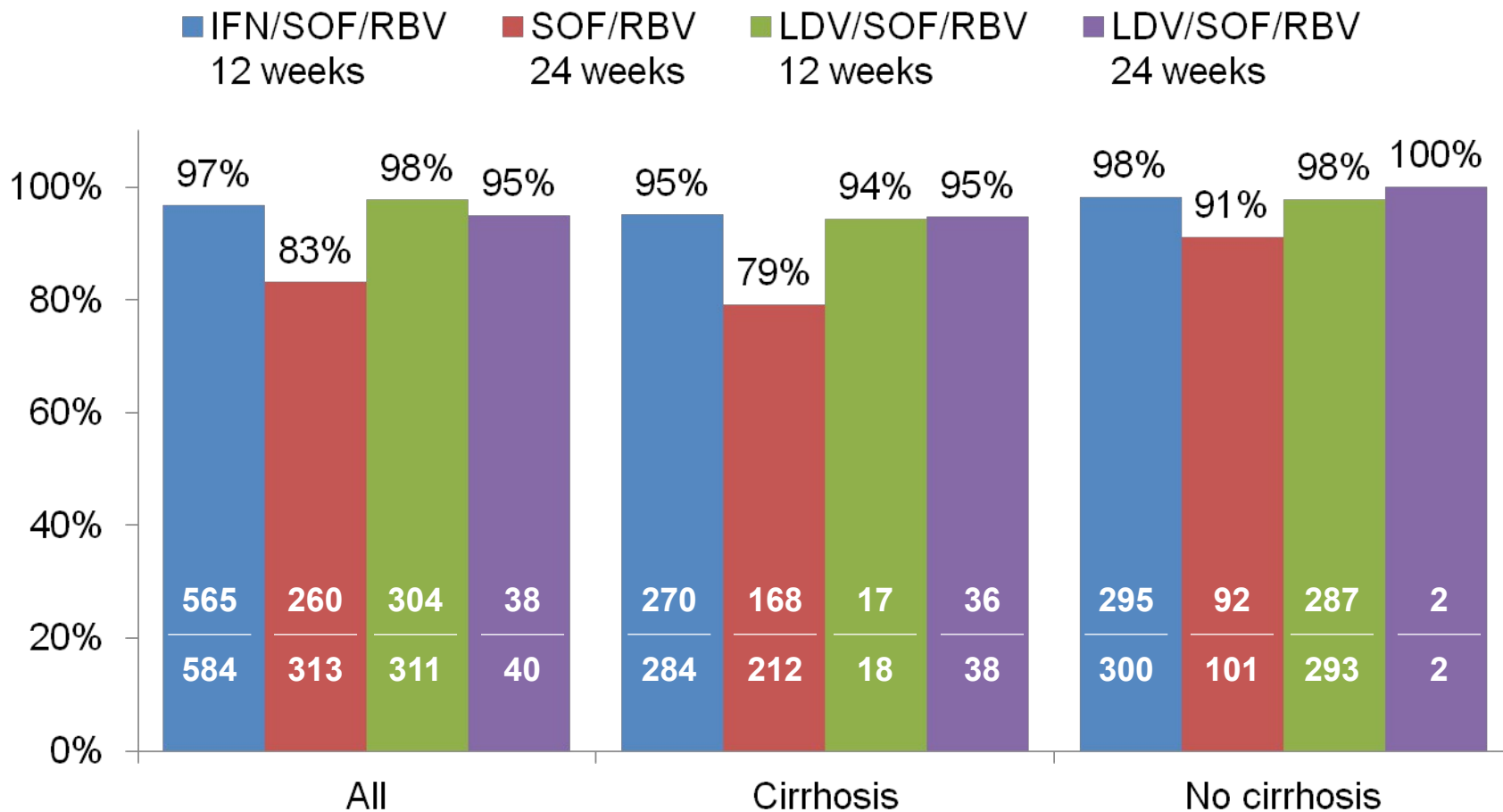
		SVR Rate			
		G1	G2	G3	TOTAL
12 weeks	LDV/SOF	98.9% (869/879)	–	–	98.9% (869/879)
24 weeks	LDV/SOF	98.1% (104/106)	–	–	98.1% (104/106)
12 weeks	LDV/SOF/RBV	94.9% (112/118)	99.7% (334/335)	97.7% (304/311)	98.2% (750/764)
24 weeks	LDV/SOF/RBV	96.3% (78/81)	100% (8/8)	95.0% (38/40)	96.1% (124/129)
<b>TOTAL</b>		<b>98.2%</b> (1163/1184)	<b>99.7%</b> (342/343)	<b>97.4%</b> (342/351)	<b>98.3%</b> (1847/1878)



# SVR rates with LDV/SOF by Genotype and Cirrhosis (n=1,878)



# Comparing SOF and LDV/SOF Regimens in Genotype 3 Patients (n=1,248)



# Elimination Goals

I

Cure 122,000 persons living chronic hepatitis C

II

Reduce prevalence of HCV infection by 90%

# Acknowledgements



MINISTRY OF LABOUR  
HEALTH AND  
SOCIAL AFFAIRS



საქართველოს მთავრობა  
GOVERNMENT OF GEORGIA

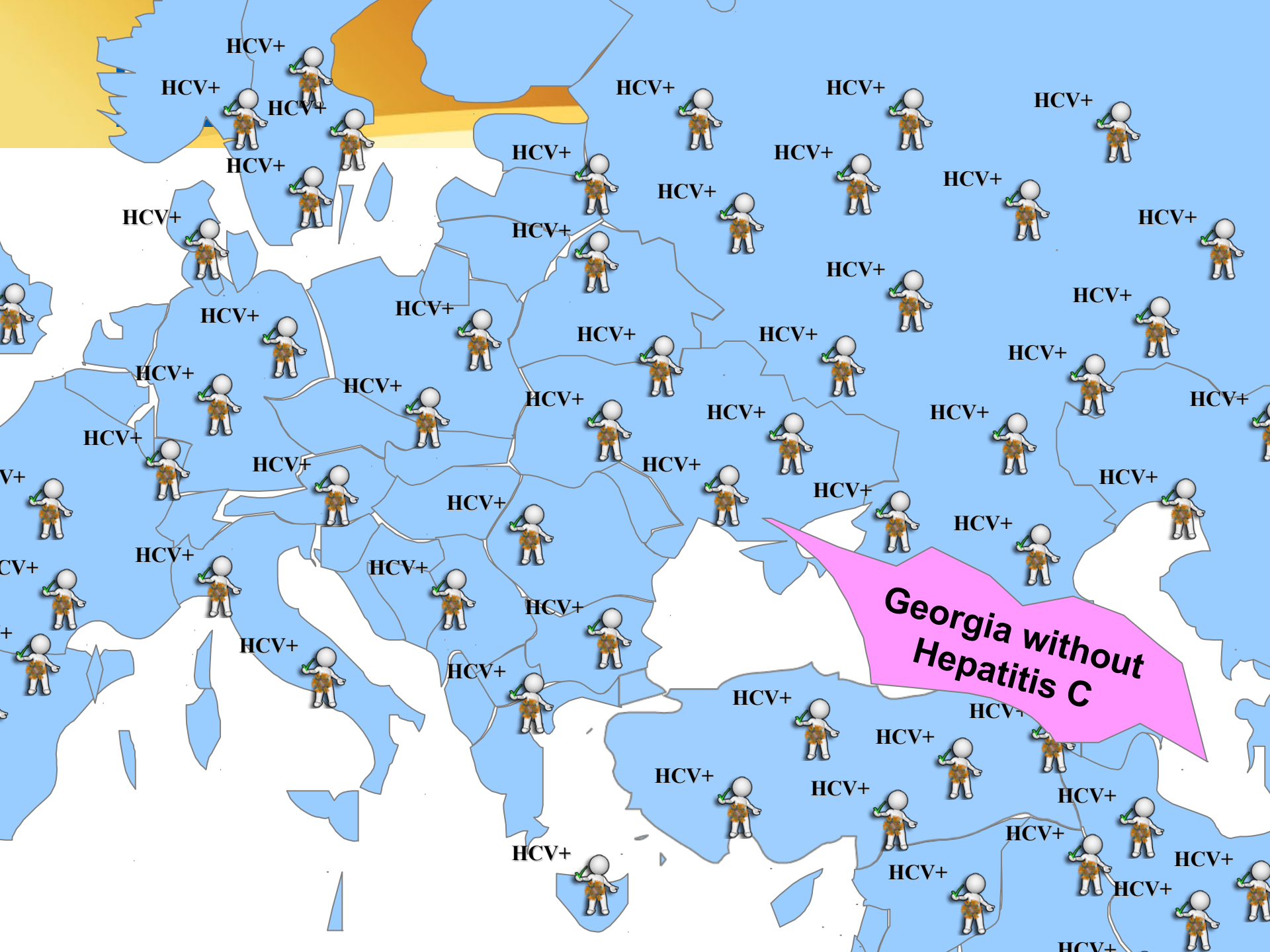


**Scientific Committee of the National  
Hepatitis C Elimination Program**

**All HCV Care Providers**



**Infectious Diseases AIDS and  
Clinical Immunology Research Center**



**Georgia without  
Hepatitis C**