

# Hepatitis C Update

Suchtmedizin State of the ART 2018

Patrick Schmid – Infektiologie / Spitalhygiene



Kantonsspital  
St.Gallen

# Agenda



- 1. Epidemiologie**
- 2. Natural History**
- 3. Behandlung 2018**
- 4. Wer hat ein Risiko / Wen screenen?**
- 5. Wie Patienten mit HCV-Infektion abklären**

# HCV Prävalenz weltweit

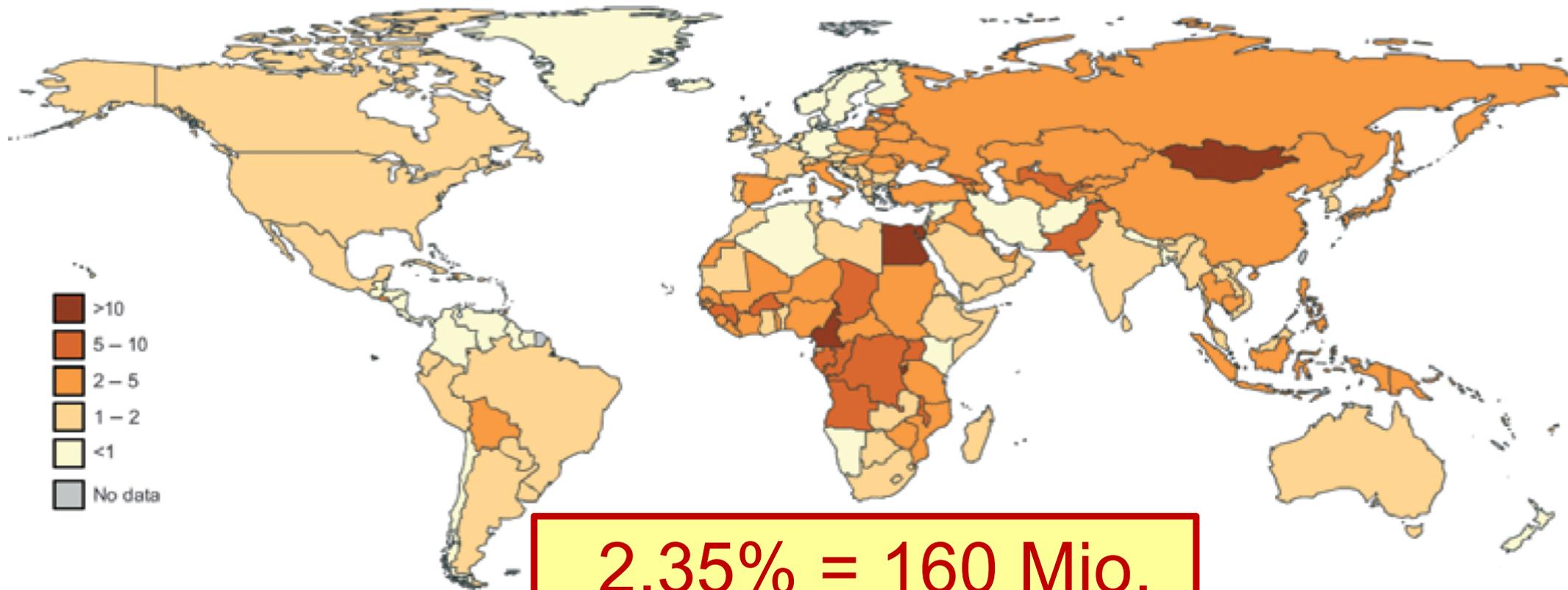


FIG. 1. Hepatitis C global prevalence 2010 (%).

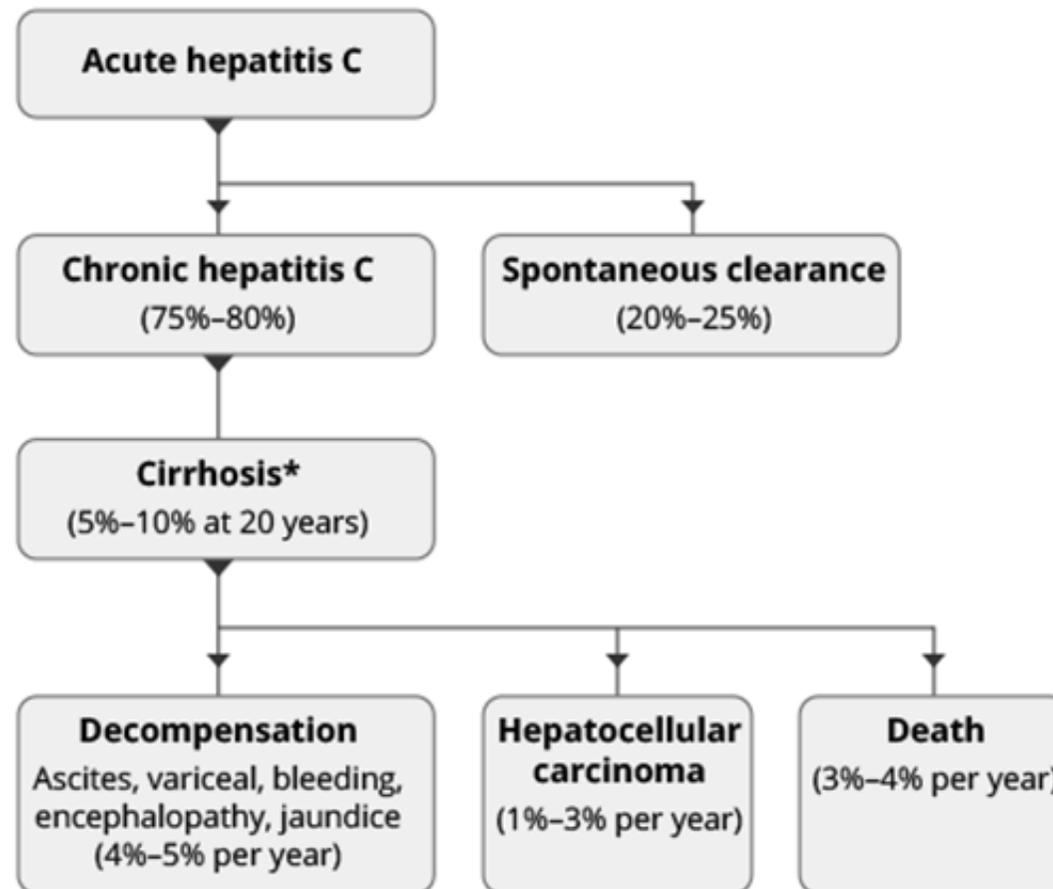
**2.35% = 160 Mio.**  
**HCV = 4,5 x HIV**



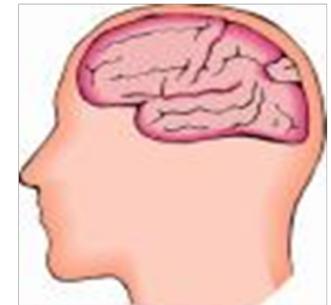
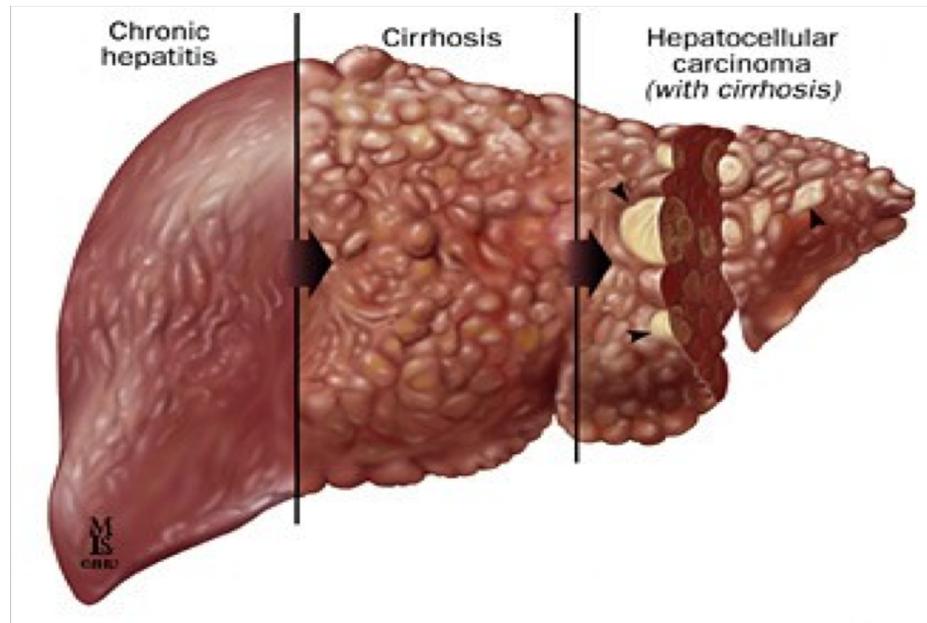
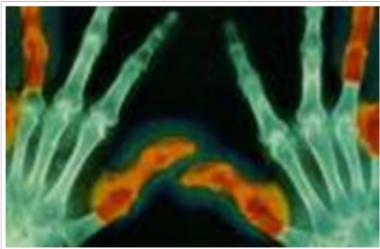
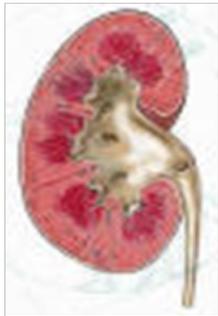
# Epidemiologie Schweiz – Diagnosis and Care Cascade

- 1. Neuinfektionen rückläufig**
- 2. Prevalenz**
- 3. Zunehmend Patienten erfolgreich behandelt**
- 4. Zunahme der HCV-bedingten Erkrankungen**
  - Leberzirrhose
  - HCC

# Natural history HCV

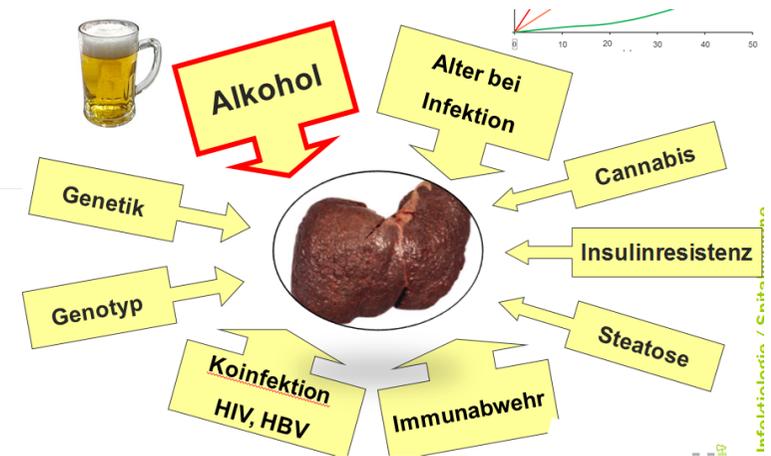
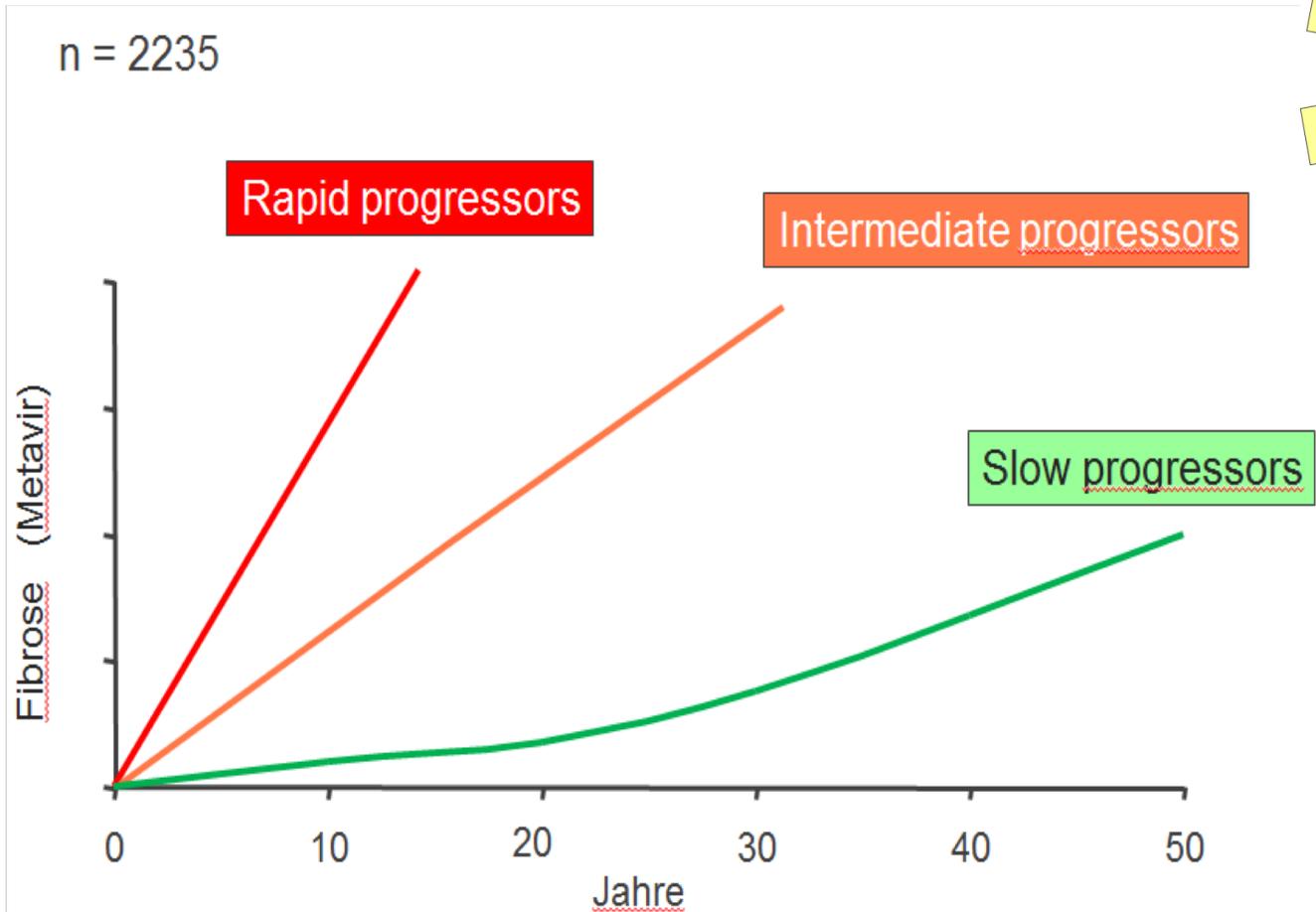


# Silent Disease



**Zirrhose: 5%-10% in 20 J.**

# Fibrose-Progression



## Second hits:

- Steatose / NASH
- Alkohol
- Eisenüberladung
- Koinfektionen
- Immunsuppression



# Risiko für hepatische und extrahepatische Komplikationen

**Leber-assoz. Tod >3x**

**Gesamtmortalität >1.5x**

**Leberzirrhose >10x**

**HCC >5x**

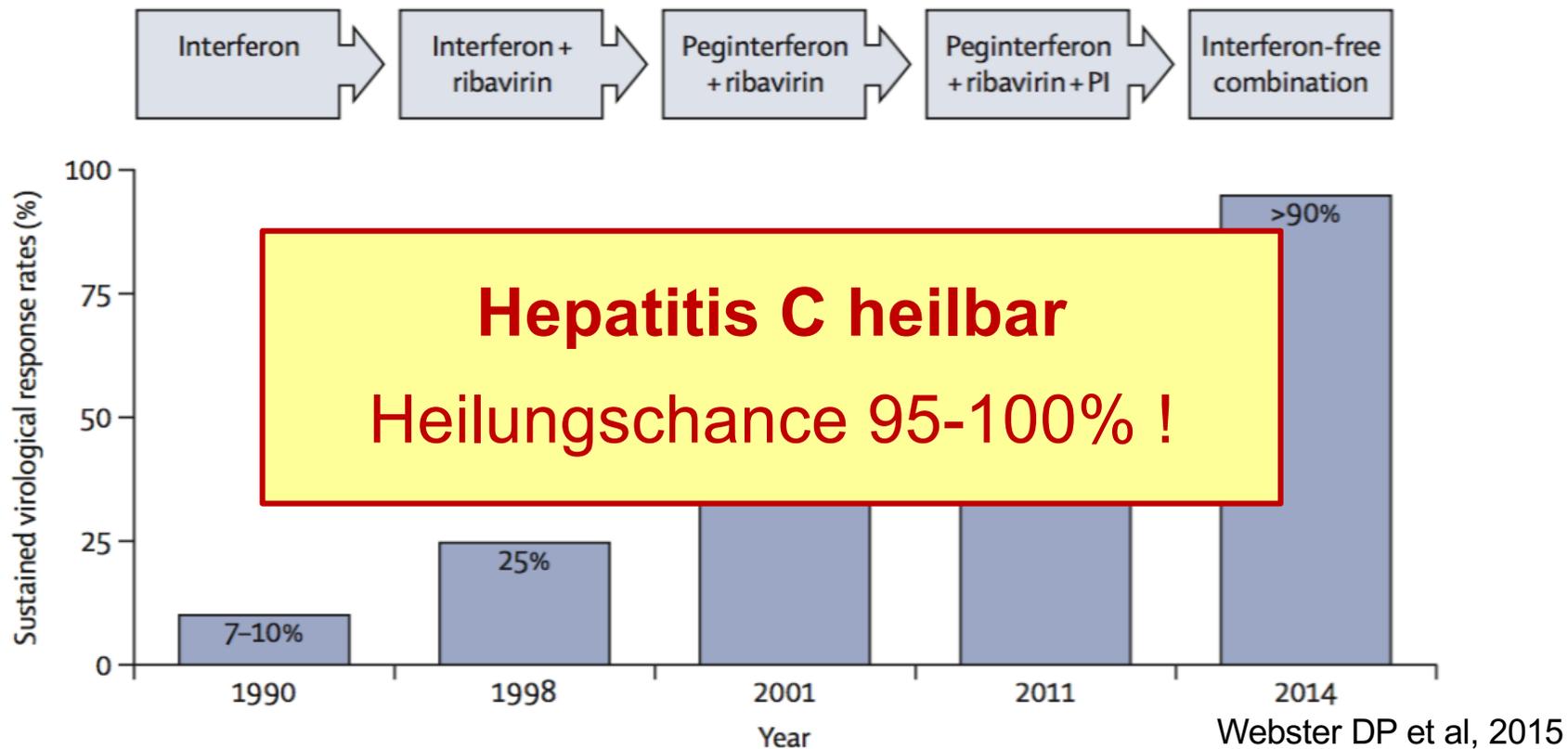
**Diabetes mellitus >2x**

**Renale Events >3x**

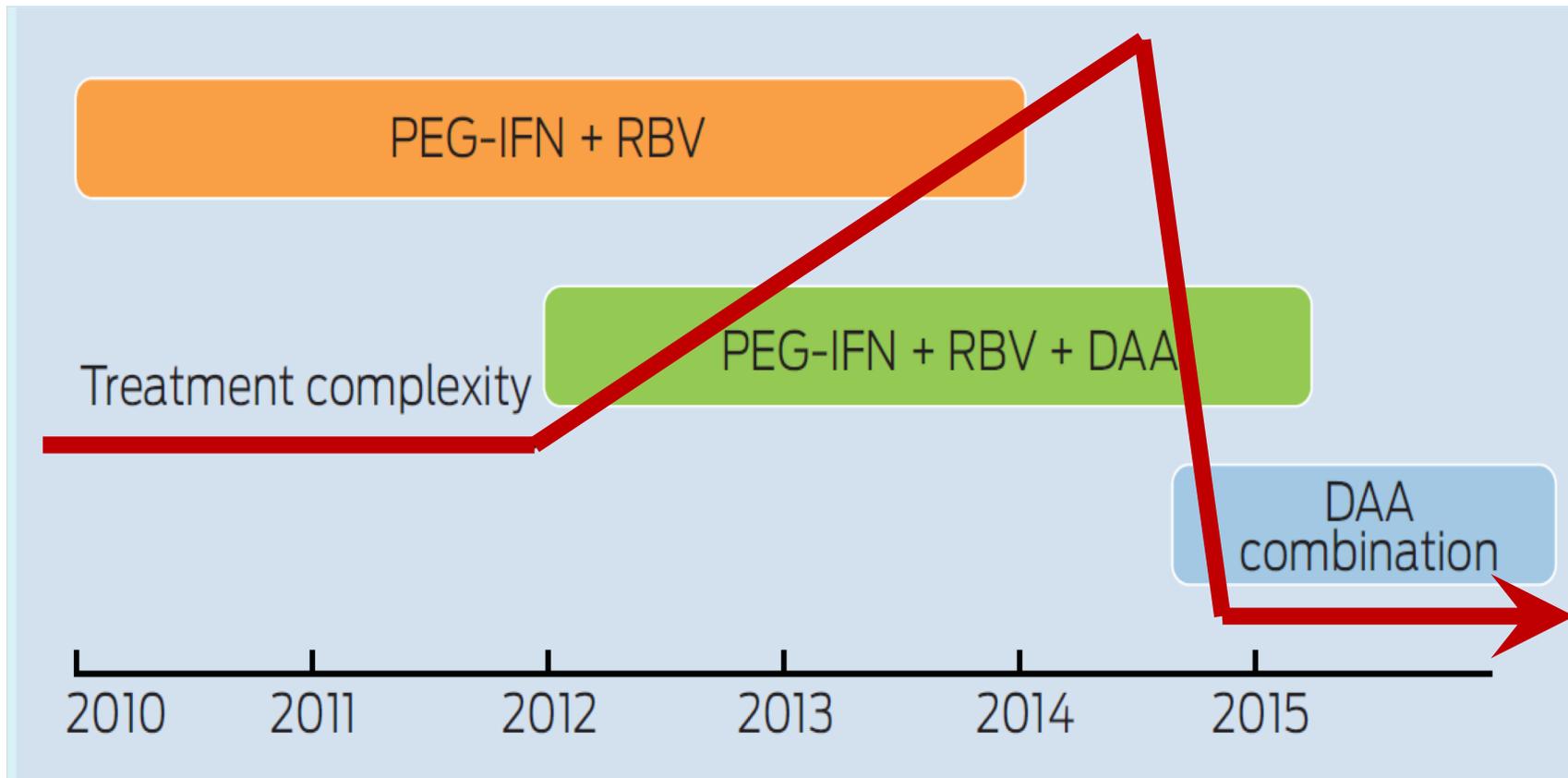
**NHL >1.5x**

A. Rauch, EACS 2017

# Therapiefortschritt



# Komplexität der Behandlung



# HCV-Therapie 2018



Swiss Association for  
the Study of the Liver

## A. Treatment-naïve patients

Genotype	Non-cirrhotic	Cirrhotic (Child-Pugh A)
1a	VEL/SOF for 12 wks GLE/PIB for 8 wks	VEL/SOF for 12 wks GLE/PIB for 12 wks
1b	GZR/EBR for 12 wks <sup>1</sup> VEL/SOF for 12 wks GLE/PIB for 8 wks	GZR/EBR for 12 wks VEL/SOF for 12 wks GLE/PIB for 12 wks
2	VEL/SOF for 12 wks GLE/PIB for 8 wks	VEL/SOF for 12 wks GLE/PIB for 12 wks
3	VEL/SOF for 12 wks GLE/PIB for 8 wks	VEL/SOF ± RBV for 12(-24) wks <sup>2</sup> GLE/PIB for 12 wks VOX/VEL/SOF for 12 wks
4	VEL/SOF for 12 wks GLE/PIB for 8 wks	VEL/SOF for 12 wks GLE/PIB for 12 wks
5 and 6	VEL/SOF for 12 wks GLE/PIB for 8 wks	VEL/SOF for 12 wks GLE/PIB for 12 wks

# DAA 2018



<b>Maviret® (Glecaprevir/Pipretasvir)</b>	<b>Gt 1 – 6</b>	<b>8 Wo</b>
<b>Epclusa® (Sofosbuvir/Velpatasvir)</b>	<b>Gt 1 – 6</b>	<b>12 Wo</b>

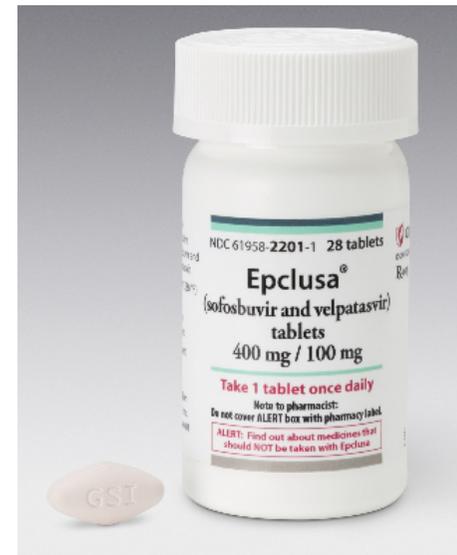


1 jour

1x 3Tbl  
mit Essen

2 Monate

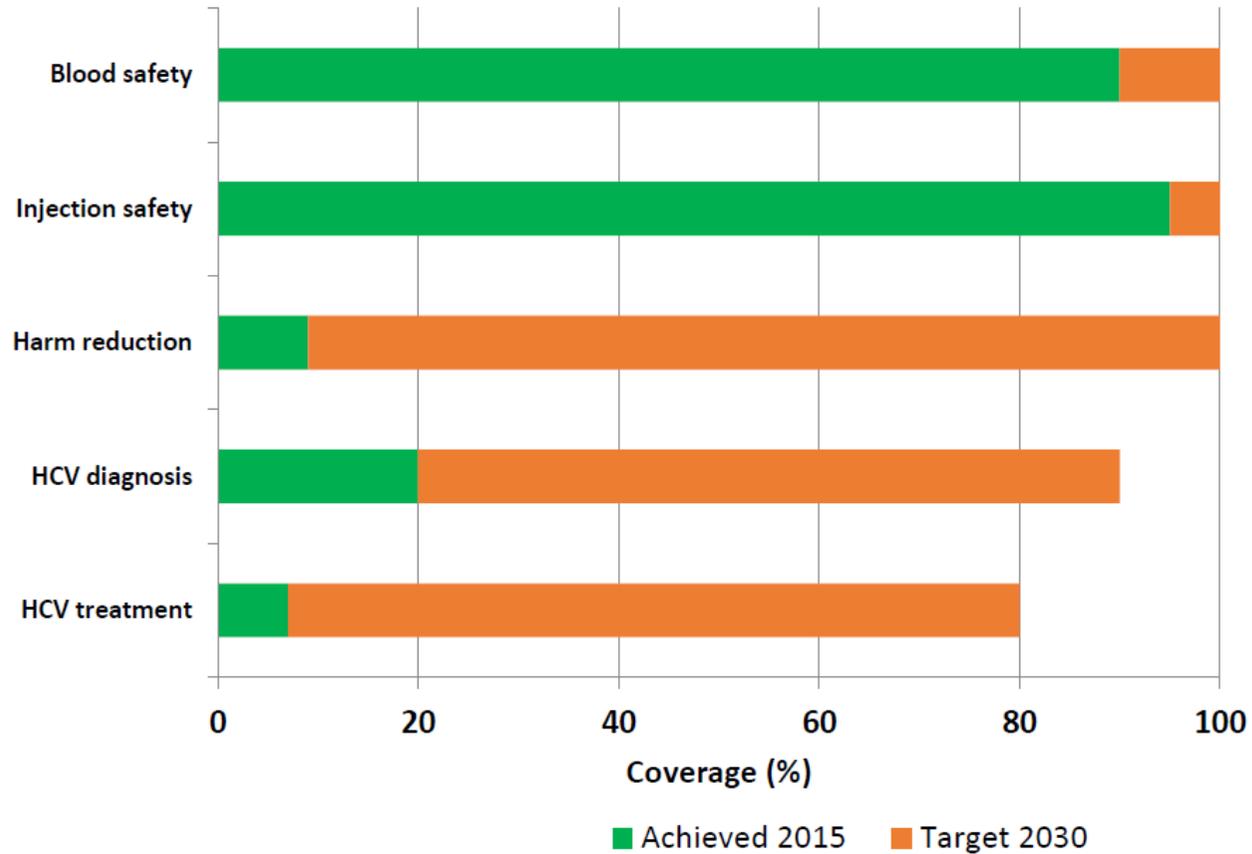
1 mois



1x 1Tbl

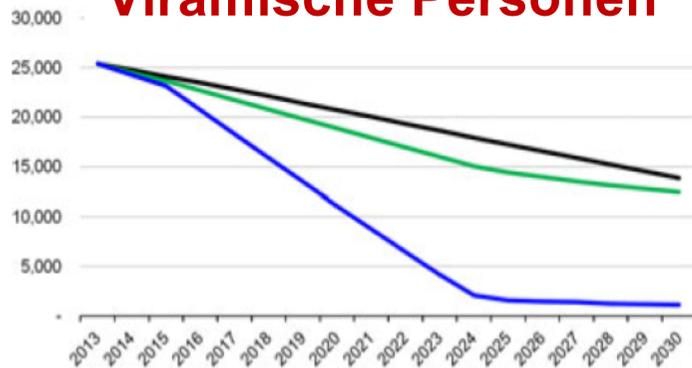
3 Monate

# Neues Ziel = Elimination 2030



# Burden of Disease

## Virämische Personen

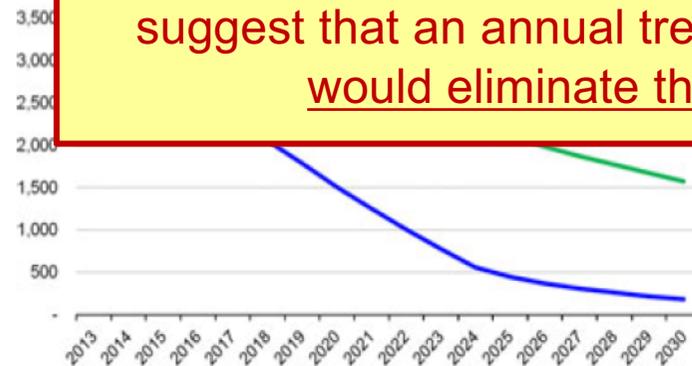
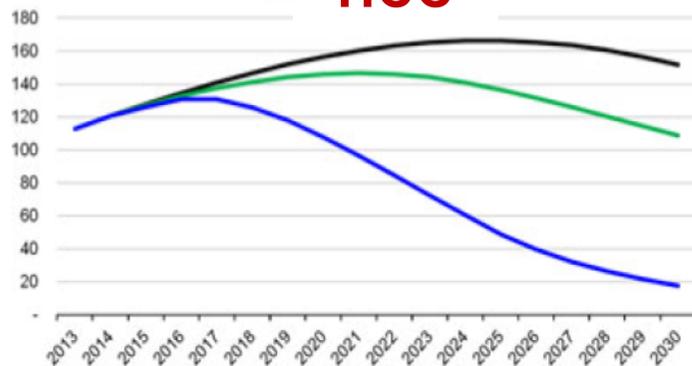


- **bisherige Therapie**
- **verbesserte Wirksamkeit**
- **verbesserte Wirksamkeit + Uptake**

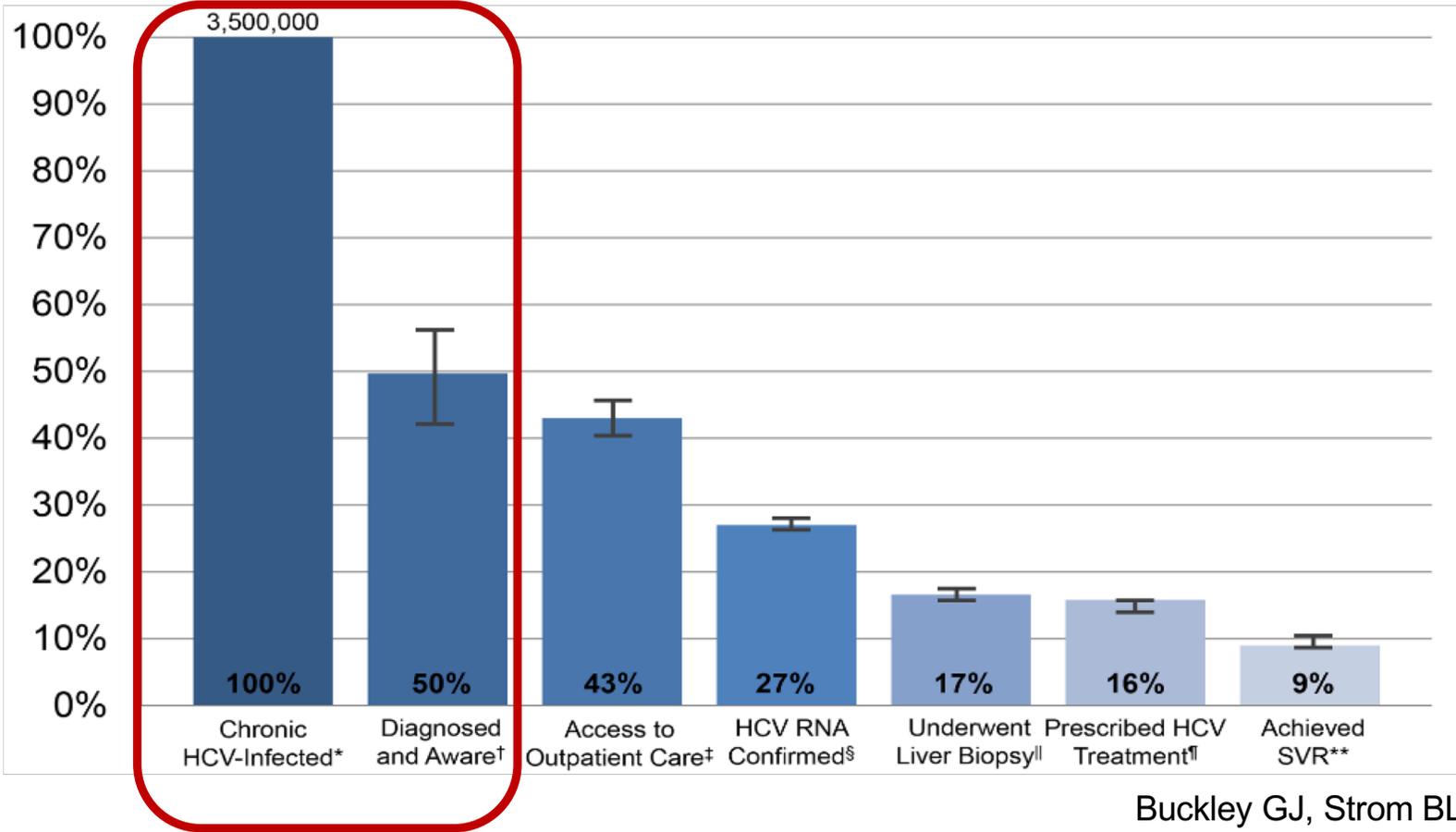
## Uptake entscheidend !

Hepatitis C virus dynamics among intravenous drug users suggest that an annual treatment uptake above 10% would eliminate the disease by 2030

## HCC



# Behandlungskaskade



Buckley GJ, Strom BL 2016

# Nebenwirkungen

**DDA ähnlich Placebo**



- Übelkeit
- Kopfweg
- Müdigkeit

**Kosten hoch, aber sinkend**

≈30'000.- für eine Therapie

**BAG Limitatio aufgehoben**

# Medi-Interaktionen

IA immer prüfen !

<http://www.hep-druginteractions.org/>

- **PPI Pause**  
oder Omeprazol 20mg + DAA 4h vor PPI
- **Kein Amiodaron** mit SOF
- **Kontrazeptiva**
- **P-Glycoprotein Induktoren:**  
**Rifampicin, Johanniskraut,**  
**Carbamazepin, Statine ...**

	Dactacavir	Ebavir/Grazoprevir	Ledipasvir/Sofosbuvir	OSU/PTV/r + DSU	Simeprevir	Sofosbuvir
Amiodarone	Do Not Coadminister	Potential Interaction	No Interaction Expected	No Clear Data	Potential Interaction	Do Not Coadminister
Antacids	No Interaction Expected	No Interaction Expected	Potential Interaction	No Interaction Expected	No Interaction Expected	Potential Interaction
Aspirin	No Interaction Expected					
Cannabis	No Interaction Expected	No Interaction Expected	No Interaction Expected	Potential Interaction	Potential Interaction	No Interaction Expected
Carbamazepine	Do Not Coadminister					



Potential Weak Interaction

Sofosbuvir/Velpatasvir

Buprenorphine

**Summary:**

Coadministration has not been studied. Buprenorphine is metabolised by CYP3A4 and is a substrate of P-gp. Concentrations of buprenorphine may increase due to mild inhibition of P-gp by velpatasvir, however, this is unlikely to be of clinical significance. No effect on sofosbuvir/velpatasvir concentrations is expected.

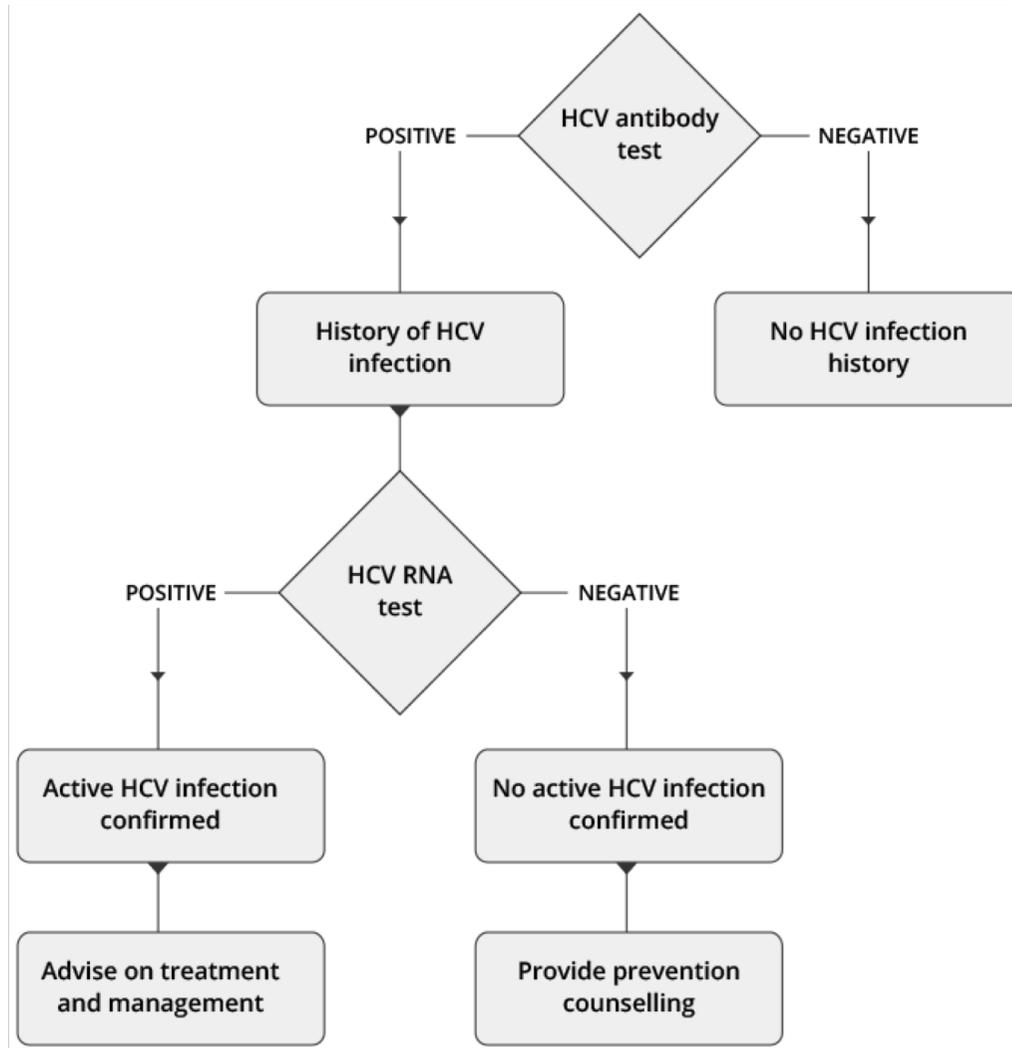
# Wen testen?



## Wen testen?

1. **Erhöhte Leberwerte – alle!**
2. **(St.n.) Drogenkonsum**
3. **Bluttransfusion vor 1992**
4. **Tattoo / Piercing ??**
5. **Geburt / aufgewachsen in Hochprävalenzland**
  - Aegypten, Pakistan, Mittelmeerraum, Osteuropa, Afrika, Asien
6. **Sexualpartner von Pat mit HCV**
  - minimales Risiko einer heterosexuellen Übertragung
  - Höheres Risiko bei MSM, traumatischen Sexualpraktiken

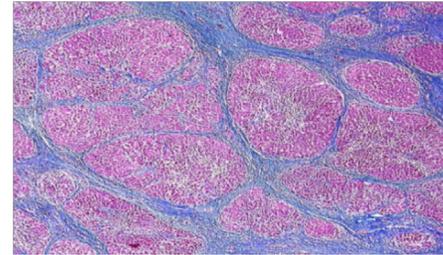
# Wie screenen?



# Beurteilung Fibrose (Staging)



- (Leberbiopsie)
- Fibroscan®
- Sonografie



**Kein Test ist perfekt !**  
Leberbiopsie auch nicht  
Fibroscan = bester nicht-invasiver Test





# Take to work – Hepatitis C



- **Silent Disease**
- **Therapie DAA (Interferon frei)**
  - Heilung >95%, sehr gute Verträglichkeit, 8-12 Wo
- **neues Ziel = Elimination bis 2030**
  - Fokus: (ehemaliger) Drogenkonsum + MSM
- **Rolle Hausarzt + Suchtberater**
  - HCV-Screening, bei andauerndem Substanzkonsum wiederholt
  - Alle HCV-RNA positiven Pat zum Spezialisten überweisen
  - Support bei Therapie (Adhärenz!)
  - Safer use