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Auckland

Friday, June 9, 2017

17:55 - 18:10 Hep C Treatment - Why GP's Should Do It

Hepatitis C Treatment
Why GP's Should Do It

Ed Gane
New Zealand Liver Transplant Unit
Auckland City Hospital

Declaration of conflict of interest

- I am a member of the Advisory Board for AbbVie, Alios, Alnylam, Arbutus, Arrowhead, Assembly, Gilead, Janssen, Merck, Mylan, Novartis and Roche
- I receive funding from Health Research Council

Hepatitis C – who to test

1. Transmission through blood transfusions
   - Blood products have been screened for HCV since 1992
   - Immigrants from countries where HCV is endemic may have been exposed from vaccinations, hospital care
2. Injecting drug use
   - In NZ, ~90% of transmission of HCV occurs this way
   - Peak age of infection 15–25 years
   - Peak incidence 1970–1990
3. Few infected via unsafe tattooing, body piercing

Total number infected >50,000
Estimated undiagnosed = 40–50%

Gane E, et al. *NZ Med J* 2014;127(1407):61–74.

Hepatitis C – who to test

1. Have you ever injected drugs?
2. Have you received blood transfusion prior to 1992?
3. Have you ever been in prison?
4. Have you ever had jaundice or abnormal liver fn?
5. Have you ever lived in or received health care in SE Asia, Indian subcontinent, Middle East, Eastern Europe?
6. Does your mother or household member have HCV?
7. Have you ever received a tattoo or body piercing using unsterile equipment?
8. Are you HIV and MSM?

Hepatitis C – how to test

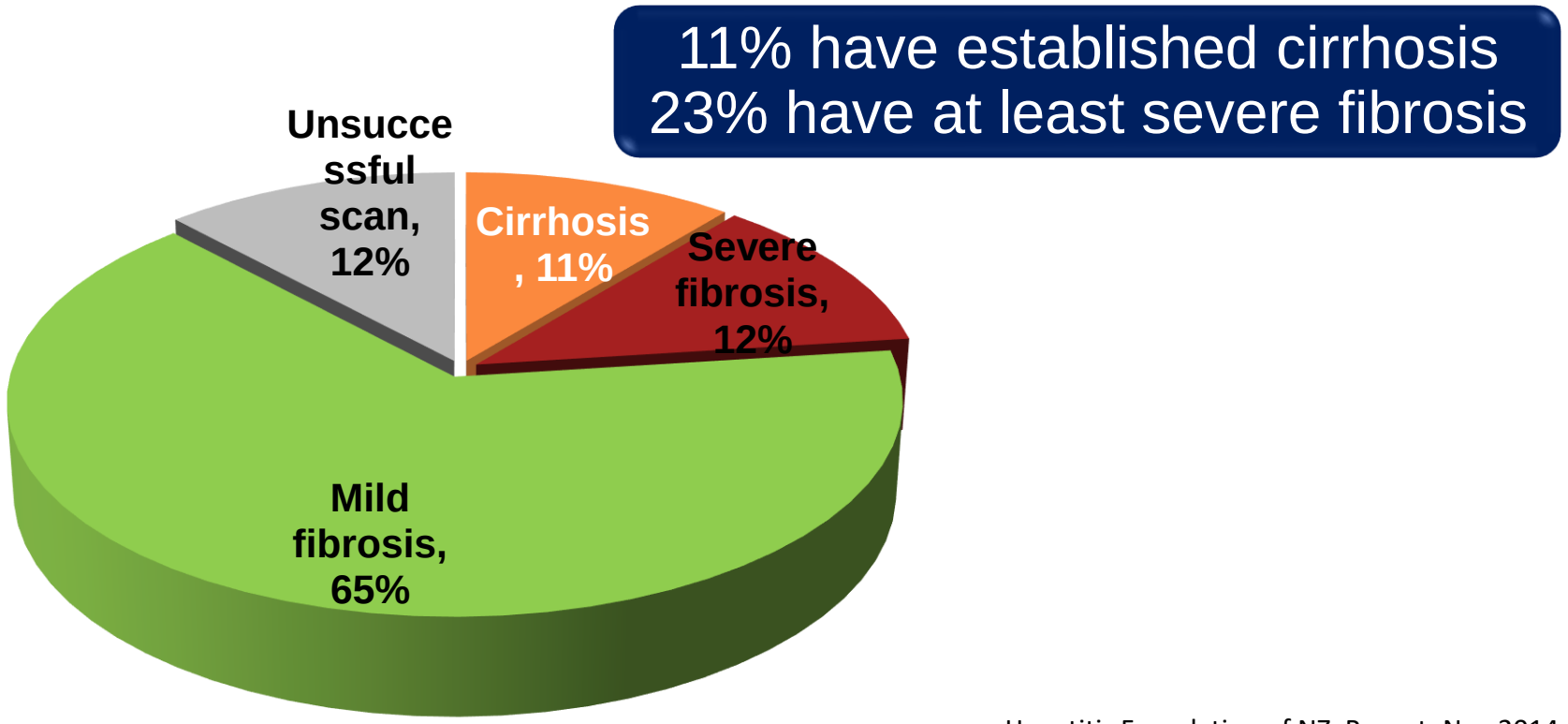
1. HCV Antibody test
   - Previous exposure to virus
   - Remains positive after virus cleared
2. HCV RNA
   - Indicates current infection
3. HCV Genotype
   - Determines eligibility for treatment with funded drugs.
   - Repeat if last genotype result >5 years ago

LabTests Reflex testing

1. Request HCV Antibody
2. If positive ⇨HCV RNA
3. If positive ⇨ HCV genotyping

Fibrosis stage of NZ patients with chronic HCV

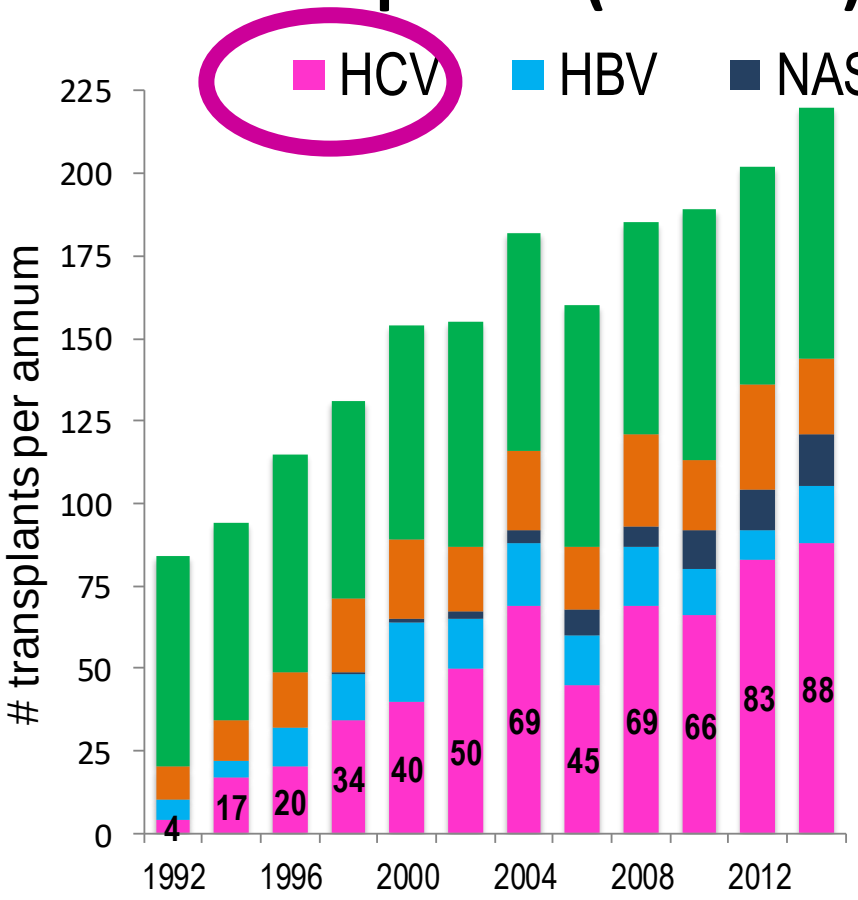
Ministry of Health HCV Pilot in Bay of Plenty and Wellington:
788 Newly Diagnosed patients underwent Fibroscan



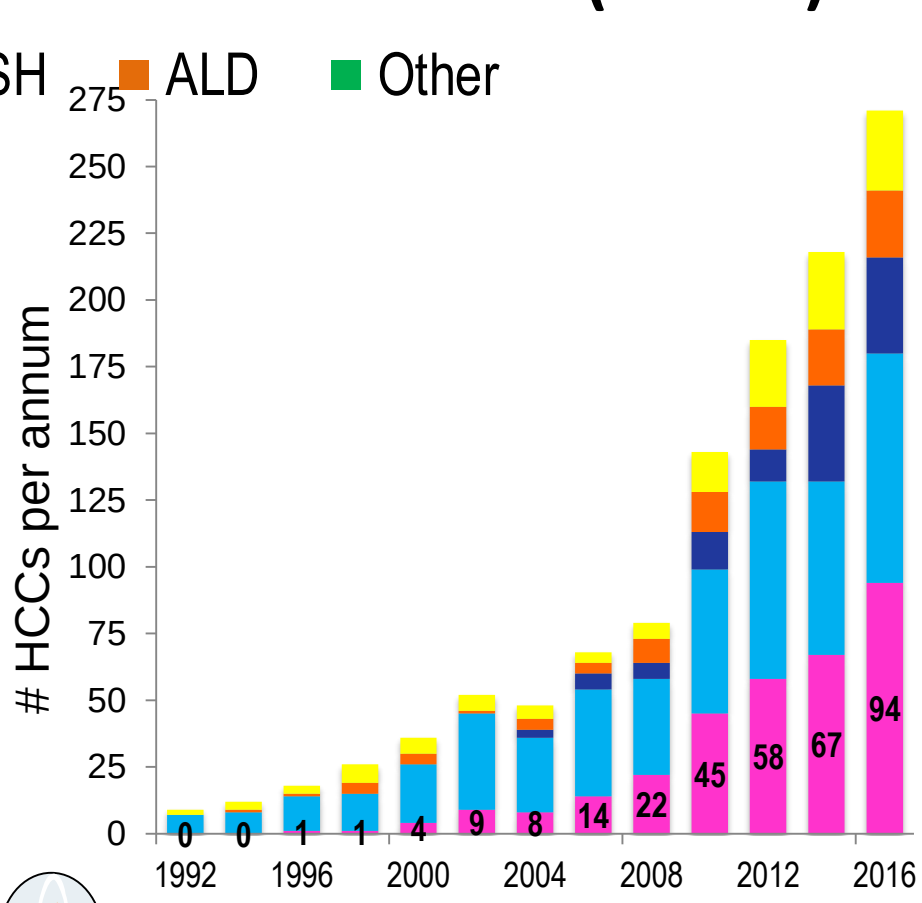
Hepatitis Foundation of NZ. Report; Nov 2014.

Hepatitis C – growing disease burden

Liver Transplants (ANZLTR)



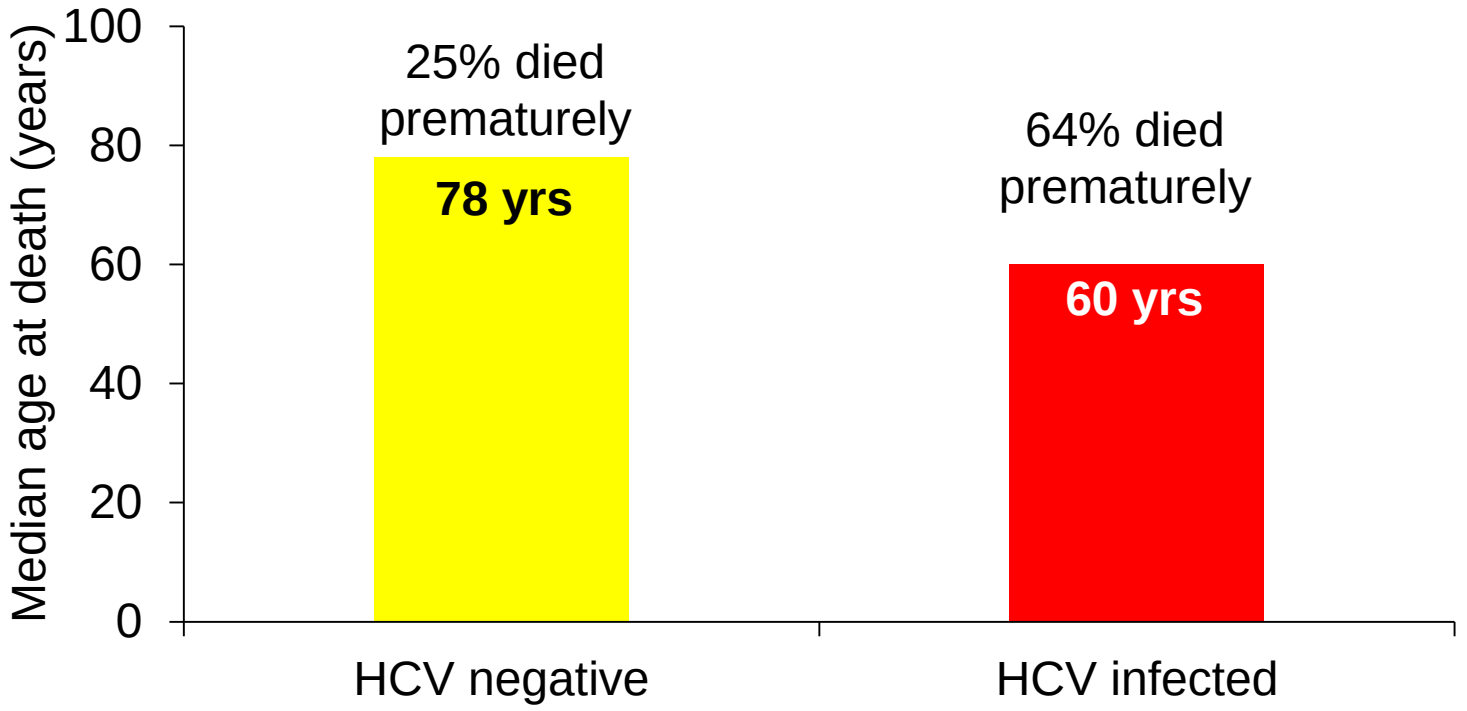
Liver Cancer (NZLTU)



26th Australian and New Zealand Liver Transplant Registry. http://www.slhd.nsw.gov.au/gastro/livertransplant/pdf/ANZLTR_26th_Report.pdf Accessed July 2015.

Chronic HCV infection reduces Life Expectancy

Premature death (<65 years) and median age at death among all deaths, NYC (2000–2011)



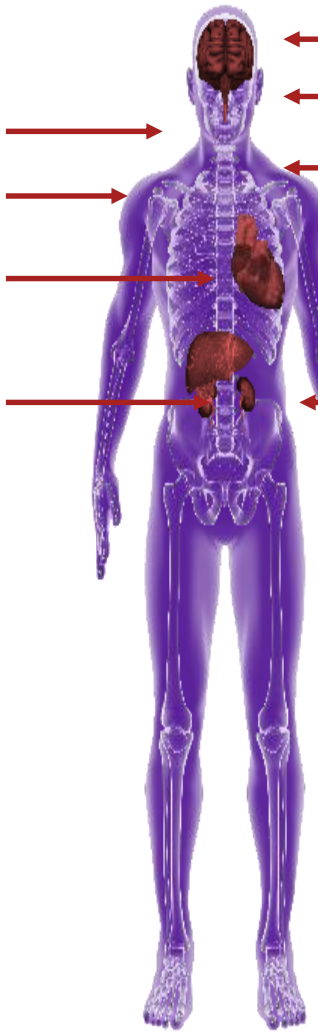
Pinchoff J, et al. Clin Infect Dis 2014;58:1047–54

Goals of Hepatitis C Therapy

1. Eradicate HCV infection
2. Prevent liver-related complications
3. Prevent extraheptic complications
4. Reduce liver-related mortality
5. Reduce overall mortality
6. Improve quality of life

What about extrahepatic manifestations of hepatitis C

HCV is more than just a liver disease: up to 74% of patients develop extrahepatic manifestations



Fatigue, depression

Corneal ulcers (Mooren ulcers)

Thyroid disease

Lichen planus

Membranoproliferative glomerulonephritis

Arthralgias, myalgias, inflammatory polyarthritis

Mixed cryoglobulinaemia and cryoglobulinaemic vasculitis

Sjögren syndrome

Lymphoproliferative disorders

Pulmonary fibrosis

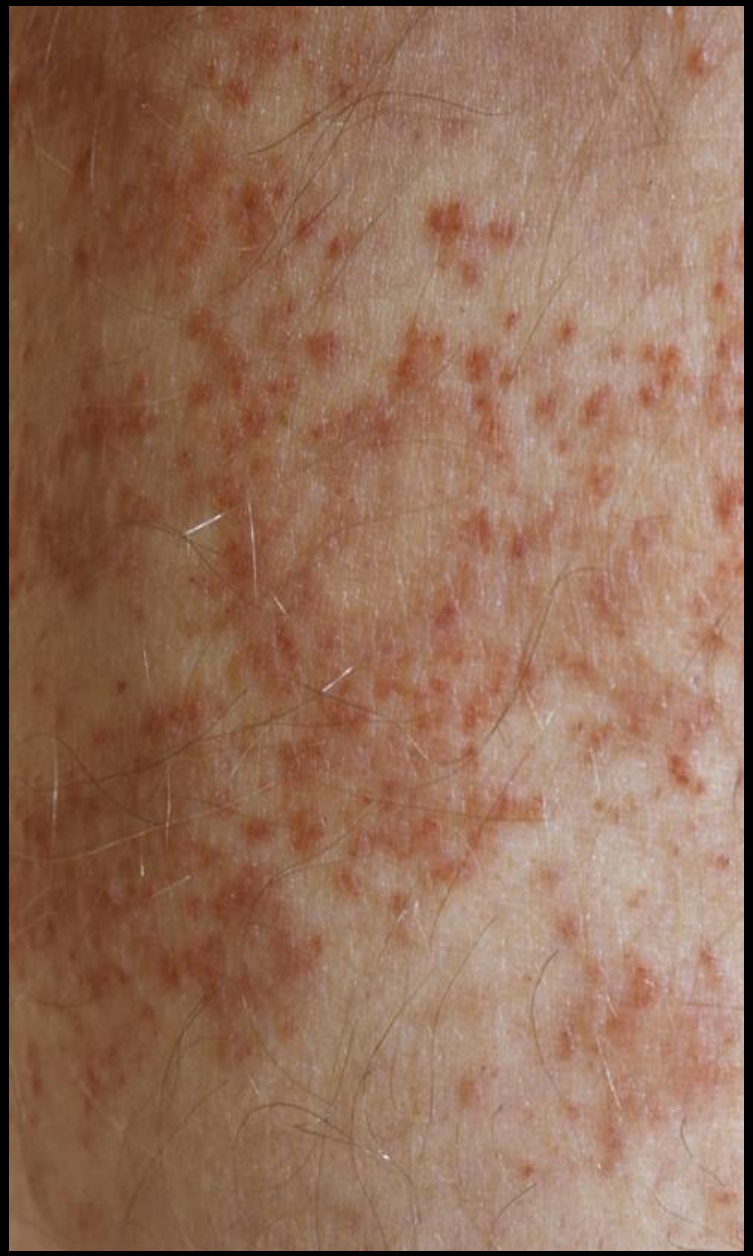
Type 2 diabetes

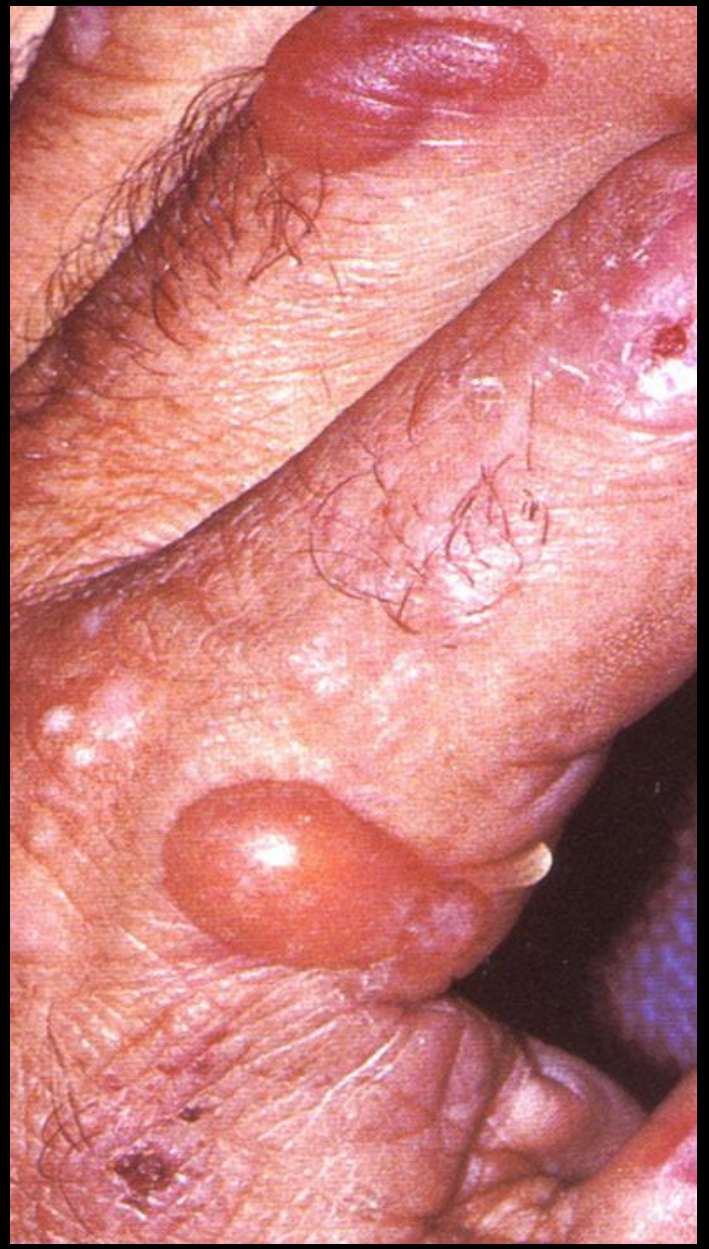
Porphyria cutanea tarda

Systemic vasculitis (polyarteritis nodosa, microscopic polyangitis)

Autoimmune thrombocytopenia

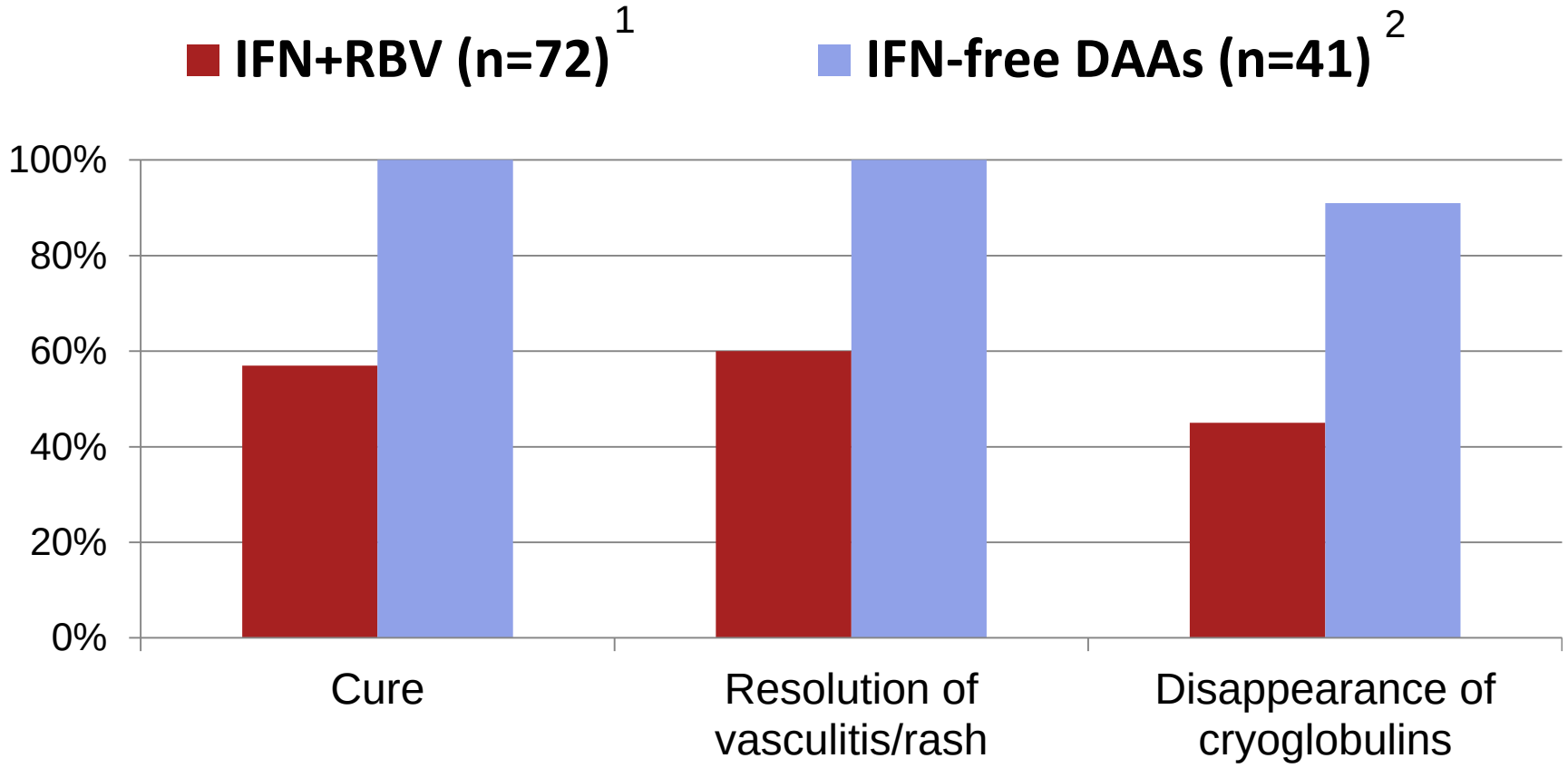
Ali A, et al. Cleve Clin J Med 2005;72:1005–19; Cacoub P, et al. Dig Liver Dis 2014;46:S165–73; Jacobson I, et al. Clin Gastroenterol Hepatol 2010;8:1017–29





Essential Mixed Cryoglobulinaemia
Response to HCV eradication

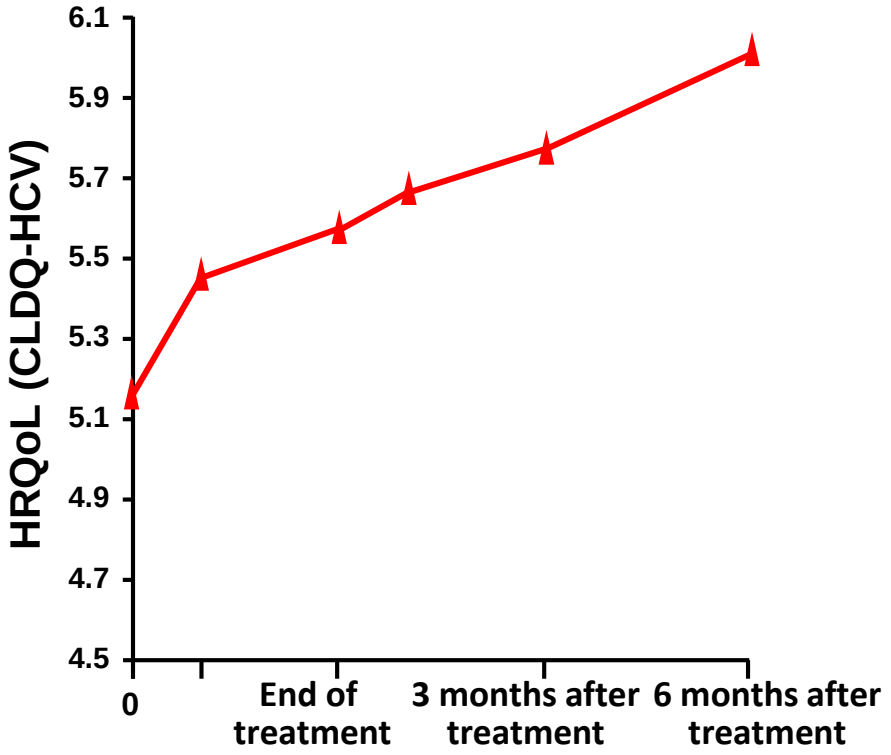
- **Multicentre French collaboration 1992-2016**



[1] Saadourn Arthritis Rheumatology 2006
[2] Saadourn EASL 2017

Curing HCV infection improves quality of life

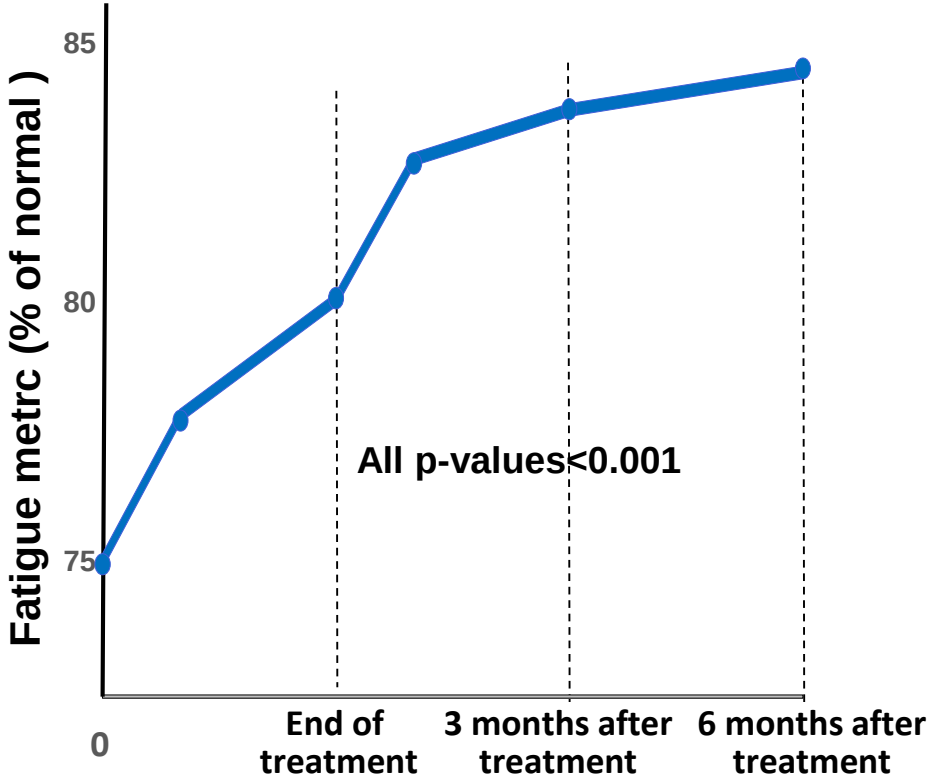
- **Quality of life in 1213 patients treated with SOF/VEL**



CLDQ-HCV: Chronic Liver Disease Questionnaire – Hepatitis C;

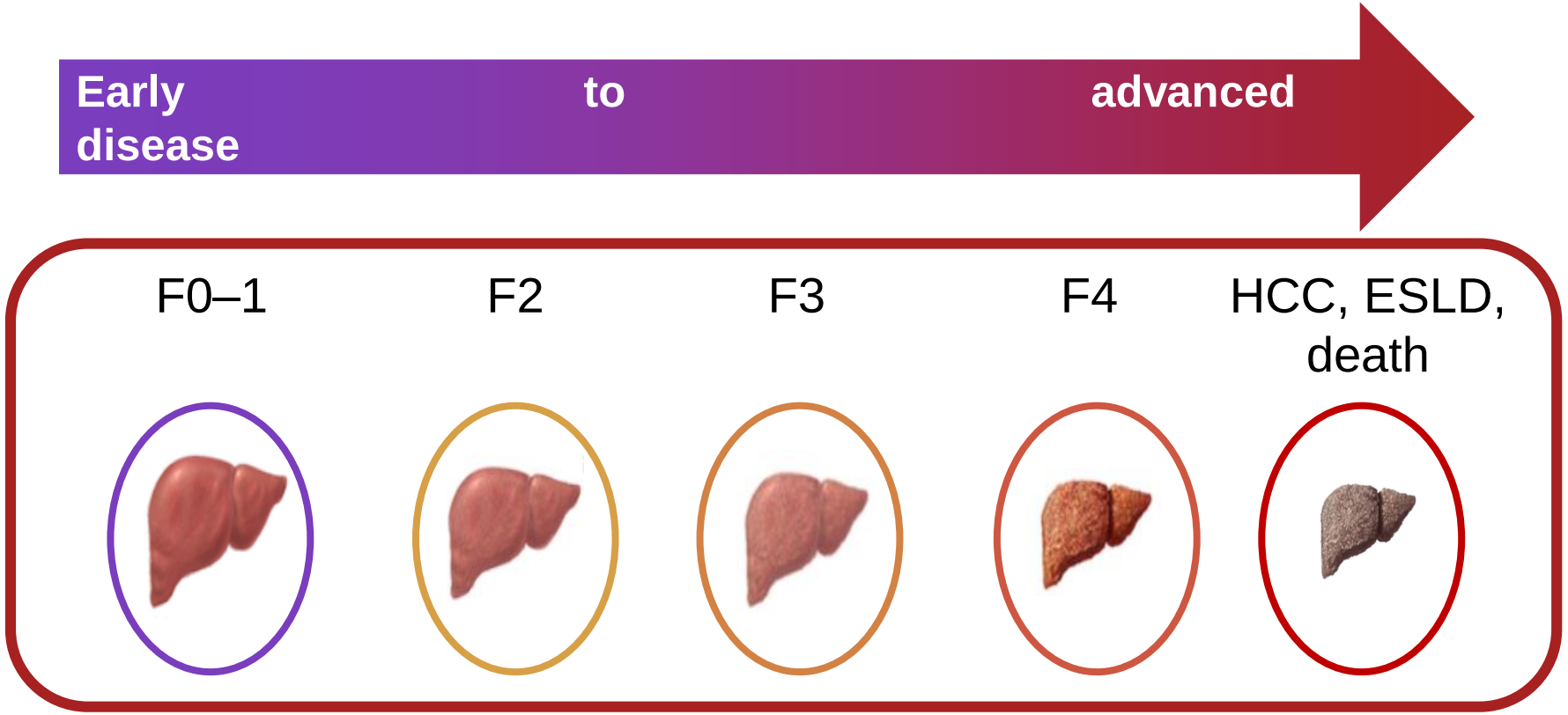
Younossi Z, et al. EASL 2016; Poster #FRI-200

- **Fatigue score in 1080 patients treated with LDV/SOF**



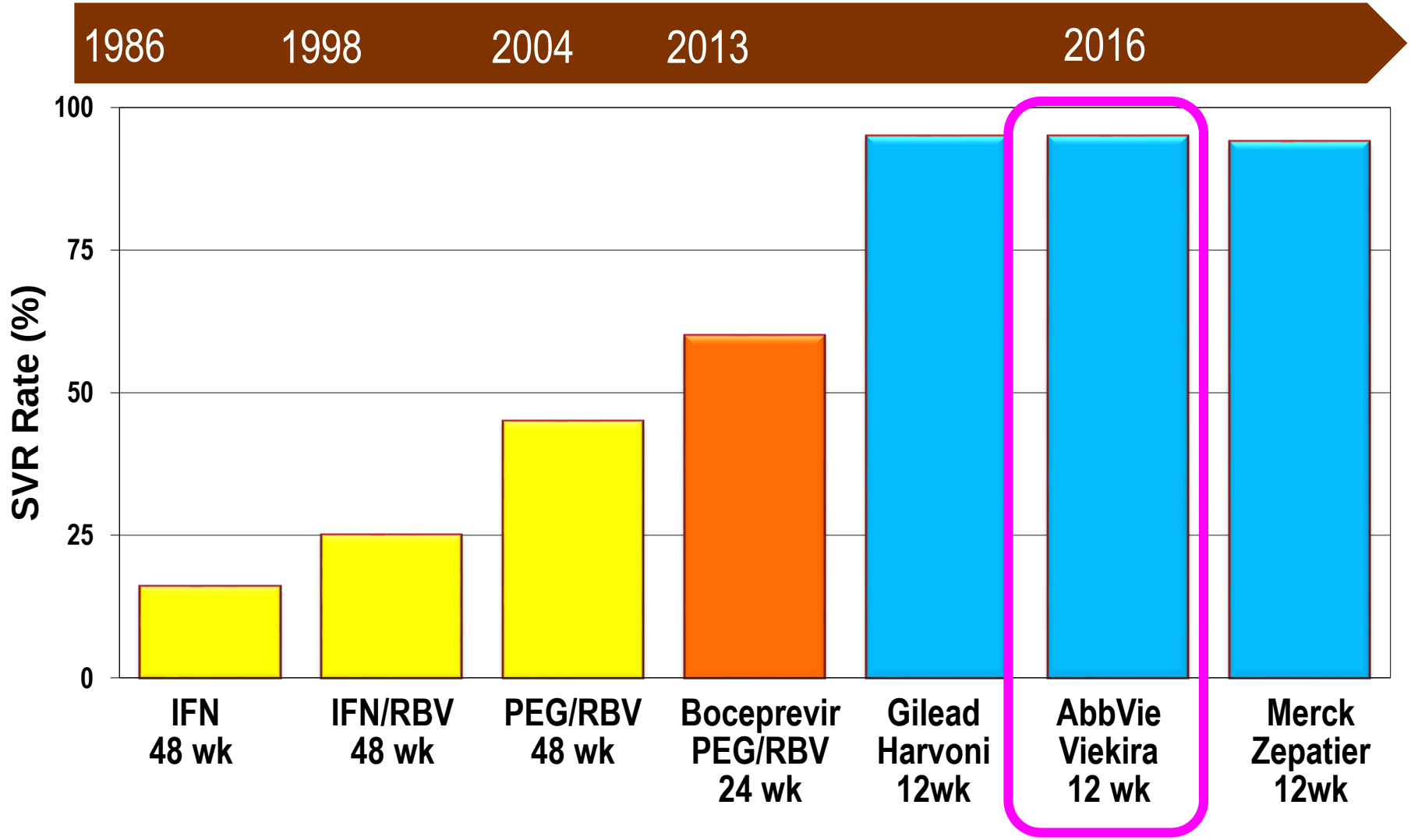
Z et al. Clinical Gastro and Hepatology 2015

The excellent tolerability and efficacy of DAAs should allow everyone to be treated



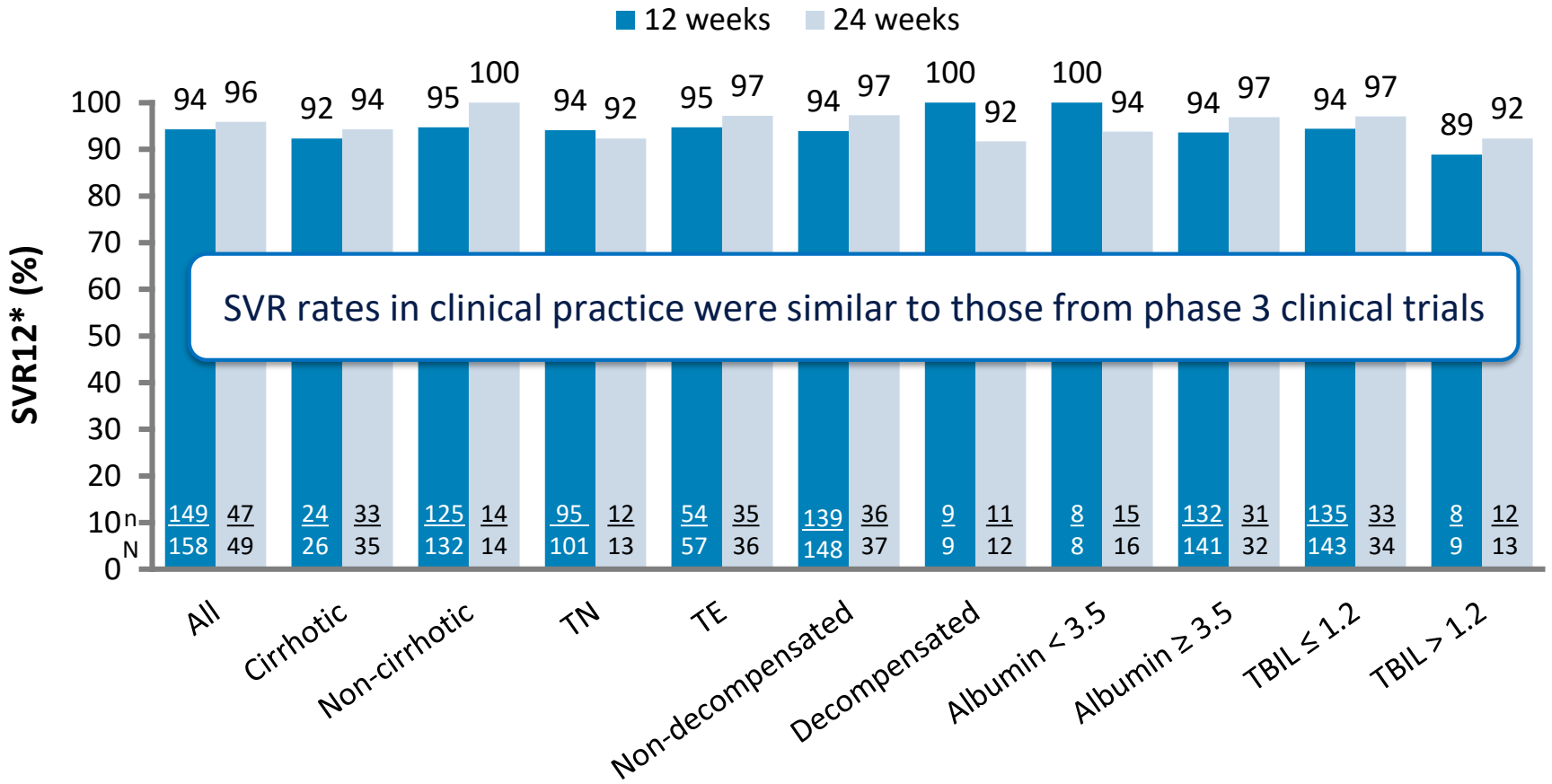
Adapted from Hepatitis C online. Core concepts - natural history of hepatitis C infection: evaluation, staging, and monitoring of chronic hepatitis C. Available at: http://www.hepatitisc.uw.edu/go/evaluation-staging-monitoring/natural-history/core-concept/all (accessed April 2017);

New Direct Acting Antivirals are better tolerated and more effective than Interferons



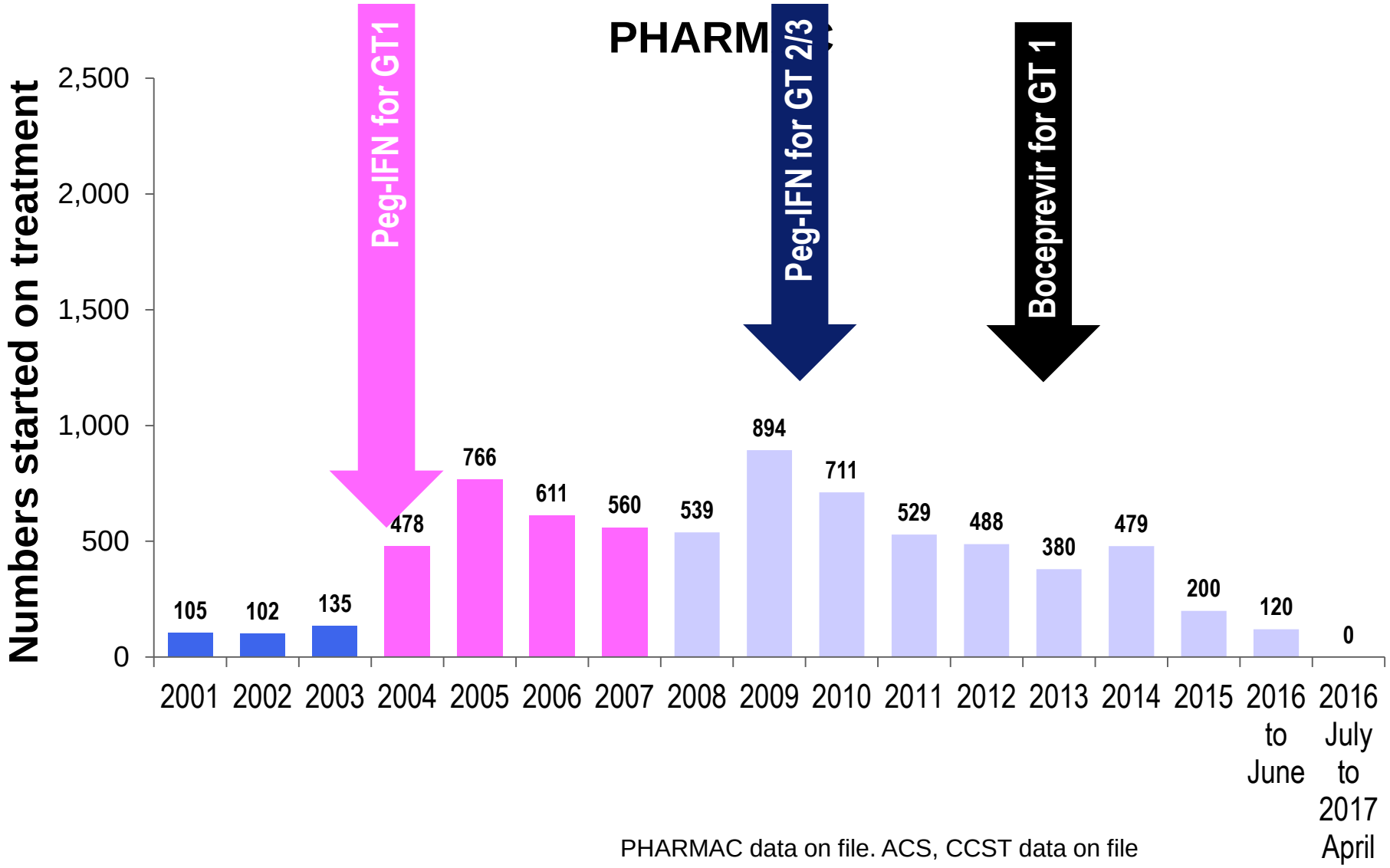
SHC 2017

VIEKIRA PAK Real World Experience: HCV TARGET: 1250 GT 1 patients in US and Europe



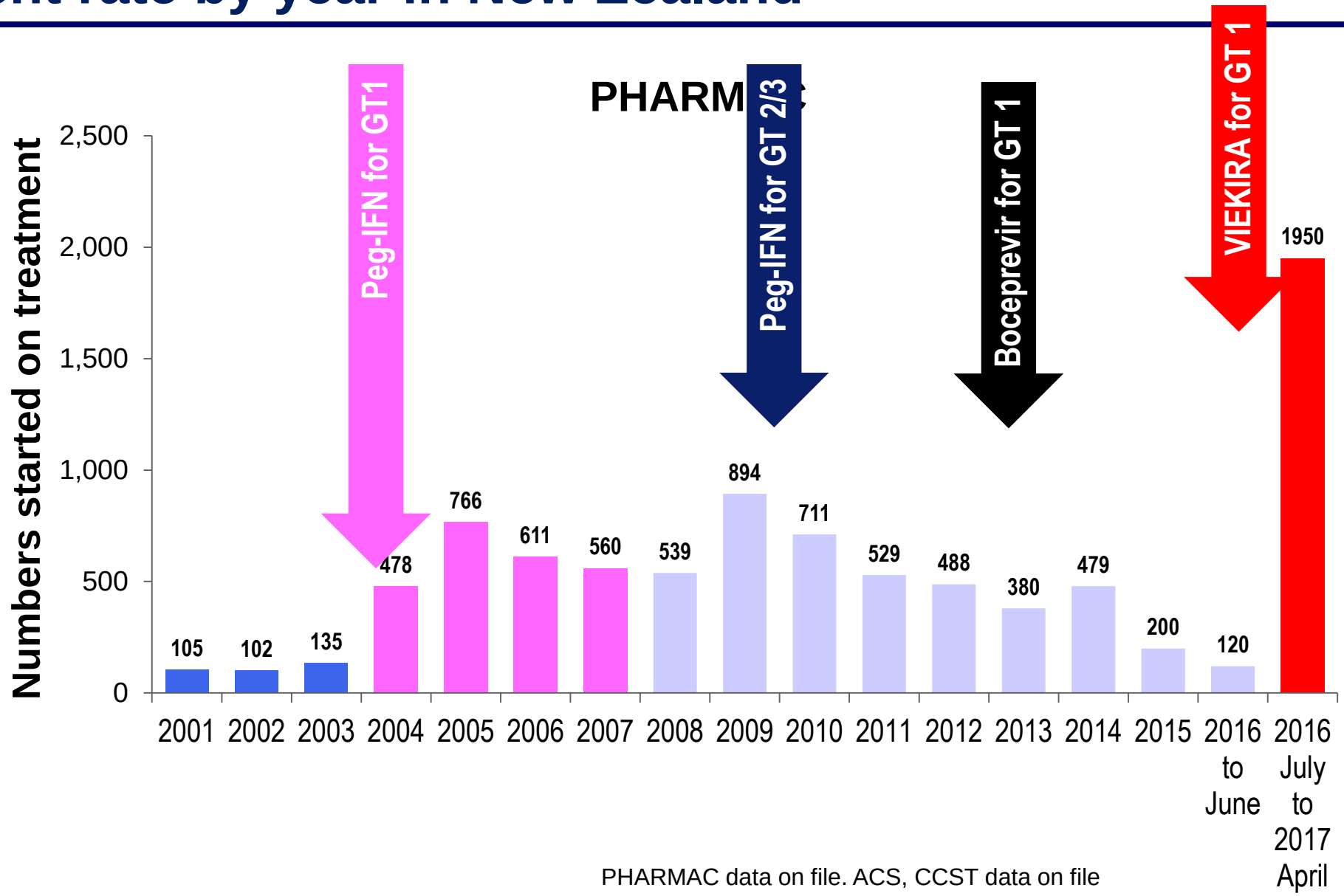
- TE= treatment experienced; TN= treatment naive. * SVR12 data are from the per-protocol population (patients that completed 12 or 24 weeks [±2 weeks] of therapy by May 2016 and have virologic outcome available).
- Shiffman ML, *et al.* EASL Special Conference, Paris 2016: Abstract 242.

Treatment rate by year in New Zealand



PHARMAC data on file. ACS, CCST data on file

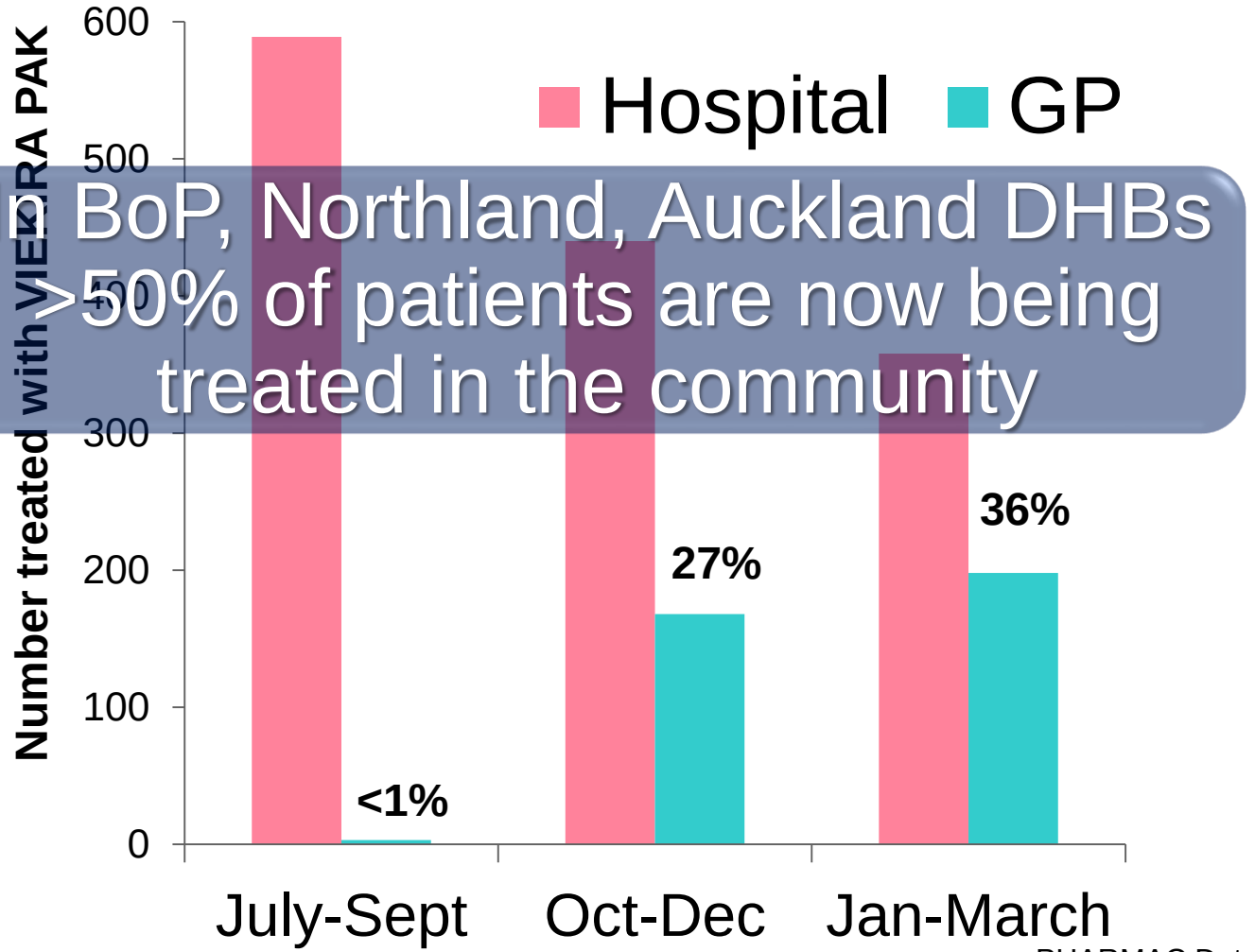
Treatment rate by year in New Zealand



PHARMAC data on file. ACS, CCST data on file

Treatment Uptake in General Practice

- Prescriber split by quarter (July 2016-March 2017)



In BoP, Northland, Auckland DHBs >50% of patients are now being treated in the community

PHARMAC Data on file

All patients infected with HCV G1 should be treated by their GP UNLESS they have cirrhosis, HIV co-infection or other complex medical conditions

Referral Back to GP Algorithm

Patients reviewed in clinic

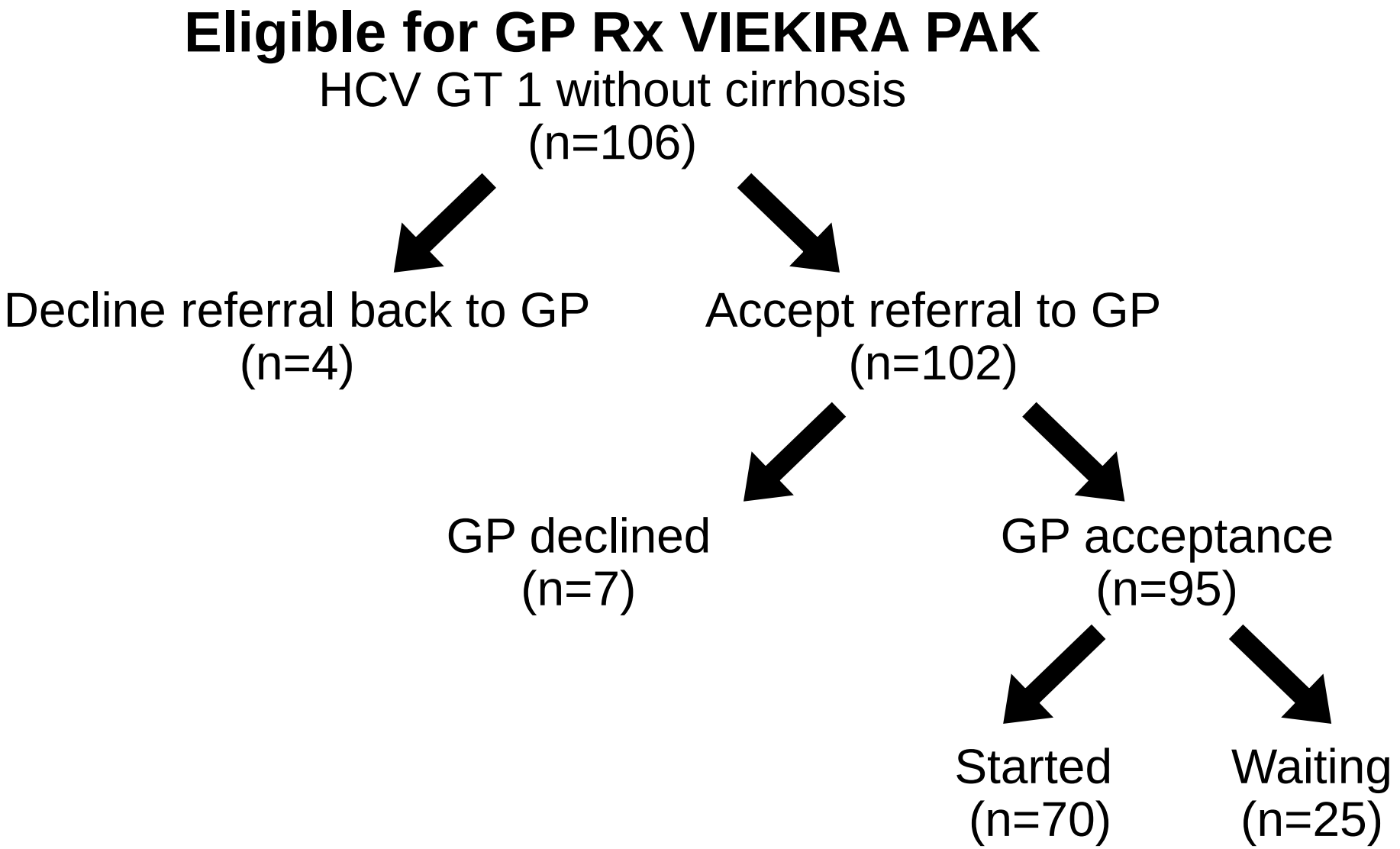
If patient is not cirrhotic without difficult comorbidities or concomitant meds (antipsychotics, antiepileptics), then discussed option of referral back to GP

Information booklet and GP information given to patient

Clinical letter with advice sent to GP, with offer of nursing support (virtual or visits) by DHB CNS

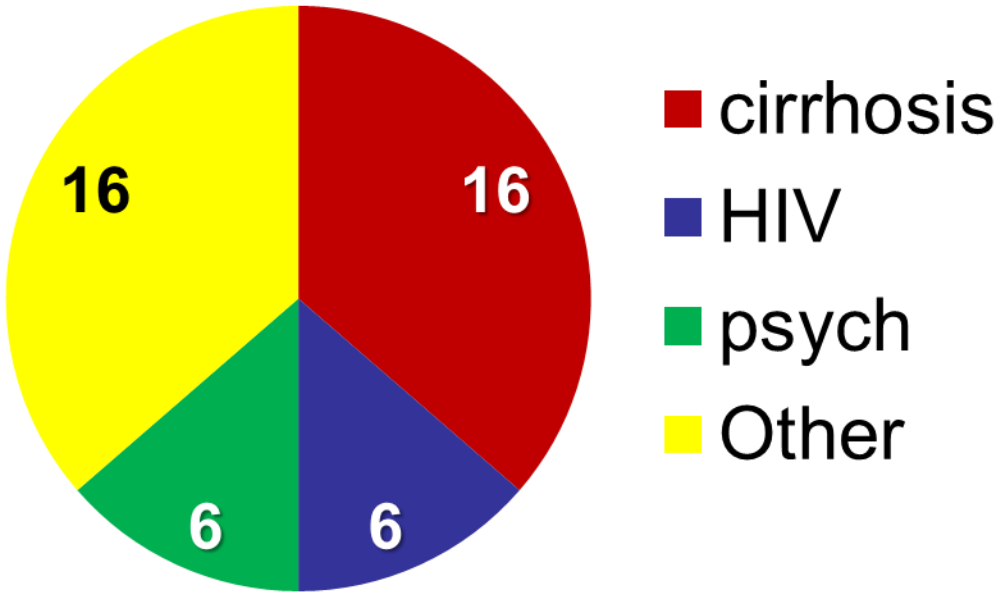
Patient discharged from clinic.

What do patients want in ACH Hepatitis Clinic?

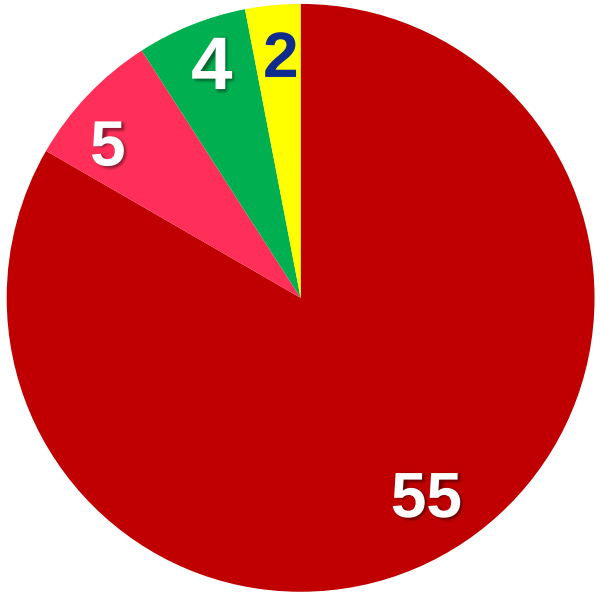


Who is receiving VIEKIRA PAK at the Hospital?

- 1st July- 30th Sept

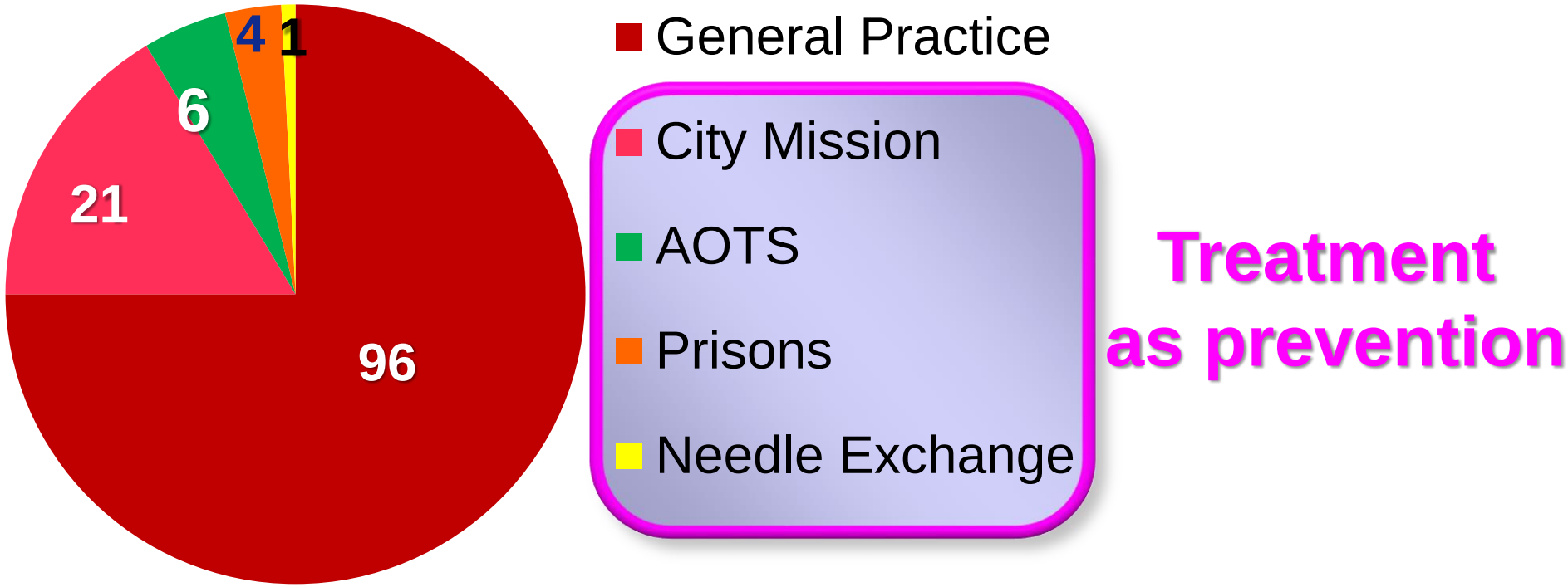


- 1st Oct- 31st May



Who is getting Viekira Pak-RBV in the community

- 1st Oct, 2016- 31st May 2017 (n=114)



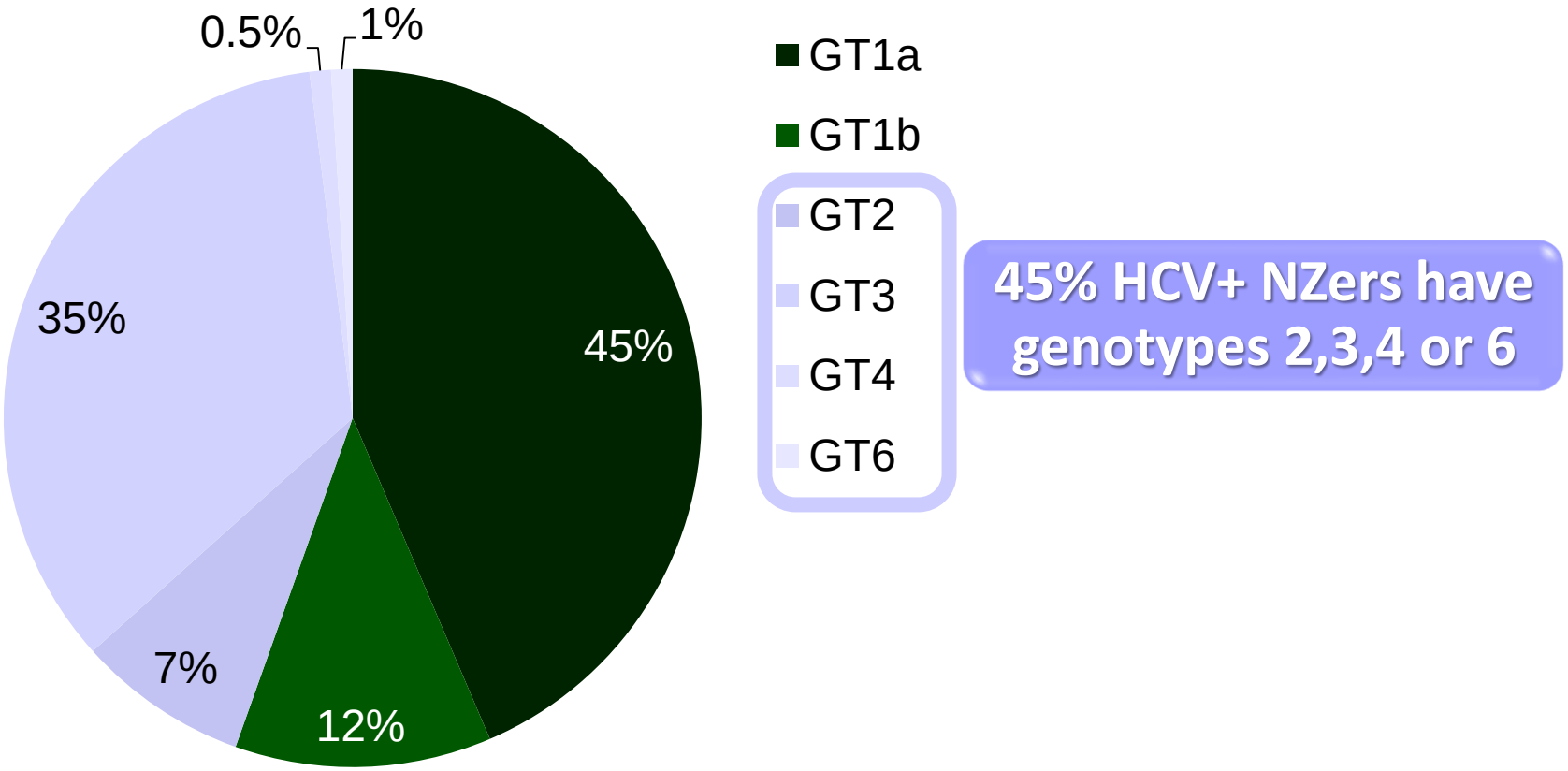
Treatment as prevention

Treatment-as Prevention (TasP)

- Engage people who inject drugs by removing stigma, discrimination
- Essential in order to achieve elimination

What about patients with HCV GT 2–6?

6130 patients genotyped at LabPlus (2005–2014)

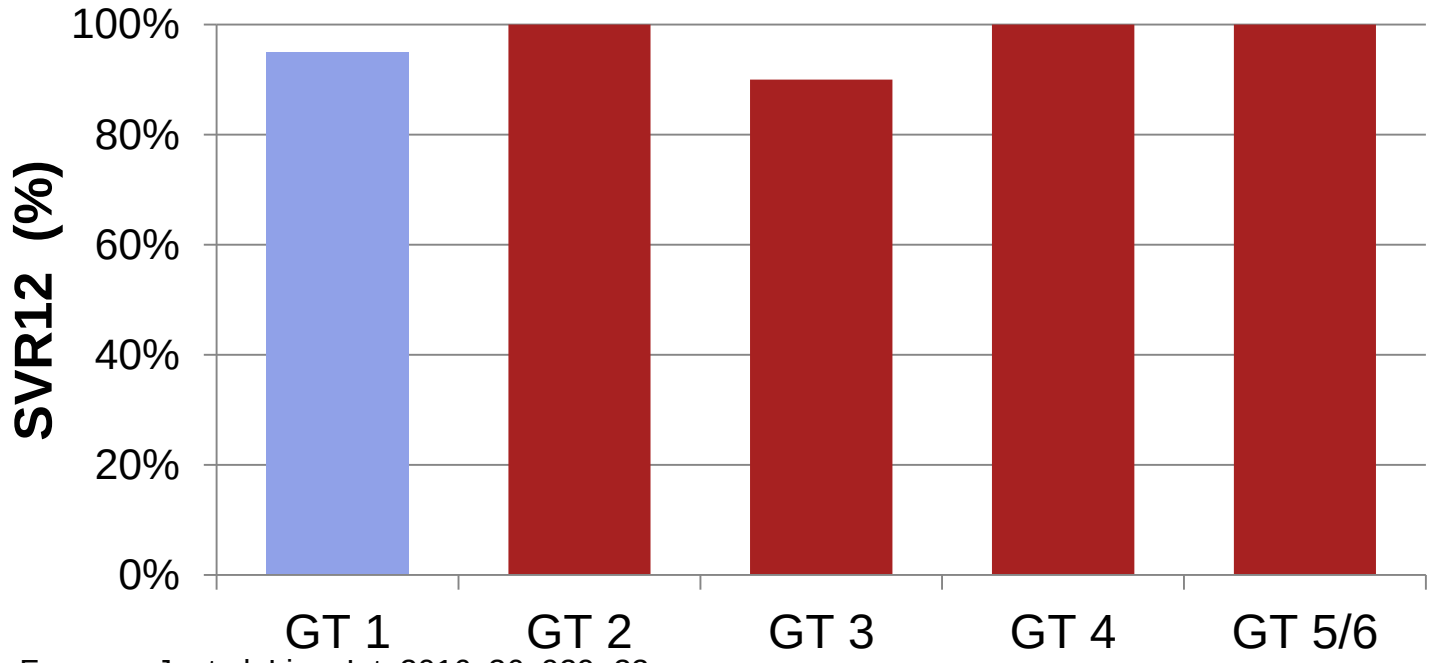


45% HCV+ NZers have genotypes 2,3,4 or 6

Gane E, et al. *NZ Med J* 2014;127(1407):61–74
AbbVie Limited. VIEKIRA PAK and VIEKIRA PAK-RBV Data Sheets. Medsafe New Zealand; version 9: December 2016.

What about patients with HCV GT 2–6?

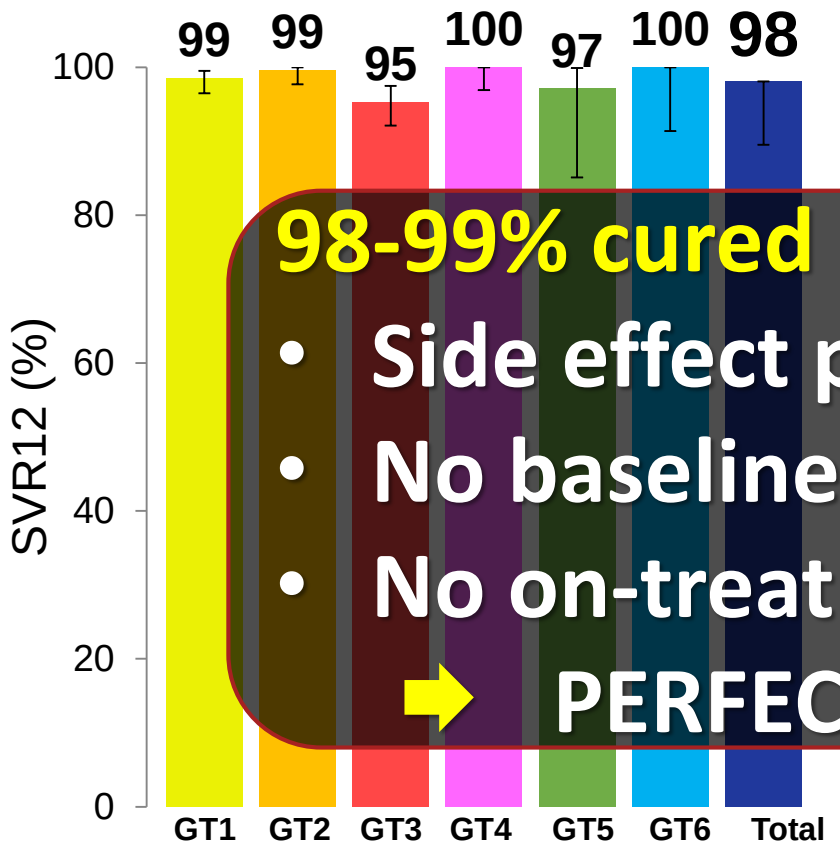
- Generic DAA 12 weeks supply can be imported (need prescription, Customs declaration,$2200-2500)
- Generics are as effective as brand drugs in clinical trials
  - **FixHepC Buyers club results (n=448)**



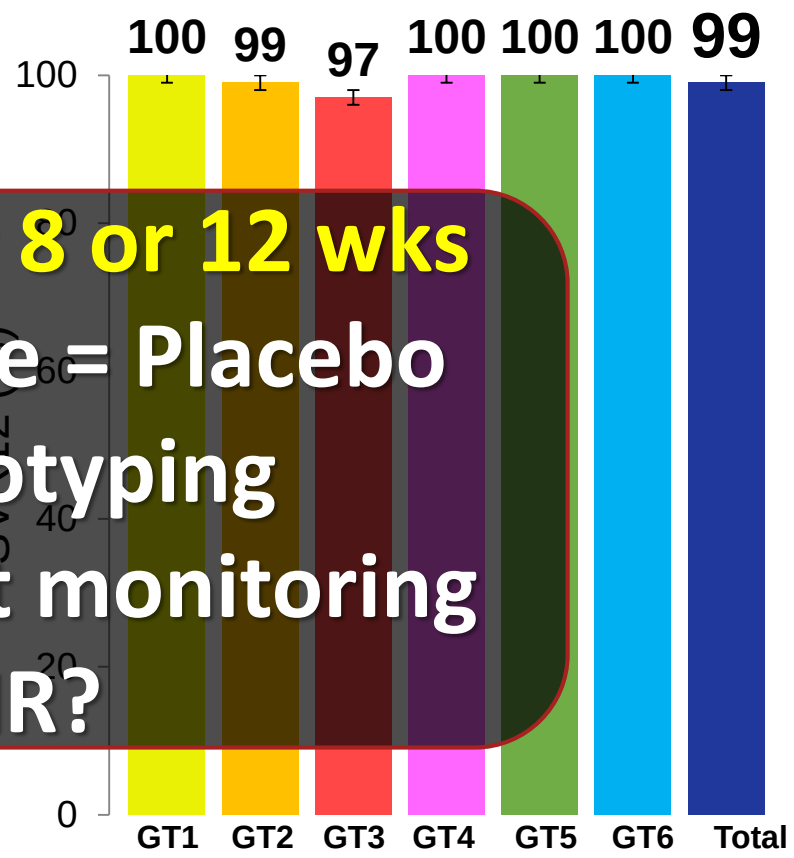
Freeman J, et al. Liver Int. 2016; 36: 929–32
Freeman J, et al. EASL 2017, Amsterdam. #PS-097

What about patients with HCV GT 2–6?

1.Sofosbuvir-Velpatasvir for 12 weeks



2.Glecaprevir/Pibrentasvir for 8 weeks



98-99% cured after 8 or 12 wks

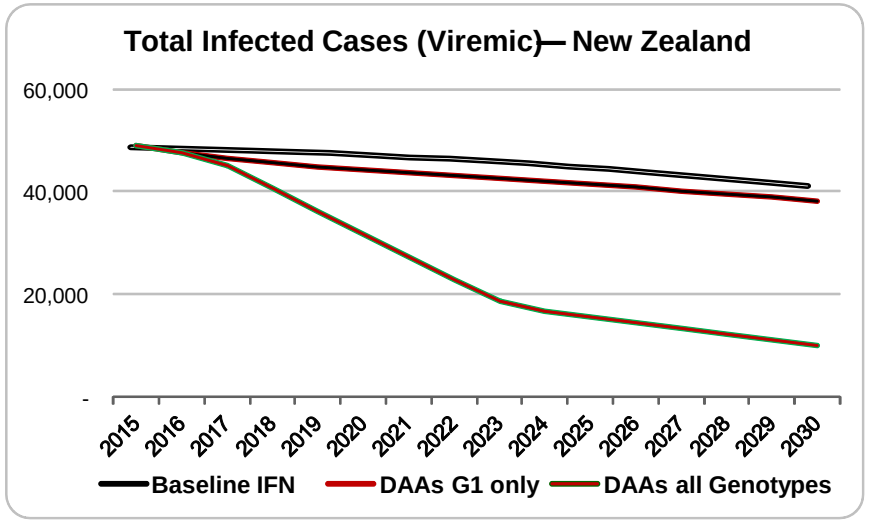
- Side effect profile = Placebo
- No baseline genotyping
- No on-treatment monitoring

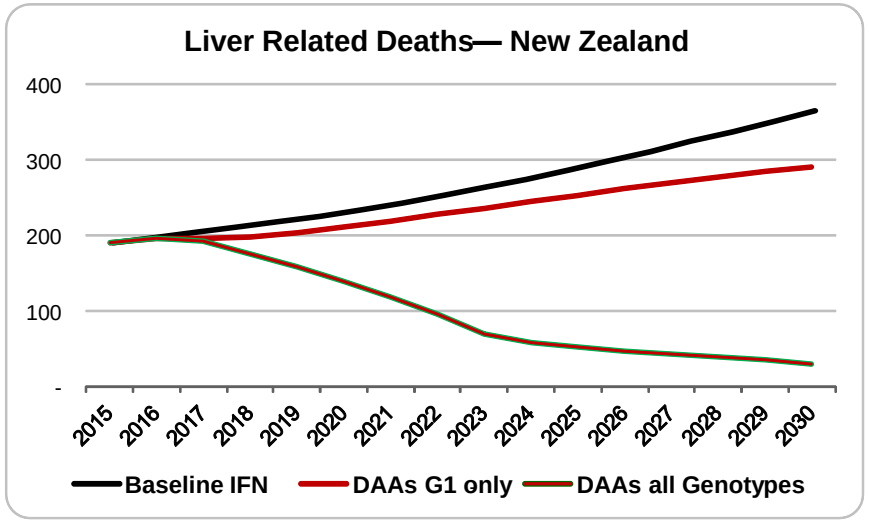
➡ PERFECTOVIR?

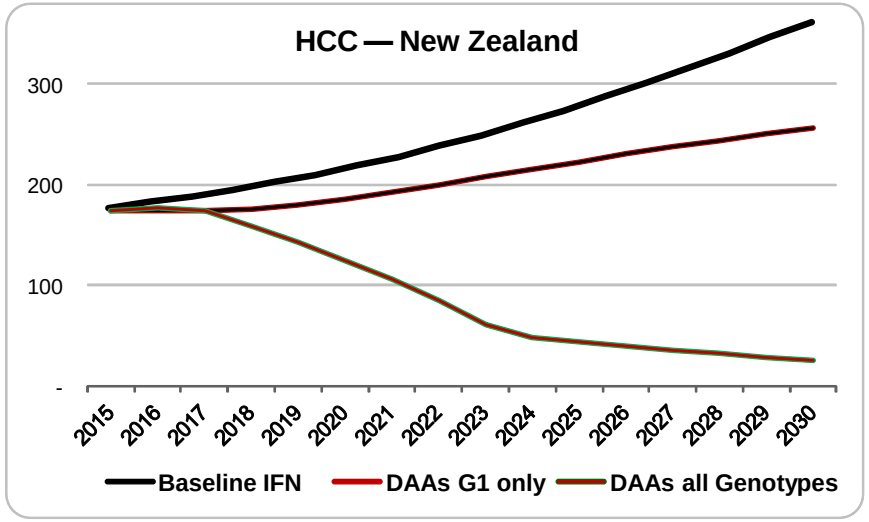
Feld J , et al. *N Engl J Med* 2015;373:2599-607
.Foster G, et al. *N Engl J Med* 2015;373:2608-17.

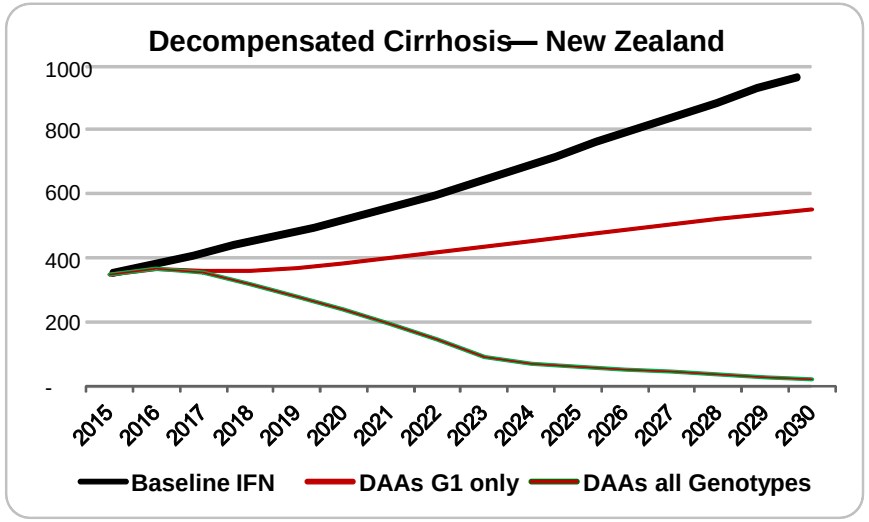
Zeuzem S, et al AASLD, 2016
Poordad F, et al. EASL 2017*

Eradicating only GT 1 will have limited benefit
The New Zealand Experiment









HCV Treatment – why GPs should do it

- HCV is now curable with 8 or 12 weeks tablets
- Treatment in general practice is safest
  - GPs know medical and psychosocial comorbidities
  - GPs know conmeds ⇨ avoid drug-drug interactions
- Treatment in general practice will improve uptake
  - Removes stigmatisation
  - Reduces patient costs, travel
  - Improves access in remote areas
  - Improves targeted testing and diagnosis rates

TO ELIMINATE HCV FROM NZ