Kirby Institute

Control and Elimination within AuStralia of HEpatitis C from people living with HIV

Associate Professor Gail Matthews| September 2015

Is HCV elimination possible?

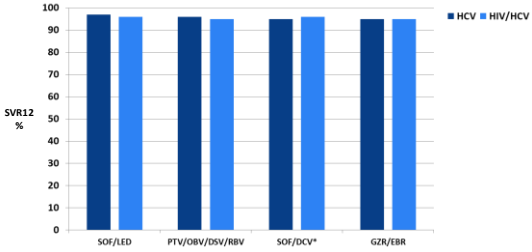
Key definitions:

Eradication: *Permanent reduction to zero of the worldwide incidence of infection caused by a specific agent as a result of deliberate efforts*

Elimination: *Reduction to zero of the incidence of a specified disease in a defined geographical area as a result of deliberate efforts*

Control: *The reduction of disease incidence, prevalence, morbidity or mortality to a locally acceptable level as a result of deliberate efforts*

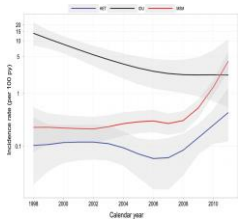
Why now?



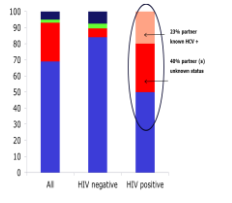
Afdhal, NEJM2014; Naggie, CROI2015; Feld, NEJM2014; Rockstroh, WAC2014; Wyles, CROI2015; Zeuzem, ILC2015; Rockstroh, ILC2015; Poordad, ILC2015

Why is it important?

Swiss HIV cohort

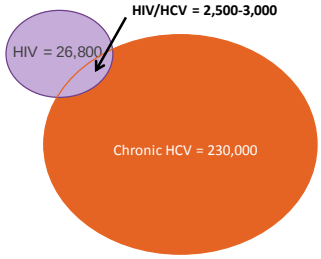


ATAHC

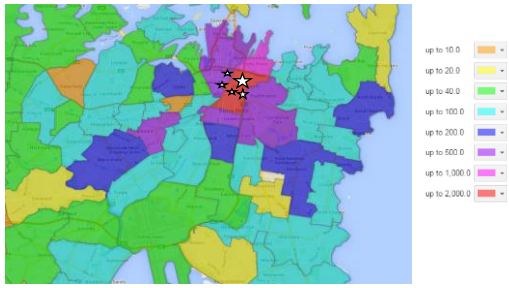


Wandelar CID 2012, Matthews CID 2011

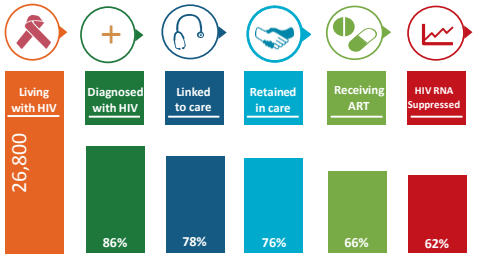
Why Australia?



Concentrated geographical location

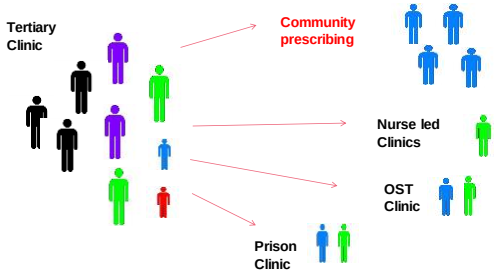


Why Australia?



HIV treatment and care cascade in Australia

Why Australia?



A unique opportunity exists within the Australian setting to demonstrate the rapid and comprehensive upscaling of treatment access within a defined and well characterized population to eliminate HCV.

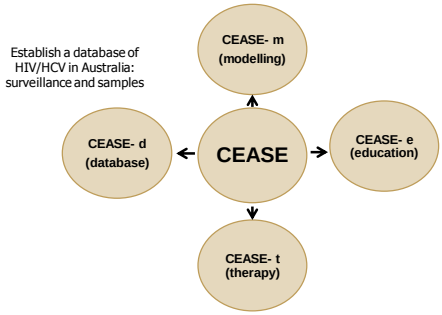
Primary Objective

- To evaluate the impact of a rapid scale-up of IFN-free HCV treatment on HCV transmission among people with HIV

Primary Endpoint

- Change in HCV incidence from pre- to post- scale-up of IFN-free HCV treatment

CEASE-D



CEASE-D

DBS
Detection of viraemia – individual and population, Genotyping,
Phylogenetic linkage – clusters

Fibroscan
Distribution of fibrosis
Regression of fibrosis at population level

Behavioural questionnaires
Drug and alcohol use
Sexual risk, reinfection risk
Changes in risk behaviour post therapy

Sites

INITIAL SITES (5)

St Vincent's Hospital
Taylor Square Private Clinic
Holdsworth House
East Sydney Doctors
Albion Street Clinic

FURTHER SITES (17)

Cairns
Brisbane
Adelaide
Melbourne
Sydney

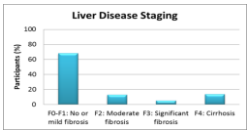
Baseline characteristics

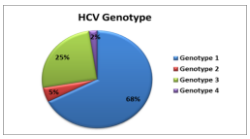
202 participants enrolled to date

98% male
82% Caucasian
89% GBM

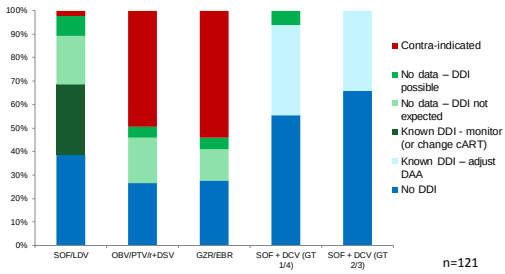
85% HCV RNA detectable
26% HIV RNA detectable

26% prior HCV treatment



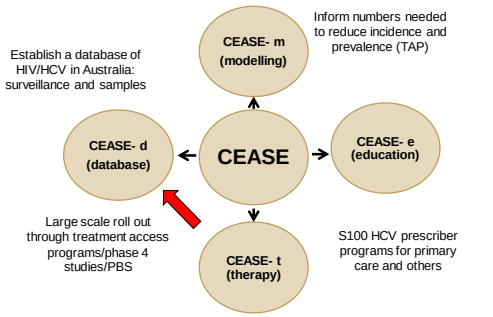


Antiretroviral therapy eligibility in CEASE

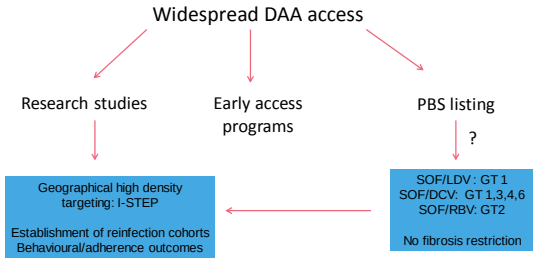


n=121

CEASE-D

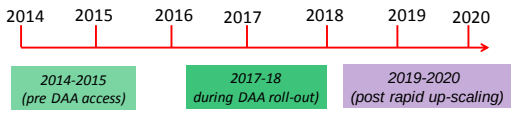


CEASE-t: therapeutic intervention



CEASE-D: Evaluation

3 rounds of data collection



Plus:
National HCV incidence surveillance through ACCESS (Primary care/sexual health/lab networks)

Summary: why is CEASE possible?

- Australia has relatively small HIV-HCV co-infected population
- Unique situation with high engagement in care and S100 community prescribing for HIV therapy
- Concentrated geographical location of patients
- Ongoing high rates of new HCV infections in this population –many through drug and sexual risk behaviour associated with crystal use
- Potential PBS access to pangenotypic regimens with no fibrosis restriction = treatment for all
- High rates of treatment willingness amongst community (patients and physicians)

Acknowledgements

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Dr Danica Martinez

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The Albion Centre: Dr Rohan Bopage

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ASHM: Ms Vanessa Towell
Hepatitis NSW: Mr Stuart Loveday
NSW Health: Ms Libby Topp
NUAA: Ms Mary Harrod
Positive Life NSW: Mr Craig Cooper

Funding

GILEAD MERCK

CEASE

Current ARV use in CEASE by class

Antiretroviral agent by class	Individuals receiving cART (n=151)*
NRTI/ntRTI, n (%)	141 (93)
Abacavir	37 (25)
Lamivudine	42 (28)
Tenofovir	99 (66)
Emtricitabine	94 (62)
(Abacavir/lamivudine FDC)	19 (13)#
(Tenofovir/emtricitabine FDC)	52 (34)#
NNRTI, n (%)	61 (40)
Efavirenz	28 (19)
Etravirine	8 (5)
Nevirapine	9 (6)
Rilpivirine	16 (11)
PI, n (%)	50 (33)
Atazanavir	2 (1)
Atazanavir/ritonavir	18 (11)
Darunavir/ritonavir	20 (13)
Lopinavir/ritonavir	12 (8)
Entry inhibitors, n (%)	2 (1)
Maraviroc	2 (1)
Integrase inhibitors, n (%)	69 (46)
Dolutegravir	28 (19)
Elvitegravir/cobicstat	4 (3)
Raltegravir	38 (25)