

## MOVING TOWARDS MICROELIMINATION WITH C-FREE: AN EFFECTIVE COMMUNITY-BASED MODEL OF CARE FOR HEPATITIS C IN PEOPLE WHO USE DRUGS IN THAILAND

Wansom T<sup>1</sup>, Thongmee A<sup>1</sup>, Chittmittrapap S<sup>2</sup>, Saraporn T<sup>3</sup>, Hasuwannakit S<sup>3</sup>, Waeuseng S<sup>4</sup>, Wanavanakorn K<sup>4</sup>, Chotirosniramit N<sup>5</sup>, Intharabut B<sup>1</sup>, Teuansiri R<sup>1</sup>, Kulprayong K<sup>1</sup>, A. Waesateh A<sup>1</sup>, Chumwangwapee T<sup>1</sup>, Lawseng S<sup>1</sup>, Pattarasuteewong S<sup>1</sup>, Pinyosinwat T<sup>6</sup>, Wongsuwon C<sup>6</sup>, Ngammee V<sup>7</sup>, Phueakchai S<sup>8</sup>, Lawpoolsri S<sup>9</sup>, Mills S<sup>10</sup>, Creac'H P<sup>11</sup>, Jourdain G<sup>12</sup>, Yoocharoen P<sup>13</sup>, Avihingsanon A<sup>14</sup>, Phanuphak N<sup>15</sup>, Durier N<sup>1</sup>

<sup>1</sup>Dreamlopmments, <sup>2</sup>Chulalongkorn University, <sup>3</sup>Chana District Hospital, <sup>4</sup>SuNgaiKolok District Hospital, <sup>5</sup>Research Institute of Health Sciences, Chiang Mai University, <sup>6</sup>Raks Thai Foundation, <sup>7</sup>Ozone Foundation, <sup>8</sup>Thai Drug Users Network, <sup>9</sup>BIOPHICS, Mahidol University, <sup>10</sup>FHI 360, EpiC, <sup>11</sup>Global Fund to Fight AIDS, TB, and Malaria, <sup>12</sup>Institut de Recherche pour le Développement, <sup>13</sup>Department of Disease Control, Ministry of Public Health, <sup>14</sup>HIV-NAT, Thai Red Cross AIDS Research Centre, <sup>15</sup>Institute of HIV Research and Innovation.

### Background:

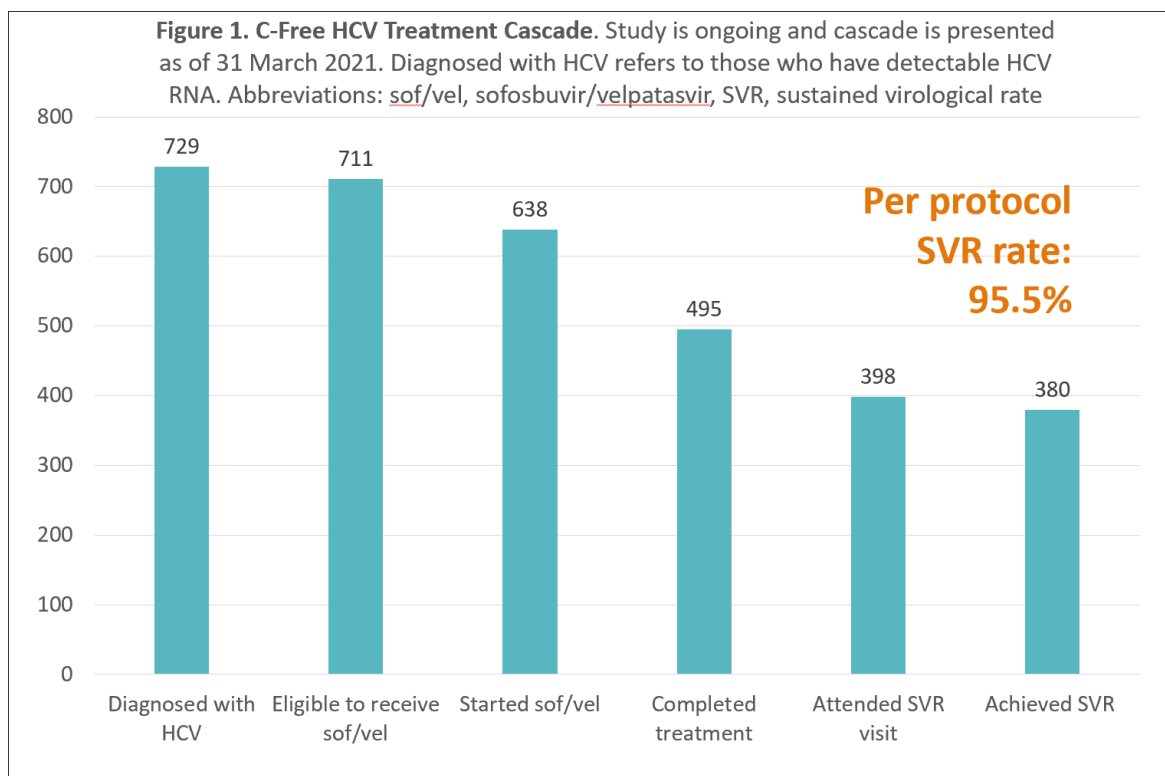
Despite being at high risk for viral hepatitis, people who use drugs (PWUD) in Thailand continue to face barriers in accessing diagnosis and care. In the 2019-2020 IBBS survey among injecting drug users, only 29% had ever been screened for hepatitis C virus (HCV).

### Description of model of care/intervention:

The C-Free Study is an ongoing cohort study of community-based testing and treatment of HCV, hepatitis B virus (HBV), and HIV for PWUD, implemented in conjunction with six community-based organizations (CBOs) offering harm reduction services. Individuals who currently/previously used drug(s), aged at least 18, are screened for HCV, HBV, and HIV with rapid tests. For those with reactive rapid tests, HIV RNA, HCV RNA, and HBV DNA is measured using GeneXpert on-site. Participants with active HCV without evidence of decompensated cirrhosis, hepatocellular carcinoma, or end stage renal disease, are offered a twelve-week course of sofosbuvir/velpatasvir, prescribed by physicians during clinics held at the CBO weekly. Staff from the CBOs offer harm reduction services and peer support. Those with negative HIV and/or HCV are offered repeat testing at three-month intervals. Those with no immunity or HBV infection receive vaccination.

### Effectiveness:

Between June 2019 and March 2021, 1257 participants were enrolled. 1068 (84.9%) were male, median age was 43 years (range 18-73), and 870 (74.1%) reported a lifetime history of injecting drugs. HCV antibody was detected in 887 (85.2%), HIV antibody in 490 (39%), and HbsAg in 68 (5.4%). 73.9% of those with HIV were coinfectd with HCV. The HCV treatment cascade is shown in Figure 1.



**Conclusion and next steps:**

Community-based HCV treatment with sofosbuvir/velpatasvir for PWUD, within harm reduction settings, is highly effective. National programs should integrate and reimburse community-based testing and treatment services.

With Global Fund Support, the C-Free Study team is expanding to more centres in Thailand. Given C-Free success, we are identifying funding mechanisms and partnerships to launch C-Free Southeast Asia (C-Free-SEA).

**Disclosure of Interest Statement:**

*The authors report no conflict of interest.*