

Malaysia's experience:
strategic options for
access to Direct Acting
Antivirals (DAA) to treat
Hepatitis C

Third World Network

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Compulsory license for government use: “Rights of Government”

Section 84 (1)(a) on Rights of Government: *“where there is national emergency or where the public interest, in particular, national security, nutrition, health or the development of other vital sectors of the national economy as determined by the Government, so requires”* a patent may be exploited by *“a government agency or a third person designated by the Minister”* (Ministry of Domestic Trade, Cooperatives and Consumerism)

- No need for prior negotiations with patent holder
- Malaysia used it in 2003 to import generic ARVs for 2 years – prices dropped by almost 80%. Free national treatment

Malaysia experience (Government Use licence for for HIV treatment)

In 2003/4 the average cost of MOH's HIV treatment per month per patient dropped from USD 315 to USD 58 (about an 81% reduction) when generic drugs were used. Prices of patented versions also dropped with generic competitors in the market.

	2001 prices (USD)	2004 prices (USD)	% drop in price
Combivir (60 tablets)	286.28	57.99	80%
AZT (100 tablets)	77.58	36.08	53%
3TC (60 tablets)	141.75	46.39	67%

HCV in Malaysia

- Estimated burden: ~453,700 people with chronic HCV(2.5% of the adult population 15-64 years)
- HCV genotype (GT)
 - Predominant : GT3 (56%); GT1 (39%), GT2 (1.8%) and GT6 (0.5%)
 - Preferred option: SOF/DCV
- Patent status in Malaysia
 - Sofosbuvir (SOF) : patented (Gilead Sciences, USA)
 - Daclatasvir (DCV): no patent (Bristol-Myers Squibb)
- 2014 Gilead's voluntary licensing agreements with Indian generic manufacturers: exclude Malaysia, Thailand, China, Hong Kong etc

Sofosbuvir for Hepatitis C

- Cost for old HCV triple therapy (pegylated interferon, ribavirin and a first generation DAA): between USD 38,568 in the United Kingdom to about USD 67,000 in the USA. Severe side effects. Not effective. Injections.
- Sofosbuvir has higher efficacy for treatment and far less side effects: patent holder is Gilead Sciences with treatment cost of up to USD 84,000 for sofosbuvir for 12-week treatment course in the US. **Patent on SOF compound expires in 2024 in Malaysia and on prodrug in 2028.**
- Sofosbuvir production cost estimated at USD 2 - 4 per gram; USD 68 to 136 for 12-week treatment course
- Within 15 years, may be possible to cure hepatitis C for USD 100 to 200 for a 12-week treatment course using two DAA plus ribavirin produced by generic manufacturers

(Study by Hill et al, University of Liverpool, 2013)

➤ **Do we wait for 11 years for the sofosbuvir patent to expire in Malaysia?**

Government price negotiations

- 3-4 rounds over last 2 years
- Private health care 100% out of pocket payment for 12-week course of sofosbuvir costs MYR 300,000 (about USD 71,700)
 - Average monthly salary of Malaysians = RM 5000
- Gilead offers to Malaysia (Sofosbuvir for about RM 48,000 for 12 weeks)
- Gilead offers EPCLUSA (sof/velpatasvir) (about RM 38,000)
- Still too expensive for Government

In the meanwhile ...

- DnDI (Drugs for Neglected Diseases Initiative) private non-profit R&D organization with MOH www.dndi.org
 - Start working with Government of Malaysia to R&D a new combination of Sofosbuvir + **Ravidasvir (RAV)**
 - Promising new combination, pangenotypic, possible price range about USD 300 for 12 weeks.
 - Final clinical trial results in 2018 were very good
 - June 2021: National Pharmaceutical Regulatory Agency (NPRA) of Malaysia granted a conditional registration for ravidasvir
 - 2022: ravidasvir was officially launched in Malaysia, with the first patient treated with the combination SOF/RAV
- First Hep C treatment developed through South-South cooperation; Malaysia first country to register the new medicine**

Options...

- Fact: sofosbuvir remains the backbone of DAA combinations: SOF/Daclatasvir or SOF/Ravidasvir
- Options:
 - Negotiate price
 - Ask for voluntary license and hope for an affordable price
 - Compulsory license

Compulsory license for government use to import generic SOF

- Early August 2017 - Malaysia's Cabinet approved a compulsory license for government use for sofosbuvir under Section 84 (1) of Patents Act 1983
- Pharmaniaga appointed by the government to import sofosbuvir from Egypt (90% cheaper than last Gilead offer). Maximum USD 120 for 12 weeks

Meanwhile ...

- Gilead pressured Malaysia to not issue CL but Gilead price offer still unaffordable
- Days before CL was issued (24 August 2017): Gilead announced in a Tweet (!!) the inclusion of Malaysia, Thailand, Ukraine and Belarus in the voluntary licence given by Gilead to Indian generic manufacturers

Is Voluntary Licence sufficient?

- Voluntary licensing under Gilead (Sofosbuvir, SOF/Ledipasvir, SOF/velpatasvir); VL under BMS for Daclatasvir
 - Indonesia (SOF: USD 289 per bottle; LDV/SOF: USD 469 per bottle; DAC USD 135)
 - Myanmar (Sof: USD 220 per bottle; LDV/Sof: US\$ 300 per bottle; DAC USD 90)
 - Vietnam (SOF: USD 570 per bottle; LDV/SOF: US\$ 808 per bottle; DAC USD 288)
 - Cambodia (SOF: USD 280 per bottle; LDV/SOF: US\$ 705 per bottle)

Note: Prices collected by civil society groups in the region 2017/2018

** Prices under VL unlikely to go down to the level that is offered by other generic companies

Currently ... Low price possible for generics; free national HCV treatment

- CL means the generic options for Malaysia are:
 - (1) import of generic sofosbuvir from Egypt under the government use CL (for MOH hospitals and clinics) – stopped in 2020
 - (2) import of generic daclatasvir (no patent in Malaysia so anyone can import after registering the generic product) (for public and private facilities)
 - (3) import of Gilead-licensed generic from voluntary licence holders in India: sofosbuvir, SOF/VEL (for public and private facilities).
 - (4) March 2018: treatment started: USD 300 USD/RM 1,200 for 12-week course for SOF/DAC (Egyptian supplier for SOF under CL and DAC).
 - (5) 2019: first VL sofosbuvir registered. Others followed (sof and sof/vel)
 - (6) Dec 2021 – lowest SOF/DAC price about USD 100 / RM 400 for 12-week course
 - (7) SOF/RAV also used in MOH hospitals and clinics
- China is working on an alternative to sofosbuvir