An Introduction to Access to Generic Hepatitis C Medicines

14:00-14:45 GMT

1 November
Chair:
Raquel Peck, CEO, World Hepatitis Alliance
@RaqPeck

Speakers:
Dr Andrew Hill, Senior Vising Research Fellow, Department of Pharmacology, University of Liverpool

Erika Duenas, Advocacy Officer, Medicines Patent Pool

Giten Khwairakpam, Project Manager for Community and Policy, TREAT Asia
DISCUSSION / QUESTIONS AND ANSWERS

How to ask a question

You can submit a question by typing it in the ‘Questions’ section in your meeting control panel.
Treatment target

80% of eligible persons with chronic hepatitis C virus infection treated

Current situation

< 1% receiving treatment
Information and access to generic versions of new HCV drugs

Erika Duenas
Medicines Patent Pool
## Several New Medicines for Hepatitis C

<table>
<thead>
<tr>
<th>Medicine / Combination</th>
<th>Brand Name</th>
<th>Date of Approval (US FDA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir</td>
<td>Sovaldi</td>
<td>December 2013</td>
</tr>
<tr>
<td>Sofosbuvir/Ledipasvir</td>
<td>Harvoni</td>
<td>October 2014</td>
</tr>
<tr>
<td>Dasabuvir/Ombitasvir/Paritaprevir/Ritonavir</td>
<td>Viekira Pak</td>
<td>December 2014</td>
</tr>
<tr>
<td>Daclatasvir</td>
<td>Daklinza</td>
<td>July 2015</td>
</tr>
<tr>
<td>Ombitasvir/Paritaprevir/Ritonavir</td>
<td>Technivie</td>
<td>July 2015</td>
</tr>
<tr>
<td>Elbasvir/Grazoprevir</td>
<td>Zepatier</td>
<td>January 2016</td>
</tr>
<tr>
<td>Sofosbuvir/Velpatasvir</td>
<td>Epclusa</td>
<td>June 2016</td>
</tr>
</tbody>
</table>

Source: US FDA
Generic Versions of HCV Medicines

- **Generic versions** of some of the new medicines have become available in a number of developing countries

- Potential mechanisms for access to generics:
  - Manufacturers make product in country where it is *not patented* for sale in country where it *is not patented* (important to also check whether there is *data exclusivity protection*)
  - Manufacturers have obtained a *voluntary licence* from the patent holder (bilateral or MPP licence)
  - If a country were to make use of a TRIPS flexibility (e.g. *compulsory licence*)

Important to understand where these medicines are patented and for which countries there are licences
Voluntary Licences in Hepatitis C

Licences enable multiple manufacturers to make the generic version of the medicine even if there are patents

Licences negotiated by the Medicines Patent Pool include public health friendly terms and conditions (see previous webinar)

<table>
<thead>
<tr>
<th>Medicine(s)</th>
<th>Brand Name</th>
<th>Countries</th>
<th>Type of licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daclatasvir</td>
<td>Daklinza®</td>
<td>At least 112 countries</td>
<td>Negotiated by the Medicines Patent Pool (MPP)</td>
</tr>
<tr>
<td>Sofosbuvir, Sofosbuvir/ledipasvir and Sofosbuvir/velpatasvir</td>
<td>Sovaldi®</td>
<td>101 countries</td>
<td>Bilateral licence between originator and generics</td>
</tr>
<tr>
<td>Other hepatitis C medicines</td>
<td></td>
<td>No licences so far</td>
<td>No licences so far</td>
</tr>
</tbody>
</table>
Finding out Patent and Licensing Status

www.medspal.org

• Free search by Keyword (e.g. patent number; brand name; country, etc.) (Patents are territorial)
• Pre-determined search by Products (e.g. Sofosbuvir 400mg)
• Pre-determined search by Countries (e.g. Egypt, South Africa, Vietnam)
Search Example 1

- Search reveals two granted patents for 2 granted patents in Malaysia
- Data Exclusivity protection in that country
- Secondary patents w/ different expiry dates
Search Example 2

<table>
<thead>
<tr>
<th>Country</th>
<th>Product Name</th>
<th>Patent Description</th>
<th>Patent Status</th>
<th>Patent Application Number</th>
<th>Expected Expiry Date (dd/mm/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Daclatasvir 60 mg</td>
<td>Daclatasvir compound family</td>
<td>Filed (opposed)</td>
<td>IN853/DELNP/09</td>
<td>09/08/2027</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daclatasvir crystalline forms</td>
<td>Filed</td>
<td>IN806/DELNP/2010</td>
<td>31/07/2028</td>
</tr>
<tr>
<td>South Africa</td>
<td>Daclatasvir 60 mg</td>
<td>Daclatasvir compound family</td>
<td>Granted</td>
<td>ZA200900962</td>
<td>09/08/2027</td>
</tr>
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<td></td>
<td></td>
<td>Daclatasvir crystalline forms</td>
<td>Granted</td>
<td>ZA201000843</td>
<td>31/07/2028</td>
</tr>
</tbody>
</table>

- Search reveals two granted patents for Daclatasvir in South Africa and two patents filed in India.
- It also reveals that there is an MPP voluntary licence that includes these countries + link to text.
## Details on the Patents

<table>
<thead>
<tr>
<th><strong>Country:</strong></th>
<th>South Africa</th>
</tr>
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<tbody>
<tr>
<td><strong>Patent Application Number:</strong></td>
<td>ZA200900962</td>
</tr>
<tr>
<td><strong>Patent Status:</strong></td>
<td>Granted</td>
</tr>
<tr>
<td><strong>Patent Application Date (dd/mm/yyyy):</strong></td>
<td>09/08/2007</td>
</tr>
<tr>
<td><strong>Expected Expiry Date (dd/mm/yyyy):</strong></td>
<td>09/08/2027</td>
</tr>
<tr>
<td><strong>Patent Description:</strong></td>
<td>Daclatasvir compound family</td>
</tr>
<tr>
<td><strong>Invention Title:</strong></td>
<td>Not Available</td>
</tr>
<tr>
<td><strong>Patent Family Identification:</strong></td>
<td>Health Canada, US FDA</td>
</tr>
<tr>
<td><strong>Publication / Grant Number(s):</strong></td>
<td>Not Available</td>
</tr>
<tr>
<td><strong>Priority Number(s):</strong></td>
<td>US11835462, US83699506</td>
</tr>
<tr>
<td><strong>Patent Applicant(s):</strong></td>
<td>Not Available</td>
</tr>
<tr>
<td><strong>PCT Related Application(s):</strong></td>
<td>WO2008021927A2, WO2008021927A3</td>
</tr>
<tr>
<td><strong>Patent Status Source:</strong></td>
<td>National Patent Office</td>
</tr>
<tr>
<td><strong>Last Updated (dd/mm/yyyy):</strong></td>
<td>03/08/2016</td>
</tr>
</tbody>
</table>
Details on the Licence

*The entire text of the MPP licences and sub-licences with the generic producers are also available in our website www.medicinespatentpool.org
Accessing generic hepatitis C DAAs for individual use

Giten Khwairakpam
TREAT Asia/amfAR
1 November 2016
Outline

• Licensed direct-acting antivirals (DAAs)
• Price reductions in generic HCV medications
• How are DAAs being accessed broadly
• Named patient import and how it is being done
• Conclusions
Direct-acting antivirals

Sovaldi (sofosbuvir)

Harvoni (Ledipasvir/sofosbuvir)

Daklinza

Generic sofosbuvir

Generic ledipasvir/sofosbuvir

Generic daclatasvir
Price reductions in Indian generic hep C medicines

- Sofosbuvir
- Sofosbuvir/ledipasvir
- Daclatasvir

Cost for 4 weeks:
- Sofosbuvir: $330 → $161 → $92 → $61 → $38
- Sofosbuvir/ledipasvir: $384 → $205 → $169 → $143
- Daclatasvir: $83 → $51 → $38
How are DAAs being accessed

• At the hospital level
  – Special import license

• At the patient level
  – “Named patient import”
  – Buyers’ clubs
  – Large pharmacies in India
Named patient import: How it is being done

• Australia
  – TGA allows import for personal use for a maximum of 3 months doses with a doctor’s prescription by courier

• United Kingdom
  – MHRA allows importation for personal use for a maximum of 3 months doses by courier.
  – There is no need for a doctor’s prescription

• Hungary
  – FDA allows for personal use for a maximum of 3 months doses by courier with doctor’s prescription
  – Patients have to pay a VAT of 27% while receiving medicines from the customs
Named patient import: How it is being done

- **Canada**
  - FDA allows import by hand carry for a maximum of 3 months doses
  - Medicines cannot be couriered

- **Romania**
  - Allows for personal use for a maximum of 3 months doses by courier with doctor’s prescription
Conclusions

• Cure can be accessible through small-volume imported generics when public programs are not available
  – Named patient import is legal in many countries, including in Europe
  – Local taxes (e.g., VAT) differ by country

• Need to consider “quality control” of medicines as well as of treatment implementation
  – Physician monitoring is always advisable
  – Be cautious of source for medicines to avoid counterfeits
Elimination of Hepatitis C using low cost drugs: what could be done?

Dr Andrew Hill
St Stephens AIDS Trust
Chelsea and Westminster Hospital
United Kingdom
# HCV DAAs: Prices in USA and India versus Target

<table>
<thead>
<tr>
<th>Drug</th>
<th>Current US price (lowest)</th>
<th>Current lowest Indian market price</th>
<th>Target price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir</td>
<td>$49,680</td>
<td>$324</td>
<td>$62</td>
</tr>
<tr>
<td>Daclatasvir</td>
<td>$50,653</td>
<td>$153</td>
<td>$14</td>
</tr>
<tr>
<td>SOF+LDV</td>
<td>$56,700</td>
<td>$507</td>
<td>$96</td>
</tr>
<tr>
<td>SOF+VEL</td>
<td>$74,760</td>
<td>-</td>
<td>$181-216</td>
</tr>
</tbody>
</table>

Price of sofosbuvir by country (12 weeks)

3. Germany: medizinfuchs.de
5. UK: British National Formulary 2016
7. Australia: Based on total annual government expenditure (AU$200 million) and 40,000 treated in 2016
The Australian “All you can Treat” contract for Hepatitis C

Contract for $1 billion Australian dollars, over 5 years, with a group of pharmaceutical companies.

For €138 million/ year, unlimited treatment numbers
In 2016, 40,000 people will be treated (20% of epidemic)

Unit cost per DAA treatment = €3,450 / person

If this price is acceptable in Australia, we should have access to DAAs at the same prices in Europe, to achieve elimination of Hepatitis C across our region.

Adapted from “The New HCV treatment Era in Australia: Early Lessons”
A new option for access to treatment: HIV and Hepatitis C buyers clubs

There are many companies willing to export generic PrEP and DAAs into Europe and North America.

Several generic ARVs are already approved by the US Food and Drug Administration and the World Health Organization.

Generic PrEP or DAAs can be bought online in 10 minutes. Prices are falling rapidly.

www.alldaychemist.com
www.iwantprepnow.co.uk
www.fixhepc.com
www.myhepc.info
Patented vs Generic drugs for HCV

<table>
<thead>
<tr>
<th>Harvoni</th>
<th>Generic SOF/DCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>€45,000</td>
<td>€900</td>
</tr>
</tbody>
</table>

Hepatitis C: https://www.youtube.com/watch?v=HBF5cf5zt9U
HIV: https://youtu.be/JXnaHYzyAq4
Routes of export: https://youtu.be/X1QSHkUAP50
The legal basis of personal importation

Article 60 of TRIPS - *De Minimis* Imports – states: *Members may exclude from the application of the above provisions small quantities of goods of a non-commercial nature contained in travellers' personal luggage or sent in small consignments.*

In line with Article 60, most countries allow some form of personal medication importation.

Medicines are being sent from India, China, Egypt and Bangladesh to countries all over the world.
FixHepC Buyer’s Club

N = 438
RVR: 85 %
EOT: 99%
SVR4: 89%

[Poster 256 – HIV Glasgow 2016]
Hep C Treatment Without Borders

N = 151
RVR: 74%
EOT: 93%
SVR4: 96%
SVR12: 96%

http://hepatitisctreatment.homestead.com/
South East Asia Buyer’s Club

N = 237
RVR: 99%
EOT: 99%
SVR4: 100%
SVR12: 92%

[Poster 256 – HIV Glasgow 2016]
Russian Buyer’s Club

N = 213
RVR: 85%
EOT: 100%
SVR4: 100%
SVR12: 98%

[Poster 261 – HIV Glasgow 2016]

$490 for SOF/DCV, 12 weeks
Conclusions - 1

Elimination of disease is only affordable if drugs can be accessed at low prices, within national health budgets.

We need new approaches to funding mass treatment programmes for Hepatitis C in Europe:

“All you can Treat” pricing – unlimited treatments for a fixed price

Or

Lower fixed prices. Under €4000 per cure for Hepatitis C.

Most drugs are fundamentally cheap to produce, so pharmaceutical companies can still make large profits from selling to larger numbers of people at lower unit prices.
Conclusions - 2

If pharmaceutical companies refuse to lower prices, we need back-up mechanisms to ensure access:

- Compulsory licenses
- Buyers Clubs
- Windfall taxes on tax avoidance
THANK YOU FOR ATTENDING