Global Access to Medicines Challenge. Time for a new approach?

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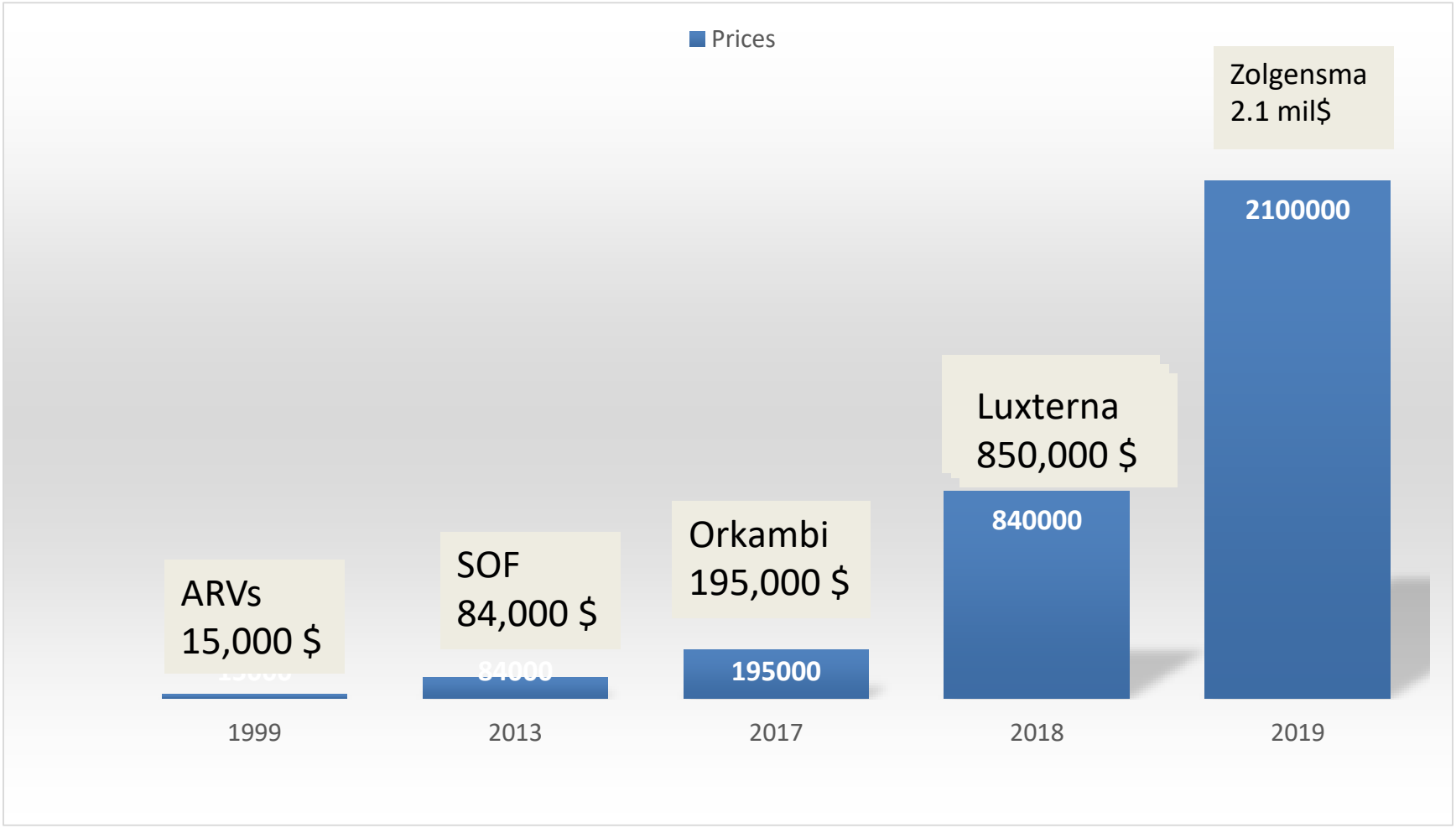
Interest declaration

- Travel and accommodation to attend this meeting paid by the organisers
- My time is not paid
- Self-employed: work for not-for-profits, governments, UN.
- Our work is open access and freely available on: www.medicineslawandpolicy.org

20 years of meds price development



Medicines Pricing and Cost

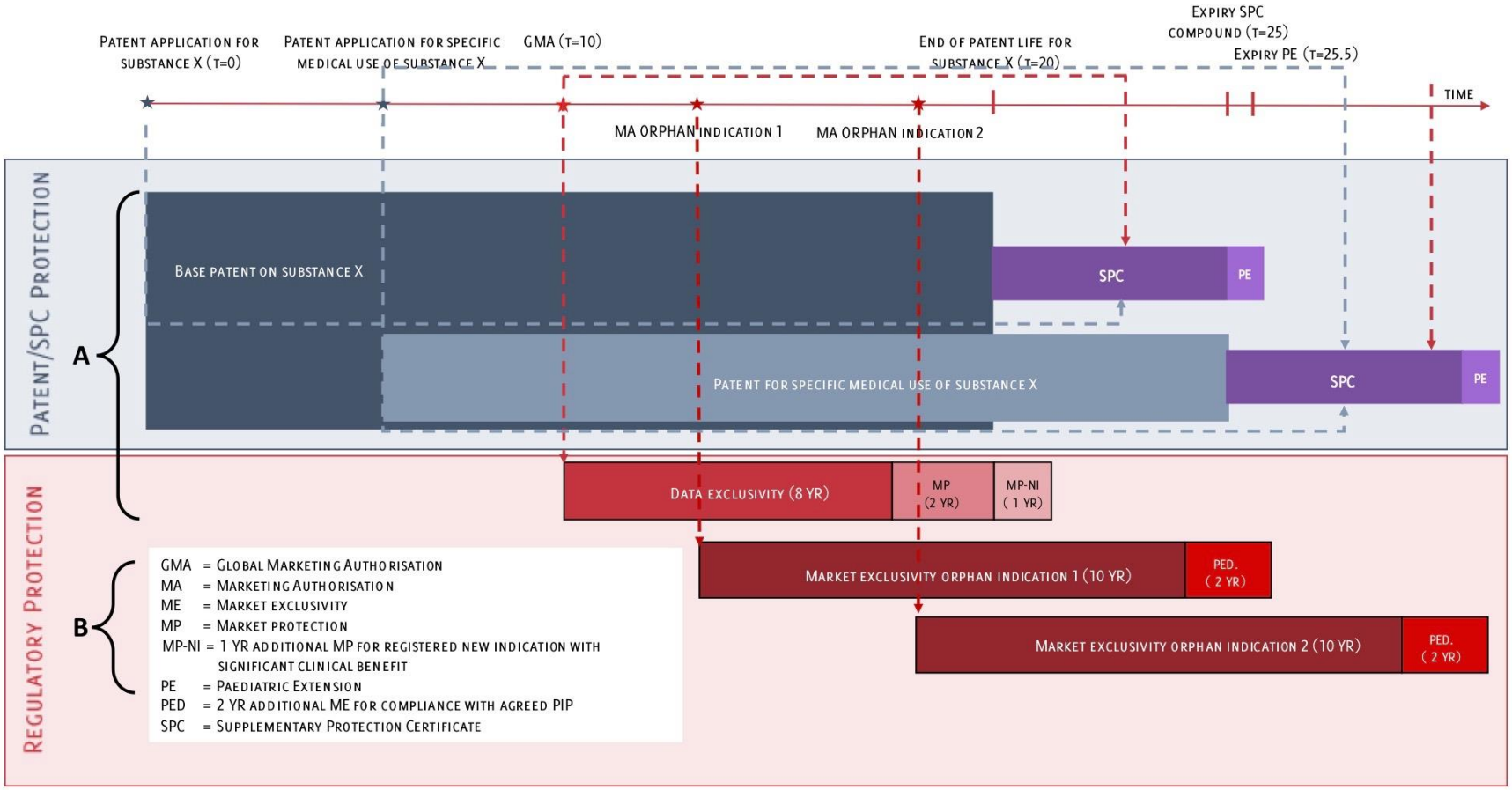
Cancer medicines

Medicine	Lowest-highest list prices in EU	Target price
Bortezomib (Multiple myeloma)	$982 (Spain) - $1,123 (UK) per month	$255 per month
Dasatinib (Chronic myeloid leukaemia)	$2,146 (UK) - $3,624 (Latvia) per month	$12 per month
Everolimus (Breast cancer)	$3,155 (UK) - $3,958 (Latvia) per month	$1,086 per month
Gefitinib (Lung cancer)	$1,786 (France) - $2,568 (Latvia) per month	$13 per month
Imatinib (Chronic myeloid leukaemia)	$2,261 (Latvia) - $32,906 (Spain) per year	$172 per year
Erlotinib (Lung, pancreatic and others)	$26,416 (France) - $36,678 (Latvia) per year	$240 per year
Lapatinib (Breast cancer)	$33,549 (Spain) - $49,887 (Latvia) per year	$4,020 per year
Sorafenib (Kidney and liver cancer)	$45,162 (France) - $67,877 (Latvia) per year	$1,450 per year

Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV) medicines

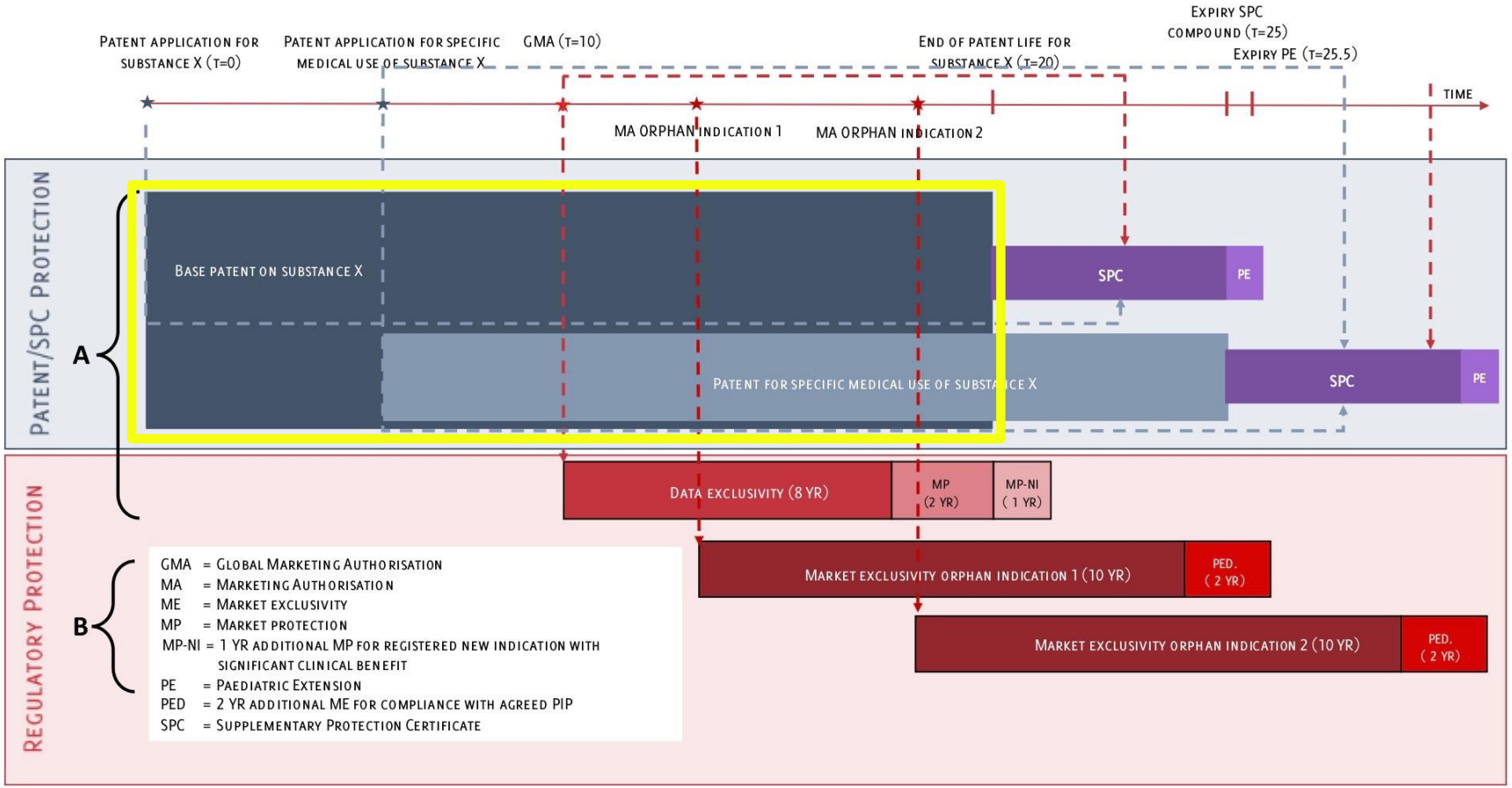
Medicine (Indication)	List price/ pill in UK	Target price/ pill	Current price/ treatment in UK	Target price/ treatment
Daclatasvir (HCV)	$379.44	$0.08	$31,872.96	$6.72
Darunavir (HIV)	$12.90	$1.45	$387 a month	$43.50 a month
Efavirenz+emtricitabine+tenofovir (HIV)	$23.09	$0.15	$692.70 a month	$4.50 a month
Ledipasvir+sofosbuvir (HCV)	$603.26	$1.02	$50,673.84	$85.68
Sofosbuvir (HCV)	$541.40	$0.57	$45,477.60	$47.88
Tenofovir disoproxil fumarate (HIV)	$8.85	$0.07	$265.50 a month	$2.10 a month

Patent and regulatory market exclusivity



Source: http://www.technopolis-group.com/report/effects-of-supplementary-protection-mechanisms-for-pharmaceutical-products/

Patents



Source: http://www.technopolis-group.com/report/effects-of-supplementary-protection-mechanisms-for-pharmaceutical-products/

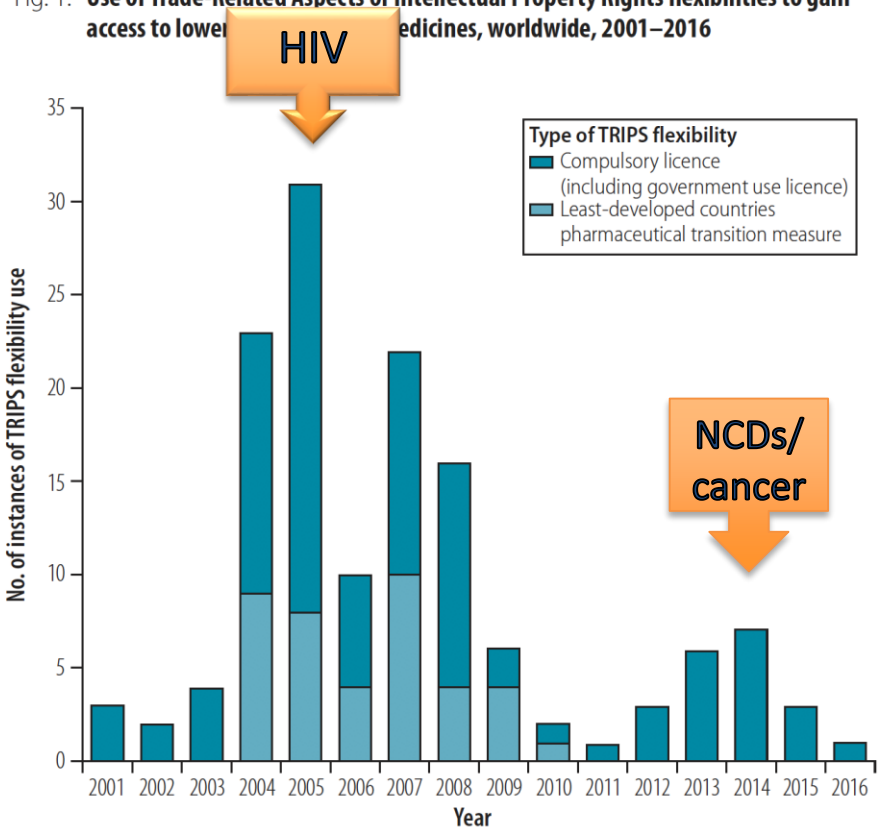
Patents

- Right to exclude others from making, using, offering for sale, selling, and importing the patented product (or a product made with a patented process)
- Minimum 20 years upon application
- Patents are national – global patent application procedures exist (WIPO PCT) but a global patents do not.
- Social policy tool to encourage innovation -> comes with a cost
- Patent law has public interest safeguards: e.g. compulsory license

Patents, TRIPS Agreement and access to HIV treatment

Policy & practice
TRIPS flexibilities and medicines

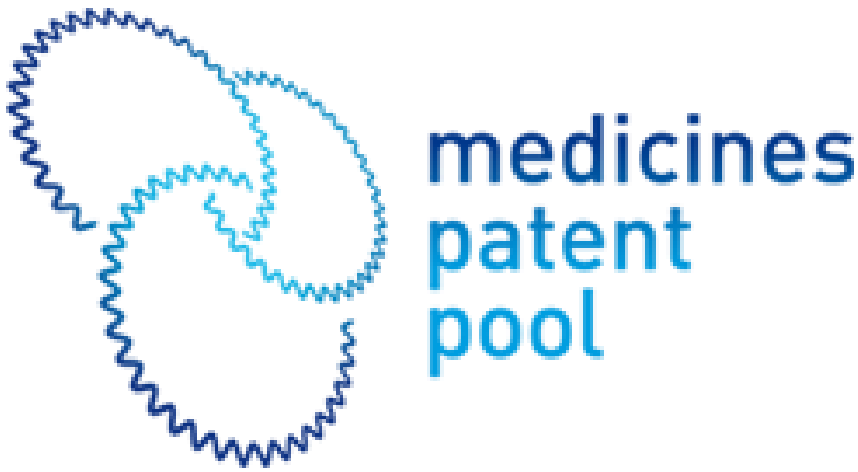
Fig. 1. **Use of Trade-Related Aspects of Intellectual Property Rights flexibilities to gain access to lowe edicines, worldwide, 2001–2016**



TRIPS: Trade-Related Aspects of Intellectual Property Rights (Agreement on).
Note: The least-developed countries pharmaceutical transition measure applies to World Trade Organization (WTO) Member States designated by the United Nations as least-developed countries and removes them from the obligation to grant and enforce medicine patents in accordance with Paragraph 7 of the Doha Declaration.

FM't Hoen E, Veraldi J, Toebes B, Hogerzeil HV. Medicine procurement and the use of flexibilities in the Agreement on Trade-Related Aspects of Intellectual Property Rights, 2001–2016. Bulletin of the World Health Organization. 2018 Mar 1;96(3):185. http://www.who.int/bulletin/volumes/96/3/17-199364.pdf

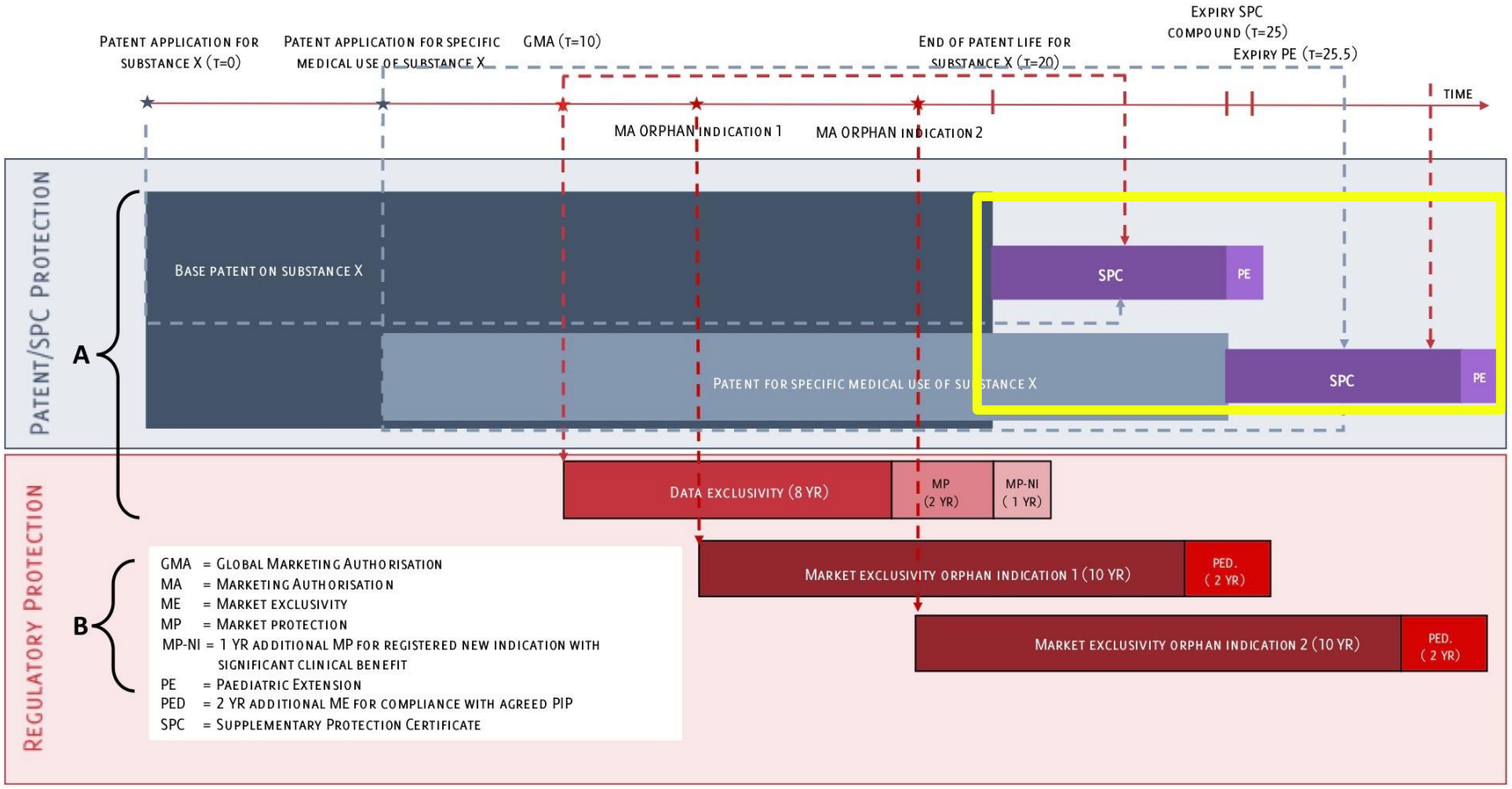
Medicines Patent Pool



- Voluntary licensing
- Estabished in 2010 for HIV
- All WHO recommended regimen
- 87-91% of adult PLHIV covered and 99% of children
- Expanded to TB and HCV
- And all WHO Essential Medicines

PATENTS ARE PERHAPS THE LEAST OF OUR WORRIES?

Supplementary Protection Certificates



Source: http://www.technopolis-group.com/report/effects-of-supplementary-protection-mechanisms-for-pharmaceutical-products/

Supplementary Protection Certificates

- Up to **5 years of additional patent-like protection** to a registered medicine

- To compensate for lack of commercial exploitation before the medicine's regulatory approval & increase pharma R&D in EU
  - Ensure **15 years of effective patent protection**
  - Deemed necessary **"to cover the investment put into the research"**

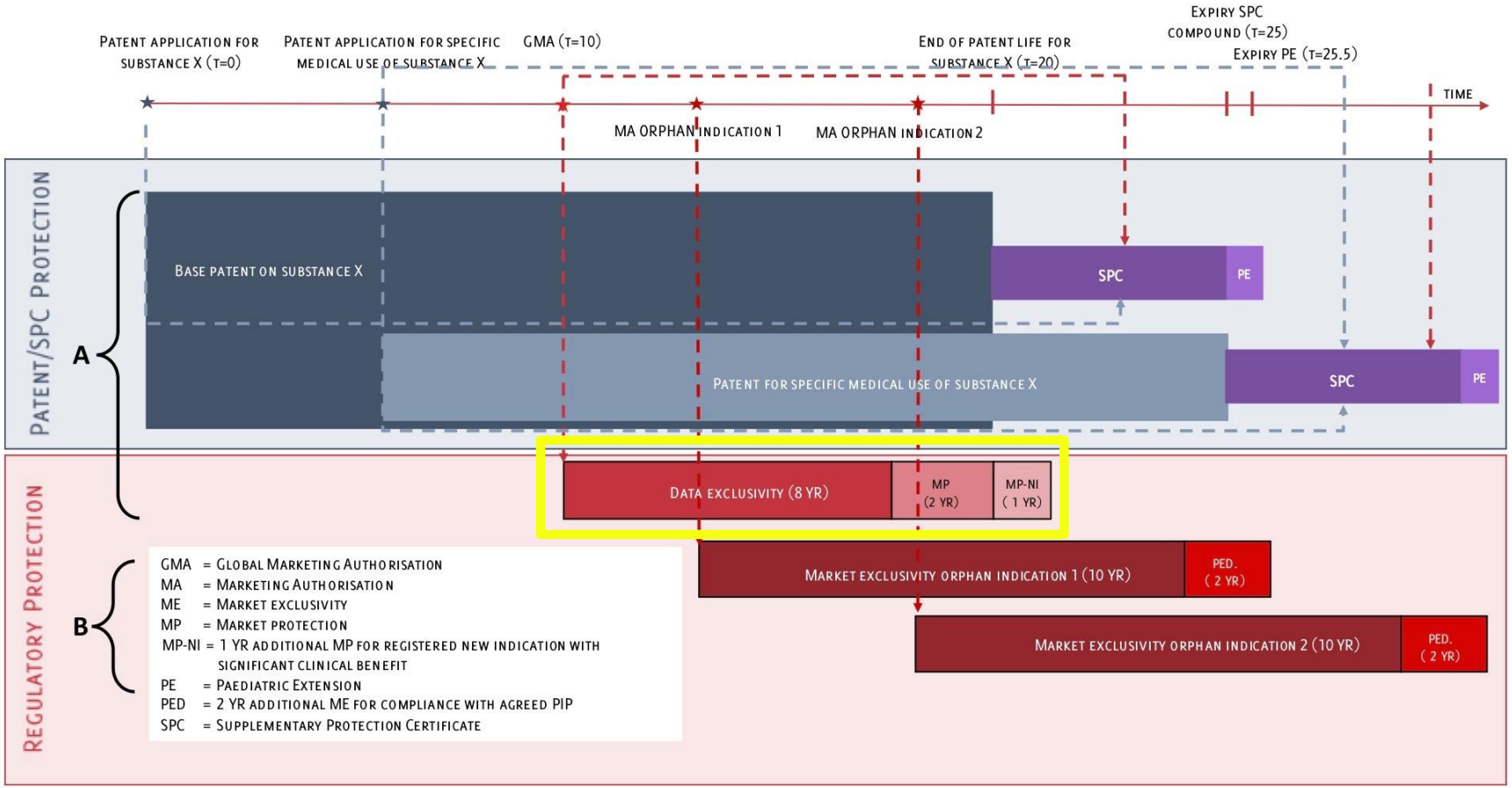
Regulation (EEC) No 1768/92, Regulation (EC) No 469/2009

Higher prices of medicines with SPCs

Example of the HIV medicine TDF/FTC (Truvada)

Country	SPC status	Price (30 tablets) in €
The Netherlands	Never granted	30,65
France	Revoked	170
Switzerland	In force	800

Data Exclusivity



Source: http://www.technopolis-group.com/report/effects-of-supplementary-protection-mechanisms-for-pharmaceutical-products/

Data Exclusivity 1/2

- Data exclusivity was first introduced in the EU in 1987
  - 6 years / 10 years biologics
  - 2004 EU exclusivity regime expanded: '8+2+1 rule'

- To **protect the investment** in the production of test data needed to obtain marketing authorisation by **preventing use by generic companies** for a certain period of time

- During the period of data exclusivity, a generic **competitor product cannot be considered for registration**

Directive 87/21/EEC, 2004/27/EC

Data Exclusivity 2/2

- Data exclusivity is automatic:
  - **does not require an application** nor evidence of its need
  - data exclusivity is granted **regardless of the level of investment** in generating the test data
  - **quietly enforced through medicines regulation**

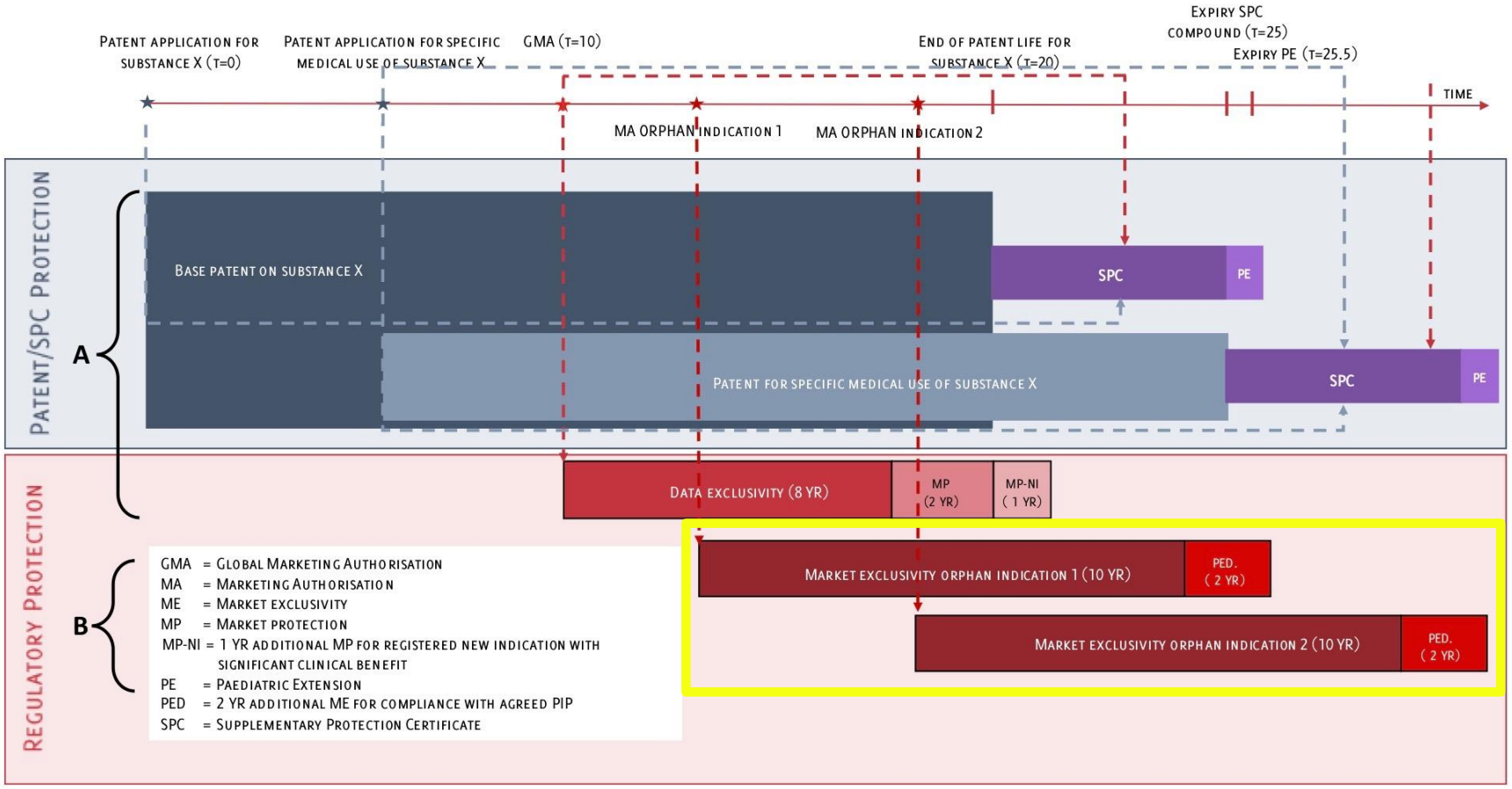
- **No international obligation** to provide data exclusivity
  - WTO TRIPS 39.3: protect certain kind of data related to new chemical entities (NCEs) against unfair commercial use
  - A majority of WTO members do not provide data exclusivity

- EU generally requires data exclusivity **commitments in Free Trade Agreements** (FTAs)

Data Exclusivity - the case of Ukraine

- EU-Ukraine DCFTA ->5-year data exclusivity
- Sofosbuvir not patented in the Ukraine
- Generic company Pharco1st to apply for marketing authorisation (MA) (granted 18.11.15)
- Originator Gilead granted MA on 9.10.15 claiming DE until 2020
- Under legal pressure (incl. ISD threat) Ukraine revoked Pharco's MA

Orphan Medicinal Products



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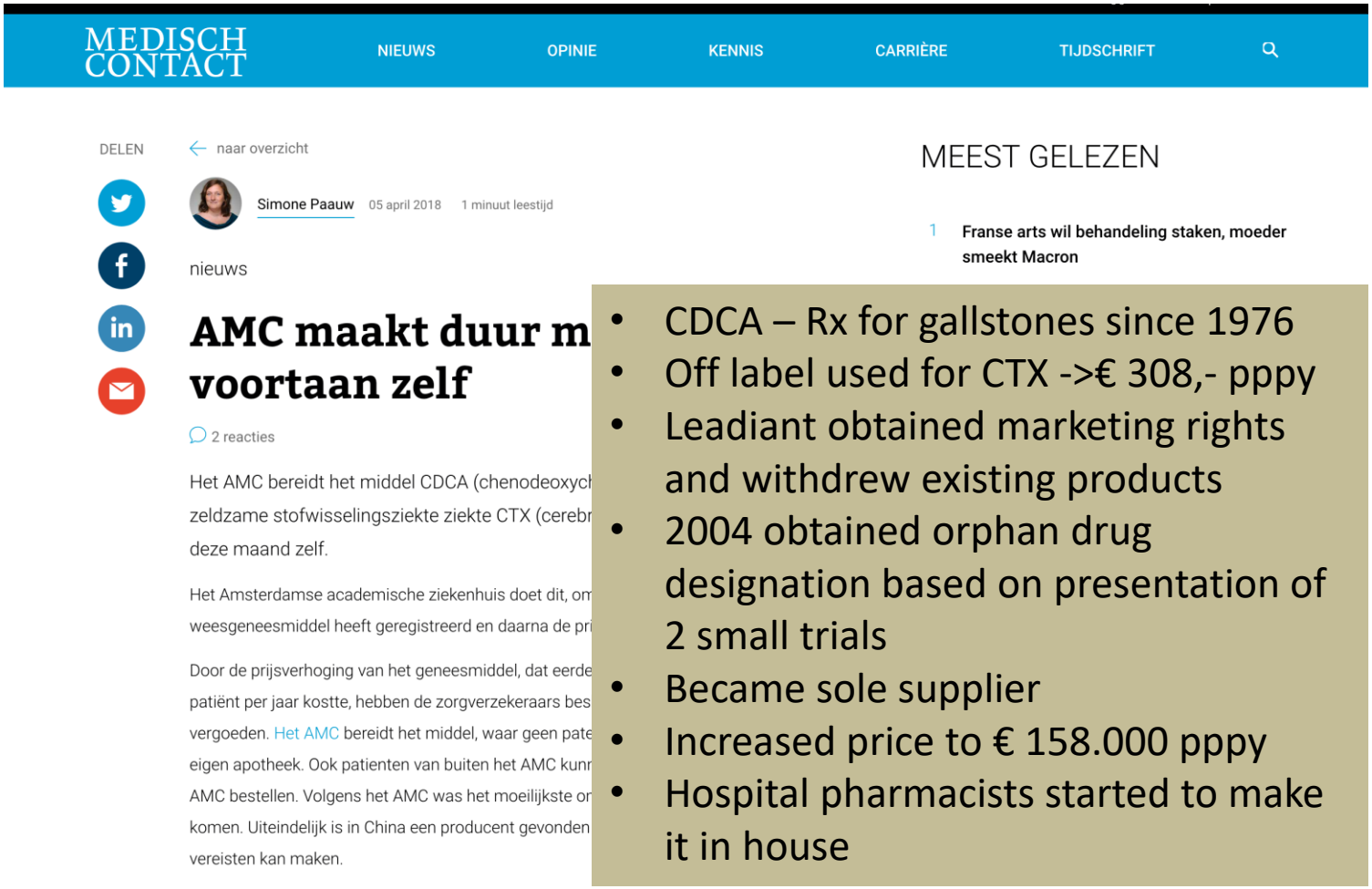
Orphan Medicinal Products

- Targets rare diseases ≤ **5 patients/10,000 of population**
- Estimated to be at least **8,000 such rare diseases** and c. 30 million EU citizens affected
- A mix of **push and pull incentives**
  - Protocol assistance
  - Fee waiver
  - Framework for EU and Member State R&D funding
  - 10 year market exclusivity

Regulation EC 141/2000

Gaming the Orphan Drug Act: CDCA in the Netherlands


MEDISCH CONTACT

NIEUWS OPINIE KENNIS CARRIÈRE TIJDSCHRIFT

DELEN

naar overzicht

Simone Paauw 05 april 2018 1 minuut leestijd

nieuws

AMC maakt duur m voortaan zelf

2 reacties

Het AMC bereidt het middel CDCA (chenodeoxych zeldzame stofwisselingsziekte ziekte CTX (cerebr deze maand zelf.

Het Amsterdamse academische ziekenhuis doet dit, om weesgeneesmiddel heeft geregistreerd en daarna de pri

Door de prijsverhoging van het geneesmiddel, dat eerde patiënt per jaar kostte, hebben de zorgverzekeraars bes vergoeden. Het AMC bereidt het middel, waar geen pate eigen apotheek. Ook patienten van buiten het AMC kunn AMC bestellen. Volgens het AMC was het moeilijkste or komen. Uiteindelijk is in China een producent gevonden vereisten kan maken.

MEEST GELEZEN

1 Franse arts wil behandeling staken, moeder smeekt Macron

- CDCA – Rx for gallstones since 1976
- Off label used for CTX ->€ 308,- pppy
- Leadiant obtained marketing rights and withdrew existing products
- 2004 obtained orphan drug designation based on presentation of 2 small trials
- Became sole supplier
- Increased price to € 158.000 pppy
- Hospital pharmacists started to make it in house

New medical therapies – Pills or Skills?

- CAR-T - blood cancer treatment
  - Yescarta $373,000 Kymriah $475,000 for single dose
  - Cost of production estimates -> $20,000
- Gene therapies, cell therapies

→Products or therapeutic methods?

… Pills or Skills?

TRIPS Article 27 3(a)

Patentable Subject Matter

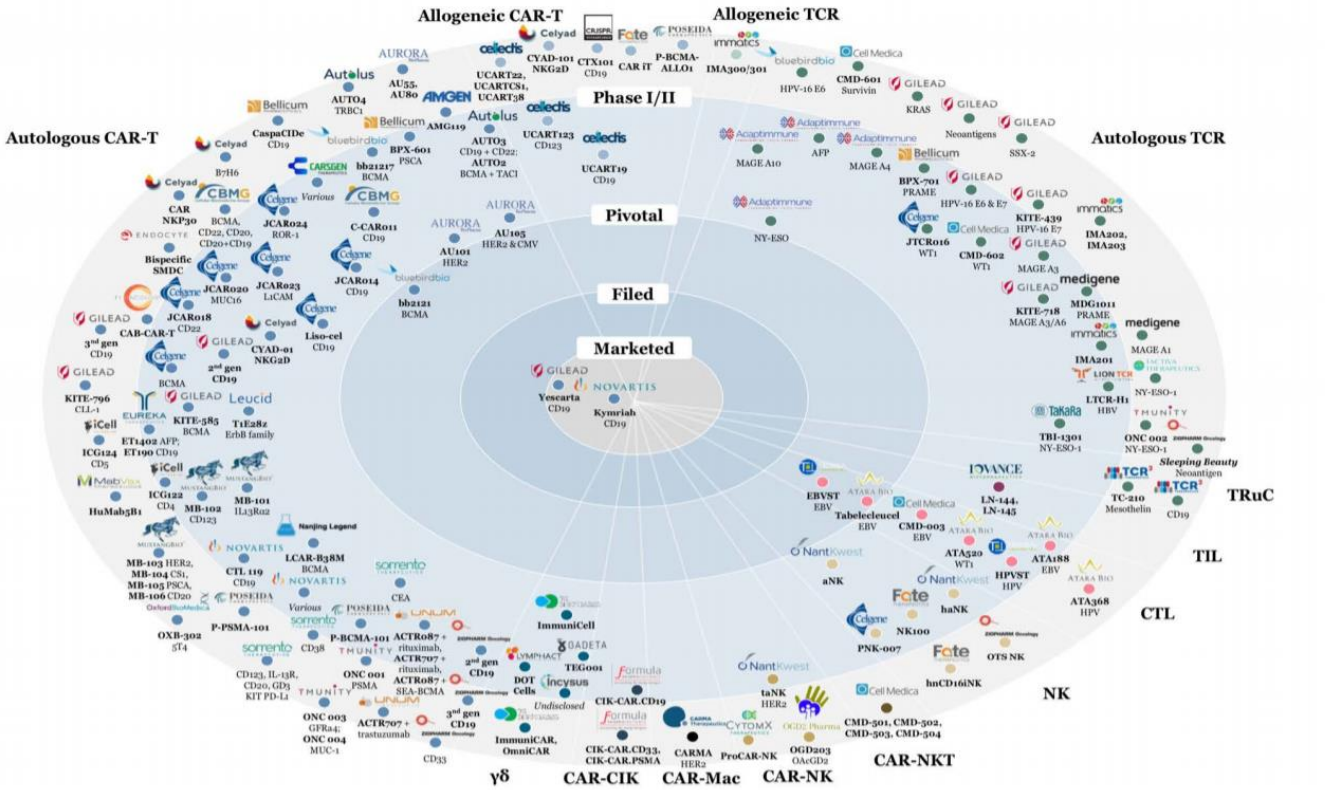
…

2. Members may exclude from patentability inventions, the prevention within their territory of the to protect *ordre public* or morality, including to protect human, animal or plant life or health or to provided that such exclusion is not made merely because the exploitation is prohibited by their law.

3. Members may also exclude from patentability:

(a) diagnostic, therapeutic and surgical methods for the of humans or animals;

CAR T Success Leads to Massive Investment in Cell Therapy



Source:
Aditi Krishnamurthy, Michelle Teicher, Benjamin Leibowitz, Jim Tornatore, Filippo Petti & John Bishai (Wells Fargo)

High Medicines Pricing a Global Issue

Campaigners protest outside the National Institute for Health and Care Excellence over

s no longer an option

— Why Access

JUNE 2016

EDITORIAL

Jonathan D. Ai

bold enough. Im
an international
financing for R&D.
transparency, good g
all emphasised, includi
that pressure countries

The report was oppos by the US
the pharmaceutical industry whose attempts to dilute health and development agenda. ■ *The Lancet*

For the **High-Level Panel report** see http://static1.squarespace.com/static/562094dee4b0d00c1a3ef761/t/57d9c6ebf5e231b2f02cd3d4/1473890031320/UNSG+HLP+Report+FINAL+12+Sept+2016.pdf

For **Essential Medicines are still essential** see Comment *Lancet* 2016; **386**: 1061–63

Dutch Ministers on access to medicines:

*"We cannot achieve any real progress without acknowledging that the current patent-based business model and the w[illegible] need to change. [illegible] **intellectual prop[illegible] cornerstone of th[illegible] the price they lik[illegible] develop alternat[illegible]** money is used fo[illegible] agreement upfro[illegible] investment will mean for the final price. We believe that companies must provide full transparency regarding the costs of research and development (R&D)."*

NL Ministers E. Schippers (Health) and L. Ploumen (Foreign Trade and Development Cooperation), speaking in the Lancet. http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31905-5/fulltext

2006 EU council decided to review pharmaceutical incentive systems" to strengthen the balance in the pharmaceutical systems in de EU and its Member States" This review is ongoing.

https://www.consilium.europa.eu/en/press/press-releases/2016/06/17/epsco-conclusions-balance-pharmaceutical-system/

Time for a new approach

- Sufficiency principle in granting of incentives-> when is enough enough?
- Greater transparency price and cost
- Different financing models for R&D ->adequate resources are needed but delink from price

Thank you!

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ellenthoen@medicinceslawandpolicy.net

For background sources please visit:

www.medicineslawandpolicy.org

http://tripsflexibilities.medicineslawandpolicy.org/