



Patents and Public Pharma

## Patents are monopolies

#### TRIPS sets the minimum standard

Patents are granted for minimum 20 years (§33)

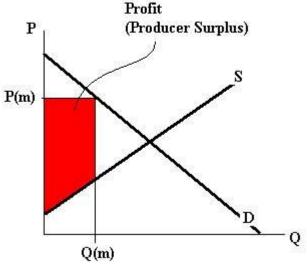
Patents need be granted on all products which are:

- New
- Industrially applicable

https://www.e-education.psu.edu/ebf200ank/node/134

Innovative (but TRIPS does not define, what is innovative)

Countries have different patent laws, which can be stricter (TRIPS plus)





### Patents are monopolies

#### TRIPS Flexibilities:

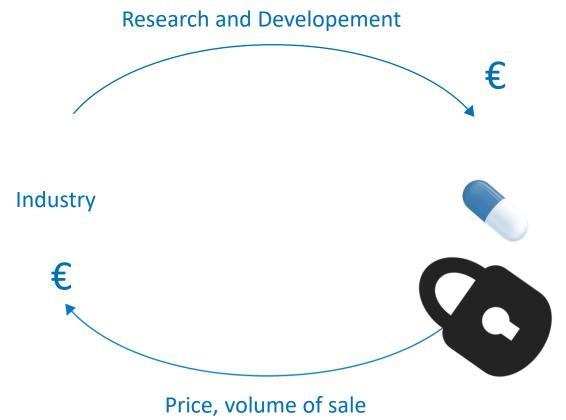
- Compulsory licences
- Parallel imports
- Criteria of what can be patented (section 3d in India)
- Exceptions for LDC
- Pre- and post-grant oppositions





## Patents are monopolies







## The problems of patents

- ❖ Evergeening: re-patenting a drug on the basis of "improved formulations," "new indications" or "combinations with another drug" This leads to unnecessary patents.
- System of drug production is paid by public tax money. But patents lead to: High costs of prescription medicine an huge profits for big pharma
- Incentive for corruption
- Irrationality and misuse



#### R&D costs

- ❖ 161 millions to 4.54 billions US\$
- Differences by therapeutic area, small/large molecules, orphan/non-orphan, original/licensed-in. firm size
- highest for anticancer drugs (between \$944 million and \$4.54 billion)

<u>Michael Schlander</u> et al, How Much Does It Cost to Research and Develop a New Drug? A Systematic Review and Assessment, 2021 <a href="https://link.springer.com/article/10.1007/s40273-021-01065-y">https://link.springer.com/article/10.1007/s40273-021-01065-y</a>



# From privatization through patents to medical research in the public interest

abolishing medical patents is scientifically, socially and morally preferable, economically and financially profitable and organizationally practicable.



## The myths

Only the patent system allows the pharmaceutical industry to recover its high R&D investments - drug research without patents is economically impossible

#### Answers:

Excessive profits resulting from highly overpriced drugs made by the pharmaceutical industries and are made possible by substantial public investments

Money that will be saved in a system with normal rather than excessive profits can be employed to establish a publicly funded and regulated R&D system

The huge amount of money paid for medicines by governments, insurance companies and individual patients could be spent publicly funded on the basis of a system without patents.

Hans Radder., Joost Smiers, Medical research without patents: It's preferable, it's profitable, and it's practicable, 2024 https://www.tandfonline.com/doi/full/10.1080/08989621.2024.2324913#abstract



## The myths

Pharmaceutical companies bear almost all risks and expenses of the system of drug production.

#### Answers:

A vast amount of public money is already being invested: public infrastructure of medical education and research.

Public contributions to early-stage drug research have significantly increased.

Excessive growth of healthcare expenditure

More money is spent on marketing than on R&D.

Costs of pharmaceuticals have grown in spite of attempts to curb them.

Hans Radder., Joost Smiers, Medical research without patents: It's preferable, it's profitable, and it's practicable, 2024 https://www.tandfonline.com/doi/full/10.1080/08989621.2024.2324913#abstract



## An alternative: Drugs and medical research without patents as Public Pharma

A semi-public Pharmaceutical Research Funding Agency (PRFA) must be need based and tax financed. It prioritizes public interest rather than privatization through patenting. Knowledge can be freely used as patents are no longer involved.

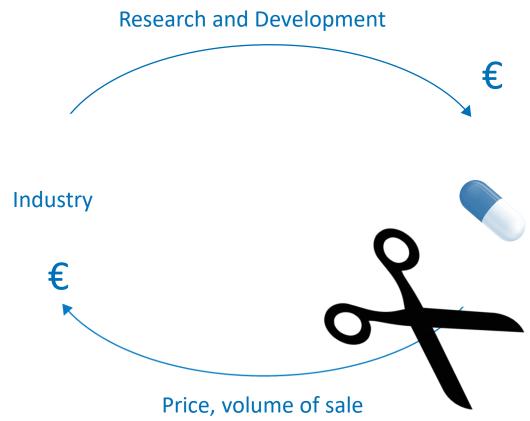
#### Tasks:

- Funding and organizing the research, development, manufacture and sale of prescription drugs.
- Manufacture at cost price
- Delivery to hospitals and pharmacies
- ❖ Medical Research as Open Source



## Delinkage

- Financial
  Awards: Direct
  Grants,
  Milestone und
  End Prizes
- Global access
- Patents are not an obstacle to further research





## Delinkage and Public Pharma through Open Science

**Open science:** anyone can freely access, use, modify and share the data for any purpose.

**Open Innovation:** Integration of extern knowledge in the process of innovation

Open Source: Open Data, Open Methodology, Open Access, free publication



## The advantages

- Much lower drug prices
- ❖ Medicine including research is returned to the public domain
- Open and faster research
- ❖ Healthcare will be affordable
- ❖ Global Access to medicines is increased



