



Business Finland Health Tuesday

# *IPR from a Viewpoint of Pharmaceutical Industry*



6.10.2020 / Pirjo Kortesus





# Agenda

Bayer Oy R&D and Supply Center Turku

Where Do Product Ideas Come From?

Why does the pharmaceutical industry need patents?

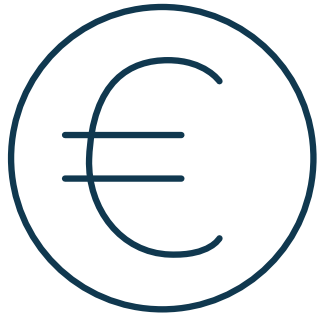
Patents and Product Development Phases

About Bayer Oy Patent Portfolio

Some topics that have been valuable in our patent work



## Bayer – Key data in 2019



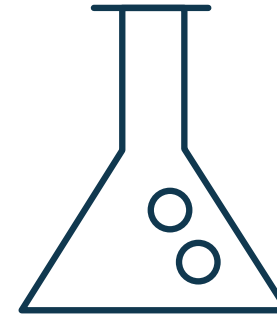
Sales

€ **43,5** bn



Personnel

**103 824**



Investment in  
R&D

€ **5.3** bn

**12%**  
*(high!)*



Countries

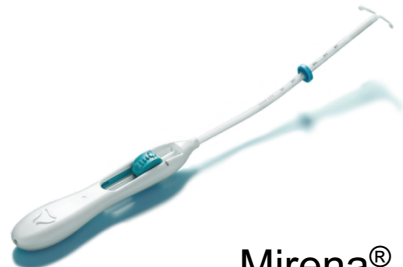
**90**



# Bayer Oy R&D and Supply Center Turku

Top production and R&D plant

- // 73 years of tradition in manufacturing pharmaceuticals
- // The biggest Bayer Pharma factory outside of Germany
- // The Turku site is **global technology leader in polymer-based drug delivery technology** (PBDS); the only Bayer site that develops and manufactures PBDS-products



Mirena®



Jaydess® /Skyla®


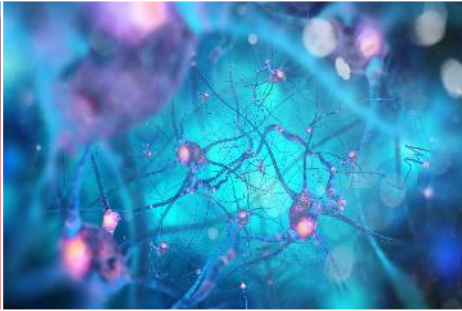




Jadelle®





# Where do new innovations come from?

				
<b>Strategic lever</b>	<b>R&amp;D</b>	<b>OPEN INNOVATION</b>	<b>EMPLOYEE INNOVATION</b>	<b>SOCIAL INNOVATION</b>
<b>Programs</b>	<ul style="list-style-type: none"> <li>// R&amp;D Tech Immersion</li> <li>// R&amp;D Data Science Integration Strategy</li> <li>// LifeScience Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>// Open Innovation strategy</li> <li>// LifeHub Programs</li> </ul>	<ul style="list-style-type: none"> <li>// Catalyst Fund</li> <li>// Catalyst Box</li> <li>// Mini-Sessions</li> </ul>	Cooperations with: <ul style="list-style-type: none"> <li>// myAgro</li> <li>// One Acre Fund</li> <li>// Pula</li> </ul>
<b>Platforms &amp; networks</b>	<ul style="list-style-type: none"> <li>// Science Communities</li> <li>// Data Science Network</li> <li>// Technology Platforms</li> </ul>	<ul style="list-style-type: none"> <li>// Global LifeHub Network</li> <li>// Open Innovation Portal</li> </ul>	<ul style="list-style-type: none"> <li>// Innovation Network</li> <li>// YOUNiverse</li> <li>// WeSolve</li> <li>// Hype</li> </ul>	<ul style="list-style-type: none"> <li>// Small holder farmers</li> <li>// Social entrepreneurs</li> </ul>



# Why does the pharmaceutical industry need patents? (1/2)

**Patents are essential to protect Bayer's innovation and intellectual property**



- to obtain **protection** for **our products and technologies** in major markets
- to **exclude others** from making, using, or selling their invention in the country where the patent was issued for 20 years
- to reinvest the profits in sustainable R&D
- **to limit the competition**

**Life Science collaboration and licensing enable**

- access to
  - complementary technologies
  - external innovation potential
  - innovative external compounds
- licensing new assets
- divesting non-strategic assets

# Why does the pharmaceutical industry need patents? (2/2)

- filing of patents require significant money and resources  
→ only those patents that have at least some potential to create value for the company should be filed

„Rule of thumb“ :

Patent applications

- should be linked to an active project or a product or
- should have the potential to enter a project



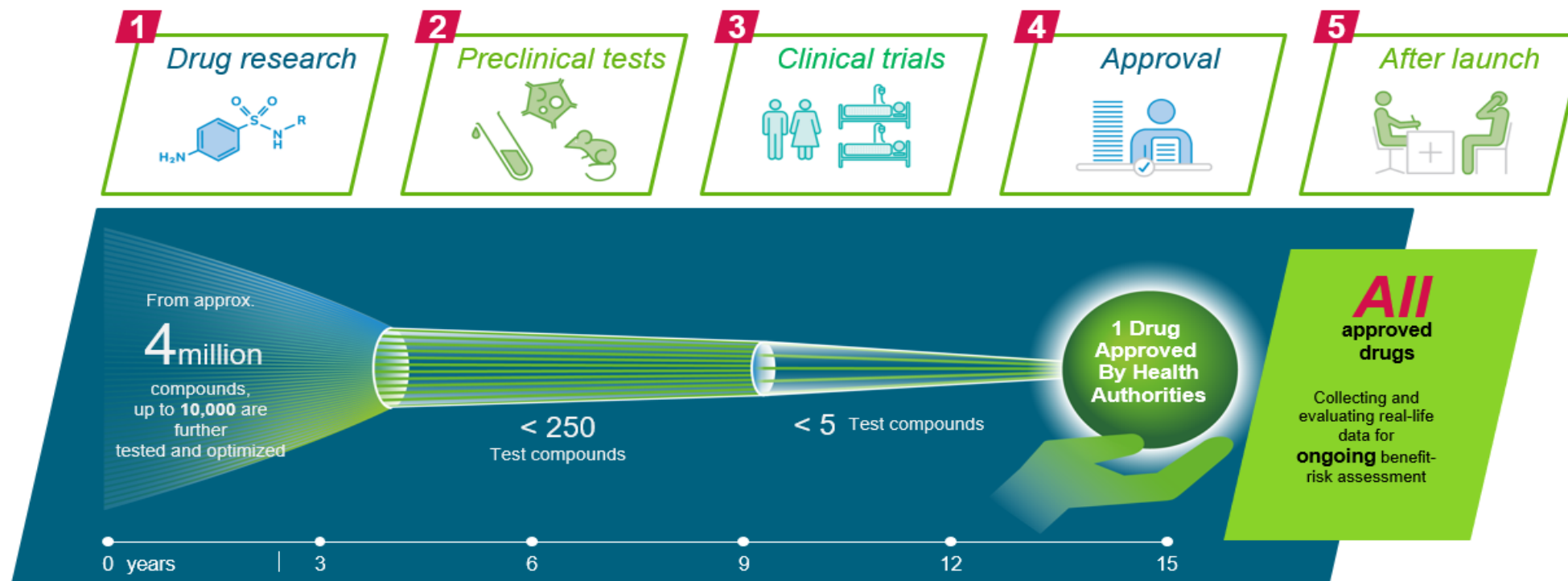
**Total cost for a patent family can reach 0.5Mio€ over its lifetime!**



# Patents and product development phases (1/2)

IP input along product development phases

- Freedom to operate
- Evaluation of patentability





# Patents and product development phases (2/2)

Topics to be covered annually:

- **search of competitor patents**
- **check new indications**
- **check formulations / product manufacturing process / improvements / modifications / compositions etc.**
- **check other items of IP relevance like e.g. patient selection, package designs etc.**

**Topics to be covered in the beginning of a new product development and every 3 years**

- White spot analysis



# About Bayer Oy Patent Portfolio



- The existing portfolio was group into 3 groups
  - (1) Patents for Bayer Oy Products (Mirena, Jaydess, Kyleena)
  - (2) Project related Patents
  - (3) New Innovations, Basic Technologies, and Miscellaneous

## Patent categories

Active  
Ingredient

Formulation

Component

Process  
Manufacturing  
process



# Some topics that have been valuable in our patent work

In addition to our German patent Counsel and our lawyers we have had a long term relationship with a local Finnish Patent Attorney

## Benefits

- The local contact knows our products and patent portfolio inside out
- Can work seamless with our scientists in applications
- Can support in innovation sessions, trainings, workshops
- Masters the company patent process from A-Z as well as local aspects
- Serves as and advisor in any question





## To Summarize...

- Importance of patents to protect innovative products and technologies
- Timing of patents
- Close collaboration with patent attorneys



*Thank you!*



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