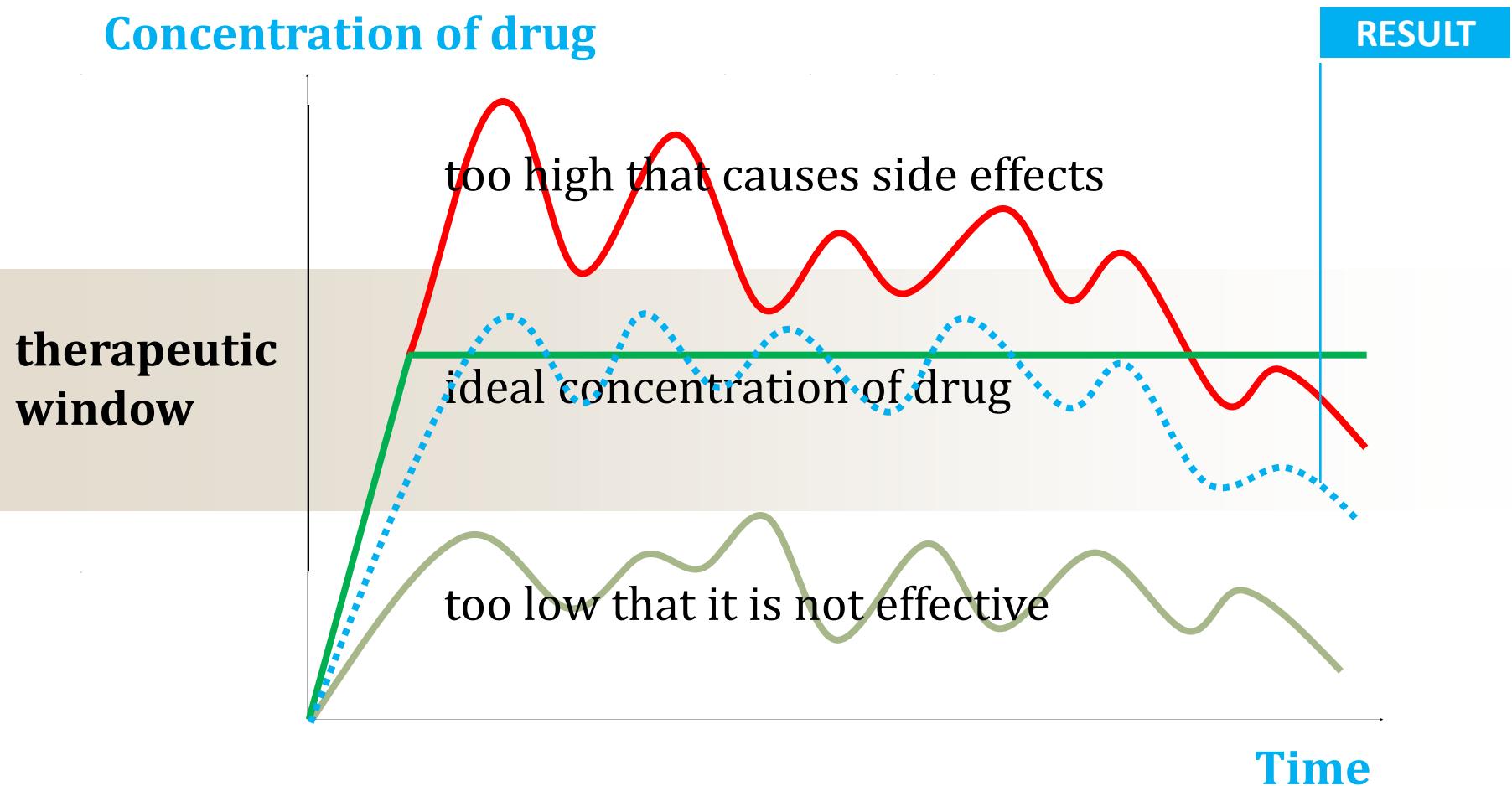


# **PHARMACEUTICAL COMPOSITION**

## **New Generation of Medicines**

Technology which enables the controlled release of a drug from the formulation.

# Problem – Uncontrolled therapy, uncontrolled administration of drugs

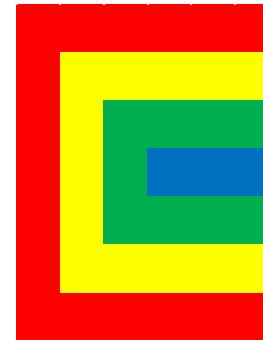
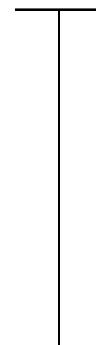


# Solution- The controlled release of a drug from the formulation

## Novelty – number and the order of coatings

RESULT

- **Formulation** – a lot of particles
  - DRC / drug resin complex + layers
- **Pharmaceutical composition** -
  - enables **controlled and site specific** release of drug from formulation
- **Technology** – spray granulation
  - modification – number / order of coatings



3 – enteric layer  
2 – bioadhesive layer  
1 – CR layer  
0 – DRC

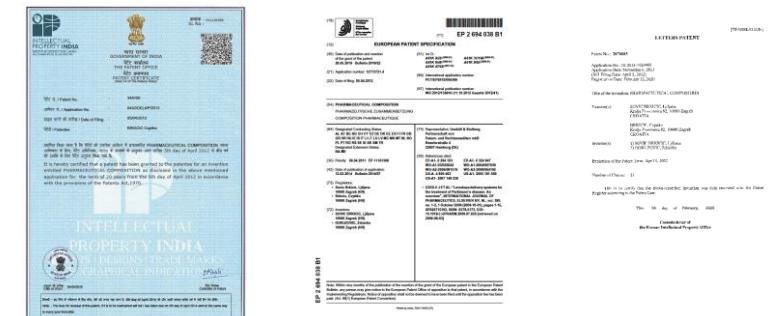
diameter 100-500  $\mu\text{m}$

**Model of particle (DRC + layers)**

*Patent application WO2012136816 (at national phases – 90 countries)*

# Patent application – WO201236816

- EPO application
- PCT application
- national applications
- 90 countries
- 4 patent unions, others
- granted – 90 countries
- covered – 3 billion people



# Competition

Example -  
novel  
levodopa  
(antiparkisonic)



Competitors	Duodopa	Existing oral formulations	Novel formulation
Price per year	50,000 Euros or more	1,000 Euros	3,000 - 5,000 Euros
Administration	parenteral	oral	oral
Features	unacceptable application	causes side effects	well controlled release
Rating of CR	excellent	bad	very good
Evaluation	<ul style="list-style-type: none"><li>⊖ Expensive</li><li>⊖ Very inconvenient</li><li>⊕ Highly effective</li></ul>	<ul style="list-style-type: none"><li>⊕ Low cost</li><li>⊕ Convenient</li><li>⊖ Ineffective</li></ul>	<ul style="list-style-type: none"><li>⊕ Price acceptable</li><li>⊕ Convenient</li><li>⊕ Very Effective</li></ul>

# The Platform - Usable for drugs with N

**Duodopa**

Hypertension

*morphine*

*olanzapine*

Depression

**Viagra**

*sildenafil*

Parkinson's disease

*tramadole*

**Sinemet**

*risperidone*

Epilepsy

*levodopa*

# Value Proposition



## Patients

- better drug treatments
- better therapy
- better quality of life



- therapeutic – lower side effects
- economic – saving money
- business – staying on job / working

## Health insurances / payers

- will ensure better treatments
- rationalisation of costs
- lower costs



- therapeutic – better healthcare
- economic - saving money (long-term)
- business – better results

## Pharmaceutical company

- will produce better products
- good business opportunity
- higher market share



- **added value** – higher profit
- revenues in billion / **blockbusters**
- **The Platform**

# Market Opportunity & Risks

## Market

→ *European and global*

## Blockbusters (past and future)

→ *Revenues in billion / Large PH company*

## The Platform

→ *Usable to all drugs containing N (nitrogen)*

# Business Model

## § Licensing (Model 1 of commercialization)

- cooperation with large pharmaceutical company
  - resources, fast realization, **high revenues, blockbusters**
- 



## Production (Model 2 of commercialization)

- outsourced production, later own production
  - higher costs, slower realization, longer exploitation
- 



## Next proceedings

- completing of package for commercialization / licensing
- **small trials** (known main and additional substances)

# Commercialization & Marketing

## Licensing (Model 1)...

### ...to large PH company

- need for novel products
- crisis in PH industry
- lack of good inventions
- **this is the opportunity**
- resources, **files**, network

## Production (Model 2)...

### ...outsourced production

- need for better therapy
- novel technology developed
- **small trials**
- registration of medicines
- **fast** commercialization



# Financial Projections

## Licensing...

### Large PH (Model 1)

- revenues in **billion**
- **blockbusters**
- **added value** - generics
- **prolong** patent protection
- **The Platform**

## Production...

### SME (Model 2)

- need partnering
- need funding
- slower realization
- less revenues
- less profit

# Who we are?



**Zdravko  
Dokuzović, PhD**

Researcher, inventor,  
technologist,  
earlier patents



**Ljiljana  
Sović Brkičić**

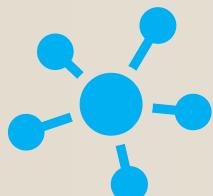
Researcher, inventor,  
patent applicant,  
idea, business strategy



**Cvjetko  
Brkičić**

Patent applicant,  
business experience,  
investment

**Team** – 95 years of experience; 15 years on this project; 36,500 hours of work (this project)

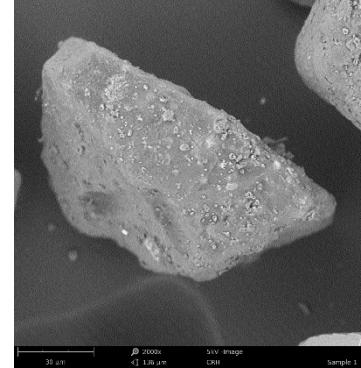


**BLC pharmaceuticals d.o.o.**

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# Conclusion



We have a solution which will improve  
the lives of people.

We have the best innovative project in Europe.  
This is project with global potential.

# Points



## Novel technology / New generation of medicines

- developed
  - patents granted up to the year 2032 (+ 5 years additional)
- 



## The Platform

- usable to different drugs
  - usable to all drugs containing nitrogen (N)
- 



## Important / novel technology is applicable

- generics - **added value**, new generation of medicines
- novel drugs – **to prolong patent protection**