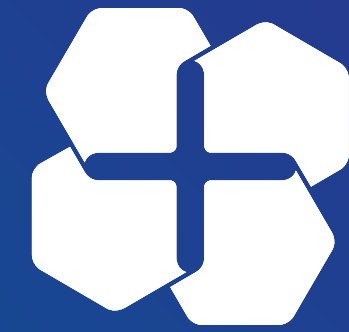


i+Med



BIOMEDICAL  
INTELLIGENCE



# COOPERATIVE OF SCIENTISTS

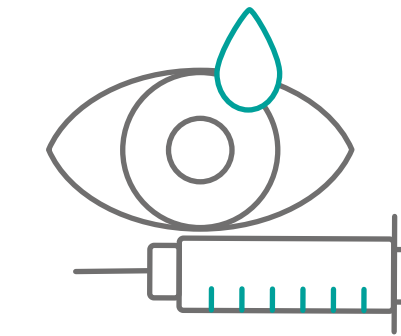
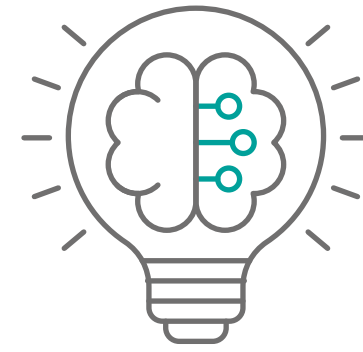
2013

2015

2024



**NEW  
FACILITIES  
Q4 2023**



## 3rd PARTY DEVELOPMENTS

- + Hydrogels
- + Drug delivery systems
- + Nanocarriers



## MANUFACTURING OF FINISHED PRODUCTS

- + Long acting injectables
- + Eye drops
- + Topical use

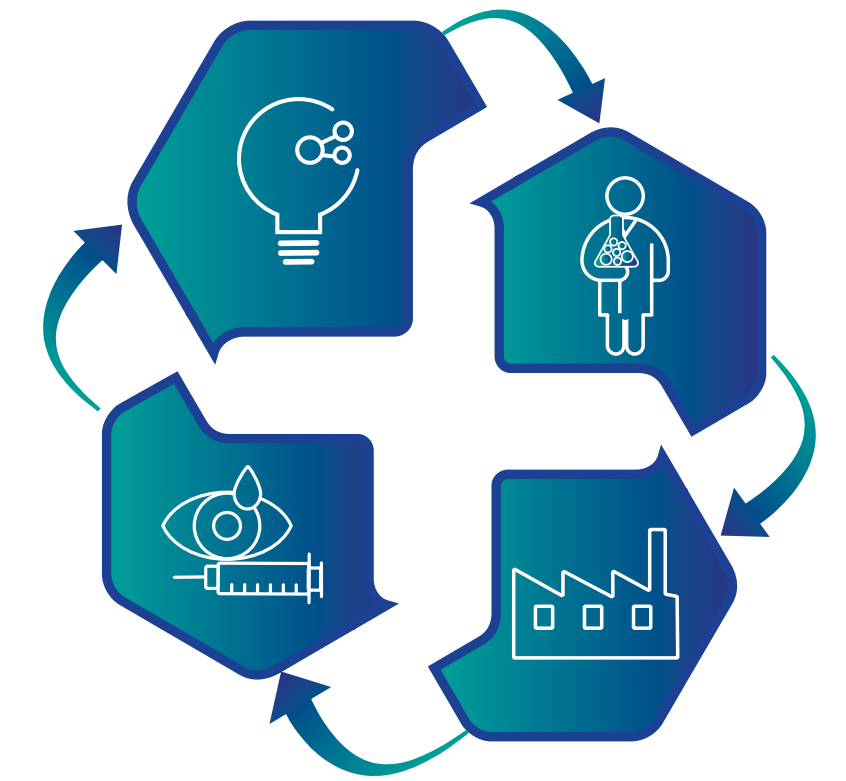
**ADAPTEK TECHNOLOGIES** ← **Controlled release** → **ADAPTMED PRODUCTS**



**WE WORK AS  
AN EXTERNAL  
R&D UNIT**



## PARTNER 360°



ABILITY TO ASSUME **ALL PHASES OF THE PROJECT.**

- + Technological development
- + Patentability
- + Certification
- + Regulation and Quality assurance
- + Manufacturing of prototypes and pilot batches
- + Industrial scale-up
- + Analysis and assays

**+90**

R&D  
Projects

**72**

Researchers  
in the team

**14**

National and  
international awards

## OUR PATENTS



**06**

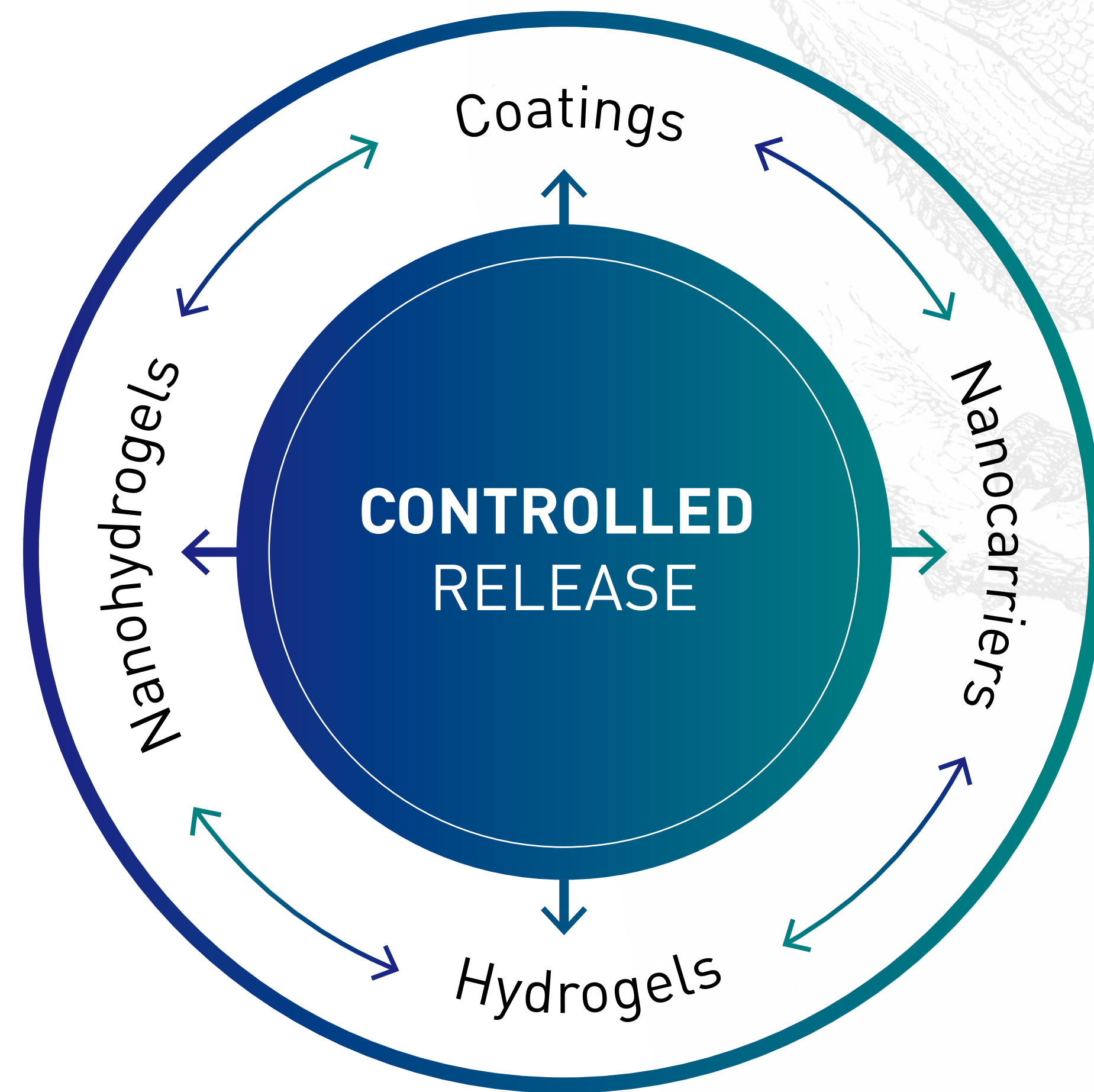
**Technological  
Patents**

- + Controlled release
- + Nanocarriers
- + Coatings
- + Phytocannabinoids



# ADAPTEK TECHNOLOGY

A cross-cutting technology that allows the generation of biomedical and pharmaceutical solutions with high added value customized for each client.



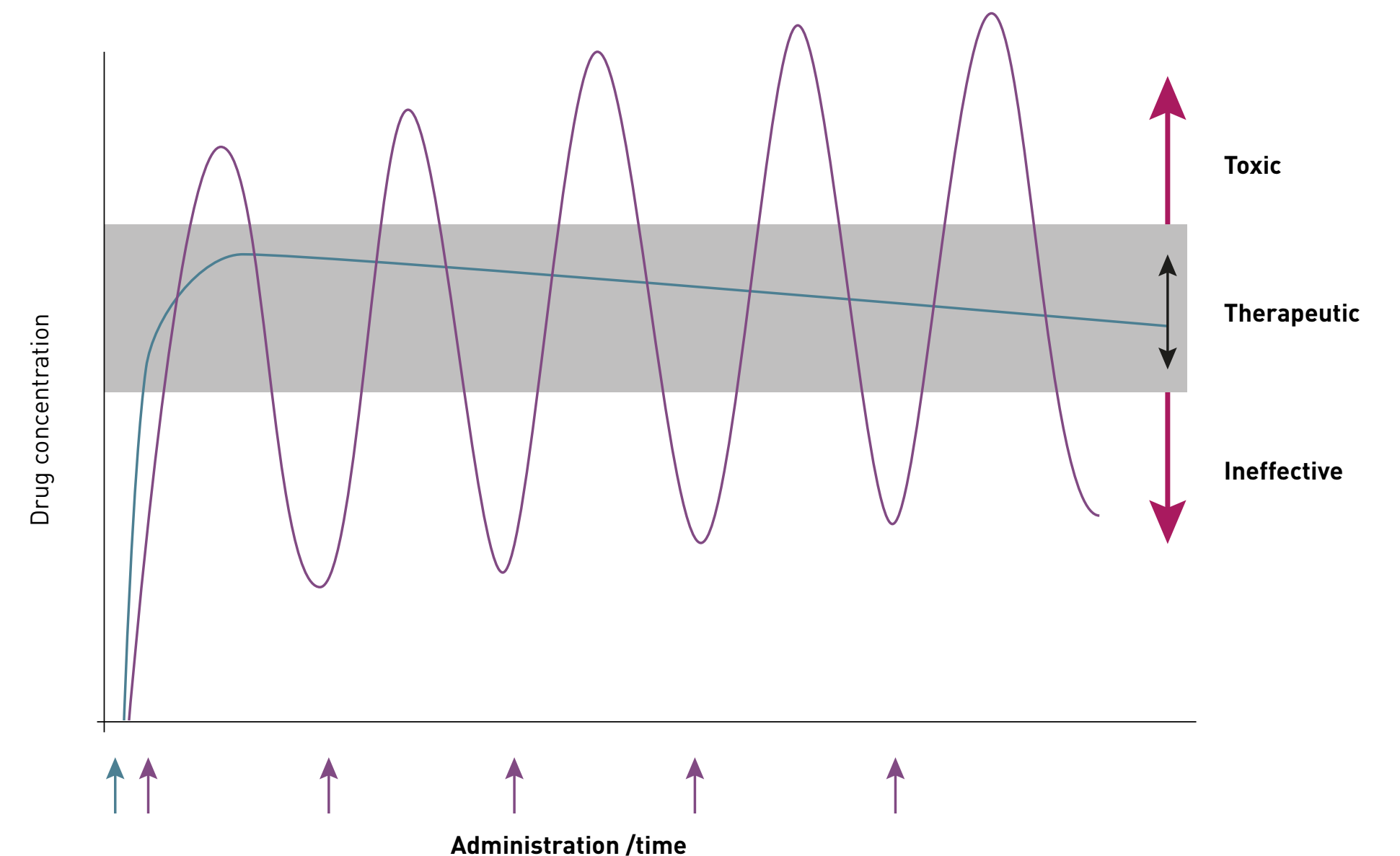
# CONTROLLED RELEASE

## MEDICAL ADVANTAGES

- + Long duration of the treatment since the 1st application
- + **Less toxicity** and systemic exposure with less side effects
- + **Better efficacy**
- + **Stabilisation of molecules:** against degradation, oxidation, improved solubility...
- + **Less frequency of applications:** better patient compliance

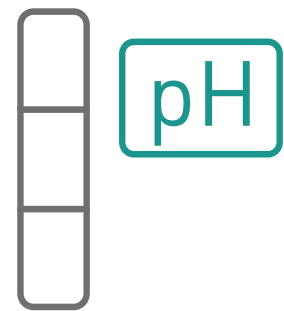
## CORPORATE BENEFITS

- + **Cost reduction**
- + **Intellectual property** and patent extension





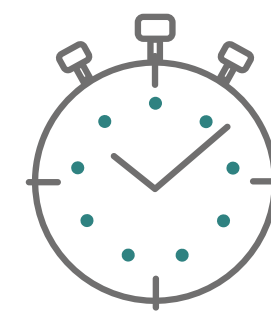
# STIMULI CONFIGURATION



**pH**  
DEPENDENT



**TEMPERATURE**  
DEPENDENT

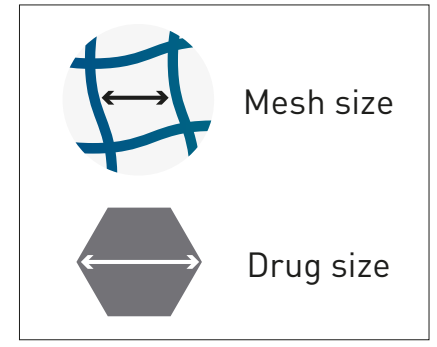
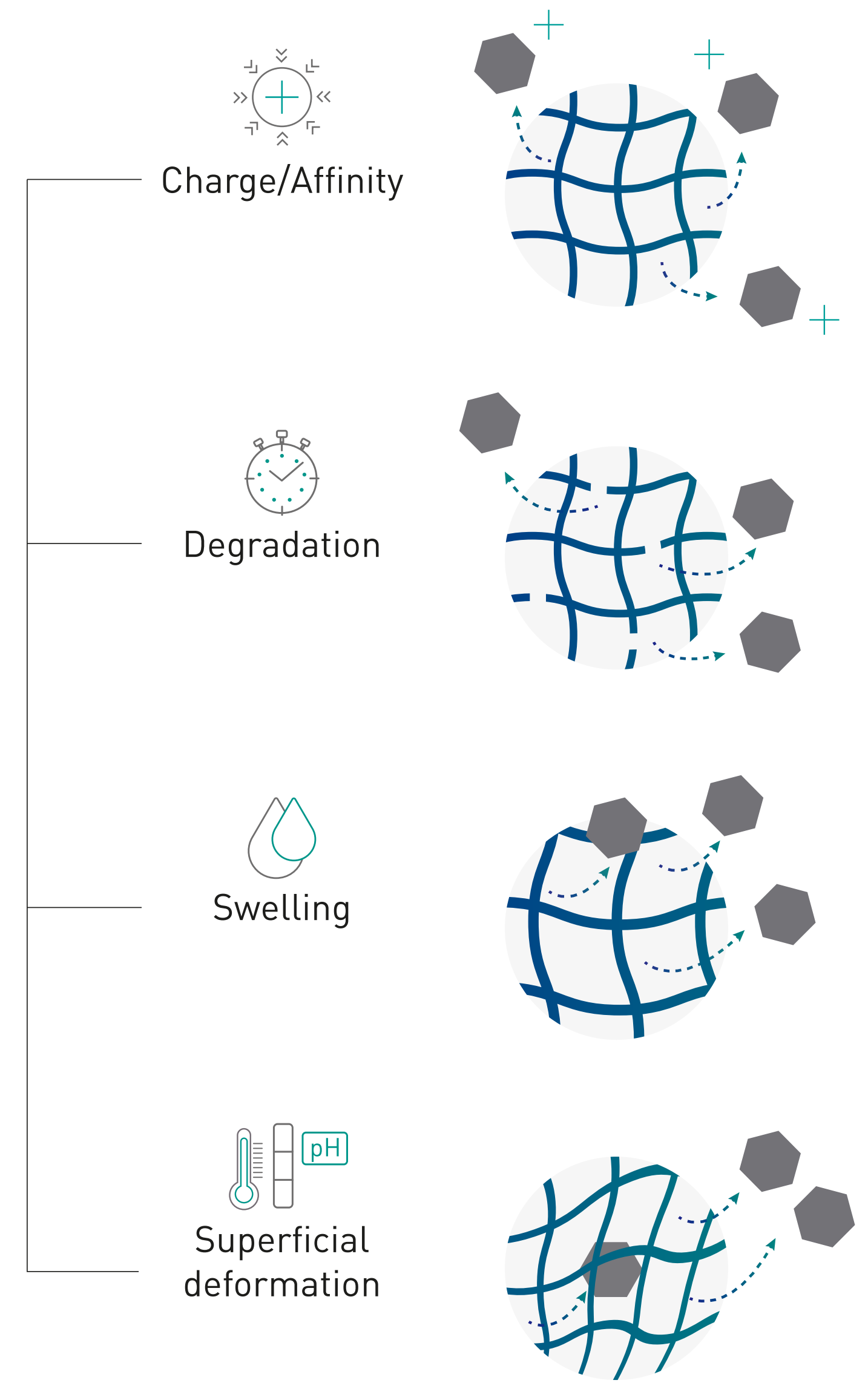
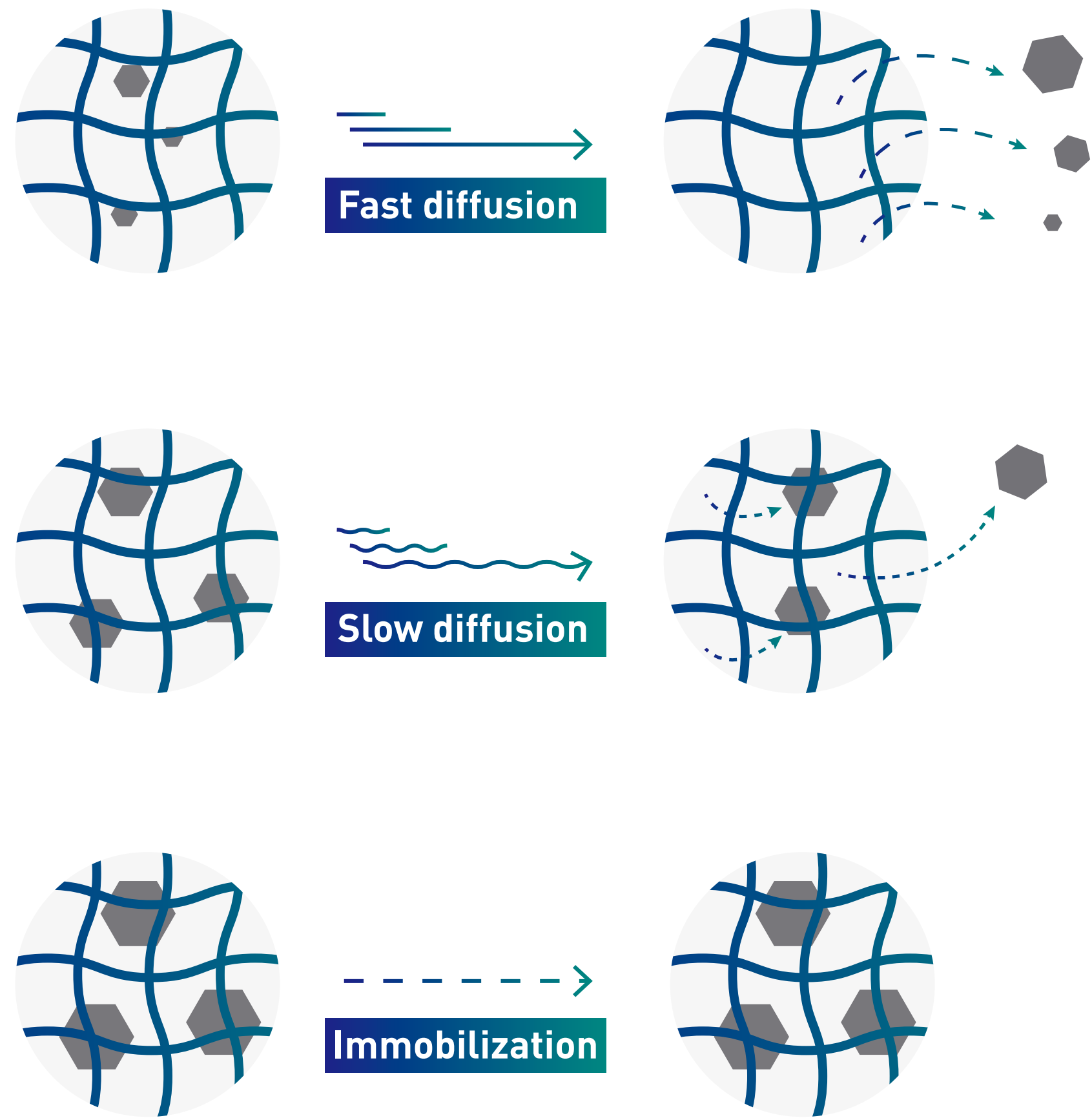


**TIME**  
DEPENDENT



**HUMIDITY**  
DEPENDENT

# Controlled release mechanisms

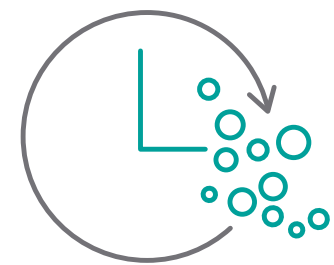




# CONTROLLED RELEASE

UP  
TO 90

DAYS OF  
CONTROLLED  
RELEASE

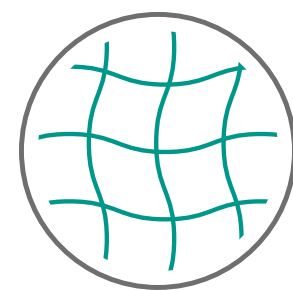


## APPLICATIONS:

- + **Our technologies can be adapted** to a wide variety of active compounds (small molecules, peptides, cells..)
- + **Controlled release can be achieved even in sensitive tissues** (mucous, inner ear...)
- + **We can manufacture a wide variety of formats:** injectables, creams, ointments, gels, sprays, coatings, etc

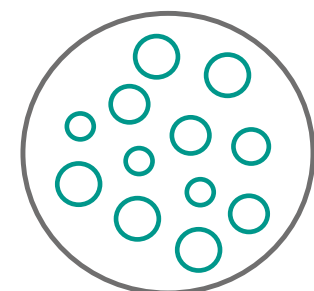
# CONTROLLED RELEASE

## TECHNOLOGY



### HYDROGELS

Continuous biopolymeric Hydrogels **containing your substance and leading its biological activity.**



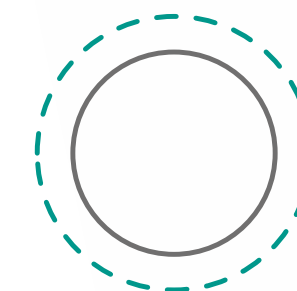
### NANOCARRIERS

**NanoCarriers** are nanoparticle systems that vehiculize your active substances **enhancing bioavailability** and formulation capabilities.



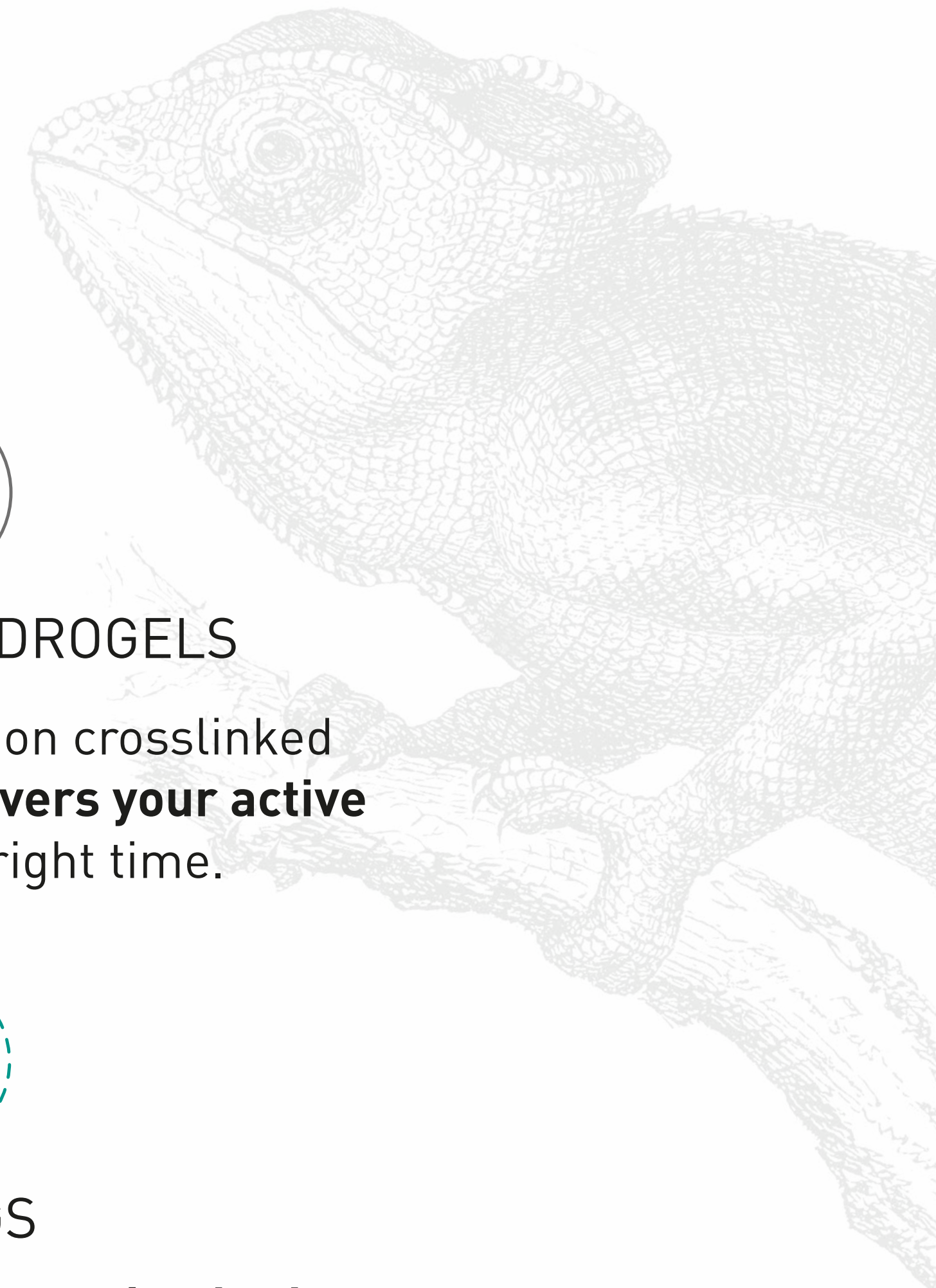
### SMART NANOHYDROGELS

**NanoHydrogels** based on crosslinked polymeric networks **delivers your active ingredient** at the right time.

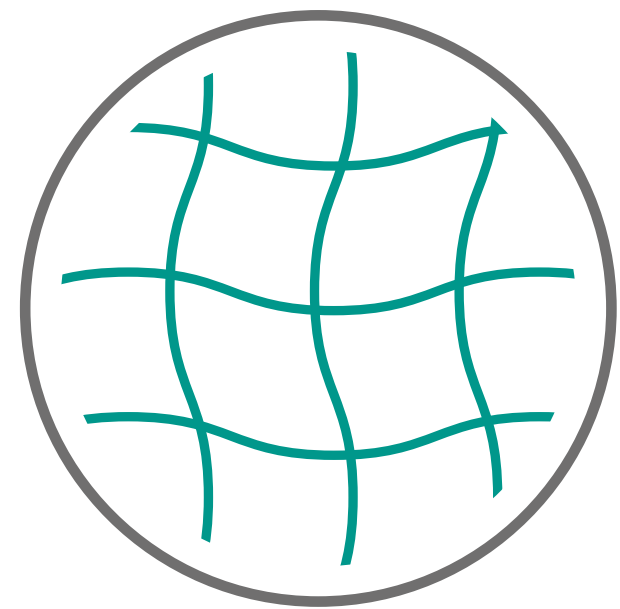


### COATINGS

**i+Med** coatings perform a **sustained release** of the client's active substances, and acts as a physical barrier **against biofilm** formation.







## Hydrogels

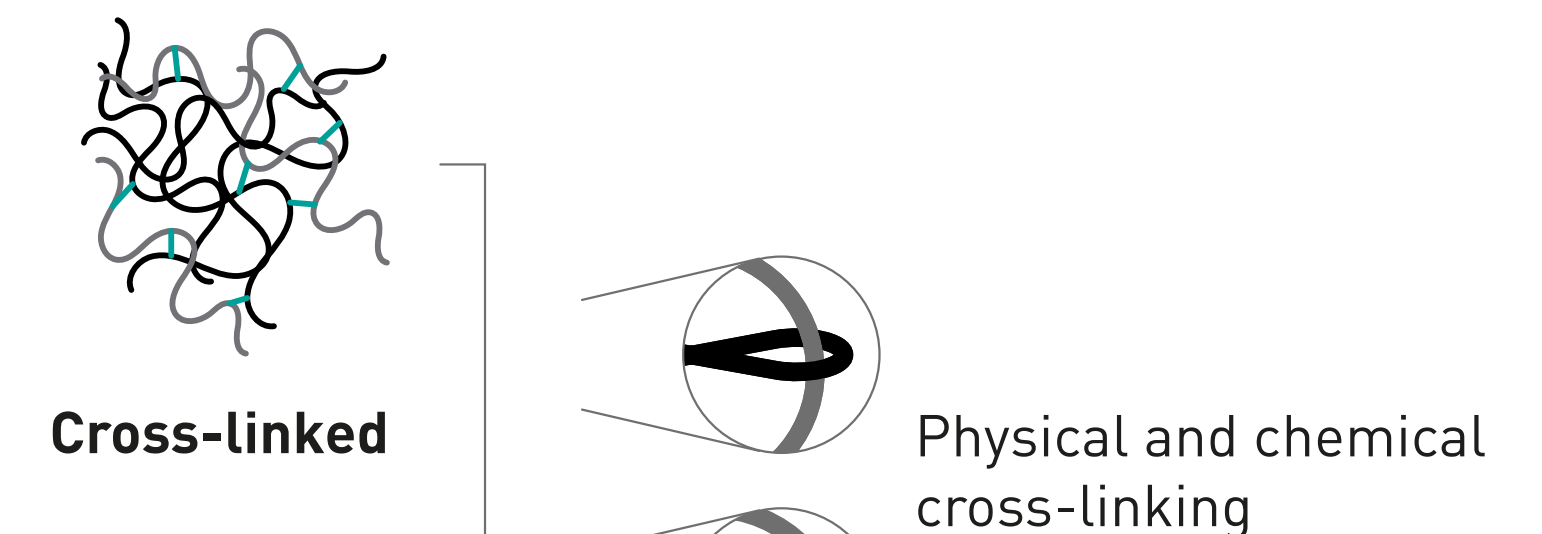
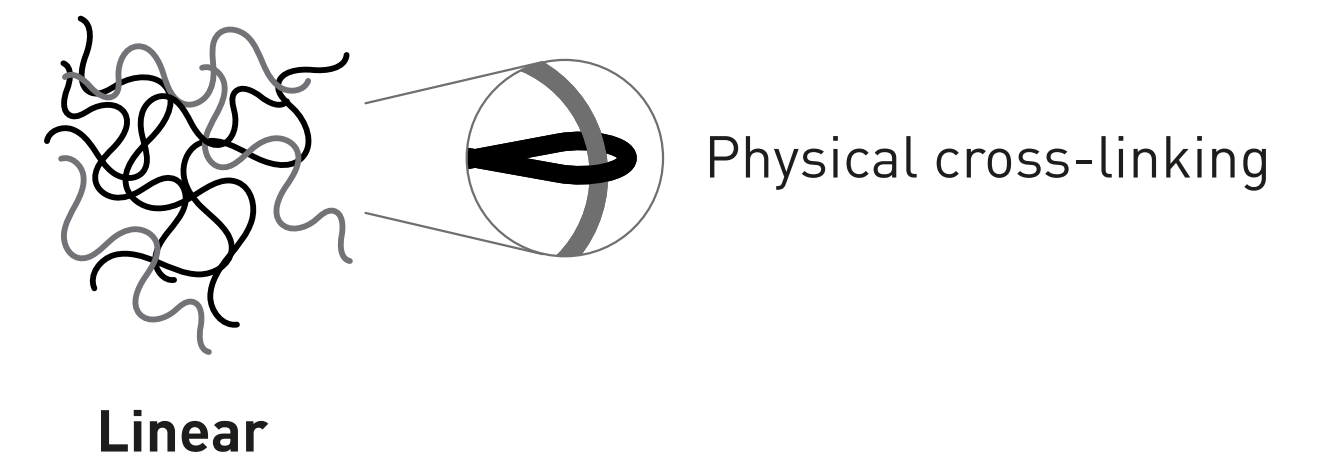
Continuous biopolymeric Hydrogels **containing your substance and leading its biological activity.**

- + Lineal and **crosslinked endogenous** and synthetic biopolymers.
- + Tunable **mechanical and rheological** properties.
- + **Controlled release:** Time, pH...
- + **Mucoadhesiveness** for a local effect.
- + Ajustable **biodegradation** rates.

\*Combinable with Nanohydrogels and NanoCarriers

A D A P T E K

T E C H N O L O G Y

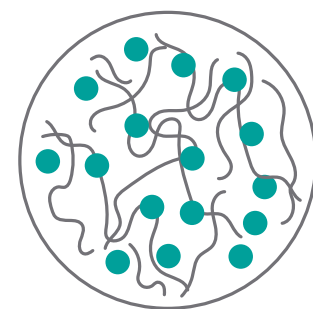




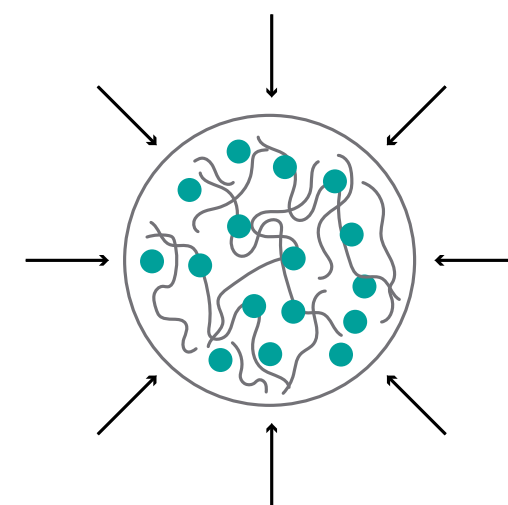
## Smart Nanohydrogels

**NanoHydrogels** based on crosslinked polymeric networks **delivers your active principle** at the right time.

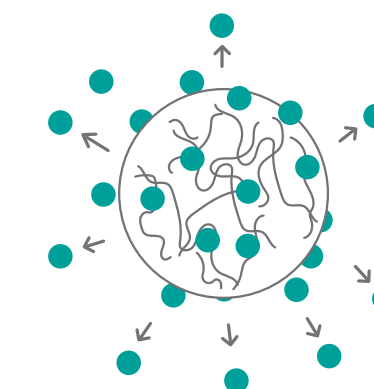
- + Stimuli **responsiveness** (T° and pH).
- + Tunable and customizable **trigger**.
- + **Filmogenic and mucoadhesive** properties.
- + **Biomimetic** distribution in physiological fluids.
- + **Robust manufacturing process** in water.
- + **Patented** technology.



**DRUG LOADED**  
SWOLLEN NANO GEL

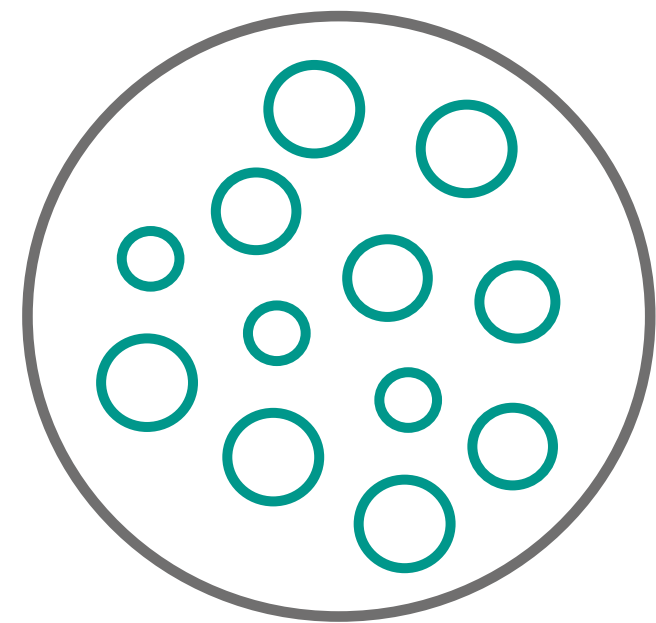


**STIMULI**  
ENVIRONMENT



**DRUG RELEASE FROM**  
NANO GELS

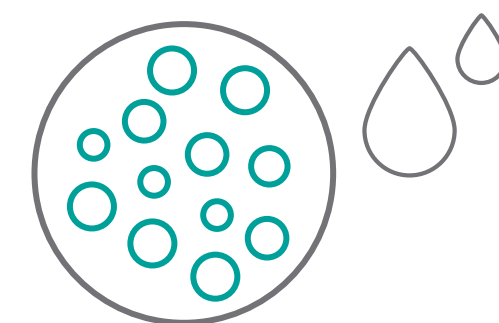




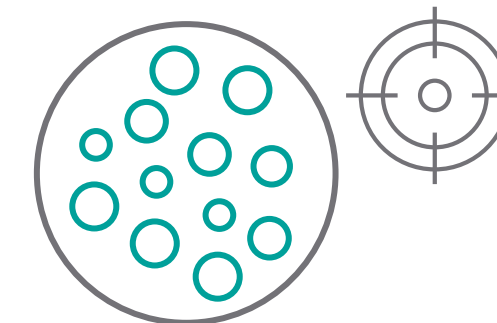
## Nanocarriers

**NanoCarriers** are nanoparticle systems that vehiculize your active substances **enhancing bioavailability** and formulation capabilities.

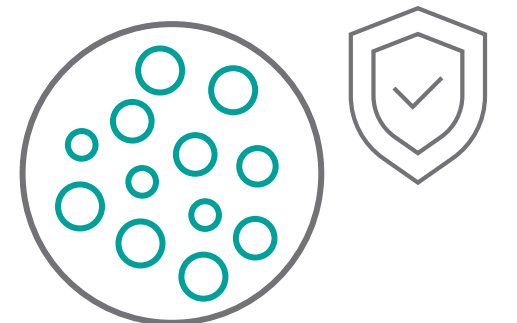
- + **High** encapsulation capacity.
- + Solubilization: Capacity to encapsule **lipophilic and hydrophilic** substances.
- + Tunable and customizable **size**.
- + Enhanced **skin penetration**.
- + **Functionalized** with active substances (active ingredient and targeting groups).
- + Functionalized liposomes lipid and polymeric nanoparticles, micelles or others.



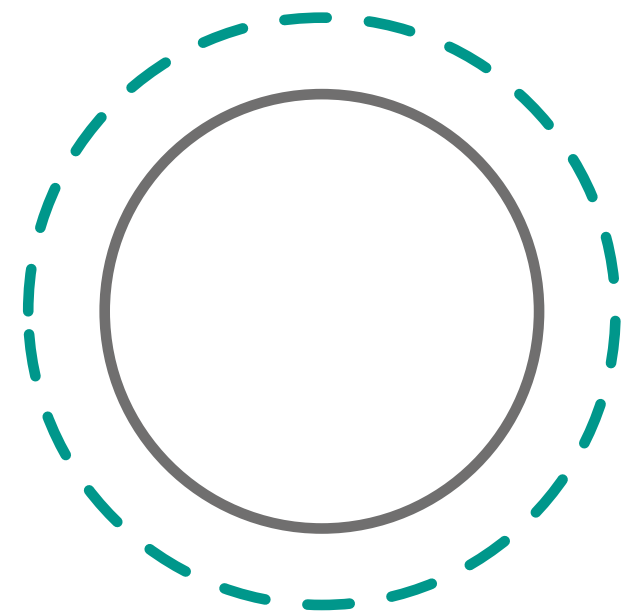
SOLUBILIZATION



TARGETING



PROTECTION



## Coatings

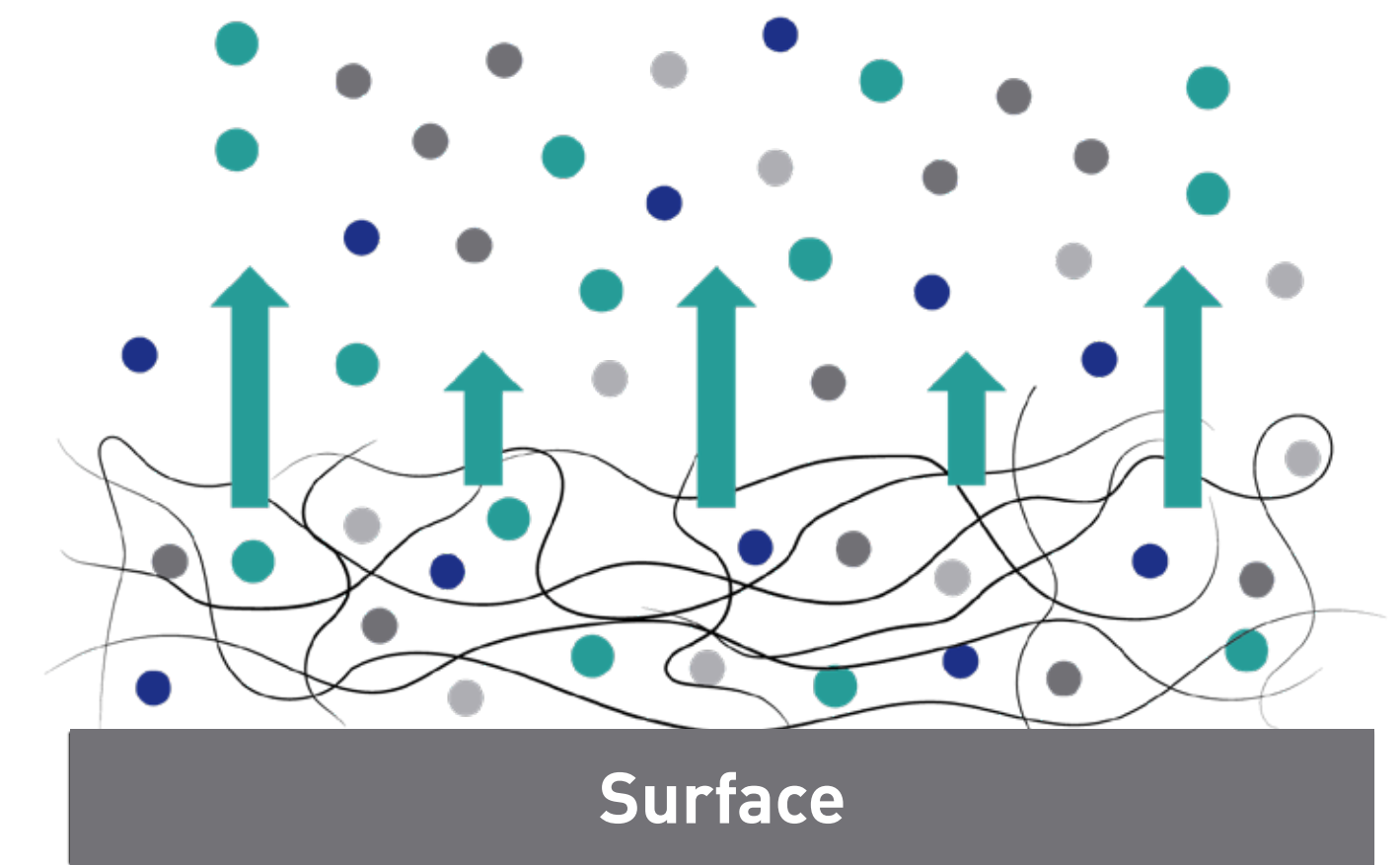
i+Med coatings perform a **sustained release** of the client's active substances, and acts as a physical barrier **against biofilm formation**.

- + **Lower rejection rate of implants.**
- + Reduction of the **post-operative** phase.
- + Promote tissue **regeneration** and implant **integration**.
- + Maintenance of the **optimum environment** around the implant.
- + Applicable on a **broad variety** of biomedical implant devices.

\*Combinable with NanoHydrogels and NanoCarriers.

A D A P T E K

T E C H N O L O G Y



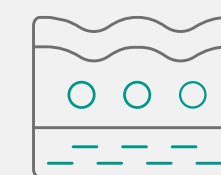
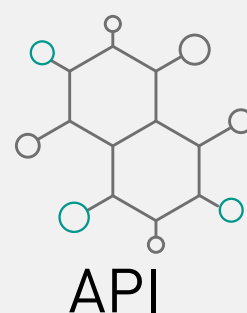
# ADAPTEK TECHNOLOGIES

On-demand. Make your own Combo

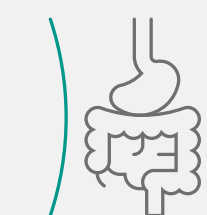
STEP

1

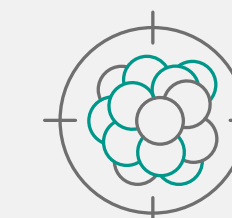
Choose  
Your API + Target



Tissue



Organ

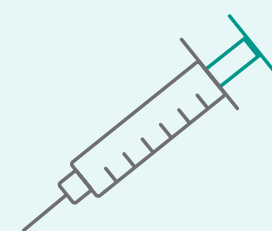


Therapeutic target

STEP

2

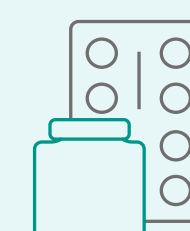
Choose one  
Pharmaceutical form



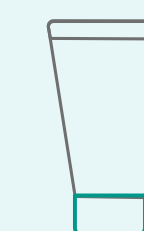
Injectable



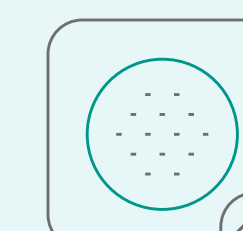
Ophthalmic drops



Oral



Topical

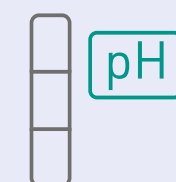


Other

STEP

3

Choose one or more  
External stimuli  
configuration



pH dependent



Temperature dependent



Humidity dependent



Time dependent (Up to >90 days)

## TECHNOLOGICAL STRATEGY

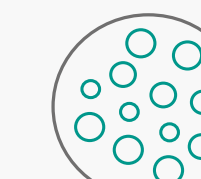
i+Med will choose the best  
**Controlled release technology**  
for your Combo



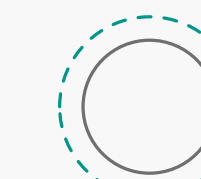
Hydrogels



Smart Nanohydrogels



Nanocarriers



Coatings



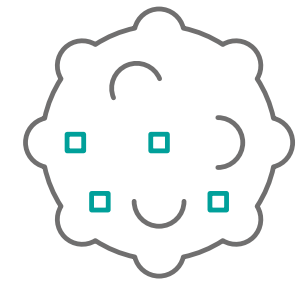
# TECHNOLOGICAL CAPACITIES



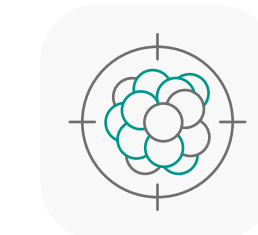
**CUSTOM-MADE MATRICES  
AND NANOCARRIER  
SYSTEMS ADAPTED TO  
THEIR CARGO**

- + Specialists in nanohydrogels and long-lasting injectables.
- + **Products and projects for third parties:** Medical Devices and Pharma products.
- + Manufacturer's requirements: Quality System **ISO 13485:2016**

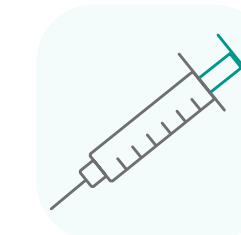
# Transversal technology



Injectables for the release of active substance in **intratumoral anticancer therapy**



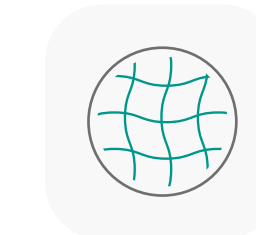
Therapeutic target



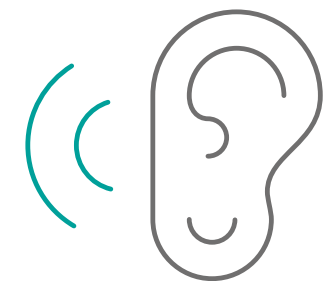
Injectable



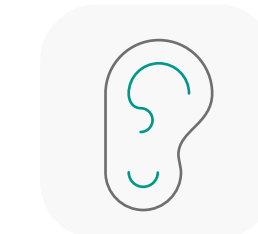
pH dependent



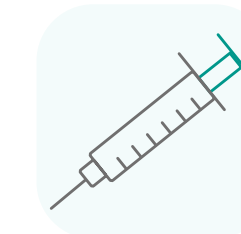
Hydrogels



Mucoadhesive thermosensitive injectable hydrogel to **prevent hearing loss with chemotherapy**



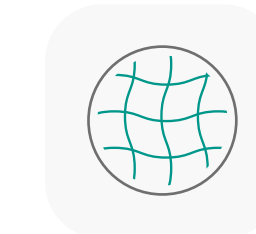
Organ



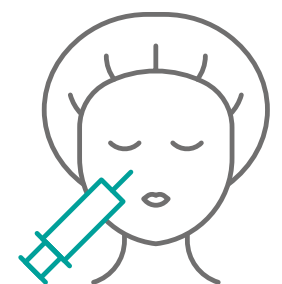
Injectable



Time dependent



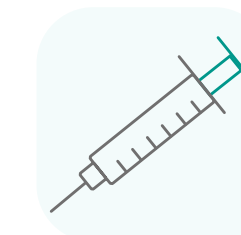
Hydrogels



Aesthetic injectable with **controlled cell release system**



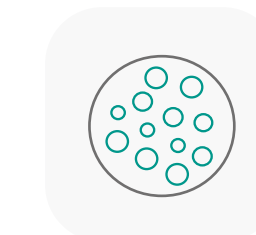
Tissue



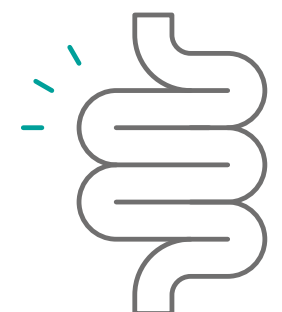
Injectable



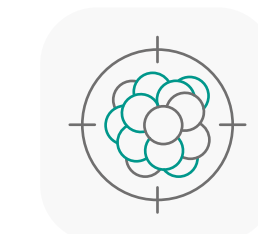
Time dependent



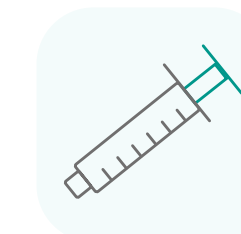
Nanocarriers



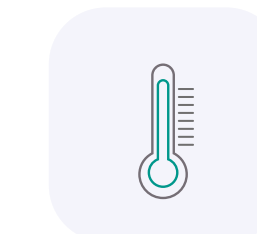
**Thermoreversible haemostatic hydrogel** for tissue regeneration in polyp resection surgery



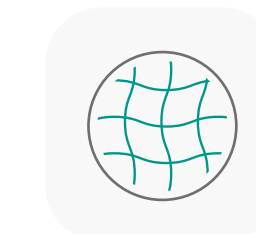
Therapeutic target



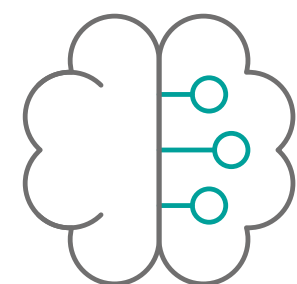
Other (solid)



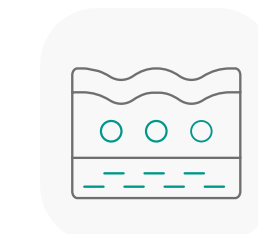
T° Dependent



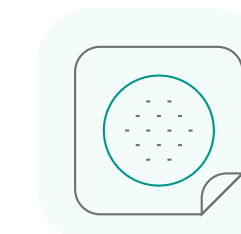
Hydrogels



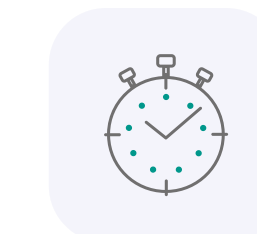
Artificial Intelligence (AI) applied to **topical hydrogels**



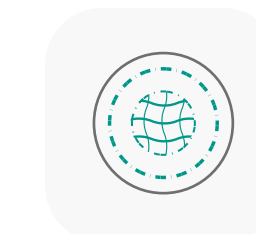
Tissue



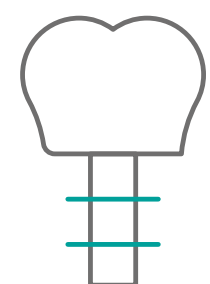
Other (solid)



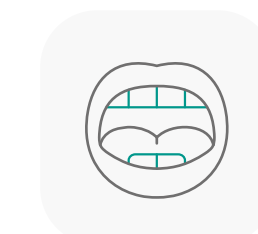
Time dependent



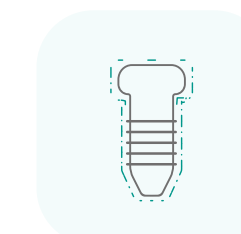
Smart Nanohydrogels



Development of nanohydrogels for the **coating of dental implants**



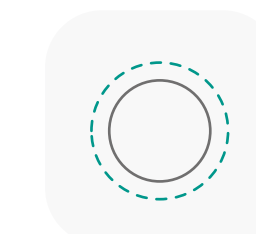
Organ



Dental implant

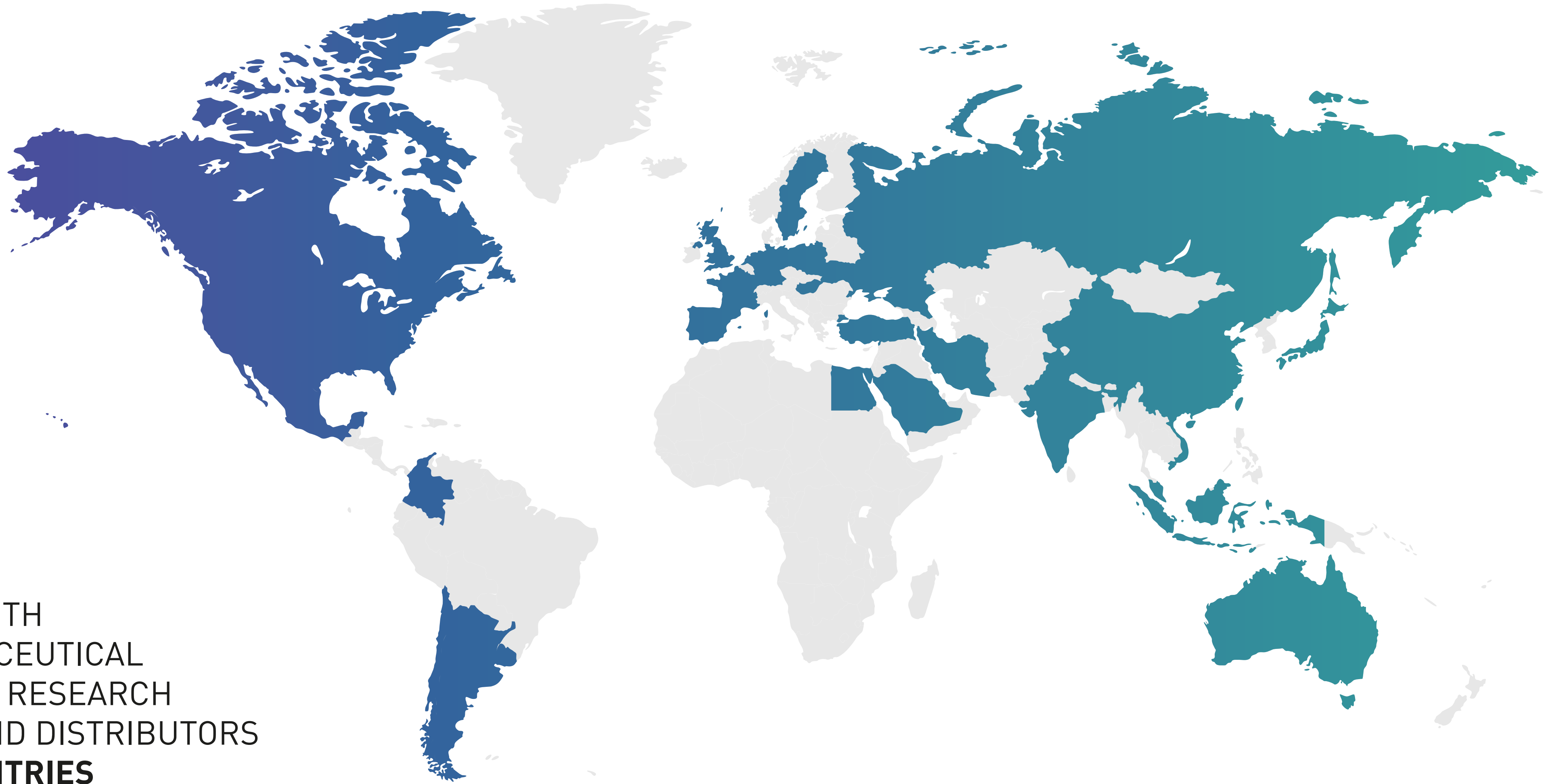


Time dependent



Coatings

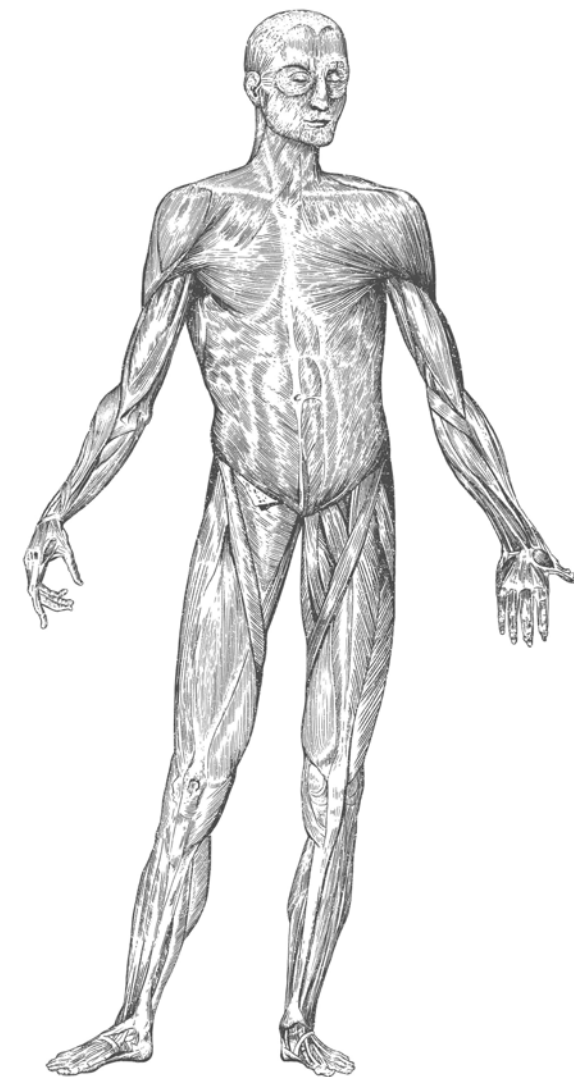
# i+MED'S GLOBAL FOOTPRINT



WE WORK WITH  
BIOPHARMACEUTICAL  
COMPANIES, RESEARCH  
CENTERS AND DISTRIBUTORS  
**IN 30 + COUNTRIES**



# THANK YOU



“Take care of your body,  
it is the only place  
you have to live”  
(Jim Rohn)

## **i+MED, S. COOP.**

PARQUE TECNOLÓGICO DE ÁLAVA  
C/ Albert Einstein 15, nave 15, 01510  
Vitoria-Gasteiz, Álava, Spain

## **CONTACT US**

[business@imasmed.com](mailto:business@imasmed.com)

**IMASMED.COM**