



InSyBio

Intelligent Systems Biology

User Manual

InSyBio Precision Chronic Pain Treatment Tool for Patients: a first-of-its-kind tool for personalizing treatment of chronic pain patients

March 2021

Insybio Pain Tool v1.0

www.insybio.com

InSyBio Precision Chronic Pain Treatment Tool for Patients

Introduction

InSyBio Precision Chronic Pain Treatment Tool for Patients is a first-of-its-kind tool that is able to stratify chronic pain patients into individuals who will benefit from topical analgesics treatment and select the most suitable non-opioid treatment formulation for them using as input a combination of demographics, clinical characteristics and other responses to a simple questionnaire.

The first version of this tool is available for chronic-pain patients (get it from here: <https://painpatient.insybio.com/>) to allow them to identify if a non-opioid treatment is suitable for them and suggest them discussing additional therapeutic options with their physician. The tool offers the following features:

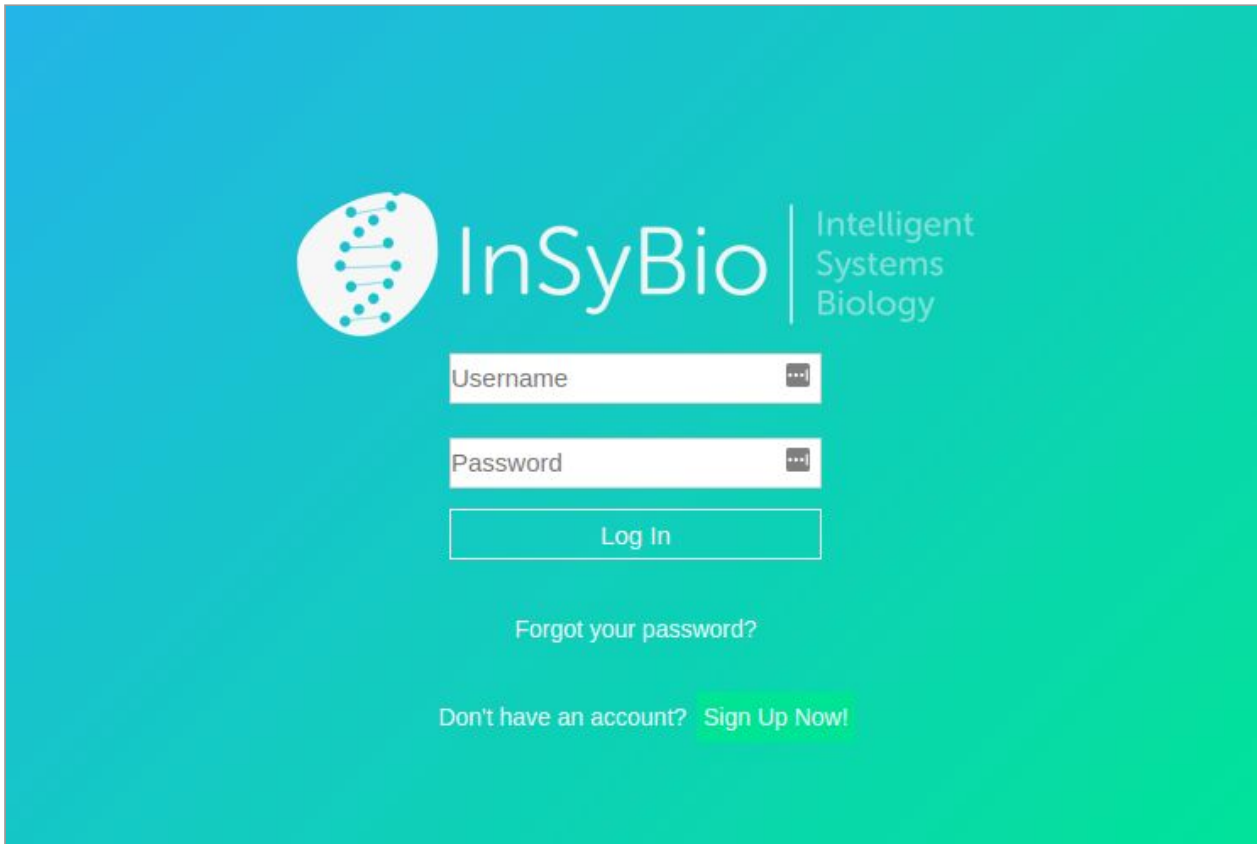
- Evaluation of chronic pain situation of patients through the completion of a user-friendly web form
- Suggesting suitable patients for non-opioid treatments
- Suggesting the best performing non-opioid treatment among 4 different formulations.

98.1% of the patients that were classified into the responders group presented a decrease in their pain scales and in the total number of administered drugs 3-6 months after having our test.

The available functionalities of the tool include New Test addition and viewing Test results.

Logging in

In the login page at painpatient.insybio.com, you enter your email and your password and press the “Log In” button.



InSyBio Precision Chronic Pain Treatment Tool For Patients!

98.1% of the patients that were classified into the responders group presented a decrease in the pain scales and in the total number of administered drugs 3-6 months after having our test.

InSyBio Precision Chronic Pain Treatment Tool has been developed for the US population, and is mainly intended for use in the US. All medical decisions need to be taken by a patient in consultation with their doctor. The authors and the sponsors of this tool accept no responsibility for clinical use or misuse of the machine learning empowered prognostic scores or any other detail displayed in our tool.

If you don't have an account yet, you should click the respective button "Sign up now!". This redirects you to a page where a registration form should be filled out.

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InSyBio Precision Chronic Pain Treatment Tool
For patients

Create Account

Please fill the following form and log in with your credentials

All the fields are required.

Email address

Username

Password

Retype Password

twgadik Get a new code

Enter the letters above

Letters are not case-sensitive.

I agree to receive news and updates from InSyBio

I agree with the [terms of use](#) .

Apply

If you have already access credentials, go to the login page:

Log in

In case you have forgotten your password, you can click the respective link. In the page you will be redirected to, you have to enter your email. After that a link where you can update the password will be sent to you via email.

Forgot Password

Please fill the following form and we will contact you short after:

All the fields are required.

Create new Test

After logging in, you are redirected to the home page - create test. This page allows you to create a new test. By entering this view you can see a simple questionnaire that must be filled out in order to identify if a non-opioid treatment is suitable for you and which one of the four supported formulations is predicted to be more beneficial.

At first you should answer the questionnaire, then press the submit button, wait a minute without pressing anything and finally the results will appear on screen.

The test consists of 4 parts. The “Date of Survey - Date of birth - Gender”, the “Primary Complaint/ Diagnosis”, “Severity/ Interference” and “Current Medication Usage”.

Date of survey	<input type="text" value="03/03/2021"/>	
Date of birth	<input type="text" value="03/03/2021"/>	
Gender	<input type="radio"/> Male <input type="radio"/> Female	

Primary complaint/ Diagnosis

(Check all that apply)

Arthritis

- Hands Feet Hips Knees Neck Shoulders Back Other

**Neuropathy or
Radiculopathy
(Radiating pain)**

- Hands Feet Neck Back Sciatica Other

**Myofascial/
Musculoskeletal
Pain or Spasm**

- Neck Shoulder Back Hips Other

Tendinitis

- Shoulder Elbow Knee Wrist Hip Other

Other



Severity/ Interference

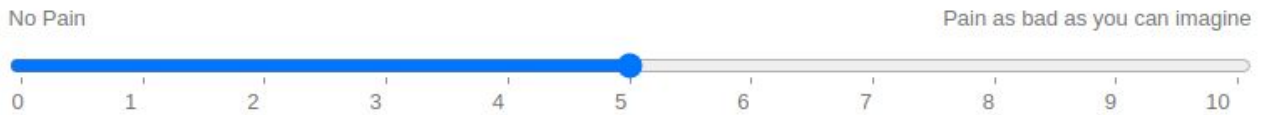
1. Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?

Yes No

2. Select the areas where you feel pain.

Ankle Elbow Foot Hand Head Hip Neck Shoulder Knee Upper Arm
 Upper Leg Wrist Lower Arm Lower Leg Back

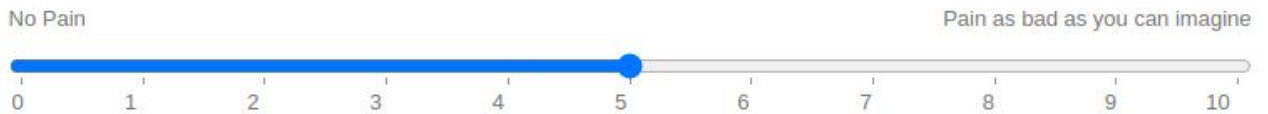
3. Please rate your pain by selecting the one number that best describes your pain at its worst in the last 24 hours.



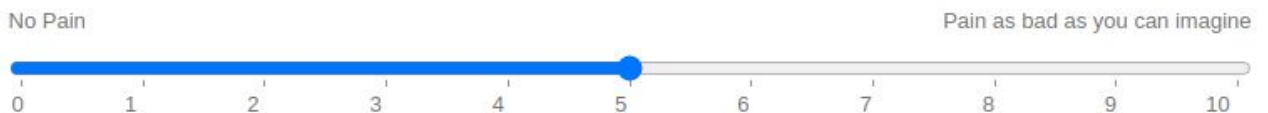
4. Please rate your pain by selecting the one number that best describes your pain at its least in the last 24 hours.



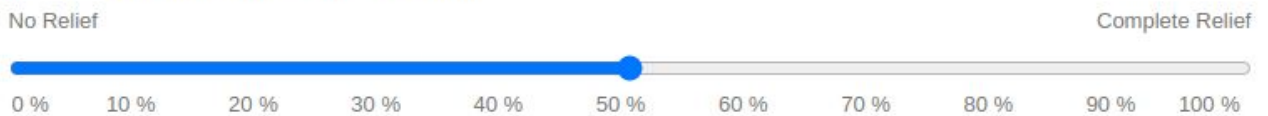
5. Please rate your pain by selecting the one number that tells how much pain you have on the average.



6. Please rate your pain by selecting the one number that tells how much pain you have right now.



7. In the last 24 hours, how much pain relief have treatments or medications provided? Please select the one percentage that most shows how much relief you have received.



8. Select the one number that describes how, during the past 24 hours, pain has interfered with your:

A. General Activity

Does not Interfere

Completely Interferes



B. Mood

Does not Interfere

Completely Interferes



C. Walking Ability

Does not Interfere

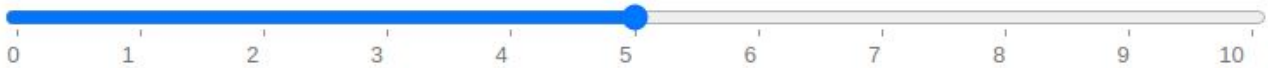
Completely Interferes



D. Normal Work (includes both work outside the home and housework)

Does not Interfere

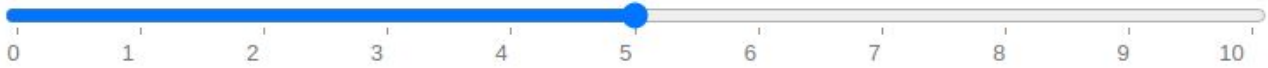
Completely Interferes



E. Relations with other people

Does not Interfere

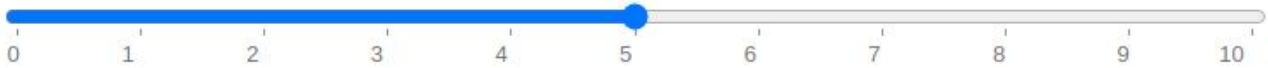
Completely Interferes



F. Sleep

Does not Interfere

Completely Interferes



G. Enjoyment of life

Does not Interfere

Completely Interferes



Current medication usage

Yes None

(Check all that apply)

1. Over-the-Counter (OTC) Pain Medication

- Advil®, Motrin® (ibuprofen)
- ALEVE® (naproxen)
- Aspirin (acetylsalicylic acid)
- Tylenol® (acetaminophen)
- Other

If you have indicated any medications taken above - What is dose and how often per day?

- 1 x day
- 2 x day
- 3 x day
- More than 3 x day
- As Needed

Dosage

2. Anti-Inflammatory (Prescription)

- | | | |
|--|---|---|
| <input type="checkbox"/> Anaprox (naproxen sodium) | <input type="checkbox"/> Feldene (piroxicam) | <input type="checkbox"/> Toradol (ketorolac tromethamine) |
| <input type="checkbox"/> Celebrex (celecoxib) | <input type="checkbox"/> Indocin (indomethacin) | <input type="checkbox"/> Vimovo (naproxen/ esomeprazole) |
| <input type="checkbox"/> Clinoril (sulindac) | <input type="checkbox"/> Lodine (etodolac) | <input type="checkbox"/> Voltaren (diclofenac) |
| <input type="checkbox"/> Daypro (oxaprozin) | <input type="checkbox"/> Mobic (meloxicam) | <input type="checkbox"/> Other |
| <input type="checkbox"/> Disalcid (salsalate) | <input type="checkbox"/> Naprosyn (naproxen) | |
| <input type="checkbox"/> Dolobid (diflunisal) | <input type="checkbox"/> Relafen (nabumetone) | |

If you have indicated any medications taken above - What is dose and how often per day?

- 1 x day
- 2 x day
- 3 x day
- More than 3 x day
- As Needed

Dosage

3. Narcotic

- | | | |
|---|---|---|
| <input type="checkbox"/> Avinza®, Kadian® (morphine) | <input type="checkbox"/> Duragesic®, Fentora®, Actiq® (fentanyl) | <input type="checkbox"/> Oxycontin®, Oxyfast®, Percocet®, Roxicodone® (oxycodone and acetaminophen) |
| <input type="checkbox"/> Demerol (meperidine) | <input type="checkbox"/> Lorcet®, Lortab®, Norco®, Vicodin® (hydrocodone) | <input type="checkbox"/> Other: Neurontin® (gabapentin) |
| <input type="checkbox"/> Dilaudid®, Exalgo® (hydromorphone) | <input type="checkbox"/> Opana® (oxymorphone) | <input type="checkbox"/> Lyrica® (pregabalin) Ultram® |

If you have indicated any medications taken above - What is dose and how often per day?

- 1 x day
- 2 x day
- 3 x day
- More than 3 x day
- As Needed

Dosage

When you answer the questions, you submit the test and wait a few seconds to be redirected to a result page with all the detailed information, graphs and predictions about you.

View Test

In the view test page you can see the results of a test with the submitted answers of the questionnaire.

At the top of the screen, you can see a concise result of the submitted test. You are predicted to be either a responder or a non-responder for Topical Analgesics Therapies. If your pain situation is evaluated as mild, then results are not produced and you get informed accordingly. The percentage shown on the result page of responders and non-responders shows the predicted average reduction (or increase) in your pain severity, interference, pain related complaints and drugs used with the best performing non-opioid treatment:

Responder of Topical Analgesics Therapies

You are predicted to be a responder of Topical Analgesics Therapies.

Benefit is expected in all examined metrics from using a topical analgesics therapy for treating his chronic pain condition by an average reduction of 60.1% in your pain severity, interference, pain related complaints and drugs used. However, you should visit a specialized physician before using any of the non-opioid chronic pain treatments. We recommend showing the results of our tool to your specialized clinician who is responsible of changing your chronic pain treatment.



Non - Responder of Topical Analgesics Therapies

You are predicted to be a non-responder of Topical Analgesics Therapies.

You are classified in the non-responders group since you are not predicted to benefit in ALL examined metrics from using a topical analgesics therapy for treating your chronic pain condition. However this does not mean that you are not expected to get any benefit from any non-opioid treatment. Always consult a specialized physician before altering your chronic pain treatment.



Mild pain situation

This tool has been designed to personalize response to therapy treatments for severe chronic pain cases and/or patients administered with Opioids or Anticonvulsants.

Your chronic pain situation is evaluated as mild and thus you are not suitable for the provided test. Your clinician should consider administering a mild pain treatment.


Furthermore a “Detailed results for each topical analgesic” part shows detailed results for the 4 different formulations:




In the final part of the result page you are able to view the submitted responses of the patient’s questionnaire. In this part you have also the opportunity to delete the submitted test clicking the respective link:

View submitted responses

[Delete Test #173](#)

Date of survey 

Date of birth 

Gender Male Female

Primary complaint/Diagnosis

(Check all that apply)


Arthritis Hands Feet Hips Knees Neck Shoulders Back Other

Neuropathy or Radiculopathy (Radiating pain) Hands Feet Neck Back Sciatica Other

Myofascial/ Musculoskeletal Pain or Spasm Neck Shoulder Back Hips Other

Tendinitis Shoulder Elbow Knee Wrist Hip Other

Other

If you want to submit another test you are able to click on the InSyBio's logo at the top of the page  and you are redirected to the create test view. Note that after you leave the result page you are not able to view the results again.

How to get InSyBio Precision Chronic Pain Treatment Tool for Patients

To purchase InSyBio Precision Chronic Pain Treatment Tool for Patients contact us at info@insybio.com .

About Us

InSyBio Ltd is a bioinformatics pioneer company (www.insybio.com) in personalized healthcare, that focuses on developing computational frameworks and tools for the analysis of complex life-science and biological data in order to develop predictive integrated biomarkers (biomarkers of various categories) with increased prognostic and diagnostic aspects for the personalized Healthcare Industry.

InSyBio Suite consists of tools for providing integrated biological information from various sources, while at the same time it is empowered with robust, user-friendly and installation-free bioinformatics tools based on intelligent algorithms and methods.

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