

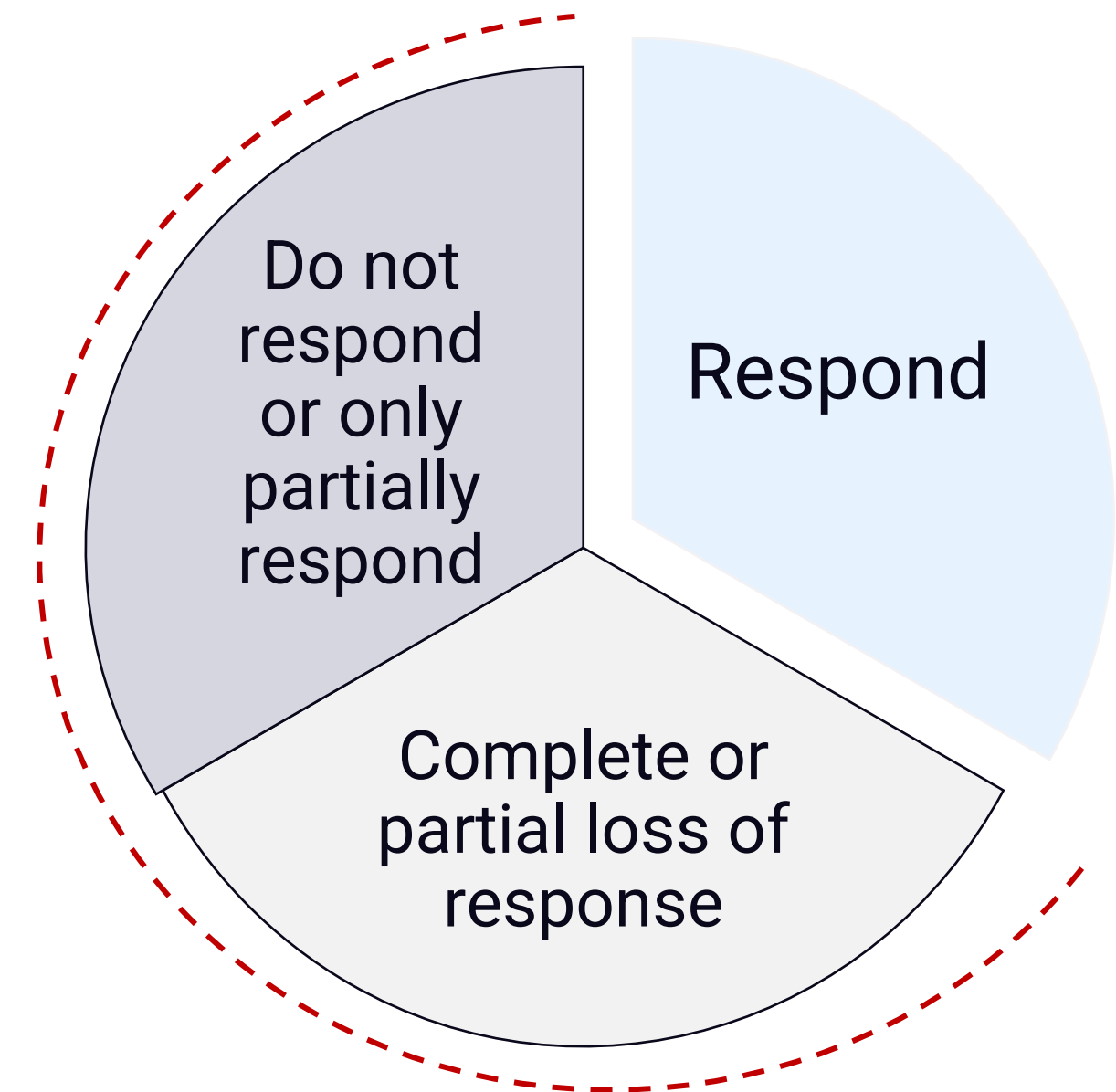
- A global leader in utilizing variability to enhance functionality.
- Tailoring therapies to suit human physiology.
- Revolutionizing patient outcomes.
- Augmenting the standard of care.
- User-friendly.

Optimed Max: Lead with value for patients

The Problem:

Over half of patients with chronic diseases experience partial or complete loss of effectiveness of their medications.

- Over half of the population suffers from at least one chronic disease.
- 40% of American adults have multiple chronic conditions.
- The US chronic disease market is valued at > 3 trillion USD/year.



Hypertension

Heart disease

Chronic lung disease

Depression

Cancer

Chronic pain

High cholesterol

Arthritis

Diabetes

Dementia

Kidney disease

Obesity

The Solution:

Optimed Max, The Digital Pill, is a drug regulated by AI.

Adjusting the administration times helps overcome the lack of response.

A reminder to take medications

20 mg BID:
7 AM; 7 PM

The patient inserts the treatment plan into the app.

- Improves adherence.
- Regulates the formulation, dosage, and administration times.
- Collects data on the response.

Loss of effect
Adverse effects



Optimed Max

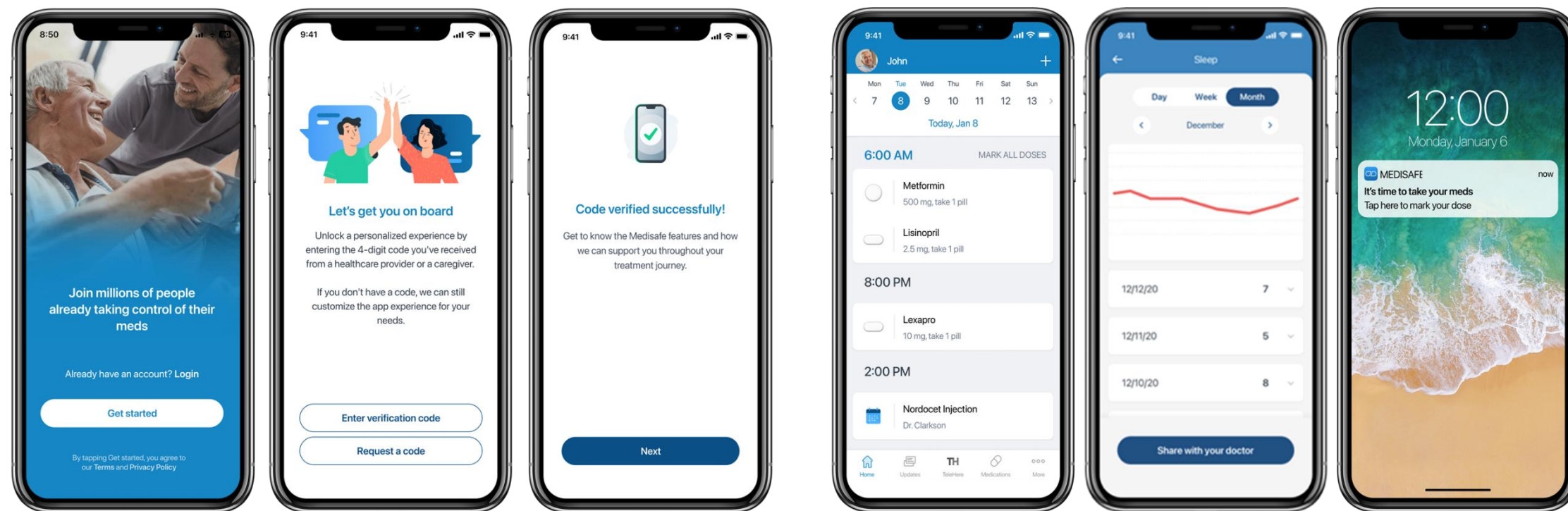
Adjusting times of administration within the approved range

20 mg BID
7 AM \pm 2 hours;
7 PM \pm 2 hours

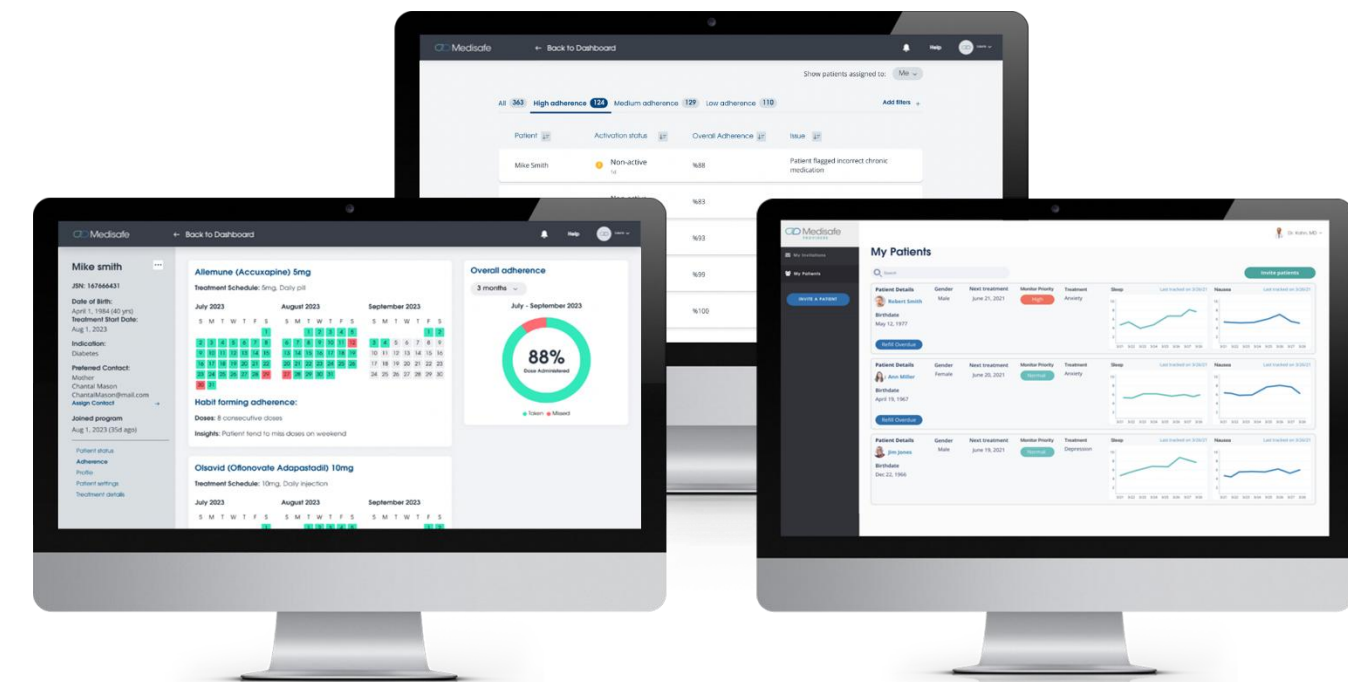
- Overcomes tolerance to drugs.
- Improve treatment outcomes.
- Ensure prolonged usage.

Optimed Max is integrated into Medisafe, enabling patients to adjust their medication schedule for all daily medications.

- Medisafe is the leading patient-connected health platform.
- Superior user experience leading to improved adherence.
- Over 12 M registered users and 750K active monthly users.

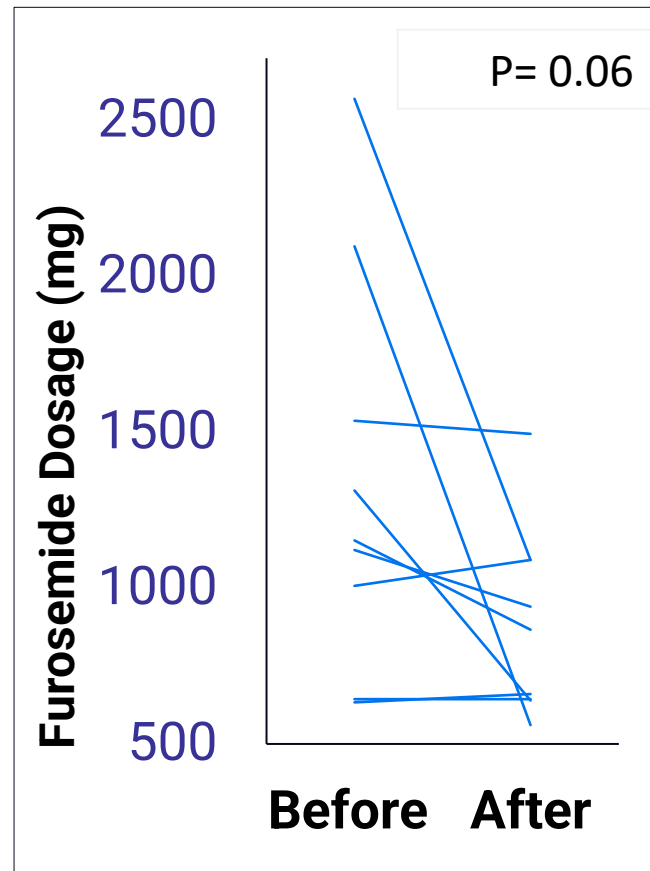


The Medisafe portal enables healthcare providers to evaluate patients with real-time access to patient activity.

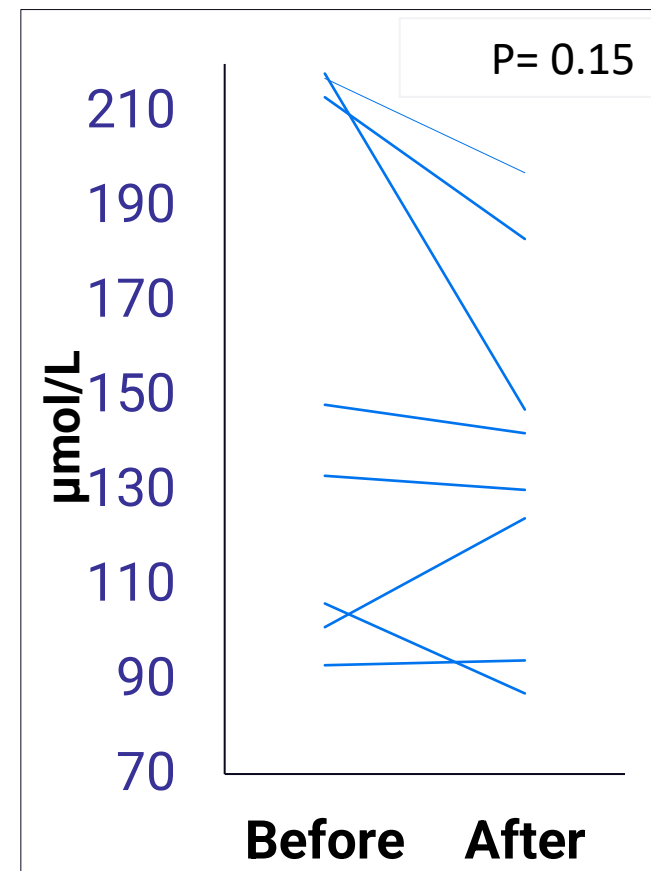


Optimed Max improves the response to diuretics in heart failure patients with diuretic resistance.

Reduces required dosages

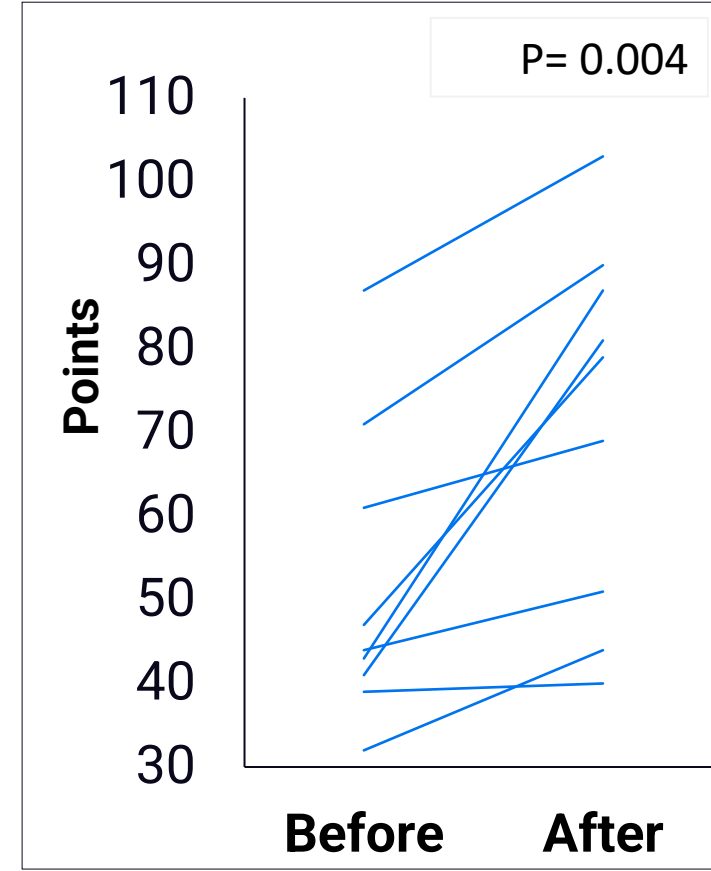


Improves kidney function



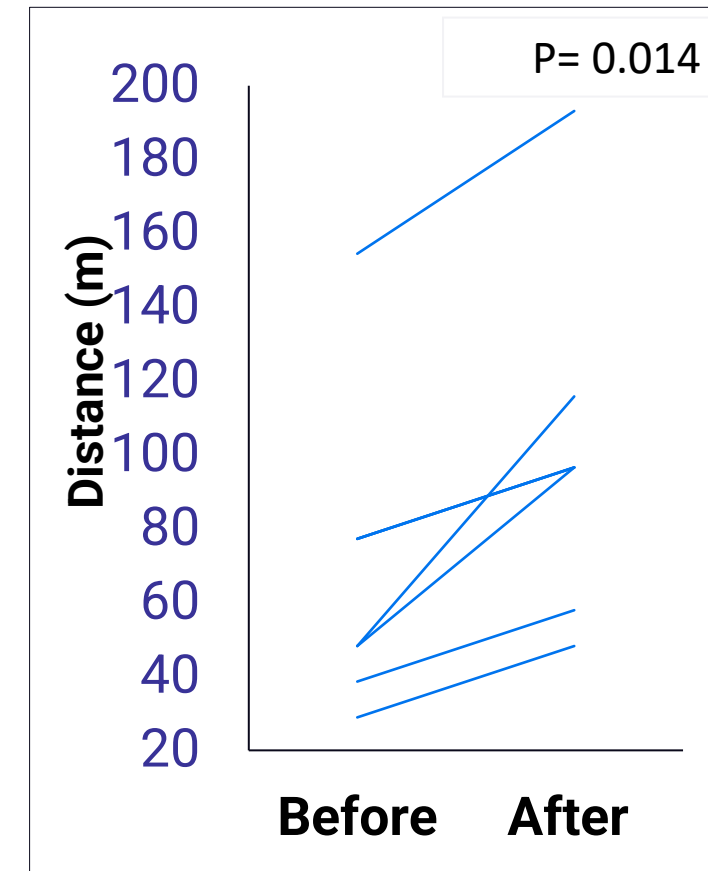
Serum Creatinine

Improves functional capacity

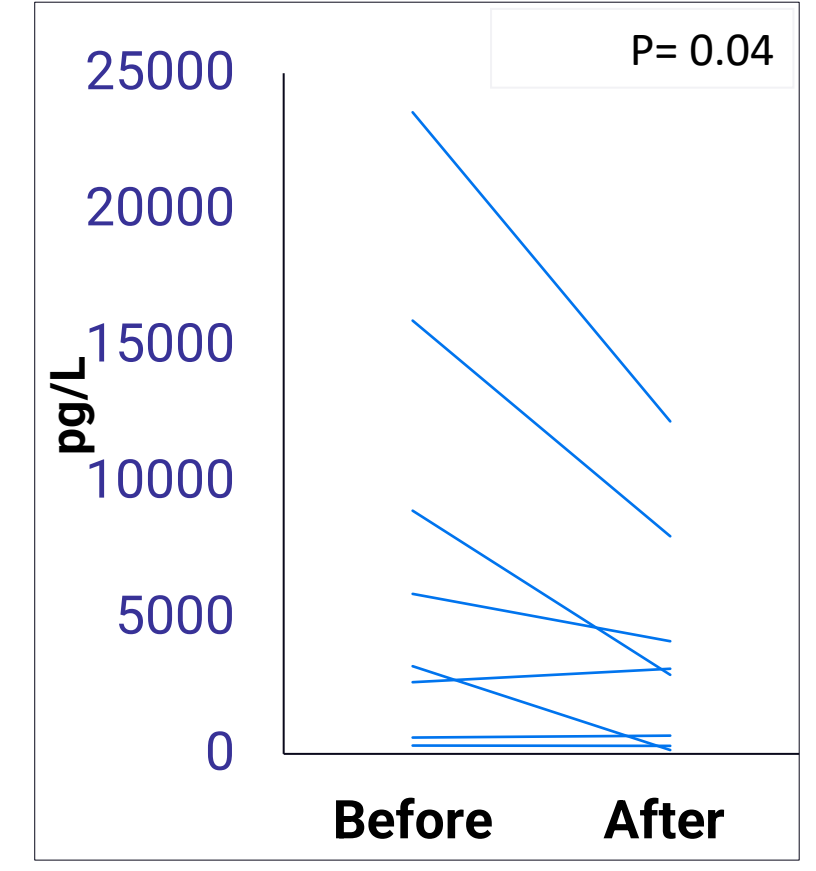


Kansas City Cardiomyopathy Questionnaire

Improves 6-minute walk test



Reduces NT-ProBNP serum levels: A measure of severity of heart failure

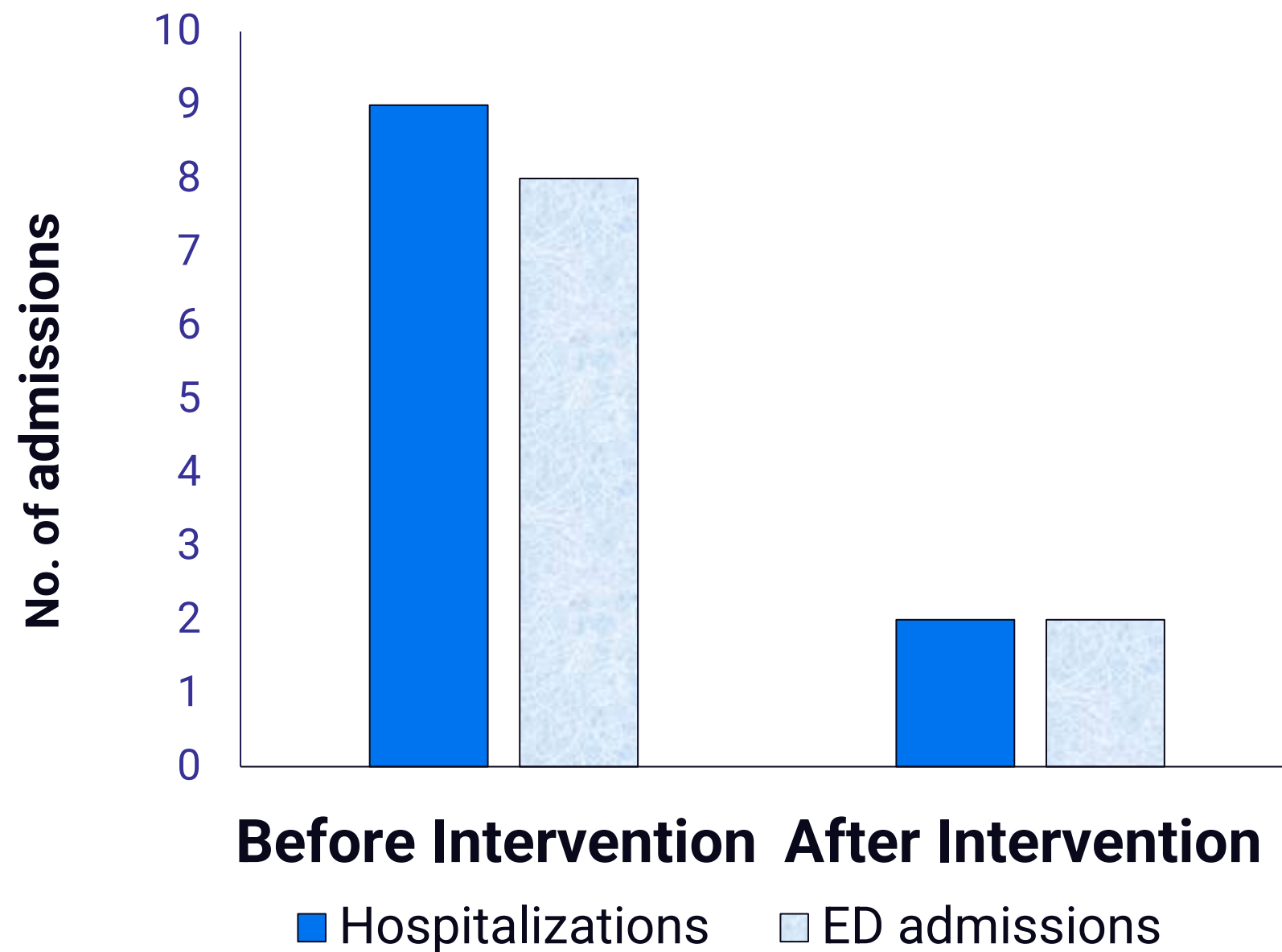


AMERICAN COLLEGE of CARDIOLOGY

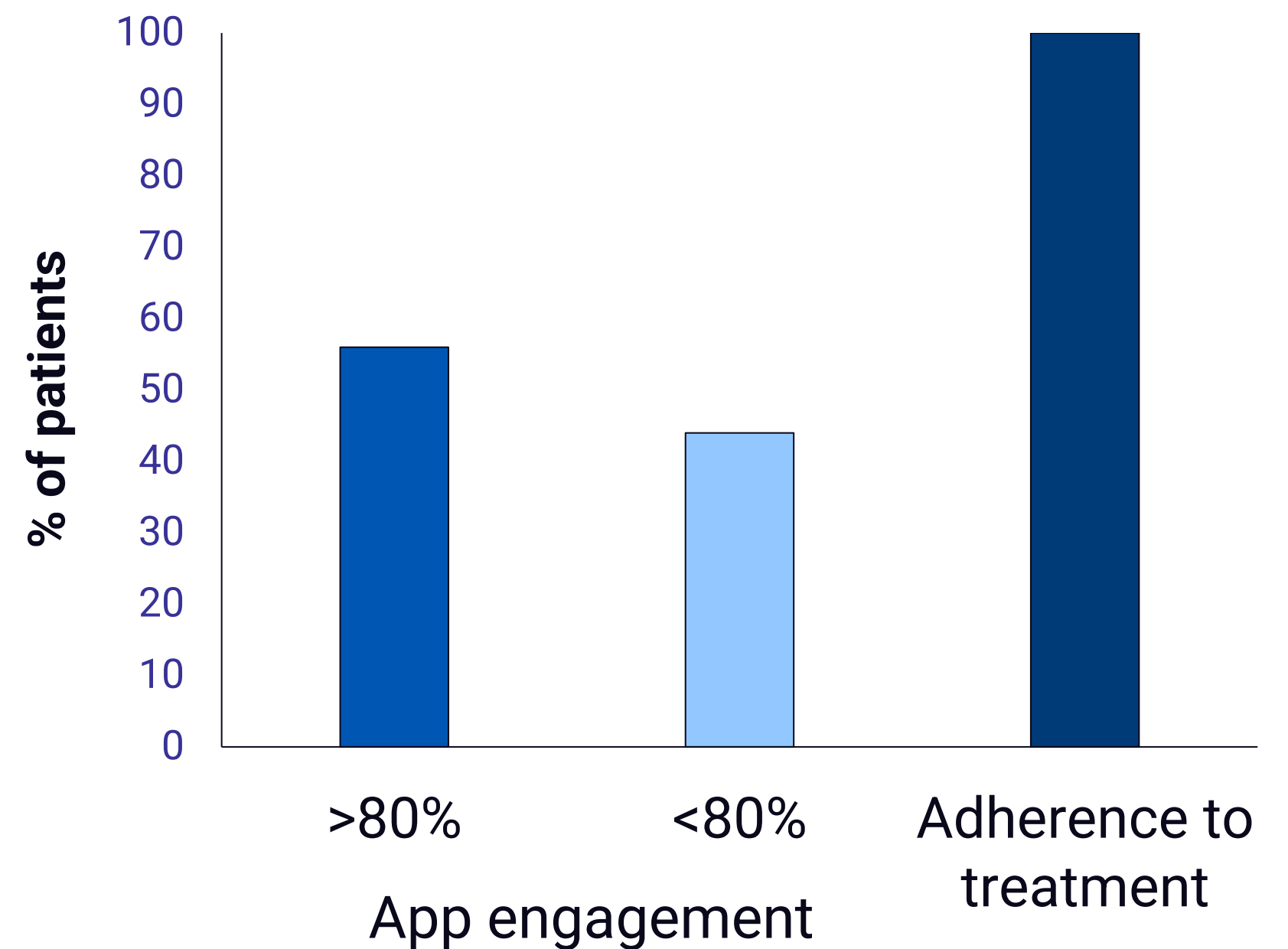


Optimed Max reduces hospitalizations for patients with heart failure.

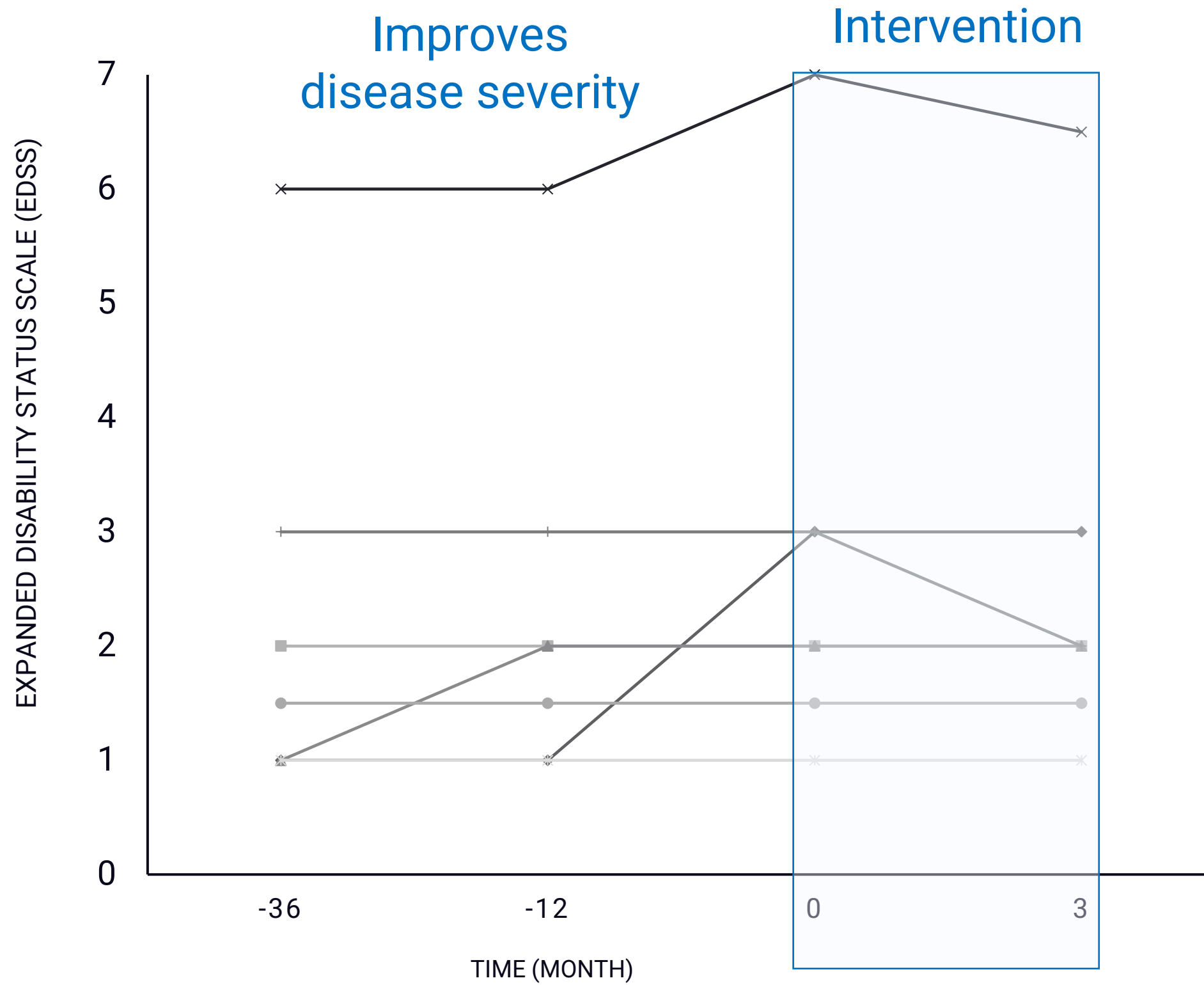
Reduces hospitalizations and emergency room admissions



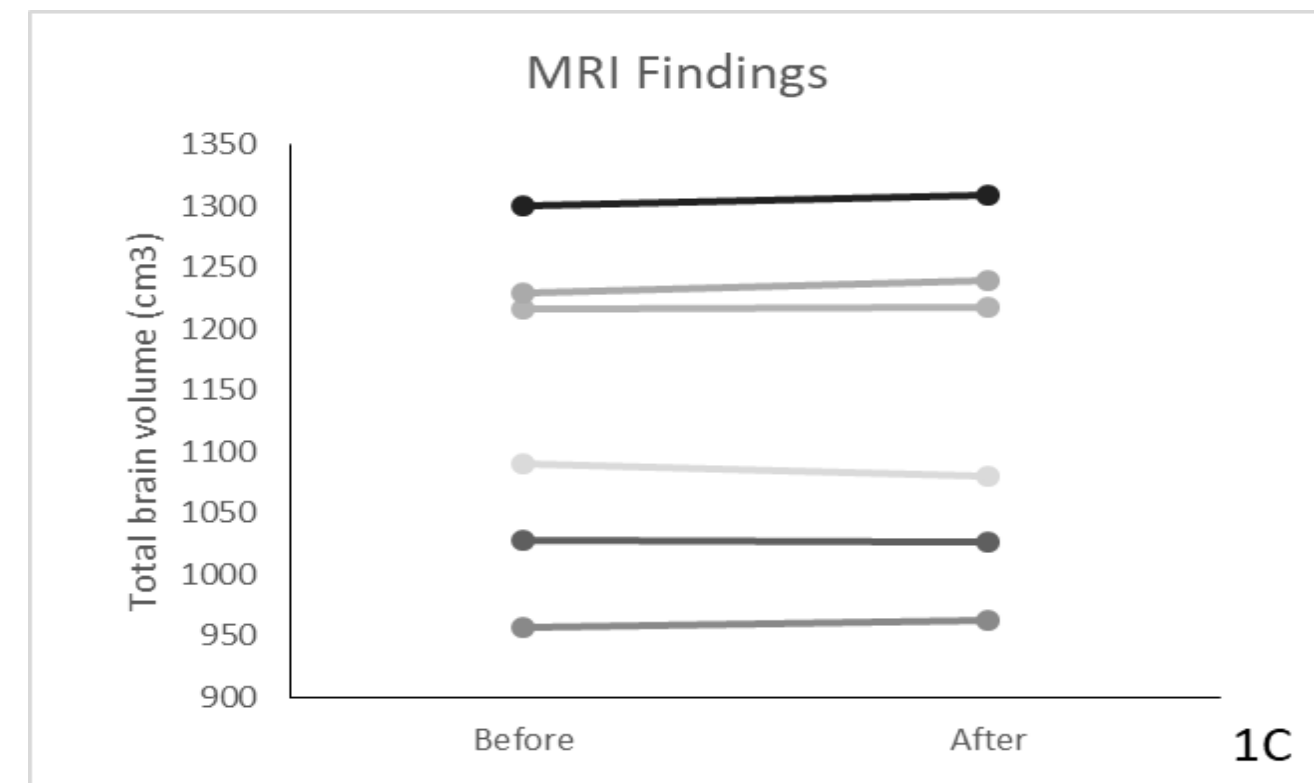
Improves engagement and adherence



Optimed Max stabilizes and improves multiple sclerosis patients treated with Dimethyl Fumarate (Tacfidera).

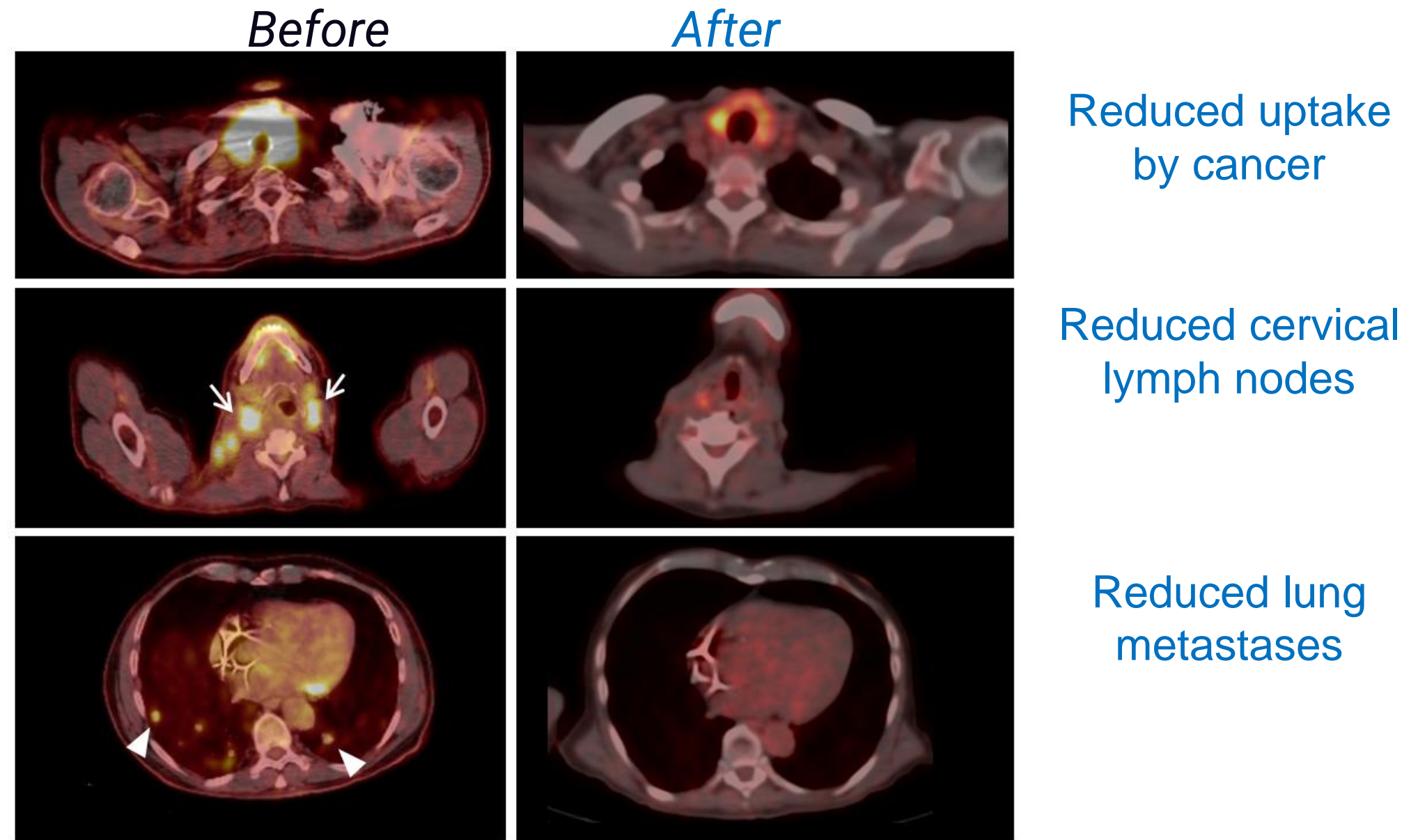


Stabilizes and improves brain MRI

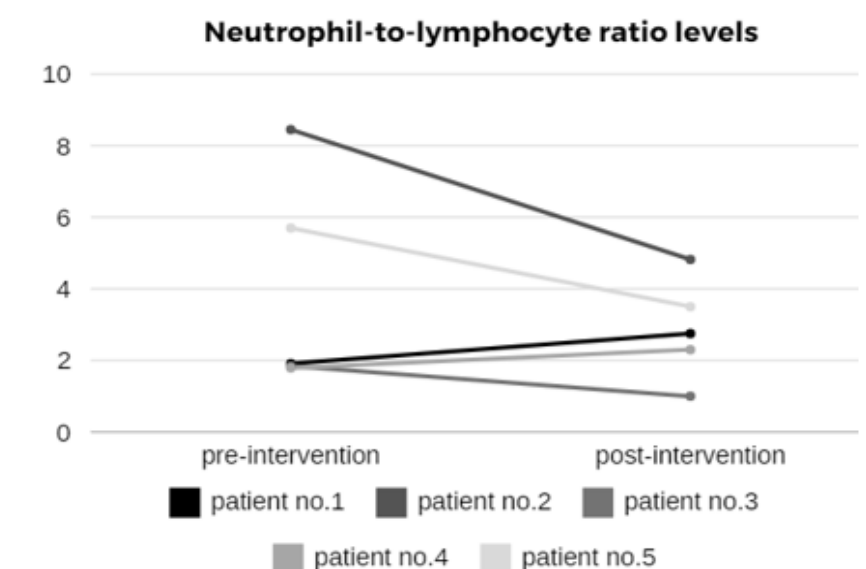
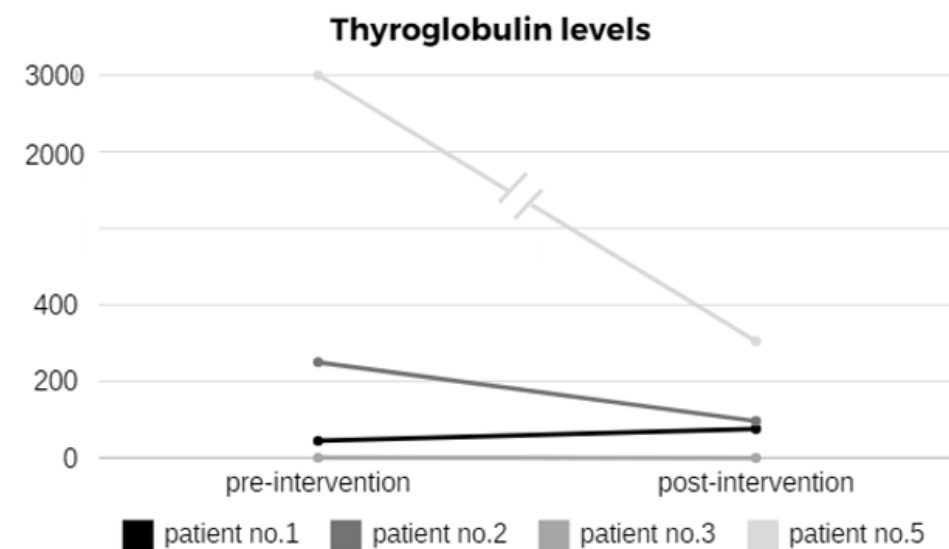


Optimed Max overcomes drug-resistant cancer in patients with loss of response or dose-limiting adverse effects.

- Disease control rate, complete response, partial response, and stable disease: **80% of patients** within a 14-week follow-up.
- The FDG-PET-based RECIST and PERCIST criteria: partial response in 40% and stable disease in 40%.
- **75%** of the thyroid cancer patients showed a reduction in thyroglobulin levels.
- **60%** of patients showed a decrease in the neutrophil-lymphocyte ratio.
- Improvement in the mean social support score.



- A 14-week study
- Thyroid and salivary gland cancers.
- Non-responders to Lenvatinib.
- $n=5$

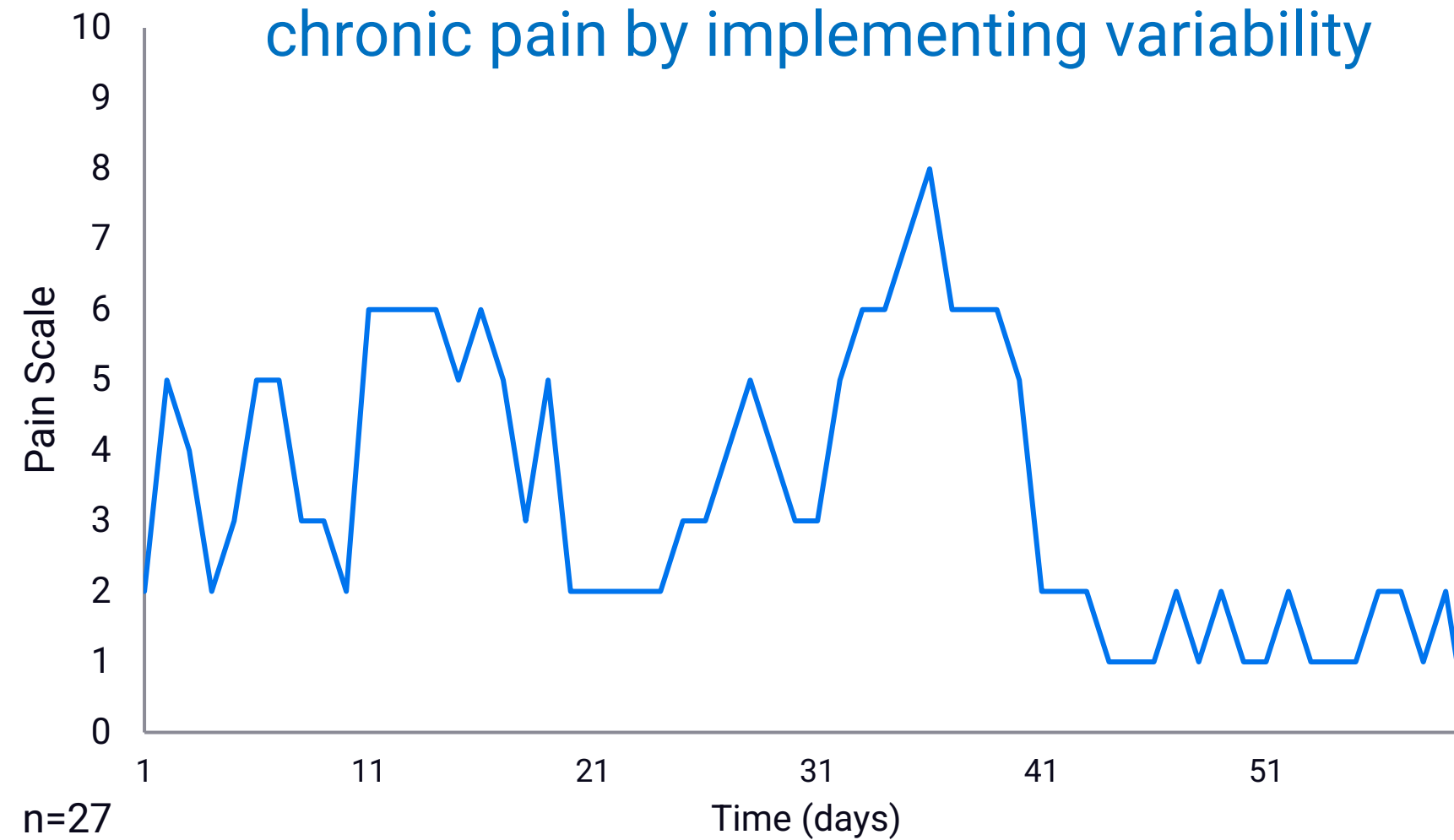


Real-world data on digital medical cannabis in patients with chronic pain: **Optimed Max** enhances adherence and maintains the response.

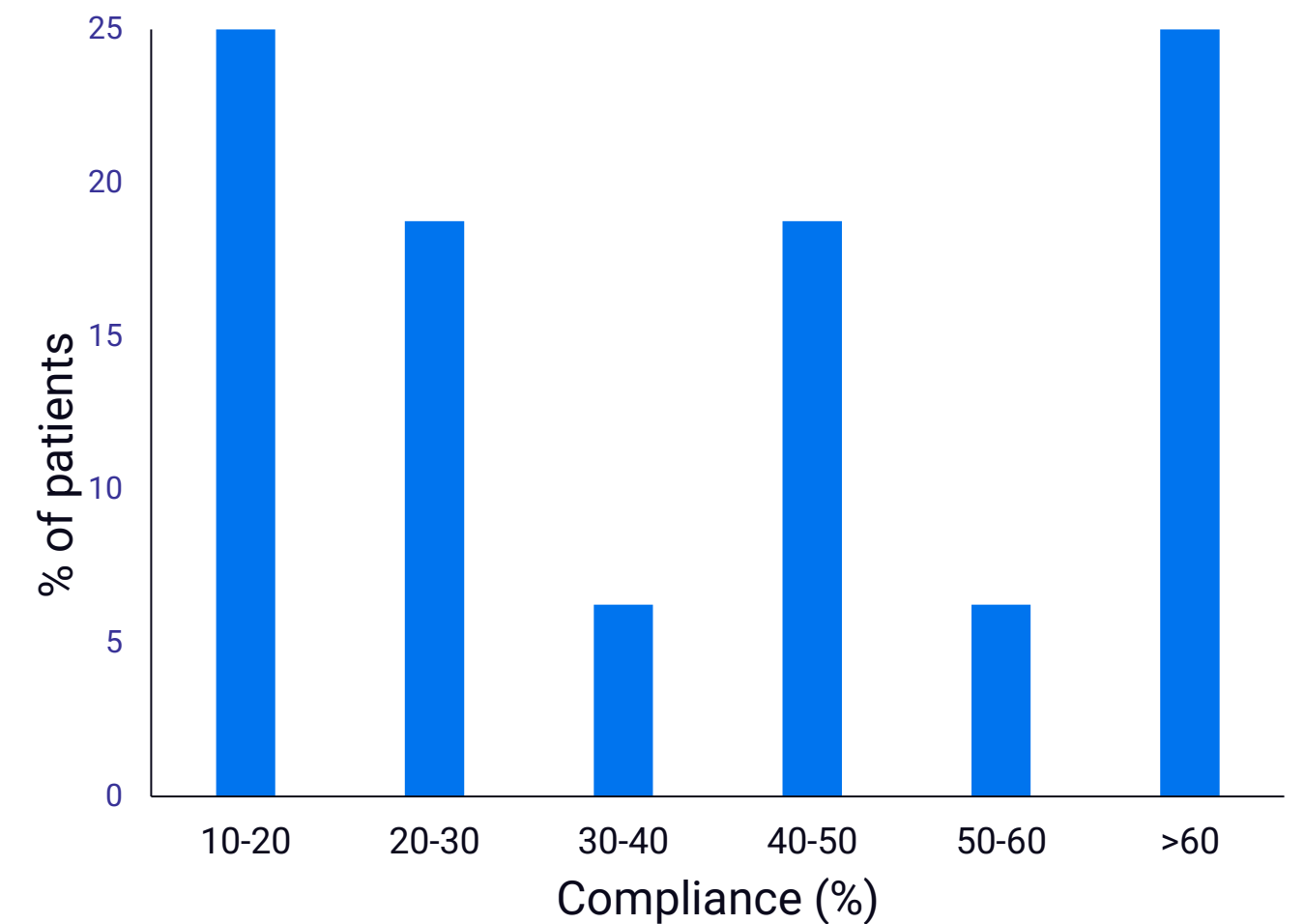
Improves pain score

Use of app/day	2022-05-01	2022-05-02	2022-05-03	2022-05-04	2022-05-05	2022-05-06	2022-05-07	2022-05-08	2022-05-09	2022-05-10	2022-05-11	2022-05-12	2022-05-13	2022-05-14	2022-05-15	2022-05-16
	3	3	3	3	1	3	2	3	3	3	1	3	3	3	3	3
Pain score	2022-05-02	2022-05-03	2022-05-04	2022-05-06	2022-05-07	2022-05-08	2022-05-09	2022-05-10	2022-05-12	2022-05-13	2022-05-14	2022-05-15	2022-05-16	2022-05-17	2022-05-18	2022-05-19
	6	6	6	6	5	6	5	3	5	2	2	2	2	2	3	3

Improving the pain score in patients with chronic pain by implementing variability



High engagement rate

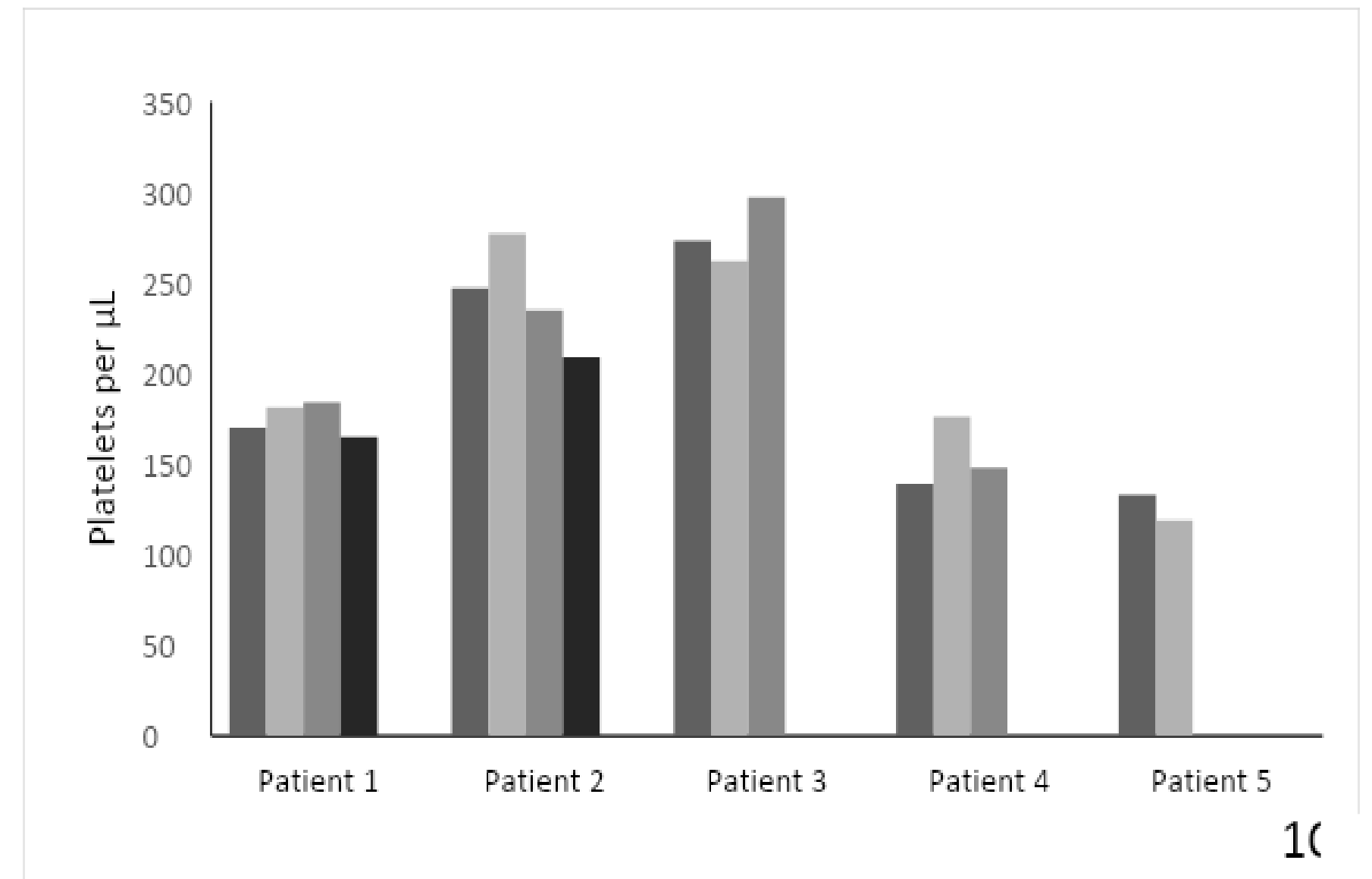


Sigawi, Tal, et al. *Journal of Bioinformatics and Systems Biology* 6 (2023): 82-89.

Optimed Max improves Gaucher disease patients' response to intravenous enzyme replacement therapy.

- Platelet levels increased (40%).
- Improved SF-36 quality of life scores(20%).
- Improved sense of change in health(40%).
- Increase Lyso-GB1 levels increased (20%).

6 months follow up
n=5



Optimed Max improves patients' outcomes: A real-life story.



Good morning, Dr. Lehmann
I feel great.

We are on vacation in the Dolomites, and I am proud to share that yesterday, I climbed after I already thought I wouldn't climb anymore (fear of stability and balance due to sclerosis). I did it successfully and, most importantly, with pleasure.

A global leader in utilizing variability to enhance functionality. **Optimed Max** improves effectiveness by implementing data-driven personalized regimens.

Optimed Max

Powered by Medisafe

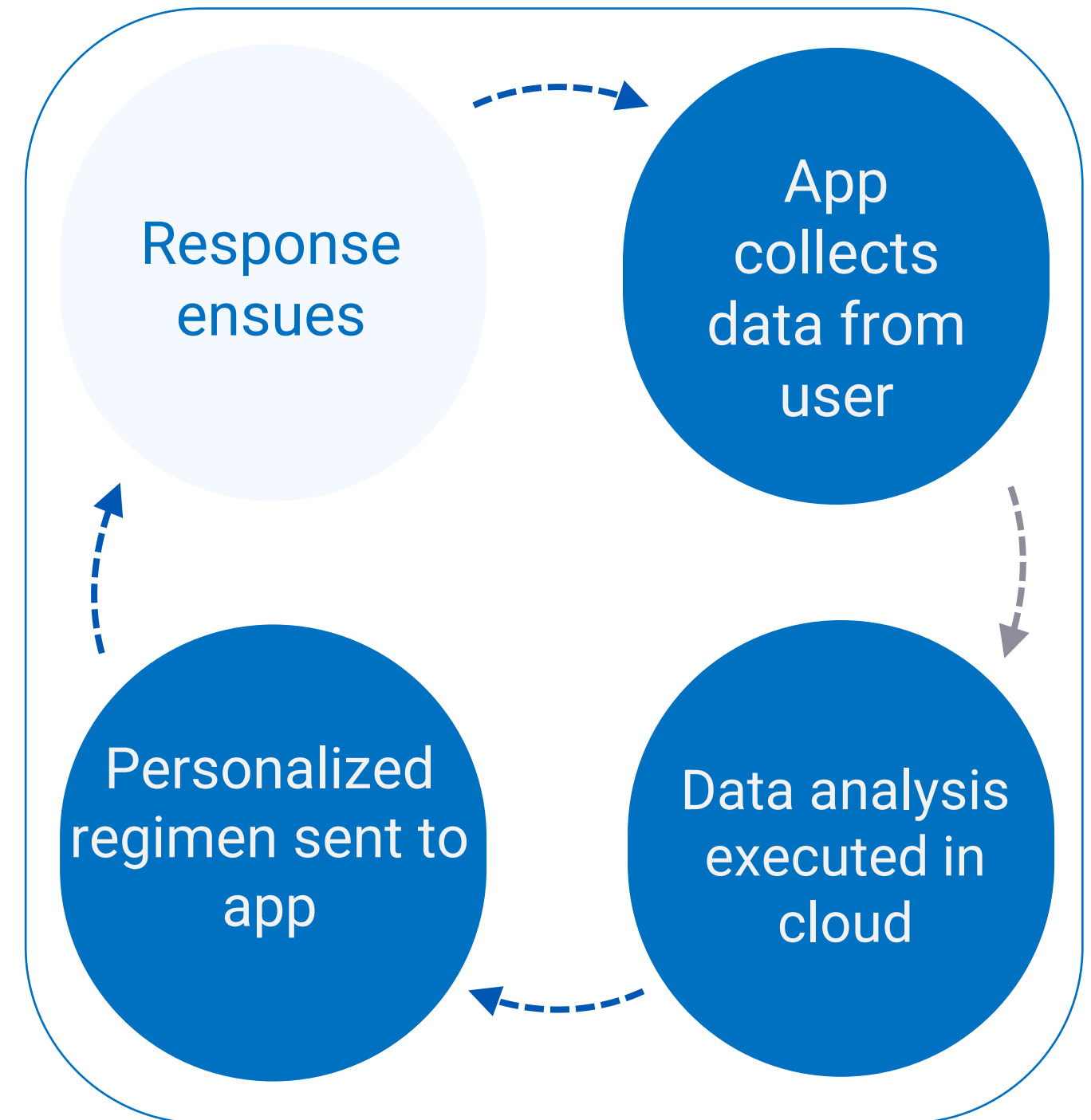
Introduce variation in the dosage and timing of administration within the approved range.

Version 2.0

A closed-loop system that adjusts variability depending on the outcome.

Version 3.0

Quantifies variability signatures and incorporates them into the algorithm.



Enhancing value across healthcare stakeholders: Improving patient outcomes.

Patients

- ✓ Improve outcome
- ✓ Reduce admissions and hospitalizations

Physicians

- ✓ Seamless integration
- ✓ Enhance adherence

Payers

- ✓ Saves costs

Pharma

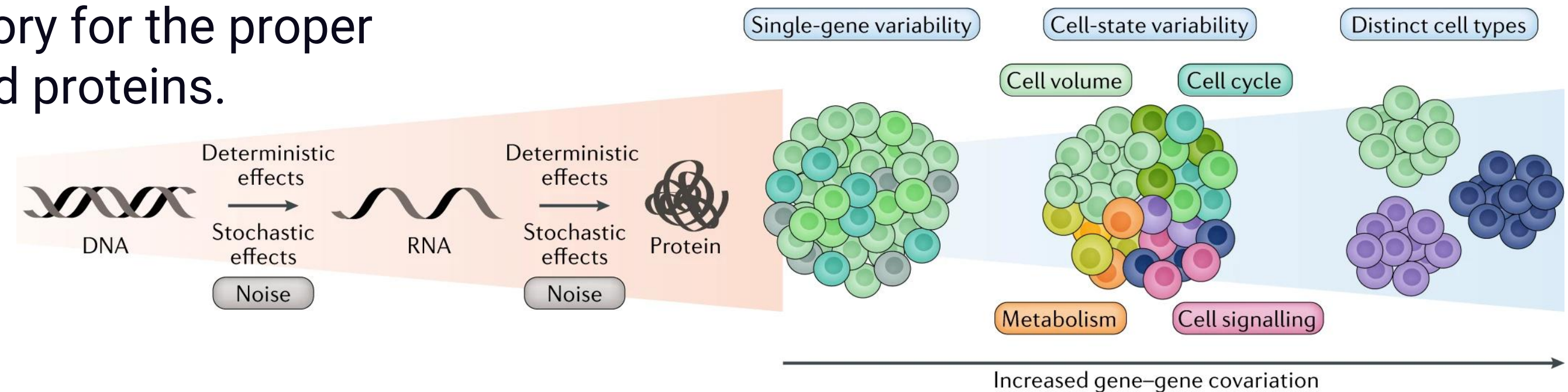
- ✓ Market disruptor
- ✓ Increase revenues
- ✓ Prolongs drugs' IP

- Seven worldwide issued patents.
- In the market.
- FDA exempt “no claim”-based reminder within common practice.

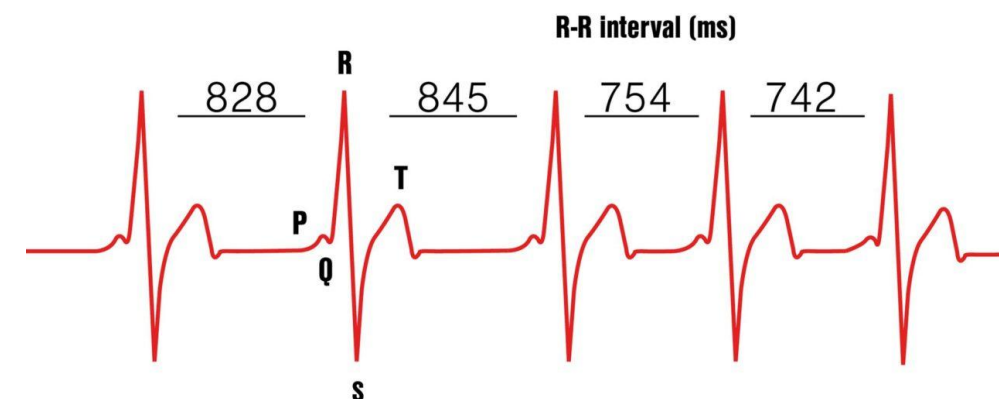
The Science: Tailoring therapies to suit human physiology.

Variability is crucial for the proper functioning of biological systems.
Optimed Max tailors therapies to human physiology.

Variability is mandatory for the proper function of genes and proteins.

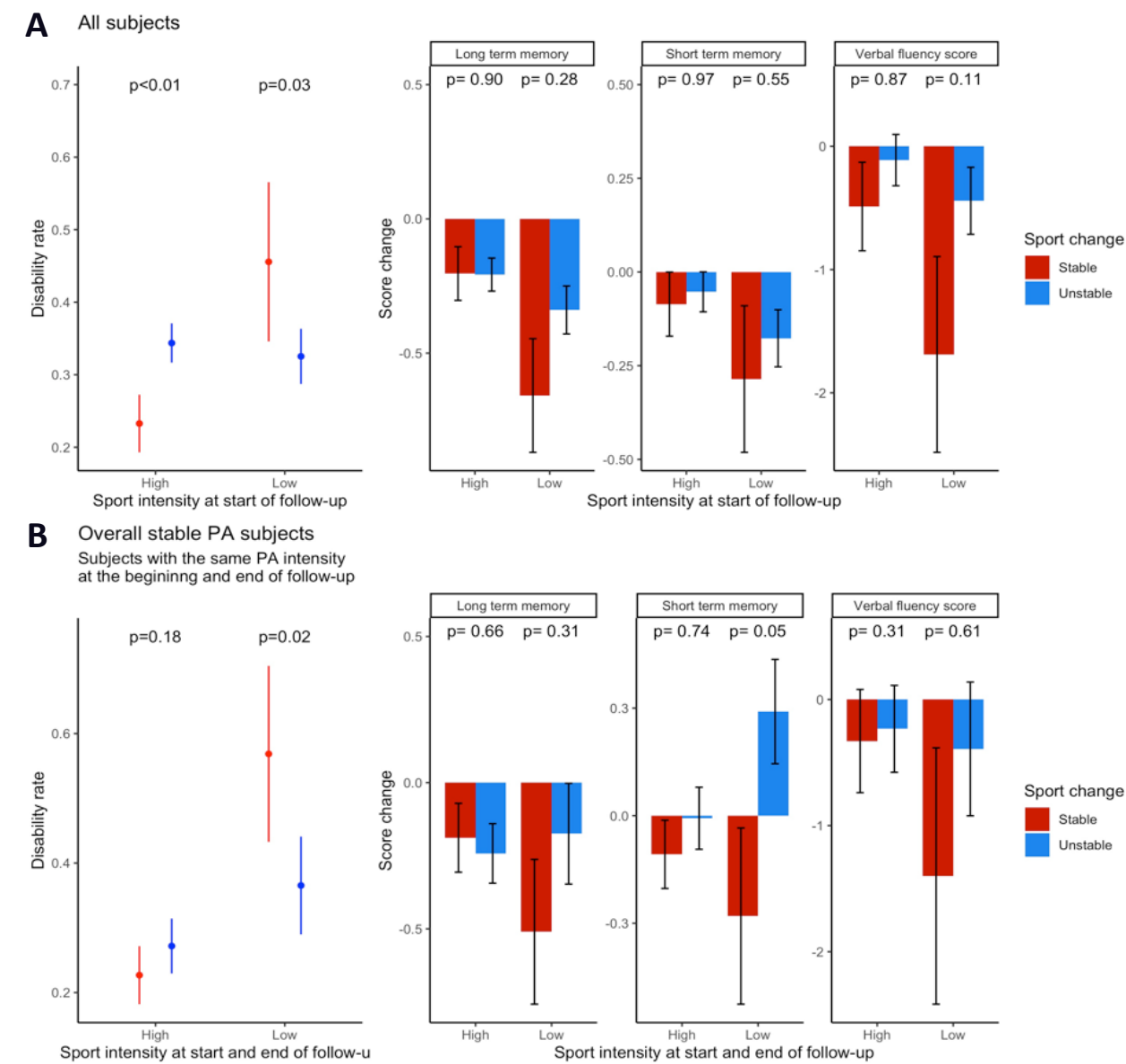
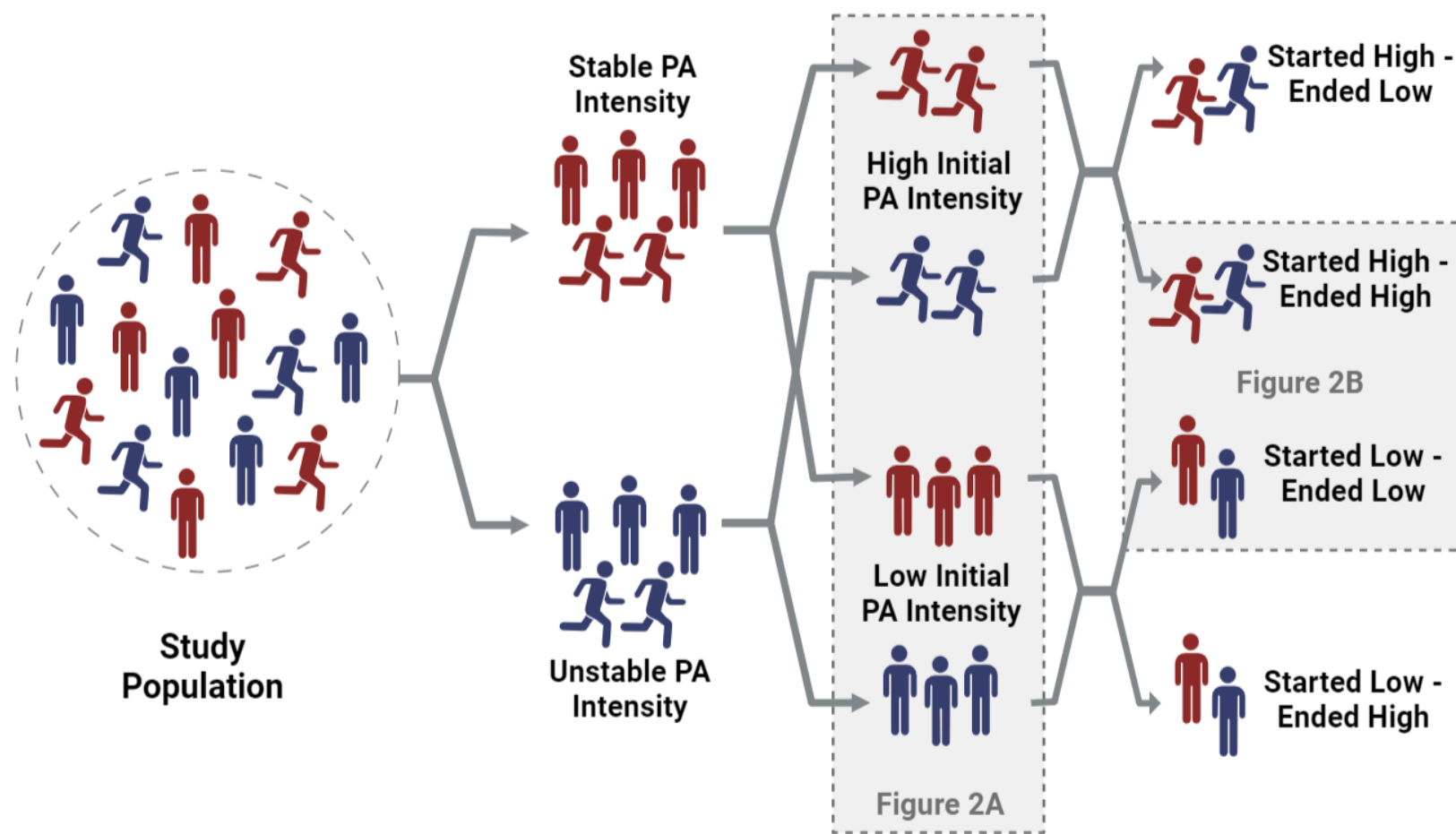


- Heart rate variability (HRV) refers to the beat-to-beat variation in heart rate.
- A loss of variability is linked to a poor prognosis and increased mortality.



Implementing variability-based algorithms to improve outcomes.

Introduced variability was linked to reduced physical disability and improved short-term memory in individuals with low physical activity levels.



SHARE dataset: The most prominent social science study
27 countries; millions of subjects being followed for 18 years



HARVARD
T.H. CHAN
SCHOOL OF PUBLIC HEALTH



Optimed Max: Lead with value for patients

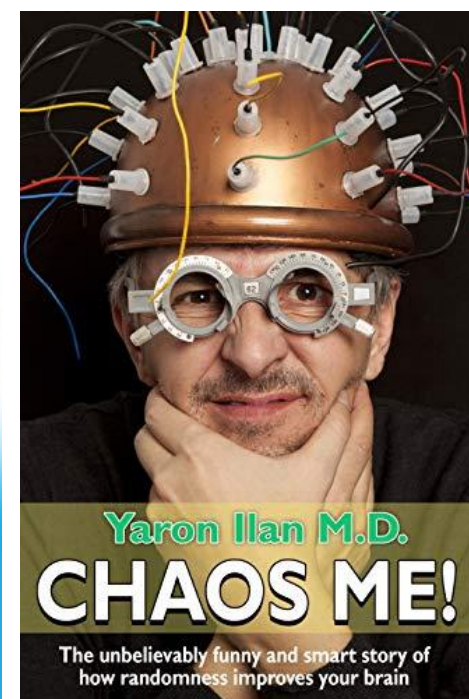
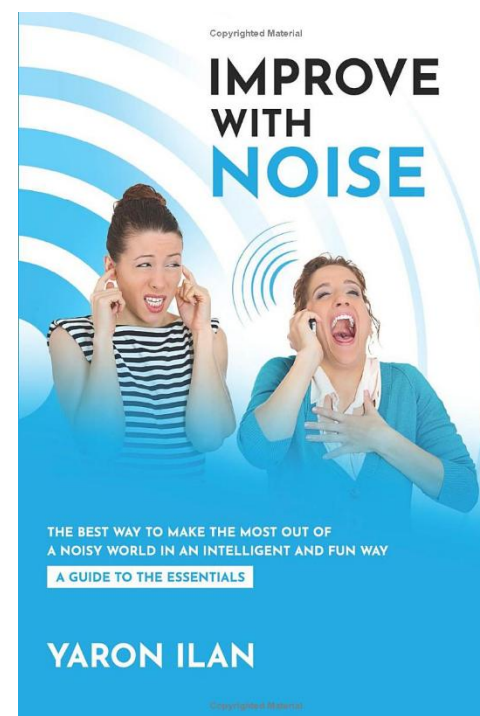
- A global leader in utilizing variability to enhance functionality.
- Tailoring therapies to suit human physiology.

- ✓ Does not require a behavior change.
- ✓ Ensures adoption by improving outcomes: *Patients perceive the app as an integral part of their therapy.*
- ✓ Enhances existing products: *Utilize a model similar to Uber or Airbnb, eliminating the need to develop costly new products and bypassing regulatory barriers.*
- ✓ Reduces costs for healthcare systems.
- ✓ Increase revenue for pharmaceutical companies.
- ✓ Establishes a win-win business model: *Implement a yearly subscription fee and share revenues from data.*
- ✓ Offers a white-label app

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ilan@hadassah.org.il



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A second-generation artificial intelligence-based therapeutic regimen improves diuretic resistance in heart failure: Results of a feasibility open-labeled clinical trial

Ram Gelman^{a,1}, Noa Hurvitz^{a,1}, Rima Nesserat^a, Yotam Kolben^a, Dean Nachman^b, Khurram Jamil^c, Samuel Agus^c, Rabea Asleh^b, Offer Amir^b, Marc Berg^c, Yaron Ilan^{a,*}