

- Revolutionizing patient outcome.
- Augmenting the standard of care.

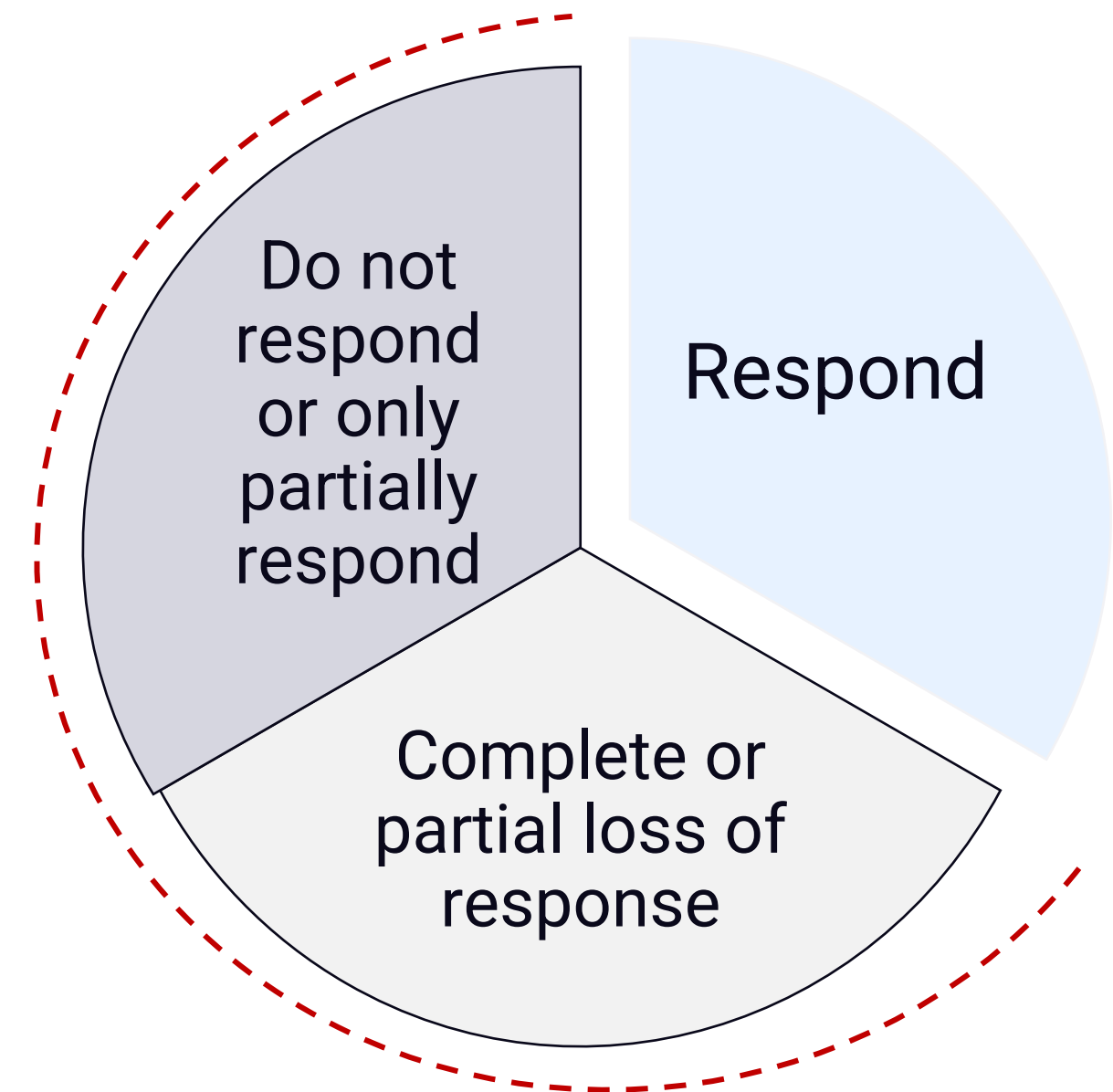
Optimed Max

Science-driven effectiveness

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

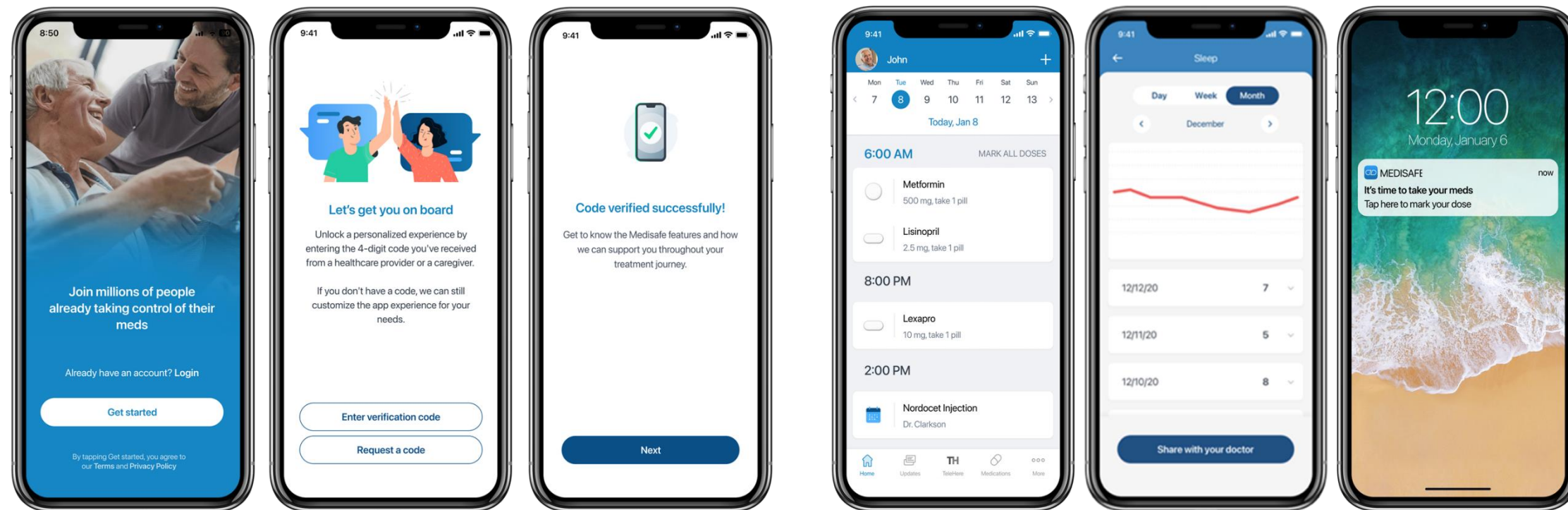
Dementia

Kidney disease

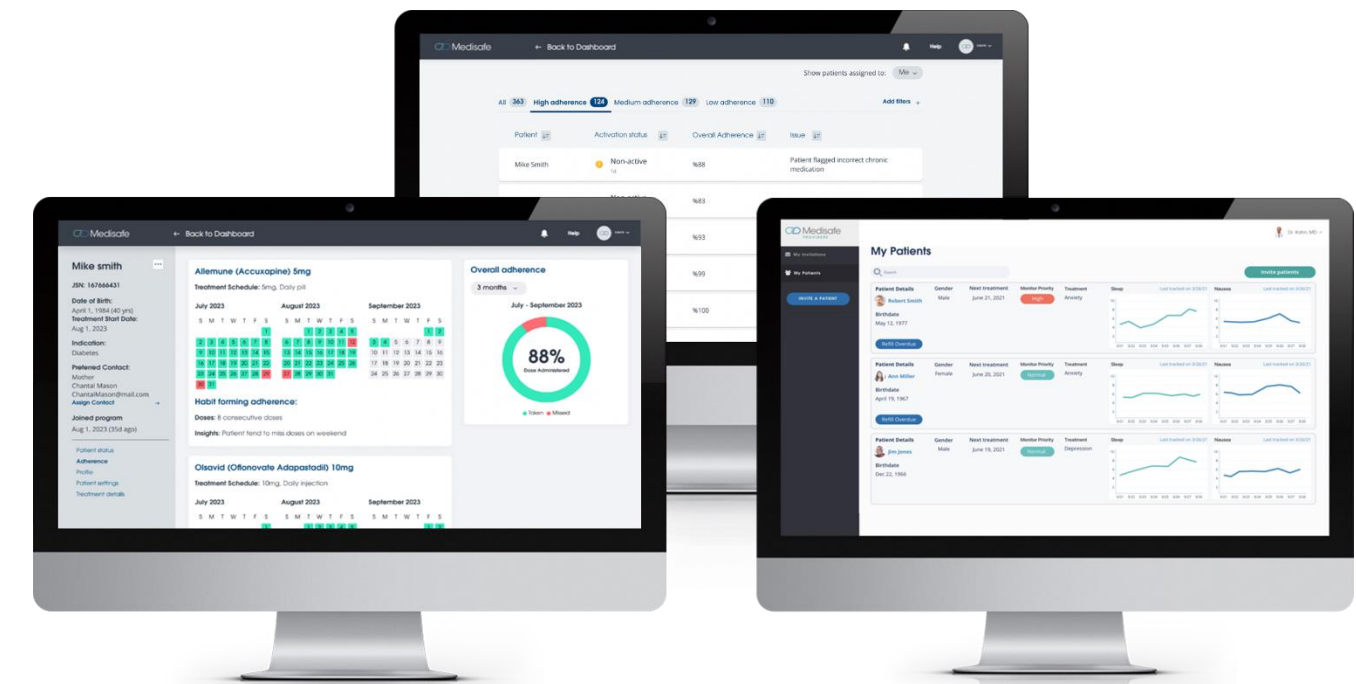
Obesity

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.

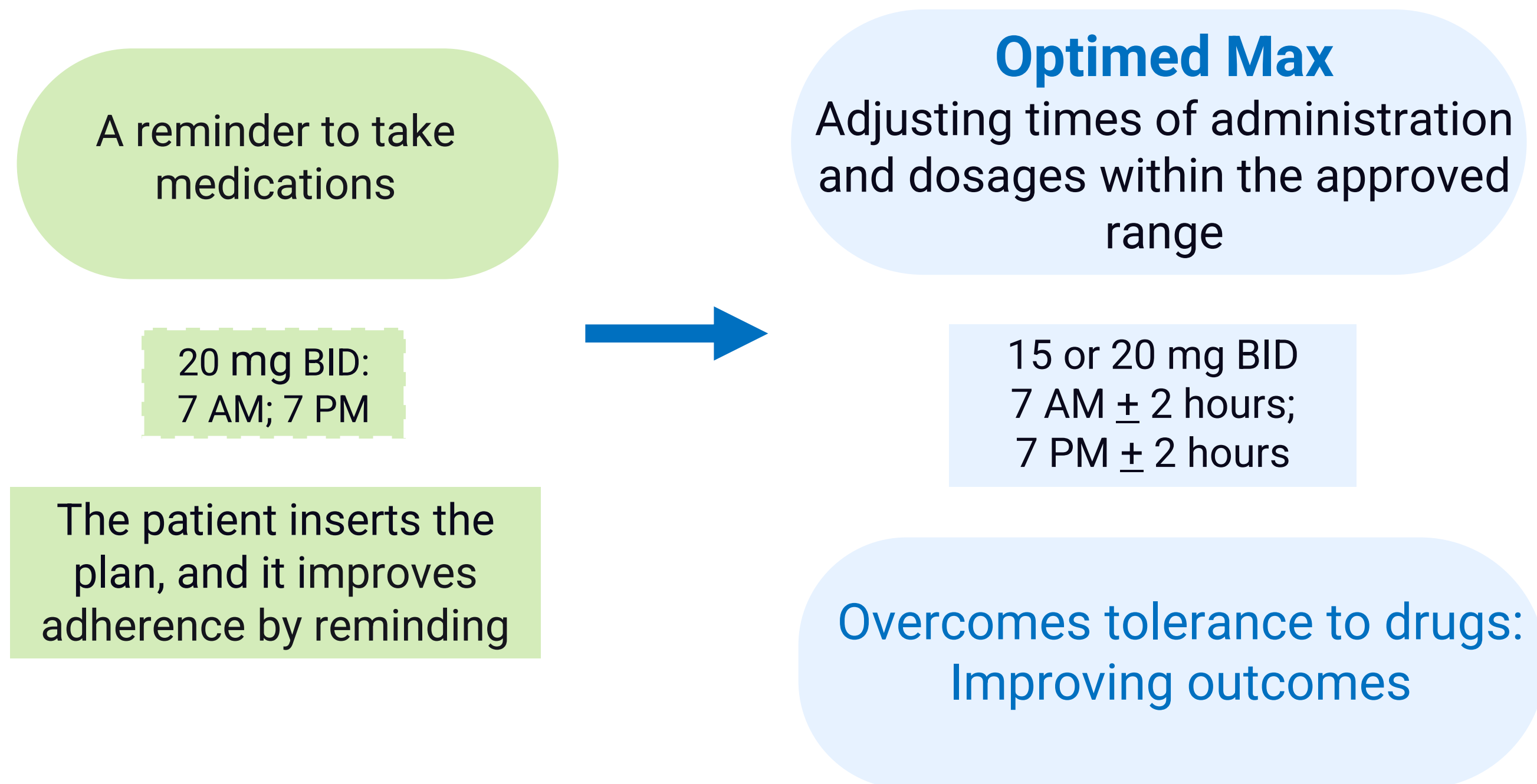


The Medisafe portal enables healthcare providers to evaluate patients with real-time access to patient activity.



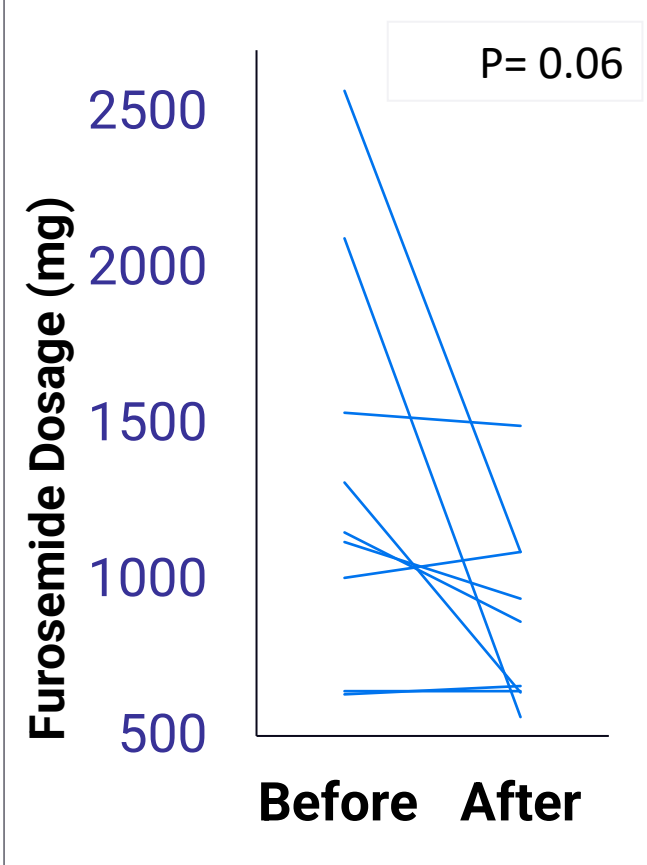
The Solution:

Optimed Max, The Digital Pill, is a drug regulated by AI. Adjusting the administration times and dosages can help overcome the lack of response.

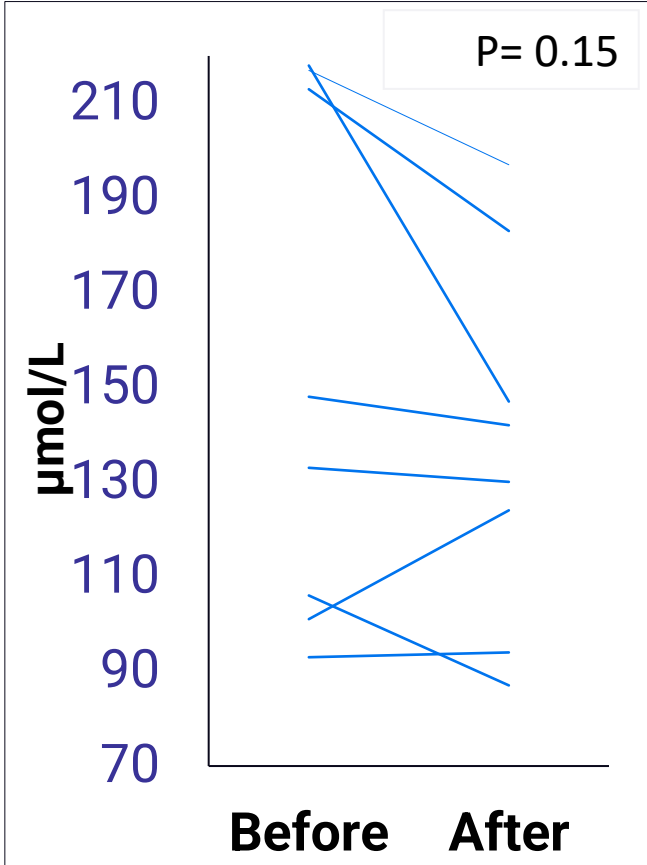


Optimed Max improves the response to diuretics in heart failure patients with diuretic resistance.

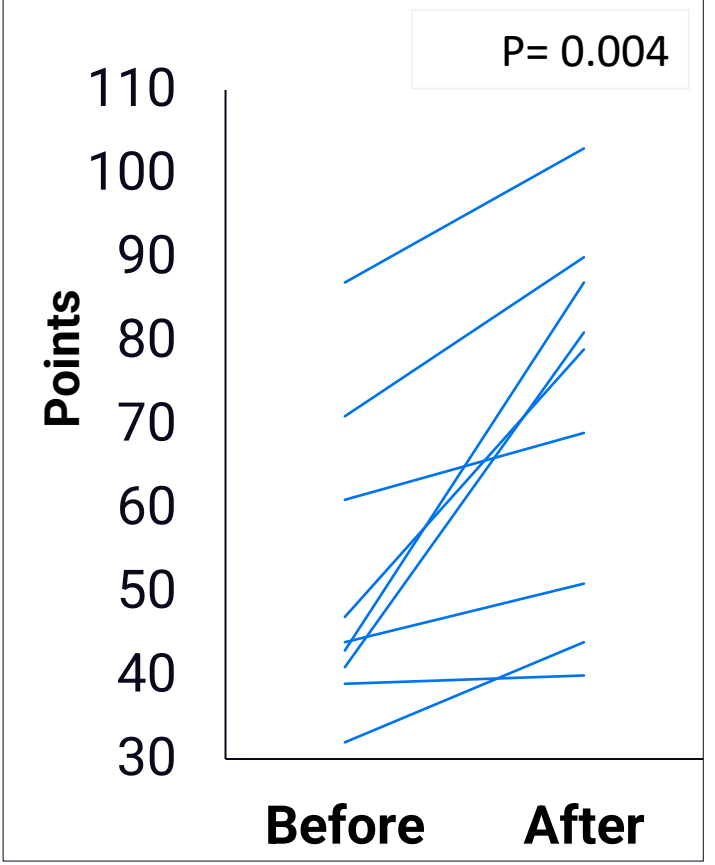
Reduces required dosages



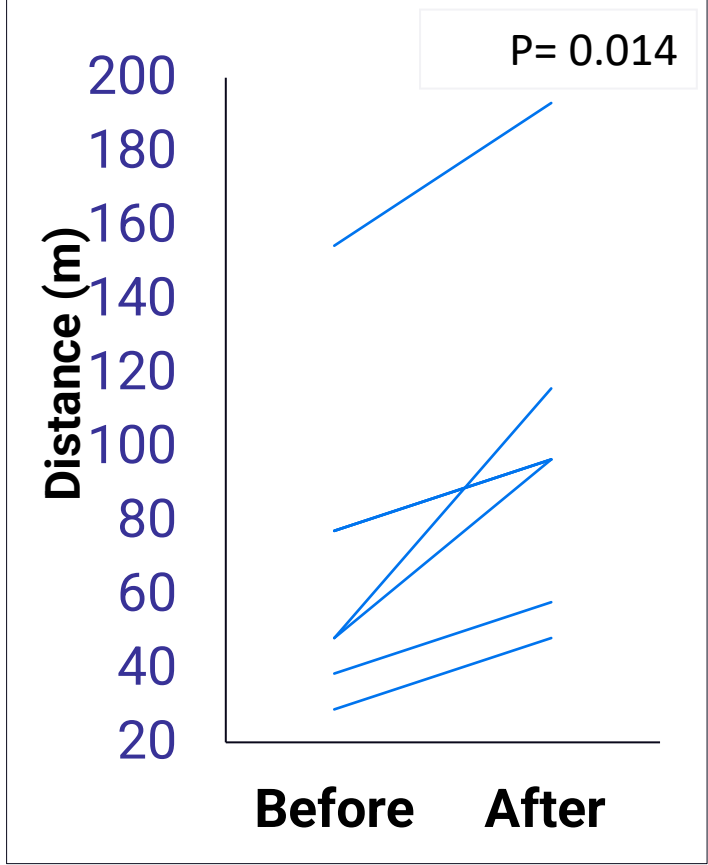
Improves kidney function



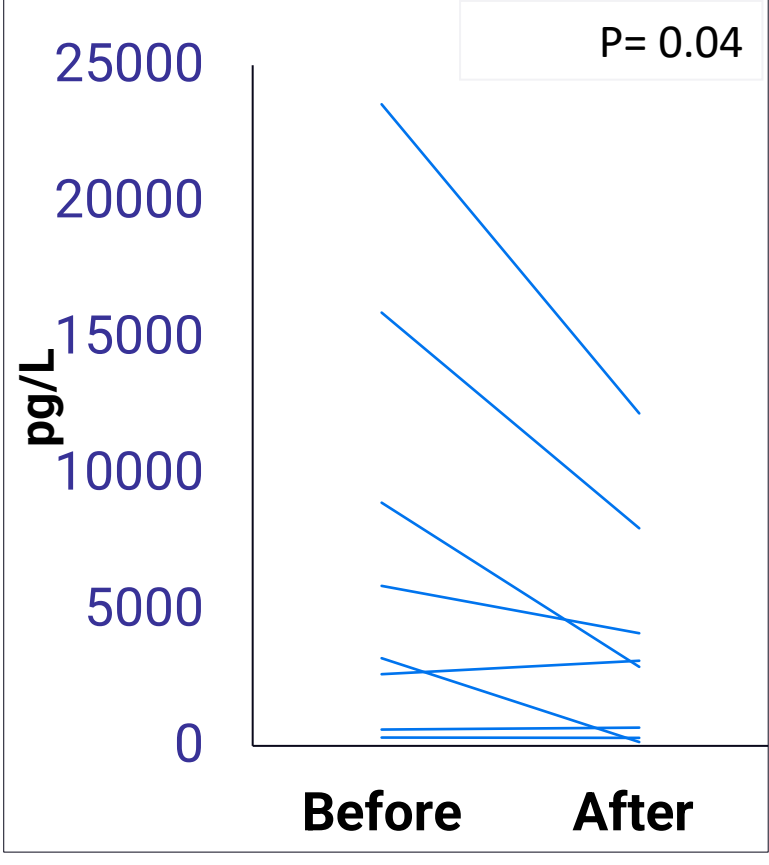
Improves functional capacity



Improves 6-minute walk test

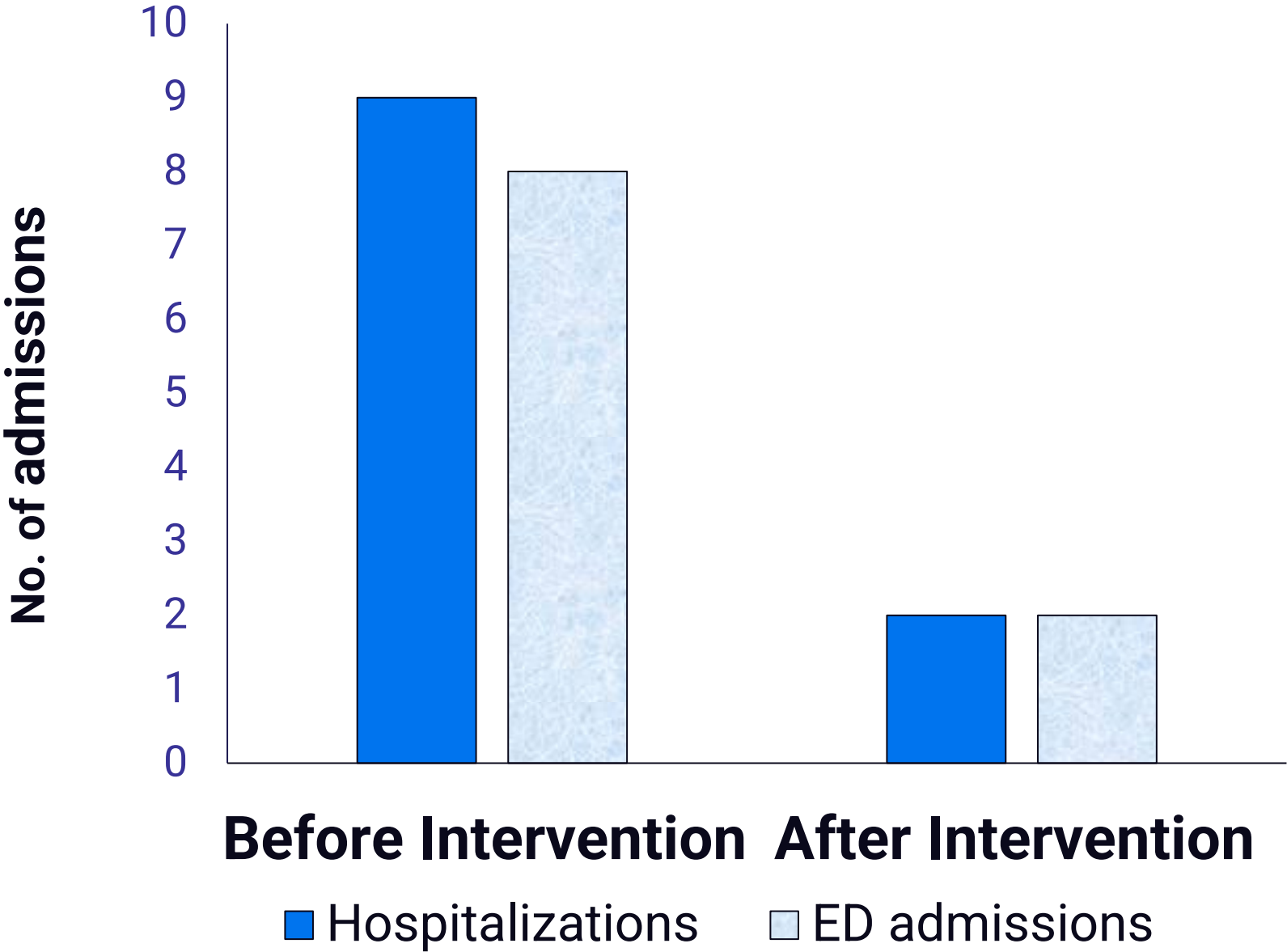


Reduces NT-ProBNP serum levels: A measure of severity of heart failure

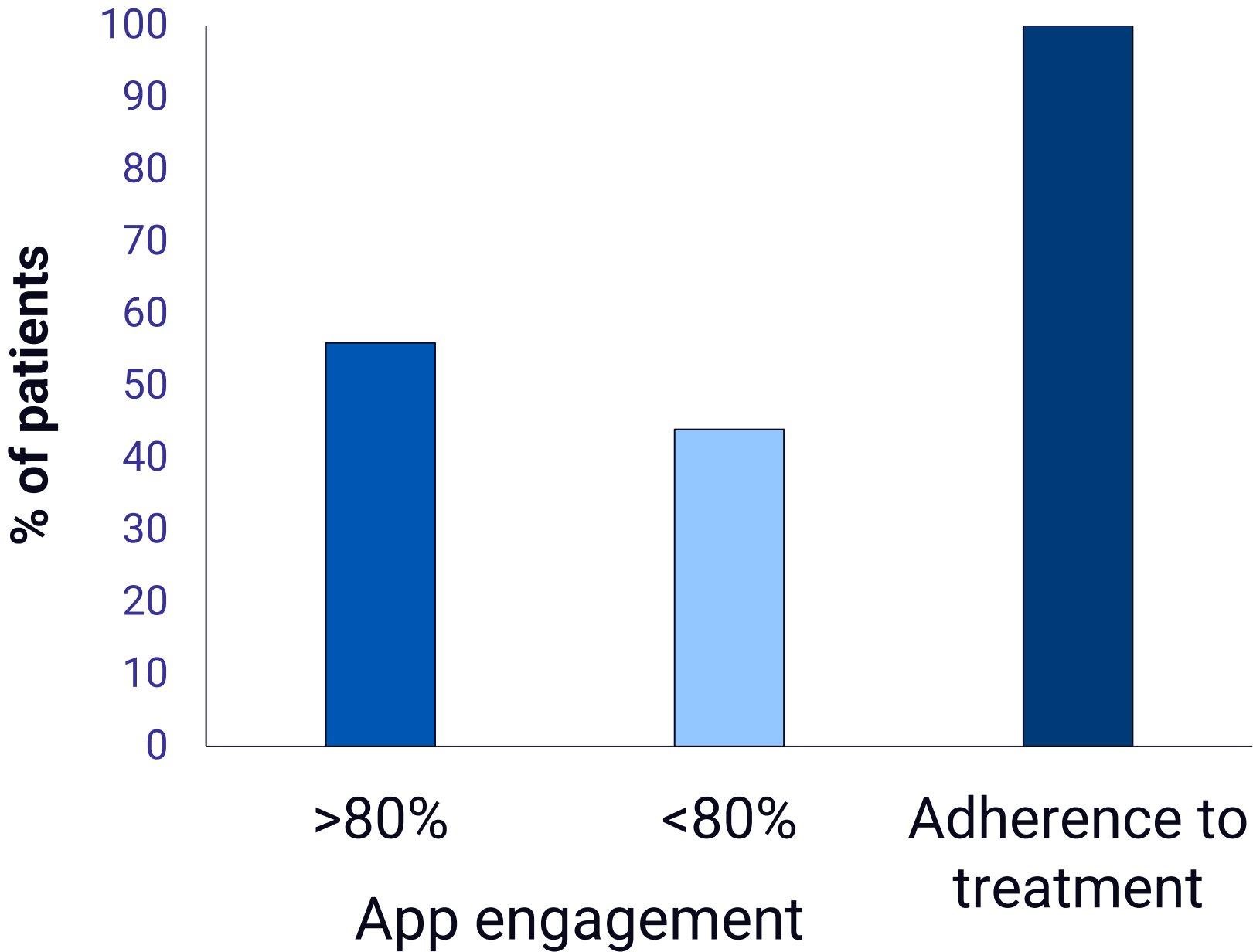


Optimed Max reduces hospitalizations for patients with heart failure.

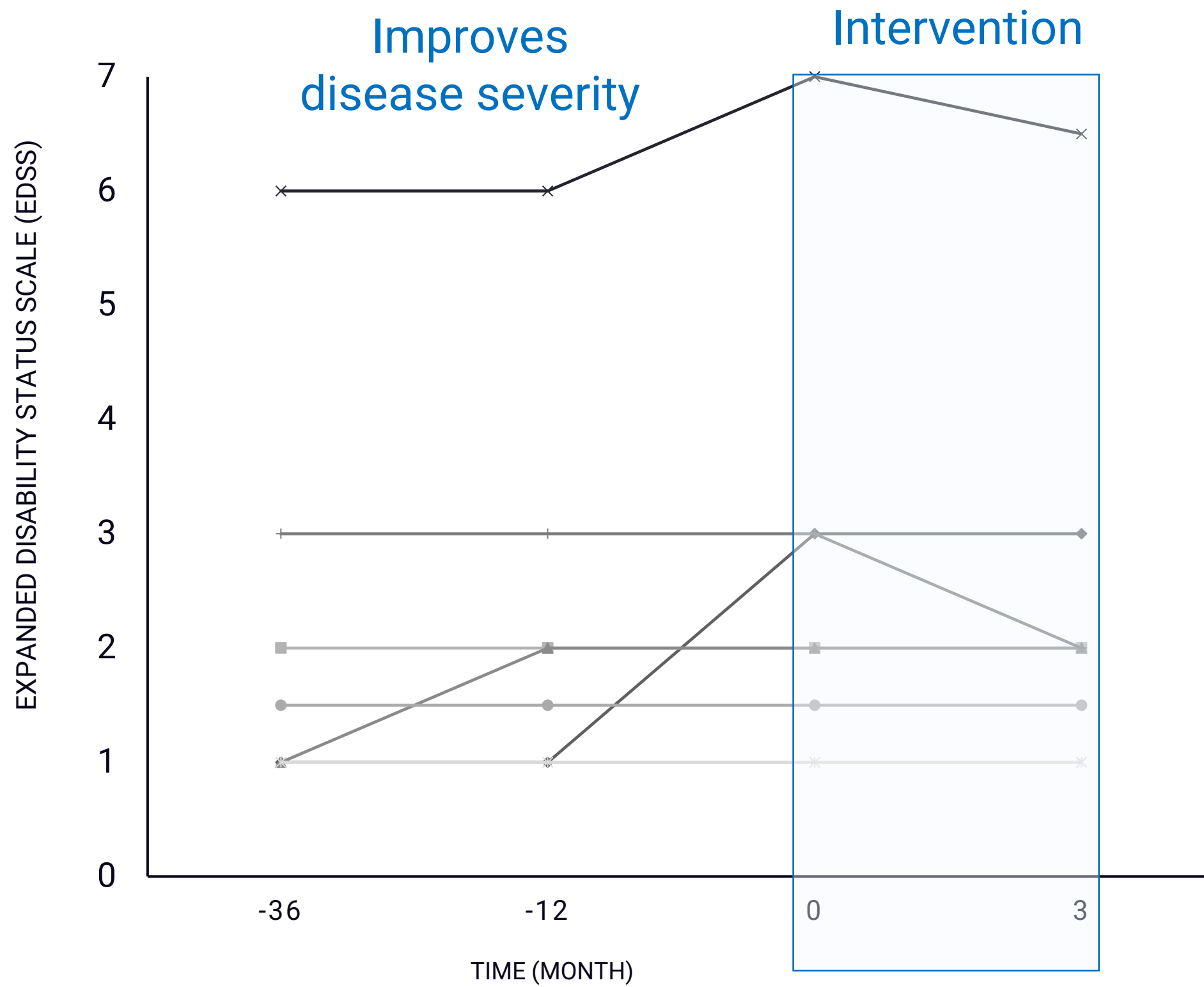
Reduces hospitalizations and emergency room admissions



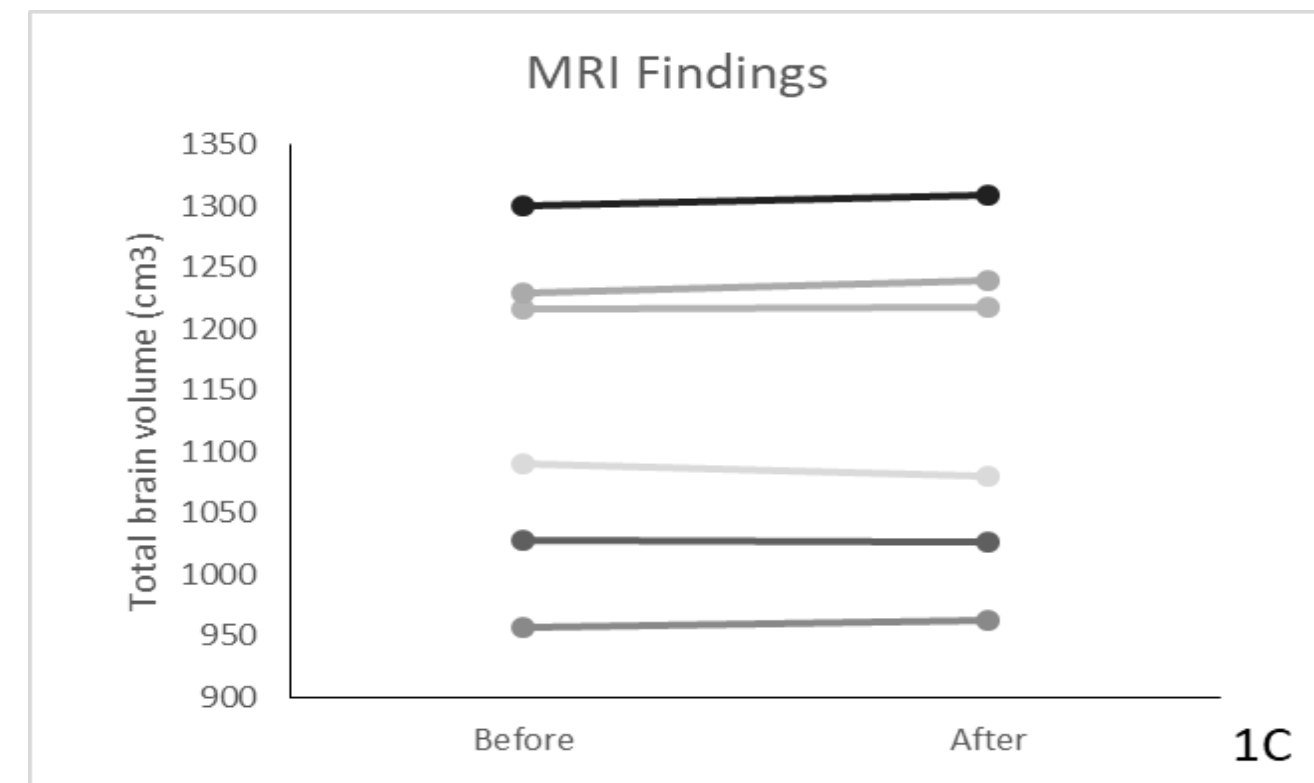
Improves engagement and adherence



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

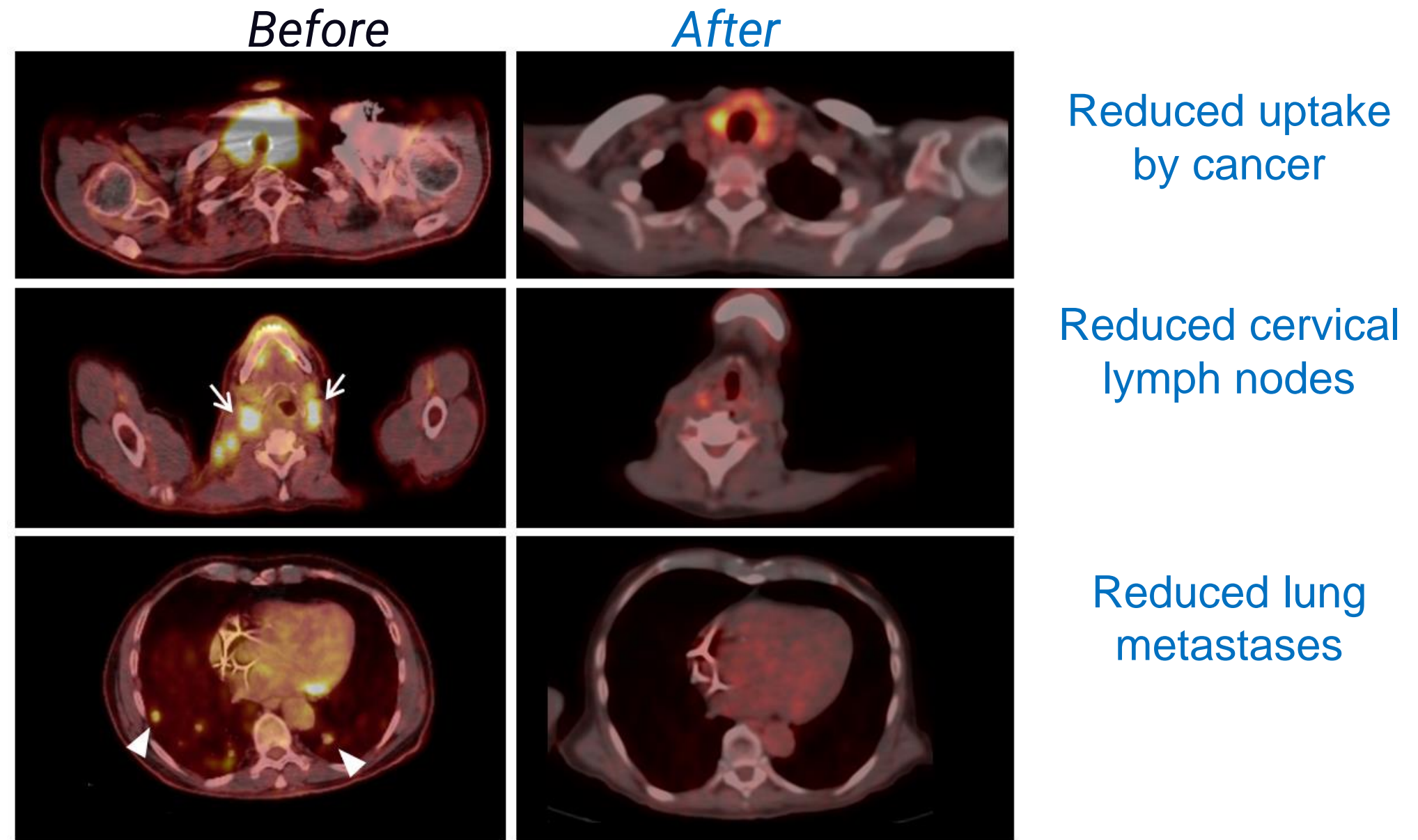


Stabilizes and improves brain MRI

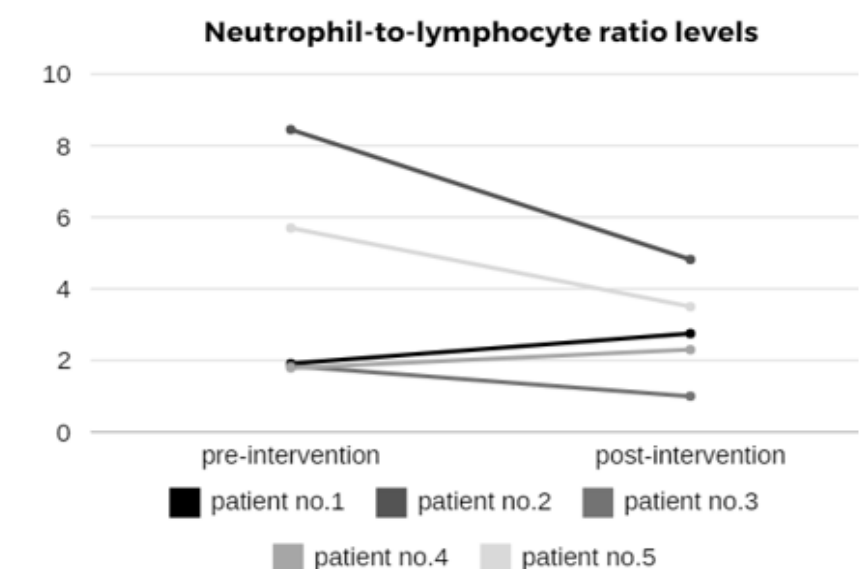
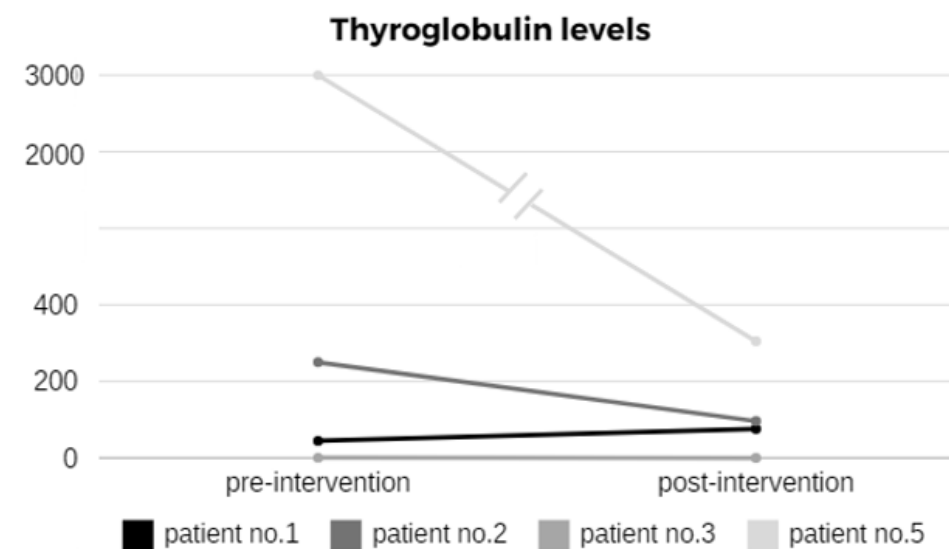


Optimed Max overcomes drug-resistant cancer in patients with loss of response or dose-limiting adverse effects

- 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.
- $n=5$

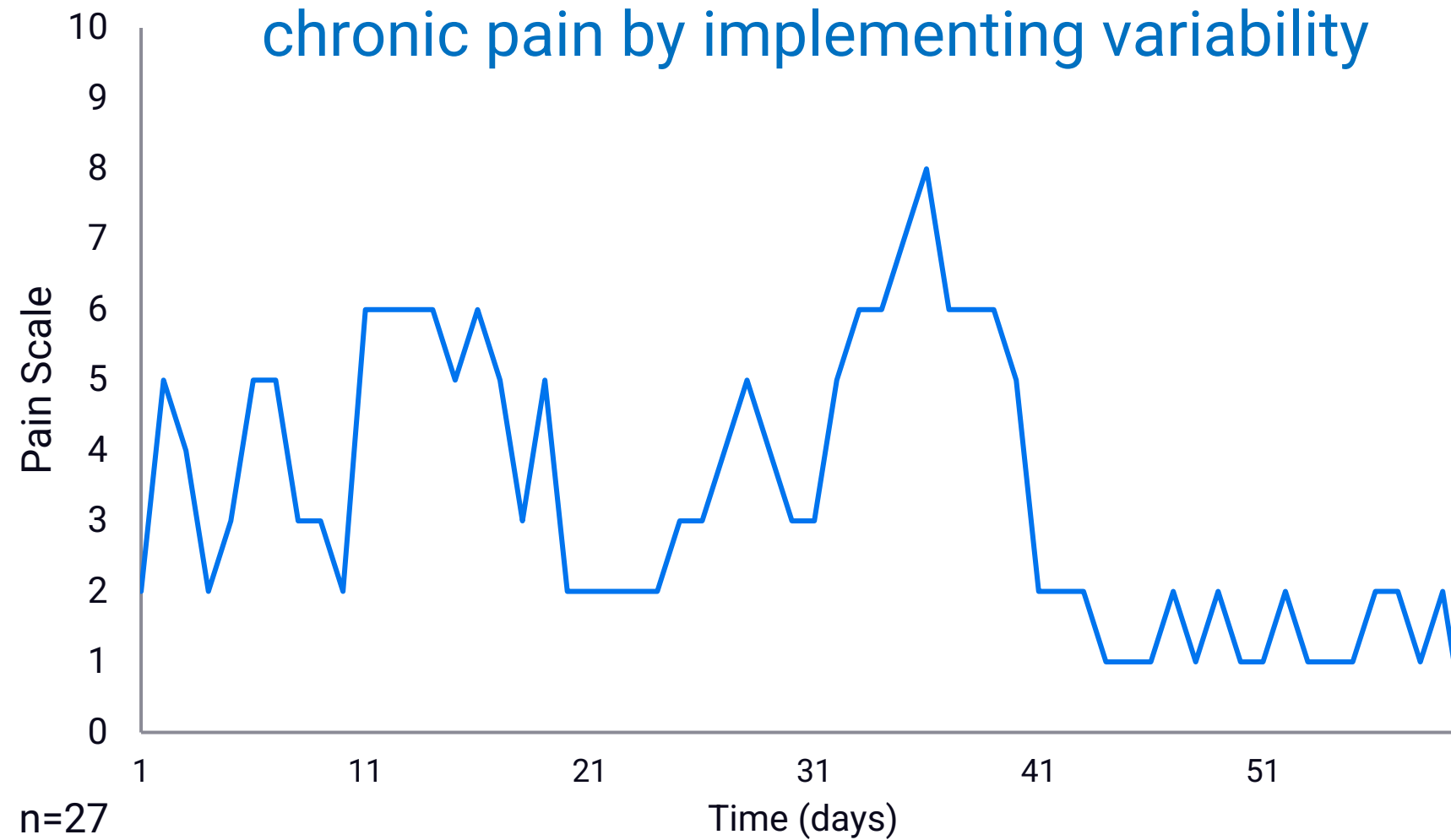


Real-world data on digital medical cannabis in patients with chronic pain: Optimed Max enhances adherence and maintains the response.

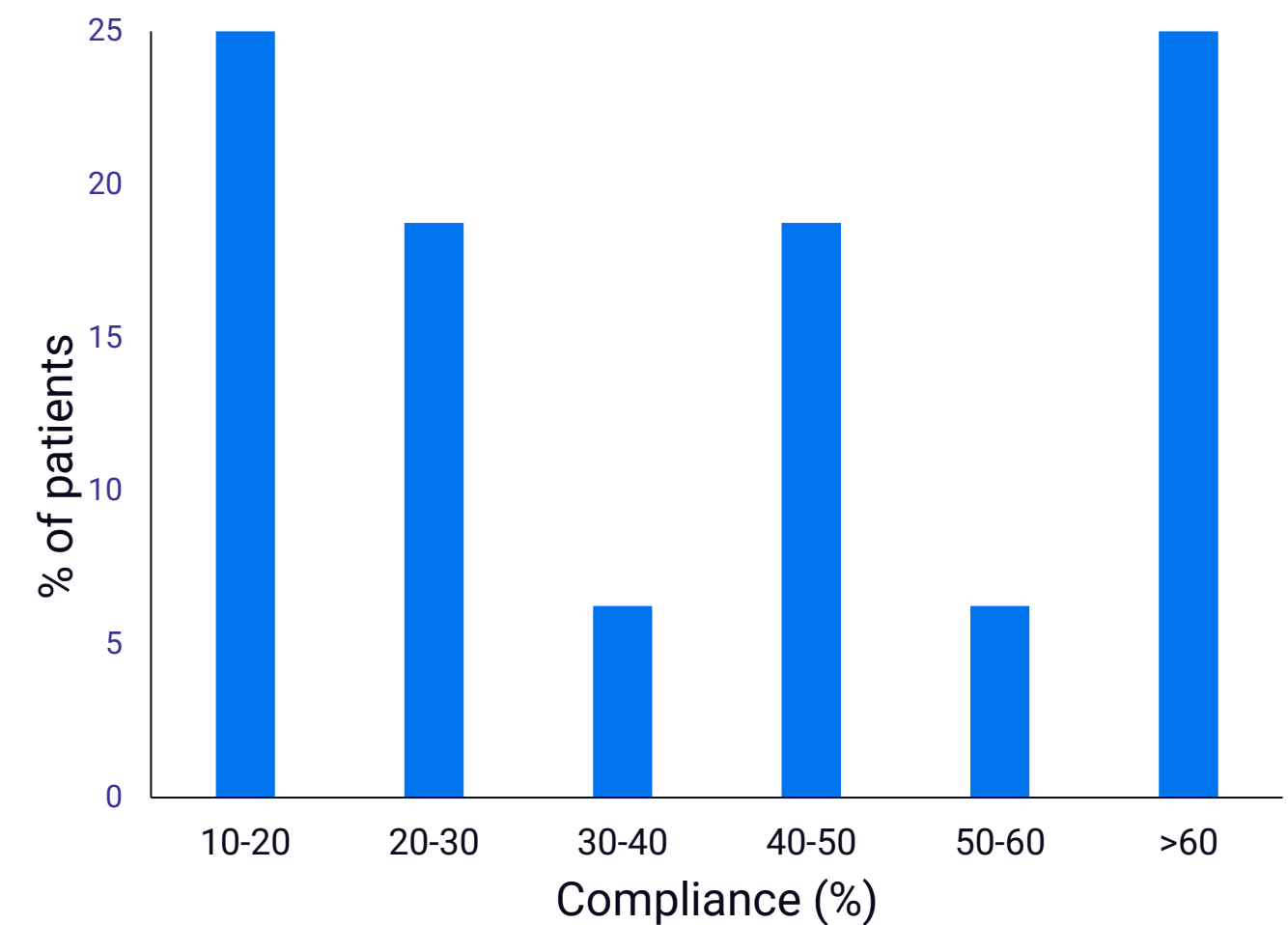
Improves pain score

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

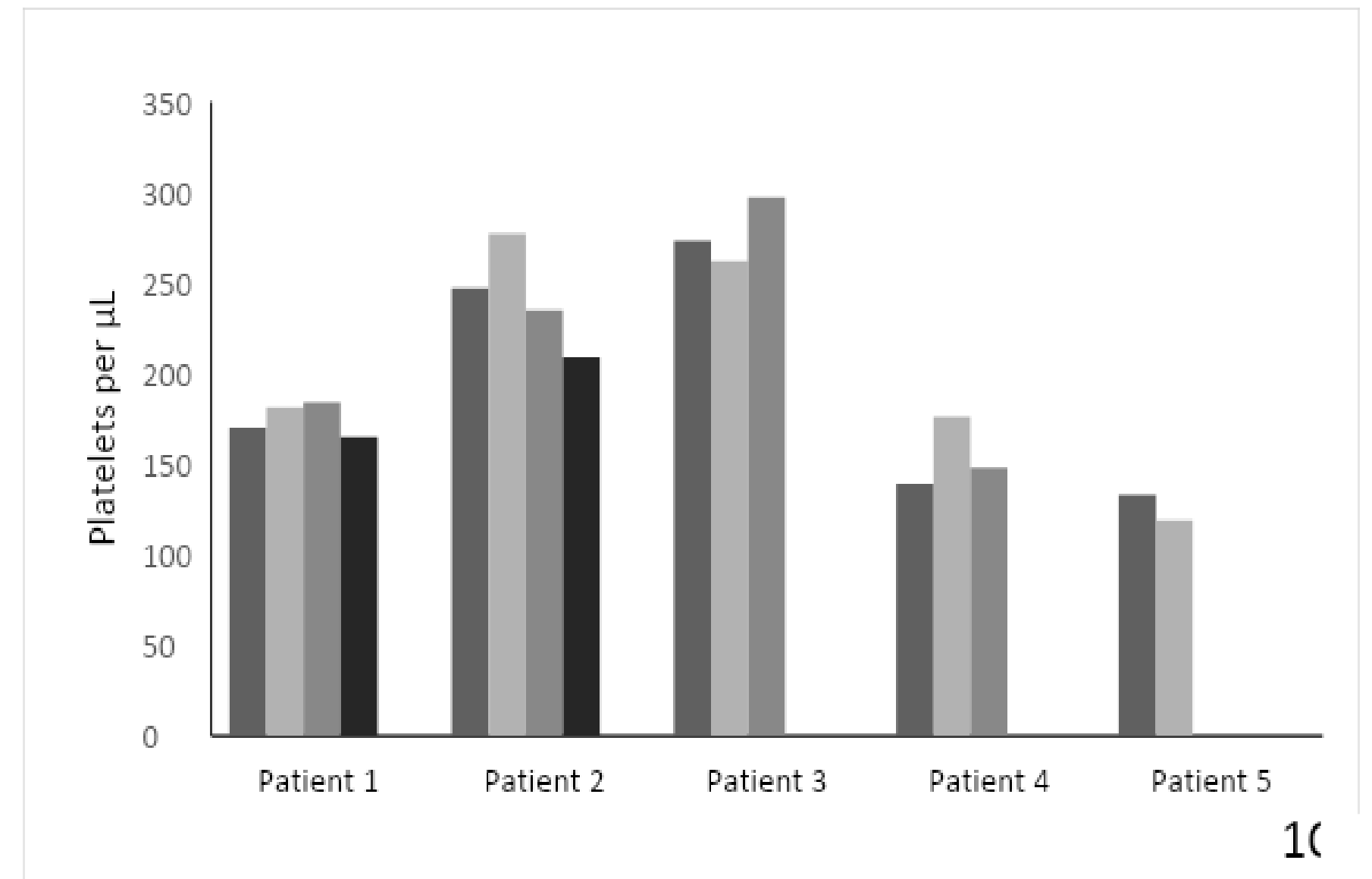


Sigawi, Tal, et al. *Journal of Bioinformatics and Systems Biology* 6 (2023): 82-89.

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.

Optimed Max improves effectiveness by implementing data-driven personalized regimens.

Optimed Max

Powered by Medisafe

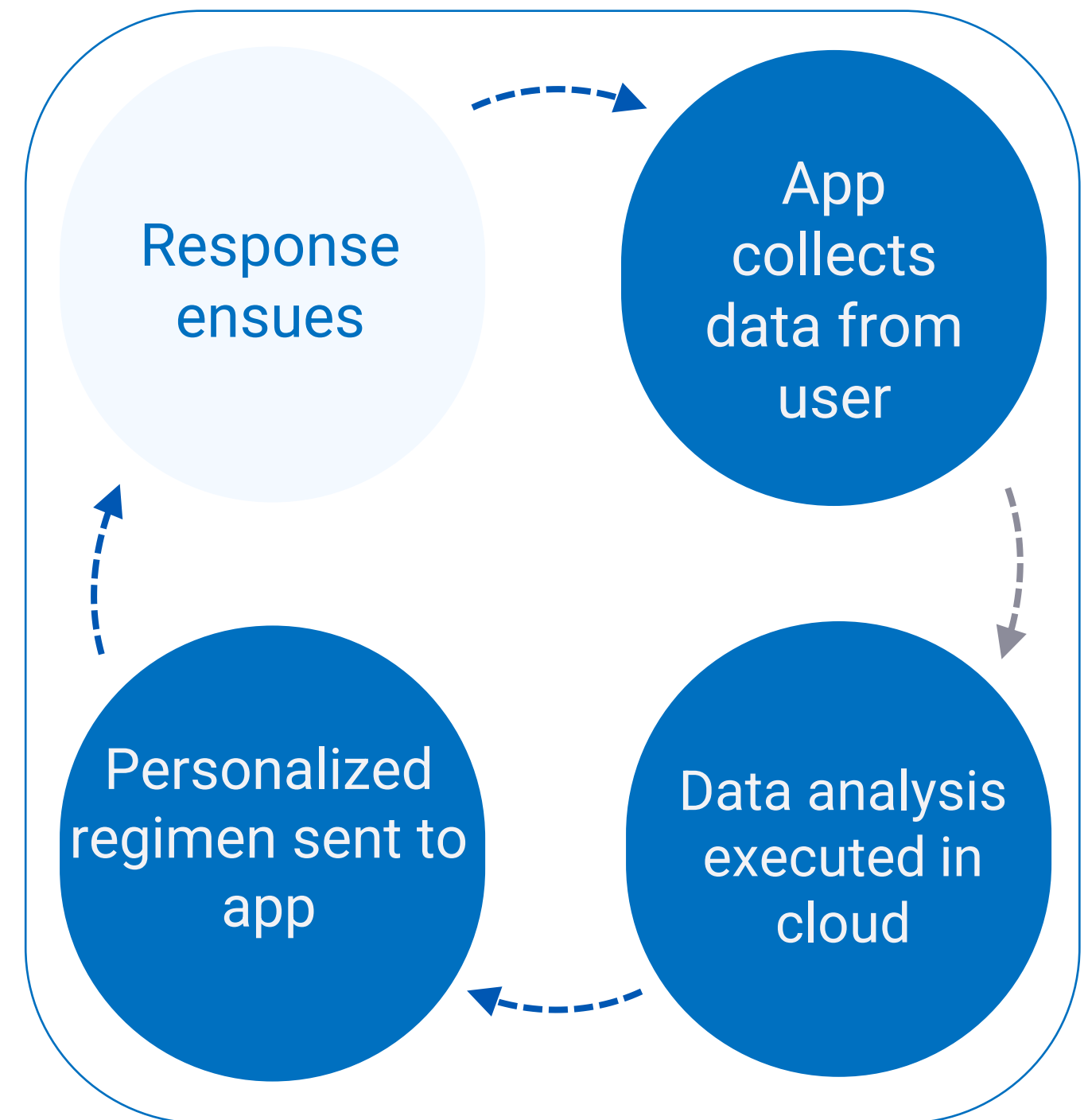
Introduce variation in the dosage and timing of administration within the approved range.

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.



Adding value to all participants in the healthcare system by fostering engagement and reducing costs.

Patients

- Improve outcome
- Reduce admissions and hospitalizations

Physicians

- Improve adherence

Payers

- Saves costs

Pharma

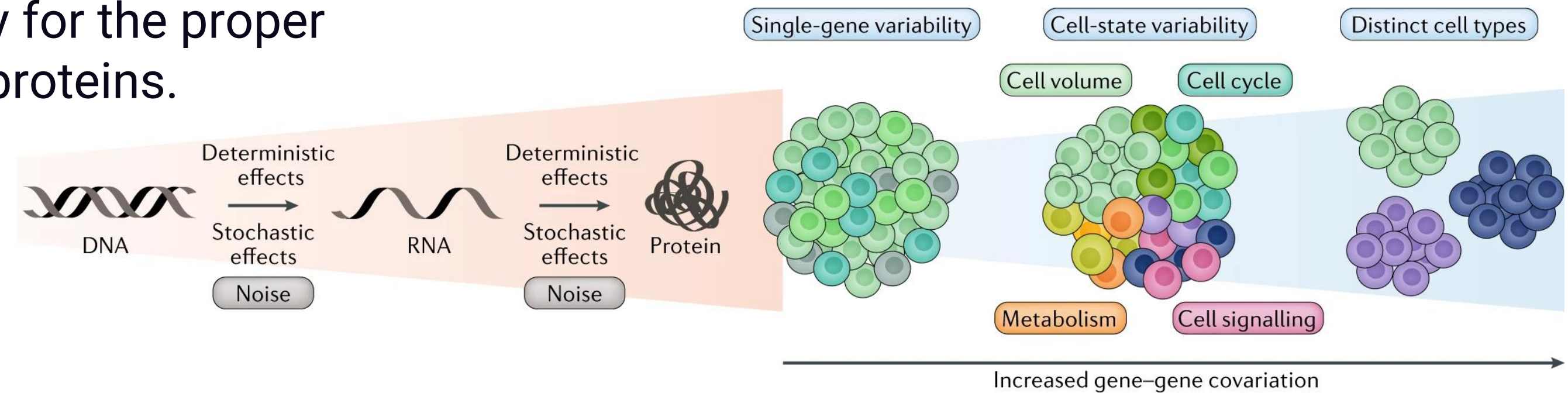
- Market disruptor
- Increase revenues
- Prolongs drugs' IP

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

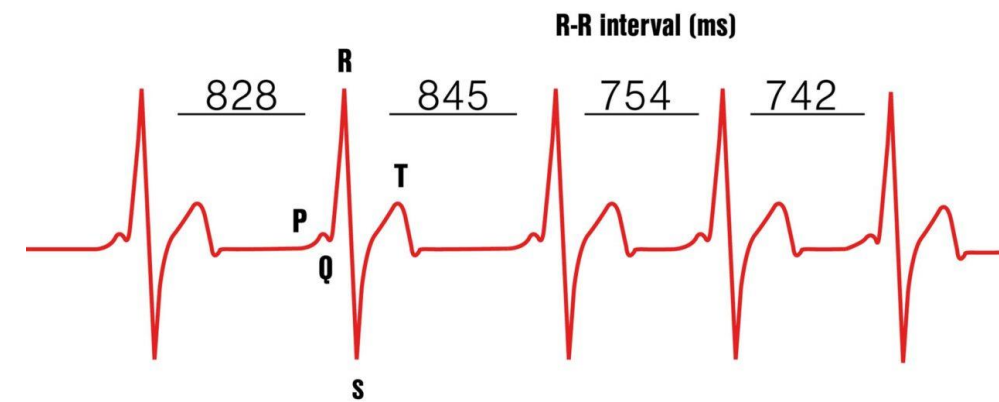
The Science

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.

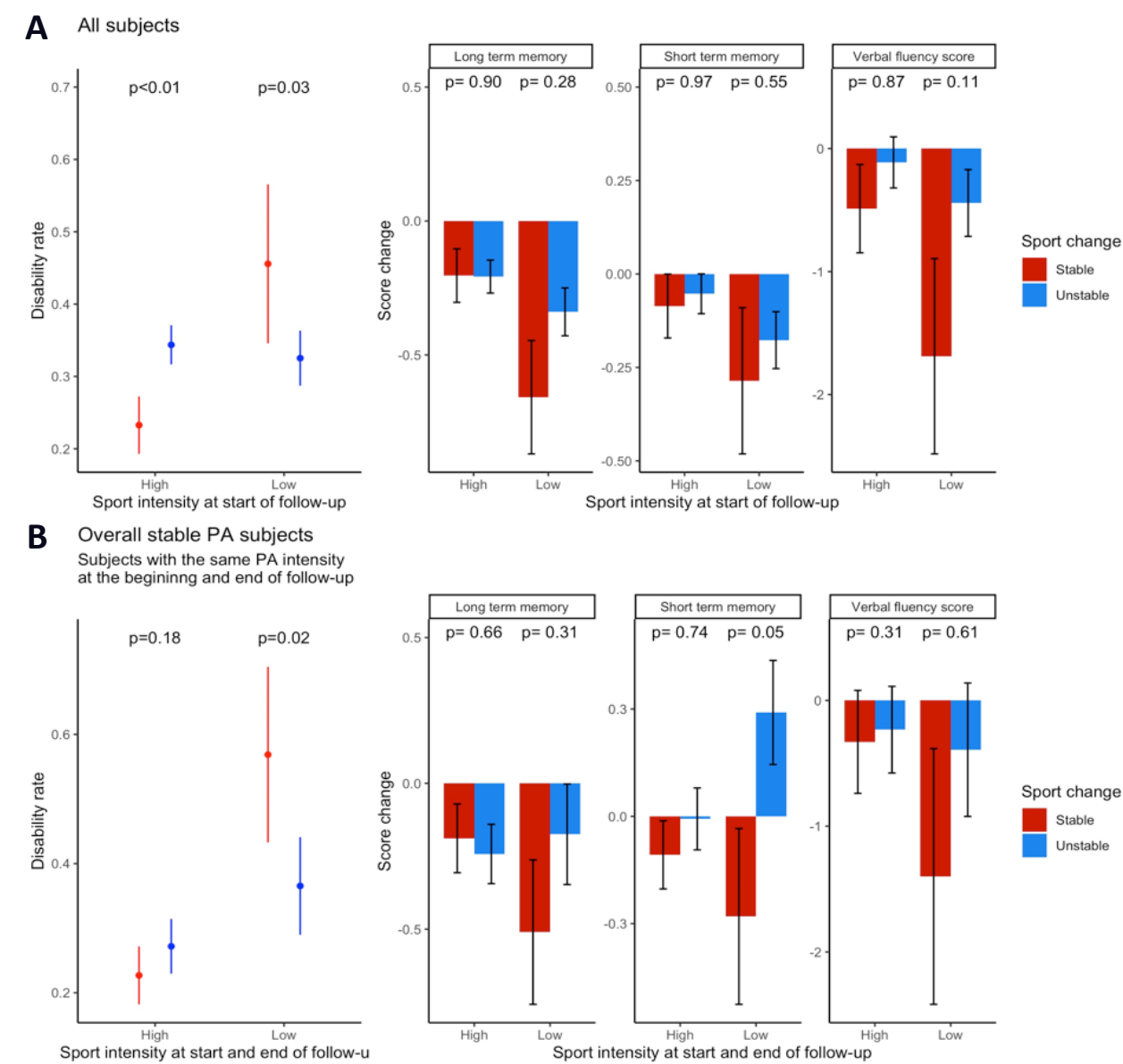
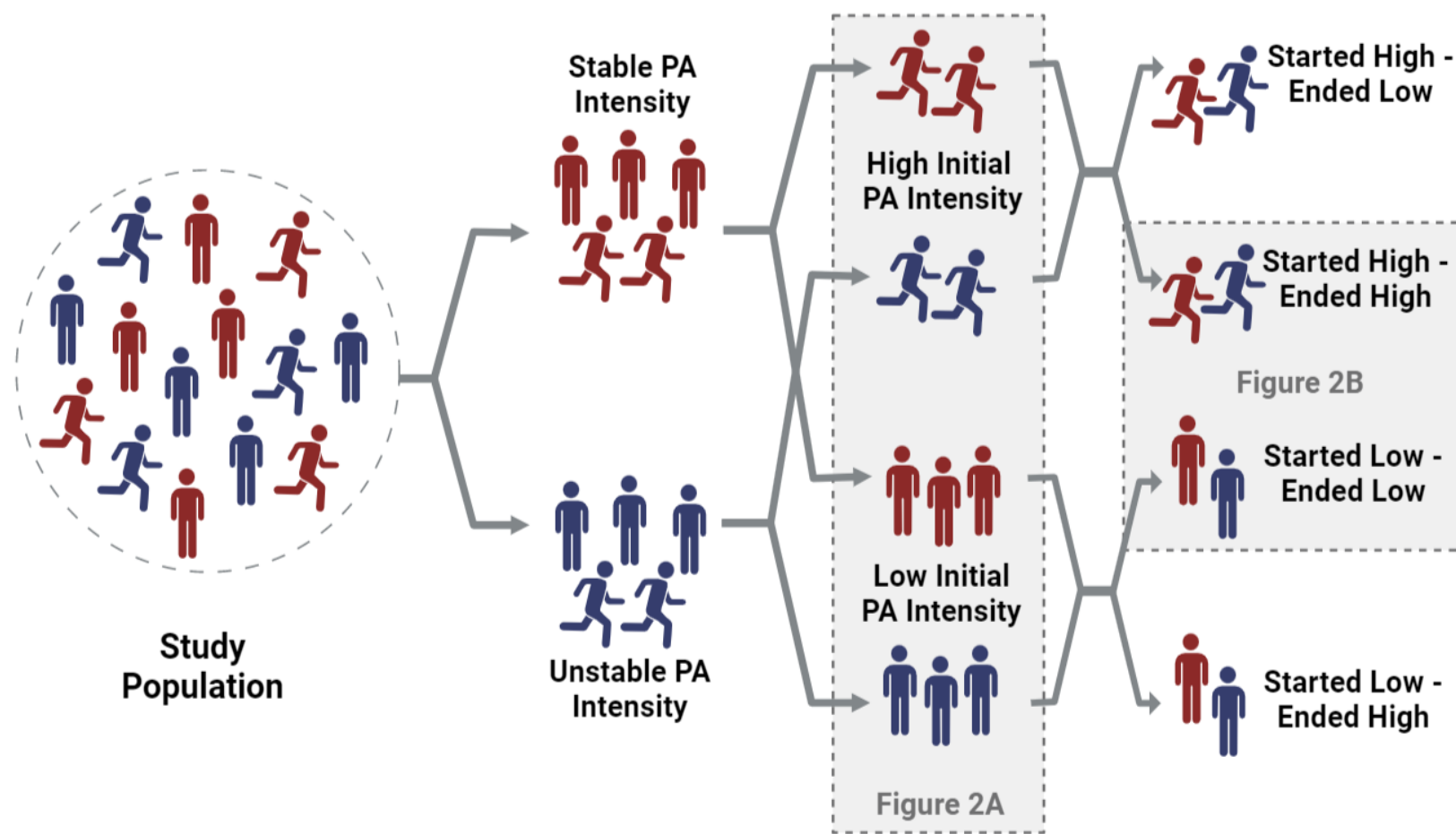


- Heart rate variability (HRV) refers to the beat-to-beat variation in heart rate.
- A loss of variability is linked to a poor prognosis and increased mortality.



Implementing variability-based algorithms to improve outcomes.

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



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

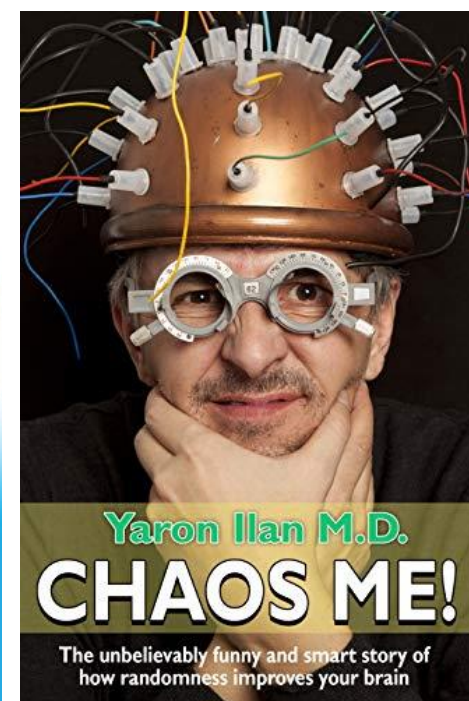
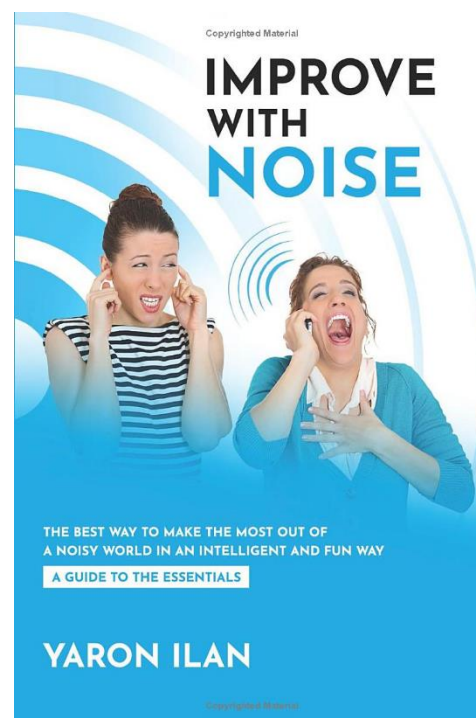


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Optimed Max

- ✓ Ensuring adoption by improving outcomes: Patients see the app as part of their therapy.
- ✓ Improving existing products: Using a model similar to Uber / Airbnb, there is no need to develop expensive new products and no regulatory barriers.
- ✓ Saving costs for health systems.
- ✓ Increasing pharmaceutical revenue.
- ✓ A win-win business model: A yearly subscription fee and sharing revenues from data.



> 40 publications & 2 books



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,*}



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Science-driven effectiveness