



Ensuring Quality Control Through Cell-Based Testing



Opportunity

Revolutionize the cannabis and hemp industry with novel proprietary product tests that will guide product development and inform consumer choice.

What is CannaMetrix, LLC?

CannaMetrix is a biotechnology company specializing in unique and proprietary human cell-based methods that anticipate how products will perform in human biology rather than inferring potency from chemical quantification.

Industry-Wide Shortcomings Are Solved by CannaMetric

Bias is inherent in reporting chemical quantification; you only see what you look for

Live human cell testing reproducibly reveals dose-dependent potency of products

Chemical composition analysis does not reveal product performance in biology

Cell-based testing reveals the cellular response to the whole product

Currently, potency is inferred from anecdotal experiences of consumers or academic research using single cannabinoids

Cell-based testing is built for industry applications where biologic potency as a production goal

Consumers are generally uninformed, their experiences are inconsistent, low product loyalty

CannaMetric provides consumers with informed choices and educational tools linked by QR code

Consumer frustration; package labeling does not differentiate

CannaMetric testing and trademark differentiates products for consumer choice

Testing Services on Broad and Full Spectrum Products Make Up to 50% of the Value Generated in Cannabusiness

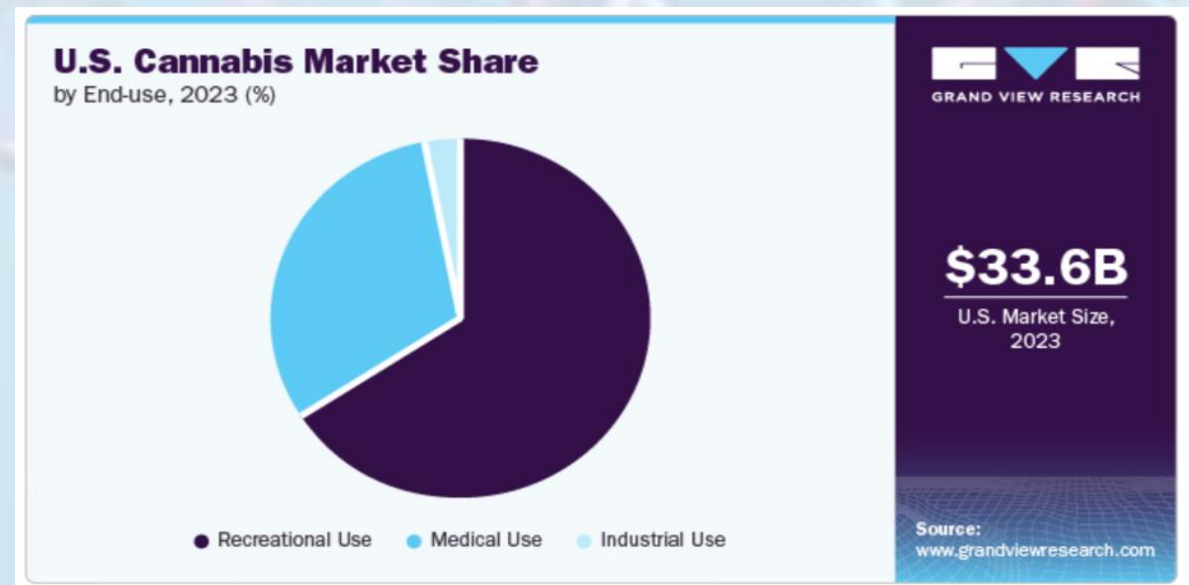
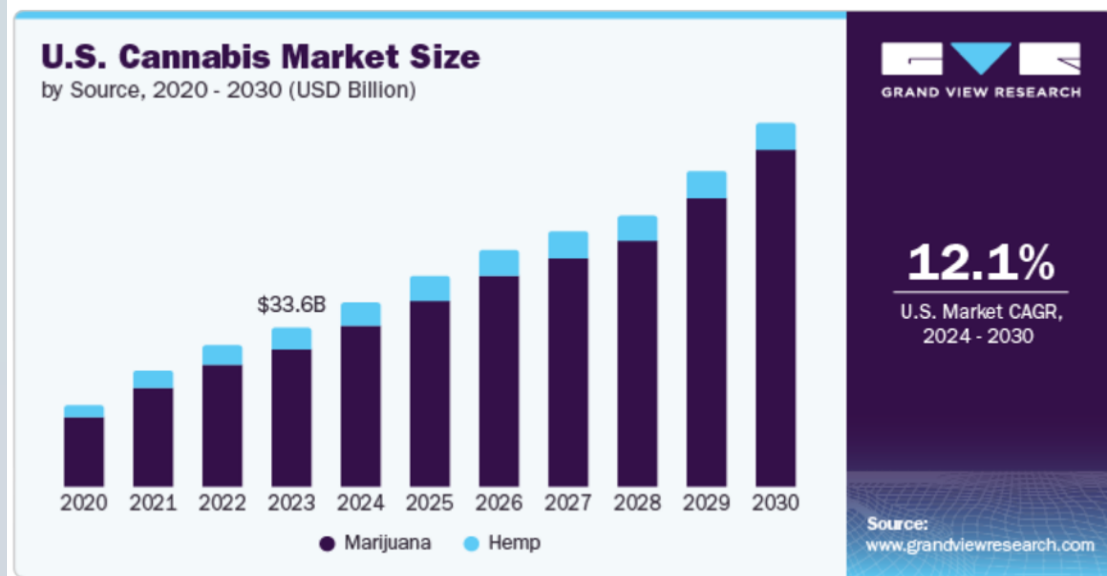
**NY State Processors and Testing Services,
Product Labeling and Trademark
(current total market > \$3.5B)**

**National Processors and Testing Services,
Product labeling and Trademark
(current total market > \$85B)**

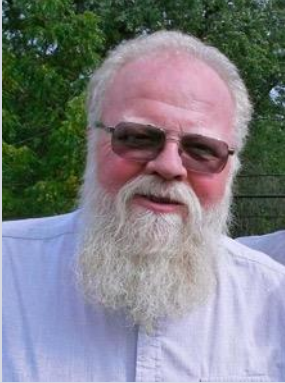
**Global Cannabis Potency Testing
NextGen Testing, Boutique Services
(current total market > \$300B)**

Market Trends & Dynamics

- The FDA has approved clinical trial testing for individual cannabinoids. Four products containing either THC or CBD have been approved in the USA for prescription use.
- More than half of 440 clinical trials involving cannabis since 2010 were performed in the United States.
- As of January 2025, 30 states have made cannabis fully legal and the remaining states have decriminalized or have restricted sales for medicinal purposes.
- The true potency and efficacy of most of the cannabis consumed globally is unknown because it is full spectrum.



CannaMetric Team



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CannaMetric, LLC Ideation and Disruptive Technology

What Determines Potency?

The industry determines the quantities of the most abundant cannabinoids and terpenes as a measure of “potency”.



Focus is on THC/CBD but ~10-15% of the 110 cannabinoids are testing for by labs



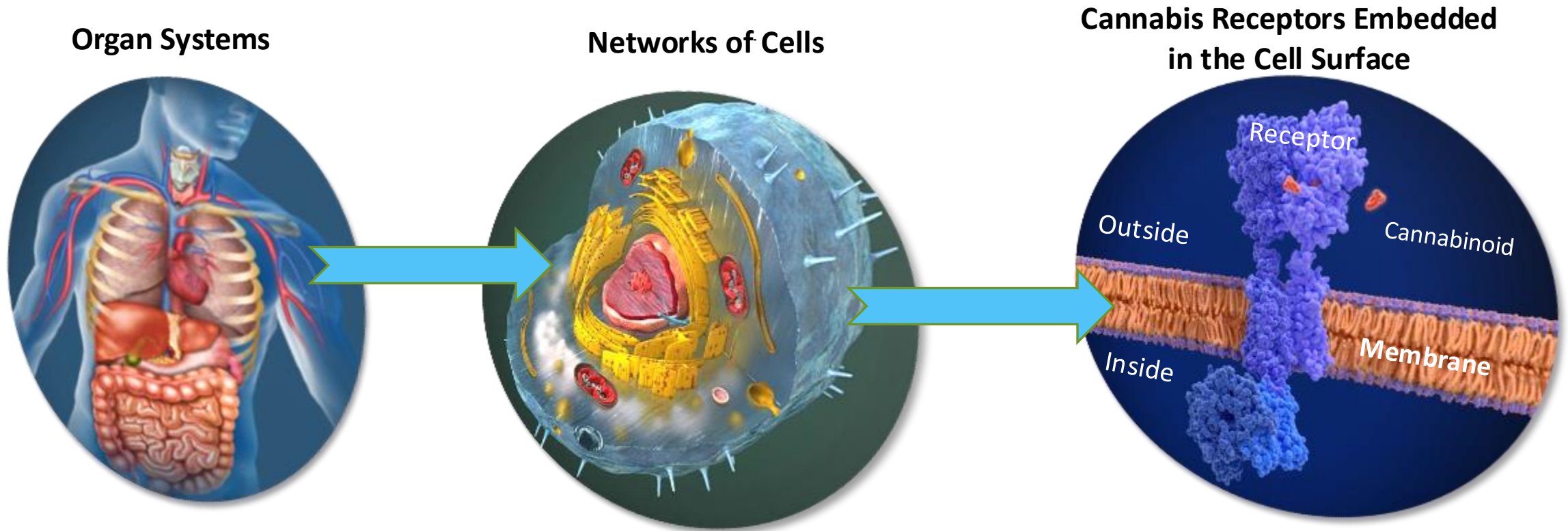
<https://www.cdxmlife.com/what-can-terpenes-do-for-you/>

~1/3 of the 80+ terpenes are monitored by most analytical testing labs, these may be bioactive

The industry has failed to appreciate that potency is the biological response to the chemistries in the product acting simultaneously on different cell receptors throughout the human body.

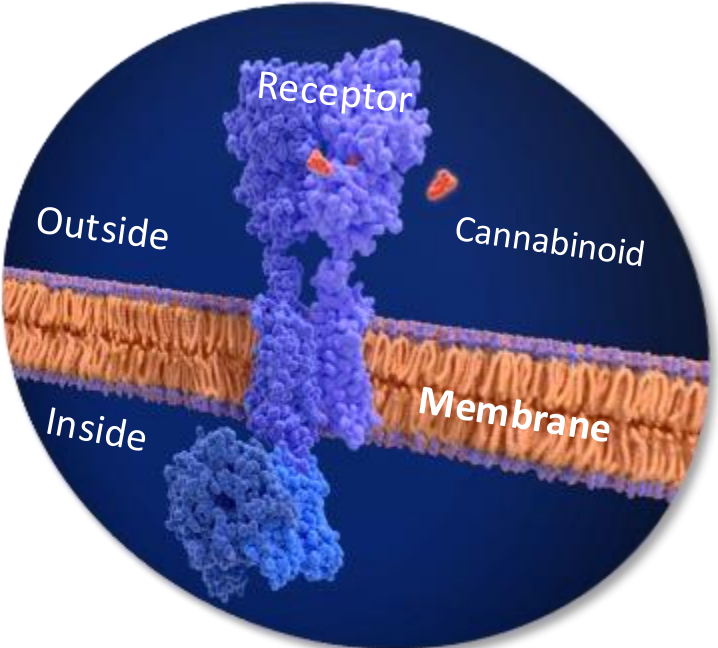
Therefore, potency manifests in biology and has to be measured as such.

Plant Cannabinoids Communicate with Human Cells to Alter Receptor Activity

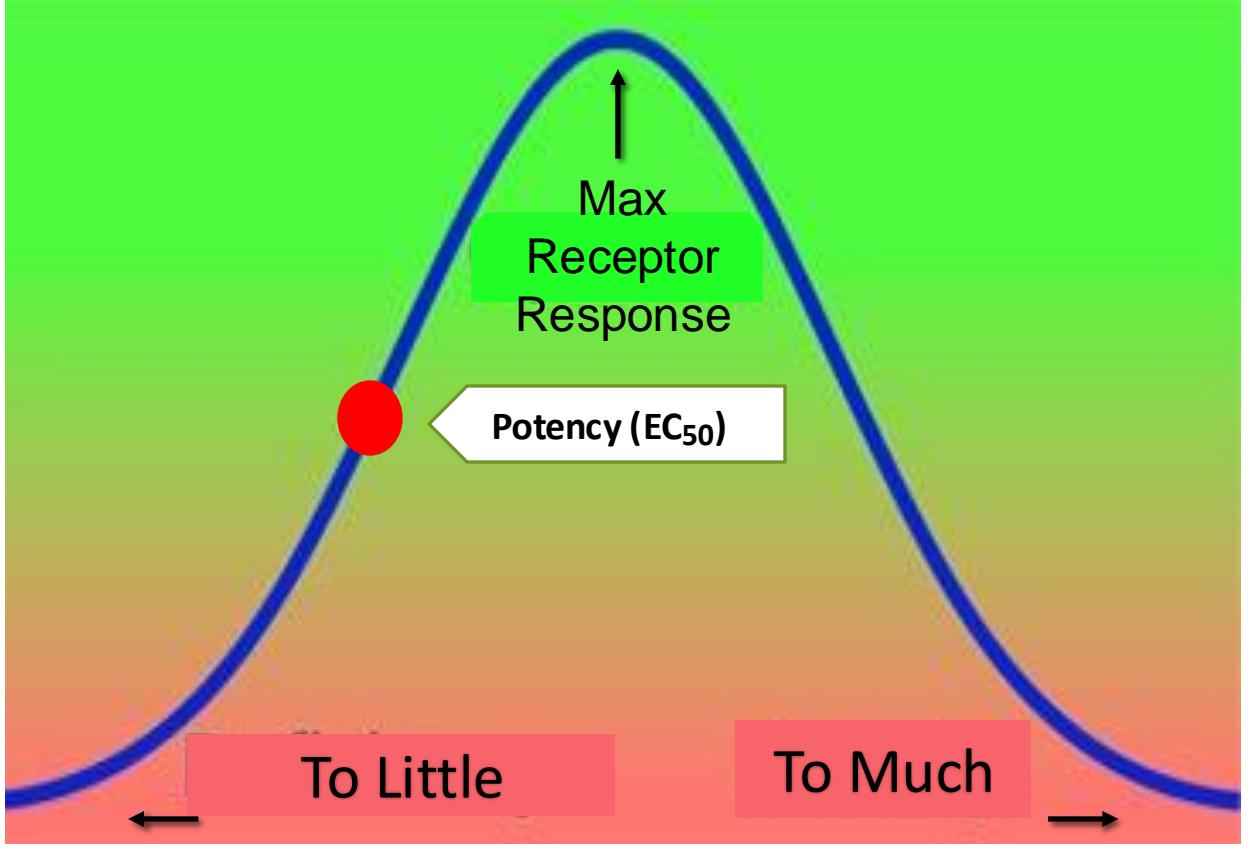


To understand the potency of cannabinoid products, it is essential to measure human cannabinoid receptor activity.

CannaMetric Cell-based Potency Assay Provides a Product EC_{50} as An Industry Metric to Guage Batch-to-Batch Consistency



**Effect
(health benefit)**



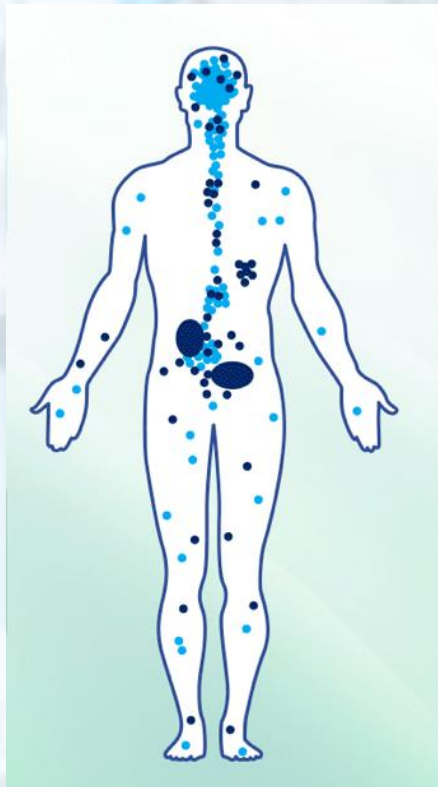
Receptor Response to Increasing Doses of Cannabinoid



Human Cell-based Potency Testing is a Game Changer

EC₅₀ Organ System Guide Targeting Product Identification and Development

Cell and tissue responses to cannabis modelled by cell-based potency testing



skin
gut
immune system
liver
kidney
neuronal
bone

Dose Range
Dose Range
Dose Range



skin
gut
immune system
liver
kidney
neuronal
bone

The CannaMetrix Proprietary Technology

CannaMetrix’s flagship testing service, the “EC50 Array” is a patented*, beta tested and peer-reviewed method for quantifying biologic potency.

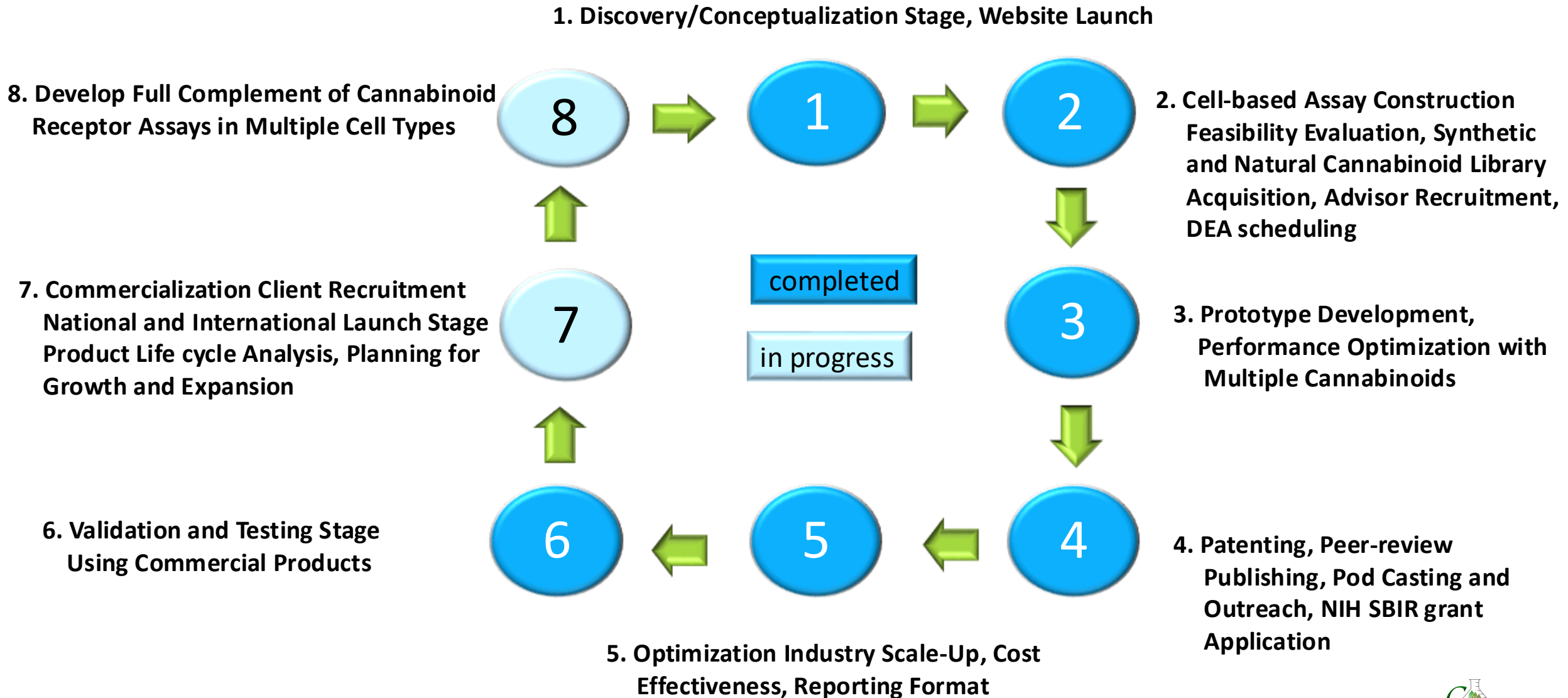
*US 2023/11,782,050 B2 published 09-05-2024: Cell-based assay for quantifying the potency and efficacy of cannabinoids and/or terpenes, and methods of use thereof.



Trademark

The potency of this product on human cannabinoid receptor biology has been validated through laboratory testing

The Stages of Development for CannaMetrix EC₅₀ array



Commercialization Plan

Market Research & Validation



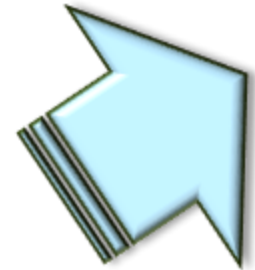
Market Research
Demand/Customers
Current solutions
Customer validations
Competitive analysis

Intellectual Property (IP) Protection



**IP
Trademark
Labeling**

Regulatory Approvals and Certifications?



Partnerships & Collaborations

Cannabis testing labs
Cannabis industry leaders
Pharmaceutical companies
Plant genetic engineers
Regulatory agencies

ongoing

planning

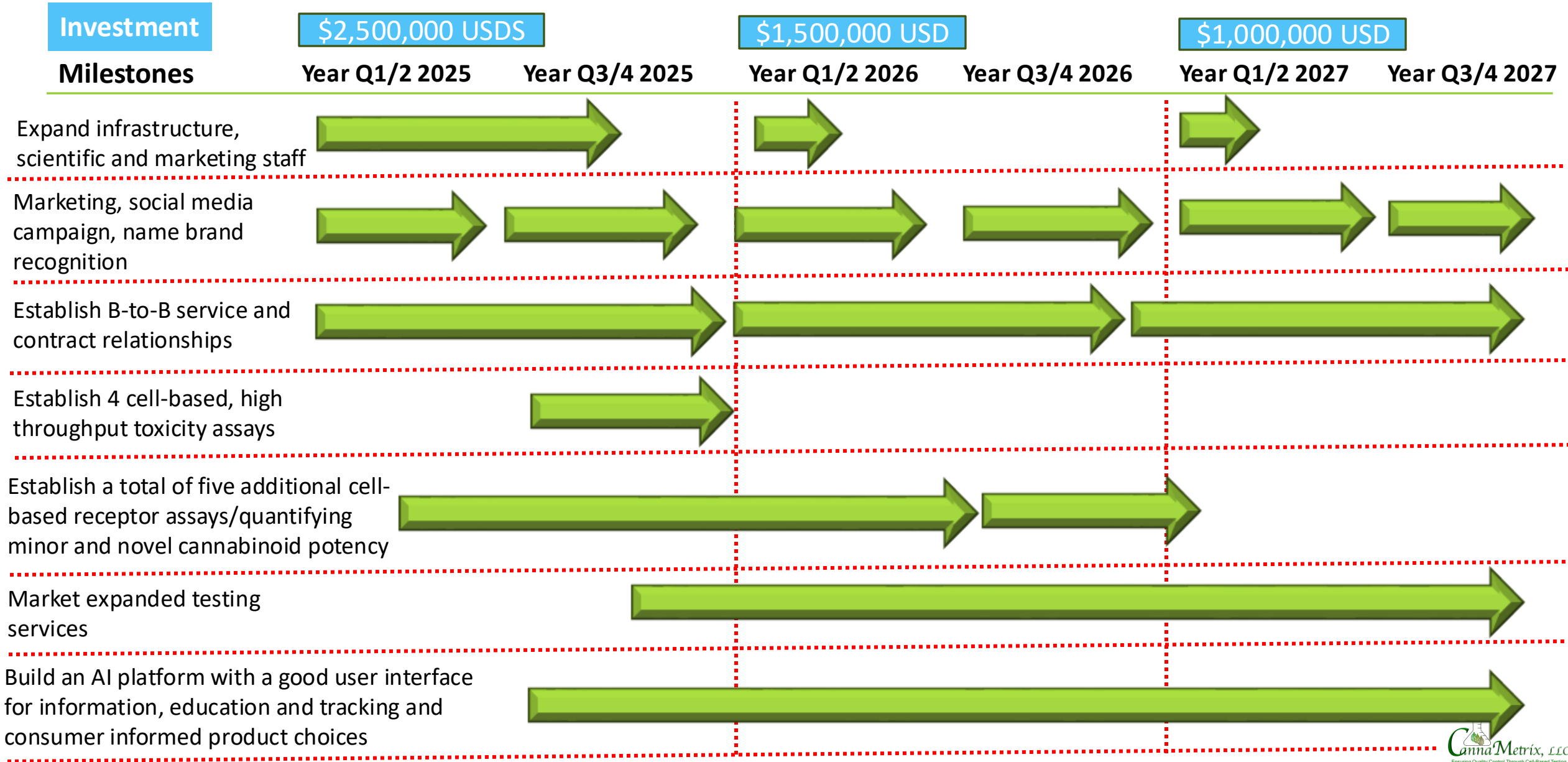
Licensing and Strategic Alliances

Nonexclusively license technology and labeling to growers, processors, testing labs and formulators
Opportunities for an exclusive licensing partnering or acquisition
Consulting and contract R&D for commercial, federal and academic labs

Growth and Expansion

Equity Investors – take the company public
Manufacturing and supply chain setup
Marketing, product labeling and sales strategies
Potency testing for mushrooms/other nutraceuticals

Three Year Milestones of Success With a \$5 MM Investment



Products Differentiated by CannaMetric Testing and Labeling Will Drive a Revolution in Consumer Demand

- Whether for inflammatory disease, pain relief, PTSD or recreational enjoyment, consumers want assurances of potency and product consistency.
- Our patented, human cell-based potency testing and product labeling will assure consumers that they are purchasing a product that will consistently deliver the results they expect.
- Satisfied customers will become life-long return buyers.
- This is why brand owners will want to have their products endorsed by CannaMetric as having been laboratory tested in the human endocannabinoid system to have dose-dependent potency.
- CannaMetric technology will disrupt and transform the industry with quantitative science where human cell-based methods anticipate product potency rather than inferring potency only from chemical quantification.



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