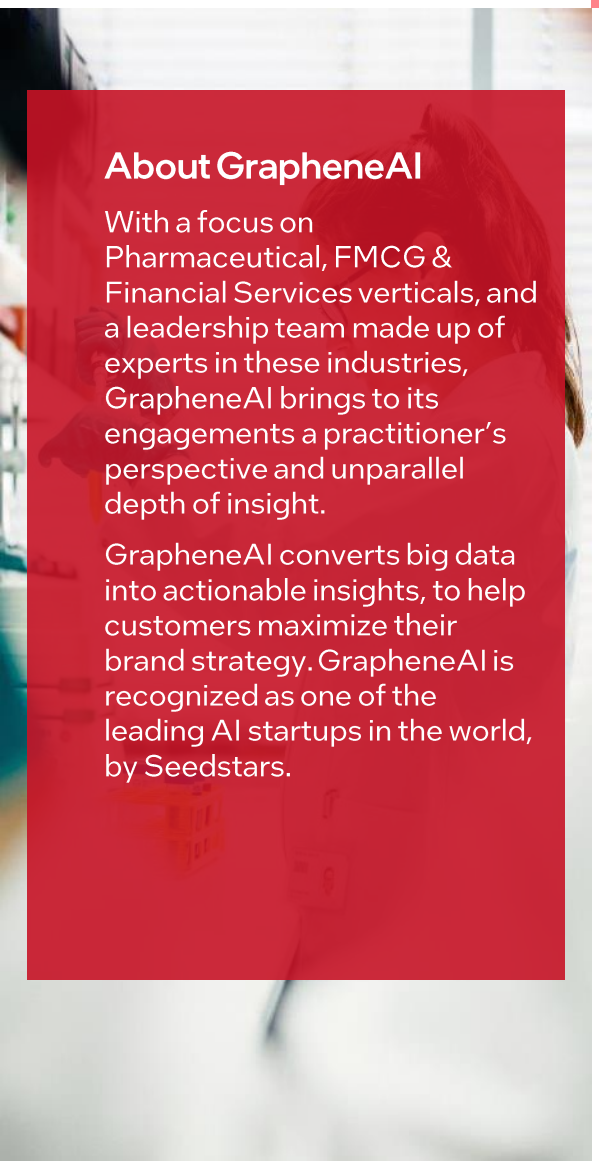
Solution Brief

Human Wellness Monitoring
Asset & Operations Optimization
Artificial Intelligence

Medicine Meets AI: Pharma Intelligence Powered by GrapheneAI

GrapheneAI is an AI based Market research & Decision Insights company, powered by Intel® technologies that empowers pharmaceutical and healthcare providers to stay attuned to Patient & HCP needs, understand market shifts, and keep abreast of medical innovations.

GrapheneAI™



About GrapheneAI

With a focus on Pharmaceutical, FMCG & Financial Services verticals, and a leadership team made up of experts in these industries, GrapheneAI brings to its engagements a practitioner's perspective and unparallel depth of insight.

GrapheneAI converts big data into actionable insights, to help customers maximize their brand strategy. GrapheneAI is recognized as one of the leading AI startups in the world, by Seedstars.

Pharma Market Research: A Roadmap to Enhanced Outcomes

In an era dominated by data, the healthcare sector leads the way, contributing to nearly 30% of the global data volume. The main challenge lies in harnessing this vast influx of information and converting it into actionable insights. This task becomes even more daunting considering that by 2025, the compound annual growth rate of healthcare data is expected to reach 36%.[1]

With rapid advancements in the medical field, there's a constant flow of new research. To remain at the forefront, pharmaceutical companies rely on precise and actionable market data. This data serves two primary purposes:

Data in Pharmaceuticals Serves 2 Primary Purposes

- Tailoring products to meet specific patient & HCP needs.
- Deciphering the market landscape to better understand competition.

Developing and promoting new drugs is a major investment for pharmaceutical companies. For these efforts to yield dividends, it's imperative that their strategies resonate with their target audience's needs. And that's where comprehensive pharmaceutical market research comes into play. It offers invaluable data across different product stages: From conception to post-launch.

By utilizing diverse data sources, market research can bolster the likelihood of successfully introducing a drug to the market, shed light on factors that influence drug sales longevity, and ultimately, improve patient outcomes.

Moreover, pharmaceutical market research goes beyond just gauging patient needs. It provides a holistic view of the market dynamics and competition. When pharmaceutical firms couple patient insights with a competitive analysis, they gain a complete understanding of the market. This clarity ensures better, data-informed decision-making processes, allowing companies to effectively target demographics and differentiate themselves in a saturated market.

Unlocking Pharma Insights with GrapheneAI's AI-powered Solutions

In today's dynamic pharmaceutical industry, efficient and dependable research methods are paramount. Traditional research can be slow, expensive, and at times, unreliable due to various respondent biases. To bridge this gap, businesses are increasingly leveraging Artificial Intelligence (AI), known for its swift data processing and consistent accuracy. With AI, firms can swiftly interpret vast amounts of data, ensuring decisions are timely, informed, and cost-effective. For those seeking a trusted AI-driven pharmaceutical research ally, GrapheneAI's offerings stands out.

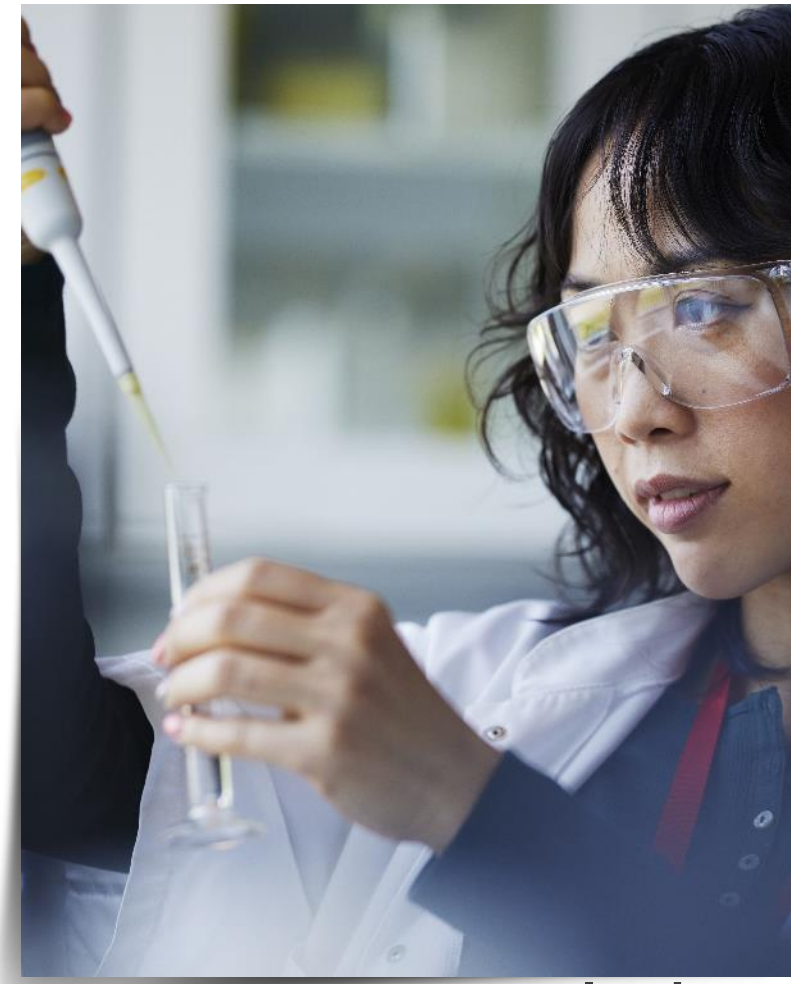
GrapheneAI, on a global scale, delves deep into extensive public datasets to provide valuable insights into prevailing market trends and best medical practices. Enhanced by Intel® technologies and trained by industry domain experts, GrapheneAI offers comprehensive insights spanning multiple disease areas ranging from Oncology, Respiratory, Neurology to Metabolic Diseases, Ultra-rare diseases, vaccines, and OTC drugs. The proprietary 41-parameter algorithm distinctly identifies healthcare professionals and patients, capturing unique respondents and sentiments on a detailed Likert scale from -15 to +15, and adeptly transforms textual themes into statistical insights with a formidable 95% confidence margin.

Diving deep into genuine doctor-patient conversations, medical literature, and more, GrapheneAI transforms this wealth of data into pivotal insights, while meticulously recognizing linguistic nuances and adhering to GDPR standards.

With a footprint in over 35 countries, GrapheneAI has become an ally to top-tier Pharma firms, offering a comprehensive suite of services, including Disease landscape assessment, Pre-launch analysis, Healthcare professional and Patient Persona development, Competitor analysis, Multi-channel engagement (MCE), Brand tracking and more. At its core, GrapheneAI helps businesses make well-informed, data driven decisions in the pharma realm.

Monitoring Brand Health with GrapheneAI

GrapheneAI offers businesses a precise lens to monitor their brand, capturing how HCPs & Patients react to their pharmaceutical products. For a company introducing a new drug, consistent tracking is key. With GrapheneAI, companies can receive monthly reports detailing aspects like prescription trends, prevailing sentiment about the drug, available treatment alternatives, and country-specific opinions on its effectiveness. Such real-time insights ensure that the drug aligns with performance goals, and if any discrepancies arise, they can be addressed promptly.



Unveiling the Pharma Market Landscape with GrapheneAI

GrapheneAI can identify unique HCPs and Patients and delve deep into their online discussions to provide insights that help businesses get a clear picture of the market landscape & competitive threats. When companies are keen to understand the perceptions around a specific drug, GrapheneAI can step in. It collects feedback from healthcare professionals and patients, summarizing prevalent views, favored treatment alternatives, and feedback points. This information guides businesses in pinpointing market opportunities, recognizing rival treatments, and staying updated on emerging trends, ultimately aiding in the strategic positioning of their drugs.

Key Benefits

Benefits for Pharmaceutical companies

Empower decision making

- Deep insights in HCP, patient segments, and market landscape
- Ethically source data from various sources and reference points
- Ability to build customized econometric models for insights from data

Amplify marketing initiatives

- Get insights into market segments and the general landscape to inform marketing campaign approaches
- Inform and enhance multi-channel engagements with robust insights pulled from a variety of sources to provide unbiased results

Enhance brand image

- Monitor brand awareness, message playback, sentiment, behavior and global/local events across medical forums and platforms

Key Features

- No pre-defined questions and bias
- Reliable and robust statistical insights – High fidelity data with 95% confidence
- Access to largest sources of data – AI self discovers wider & larger set of medical sources: Login based, open, hybrid (medical platforms, discussion groups, medical articles, anonymized case reports, pay for membership, etc.)
- Ability to identify unique customer (HCP, Patient) – Using propreitery algorithms to identify doctor/patient and validation techniques
- Lower cost per respondent and fast turnaround (faster than traditional market research- insights delivered in 4-5 weeks)
- Can analyze 55 different languages

Efficient Implementation with GrapheneAI

The process with GrapheneAI begins with a tailored workshop to pinpoint client needs. Then, GrapheneAI's AI engine is fine-tuned to uncover specific insights. To maintain the highest standard of accuracy, preliminary results undergo a thorough review by in-house pharmaceutical experts. Within a span of 6-8 weeks, clients are furnished with a bespoke report tailored to their specifications.

Intel and GrapheneAI: A Powerful Collaboration

Through collaboration with Intel, GrapheneAI has enhanced its AI-Based Decision Insights service, harnessing the best of technology and advanced optimization techniques. This partnership has streamlined GrapheneAI's models, ensuring faster and more precise sentiment analyses. As a result, clients benefit directly, gaining sharper insights that catalyze their business growth.

Intel's technology has played a key role in fine-tuning the performance of the sentiment model that GrapheneAI employs. Using specialized optimization methods, Intel engineers harnessed the capabilities of Intel® Xeon® Gold 6242 processors to expedite inferencing. As a result, the algorithm's configuration yielded a 1.36x improvement in throughput with 16 streams and a batch size of 128. This enhancement significantly amplified the speed at which GrapheneAI's models perform sentiment analysis, offering businesses rapid and actionable insights. In addition, the solution incorporates PyTorch and Hugging Face models to gauge sentiment from text, classifying it as positive, negative, or neutral.

Intel Components

Intel® Xeon® Processors: These processors are built specifically for the flexibility to run complex AI workloads on the same hardware as existing workloads. With AI acceleration and optimization that goes silicon deep and ecosystem wide, Intel® Xeon® Scalable processors take embedded AI performance to the next level.

> "The Insights Analysis far exceeded my expectations, and I will share these learnings across the rest of the organization!"
>
> **– Director Marketing, for a Top Global Pharma Company**

Conclusion

GrapheneAI has been providing disruptive and innovative AI decision making services to Pharmaceutical and Healthcare companies around the globe. These tools provide unbiased insights delivered in real time for significantly lesser cost than traditional research firms. Through the strengths of AI and deep learning, GrapheneAI supports both emerging and established businesses in navigating complex challenges. The expertise lies in delivering in-depth market analyses and guide clients in crafting optimal market strategies to thrive in the competitive pharmaceutical landscape.

Maximize your market insights by connecting with GrapheneAI at Guruprasad@graphenesvc.com.

Learn More

- GrapheneAI Website
- Intel® Xeon® Scalable Processors Product Page
- Intel® Optimization for PyTorch Introduction

Sources

1. Coughlin et al Internal Medicine Journal article “Looking at tomorrow’s healthcare today: a participatory health perspective”. IDC White Paper, Doc#US44413318, November 2018: The Digitization of the World – From Edge to Core.

Notices & Disclaimers