ChatGPT Adoption in the Life Sciences Industry

By IntuitionLabs • 4/29/2025 • 30 min read

artificial-intelligence   chatgpt   life-sciences   pharmaceutical   ai-adoption

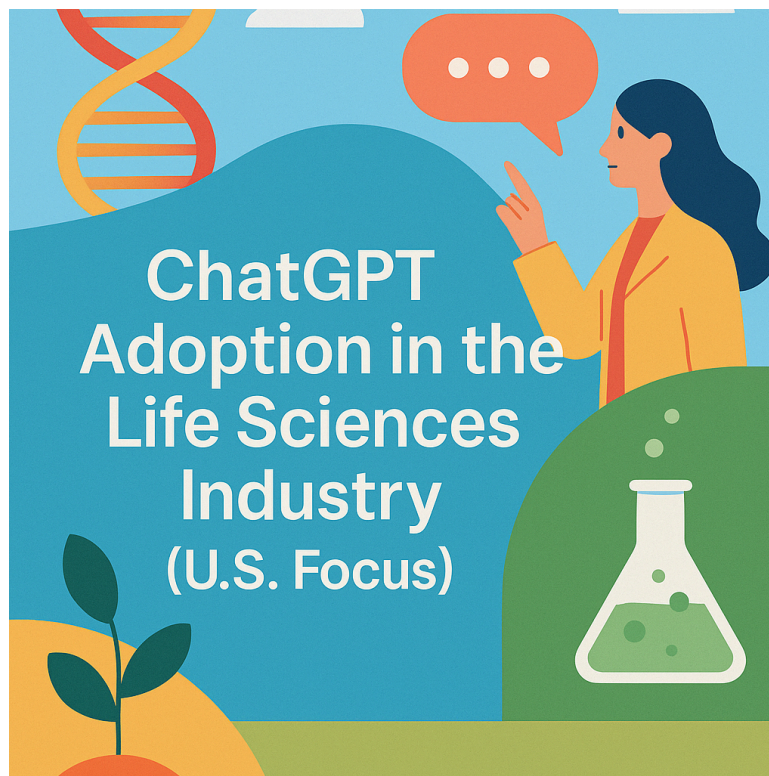healthcare-technology   drug-development   research-automation   regulatory-compliance

natural-language-processing   ai-implementation   industry-trends

ChatGPT Adoption in the Life Sciences Industry (U.S. Focus)

ChatGPT Adoption in the Life Sciences Industry

Introduction

The advent of OpenAI's ChatGPT has sparked significant interest in the pharmaceutical and biotech sectors. Within just two years of ChatGPT's launch, generative AI has evolved from a novelty to a **boardroom priority** in healthcare and life sciences (The Healthcare AI Adoption Index-Bain & Company). Companies see enormous potential to accelerate research, streamline operations, and improve decision-making with these tools. At the same time, many firms are **proceeding with caution** due to data security and compliance concerns (Two-thirds of top 20 pharmas have banned ChatGPT: report). In fact, a recent survey of 200+ life sciences professionals found over half of their companies *banned employees from using ChatGPT*, including 65% of the top 20 pharma companies, chiefly to prevent leakage of sensitive data (Two-thirds of top 20 pharmas have banned ChatGPT: report). Yet despite official restrictions, individual scientists and staff often still experiment with ChatGPT – more than half of respondents use it at least a few times per month, and over a quarter use it weekly or daily (Two-thirds of top 20 pharmas have banned ChatGPT: report). This dichotomy underscores the careful balance pharma organizations must strike between leveraging AI's benefits and managing its risks.

This report provides an in-depth look at **U.S.-focused life sciences companies** (pharmaceutical, biotech, and diagnostics) that have **publicly acknowledged using ChatGPT** in their operations. We identify these companies and cite sources confirming their use. We also examine **how they are applying ChatGPT or similar generative AI** – from drug R&D and clinical trials to internal knowledge management, marketing content, customer engagement, and regulatory affairs. Furthermore, we present key **statistics on AI adoption** in the industry (e.g. uptake rates, common use cases, value potential) to contextualize these case studies. A summary table is included for quick reference, and detailed sections follow with a professional analysis of each example. The goal is to inform IT and innovation leaders in pharma about real-world generative AI implementations among their peers, focusing on companies active in the U.S. market.

AI Adoption in Pharma: Trends and Statistics

Life sciences companies are unmistakably investing in AI, even if opinions on the hype are divided. Interestingly, **83% of surveyed life sciences professionals called AI "overrated"** – yet only 8% said their company hadn't begun adopting AI in some form (Two-thirds of top 20 pharmas have banned ChatGPT: report) (Two-thirds of top 20 pharmas have banned ChatGPT: report). In practice, **over half** of companies report having at least "some" AI use cases in production, and 10% claim to

be industry leaders in AI adoption (Two-thirds of top 20 pharmas have banned ChatGPT: report). This shows that behind cautious rhetoric, many organizations are actively implementing AI solutions.

Generative AI (like ChatGPT) is a major part of this trend. Industry analysts estimate generative AI could contribute **$60–110 billion in annual value** for pharma and medical product companies by improving productivity (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). In one analysis, the healthcare sector had at least **24 companies integrate ChatGPT or similar models into their workflows by 2023**, a number that is quickly growing (ChatGPT Statistics in Business [January 2025]). The **primary motivations** are efficiency and cost savings – 64% of pharma professionals said they look to AI for cost reduction, versus only 17% who view it as a driver of revenue (Two-thirds of top 20 pharmas have banned ChatGPT: report).

Early adoption data highlights which applications are gaining traction. According to ZoomRx survey results, the **most common use cases** of AI in biopharma so far are in **drug discovery**, followed by **personalized medicine**, **copywriting/content generation**, and **clinical trial optimization** (Two-thirds of top 20 pharmas have banned ChatGPT: report). This aligns with the generative AI examples we see publicly: companies are using ChatGPT to sift scientific literature for new targets, draft or summarize documents, and assist in trial design and patient recruitment. Notably, generative AI is also viewed as a powerful tool for supporting **regulatory compliance** (e.g. drafting reports) and **marketing**. For instance, McKinsey research suggests AI could halve content creation costs in pharma marketing and substantially speed up review cycles (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday).

At the same time, **data privacy and security remain paramount concerns**. The prevalence of ChatGPT bans at big pharma underscores fear of unintentionally exposing confidential data (Two-thirds of top 20 pharmas have banned ChatGPT: report). Fewer than 60% of life sciences companies have provided any employee training or usage guidelines for ChatGPT, though another 15% plan to do so (Two-thirds of top 20 pharmas have banned ChatGPT: report). Some organizations have chosen a middle path – enabling use of ChatGPT but within controlled, internal platforms to safeguard information. The case studies below illustrate this approach. For example, one pharma developed a proprietary interface to **allow 50,000+ employees to access ChatGPT and other models securely**, ensuring prompts and outputs don't leak externally (Pharma Embraces AI - NAM).

In summary, the life sciences industry recognizes generative AI as a potential **game-changer** to accelerate R&D and operations, evidenced by broad experimentation and several high-profile implementations. Still, adoption is uneven – while leaders like Moderna and Pfizer are openly embracing ChatGPT, others are holding back or restricting use. The next sections detail specific companies that have **publicly confirmed using ChatGPT or GPT-based solutions**, what they use it for, and how it fits into their digital strategy.

Notable Life Sciences Companies Using ChatGPT

Multiple pharmaceutical and biotech companies with U.S. operations have **announced or acknowledged** using ChatGPT (or custom versions of it) in their business. Table 1 provides a

summary of key examples, including the use cases, departments involved, when it was first reported, and sources. These range from global pharma giants to innovative biotechs. Each of these cases is explored in more detail in the subsequent sections.

Table 1. Examples of Life Sciences Companies (U.S.-Focused) Using ChatGPT or Generative AI

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
Moderna	Internal *ChatGPT Enterprise* deployment ("mChat") with 80% employee adoption; 750+ custom GPT assistants (e.g. *DoseID* for trial dose selection) (Moderna and OpenAI Collaborate To Advance mRNA Medicine) (Moderna and OpenAI Collaborate To Advance mRNA Medicine).	Company-wide (R&D, clinical, manufacturing, legal, commercial)	Apr 2024 (Press Release) (Moderna and OpenAI Collaborate To Advance mRNA Medicine) (Moderna and OpenAI Collaborate To Advance mRNA Medicine)	Moderna/OpenAI announcement (Moderna and OpenAI Collaborate To Advance mRNA Medicine) (Moderna and OpenAI Collaborate To Advance mRNA Medicine)
Pfizer	**"Charlie"** – a generative AI content platform powered by a custom ChatGPT version for marketing content creation, editing, fact-checking, and workflow	Marketing and Sales (content supply chain); Internal Knowledge Queries	Feb 2024 (Media Report) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing -	Digiday interview (Pfizer) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday) (With 'Charlie,' Pfizer

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	integration (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). Also exploring GPT for internal research queries and analytics (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday).		Digiday) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday)	is building a new generative AI platform for pharma marketing - Digiday)
Johnson & Johnson	Generative AI for document summarization and productivity; launched **mandatory training** (56k+ employees trained) and a governance program to safely enable tools like ChatGPT (Pharma	Enterprise-wide (with emphasis on employee upskilling for AI)	Mar 2025 (Business press) (Pharma Embraces AI - NAM)	Business Insider (J&J CIO) (Pharma Embraces AI - NAM) (Pharma Embraces AI - NAM)

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	Embraces AI - NAM) (Pharma Embraces AI - NAM). Use cases span R&D, supply chain, finance, etc. after certification.			
Merck & Co. (MSD)	Proprietary **"GPTeal"** platform gives ~50k employees secure access to ChatGPT, Meta Llama, Anthropic Claude, etc., to assist in writing emails, memos, and reports (Pharma Embraces AI - NAM). Used to automate drafting of regulatory documents and other text, freeing scientists from copyediting chores (Pharma Embraces AI - NAM).	Company-wide (Internal Communications, Regulatory, R&D support)	Mar 2025 (Business press) (Pharma Embraces AI - NAM)	Business Insider / NAM (Merck CTO) (Pharma Embraces AI - NAM) (Pharma Embraces AI - NAM)
Eli Lilly	Broad **encouragement of ChatGPT use** – leadership told	R&D (Drug Discovery), Regulatory Affairs, Internal Operations	Mar 2025 (Business press) (Pharma	Business Insider (Lilly CIDO) (Pharma Embraces AI -

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	employees *"you need to start bringing ChatGPT into your work"* (Pharma Embraces AI - NAM). Applied in research (small & large molecule design), generating clinical trial documentation and regulatory submission drafts (Pharma Embraces AI - NAM). Also used for internal tasks like writing year-end performance reviews (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider).		Embraces AI - NAM) (Pharma Embraces AI - NAM)	NAM) (Pharma Embraces AI - NAM)
Novartis	Deployed an **internal ChatGPT-powered assistant** (branded *"NovaGPT"* per reports) for HR	Human Resources (People & Organization), Internal Comms	May 2024 (Interview) (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT	Canadian HR Reporter (Novartis HR) (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	and communications. Used to draft HR policies, job descriptions and internal memos, saving considerable time (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter) (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). Employees in HR use it to generate first drafts and improve the wording of communications.		elevates company's HR work-Canadian HR Reporter) (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter)	company's HR work-Canadian HR Reporter) (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter)
AstraZeneca	Developed **"AZ ChatGPT"**, an AI research assistant leveraging GPT models on	R&D (Research Knowledge Management); Executive/Analytics Reporting	Jul 2024 (Industry article) (Data Science Hiring and Interview	Analytics India Magazine (AstraZeneca) (Data Science Hiring and Interview

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	AstraZeneca's internal data. It answers scientists' complex questions using proprietary biology/chemistry knowledge bases (Data Science Hiring and Interview Process at AstraZeneca-AIM). Also piloting LLMs for *executive reporting* and competitive intelligence (drafting insights for leadership) (Data Science Hiring and Interview Process at AstraZeneca-AIM) (Data Science Hiring and Interview Process at AstraZeneca-AIM).		Process at AstraZeneca-AIM) (Data Science Hiring and Interview Process at AstraZeneca-AIM)	Process at AstraZeneca-AIM) (Data Science Hiring and Interview Process at AstraZeneca-AIM)

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
Sanofi	Ongoing **collaboration with OpenAI** to integrate generative AI in drug development. Launched an AI tool called *"Muse"* with OpenAI/Formation to speed up clinical trial **patient recruitment** (Sanofi, Formation and OpenAI design AI tool to slash clinical trial …). Sanofi's CEO said LLMs offer *"insane opportunity to… summarize and create"* in R&D, e.g. designing candidate molecules or drafting FDA submission documents (first AI-drafted filings expected by end of 2024) (Sanofi's CEO thinks	R&D (Drug Discovery), Clinical Development (Trials), Regulatory (Docs)	May 2024 (Press & CEO) (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…-Peter Vanham) (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…-Peter Vanham)	Fortune (CEO interview) (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…-Peter Vanham) (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…-Peter Vanham); Reuters (Sanofi partners with OpenAI, Formation Bio on AI-driven drug development-Reuters)

Company	ChatGPT Use Case(s)	Department / Function	First Reported	Source
	[OpenAI offers 'insane' potential for the…-Peter Vanham](#)) ([Sanofi's CEO thinks OpenAI offers 'insane' potential for the…-Peter Vanham](#)).			

Sources: Company press releases and media reports as cited above.

Company Case Studies and Use Cases

Below, we delve deeper into how these organizations are leveraging ChatGPT or similar **large language models (LLMs)**, and the business functions impacted. Each example illustrates distinct use cases – from research labs to corporate offices – highlighting the versatility of generative AI in life sciences.

Moderna: Enterprise-Wide AI Integration

([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#))Moderna, a Boston-based biotech, has emerged as a **pioneer in ChatGPT adoption**. In early 2023, Moderna deployed its own internal instance of ChatGPT called **"mChat"**, built on OpenAI's API ([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#)). This tool quickly gained traction – over **80% of Moderna's employees began using mChat** for day-to-day tasks, an adoption level that spurred a broader AI-first culture ([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#)). By late 2023, Moderna upgraded to ChatGPT Enterprise and embedded **750+ AI assistants ("GPTs") across its business** ([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#)). These assistants are custom-trained bots that function as virtual coworkers in different departments. For example, in R&D and clinical development, Moderna created a *"Dose ID GPT"* to help scientists analyze clinical trial data and choose optimal vaccine dosages ([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#)). This GPT uses ChatGPT's **Advanced Data Analytics** capabilities to evaluate dose selection, provide rationale with citations, and even generate charts for the team ([Moderna and OpenAI Collaborate To Advance mRNA Medicine](#)). Such assistance accelerates the trial decision-making while ensuring human oversight for safety.

Crucially, Moderna didn't limit ChatGPT to the labs – they rolled it out **company-wide**, including in legal, manufacturing, and commercial functions ([Moderna and OpenAI Collaborate To Advance](#)

mRNA Medicine). For instance, lawyers use GPT assistants to summarize contracts or regulations, while the manufacturing team might use them to troubleshoot process documents. Moderna's CEO described these AI tools as *"extensions of our team"* that augment employees' roles through personalized support (Moderna and OpenAI Collaborate To Advance mRNA Medicine). By empowering staff with generative AI, Moderna aims to maintain its innovative edge (the company famously delivered one of the first COVID-19 vaccines). This bold integration, done in partnership with OpenAI, was publicly announced in April 2024 (Moderna and OpenAI Collaborate To Advance mRNA Medicine), signaling Moderna's belief that AI will be as transformative to work as the PC was decades ago (Moderna and OpenAI Collaborate To Advance mRNA Medicine). Notably, Moderna's initiative is **targeted and responsible** – all AI usage is internal with OpenAI's enterprise-grade privacy, mitigating the risk of sensitive data leaks. Moderna's case exemplifies how a life sciences company can *safely scale ChatGPT across the organization* to boost productivity in research and beyond.

Pfizer: "Charlie" – GPT-Powered Marketing Engine

Global pharma leader Pfizer (headquartered in New York) has taken a slightly different route by focusing ChatGPT on a specific domain: **marketing and content**. Pfizer's internal generative AI platform, nicknamed **"Charlie,"** is designed to revolutionize the company's content creation and review processes in its marketing and sales operations (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). Rolling out since late 2023, Charlie was built with the help of an agency (Publicis Groupe) and is powered on the backend by a **customized version of ChatGPT** (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). It acts as a copywriting and proofreading assistant that can generate draft promotional content, suggest edits, and even flag compliance issues.

Bill Worple, Pfizer's VP of customer engagement technology, explained that one goal is to **"5x our content creation"** for both healthcare provider (HCP) and patient communications (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). Charlie helps marketing teams quickly produce materials like digital ads, emails, webpages, and sales brochures. More importantly, it has in-built **fact-checking and legal/compliance guardrails**. For example, the system labels AI-generated content with a risk rating (red/yellow/green) to indicate how much regulatory review it may need (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). Reused claims or previously approved language are marked green for faster approval, whereas any novel claims get a red flag for thorough human scrutiny (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). By triaging content in this way, Pfizer hopes to speed up the traditionally slow review cycles in pharma marketing, without compromising on accuracy.

(With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday)Notably, Charlie's content generation is backed by Pfizer's **own data and knowledge**. It can answer internal questions by drawing on Pfizer's repository of research reports, case studies, and performance data, thanks to natural language query features (With 'Charlie,' Pfizer is building a new

generative AI platform for pharma marketing – Digiday). To prevent the AI from "hallucinating" (making inaccurate statements), Pfizer configured Charlie such that *all answers must be grounded in Pfizer's validated content sources* (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing – Digiday). Employees can even use Charlie through integrations with everyday tools – it's being built into Pfizer's Adobe content management system and Slack for easy access (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing – Digiday). By early 2024, **hundreds of Pfizer marketers and even external agency partners** were using Charlie in pilot, with plans to expand across thousands of staff (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing – Digiday). This initiative illustrates ChatGPT's role in **customer-facing applications**: while not directly chatting with customers, it supercharges the teams that create Pfizer's messaging to doctors and patients. Pfizer's careful approach – a custom GPT instance with internal data governance – highlights how pharma companies can harness ChatGPT for creative and analytical work while managing regulatory risk.

Johnson & Johnson: Upskilling Employees to Use Generative AI

Healthcare giant Johnson & Johnson took a holistic, workforce-driven approach to ChatGPT adoption. Rather than launching a specific chatbot tool, J&J focused on building **AI proficiency among its 138,000 employees** so they could safely leverage tools like ChatGPT in various contexts (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider) (Pharma Embraces AI - NAM). By 2024, J&J's Chief Information Officer, Jim Swanson, reported *"there are so many ways we've been using AI"* across the company – from R&D to supply chain – but doing so required a concerted **upskilling program** (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider) (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). J&J created a generative AI training course that was made **mandatory for any employee to be authorized to use the technology** (Pharma Embraces AI - NAM). So far, over **56,000 J&J employees** have completed this course on ChatGPT and prompt engineering basics (Pharma Embraces AI - NAM). In addition, J&J ran in-depth digital bootcamps (90-minute classes over 6 weeks) on AI and related emerging tech, logging 37,000+ training hours for 14,000 employees (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider) (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider).

This rigorous enablement effort reflects J&J's stance that *AI literacy is now as important as traditional skills* for its workforce (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider) (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). After training, employees can access approved generative AI tools for tasks like **summarizing documents, analyzing data, and drafting content** within their roles (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). For example, a scientist might use ChatGPT (in a controlled environment) to summarize recent journal articles, or a supply chain analyst might use it to outline a report. By **educating staff about data privacy and proper use**, J&J mitigates the risks of ChatGPT (e.g. they emphasize not to input any sensitive information) while unlocking productivity gains. Essentially, J&J did the groundwork so that generative AI can be tapped *safely at scale* – an approach validated by the survey that showed training is often lacking elsewhere (Two-thirds of top 20 pharmas have banned ChatGPT: report).

This doesn't mean J&J lacks specific use cases. Swanson noted J&J has used AI in areas like **surgical device guidance, inventory management, and drug discovery** for years ([Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider](#)). With the rise of GPT models, employees are now applying them to everyday tasks as well. By early 2024, J&J even piloted an "AI immersion" program for senior leaders, and going forward, the company plans to **require all managers to obtain AI certification** ([Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider](#)). J&J's experience underscores that cultural readiness and governance are key – they built a foundation so that tools like ChatGPT can be broadly used (for internal knowledge management, content generation, etc.) *without compromising compliance*. For IT professionals, this case highlights the importance of **AI training programs** alongside technology deployment.

Merck & Co.: GPTeal – Securing ChatGPT for Internal Use

Merck & Co. (known as MSD outside the U.S.) is a top-ten pharma based in New Jersey, and it adopted a strategy to enable ChatGPT **within a gated, proprietary platform**. Merck developed an internal tool called **"GPTeal"** – a playful nod to Merck's signature teal brand color – which serves as a company-sanctioned ChatGPT interface ([Pharma Embraces AI - NAM](#)). According to Merck's CTO Ron Kim, GPTeal provides employees a safe way to use large language models like OpenAI's ChatGPT, Meta's LLaMA, and Anthropic's Claude, *"while keeping company data secure from external exposures."* ([Pharma Embraces AI - NAM](#)) This means when a Merck staff member wants to ask a question or draft something with an AI assistant, they use GPTeal rather than the public ChatGPT website. GPTeal acts as a shield – it likely runs on a private cloud or uses OpenAI's enterprise API, ensuring that **no prompts or outputs are leaked** to train the public model.

With GPTeal in place, Merck's workforce has enthusiastically begun using generative AI for **day-to-day productivity**. Kim noted that employees regularly rely on it to **draft emails, memos, and documentation** ([Pharma Embraces AI - NAM](#)). One impactful use case is in **regulatory affairs and medical writing**: Merck is using GPT assistance to generate first drafts of documents that must be submitted to health authorities (which are then reviewed and edited by humans) ([Pharma Embraces AI - NAM](#)). By doing so, highly trained scientists and physicians at Merck can avoid spending time on rote copyediting tasks. *"We felt like some of our scientists were taking time being copy editors,"* Kim said – work that generative AI can handle, freeing researchers to focus on science ([Pharma Embraces AI - NAM](#)). Importantly, Merck's approach still enforces the rule that any AI-written content (like a draft clinical study report) is **checked by Merck experts** before use.

Merck's public statements in March 2025 confirm the success of this initiative ([Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider](#)) ([Pharma Embraces AI - NAM](#)). By then, GPTeal was accessible to tens of thousands of Merck employees globally and had become a cornerstone of the company's digital workflow. This case illustrates how a pharma company can embrace ChatGPT by **building a custom wrapper** that addresses intellectual property and privacy concerns. For IT professionals, Merck's GPTeal is a model of deploying generative AI at scale: integrate multiple LLM models, control data flow, and then open it up for broad internal use to boost productivity in everything from R&D knowledge searches to preparing slide decks. Merck effectively

turned a *potential threat (unsanctioned ChatGPT use)* into an asset by bringing the technology in-house under IT's oversight.

Eli Lilly: Embracing ChatGPT to Transform Workflows

Indianapolis-based **Eli Lilly** took one of the most open stances on ChatGPT among big pharma. While many peers banned or restricted generative AI, Lilly's leadership "went in the exact opposite direction" after ChatGPT's debut (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). **Diogo Rau, Lilly's Chief Information and Digital Officer, publicly encouraged all employees to experiment with ChatGPT**, as long as they did so carefully (no sensitive data input) (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). *"We told everybody you need to use it, you need to start bringing ChatGPT into your work,"* Rau said, while also cautioning, *"Don't put anything in there that you don't want to get out."* (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). This balanced message both promotes innovation and reinforces data security.

In practice, Lilly employees across divisions found creative ways to leverage generative AI. In drug discovery research, teams used AI to support the design of **both small-molecule and large-molecule (biologic) drugs** (Pharma Embraces AI - NAM). Although details are scant, this likely means using GPT-based tools to digest scientific literature, propose molecule structures or targets, and hypothesize mechanisms – essentially acting as a brainstorming assistant in early R&D. Lilly also applied AI to **automate documentation in clinical trials and regulatory submissions** (Pharma Embraces AI - NAM). For example, generating drafts of study protocols, informed consent forms, or sections of FDA submission packages can be done by ChatGPT in seconds, after which experts at Lilly refine them. This speeds up what are traditionally labor-intensive writing tasks in drug development.

On the internal operations side, Lilly tried some novel approaches to spark AI adoption. In summer 2024, they ran an "**AI Games**" competition, with challenges like using a chatbot to write a fun poem about the company or create a quiz on Lilly's history (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). This gamified AI use and helped employees get comfortable with the technology. Later in 2024, **Lilly even asked all employees and managers to use generative AI when writing their year-end performance reviews** (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). The idea was that ChatGPT could help draft self-assessments or reviews, which managers could then personalize – turning a normally dreaded chore into a more efficient process. By 2025, Lilly planned to require all senior leaders to obtain an AI certification, ensuring top-down buy-in and knowledge (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider).

Lilly's experience shows the cultural side of implementing ChatGPT: executives explicitly championed the tool, creating an environment where employees felt *empowered* to innovate with AI. As a result, usage spread organically in many directions – scientists using it for hypotheses, HR for drafting posts, etc. From an IT perspective, Lilly did still need guardrails (they presumably used a secure instance or at least monitored usage). But their key differentiator was **treating ChatGPT as a skill to be learned and embraced** company-wide, rather than a danger. This has reportedly led to a

workforce that is highly engaged in finding new applications for AI in the business (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider). Lilly's bold approach suggests that with proper guidance, allowing open use of generative AI can rapidly uncover value across diverse pharmaceutical functions.

Novartis: "Branded ChatGPT" for HR and Communications

Novartis, a Swiss-headquartered pharma with large U.S. operations, publicly shared an interesting niche use of ChatGPT: in its **Human Resources and internal communications** department. In an interview, Novartis' Global People & Organization Leader for Canada described how the company deployed its **own branded version of ChatGPT** to assist with everyday HR writing tasks (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). This internal tool (sometimes referred to informally as "NovaGPT") is used for *"the most mundane and basic topics"* in HR, allowing the team to offload those and save time (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). For example, when HR needed to draft a **new policy document or a company-wide announcement**, they would start by prompting the internal ChatGPT for a first draft (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). Similarly, writing **job descriptions** for new roles – a repetitive but important task – has been eased by using ChatGPT to generate an initial version that HR personnel can then tweak (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter).

According to Novartis, this experiment paid immediate dividends in efficiency. Even if the chatbot's draft wasn't perfect, it provided a solid starting point. The HR leader noted that sometimes he might only take "two or three sentences" from the ChatGPT output that are particularly well-phrased, but those saved him significant effort and improved the overall quality of the communication (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). Over time, as the HR team learned to engineer better prompts, the outputs got more useful. Novartis indicated that the tool *"elevates the quality of the message"* by providing options and inspiration (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter).

Importantly, **Novartis integrated this ChatGPT capability internally**, likely connecting it with their own data and templates. They mentioned it is "branded" for Novartis, which implies a custom interface or at least an approved internal version of the model (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter). This would alleviate concerns about feeding confidential HR data into a public system. In the broader context, Novartis has been very active in AI for R&D, but this HR use case shows the *breadth of ChatGPT's applicability*. Even in a highly regulated industry, departments like HR, communications, or training can safely use generative AI on non-sensitive tasks (policy drafts, newsletters, FAQs, etc.) to improve speed and consistency. For IT teams, Novartis' approach could serve as a template: start with internal-facing functions and a limited, secure ChatGPT deployment to demonstrate value, which can build confidence before expanding AI to core scientific areas.

AstraZeneca: AI Research Assistant "AZ ChatGPT"

AstraZeneca (a UK/Swedish pharma with significant U.S. presence) has showcased its use of generative AI as a **research and data analysis assistant**. An article from mid-2024 detailed AstraZeneca's in-house development of **"AZ ChatGPT"**, described as *"an AI-powered research assistant."* (Data Science Hiring and Interview Process at AstraZeneca-AIM) This tool interfaces with AstraZeneca's vast internal knowledge repositories – containing decades of proprietary biology and chemistry data – to help scientists **answer complex research questions** (Data Science Hiring and Interview Process at AstraZeneca-AIM). In essence, AZ ChatGPT is like an internal chatbot trained on all of AstraZeneca's experimental results, scientific publications, and databases. A scientist can query it in natural language (for example, *"What do we know about Target X in oncology?"*), and it will retrieve and summarize relevant information from the company's troves of data, far faster than a manual search. It can even provide **prompts or suggestions for experimental approaches** related to discovery and clinical inquiries (Data Science Hiring and Interview Process at AstraZeneca-AIM).

One AstraZeneca director noted they are evaluating how such LLM capabilities can **improve insight generation in executive reports** for decision-makers (Data Science Hiring and Interview Process at AstraZeneca-AIM). For instance, summarizing portfolio progress or competitive intelligence updates for senior management is being tested with AZ ChatGPT (Data Science Hiring and Interview Process at AstraZeneca-AIM). This suggests the tool isn't just for bench scientists but also for strategy and commercial teams who need distilled insights (e.g. a summary of competitor trial results or a high-level report on a therapeutic area). Additionally, AstraZeneca built a system called the **Biological Insight Knowledge Graph (BIKG)**, which works in tandem with their AI efforts (Data Science Hiring and Interview Process at AstraZeneca-AIM). BIKG uses machine learning to link biological data and help *recommend* research directions – for example, highlighting a promising drug-target relationship. When combined with AZ ChatGPT, these tools enable a powerful **discovery engine**: the knowledge graph finds patterns, and the chatbot interface allows scientists to query those patterns in plain language and get explanations.

Notably, AstraZeneca has been using **Microsoft's Azure OpenAI Service** to test the latest GPT-4 models within a secure environment (Data Science Hiring and Interview Process at AstraZeneca-AIM). They report using a mix of in-house models and external ones, showing a robust, hybrid AI infrastructure (Data Science Hiring and Interview Process at AstraZeneca-AIM). By mid-2024, AstraZeneca's leadership was confident enough in generative AI that they integrated it across the drug development pipeline – from target identification to clinical trial design and even in commercial analytics (Data Science Hiring and Interview Process at AstraZeneca-AIM). The company's bold ambition is to become a fully "data-led enterprise," and generative AI like AZ ChatGPT is a cornerstone in that strategy (Data Science Hiring and Interview Process at AstraZeneca-AIM). For pharma IT professionals, AstraZeneca's case underlines the value of connecting LLMs to *internal proprietary data*. The real power emerges when ChatGPT is not just drawing from public knowledge but from the hidden insights in a company's own research – making it a cutting-edge digital assistant for scientists and executives alike.

Sanofi: Partnering with OpenAI for Drug Development

Sanofi, a French pharma active in the U.S. market, made headlines in 2024 by **partnering directly with OpenAI** to embed generative AI into its drug development processes. CEO Paul Hudson has been an outspoken champion of this approach, stating that *"Large-language models give us this insane opportunity to suppress, summarize, and create"* in ways that could radically improve R&D productivity (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). In May 2024, Sanofi announced a first-of-its-kind collaboration with OpenAI and a biotech startup (Formation Bio) aimed at **building AI tools to accelerate clinical trials** and drug discovery (Sanofi, Formation and OpenAI design AI tool to slash clinical trial …) (Sanofi partners with OpenAI, Formation Bio on AI-driven drug development-Reuters). One product of this collaboration is an AI software called **"Muse,"** which focuses on speeding up **patient recruitment for clinical trials** – a traditionally slow part of drug development (Formation Bio collaborates with Sanofi and OpenAI to Introduce …). By analyzing protocol criteria and real-world data, Muse (powered by GPT models) can help identify suitable patients much faster and even suggest ways to broaden eligibility, potentially reducing trial delays.

Sanofi is also leveraging OpenAI's technology to sift through its massive datasets for discovery insights. The company granted OpenAI **secure access to some of its proprietary research data** in order to train specialized models for Sanofi's needs (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). This is a bold move that many pharma companies have been hesitant to take. Hudson believes this deep cooperation will help *"design a drug candidate's molecular structure"* and find the right patients for it more efficiently (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). For example, generative AI might propose novel molecule designs or predict which patient subgroups will respond best to a drug, tasks that traditionally involve a lot of trial and error. Sanofi expects tangible early results from this partnership by late 2024, with the **first AI-generated draft sections of FDA submission documents** coming out of the system (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). Automating the writing of regulatory documentation (such as preclinical summaries or clinical study reports) is low-hanging fruit that can save scientists countless hours.

By integrating OpenAI's models so deeply, Sanofi aims to shave *years* off the drug development timeline. As Hudson highlighted, the cost of developing a drug (>$2–4 billion) with a high failure rate is something AI could help mitigate by predicting failures earlier (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). Sanofi's initiative is essentially treating ChatGPT-like AI as an **R&D accelerator** – one that can learn from past pipelines and guide future ones. This approach, however, comes with heavy responsibility. Sanofi has had to implement an AI risk assessment framework and ensure compliance (they mention "responsible AI" and data privacy commitments in their communications (All in on AI, Accountable to Outcomes - Sanofi)). For the IT and data teams, a lot of work goes into **securely connecting internal data with external AI**. The payoff, Sanofi hopes, will be a step-change in how quickly they can bring new therapies to market. This case exemplifies a top-down, strategic investment in ChatGPT technology, treating it not just as a tool for productivity, but as *a core component of future pharmaceutical innovation*.

Common Use Cases for ChatGPT in Life Sciences

The company cases above reveal a wide spectrum of **use cases** for ChatGPT in the life sciences. Below is a summary of the key application areas and how different organizations are tackling them:

- **Drug Research & Discovery:** Perhaps the most impactful area is using ChatGPT/LLMs to **assist scientists in R&D**. Companies like **Pfizer and AstraZeneca employ generative AI as a research assistant** – e.g. scanning vast libraries of publications and data to identify new drug targets or molecular designs (ChatGPT in Pharmaceutical Industry: Advancing Drug Discovery and Research) (Data Science Hiring and Interview Process at AstraZeneca-AIM). In surveys, drug discovery was the #1 cited application of AI in pharma (Two-thirds of top 20 pharmas have banned ChatGPT: report). Even smaller biotechs (e.g. Recursion Pharmaceuticals) integrate GPT-3/4 models into their discovery platforms (ChatGPT in Pharmaceutical Industry: Advancing Drug Discovery and Research). The benefit is faster hypothesis generation and knowledge synthesis; a chatbot can summarize the state of research on a protein in minutes, guiding scientists to promising avenues. Generative models are also beginning to propose **chemical structures** for drug candidates (part of **AI-driven medicinal chemistry**), essentially suggesting novel compounds to test ([PDF] "AI at Merck: a 360-degree perspective" How Merck enables and ...). This use case remains in early stages, but public comments by companies like Sanofi indicate strong optimism that *LLMs can design or select better drug candidates* (Sanofi's CEO thinks OpenAI offers 'insane' potential for the...-Peter Vanham).

- **Clinical Trial Optimization:** Life sciences companies are leveraging ChatGPT to make clinical development more efficient. **Patient recruitment** is a prime example – Sanofi's partnership developed an AI tool to find trial patients faster using generative AI (Sanofi, Formation and OpenAI design AI tool to slash clinical trial ...). **Trial design and protocol writing** is another: AstraZeneca noted AI helps design smarter trials and inclusion criteria (Advancing data and artificial intelligence - AstraZeneca), and Moderna's DoseID GPT analyzes trial dosing decisions (Moderna and OpenAI Collaborate To Advance mRNA Medicine). In a Nature report, scientists highlighted using AI to *write first drafts of trial protocols and analyze data* in real-time (How AI is being used to accelerate clinical trials - Nature). By automating such tasks, companies can cut down the time it takes to start and run studies. The ZoomRx data also listed **trial optimization** among top use cases already in play (Two-thirds of top 20 pharmas have banned ChatGPT: report). Additionally, generative AI can create **"digital twins"** or simulated patient data to model trial outcomes, which may reduce the number of real patients needed in control groups (Understanding generative AI and ChatGPT in pharma - Within3). Overall, ChatGPT is becoming a valuable co-pilot for clinical operations teams, helping with everything from drafting investigator brochures to interpreting complex results – always with human experts in the loop for final decisions.

- **Regulatory Affairs & Documentation:** Pharma and biotech companies face heavy documentation workloads – regulatory submissions, compliance reports, literature reviews, etc. Generative AI is proving extremely useful here. **Eli Lilly and Merck have used ChatGPT to generate drafts of clinical trial reports and sections of regulatory submissions** (Pharma Embraces AI - NAM) (Pharma Embraces AI - NAM), which are then polished by experts. **Sanofi expects AI to write first drafts of FDA documents** for upcoming filings (Sanofi's CEO thinks OpenAI offers 'insane' potential for the…–Peter Vanham). This cuts down the tedious writing effort and ensures consistency. Companies are also using ChatGPT for **pharmacovigilance** writing – for example, Indegene (a pharma services firm) noted that ChatGPT can intake adverse event narratives and draft pharmacovigilance case summaries more efficiently (Exploring the Future: Use Cases of ChatGPT in Life Sciences). Internally, any report that needs to be written in a structured format (annual summaries, manufacturing deviation reports, safety assessments) can be accelerated with LLMs. Of course, all output is reviewed by regulatory professionals, but it can significantly accelerate compliance workflows. Given the strict standards of regulatory docs, firms typically use **enterprise-secure instances** of ChatGPT (as in Merck's GPTeal or Moderna's mChat) to ensure confidentiality while benefiting from AI-generated content.

- **Knowledge Management & Internal Support:** Large life sciences organizations generate and consume enormous amounts of information. ChatGPT is increasingly used to **organize, search, and summarize internal knowledge**. For example, **AstraZeneca's AZ ChatGPT indexes internal R&D data** so scientists can query it in plain language (Data Science Hiring and Interview Process at AstraZeneca–AIM). **Novartis and J&J employ ChatGPT for internal communications** and knowledge sharing – drafting policy updates, summarizing training materials, or answering common employee queries (AI closeup: Ashley Sardjoe of Novartis details how ChatGPT elevates company's HR work-Canadian HR Reporter) (Pharma Embraces AI - NAM). Some companies have built chatbot assistants that act as an **internal helpdesk** for employees, leveraging company manuals and wikis. This spans IT helpdesks (answering how-to questions) to HR portals (answering policy questions). One report mentioned **Johnson & Johnson's vision of a "bilingual" employee** fluent in both domain skills and AI tools (Pharmaceutical Companies Embrace AI in Drug Discovery Efforts - Business Insider) – in effect, encouraging staff to use ChatGPT as an on-demand mentor or tutor in their work. In Medical Affairs departments, generative AI can summarize medical literature or prepare educational slides for medical science liaisons, vastly speeding up preparation time. The key impact in this category is turning a company's siloed data into a **conversational knowledge base**, increasing the agility of learning and decision-making.

- **Marketing, Sales & Customer Engagement:** Pharma marketing and sales teams are using ChatGPT to create and manage content more efficiently, as seen with **Pfizer's Charlie platform for content creation and review** (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday) (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). Generative AI can produce drafts of marketing copy, social media posts, product FAQs, and even medical conference booth scripts. These drafts save time for marketing writers and ensure messaging consistency. **Copywriting** was identified as a common early use of AI in pharma (Two-thirds of top 20 pharmas have banned ChatGPT: report). Moreover, ChatGPT can **personalize communications** – for instance, sales reps could use it to tailor follow-up emails to doctors based on conversation notes (while staying within compliance-approved language). Some life science companies also explore using chatbots for **customer service or patient support**. Although we have not seen a major pharma publicly deploy a ChatGPT-based patient chatbot yet (likely due to regulatory caution), the idea is on the table. Generative AI could answer patient questions about a medication or assist with reimbursement and access queries, acting as a first-line support (with proper disclaimers). **Doximity, a physicians' network, even integrated a ChatGPT assistant to help doctors draft patient correspondence** (Doximity rolls out beta version of ChatGPT tool for docs) – hinting at future use in communications between pharma and healthcare providers. In summary, generative AI is streamlining how life sciences companies produce content and engage with stakeholders, **augmenting human creativity** and ensuring faster turnaround. It holds promise to maintain high-quality, compliant interactions at scale, whether those interactions are promotional, educational, or service-oriented.

- **Personalized Medicine & Data Analysis:** Another emerging use case is in analyzing complex datasets for **personalized medicine**. For example, AI can help parse genetic information or electronic health record data to identify patients who might benefit from a therapy (this ties into the trial recruitment use case). The ZoomRx survey found personalized medicine to be a popular AI application area after drug discovery (Two-thirds of top 20 pharmas have banned ChatGPT: report). Generative AI could assist in writing **genomic reports** or explaining to clinicians the rationale for a targeted therapy. Companies are also interested in using ChatGPT's **data analysis modes**: ChatGPT Enterprise offers advanced data analysis (formerly Code Interpreter) which Moderna used in its Dose ID tool (Moderna and OpenAI Collaborate To Advance mRNA Medicine). This allows for making sense of large clinical or real-world datasets, identifying patterns and visualizing results, which can support both R&D and commercial analytics. In essence, wherever there is data and a need to derive narrative or insight from it, ChatGPT can help translate numbers into natural language. This supports teams in epidemiology, health economics, and outcomes research (HEOR), and other data-heavy disciplines in pharma.

Each of these use cases is accompanied by specific challenges – ensuring accuracy (no AI hallucinations in critical info), maintaining compliance (e.g. promotional content must stick to approved claims), protecting privacy (especially with patient data), and user trust and adoption. The **early results**, however, are promising. Many companies report substantial time savings and quality improvements. For instance, Merck saw significant reduction in time spent on drafting documents (Pharma Embraces AI - NAM), and Pfizer noted faster content cycles and better focus of human reviewers on high-risk items (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday). As generative AI tools mature (with domain-specific fine-tuning, audit logs, etc.), we can expect even wider uptake in life sciences.

Conclusion

Generative AI tools like ChatGPT are rapidly transforming the **operational landscape for pharmaceutical, biotech, and diagnostics companies**. In the U.S. and globally, life sciences organizations are moving past the hype and into practical deployments that improve how new drugs are discovered, developed, and delivered. We have identified several leading companies – from **Moderna's enterprise-wide AI assistants to Pfizer's marketing GPT, Merck's GPTeal platform, Lilly's all-in adoption, and Sanofi's R&D partnership with OpenAI** – that openly attest to the value of ChatGPT in their workflows. These pioneers demonstrate that, when implemented thoughtfully, ChatGPT can **boost productivity, enhance decision-making, and reduce cycle times** across diverse functions like research, clinical trials, regulatory compliance, and customer engagement.

That said, the **life sciences industry is approaching ChatGPT with justified caution**. Common themes for success include establishing proper data safeguards (as seen in internal platforms like GPTeal and AZ ChatGPT), investing in employee training and AI literacy (J&J and Lilly's approach), and starting with "safe" applications (non-public or non-critical tasks) to build confidence. Regulatory compliance and patient safety remain the north stars – any AI-generated content is carefully reviewed by experts, and companies are developing clear policies to govern AI use. The survey data and early case studies indicate that concerns about data privacy have led many firms to initially restrict ChatGPT, but this is gradually easing as **enterprise-grade solutions and best practices** emerge.

For IT professionals in pharma, the examples in this report offer **valuable lessons**. Key takeaways are: integrate ChatGPT into secure internal systems or sandboxes before scaling up; focus on high-impact use cases like research knowledge management or document drafting where AI can save significant time; involve cross-functional teams (IT, legal, compliance, business units) to set guidelines; and upskill your workforce to confidently use these new tools. It's also important to measure outcomes – several companies cited improved efficiency (e.g. cutting writing time by over 50%) and no negative compliance incidents, which helps in making the case for wider adoption.

In an industry defined by innovation, generative AI is poised to become a **competitive differentiator**. Companies that harness ChatGPT and similar models effectively may achieve faster R&D pipelines, better engagement with healthcare providers, and more agile operations, ultimately bringing medicines to patients sooner and at lower cost. The U.S. life sciences market, with its large scale and investment in digital, is at the forefront of this generative AI wave. As more organizations follow the trail blazed by the early adopters profiled here, we can expect the next few years to solidify ChatGPT's role as an indispensable assistant in labs, offices, and clinics throughout the pharmaceutical world. The transformation has begun – and those who responsibly leverage ChatGPT's capabilities are likely to lead in the **new era of AI-powered life sciences**.

References: The information in this report is drawn from public sources including company press releases, interviews, and reputable media coverage. Key sources have been cited in context (in), for example: official statements from Moderna (Moderna and OpenAI Collaborate To Advance mRNA Medicine), Pfizer's marketing AI report (With 'Charlie,' Pfizer is building a new generative AI platform for pharma marketing - Digiday), insights from Business Insider on J&J, Merck, Lilly (Pharma Embraces AI - NAM) (Pharma Embraces AI - NAM), and a Fortune interview with Sanofi's

CEO ([Sanofi's CEO thinks OpenAI offers 'insane' potential for the...-Peter Vanham](#)), among others. These citations provide direct evidence of each company's use of ChatGPT or generative AI as discussed. The reader is encouraged to explore those sources for further details on specific implementations.

DISCLAIMER

The information contained in this document is provided for educational and informational purposes only. We make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability, or availability of the information contained herein.

Any reliance you place on such information is strictly at your own risk. In no event will IntuitionLabs.ai or its representatives be liable for any loss or damage including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from the use of information presented in this document.

This document may contain content generated with the assistance of artificial intelligence technologies. AI-generated content may contain errors, omissions, or inaccuracies. Readers are advised to independently verify any critical information before acting upon it.

All product names, logos, brands, trademarks, and registered trademarks mentioned in this document are the property of their respective owners. All company, product, and service names used in this document are for identification purposes only. Use of these names, logos, trademarks, and brands does not imply endorsement by the respective trademark holders.

IntuitionLabs.ai is an AI software development company specializing in helping life-science companies implement and leverage artificial intelligence solutions. Founded in 2023 by Adrien Laurent and based in San Jose, California.

This document does not constitute professional or legal advice. For specific guidance related to your business needs, please consult with appropriate qualified professionals.