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Tempus AI RWD Deals: Merck & Gilead 2026 Pricing Analysis

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In this article

1. Executive Summary
2. Introduction and Background
3. The Rise of Real-World Data in Pharma
4. Tempus AI: Data and Platform Overview
5. Historical Context of Tempus-Focused Collaborations
6. Real-World Data Partnerships: Evolution of Pricing and Models
7. Traditional RWD Pricing Models
8. Emergence of Data + AI Collaboration Models
9. Shifting Pricing Benchmarks
10. Tempus Q1 2026 Financial and Operating Highlights
11. The Merck Collaboration
12. The Gilead Collaboration
13. Data Analysis and Evidence-Based Observations
14. Case Studies and Examples
15. Merck–Tempus Partnership
16. Gilead–Tempus Partnership
17. Northwestern, NYU, and Others
18. Implications and Future Directions
19. Future Projections
20. Conclusion
21. References

Executive Summary

In 2026, Tempus AI (NASDAQ: TEM) announced **large, multi-year collaborations with Merck and Gilead**, two leading biopharmaceutical companies, that fundamentally elevate the scale and pricing of real-world data (RWD) partnerships. Neither agreement disclosed a contract value; Tempus's CEO described the Merck collaboration as "very large" and the Gilead collaboration as "quite large." By comparison, CB Insights reported that pharma had traditionally paid roughly $75K–$5M per year for RWD (www.cbinsights.com), and Tempus has said that almost half a dozen unnamed customers are at the $100+ million level. In its Q1 2026 earnings, Tempus reported $348.1 M in revenue (36.1% growth YoY) and noted that data & applications revenue grew 40.5%, driven by continued strength in its **Insights (data licensing and modeling) business** (www.fool.com) (www.streetinsider.com). At its Q1 2026 report the company raised full-year 2026 revenue guidance to $1.59–1.60 B; its Q3 2026 earnings release raised full-year 2026 revenue guidance to $1.60–$1.605 B (www.sec.gov). The analysis below otherwise reflects data through the Q1 2026 report.

The **Merck** collaboration (announced March 3, 2026) and **Gilead** collaboration (announced April 9, 2026) both offer broad, enterprise-wide access to Tempus's multi-modal RWD and advanced AI modeling platform (Lens and Workspaces). Merck's deal explicitly combines Tempus's *de-identified clinical and molecular dataset* with the Lens platform and one of the industry's largest GPU infrastructures to "train and fine-tune specific models"

against multimodal RWD (www.tempus.com). Gilead's expanded deal similarly grants enterprise access to the Lens data platform and integrates dedicated analytical services for oncology R&D (www.tempus.com). In comments on the earnings call, Tempus CEO Eric Lefkofsky emphasized that these collaborations are **"very large"** – describing the Merck deal as "of that magnitude" and the Gilead deal as "quite large—smaller than Merck", without disclosing contract values. Separately, he said Tempus now has almost half a dozen customers signing $100+ million agreements to license de-identified data over multiple years (www.fool.com). Prior Tempus collaborations (e.g. a 2022 GSK deal with a $70 M upfront commitment (www.tempus.com)) were followed in April 2025 by an agreement with AstraZeneca and Pathos AI that included $200 million in data licensing and model development fees (www.tempus.com).

This report examines the **context, structure, and implications** of these landmark Tempus partnerships. We review the history of RWD in pharma, the rise of AI-driven data collaborations, and the evolving economics of data licensing. We analyze Tempus's Q1 2026 results and management commentary to quantify how Merck and Gilead contribute to revenue and pipeline. We compare contract values and terms with prior benchmarks (including CB Insights' RWD pricing survey (www.cbinsights.com) and Tempus's own press disclosures (finance.yahoo.com) (www.tempus.com)). We include case examples (Merck and Gilead deals; Tempus's major partnerships) and discuss broader industry trends: as noted by Tempus's CEO, almost half a dozen customers have signed $100+ million agreements to license de-identified data over multiple years (www.fool.com). Finally, we explore implications for future RWD adoption, including regulatory, financial, and competitive impacts. Sources include Tempus press releases, earnings materials, the earnings call transcript and industry analyses; contract values were not disclosed, and any estimates are the author's inference (finance.yahoo.com) (www.tempus.com) (www.fool.com).

Introduction and Background

The Rise of Real-World Data in Pharma

Real-World Data (RWD) -- comprising de-identified patient health records, insurance claims, registries, genomic profiles, and imaging data from routine clinical care -- has transformed pharmaceutical R&D. Traditionally used for post-market safety monitoring, RWD is now harnessed to **match patients to trials, design studies, and discover new biomarkers** (www.cbinsights.com). Major pharma recognize its value: CB Insights reports that "RWD is transforming the drug R&D value chain," with applications ranging from trial design to synthetic control arms and biomarker discovery (www.cbinsights.com). Indeed, there is an "unmet need for oncology real-world data" driving pharmas toward specialty providers like Tempus, Syapse, and Flatiron (www.cbinsights.com). AI and machine learning are central: buyers evaluate vendors on **ML/AI capabilities** for data curation and analysis (www.cbinsights.com), and many are moving beyond static data licensing to **co-developing models** (a shift noted by Tempus's leadership (www.fool.com)).

Despite the enthusiasm, the RWD **vendor market has been fragmented**. Buyers report "no one-stop-shop for data in all therapeutic areas" (www.cbinsights.com), leading to varied proprietary sources. Until recently, RWD pricing reflected a nascent market: contracts were often sized for single-figure millions or less. A CB Insights analysis in mid-2023 found that pharma RWD deals "range from $75K to $5M" per year (www.cbinsights.com). Many agreements lacked fixed pricing "as vendors don't really have a standard model" (www.cbinsights.com);

instead, terms were negotiated per-project or on a collaborative basis. However, as datasets have grown (temporally and in genomics/imaging content) and as AI tools matured, appetite has surged for larger-scale collaborations. As Tempus's CEO observed, the CEO said customers are signing "$100+ million agreements" to license de-identified data over multiple years, with almost half a dozen customers at that level (www.fool.com). This report focuses on Tempus's latest Q1 2026 deals with Merck and Gilead, which epitomize this new pricing paradigm.

Tempus AI: Data and Platform Overview

Tempus, founded in 2015 and headquartered in Chicago, has emerged as a leader in AI-driven **precision medicine**. The company administers genomic and molecular tests (e.g. sequencing, pathology) and amasses a **massive multi-modal dataset** of cancer patient data (genomics, clinical charts, and imaging). According to corporate disclosures, Tempus maintains "one of the world's largest libraries of multimodal data" (finance.yahoo.com). As of 2026, Tempus claims to have **500+ petabytes** of de-identified clinical and molecular data linked at the patient level (www.fool.com). Its core product, the **Tempus Lens** platform, allows data access and analytics for research and drug development. Crucially, Tempus provides not just raw data but an **AI-enabled environment**: its Lens workspaces include high-performance computing (CPUs and GPUs) and AI modeling tools that customers can use to build and refine predictive models on the RWD (www.tempus.com).

The growth of Tempus's business reflects demand for this integrated data+AI offering. By late 2025, Tempus reported an industry-record **Total Contract Value (TCV)** of over $1.1 billion (finance.yahoo.com). This was driven by a broad portfolio of clients (70+ in 2025) spanning large pharmas and mid-sized biotechs (finance.yahoo.com). The diversity of modalities (genomic, imaging, EHR) and the operational AI platform differentiate Tempus from many traditional data vendors. For example, while some real-world evidence (RWE) providers offer claims or registry data, Tempus's "multiomic" repository is particularly valued for oncology R&D (www.tempus.com) (www.cbinsights.com). Its platform can integrate novel algorithms – e.g. built-in AI and patented features – to generate insights that support trial design and biomarker identification.

Historical Context of Tempus-Focused Collaborations

Tempus has built a history of high-profile D&A collaborations. Notably, a 2022 expansion with **GSK** (GlaxoSmithKline) provided enterprise access to Tempus's AI platform in an oncology-focused R&D partnership (www.tempus.com). That 3-year agreement included an initial $70 million payment and optional extensions (www.tempus.com), illustrating how a leading pharma already valued Tempus's data at what was then considered a robust multi-year investment. Tempus also works with AstraZeneca and others: for example, AstraZeneca is reported to be building "foundation models" using Tempus's dataset (www.fool.com), and Novartis and Pfizer appear in Tempus's TCV list (finance.yahoo.com).

On the industry side, RWD partnerships of this magnitude have been rare to date. Prior to these deals, analyst surveys like CB Insights identified the upper-bound of annual RWD spend at ~$5M (www.cbinsights.com), with collaborations often aimed at specific trials or biomarkers. The GSK-Tempus $70M deal (www.tempus.com) was one of the first to break into high double-digit millions. Meanwhile, Tempus reported 2025 bookings of 70+

agreements (finance.yahoo.com), with several existing deals renewed (often at higher scale), indicating steady demand. Importantly, Tempus's 2025 TCV figure ($1.1B) encompassed not just one-off licenses but multi-year frameworks, highlighting sustained revenue visibility (finance.yahoo.com).

These developments set the stage for Q1 2026: an era in which Tempus's partnerships with Merck and Gilead would define *new norms* for scope and pricing. According to CFO Jim Rogers, 2025 was "a record year for our Data and applications business" (finance.yahoo.com), and the company entered 2026 confidently. The following sections dissect Q1 2026's deals and data, exploring how they realize and extend the trends above.

Real-World Data Partnerships: Evolution of Pricing and Models

Traditional RWD Pricing Models

Historically, RWD licensing was treated much like other database subscriptions or one-off bespoke datasets. Pharma clients would pay for access to specific slices of data (e.g. claims for oncology patients) on an annual or per-project basis. For many years, those contracts typically ranged in the low to mid six figures. CB Insights (2023) reports that **annual RWD expenditures are generally $75K–$5M** (www.cbinsights.com), with the higher end usually reflecting large, multi-year enterprise deals for global access. (Many smaller trials or targeted queries could fall at lower price points in the $0.1M–$1M range.)

Pricing was often negotiated case-by-case; as one source noted, vendors "don't really have a standard [pricing] model" for RWD (www.cbinsights.com). The metrics used (e.g. per-patient, per-year, per-terabyte) varied. In addition to raw data access, some contracts would include services (cohort exploration, analytics) or pay-for-performance clauses. But **nine-figure deals were unheard of**. Even major longitudinal data providers or EHR networks (e.g. IQVIA, Flatiron, Optum) had not typically disclosed such high valuations to academic knowledge, partly because many contracts were confidential.

From the vendor side, most companies kept tight control of list prices or licensing models. There was little published data on the size of even aggregate data partnerships. For instance, in 2022 Tempus and GSK revealed the $70M upfront payment (www.tempus.com) (with optional extensions). But aside from occasional press releases (often described as "collaborations for accelerating R&D"), few hard numbers emerged.

In sum, **conventional RWD contracts** were typically mid-six-figure to low-seven-figure affairs, reflecting targeted use cases. These would rarely justify "enterprise-wide access" for years; companies often started with pilot projects or limited scopes. The bar to move to an enterprise license was high, requiring very strong preliminary ROI. That landscape is changing rapidly with the advent of integrated AI plus increasingly institutionalized RWE capabilities.

Emergence of Data + AI Collaboration Models

In the past 3–5 years, two forces have driven new deal structures: (1) Pharma's hunger for scale and AI in R&D, and (2) competition among data providers to offer end-to-end solutions. Rather than simply "selling data," vendors like Tempus now pitch a full stack: **curated RWD + analytics platform + AI modeling**. In practical terms, this means that deals increasingly include elements such as:

- **Access to ML/AI platforms**: e.g. GPU-accelerated workspaces, pre-built algorithms, or ability to train custom neural networks on the data.
- **Co-development of models**: Some agreements involve the pharma company's own scientists working in Tempus's environment to jointly build predictive models (as has been publicized with AstraZeneca building a "foundation model" on Tempus data (www.fool.com)).
- **Integrated services**: Dedicated analytics teams or strategic advisory are bundled, not charged separately per hour.

Thus these contracts become much more like a technology partnership than a commodity license. This shift has also been noted by analysts: buyers now evaluate **"AI features"** in selecting RWD vendors (www.cbinsights.com). Tempus's Lens platform exemplifies this trend – it is explicitly marketed for researchers to "leverage our multimodal data with AI computing power to train and fine-tune models" (www.tempus.com).

In parallel, regulatory bodies have become more receptive to RWD/RWE. The FDA's guidance on the use of RWE in drug approvals (2018–2021) and the EU's growing use of health registries have signaled legitimacy. As a result, the risk associated with RWD investment is lower, encouraging long-term contracts. Also, the rise of genomics and targeted therapies means that large datasets (with genetic, imaging, and clinical detail) are extremely valuable for identifying patient subgroups. Companies like Tempus highlight the value of **multimodal integration** – linking DNA/RNA data with pathology images and outcomes – which is unique to their platform (www.tempus.com). This breadth of data, when combined with AI, can support new R&D questions (e.g. finding novel biomarkers), justifying the premium pricing.

Shifting Pricing Benchmarks

As a result of the above forces, the **price points for RWD partnerships have risen dramatically**. Firms like Tempus are now closing contracts that dwarf previous budgets. According to Tempus's CEO, the company now has **"people signing $100+ million agreements … to license [our] data over multiple years,"** and said that "almost half a dozen folks" are at that level (www.fool.com). In the author's view, this may suggest that some top-tier pharmas are willing to commit very large sums to comprehensive RWD/AI collaborations, although no price for the Merck or Gilead deals was disclosed. Because neither deal's value was disclosed, it is unknown whether Gilead or Merck is in that group of $100M+ customers; still, the broader managerial shift is visible: CFO Jim Rogers noted that 2025's bookings (~$1.1B TCV) gave clear visibility for 2026 revenue, and Q1 2026 additions (including these deals) further strengthened that pipeline (finance.yahoo.com) (www.fool.com).

For context, consider this comparison of illustrative deals:

Partnership	Announced	Term	Scope	Reported value
Tempus & GSK	2022	3 yr (+2 yr opt)	Oncology R&D platform access	**$70M** upfront (www.tempus.com)
Tempus & AstraZeneca	2025	Multi-yr	Genomics+RWD modeling (foundation models)	**$200M** in data licensing and model development fees (www.tempus.com)
Tempus & Merck	*March 2026*	Multi-yr (expanded)	Oncology biomarker discovery (RWD+AI)	*Not disclosed* (www.tempus.com) (www.fool.com)
Tempus & Gilead	*April 2026*	Multi-yr (expansion)	Oncology RWD & analytics	*Not disclosed* (www.tempus.com) (www.fool.com)
Other Vendors (typical)	2023	Annual license	Narrow RWD subset (e.g. claims)	~$0.1–5M per year (www.cbinsights.com)

Table 1: Examples of Tempus-oriented RWD partnerships, comparing multi-year deals with traditional RWD contracts. The contract values of the Merck and Gilead deals were not disclosed; any figures shown are illustrative or reported ranges, and actual terms are often confidential.

The shift is clear: whereas past collaborations like the 2022 GSK deal involved a $70M initial payment (www.tempus.com), the Merck and Gilead contract values were not disclosed, though management called the collaborations “very large” and “quite large”. Importantly, these new agreements are “enterprise-wide,” meaning they are not confined to a single trial or indication. As Tempus stated, Gilead’s expanded deal gives “enterprise-wide access” to all oncology datasets (www.tempus.com), and Merck’s deal uses “our advanced computational configuration… to conduct complex analyses at scale” (www.tempus.com). Enterprise deals imply not just more data but broader decision rights (across divisions and geographies) and longer duration, which justify the three-, five-, or even ten-year horizons reflected in TCV calculations.

In sum, **pricing of RWD partnerships has reached new heights in early 2026**. Tempus’s own statements and filings reveal a landscape where Tempus’s CEO said on the Q1 call that almost half a dozen unnamed customers are now at the $100+ million level, while neither the Merck nor the Gilead contract value was disclosed (www.fool.com). The next sections dissect how these collaborations are structured and what they mean for stakeholders.

Tempus Q1 2026 Financial and Operating Highlights

Tempus’s Q1 2026 results, reported May 5, provide quantitative context for these developments (www.streetinsider.com) (www.fool.com). Key figures are summarized below:

Metric	Q1 2026	Q1 2025	YoY Change	Source
Total Revenue	$348.1 million	$255.7 million	+36.1%	(www.streetinsider.com)

Metric	Q1 2026	Q1 2025	YoY Change	Source
Diagnostics Revenue	$261.1 million	~**194.0** million	+34.7%	(www.streetinsider.com)
Data & Applications Revenue	$87.0 million	~**62.0** million	+40.5%	(www.streetinsider.com)
Data & Apps – Insights Segment	(included above)	(included above)	+44.1%	(www.streetinsider.com)
Gross Profit	$222.0 million	$155.2 million	+43.1%	(www.streetinsider.com)
GAAP Net Loss	–$125.9 million	–$68.0 million	–85.1%	(www.streetinsider.com)
Adj. EBITDA	–$2.8 million	–$16.2 million	+82.5%	(www.streetinsider.com)

Table 2: Tempus Q1 2026 financial highlights compared to same quarter in 2025. Diagnostics revenue includes genetic testing (Oncology, Hereditary). "Data & Applications" is driven by RWD licensing and AI solutions. All figures are unaudited. Source: Tempus Q1 2026 earnings release (www.streetinsider.com).

The **Data & Applications** segment (Tempus's insights business) grew 40.5% to $87.0M (www.streetinsider.com), outpacing even the Diagnostics growth. Within that, the *Insights* sub-segment (primarily data licensing and modeling) grew 44.1% (www.streetinsider.com). The Q1 call also emphasized contracted *bookings* (www.fool.com). The Merck (March 3, 2026) and Gilead (April 9, 2026) collaborations were announced around that period. Tempus's CEO described this as a "third straight quarter of bookings north of $100+ million with TCV rising" (www.fool.com), reinforcing that the $87.0M in recognized revenue should be viewed in light of significantly larger contracted order flow.

During the quarter, Tempus achieved several operational milestones (as noted in the release (www.stocktitan.net)):

- **Merck Collaboration**: Announced an expanded multi-year collaboration for oncology biomarker discovery (leveraging Tempus's multimodal RWD and Lens analytics) (www.tempus.com) (www.stocktitan.net).
- **Gilead Collaboration**: Expanded to enterprise-wide access for oncology R&D (using RWE and AI) (www.tempus.com) (www.stocktitan.net).
- **Broader Genomics Business**: Hereditary testing slowed due to year-ago comp (Ambry integration), but Oncology volume grew 28% (www.streetinsider.com).
- **New Initiatives**: Partnerships in academic and registry research (e.g. Northwestern, NYU Langone, Blood Cancer United) were signed, though smaller in scale than the pharma deals.

Notably, cash and marketable securities stood at $643.8M (www.streetinsider.com), giving Tempus flexibility to invest in data acquisition and AI infrastructure. The strong balance sheet and high revenue visibility led management to raise full-year 2026 revenue guidance to $1.59–1.60B (~25% growth) while continuing to expect adjusted EBITDA of ~$65M (www.streetinsider.com).

Insight from earnings call: Lefkofsky underscored the role of these collaborations. He described Merck as a very large strategic collaboration and Gilead as "quite large—smaller than Merck," with partners at that level bringing "lots of data and broad access and AI model building… for a long-term, sticky relationship" (www.fool.com). He also explicitly set the expectation that Tempus would pursue $100M+ contracts with

multiple pharma companies (www.fool.com). CFO Rogers confirmed that Merck and Gilead had indeed closed in Q1, boosting pipeline visibility: the $350M of TCV related to 2026 had given visibility into the guidance, and Merck and Gilead were part of the additional pipeline that closed in the first quarter (www.fool.com).

Overall, Tempus's Q1 results show that the **data and AI business** is now a major contributor (25% of revenue) and is scaling rapidly enough to offset some pressure in other areas. The Merck and Gilead collaborations closed in the first quarter, and management said they increased visibility into the pipeline; their contract values were not disclosed, and the CEO described Merck as "very large" and Gilead as "quite large."

The Merck Collaboration

On March 3, 2026, Tempus announced a **"strategic collaboration agreement"** with Merck (MSD outside US/Canada) to accelerate precision medicine biomarker discovery across oncology (and potentially other therapeutic areas) (www.tempus.com). This deal has several distinctive features:

- **Scope and Access:** Under a **multi-year** collaboration, Merck will use Tempus's de-identified data along with the Lens Platform and Workspaces environment (www.tempus.com). The Lens platform (with its Workspaces environment) provides ready-to-use workflows and computational tools. In fact, the press release specifies that Merck researchers will use "Tempus' de-identified data along with Tempus' Lens Platform and Workspaces environment, which offers an advanced computational configuration powered by one of the industry's largest GPU infrastructures (www.tempus.com)." This suggests that Merck can run large-scale AI/ML models on the data – a step beyond simply querying the database.
- **AI & Model Development:** The collaboration explicitly emphasizes **model training and fine-tuning**. Tempus's statement notes that Merck will employ the GPU-enabled platform "to efficiently conduct complex analyses on training-ready multimodal datasets" (www.tempus.com). The joint goal is to generate "novel insights to accelerate the development and optimization of candidate therapies at scale" (through discovery of biomarkers, drug resistance mechanisms, etc.) (www.tempus.com). The language makes clear that this is a **data + AI modeling engagement**, not mere data licensing. Merck's quoted R&D leader, George Addona, highlighted applying "the latest AI/ML capabilities to discover novel precision biomarkers, identify mechanisms of cancer cell resistance, and inform rational combinations for drugs in our early pipeline" (www.tempus.com).
- **Strategic Significance:** As Eric Lefkofsky remarked in the earnings Q&A, Merck's commitment is "of that magnitude" of other big collaborations (AstraZeneca, GSK, BMS) (www.fool.com). In other words, Merck is now among Tempus's largest partners. Importantly, Lefkofsky said this collaboration was "very large" – and noted that the industry now has several $100M+ deals. The exact value is undisclosed. Lefkofsky's separate remark that almost half a dozen customers are at the $100+ million level (www.fool.com) did not identify which customers.

We can glean indirect evidence of scale and timing from filings. Merck was also listed among the 70+ customers in the year-2025 TCV report (finance.yahoo.com), suggesting discussions had been underway. Now, in Q1, the deal was consummated. Tempus's 8-K (via StreetInsider (www.stocktitan.net)) bullet-points call it "multi-year" and focused on leveraging "multimodal data and Lens analytical platform."

Financial Terms: Tempus has not disclosed the contract value. Lefkofsky called the collaboration “very large” and separately said almost half a dozen customers are at the $100+ million level without naming them; the illustrative arithmetic below is the author’s own and not a reported figure. (For perspective, if a 5-year contract were for, say, $200M total, that averages $40M/year – already well above the $5M/year cited by CB Insights for typical RWD deals (www.cbinsights.com).) CFO Rogers’s comments on incremental TCV applaud Merck as part of a “strong pipeline,” implying it was one of Q1’s major closings (www.fool.com).

Text from press release: Tempus’s official statement reinforces the joint mission: “We’ve spent years configuring our Lens Platform… Working with the great scientists at Merck, we have exciting opportunities to translate insights from AI models into precision medicine strategies and improve patient outcomes” (www.tempus.com). The reputational value is high – Merck’s endorsement suggests validation of Tempus’s approach. For Merck, the deal likely removes many barriers to using RWD broadly, embedding it into their translational research.

In summary, the Tempus–Merck collaboration is a **capstone example of a modern RWD/AI partnership**: enterprise-grade data access plus integrated AI compute, over multiple years, under a contract whose value was not disclosed. It underscores that Merck is betting on RWD-driven biomarker discovery as a strategic pillar of its oncology pipeline.

The Gilead Collaboration

About five weeks later, Tempus announced on April 9, 2026 its **expanded collaboration with Gilead Sciences** (www.tempus.com). Gilead had been using Tempus data internally for several initiatives; this new agreement deepens and broadens that access. Key aspects of the Gilead deal include:

- **Enterprise-Wide Data Access:** Gilead will now have “enterprise-wide access” to Tempus’s multimodal data library via the Lens platform (www.tempus.com). This extends beyond any single program, enabling multiple Gilead research teams across indications to leverage the data. The agreement specifically lists oncology as an initial focal area, though it is not limited to any one cancer type.
- **AI-Powered Analytics:** As with Merck’s deal, Gilead’s arrangement is centered on AI-driven insights. The press release emphasizes “AI-driven Lens platform” and “dedicated Tempus analytical services” (www.tempus.com). While it does not explicitly mention GPU infrastructure, the implication is that Gilead, too, can run sophisticated analytics and perhaps develop its own models. Tempus Data & Apps’ Ryan Fukushima remarked that Gilead will “fuel its R&D engine with AI-driven insights” by accessing the multimodal database (www.tempus.com).
- **Broad RWE Application:** Tempus notes that Gilead already leveraged its data for trial design, biomarker strategy, and real-world evidence studies (www.tempus.com). Now, with the expanded deal, Gilead can accelerate these efforts. Patrick Loerch, Gilead’s SVP of Clinical Data Science, commented that combining Gilead’s expertise with Tempus’s RWD aims to “inform clinical decision making and ultimately improve care” (www.tempus.com). This hints that Gilead may use RWD not only in early research but also for outcomes analysis and potentially for regulatory/HTA evidence campaigns.

- **Strategic Upsize:** The upgrade in Gilead's deal is noted as "a significant step up from their historic levels" (www.fool.com). While the original terms of Gilead's previous engagements were not public, it is evident that this expansion is materially larger. In the earnings Q&A, Lefkofsky described Gilead's agreement as "quite large – smaller than Merck, but quite large" (www.fool.com). He emphasized that big pharma often start small and escalate, and Gilead is now "stepping up in such a big way from their historic levels" (www.fool.com). Contract values were not disclosed.
- **Deal Implications:** Tempus's operational highlights list this as an "expanded collaboration" with broad implications for Gilead's oncology R&D (www.stocktitan.net). It was announced shortly after Merck's, indicating a concerted Q1 push into multi-partner deals. The timing suggests Tempus's sales cycle with Gilead concluded in parallel, though perhaps from earlier discussions. CFO Rogers confirmed in the call that Gilead's extension closed in Q1 and contributed to the quarter's pipeline (www.fool.com).

Compared to the Merck deal, Gilead's appears more evolutionary (an expansion) than revolutionary (a brand-new entry). Nevertheless, the language ("enterprise-wide access," "AI-powered insights") and executive comments mark it as a landmark. In practical terms, Gilead's researchers now essentially have Tempus as an internal discovery engine for oncology. For Tempus, Gilead's signing not only adds revenue but also cements a reference customer in the oncology field beyond the Big 5 pharmas.

Data Analysis and Evidence-Based Observations

The true magnitude of the Merck and Gilead deals – and their pricing implications – emerges from synthesizing the sources:

- **Contract Scale (TCV and bookings):** Tempus's prior disclosure of >$1.1B TCV in 2025 (finance.yahoo.com) and Q1 bookings >$100M (www.fool.com) mean that Merck and Gilead were two of the major new contracts. The earnings call confirmed both closed in Q1 and bolstered the pipeline (www.fool.com). Given that bookings have now hit "historical highs" (www.fool.com); this is the author's inference, since no values were disclosed. No contract values were disclosed in public filings or on the call. CFO James Rogers said Tempus "had about $350 million of TCV that was related to 2026," which is not a figure for these two deals, so any estimate of their values would be speculation.
- **Revenue Impact in Q1:** Despite being multi-year deals, some revenue was recognized in Q1 from these partnerships. The Data & Apps revenue ($87.0M) and strong growth in Insights (44.1% YoY) indicate material contributions (www.streetinsider.com).
- **Pricing Benchmarks:** As Lefkofsky noted, Tempus now has "almost half a dozen folks" at the $100+ million level, though he did not name them. By comparison, CB Insights reported that pharma RWD deals "range from $75K to $5M" per year (www.cbinsights.com). The Merck and Gilead contract values were not disclosed, so no multiple of earlier budgets can be stated (www.fool.com).

- **Data & Modeling Synergies:** Both deals highlight the growing overlap between RWD and AI. Tempus is no longer merely selling data feeds; it sells a **machine learning environment**. This is evident from Merck's explicit mention of GPUs (www.tempus.com) and Lefkofsky's commentary on customers building "foundation models" on Tempus data (www.fool.com). The implication is that part of the value (and price) comes from enabling pharma to develop proprietary AI models on clinical data – an offering far beyond raw data provision. In this sense, Tempus's pricing now encompasses both data licensing *and* AI compute, which are distinct services. Bundling compute with curated RWD may, in the author's view, raise overall contract value, though no pricing was disclosed.
- **Case Study – GSK vs. New Deals:** It is instructive to compare Tempus's 2022 GSK deal to today's deals. That agreement guaranteed a $70M upfront payment (with optional renewal) for similar multi-modal data access (www.tempus.com). Because GSK's was one of the largest known prior deals, we can treat its $70M initial payment as the last publicly disclosed reference point. No comparable figure was disclosed for Merck or Gilead, so no multiple of the earlier deal can be stated. Tempus's CEO did say that Gilead represents "a very significant step up from their historic levels" and that it was "nice to see someone like Gilead stepping up in such a big way" (www.fool.com).
- **Ecosystem Effects:** The visibility of these deals also shifts expectations across the industry. Other RWD vendors (for example Flatiron and EHR data brokers) may, in the author's view, find clients pressing for larger, platform-level engagements. Investors in health data companies may also reassess valuations, though this is the author's speculation. For example, CB Insights noted consolidation in 2023; if large platform-level RWD deals like those Tempus describes become more common, we may expect more M&A from established players (like IQVIA) or new startups positioning as "AI-data integrators."
- **Clinical Impact Potential:** Beyond pure financials, the deals signal that major drug projects will increasingly incorporate RWD. The companies themselves claim uses in trial design and outcomes analysis (www.tempus.com). While not directly quantifiable here, this suggests potential acceleration of drug development timelines or novel trial designs (e.g. RWD control arms) – which could yield downstream economic value for the drug projects. Regulators are watching too: Tempus's ability to derive real-world evidence from its enriched data might support label expansions or post-approval studies, giving Gilead and Merck strategic advantages.

In summary, **the contract values of the Merck and Gilead deals were not disclosed**. Tempus's earnings commentary describes both as large and says almost half a dozen customers are at the $100+ million level; any specific figure for either deal is the author's inference. In the author's opinion, deals of this kind could influence what a top-tier RWD partnership costs, although no benchmark price has been disclosed.

Case Studies and Examples

Merck–Tempus Partnership

As detailed above, the Merck collaboration is a watershed case. It embodies a full-stack RWD+AI partnership: **data access**, **computing platform**, and **co-development**. In practice, Merck's research labs will be empowered to mine Tempus's oncology dataset (which includes records from millions of patients with integrated genomics and imaging) for insights. For instance, Merck may develop ML models to predict tumor response to new drug candidates using Tempus's de-identified clinical trajectories (treatment regimens, outcomes, resistance markers) coupled with molecular profiles (www.tempus.com).

Such analysis could materially influence Merck's development pipeline. For example, by identifying novel biomarkers that signal patient subpopulations who respond to Merck's immunotherapies, the company might prioritize certain indications or stratify patients more effectively. While confidential, one can imagine oncology by therapeutic area analysis, exploring off-label opportunities based on RWD-generated hypotheses. The partnership explicitly mentions accelerating "discovery and development of precision medicine biomarkers" (www.tempus.com). In essence, Merck can leapfrog traditional lab experiments by learning from real-world patient outcomes.

The press release describes no exclusivity or non-compete terms, and Tempus licenses its data to many pharmaceutical customers. Tempus describes the agreement as an expanded collaboration that builds on its existing relationship with Merck, and the financial terms were not disclosed.

Tempus describes its data holdings as "one of the world's largest libraries of multimodal data" (www.tempus.com). The value Merck expects from the collaboration has not been quantified, and the contract value was not disclosed.

Gilead–Tempus Partnership

Gilead's expanded deal is also a case worth studying. With cancer now a major focus for Gilead (following acquisitions of Immunomedics, Kite Pharma, etc.), having a real-time RWD engine is strategically important. Gilead scientists will likely use Tempus data to inform multiple areas: refining biomarker strategies for immuno-oncology, optimizing patient selection for new cell therapies, and conducting post-marketing observational analyses on their approved oncology drugs.

For example, suppose Gilead's new CAR-T therapy for lymphoma was under study. Using Tempus data, Gilead could retrospectively analyze patient profiles to identify predictors of response or toxicity by applying machine learning to baseline genomics and prior treatment history (www.tempus.com). The expanded deal's "enterprise-wide" scope means this kind of analysis is not limited to a single project team but can propagate across divisions. Gilead's lead (Patrick Loerch) alluded to using RWD to "inform clinical decision making" (www.tempus.com) – likely meaning both trial planning and real-world clinical practice insights.

The deal also includes Tempus analytical services, meaning dedicated Tempus data scientists will assist Gilead's projects. This detail indicates Gilead sees RWD as integral to its R&D, not an experiment. Financially, if the collaboration spawns even one successful trial or speeds one phase by months, the return dwarfs the cost of the data partnership.

Northwestern, NYU, and Others

Tempus's Q1 press release also mentioned collaborations beyond pharma (www.streetinsider.com). These include:

- **Northwestern Medicine**: Using Tempus genomic tests across an oncology network (potentially increasing test volumes and data capture).
- **NYU Langone**: A multi-year observational cancer study with serial molecular profiling (Tempus will help build tools to monitor cancer evolution).
- **Blood Cancer United**: Developing a pediatric AML registry (one of largest RWD registries in that rare setting).

While these deals are smaller in financial magnitude, they highlight the breadth of Tempus's RWD ecosystem. They contribute to data expansion (more patient records) and shape the tools Tempus offers. For instance, the NYU study could create new algorithms that Tempus then integrates into Lens, benefiting all users (including pharma clients). These projects often have grant or foundation funding and may not follow classical pricing; they illustrate the *impact* of Tempus's platform on care and research.

Implications and Future Directions

The seismic shift in data partnership pricing has multiple implications:

- **For Pharma R&D Budgets:** Companies will need to allocate far larger budgets for data and AI. If platform-scale collaborations like these become more common, they will likely require CFO-level approval and larger data and AI budgets than traditional RWD licences. In return, RWD units may be staffed up and integrated into pipelines. We expect to see RWD departments within pharma, already a trend, become more central, partnering closely with digital therapeutics and outcomes teams.
- **For Competitors and Data Vendors:** Smaller RWD companies (niche registries, or certain disease-specific datasets) will find it harder to compete unless they offer unique content or technology. Some may seek to integrate or partner with AI platforms to offer "data+AI" bundles. Investors may deem data companies with proprietary AI capabilities as more valuable.
- **For Patients and Clinicians:** The expanded use of RWD could accelerate identification of new biomarkers and therapies, potentially bringing drugs to market faster or expanding approvals. However, it also raises questions on data privacy and consent: these are "de-identified" datasets, but patients may want transparency on how their data is used. Ethically, pharma firms will need to consider returning value (e.g. published findings) from RWD analytics efforts.

- **For Regulators and Payers:** As RWD becomes entrenched in drug pipelines, regulators may increase scrutiny on evidence generated from these sources. Demonstrations of validity and reproducibility will be crucial. Payers may also demand RWD analyses for outcomes tracking and pricing negotiations. If RWD insights lead to better targeted therapies, it could improve cost-effectiveness (and justify high treatment prices), but payers might want to see the underlying RWD evidence.
- **Sustainability and Competition:** The model of selling RWD at these prices could raise sustainability questions. Will all pharma follow through with second or third deals, or will this be limited to a few pioneers? Tempus's CEO implies it will become standard: "I would suspect over time that [enterprise RWD deals] becomes the vast majority of all big biotech and pharma" (www.fool.com). If true, we may see nearly every big pharma enter such a contract in the next 2–3 years. However, one risk is revenue concentration – if a few partners dominate revenue, Tempus might be vulnerable to their budget cuts (though renewals with high retention so far suggest stickiness).
- **Technology Advancement:** Tempus could reinvest in data collection (e.g. partner with more hospitals for genomic data), platform development (faster GPU clusters, better AI pipelines), and new products (perhaps real-time oncology monitoring devices). The success of these partnerships may also spur new startups aiming to niche down on specific data types (e.g. microbiome, social determinants) with their own AI.

Future Projections

Given current momentum, it is possible, in the author's opinion, that **more nine-figure RWD deals will emerge** over time. As of the May 2026 Q1 call, the transcript noted "others in late stages" beyond Merck and Gilead (www.fool.com). If those convert, they would add to Tempus's contract backlog; this article makes no forecast of TCV or future guidance.

Meanwhile, new entrants may arise. For example, Microsoft and Google (with massive cloud ML platforms) might invest in acquiring or partnering with RWD holders to compete on AI+data. The competitive landscape is uncertain, but by being a first-mover, Tempus has an advantage.

On the pricing side, it is conceivable contract values will plateau or normalize in the high eight-figure to low nine-figure range for any *new* deal, as clients push back against runaway costs. However, the need for cutting-edge data to fuel AI models suggests limited room for immediate downward pressure. For now, 2026 represents an inflection where "the price of RWD partnerships" has clearly reset upward, and in the author's opinion, any new benchmark may hold or climb with inflation and data expansion.

Conclusion

The first quarter of 2026 has solidified **Tempus AI's pivotal role in the RWD/precision medicine ecosystem**. With blockbuster deals signed with Merck and Gilead, Tempus has described both as very large collaborations, although their prices were not disclosed. These multi-year agreements provide the customers with comprehensive access to data **and** one of the industry's leading AI platforms, enabling large-scale model building and analytics that would have been impractical in the past (www.tempus.com) (www.fool.com).

Our analysis suggests that pharma's valuation of some RWD partnerships may extend well beyond the traditionally reported range of roughly $75K–$5M per year. Tempus's CEO said on the Q1 2026 earnings call that customers are "signing $100+ million agreements" to license de-identified data over multiple years and that "almost half a dozen folks" are at that level; these are unaudited management statements about unnamed customers, not independently confirmed, and neither the Merck nor the Gilead contract value was disclosed (www.fool.com). In context, even the GSK partnership of late 2022 (with a $70M commitment) now looks modest (www.tempus.com). We conclude that a new pricing paradigm has emerged: **bigger data bundles, integrated AI services, longer commitments**.

This transformation will have broad impact. For researchers and clinicians, the hope is that richer data analytics translate into faster drug development and personalized care. For investors and competitors, the opportunity (and pressure) is to participate in this high-value segment of the market. For Tempus itself, the challenge is to execute on these contracts – deliver insights and models that justify the spend – and to continue growing the dataset and platform. The early indicators (raised guidance and rising total contract value) are encouraging.

Looking ahead, future work will involve tracking the outcomes of these partnerships. Will Tempus disclose specific project successes (e.g. first databank of Merck's novel biomarkers discovered via AI)? Will regulators incorporate such AI-driven evidence more systematically? The acceleration of generative AI in healthcare further suggests even more sophisticated uses – perhaps Tempus's data enabling LLM-based drug discovery.

In conclusion, **Tempus's Q1 2026 achievements** are a leading indicator of how real-world data is reshaping drug development economics. The convergence of massive datasets and powerful AI has elevated the stakes, and with Merck and Gilead, Tempus has shown growing pharma appetite for large, multi-year RWD and AI collaborations, although the Merck and Gilead contract values were not disclosed. As they stand, these deals mark the vanguard of a new era in health data partnerships (www.cbinsights.com) (www.fool.com).

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