Accelerate Therapeutic Pipelines with Flash

Support more efficient and cost-effective innovation for pharmaceutical and biotech organizations.

As pharma and biotech organizations transform their operations to handle growing amounts of research data and more-demanding trial schedules, they face two key challenges: processing therapeutic data quickly for researchers and joining data silos to analyze trial results. Leaders of therapeutic pipelines and infrastructure-modernization initiatives are rethinking clinical data storage and looking to infastructure that helps accelerate and increase the success of discovery programs while improving budget efficiency.

Modernizing Research and Development for Biopharma

To improve success rates of drug-discovery programs, you need to leverage the growing volume of medical data from claims, electronic health records, wearable devices, and historical trials. Therapeutics pipelines can use this data to identify new targets faster *in silico*, enable precision medicine using multiomics and imaging data, and leverage real-world data to improve trial planning and execution, all toward the goal of making innovation more efficient and cost-effective.

But for many, outdated data storage systems get in the way of success. Often, siloed data warehouses built on slow legacy storage limit the data you can use to support target identification and trial planning. As a result, you can lose time juggling data across disparate sources and waiting for it to load, which slows down drug pipelines. As data grows, leaders are also forced to make hard decisions about what data they keep. Legacy storage systems cobbled together over the years require expensive over-provisioning and large upfront capital expenditure (CAPEX) investments, impacting the amount of data you can maintain for detailed analytics and drug research.

Fast Matters

Bridge the cloud divide with industrial-strength block storage. Provision all-flash, 100% NVMe environments to gain high-performance compute and analytics.

Simple Is Smart

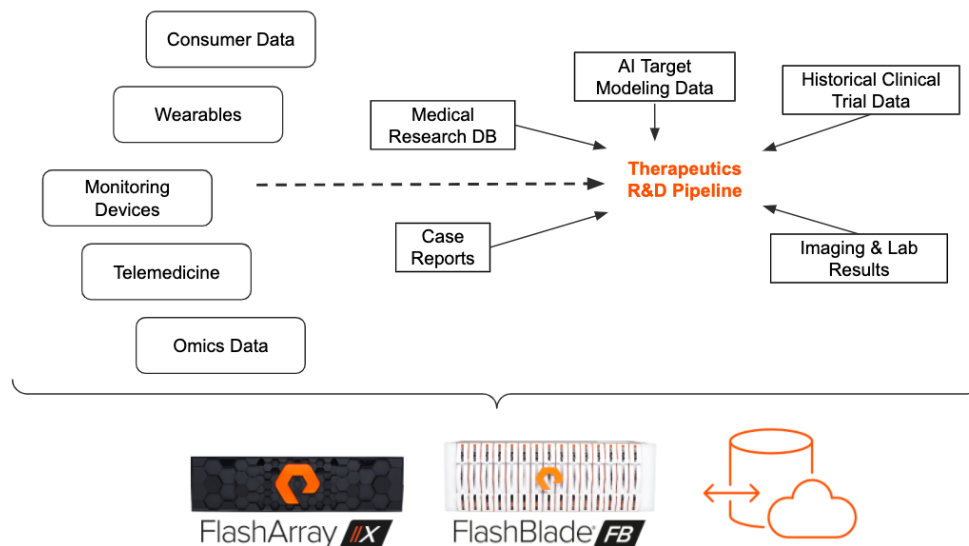Rely on Pure1® intuitive management as the complexity of your business grows.

Subscription to Innovation

Stay current with managed hardware and software upgrades with Evergreen Storage™ and Pure as-a-Service™.

To accelerate pipelines and cost-effectively retain the data that can mean the difference between a trial's success or failure, you need modern infrastructure. You need solutions that deliver rapid access to growing data warehouses, cloud economics to preserve budgets, and non-disruptive upgrades so that infrastructure disappears into the background with zero impact on research efforts. Pure Storage understands your needs and has a range of solutions designed to help teams deliver on their unique requirements for speed, scale, and even purchasing methods (buy, lease, or as a service)—all with unmatched simplicity and reliability.

A Modern Data Experience for Therapeutics Research and Development

Pure's solutions for therapeutics research and development center on four tenets of the Modern Data Experience™.

- **Fast matters:** Take advantage of the ability to accelerate access to data, whether it's low latency IOPS for structured data sets or scalable high throughput for objects and files common in analytics workflows. Pure's engineered flash technology delivers sustainable performance for faster-time-to-insight and better clinical trial decisions. And with flash on next-generation NVMe, your investment is future-proof, minimizing risks that what you buy today could become outdated tomorrow.

- **Cloud everywhere:** Cloud architectures, whether on-premises, hybrid, or public cloud, allow for data portability and automated resource delivery and utility consumption. We designed solutions on the same principles, providing support for traditional, virtualized, and containerized workloads via CAPEX purchasing or true utility pricing. This gives IT leaders the agility to support changing pipeline and analytics needs. Whether you plan to access your clinical data on-prem or in the cloud, Pure Storage has you covered. Our advanced support for containers, container orchestration, and cloud integration allows the rapid response to on-demand resource requests and simplifies data movement to and from the cloud.

- **Simple is smart:** The most common issue that plagues data science initiatives in biopharma is the complexity of managing data across segregated locations. In addition, scaling to support a rapidly growing number of users can easily result in configuration challenges that introduce risk of downtime or a lower-than-expected ROI. Pure solves this with a system that is simple to configure—from anywhere—and offers AI-driven, proactive support as well as the easiest-in-industry

data protection functions like snapshots, disaster recovery, business continuity replication, and ransomware protection, all of which work toward ensured biopharma regulatory compliance. Combined, these functions identify issues before they are failures and protect you from business crippling outages. To ensure you get the highest ROI from your investment, Pure provides workload modeling and fleet management so that you can predict budgetary needs and prevent under-utilization of resources.

- **Subscription to innovation:** Where Pure Storage has consistently led the industry is in our approach to customer relationships. When you buy from Pure Storage, you are entering into a relationship where we include controller upgrades, array software, and even flash storage upgrades so that you aren't burdened with hidden costs that might prevent you from taking on the upgrades needed to support the business. And with a proven track record of non-disruptive upgrades, you can choose to update whenever you need to, without disrupting active pipeline runs or disrupting time-sensitive trials.

Reduce Risk with Ransomware Protection

Aside from standard data protection, IT leaders in biopharma organizations must also protect against and recover from ransomware attacks. Increasingly, bad actors are targeting backups as well as primary copies of research and organizational data. Pure Storage helps mitigate against ransomware attacks by safeguarding data backups with SafeMode™ SnapShots on FlashBlade®: Pure creates snapshots that cannot be deleted for a customer-specified period, even with admin credentials. Any modification during that time would require action by both the local administrator and Pure Storage. This ensures that even if attackers are able to bypass security measures in the environment, they still cannot prevent IT teams from recovering data to keep operations running. SafeMode provides an additional layer of assurance beyond expected system hardening and can spell the difference between a disruption in business and a catastrophic disaster.

Additional Resources

- Learn more about modern data protection solutions.
- Get more information about Pure1, Pure as-a-Service, and Pure Professional Services.

Case Studies
- Barcelona's Centre for Research in Agricultural Genomics updates its HPC environment to improve speed, scalability, and stability.
- At McMaster University in Hamilton, Canada, scientists use Pure Storage® FlashBlade to power infectious disease and COVID-19 research.