



Agilent Case Study

Digital Innovation That Delivers Compliance and Quality

Spotlight on Yu Kyung Kim, Head of GMP Center, Cellid

“In a regulatory setting where even minor noncompliance could have serious business consequences, choosing Agilent informatics—delivering both compliance assurance and operational efficiency—was one of the best decisions we’ve made.” –Yu Kyung Kim, Head of GMP Center at Cellid

Founded in December 2006 at the College of Pharmacy, Seoul National University, Cellid is a biotech company focused on developing cancer immunotherapies and vaccines for infectious diseases. Based on its proprietary CeliVax platform, Cellid is advancing five BVAC pipeline candidates for personalized cancer immunotherapy and a COVID-19 vaccine. Each BVAC candidate targets multiple cancer types driven by specific tumor antigens, with preclinical studies demonstrating strong efficacy and clinical development progressing in sequence.

In parallel, Cellid is accelerating research and development of BVAC-Neo, a fully personalized cancer immunotherapy vaccine, with the long-term goal of ultimately providing treatment options for all cancer types.

Meanwhile, the Omicron-specific COVID-19 vaccine, AdCLD-CoV19-1 OMI, is currently in Phase 3 clinical trials and is being actively developed with commercialization in mind.



Yu Kyung Kim,

Head of GMP Center, Cellid

“All information that had previously been scattered across Excel and other tools is now centrally and seamlessly controlled in one place. The time previously wasted on searching, managing, and reviewing data has been reduced to one-third.”

To support these efforts, Cellid built a GMP facility in Seongnam, Korea, capable of end-to-end production, from raw materials to finished drug products. To obtain GMP certification and respond efficiently and reliably to both domestic and international regulatory requirements, the company sought a proven partner to provide a laboratory information management system (LIMS), scientific data management system (SDMS), and computer system validation (CSV).

"Before implementing the system, I had established various internal procedures and policies, based on my long experience in the pharmaceutical industry, to address regulatory requirements," began Yu Kyung Kim, head of the GMP center at Cellid. "However, without a proper digital solution in place, leading the quality team with constant reminders like 'Don't skip procedures', 'Follow the SOP', and 'Make sure to document everything' had clear limitations. When I met with Agilent, I could immediately envision a transformed future for our operations. The advice and guidance from their team of specialists gave me the confidence and trust I needed."

As is often the case in regulated environments, many laboratories still rely on handwritten documents and Excel-based manual systems. Over time, lab personnel may grow accustomed to these methods, accepting inefficiencies, document traceability issues, wasted time, and the risk of human error as unavoidable parts of the job.

Yet, without a digital system, organizations are exposed to unnecessary risks across quality, speed, and compliance. Teams that are accustomed to traditional workflows often fail to recognize these vulnerabilities as actual problems. A reactive work environment where issues are only recognized after they occur highlights the need for proactive, integrated systems like LIMS that enable prevention and continuous improvement.

Still, the implementation of such systems can be daunting. Concerns about significant disruption in the laboratory often leads to hesitation despite their necessity. Yu Kyung Kim explained why Cellid ultimately chose Agilent's solution.

"In my 25 years working in the pharmaceutical industry, I've dealt with a number of LIMS solutions—but I can't say any of them were exactly enjoyable," she noted. "After experiencing the huge costs of purchasing or developing a LIMS, all the trial and error during implementation, redevelopment caused by IT teams who didn't really understand the lab processes, endless database work, and OOS issues from user errors—I knew I didn't want to go through that again. So, at first, my only goal was to implement Agilent's SDMS to manage instrument data properly. Of course, I knew we'd need a LIMS eventually, but I planned to take it slow. That's why, honestly, I had zero expectations when I first heard about Agilent SLIMS."



"When I first saw the SLIMS introduction, I immediately saw the potential to quickly implement the core features we needed. The custom demo, led by a SLIMS application engineer who clearly understood Cellid's workflows, showed us that the system was simpler than we expected—and actually quite fast to adopt. The flexible architecture, which allows phased implementation without conflict, and the ability to manage everything systematically through barcodes were also big advantages. Most of all, the fact that we could start with a reasonable budget made it clear there was no reason to delay," emphasized Ji Yeon Lee, QC manager at Cellid.

Regulatory agencies often encourage the adoption of systems that enhance control and oversight. However, in a GMP environment, any computerized system must demonstrate accuracy, reliability, and consistency. As a result, regulators tend to prioritize data integrity and

record trustworthiness over functionality alone. To meet these expectations, global regulations such as 21 CFR Part 11, EU Annex 11, and ICH Q9 mandate CSV.

There are numerous inspection cases from agencies like the FDA or MHRA where the absence of CSV led to failure in demonstrating data integrity or detection of system errors, resulting in corrective actions. These cases underscore that validation is just as important as technology implementation.

"Agilent had already provided CSV for many GMP labs in Korea and seemed to have solid experience, even with non-Agilent instruments. CSV consultants brought a lot of practical know-how, which really helped us with validation and made it easier to prove that the system met both our workflow needs and regulatory requirements," said Ji Yeon Lee, QC Manager, Cellid.



- Automated inventory (standards, reagents, consumables)
- Real-time test status visibility
- Auto CoA reports, no human error
- Barcode-based info access
- Simplified document review process
- Streamlined data management for IT
- ~ 70% time savings

One year after implementing Agilent OpenLab ECM XT and SLIMS, Cellid's quality team has fully adapted to the solutions, and all systems are operating smoothly, without issue.

"I can confidently say the project was a success. After implementing SLIMS and ECM XT, we were able to quickly drive the digitalization of our quality operations, which helped us improve both efficiency and data integrity across the board. Thanks to our digital quality system, we've been able to maintain stability even as the company continues to grow rapidly. In fact, Cellid has seen significant growth in recent years and is now planning to move into a new headquarters in 2026," mentioned Ji Yeon Lee.

"Enabled by SLIMS's flexible architecture and proven support system, we expect to scale our lab operations smoothly without added burden. With this confidence, Cellid is proud to recommend SLIMS and ECM XT to other organizations," emphasized Yu Kyung Kim.



Cellid's new headquarters, under construction in Magok, Seoul, Korea.



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