

CAS CUSTOM SERVICESSM

Beyond PatentScope

How a Clinical-Stage Biotech Built an IP Intelligence System that Grows with Them



Industry
Biotech/Pharma



Solution
Patent Workflow Platform and
Substance Registry Check



Company size
150+ employees



Engagement
4 years, ongoing

The challenge

A growing clinical-stage biotech wanted a faster, more scalable way to run its weekly WIPO patent review, which was handled manually in PatentScope. The goal was to streamline an already effective process with AI-enabled prioritization.

The solution

CAS Custom Services experts immersed themselves within the client's workflow through deep consultative discovery, then built a tailored IP monitoring platform with automated pre-filtering, prioritized alerts by therapeutic target, and a secure proprietary substance registry check — all designed around how the team works.

The impact

What started as a time-intensive manual review of the raw WIPO feed is now a prioritized, target-specific intelligence system that speeds review, surfaces competitive signals earlier, and has become core to how the team operates.

A proven workflow, ready to scale

As with many clinical-stage biotech companies, each week patent searchers at this company reviewed new WIPO patent filings. The challenge is universal in this industry: early visibility into competitor activity is a strategic advantage for a company advancing multiple molecules into development, making patent review on or near publication day essential.

Having grown from a Series A startup into a clinical-stage organization of 150+ employees, with teams distributed across the U.S., the company's approach was for the patent searchers and medicinal chemists to collaborate closely and feed IP insights directly into portfolio decisions. That tight integration made timely, well-prioritized patent intelligence increasingly valuable, and though the manual review remained effective as the pipeline grew, the team's goal was to make it faster and easier to sustain and enable AI prioritization for the future.

The challenge: Scaling a manual, expert-led review

The company's patent monitoring was handled by experienced searchers who worked on the weekly WIPO feed patent by patent; their judgment and multilingual skills made the review accurate and thorough. However, this manual approach took considerable time each week, and the team wanted a faster, scalable way to maintain the same quality of coverage as their pipeline expanded.

The manual process had limited automated pre-filtering, no prioritization by therapeutic target, and no systematic way to surface the most relevant filings first. Instead, each week, the searchers worked through the WIPO feed in PatentScope, scanning filings one by one, and multilingual coverage depended on the searchers' language skills. Though these language skills were a real asset, the team was keen to extend coverage beyond their in-house capabilities.

In addition, the team periodically carried out a separate manual review to ensure that its proprietary molecules had not appeared in published patent or non-patent literature. The company wanted to incorporate this task into the weekly review to streamline its processes.

The workflow before CAS

- Expert reviewer manually evaluates the full WIPO feed weekly.
- No automated pre-filtering or target-based prioritization.
- No translation support beyond the searchers' own language competencies.
- No collaborative review platform or QA layer.
- No systematic check of proprietary molecules against published literature.

The team needed a more scalable way to monitor global IP activity without losing the precision and judgment that made the process effective. They needed a partner who could understand their workflow in detail to build a personalized system around it.



The solution: Building a platform calibrated to how the work actually gets done

CAS Custom Services solution experts began with a request to be walked through exactly how the company's IP program was currently working.

Over an extended discovery phase, every step of the process was mapped, from the wider team's strategizing to the individual searchers' manual execution: search tools and strategies; hedge terms; and methods of triage, flagging, and escalation.

The goal was to take that prioritization logic and encode it, to streamline the work, and shift some of the burden off reviewers' shoulders.

Patent workflow platform

The result was a custom-built software platform that ingests the weekly WIPO feed and presents patents via a prioritized, target-specific interface tailored to the company's drug discovery programs. It was developed iteratively across three phases (Versions 0, Beta, and MVP), with the internal team's input shaping every stage through an Agile methodology approach.

Key capabilities:



Target-based bucketing

Organizing patents by the organization's therapeutic targets, so the searchers can go straight to the highest-priority areas.



Custom tagging

Enabling ad hoc monitoring with trend analysis tracked across an eight-week window.



Applicant identification

Enabling the searchers to immediately see whether a filing is from a known entity and prioritize accordingly.



Review status tracking

Enhancing visibility into what has been covered and what remains.



Full-text patent viewing

Highlighting terms of interest, enabling faster, more focused review.



Concept-based filtering

Providing an additional layer of granularity within each patent.



Near-real-time translations

Expanding the team's ability to review patents from regions beyond the in-house language competencies.

Before the team committed to the platform, they tested it against what they already knew. By demonstrating that the algorithm surfaced the same patents the searchers had been finding manually, they knew that implementing the platform would not sacrifice the quality of their expert review.

Quarterly proprietary substance check

Alongside the platform, CAS runs a quarterly back-end service wherein the client's proprietary molecular structures, shared via a secure file transfer platform, are checked against the CAS REGISTRY® for any matches in published patent or non-patent literature. Up to five relevant documents are returned per hit.

Because data security is non-negotiable when handling proprietary molecules, CAS operates on a strict need-to-know basis internally, with platform access restricted to the execution team. Only two named individuals on the CAS side have access to the company's proprietary structures at any time. All work is conducted within its own secure file transfer environment; no local copies are stored.

Why data security matters

This biotech company operates with exceptional confidentiality requirements — need-to-know access internally, secure file transfer for all molecular data, and heavy legal review of all documentation. Any external partner handling proprietary structures must meet the highest bar of operational security. CAS adopted the organization's own secure infrastructure and restricted access at every level.

The impact: From manual to streamlined

Review workflow optimization and time recovery

The platform pre-populates as soon as the WIPO feed is made available. The patent searchers now see a pre-prioritized feed organized by therapeutic target rather than the raw WIPO output. They can quickly review the highest-priority flagged patents first, particularly those from known entities, and spread lower-priority items across the week rather than compressing everything into a single session.

The searchers now review approximately 50% less material upfront, with lower-priority filings automatically deferred.

Quality assurance and error reduction

For leadership, the platform's main value is added assurance. It supports the searchers' judgment and serves as a systematic second check alongside their own review, helping confirm that relevant filings are consistently captured.

IP assurance on proprietary molecules

The quarterly CAS REGISTRY check provides an early warning if proprietary molecules have appeared in published literature, and confirmation that their own patents have progressed appropriately. The trust required to share those structures with an external partner is itself a signal of the value the biotech company places on this service.

Multilingual access

Near-real-time translation capability, added in the third development cycle, expanded the team's ability to review patents from regions beyond the searchers' personal language competencies.

A streamlined relationship

More than four years into this IP workflow engagement, CAS is grateful for the continued opportunity to support the client and the patients who will benefit from their drug discovery work. All CAS renewals, CAS SciFinder®, STN IP Protection Suite™, and CAS Custom Services, have been consolidated onto a single annual timeline for the client, allowing for clear forecasting.

A partnership to scale with the science

Four years ago, a growing biotech ran its patent monitoring as a weekly manual review in PatentScope, led by an experienced search team. Today, the company has a custom-built IP intelligence platform, a quarterly molecular verification service, and a partner that has grown alongside it from Series A to clinical stage.

What made the difference was the client's commitment to helping CAS understand the existing workflow, allowing CAS to encode the team's logic so the platform reflects how work is done.

With the platform now fully embedded in the biotech company's core infrastructure, the tool and partnership are poised to evolve with the future.

See how CAS Custom Services can help optimize your IP monitoring workflow.

Schedule a consultation at cas.org/cas-custom-services