



Use Case

How Spaulding Clinical Delivered Faster, Cost-Effective PK Results with Aplos NCA

Accelerate PK data delivery, reduce analysis costs, and better meet the demands of early-phase drug development



Background and Challenge

Founded in 2007, Spaulding Clinical is a full-service, state-of-the-art paperless Phase I clinical pharmacology unit. Like many organizations, they relied on traditional tools such as WinNonlin for non-compartmental analysis (NCA), a process that was both time-consuming and expensive.

Faced with tight study timelines and growing pressure from sponsors to accelerate data delivery, Spaulding needed a more efficient alternative. Their goal was clear: reduce turnaround time for NCA results without compromising data quality or regulatory integrity.



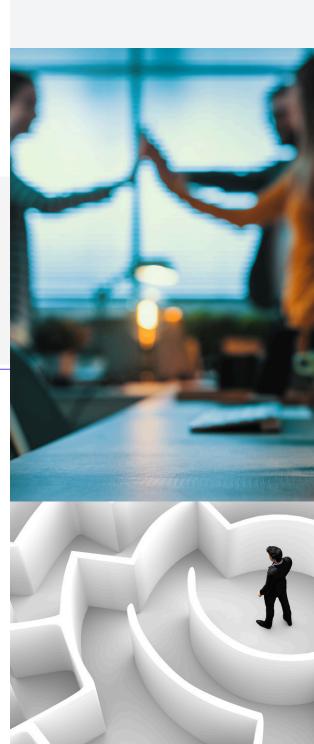
We needed to find a way to do the PK analysis that was faster and less expensive than using WinNonlin.

Brian ThorntonSenior VP Biometrics
Spaulding Clinical

Why Aplos Analytics

Spaulding selected Aplos NCA for its ability to streamline the entire analysis process, from setup and calculation to export. The intuitive interface, combined with automation, offered a practical solution that didn't require months of onboarding or specialized coding skills.

Even users with no programming background found the system approachable. After a brief orientation session, Spaulding's team was ready to process Phase 1 studies directly on the platform.



The Impact: Supporting Fast-Paced Phase 1 Studies

Spaulding has used Aplos NCA on several Phase 1 studies requiring standard PK NCA outputs. For these early-stage trials, the pressure to deliver results quickly, especially to meet sponsor deadlines can be intense. Aplos NCA helped simplify setup, execute calculations, and export results directly into SAS for final TLF generation.



Setting up the analysis, performing the actual analysis, and exporting the information to SAS, it was all significantly faster. Aplos is very simple and easy to use. We were up and running in a few days.

Brian ThorntonSenior VP Biometrics
Spaulding Clinical

Results: Cutting Timelines by Up to 2 Weeks

By replacing a multi-week, manual workflow with the automated capabilities of Aplos NCA, Spaulding Clinical realized substantial gains in speed and operational efficiency. Their legacy process, which involved data formatting, manual parameter selection, quality control, and export to SAS, typically took 2 to 3 weeks from data delivery to final outputs. With Aplos NCA, the same workflow was streamlined and completed in just 1 week cutting the analysis time by up to 66%.



We had a sponsor that needed PK NCA very quickly after the concentrations were available — Aplos helped us meet that critical timeline. Using Aplos, we're able to save 2–3 weeks of time when generating NCA analysis.

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Several core features contributed to this acceleration:

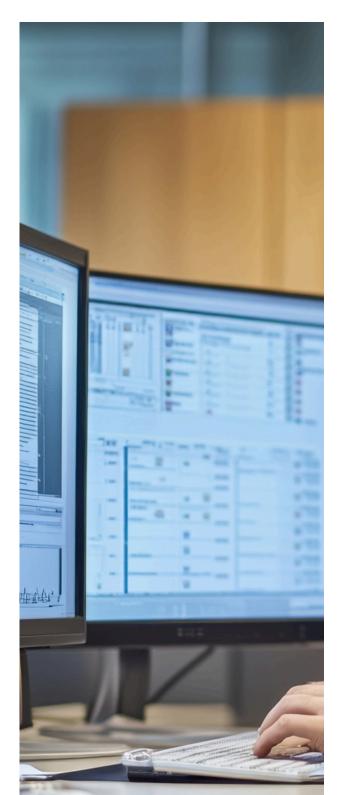
- Rapid setup and intuitive interface allowed analysts to configure studies without custom coding or scripting.
- Automated parameter calculations and rule-based logic reduced manual input and the risk of inconsistency.
- **Built-in export tools** enabled direct generation of output tables for use in downstream SAS workflows, minimizing reformatting or double-handling of results.
- Audit-ready reports were generated instantly, with traceability and compliance built into every step of the process.

By automating repetitive steps, reducing dependency on individual analysts' formatting preferences, and ensuring clean, ready-to-submit outputs, Aplos NCA gave Spaulding a strategic advantage in meeting client expectations under pressure.

User Experience and Feedback

Beyond time savings, Spaulding Clinical emphasized the user-friendly nature of Aplos NCA as a major differentiator from legacy tools like WinNonlin. Designed specifically for scientists rather than programmers, the platform offers a streamlined experience that simplifies every step of the NCA workflow, from study setup to final output. The intuitive design enabled faster onboarding, reduced dependency on technical support, and empowered Spaulding's biometrics team to focus on high-value analysis rather than time-consuming formatting or coding tasks.

The result: a more agile, confident, and efficient approach to PK analysis across the board.



Fast onboarding: After a short orientation session, the team was fully operational within days. There was no steep learning curve or extended implementation period. Aplos NCA fit seamlessly into existing processes with minimal disruption.

Elimination of redundant steps:
Aplos automatically handled tasks
that previously required manual
intervention, such as
concentration-unit conversions,
calculation rule enforcement, and
final formatting

Clear, intuitive interface: Study setup, data uploads, parameter selection, and export were all handled through a clean, browserbased interface. Analysts didn't need to learn a scripting language or navigate multiple disconnected tools, everything was built into one cohesive environment.

Consistency across users: Aplos applies standard logic and formatting across analyses, it eliminated variability often introduced by individual analysts' styles or spreadsheet templates, which can complicate quality control and reporting.



Very simple and intuitive — and it keeps improving.

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Spaulding Clinical

Aplos NCA is not static tool. The platform receives regular updates and new features based on user feedback a responsiveness not commonly seen in established legacy systems. Overall, the user experience was described as frictionless and empowering, making it easier for Spaulding's team to deliver results quickly and confidently even under high-pressure timelines.

Summary: Key Benefits

By using Aplos NCA, Spaulding Clinical was able to accelerate PK data delivery, reduce analysis costs, and better meet the demands of early-phase drug development without sacrificing quality or compliance.

Key Benefits Realized:

- Reduced PK turnaround time by up to 66%
- Onboarded within days with minimal training
- Improved sponsor responsiveness during time-critical projects
- Rapid decision-making: Faster availability of validated NCA data enables timely dose escalation and study planning
- Improved quality and consistency: Standardized logic and automated checks reduce variability and rework
- Operational efficiency: Automated exports to SAS free our team to focus on highervalue analysis



By using Aplos NCA, we've cut our PK timelines in half, which means our sponsors get answers faster and can advance their drug development programs with confidence.

The platform removes many of the delays that add up in traditional workflows, from setting up the study to generating outputs ready for our statistical team. It gives us a reliable, consistent process we can count on to deliver high-quality results under tight deadlines, and that level of trust in a tool is essential for our sponsors and our team.

For us, the combination of speed, quality, and usability makes Aplos NCA a critical tool in our biometrics workflow.



Brian ThorntonSenior VP Biometrics
Spaulding Clinical



Ready to accelerate your PK workflows?

If you're looking to reduce turnaround times, simplify NCA analysis, and meet demanding sponsor timelines, get in touch to schedule a personalized demo or start your free trial and see how automation can transform your pharmacokinetic analysis.

Contact us at info@aplosanalytics.com or visit www.aplosanalytics.com to learn more.

