

BIOFORUM CASE STUDY



At a glance:

Key Results:

- Secure, compliant AI framework built and deployed in two months
- Lower development and validation costs through Azure integration
- FDA reviewing the implementation as an industry benchmark
- Stronger client confidence and cultural buy-in
- Faster, insight-driven data reporting
- High internal demand for licensing

ABOUT BIOFORUM

Bioforum is a South African-based biometric clinical research organisation (CRO) with a global footprint. The company's primary function is to help pharmaceutical and biotech partners manage and analyse clinical trial data for regulatory submission. Bioforum comprises a team of 200 specialists in clinical data services, statistical programming, and compliant reporting for clients preparing to meet FDA standards.

Naturally, the scale and complexity of its data grew alongside the organisation. Traditional systems struggled to keep up. To remedy this, Bioforum started exploring how AI could help without breaking the bank (or the CRO industry's rigorous validation rules).

THE CHALLENGE: MOVING AHEAD WHILE MAINTAINING CONTROL AND CREDIBILITY

Clinical research is data-heavy by design and accuracy is non-negotiable. Each trial can produce millions of data points, and every outlier and adverse event must be checked, validated, and documented. For years, Bioforum relied on a gold-standard process called “double programming” (i.e. two independent teams building identical analyses to ensure each result matches, and that the conclusion is correct).

But as workloads mounted, the time cost became difficult to justify. The team at Bioforum realised there was potential for AI to improve that capacity by half, thereby also halving the workload. In other words, AI would not replace human oversight but instead, act as a second set of eyes.

FROM SPREADSHEETS TO AI-ASSISTED INSIGHT

Before AI Jumpstart, Bioforum had already started modernising its processes through Biogrid: an in-house data visualisation tool that turned raw trial data into interactive dashboards.

“A big part of the data management umbrella is data reviews, ensuring that data is clean, structured, and standardised. [Biogrid] makes it easier for our clients to do

anomaly detection, as well as trending and forecasting.”
– Francois van Vuuren, Director of Clinical Data Systems & Programming at Bioforum.

The success of Biogrid paved the way for the next big leap for Bioforum: bringing secure AI assistance into the process with the help of Braintree.

THE PARTNERSHIP: BUILT-IN REGULATION WITH AI JUMPSTART

Initially, Bioforum engaged with Microsoft to secure sponsorships. It then sought hands-on collaboration from a familiar Microsoft partner.”

“We went to Braintree because of our history with them, like the domain controller move. That conversation early on set the precedent that all Azure-related unknowns were first flown by Braintree to see what they would do. We would reach out to Braintree, and nine out of ten times, they’d come back with a solution we could implement. It was a no-brainer to go to Braintree and ask Chris for help on this.” – Jacques van der Merwe, Director of Information Technology at Bioforum

Under the guidance of **Chris Badenhorst, VP Azure & AI at Braintree**, Bioforum joined **AI Jumpstart**: a programme created by Braintree to help regulated industries adopt AI quickly and responsibly.

Together they designed an architecture for Bioforum that is:

- **Secure:** all servers and storage are housed within Microsoft Azure, ensuring data never leaves approved environments.

- **Compliant:** every model is tested, validated, and documented to meet FDA regulations and standards.
- **Sustainable and cost-effective:** moving from public application programming interfaces (APIs) to Azure-hosted AI has reduced cost and risk, embedding AI expenses into the existing Bioforum infrastructure.

Francois explains:

“Our biggest driver is cost saving. Chris provided clarity on how tokenisation works, and once we implemented it in our Azure environment as part of our system, it became much more cost-effective. When we started using Azure, the cost was a lot cheaper, and it became part of our other costs in Azure.”

Within **two months**, Bioforum had a fully operational, regulator-ready AI environment.

THE OUTCOME: FROM CONCEPT TO COMPLETION

The first major outcome for Bioforum was **"Brian"** (An acronym for **"Building Reports In AI Now"**). This refers to Bioforum's AI assistant, created to help clients explore clinical data on demand.

Instead of waiting for custom dashboards, clients can now ask questions directly, e.g. *"Show me the adverse events for Site Z."* The assistant generates a visualisation instantly, complete with a short narrative summary. If they want to revisit it, they can pin it to their dashboard for future use.

This saves everyone time. Bioforum's developers no longer have to code and validate each new widget, because the AI assistant is already validated. Clients get answers on demand, and the Bioforum team can focus on higher-value analyses.

Francois summarises the intent:

"The possibilities AI brings to our industry are immense. Some of the data we look at consists of millions of records. AI plays a big part in identifying trends or anomalies that we might miss as humans."

INSTANT ADOPTION: A PERMANENT CULTURE SHIFT

Bioforum wanted its people to feel confident using AI. Through Braintree-led **Copilot training**, internal AI forums, and open Q&A sessions, early adopters have shared how AI is making their day-to-day work easier. That knowledge has spread organically.

Internal adoption has been rapid since, with Bioforum introducing a ticketing system for licensing due to the demand. Even the Bioforum CEO has joined in.

Momentum has swiftly replaced resistance, with Bioforum employees experimenting, improving, learning, and teaching others within the CRO.

TRUST IS KEY

Everything Bioforum and Braintree have built together rests on trust: in the data, process, partnership, and technology. Hosting the AI environment entirely within Azure has given regulators transparency while providing clients with the assurance that their data is secure.

Years of collaboration on cloud migrations and infrastructure had proven the relationship even before AI entered the picture. What stood out most for Bioforum, though, was the people behind the process. They described Braintree's team as open, patient, and deeply invested: a partner that listened first, guided with care, and always came back with practical solutions rather

than sales pitches.

That approach, they said, made the collaboration feel like an extension of their own team.

"If I'm not convinced that I'm providing the right solution to the customer that's aligned to their business strategy, or to a critical business outcome they want to achieve, I feel I can't develop that trust. I don't just want a customer. I want to add strategic value to that organisation. That's my ethos. It's my team's ethos and it's a Braintree ethos." – Chris Badenhorst

A BENCHMARK FOR RESPONSIBLE AI

The accuracy and governance built into the Bioforum system have attracted attention from the very top.

"The FDA has already jumped on this. They're coming out because they want to see what we're doing, so that they can take this implementation and use it as a yardstick for other industries or other companies as well." – Jacques van der Merwe

For **Jacques**, the impact is clear:

"I'm confident enough to say that AI is going to change the whole industry. We'll be able to do much more with the resources we have, now."

LOOKING AHEAD

Bioforum plans to extend AI further into statistical programming, risk modelling, and automated reporting with the same care that built its reputation.

"It's going to upend the way legacy people do things. Unfortunately, if you're not going to get on board with this and start thinking out of the box, you're going to get left behind." - Jacques van der Merwe

AI Jumpstart by Braintree is a blueprint for keeping innovation ethical, compliant, and secure without losing the "human connection".



PRODUCT & SERVICES PROVIDED:	Bioforum
ORGANISATION SIZE:	200 employees
INDUSTRY:	Global Clinical Research Organisation (CRO)
COUNTRY:	South Africa, operating internationally
BUSINESS NEED:	Braintree's AI Jumpstart Programme, built on Microsoft Azure

For more information, visit us at
braintree.co.za

29 Scott Street, Waverley, 2090
PO Box 369, Rivonia, 2128
South Africa

Tel: +27(0)11 455 6248
enquiries@braintree.co.za

