#### ORACLE

# Safety One Intake

# Powered by Artificial Intelligence

The volume of incoming adverse event reports is increasing by an average of 30–50% a year, threatening to overwhelm safety and pharmacovigilance teams in a flood of data. What if artificial intelligence could reduce overall processing time by 50%?



#### Move from paper to digital intake

Many adverse event (AE) reports, whether they're forms, emails, articles, or other source documents, do not arrive in E2B format, which means they have to be entered manually into safety systems. This manual data entry can take hours and represents a significant cost to the organization. Free-text narratives take the most time, requiring a manual sift through every sentence to find relevant information and then enter it into the correct field. Even forms can introduce manual effort and human error when the fields on the form do not follow the same order as the fields in the system. **Oracle Life Sciences Safety One Intake Cloud Service (Safety One Intake)** can make these challenges a thing of the past.

"The end result is that we had a 90% accuracy and we can process cases within 1 minute in comparison to 15 to 20 minutes."

FERRING PHARMACEUTICALS

#### Focus on what's important

The number of incoming safety cases is increasing, but many are low-value—non-serious cases, consumer cases, patient support programs, and very mature products are all potential candidates for "noisy" data—that still must be processed. Safety One Intake helps to automate case management, reducing the pressure of increased caseloads and allowing safety teams to focus on high-value rather than low-value cases, and on case evaluation rather than data entry. This, in turn, enables better resource planning to smooth the impact of changing case volume.

**Safety One Intake** saves time and money by leveraging AI to automatically turn paper AE reports into E2B files and reducing manual data entry.

## **Leverage AI tailored for safety**

What makes all of this possible is artificial intelligence (AI). Safety One Intake uses deep learning, natural language processing, and image processing algorithms to turn safety source documents—both structured and unstructured—into E2B(R3) files for easy ingestion into any safety case management system. The powerful All engine, developed by Oracle's top safety data scientists, is specifically designed to understand and extract AE information, regardless of its form. The AI engine consists of multiple algorithms—each performing a very specific task, with lexical resources to look up terms, assisted by state-of-the-art optical character recognition (OCR)—all working together as a single solution.

## **Enjoy the benefits of cloud technology**

Safety One Intake was built as a cloud-native service on Oracle Cloud Infrastructure (OCI), which supports high-performance workloads using modern server-less and container-based architectures with high-capacity compute, including graphics processing units (GPUs). It has a modern, intuitive, browser- and device-independent user interface with dashboards and metrics for reviewing operational performance.

Improve process and quality

Proofs of concept have demonstrated that Safety One Intake can dramatically reduce overall case processing time by 50%. The cost per case goes down while the quality and consistency go up, as manual data entry issues are avoided. Faster case handling translates into better compliance as ICSRs to health authorities are expedited sooner. Safety One Intake is a revolutionary solution that is transforming today's safety case management into next-generation pharmacovigilance.

"The survey revealed that over 60% of respondents are implementing or planning to implement AIsupported technologies for case processing in their companies."

ADDRESSING THE DATA **CHALLENGES OF** PHARMACOVIGILANCE, **INFORMA BUSINESS** INTELLIGENCE RESEARCH REPORT

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