CASE STUDY

Scopus®

Essential information for medical device development

IMPROVED RESEARCH PRODUCTIVITY AT MEDICAL DEVICE PRODUCER
An information specialist and a senior scientist describe how Scopus is essential to their personal productivity in finding supportive documentation.
CASE STUDY: Medical device producer

“My own productivity has increased by 30–40% since we’ve had Scopus.”

– Information specialist

“I couldn’t answer all the clinical and scientific questions that come up in the course of my work without Scopus.”

Senior scientist

Compliance in medical device development
The term “medical device” can be applied to virtually any equipment used in the field of medicine, from simple syringes and oxygen masks to prosthetic limbs and complex electronic monitors. Standards must be met and they are regulated to various degrees, often requiring clinical trials similar to those for pharmaceuticals.

Technology used in medical monitors and analysers are now so advanced that frequently the influential market factor is user-convenience, since the ability to measure is a regulated prerequisite. One company with whom Elsevier partners successfully adopts this ethos to simplify and automate testing so hospitals and laboratories worldwide can benefit from fast results, reduced workload and risk of errors and improved cost effectiveness.

The company provides high-quality biomarker-testing solutions for the diagnosis of critically ill patients. “Our goal is to simplify and improve the way we do things in order to help our customers do the same,” explains one of the company’s senior scientists.

Bringing simplicity to information management
“Our mission is to ‘bring simplicity to our customers’,” confirmed the information specialist with the company, “That’s what Scopus has done for us! Now it’s much easier for us to find the information we need, precisely when we need it and share it with colleagues and customers.”

The company has integrated Scopus in their work practices. It fosters a collaborative environment for its R&D teams so these can improve the way things are done within the company and help their customers do the same. Both the information specialist and senior scientist access Scopus and describe here their specific use and experiences. “Scopus helps us get a clearer overview of problems and then focus on paths to explore to develop solutions,” summarizes the information specialist.

Intuitive and innovative search functions
The information specialist works closely with 3 groups—R&D, applied science and marketing—providing information to support their work on product development. The groups look for new applications and new technologies to improve devices, generate new sales and maintain existing customers. “Our devices are like little self-contained laboratories and our research is heading in a very multidisciplinary direction,” she said.

She instructs researchers how to directly use for themselves information resources like Scopus and eBooks on ScienceDirect and tools like RSS feeds and 2collab. For the more in-depth investigations, she supports them by building complex searches. She also works with clinical laboratory technicians to source information that deals with practical issues. For marketing, she provides scientific evidence during contract negotiations to support the value proposition.

Her work with Scopus includes working with researchers to define the problem to be addressed with sets of abstracts and assisting with interpretation of results by more sophisticated identified-keyword searches and following citation trails. She also collaborates with researchers to evaluate results and discuss which research direction to pursue.
“Scopus really captures the new spirit in abstract and indexing databases. It offers an intuitive way of searching and makes good use of Web 2.0 technology. It’s more innovative than its competitors. My own productivity has increased by 30–40% since we’ve had Scopus.”

Indispensable information tool
The senior scientist’s specific role is to present and evaluate the clinical issues for their products and compare these with competing products. She also provides scientific/clinical support information for customers and sales reps.

When developing new techniques to use in medical monitors, she mainly uses broad searches in Scopus to find information to evaluate the clinical hypotheses and interpret initial observations. She switches to highly specific searches when assessing the reliability of new techniques: “It’s easy to locate both human and animal studies and identify and avoid known pitfalls.”

The senior scientist also turns to Scopus when reviewing protocols used in other’s clinical studies to ensure her own study protocols are optimized for minimal risk of bias. Scopus—she finds—is “indispensable for cutting down the time needed to mount a clinical study.”

She frequently needs to identify supporting articles that document the product’s benefits and convey details to physicians and marketing colleagues. “Being able to search Scopus, the web and patent documents simultaneously uncovers the documents we need,” she highlights.

Similarly, conducting gap analyses to determine which clinical studies to initiate to improve support for clinical benefits is aided by continuous monitoring and alerts.

“Scopus saves me a lot of time and has become an indispensable information tool for me. I use it nearly every day. I couldn’t answer all the clinical and scientific questions that come up in the course of my work without Scopus.”

Preference for Scopus over other sources
Both profiled users find Scopus essential in their work, highlighting the success of its integration at the company, but why do they and their colleagues prefer Scopus to other sources? Some of the explanations were:

Comprehensive coverage: “Scopus is my first choice when starting an investigation. Before we had Scopus, we really weren’t getting a lot of good information.”

Advanced search: “Scopus gives me a high level of confidence. I know I’ve done a relatively wide search even though I didn’t spend days on it.”

Reliability: “With free search engines you never know if the information source is trustworthy. Scopus contains validated, peer-reviewed scientific literature and patent documents.”

Integration of 2collab: “Tools like 2collab allow researchers to be more organized, automatically keep up to date and increase the level of information sharing with colleagues.”

Easy to use: “I was able to start using Scopus very quickly, with almost no training. Now I can focus much more of my time on R&D work.”

Full-text availability: “I can get to the full text without having to wait for a document to arrive.”

Scopus: the effective partner
Scopus is integral to the daily working-lives of these researchers and has contributed to timesaving of around 40%. Scopus is an essential tool for answering questions in this company and Elsevier will continue to find improvements that aid the productivity of its partners.