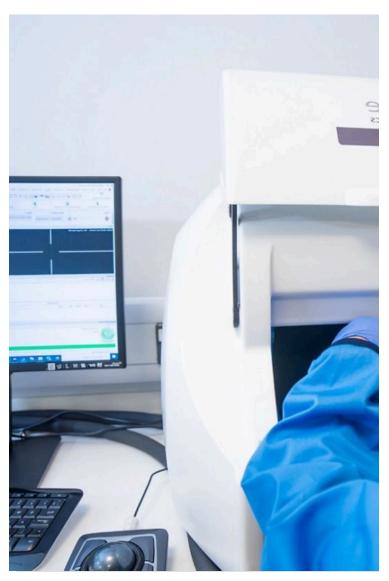
Helping to save lives wit cancer detection

CanSense brings a pioneering AI-powered color cancer screening solution to market in partners with Informed Genomics and IBM



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About Info

Colorectal cancer is the fourth most common caresponsible for 700,000 deaths globally each year of bowel cancer cases are preventable and earl to delivering positive outcomes for patients.

Testing for colorectal cancer currently requires patients to univasive procedure carried out by clinicians in a hospital set colorectal cancer rising, many hospitals in the UK are strugg increased demand for colonoscopies, and waiting lists are governments National Health Service (NHS) patients waited six weeks or 20234—a trend that could continue to worsen.

Most people who attend a hospital for a colonoscopy will no This means that the diagnostics pathways in secondary care the best use of their resources, as they end up screening a sepatients who may not have actually needed to undergo a co

While colonoscopies are traditionally the most accurate way has colorectal cancer, AI holds the potential to make cancer and less invasive. Informed Genomics—a UK-based genomi harness innovations in science and technology to improve c

Building on its recent successful launch of an accurate, non Informed Genomics is now turning its attention to improving through a new partnership with CanSense.

Spun out from a research project started at Swansea Univer the power of spectroscopy and AI to develop a quick, inexpets tfor colorectal cancer.

"We're really excited about the potential that the CanSense clinicians deliver more efficient and higher quality care," explined Genomics. "To bring the solution to market and somust ensure that the underlying technology is reliable, robu



90%

sensitivity

The CanSense solution has a high sensitivity to ensure accurate results.

"To take CanSense out cand bring it to market, scalable technology the compute-intensive wo

to ensure excellent gov powering our solution.

Adam Bryant CEO CanSense

a single platform.

Spearheading new cancer screening technology

CanSense decided to develop its new AI-powered colorectal cancer screening solution,

CanSense – CRC, on IBM Cloud* to provide seamless scalability. And to support its

regulatory approval journey, CanSense also selected

IBM* watsonx.governance** to help the company to monitor and manage its AI model from

"We decided to partner with IBM on this project because they have an excellent track record of supporting healthcare innovations and have been developing AI for decades," explains Adam Bryant, CEO of CanSense. "We really value that watsonx.governance enables us to track model health, accuracy, drift bias and other key metrics about our AI model. To gain regulatory approval, we need to show how our solution works and watsonx.governance helps us to provide transparency."

By teaming up with IBM, CanSense also gained access to IBM experts through the IBM Client Engineering service. For instance, CanSense participated in a workshop that brought clinicians and IT experts together to explore how technology can help to transform healthcare. Providing technical advice and support, IBM engineers continue to work with CanSense to co-develop its screening solution and help the company extract maximum value from its IBM solutions.

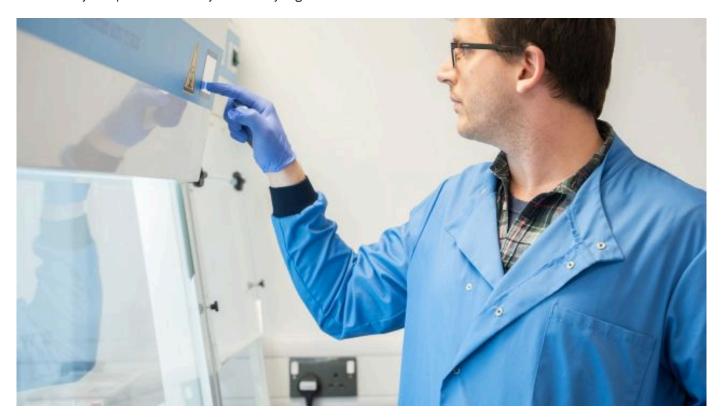
Bryant comments: "Participating in the healthcare technology workshop at IBM provided us with a great opportunity to get input and feedback from leading experts—including laboratory service providers, NHS clinicians and investors. Insights from IBM and industry experts are helping us to mature our solution and effectively preparameter launch."

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With CanSense – CRC, colorectal cancer can be detected using a blood samp healthcare professional. The CanSense solution then runs spectral analysis of the blood sample and sends this data to a proprietary AI model hosted on IBM Cloud. Trained

extensively with real-world samples and data, the CanSense AI then detects whether evidence of colorectal cancer is present in the blood sample.

Davis comments: "From a technology perspective, CanSense ticks a lot of boxes for Informed Genomics and has the potential to help us launch a brand-new colorectal cancer screening service. Knowing that CanSense constantly monitors its AI performance with IBM solutions gives us confidence that we will be able to bring this to market successfully and prove its efficacy to industry regulators."



"Knowing that CanSense constantly monitors its AI performance with IBM solutions gives us confidence that we will be able to bring this to market successfully and prove its efficient Hello! How can we help industry regulators."

Supporting early cancer diagnosis

In the coming months, Informed Genomics is planning to deploy the solution from its UK laboratory and accredit the service to ISO15189 quality standards. After thoroughly testing and validating the solution, Informed Genomics will offer colorectal cancer screening as a service to clinicians and hospitals to support diagnostics activities.

"If we can successfully bring a colorectal cancer screening service underpinned by the CanSense solution to market, the benefits will be significant," says Davis. "For instance, clinicians will be able to send patients for a non-invasive blood test so they can triage colonoscopy waiting lists. In turn, this will help to ease the workload of clinicians that carry out these procedures and help them to focus their time and resources on the highest-risk patients."

CanSense and Informed Genomics are working to reduce the diagnosis timeline from weeks to days, which will help to support early diagnosis and improve patient care.

"We know that the sooner colorectal cancer is diagnosed, the better the outcome for patients," explains Bryant. "CanSense and Informed Genomics can help doctors make accurate and quick diagnoses, which will enable them to make timely interventions and give patients the best chance of a full recovery. It will also reduce costs; we anticipate that the NHS could save £300 million a year by enhancing colorectal cancer treatment pathways with our solution."

After it has launched CanSense – CRC, Informed Genomics hopes to work with clinicians in public and private hospitals in the UK and beyond to transform colorectal cancer care.

Davis concludes: "Our core focus remains offering innovative cancer testing services which enable earlier diagnosis, personalized treatments and improved patient outcomes. Our partnership with CanSense and IBM allows to deliver this while also broadening the scope of our portfolio to new markets and bringing access to these services to even more patients."





About Informed Genomics

Established in 2022, Informed Genomics (link resides outside of ibm.com) provides a wide range of clinical genomics services, including hereditary cancer testing and bladder cancer testing. The company also offers clinicians and academics full exome, genome, and RNA sequencing, tumor profiling and custom panel design services.

Can Sense

About CanSense

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 stages making treatment quicker and easier. In 2023, CanSense was awarded the St David Award for Innovation, Science and Technology by the Welsh Government.

Solution components



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Citations

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¹Bowel Cancer (link resides outside of ibm.com), bowelcanceruk.org, 15 May 2024.

²Website homepage (link resides outside of ibm.com), CanSense, 15 May 2024.

³Bowel cancer statistics (link resides outside of ibm.com), Cancer Research UK, 15 May 2024.

⁴NHS Diagnostic Waiting Times and Activity Data (link resides outside of ibm.com), NHS England, 15 May 2024.

⁵About CanSense (link resides outside of ibm.com), CanSense, 15 May 2024.

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