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IBM

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The initiative will combine the computational power of IBM Watson and its natural language processing ability with MSKCC's clinical knowledge, existing molecular and genomic data and vast repository of cancer case histories, in order to create an outcome and evidencebased decision support system. The goal is to give oncologists located anywhere the ability to obtain detailed diagnosis and treatment options based on updated research that will help them decide how best to care for an individual patient.

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The need for such an advanced technology arises from the steadily increasing complexity of oncology treatment. Cancer is not one disease but some hundreds of sub-types, each with a different genetic fingerprint. Significant discoveries in molecular biology and genetics in the past two decades have delivered new insights into cancer biology and strategies for targeting specific molecular alterations in tumours, but these advances have also ratcheted up the complexity of diagnosing and treating each case. Oncologists and physicians who do not specialise in specific sub-types of cancer face a significant challenge in keeping up with the magnitude of rapidly changing information.

"This comprehensive, evidence-based approach will profoundly enhance cancer care by accelerating the dissemination of practice-changing research at an unprecedented pace," said Dr. Mark G. Kris, Chief, Thoracic Oncology Service at MSKCC and one of the clinicians leading the development effort. He noted that 85 percent of patients with cancer are not treated at specialised medical centres and it can take years for the latest developments in oncology to reach all practice settings.

Development work is already underway for the first applications, which include lung, breast and prostate cancers. The objective is to begin piloting the solutions to a select group of oncologists in late 2012, with wider distribution planned for late 2013. This collaboration complements an earlier announcement by IBM and Well-Point that the parties will focus on putting Watson to work on oncology solutions.

For more information, please visit: www.ibm.com

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