NLP 2

IBM Medical Oncology is a technology developed by IBM Watson Health specifically designed to assist oncologists and healthcare professionals in making informed decisions by providing them evidence-based treatment options and recommendations for their patients. This model combines machine learning and natural learning processing to analyse vast amounts of medical literature, patient records, clinical trials and other relevant medical data.

IBM Medical Oncology works by analysing structured and unstructured relevant cancer data and then applies NLP techniques to understand and interpret this data by extracting key concepts, relationships and medical insights. The technology is able to identity relevant genetic mutations, biomarkers and treatment options specific to each patient's conditions by considering the patient's medical history, medical test results and genetic profile to develop personalised treatment recommendations.

IBM Medical Oncology utilises machine learning to continously improve its performance by analysing real-world patient data, comparing treatment outcomes, adapting to new research findings and clinic evidence to refine its recommendations over time. This ensures that the model's analysis and recommendations are inline with current and relevant practice.

The goal of IBM Medical Oncology is to provide oncologists and healthcare professionals comprehensive and up-to-date knowledge base in making data-driven decisions to support their patients and keep them up to speed with the ever-evolving field of oncology. This model was designed support clinical decision-making and provide recommendation, but cannot replace the expertise and judgment of an oncologist. Therefore it serves as a powerful tool to support healthcare professionals and oncologist to provide the necessary more personalised and evidenced-based care for the patients more quickly and efficiently.

References:

https://www.ibm.com/common/ssi/cgi-bin/ssialias?appname=skmwww&htmlfid=897%2FENU S5725-W51&infotype=DD&subtype=SM&mhsrc=ibmsearch_a&mhq=IBM%20WATSON%20 ONcology#smdesc

https://www.nature.com/articles/s41598-021-84973-5

https://www.youtube.com/watch?v=UpFHNGF4F8o&ab channel=STAT