

Individualising & democratizing cancer patient care via Artificial Intelligence: trans-disciplinary solutions & normative considerations

Initiative: Künstliche Intelligenz – Ihre Auswirkungen auf die Gesellschaft von morgen

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A key promise of personalized medicine is that once realised, all citizens - irrespective of whether they are in cities or in rural areas - will be able to equally benefit from state-of-the-art individualized health care. The project will employ a transdisciplinary approach driven by AI to democratize precision medicine for prostate cancer in a regionally oriented model project targeting 8% of the German population, which in the future may be expanded inter-regionally or internationally. This will build on machine learning methods, to guide targeted treatment decisions based on deep learning classifiers that integrate longitudinally observed clinical measurements with multi-omic data. Altogether, the project represents a step towards the sharing of human, physical, and intellectual resources in healthcare consistent with social values and individuals' reasonable expectations and the concepts of fairness, inclusivity and equality. It will additionally foster the further development of AI as a technological framework for public health governance and enable enhanced standardization of the implementation of the human right to health.

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