Machine learning versus traditional statistical modelling and medical doctors

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Medicine appears to be at the start of a new era due to the many promising developments in machine learning (ML). Part of that promise is that ML will improve upon traditional statistical modelling. Another promise is that ML will outperform medical doctors. In this talk I’ll highlight a few medical settings where ML seems to have lived up to its promises, and some where it hasn’t. A couple of challenges for fair comparisons between machine learning, traditional statistical modelling and doctors will be identified and discussed. Finally, I’ll speculate on the future role of machine learning, traditional statistical modelling and medical doctors in medicine.