New Strategies and Prognosis for Diagnosis and Treatment of Pituitary Adenomas: Research Based on Medical Big Data and AI

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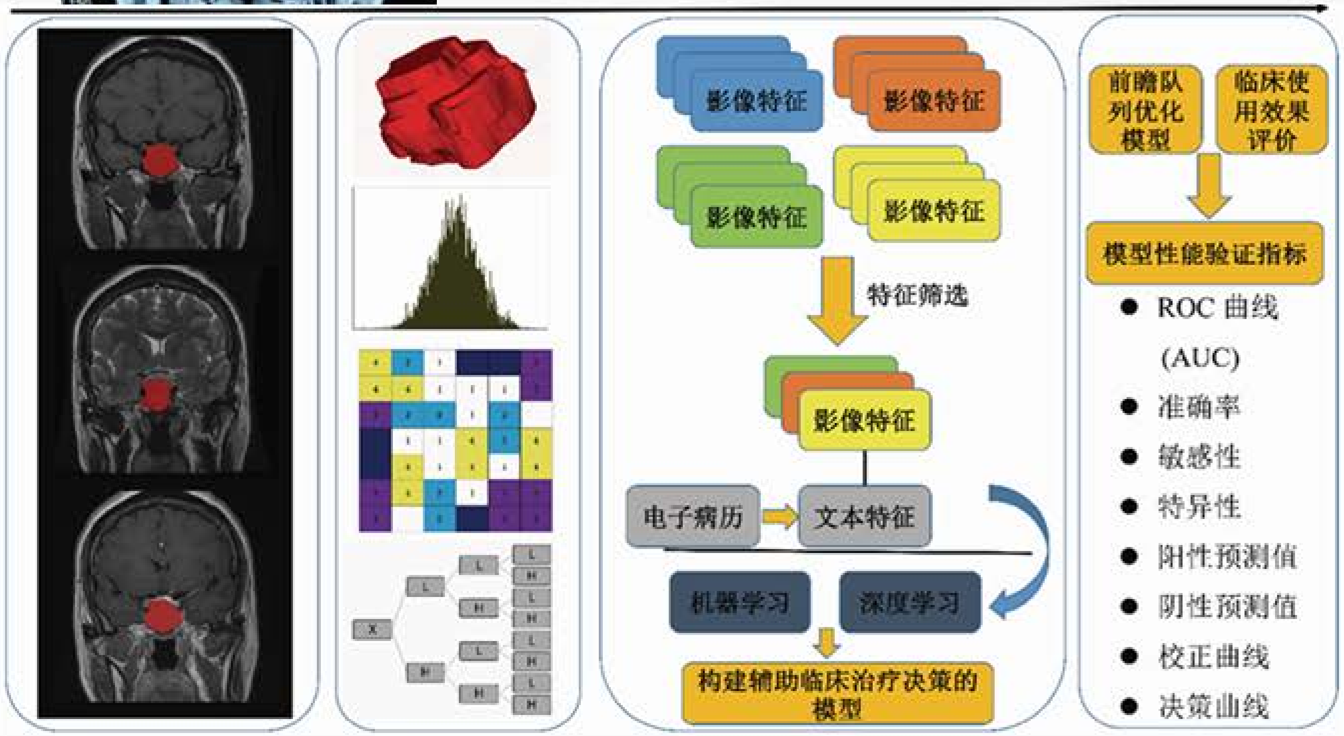
- Pituitary adenoma （PA） is one of the most common neurological tumors.
- Because of the atypical early symptoms and the lack of understanding of clinicians, PA is easily misdiagnosed as hypertension, diabetes and other common diseases, because of which treatment is delayed.
- It is difficult to make accurate judgment only based on the personal clinical experience of doctors.
- Based on EMR and imaging data, weak supervised learning, NLP, machine learning was used to assist in the diagnosis and decision-making of pituitary adenoma.



- A multidimensional diagnosis and prediction model of pituitary adenoma is established.
- The prospective cases will be used to verify the model.
- This study can assist clinicians to make accurate diagnosis and individualized treatment strategies for PA, to predict postoperative tumor recurrence and guide follow-up.
- This study breaks through the limitations of the existing diagnosis and treatment technology and mode, and provides new methods and ideas for the accurate diagnosis, individualized treatment and evaluation of PA by using the methods of big data and artificial intelligence.