



SCTP: 评估细胞恶性程度的肿瘤微环境信息多模态融合量化

朱文灿^{1,2}, 唐慧¹, 于祥田³, 柴华¹, 黄瑾³, 徐捷³, 曾涛⁴, 陈洛南⁵

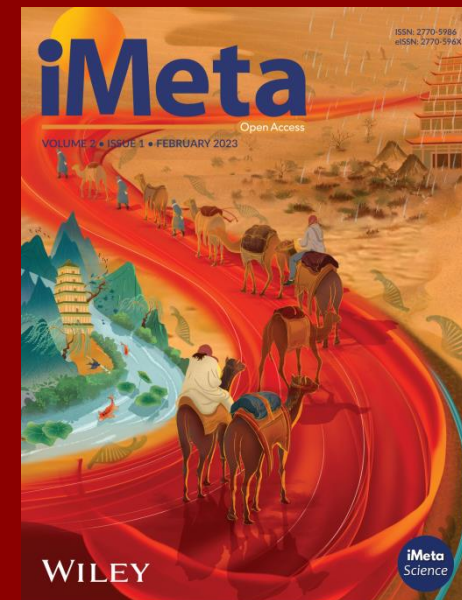
¹佛山大学数学学院

²德国癌症研究所

³上海交通大学附属第六人民医院

⁴广州国家实验室

⁵上海交通大学数学科学学院/人工智能学院

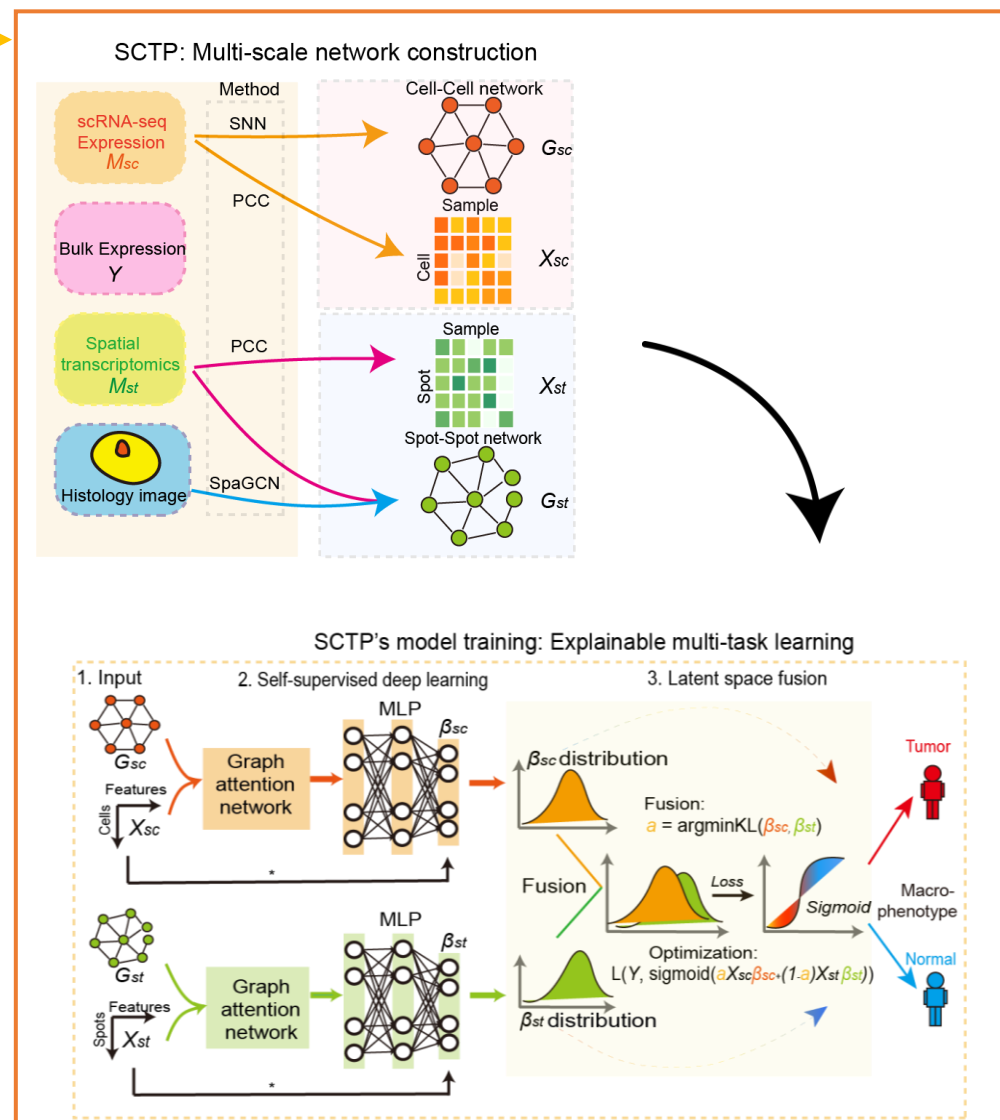
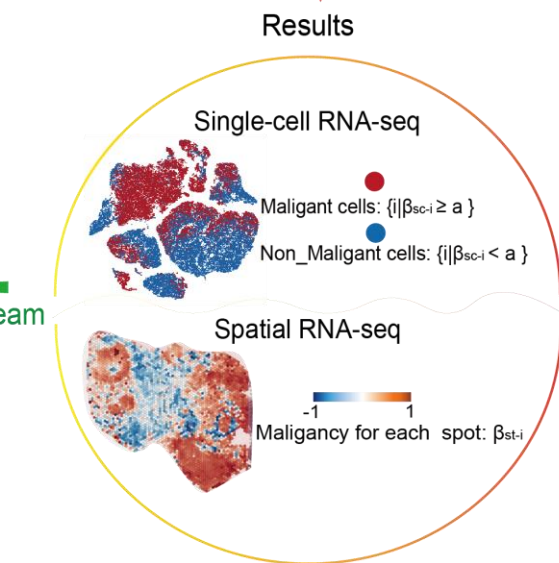
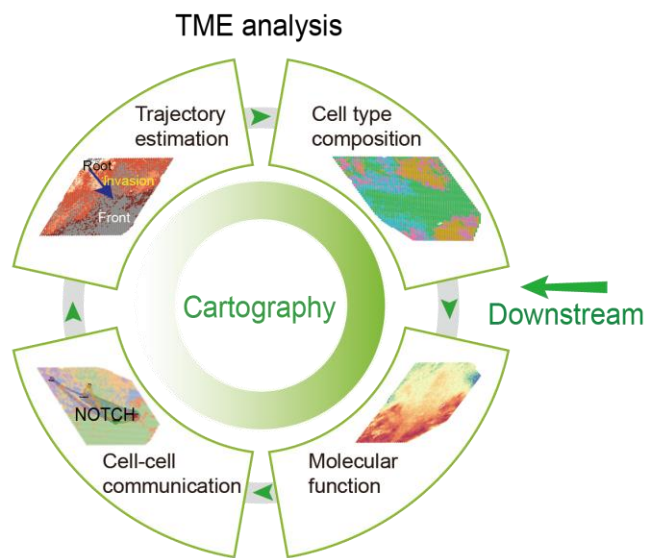
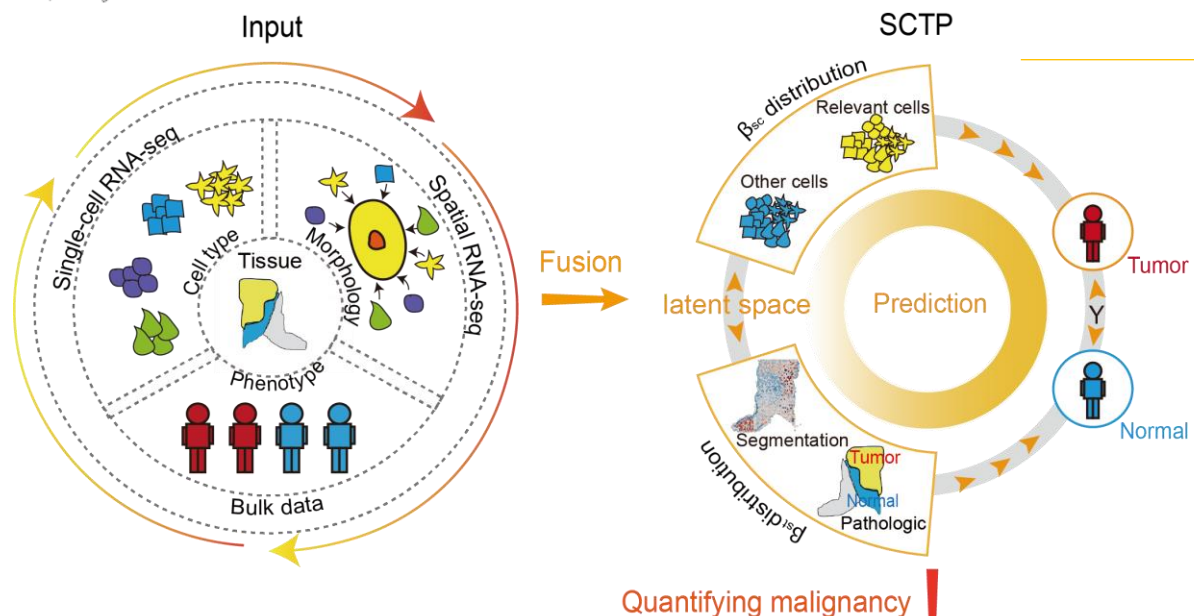


Wencan Zhu, Hui Tang, Xiangtian Yu, Hua Chai, Jin Huang, Jie Xu, Tao Zeng, et al. 2025. Quantifying cellular malignancy by tumor micro-environment measurement with multimodal fusion. *iMeta* 4: e70068.

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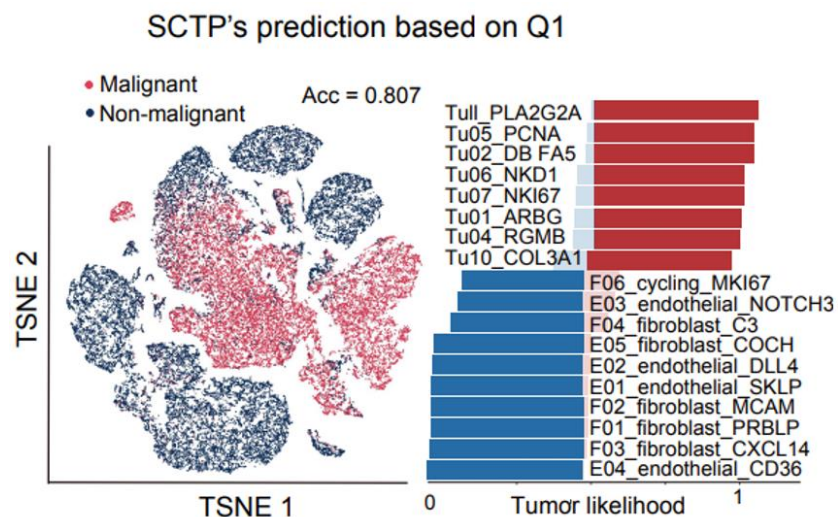
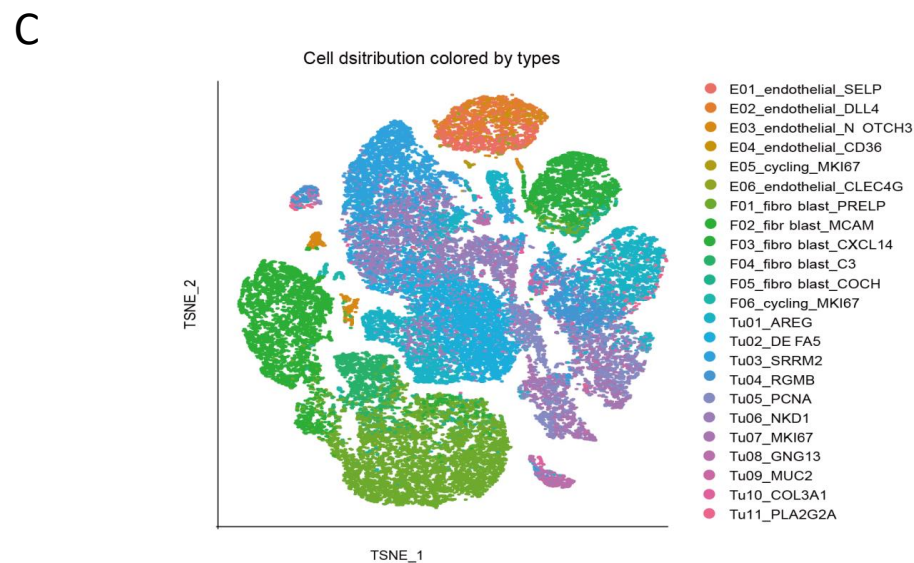
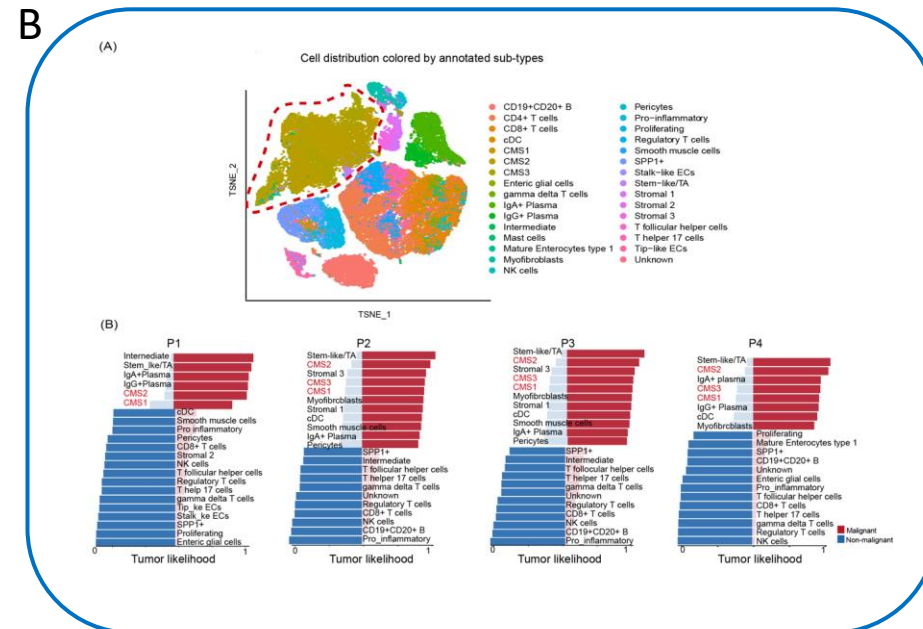
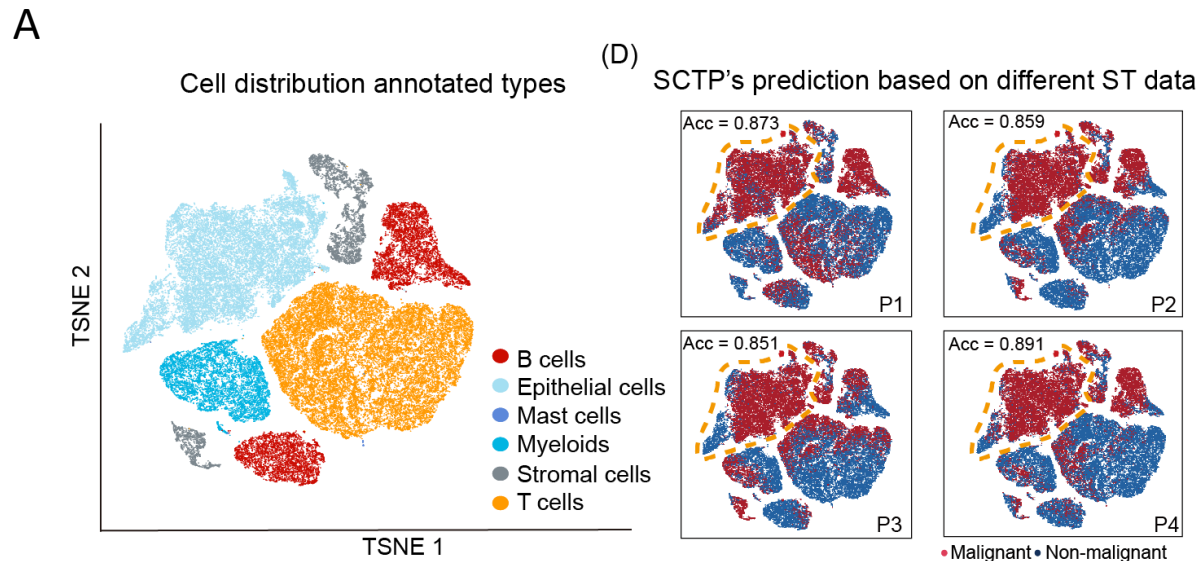


简介





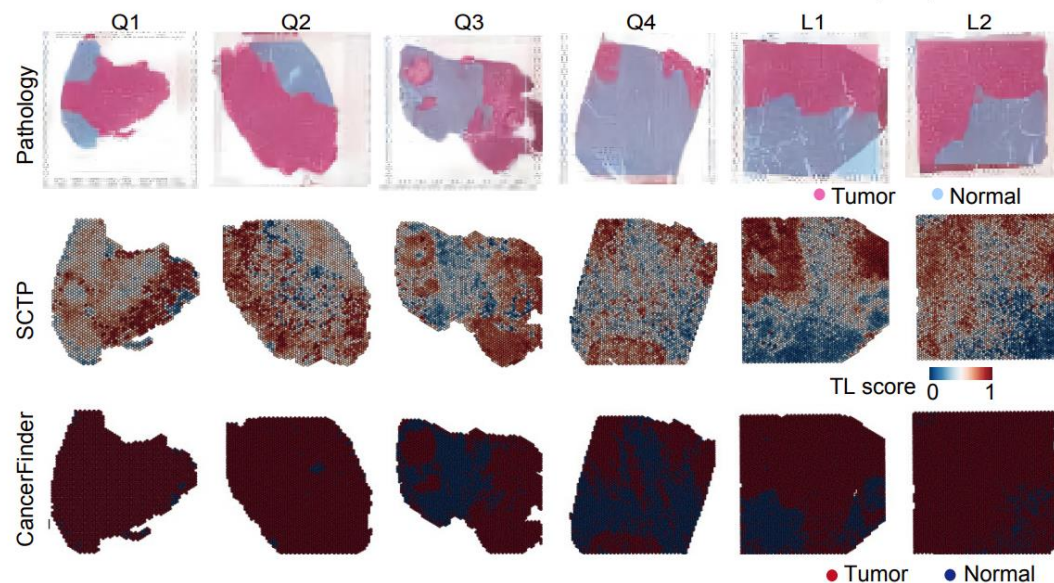
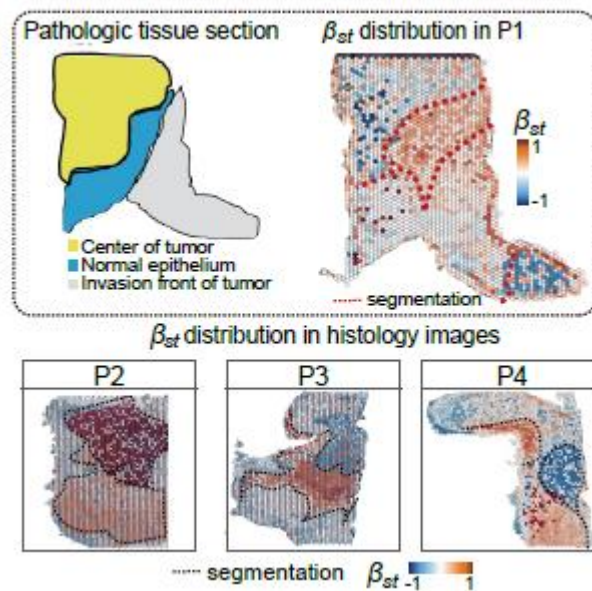
SCTP的预测准确性 (单细胞)



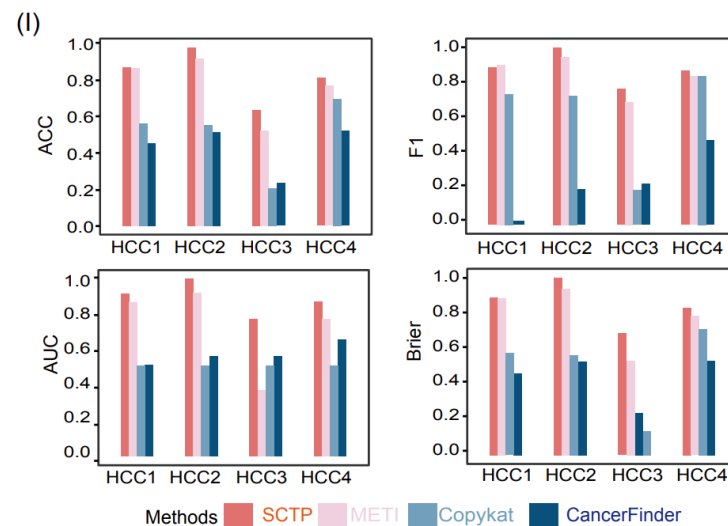
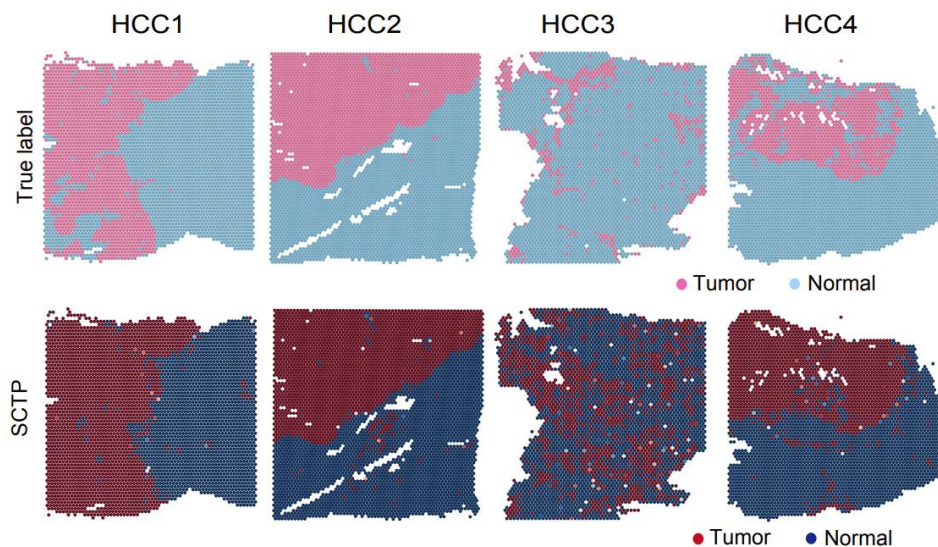


SCTP的预测准确性 (空间转录组)

SCTP-CRC

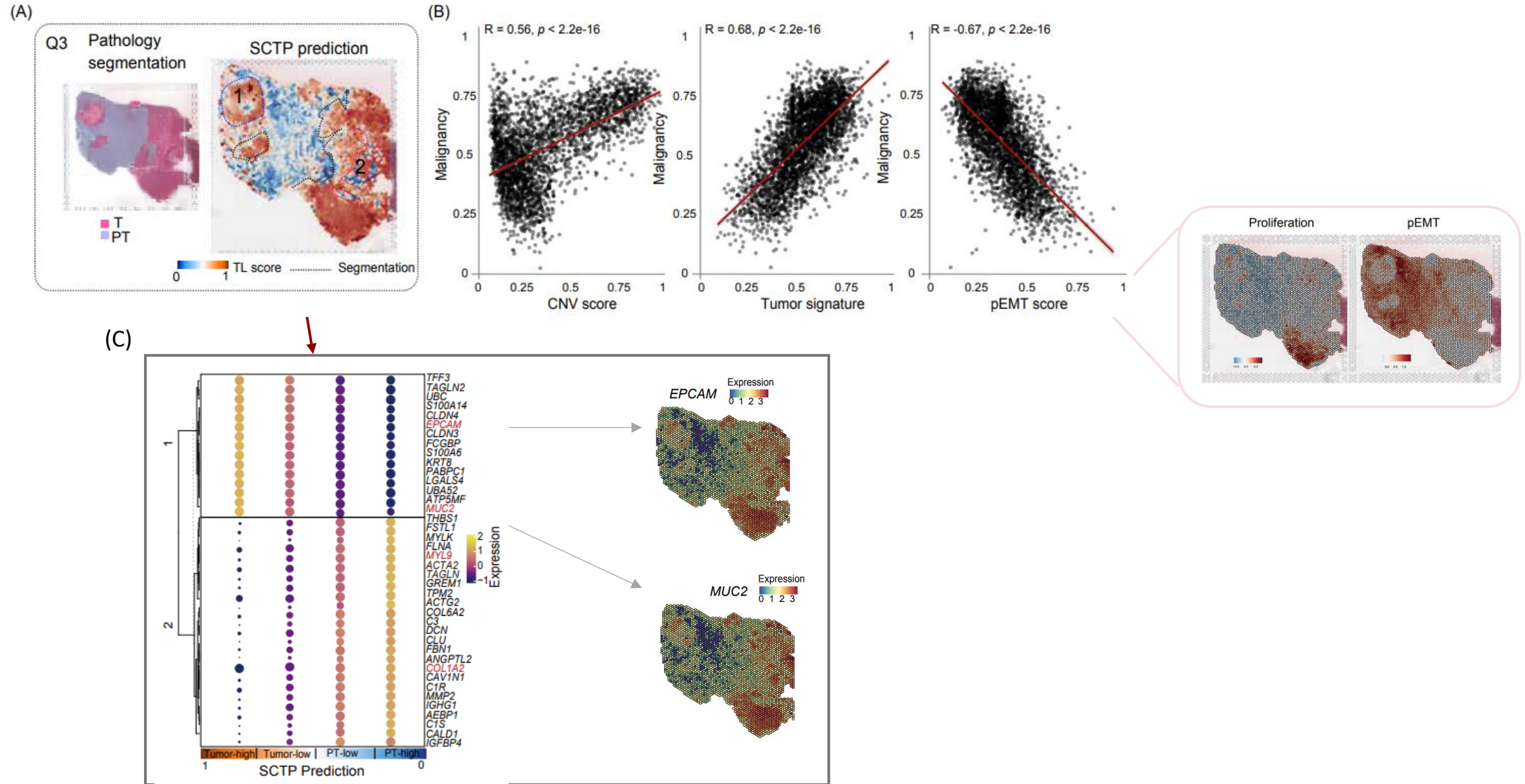


SCTP-HCC





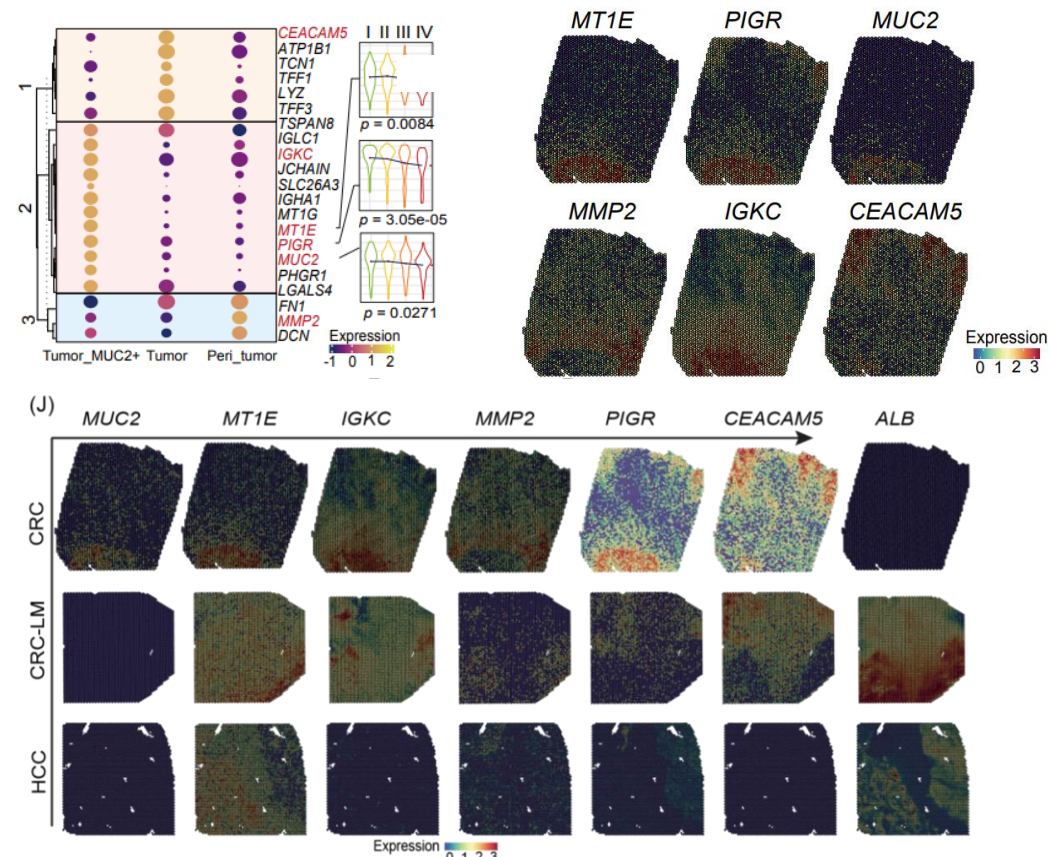
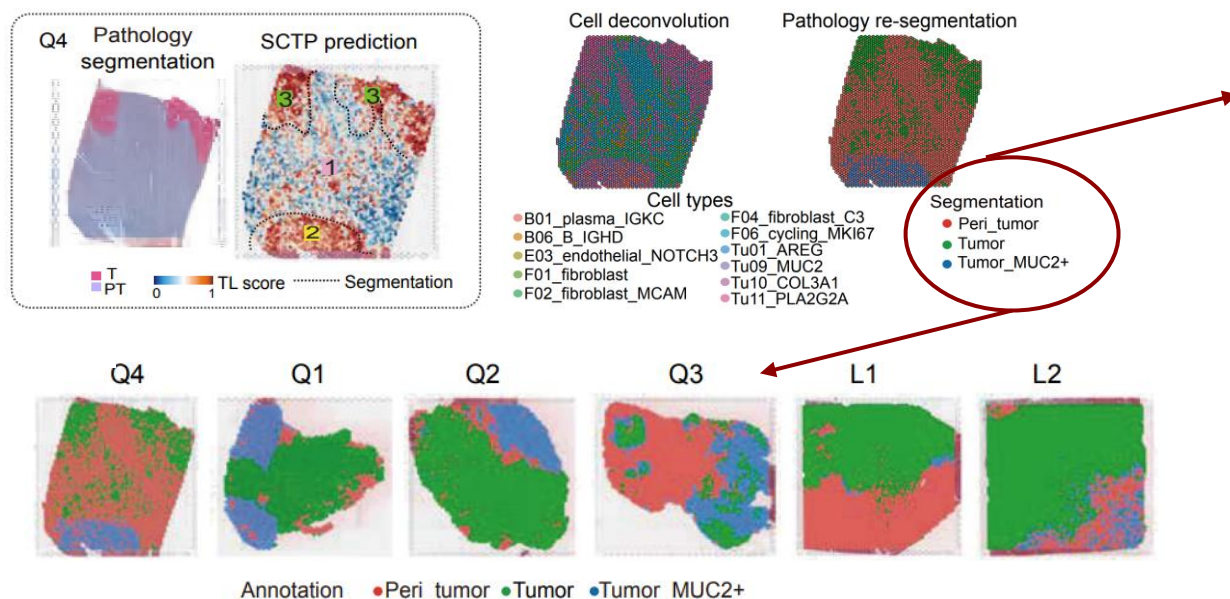
生物学相关性



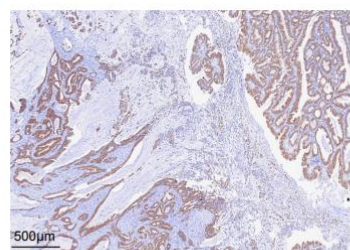


早期肿瘤亚群的发现

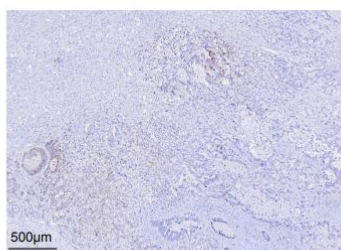
Identification of Tumor MUC2+ subpopulation



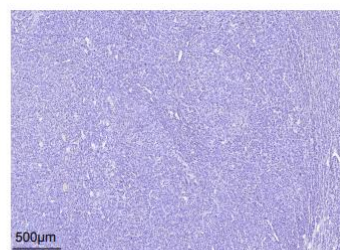
实验验证



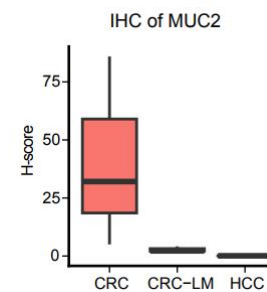
MUC2 in CRC



MUC2 in CRC-LM



MUC2 in HCC



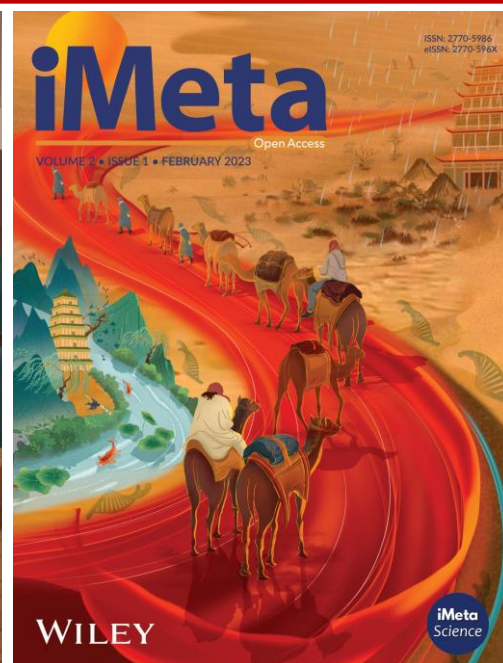
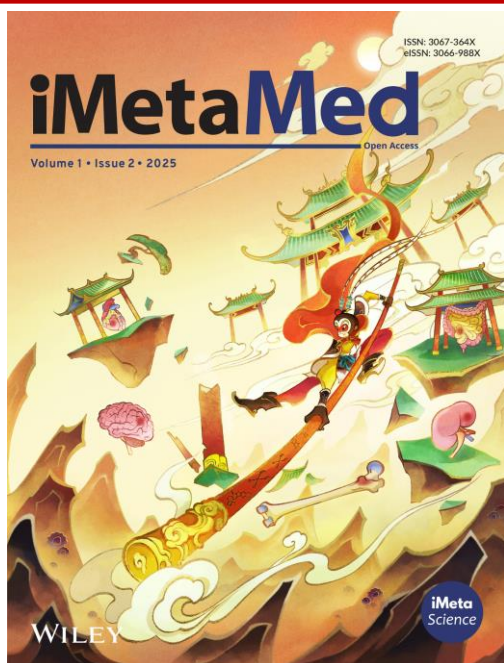


总结

- ❑ SCTP 是一个基于图结构的多模态分析框架，设计用于量化细胞的恶性程度。
- ❑ SCTP在单细胞和空间转录组数据中展现了准确的恶性识别准确率。
- ❑ SCTP能识别出具有特异空间分布和基因表达特征的早期恶性细胞亚群。
- ❑ 该工具已在 GitHub 上开源，欢迎大家使用和反馈。平台网址：
<https://github.com/ztpub/SCTP>

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