

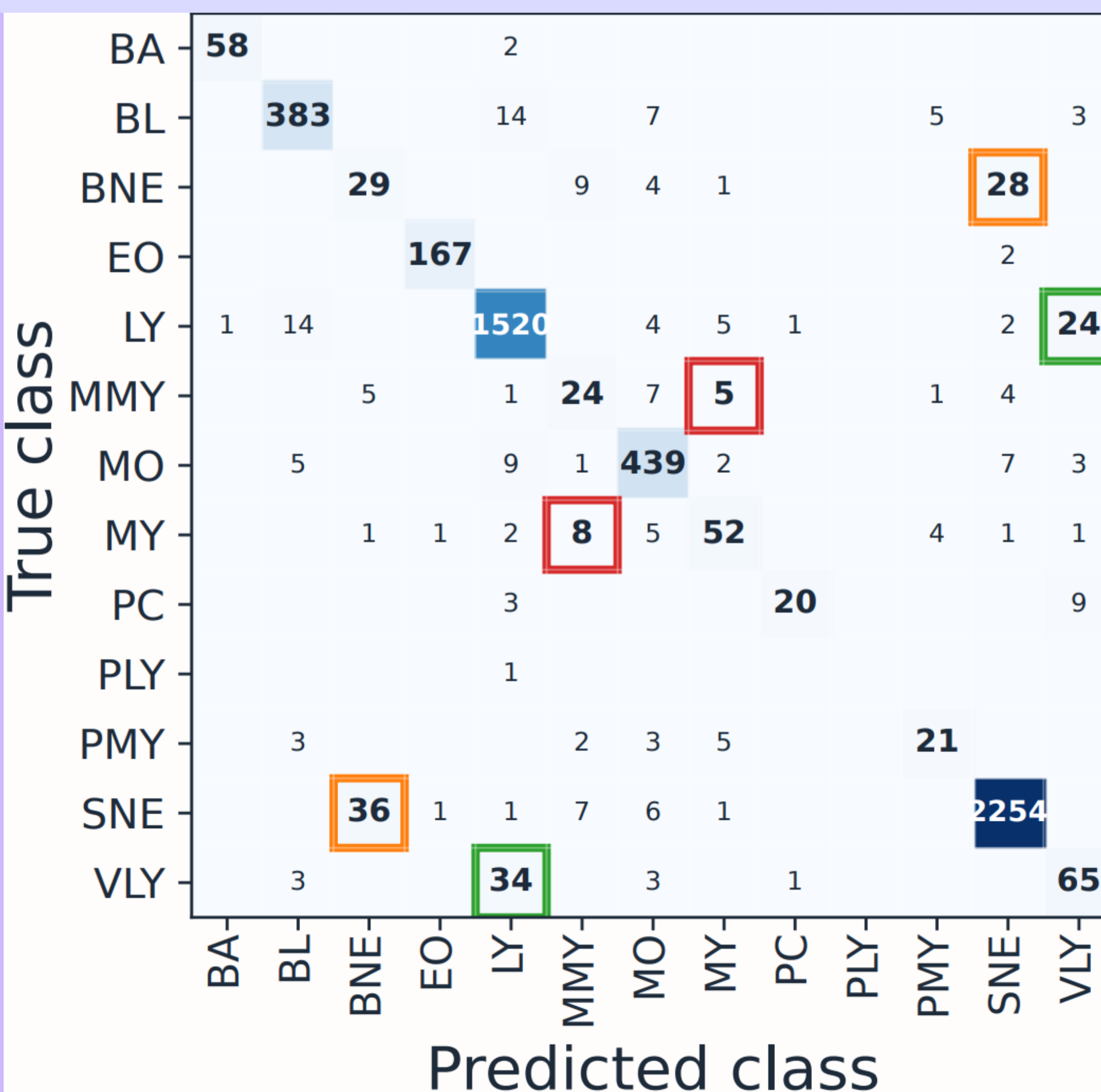
Using AI to Improve White Blood Cell Analysis for Cancer Diagnosis

Develop an AI system that can classify different types of white blood cells

- Doctors study blood cells under a microscope to diagnose diseases such as leukemia.
- This process is time-consuming and requires expert knowledge.
- AI can help automate this analysis task, and free up time for doctors to spend with understanding the patients' needs.

Early results and important findings

- Some white blood cells are difficult to distinguish because they belong to a **natural development process**, where neighboring cells look very similar.
- This leads to consistent confusion between specific cell types (highlighted in the figure).
- These are not just AI mistakes: **doctors also find these cases challenging**, and may disagree on the correct label.
- This shows that the problem is not only about improving AI accuracy, but also about **handling uncertainty in medical data**.



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