

User Manual – Leukemia Classifier Web-App


1 Audience

Laboratory technicians or clinicians who need a quick second-opinion on microscopic white-blood-cell (WBC) images, with no ML or DevOps background required.

2 System Requirements

- Modern browser (Edge ≥ 109 / Chrome ≥ 100 / Firefox ≥ 96).
- Network access to the application URL provided by IT:
`http://localhost:8501`.
- JPEG/PNG images ≤ 5 MB captured via microscope camera.

3 Quick Start

1. **Open** the link → web page shows “ *Leukemia Classifier*” header.
2. In the left panel click **Browse files**, choose a WBC image.
3. A thumbnail preview appears.

4. Hit **Predict** – after ~1 s the predicted class (*Benign / Early / Pre / Pro*) is displayed on the right.

4 Interpreting the Result

Predicted class	Meaning	Suggested action
Benign	normal cell	no immediate action
Early	early-stage malignancy	schedule further tests
Pre	pre-ALL	refer oncologist
Pro	proliferate stage	urgent treatment

Note: The tool is *assistive*; always confirm with lab protocols.

5 Providing Feedback

1. If prediction looks wrong, open **Correct label** dropdown.
2. Select the right class and click **Submit feedback**.

3. Status banner confirms *“Thanks! We’ve stored # N feedback items.”*
4. Feedback is anonymised, stored securely, and used to improve the model after ≥ 100 items.

6 Common Issues & Solutions

Issue		Cause	Fix
“Inference error 404”		backend temporarily restarting	wait 10 s & retry
“File too large”	too large	image > 5 MB	export lower resolution
Slow response (>5 s)		low bandwidth network	verify LAN/Wi-Fi