

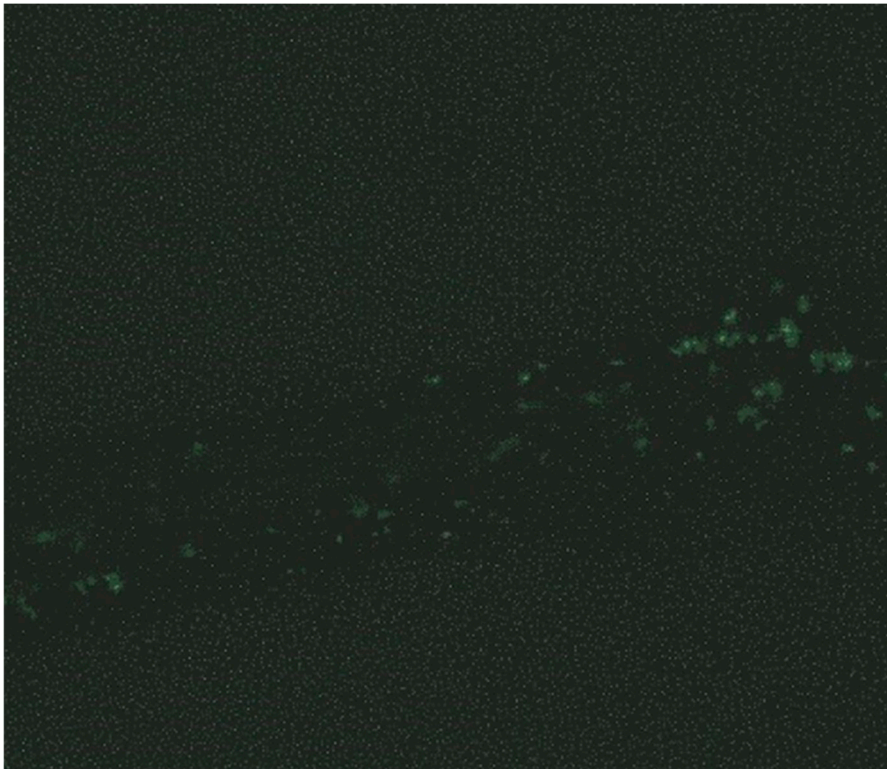
Supplementary Methods.

Image preprocessing procedure to emphasize green signals.

1) By using ImageMagick, reduce colours (gray, green, red and blue) to remove background and edge of fish.

Open the images and command “convert.exe input.jpg –colors 4 output.jpg”.

Representative image after ImageMagick procedure.

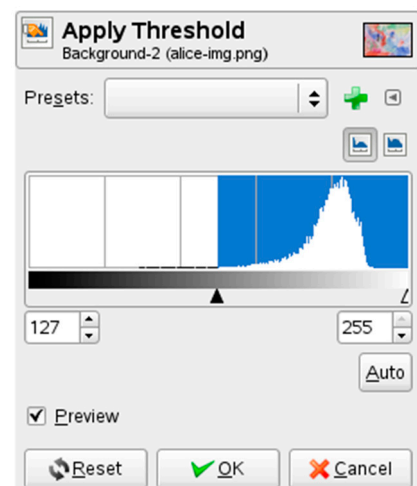


* At that time, the Tiff images were also converted to Jpg which suitable for Auto-ML uploading.

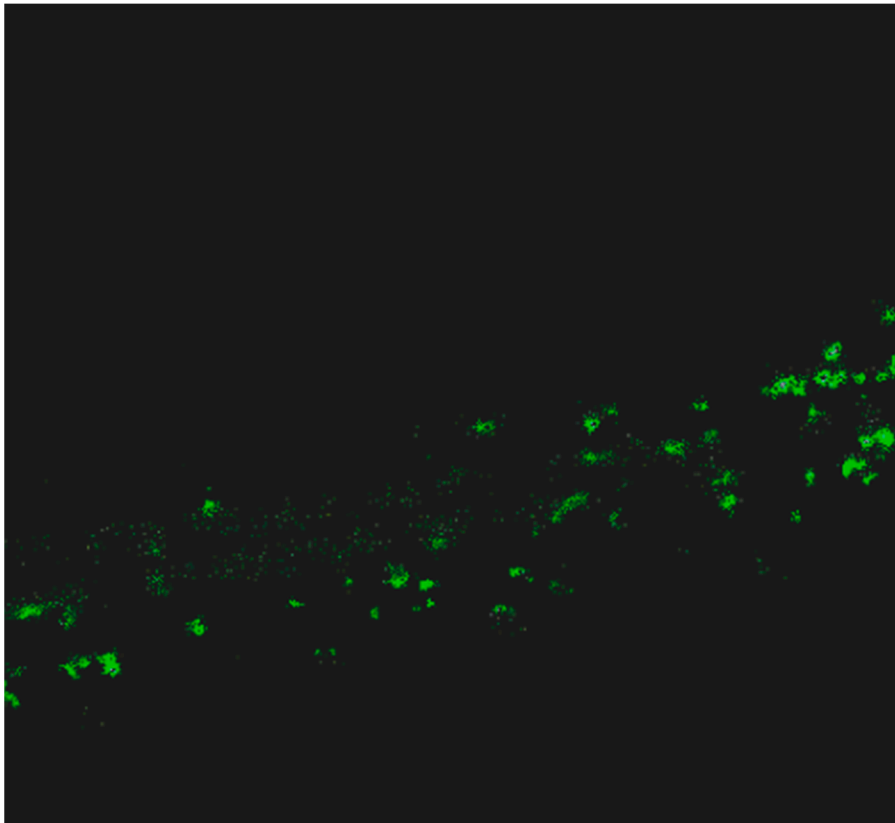
2) By using GIMP, reduce noise (small dots) in the background.

Open the ImageMagick processed images and apply thresholds from color menu.

* Decide the threshold value to diminish the noise (“Auto” is recommended).

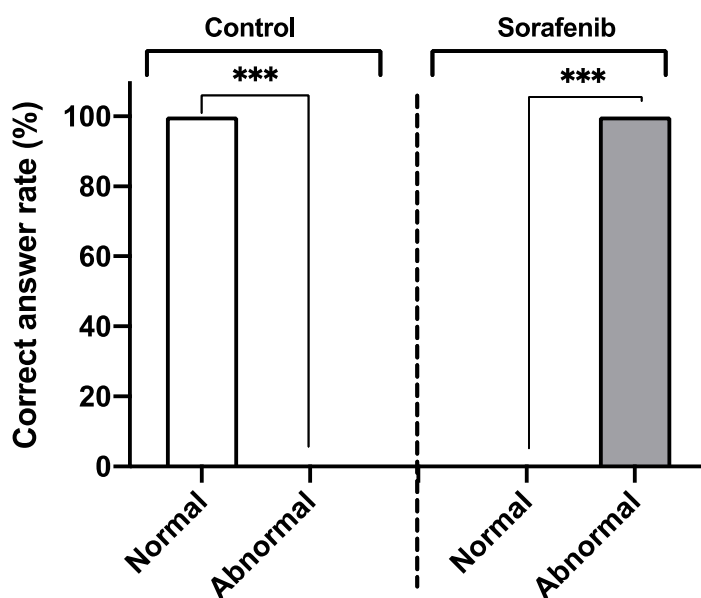


Representative image after GIMP procedure.



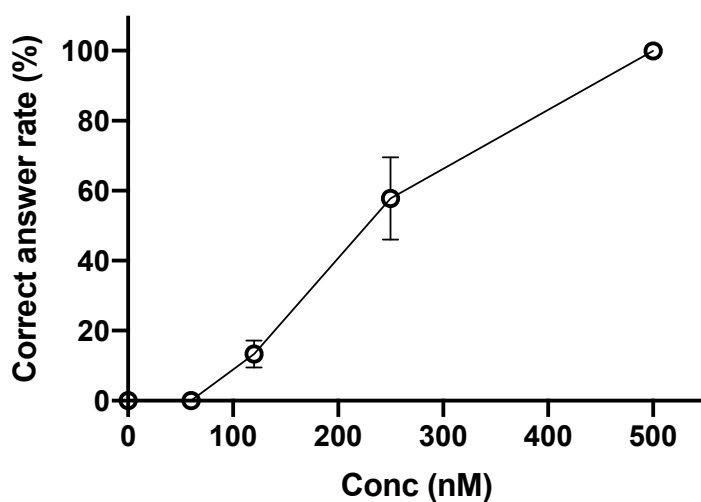
Supplemental Figures

Figure S1. Manual prediction of normal and abnormal phenotypes in zebrafish treated with 0.5 μ M sorafenib.



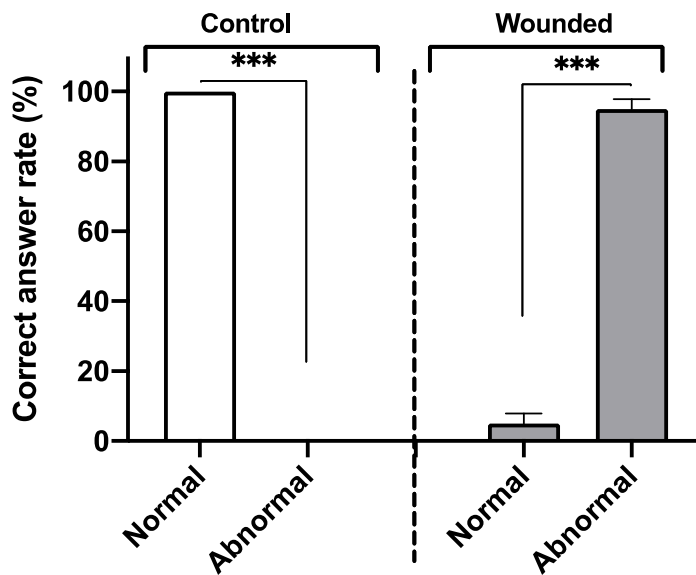
n=3, error bars indicate SE. ***p < 0.001.

Figure S2. Manual prediction of normal and abnormal phenotypes of zebrafish treated with sorafenib in a dose-dependent manner.



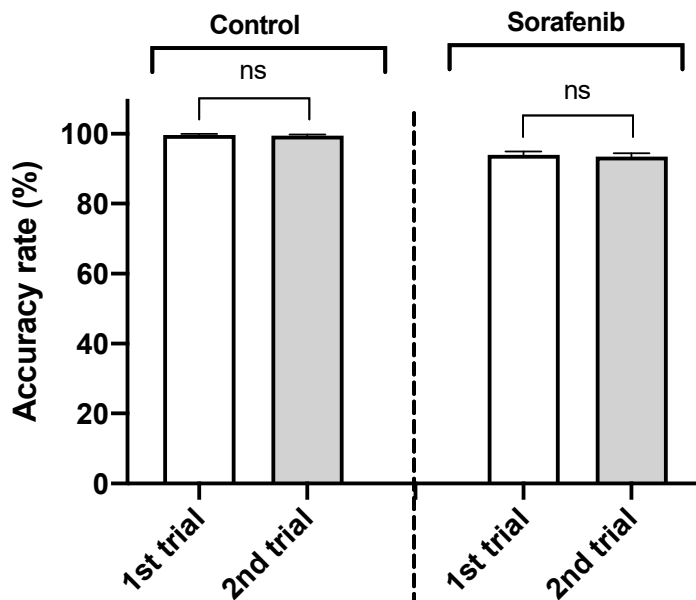
n=3, error bars indicate SE.

Figure S3. Manual prediction of normal and abnormal phenotypes in wounded zebrafish.



n=3, error bars indicate SE. ***p < 0.001.

Figure S4. Repeated training of AutoML with the same images did not affect the prediction accuracies in vascular-EGFP zebrafish.



The percentage of “predicted as normal” in 1st trial (Fig. 1c) and 2nd trial of control group is $99.7 \pm 0.2\%$ and $99.5 \pm 0.3\%$, respectively, while the percentage of “predict as abnormal” in 1st trial (Fig. 1c) and 2nd trial of control group is $94.0 \pm 0.9\%$ and $93.4 \pm 1.0\%$, respectively. n=20, error bars indicate SEM.