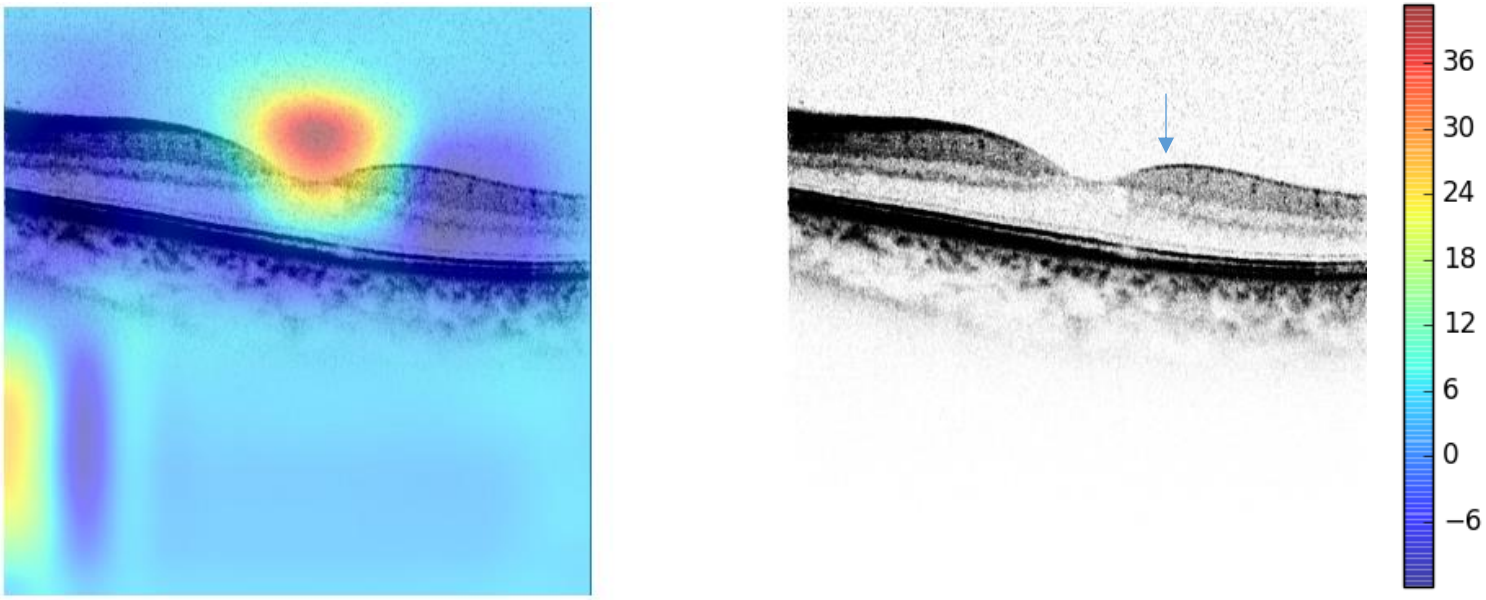
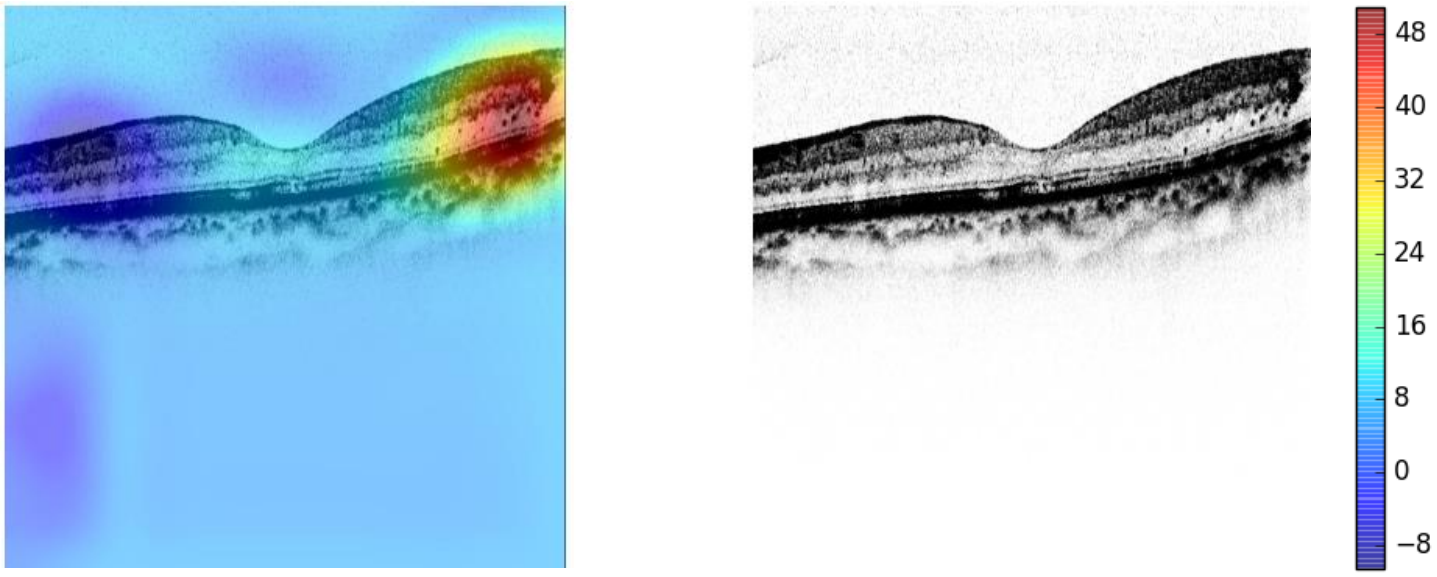
Supplementary Figure S1. Examples of misclassified cases on Spectralis OCT images and their corresponding heatmaps. False-negative cases: (a) eye with ground truth of DME presence but misclassified as an absence; (b) eye with ground truth of center-involved DME but misclassified as non-center involved DME. False-positive cases: (c) eye with ground truth of DME absence but misclassified as a presence. An orange-red color indicates the greatest relative discriminatory power of the deep-learning (DL) system in detecting abnormalities, whereas a green-blue color indicates the least relative discriminatory power.

For (a), the DL system failed to detect mild DME (a cyst indicated by the arrow). For (b), the DL system failed to pay attention within central subfield zone but successfully paid attention and identified DME in the "non-center" region. For (c), the misclassification of a DME presence case is possibly due to shadow of blood vessel or high-noise density throughout the entire image.

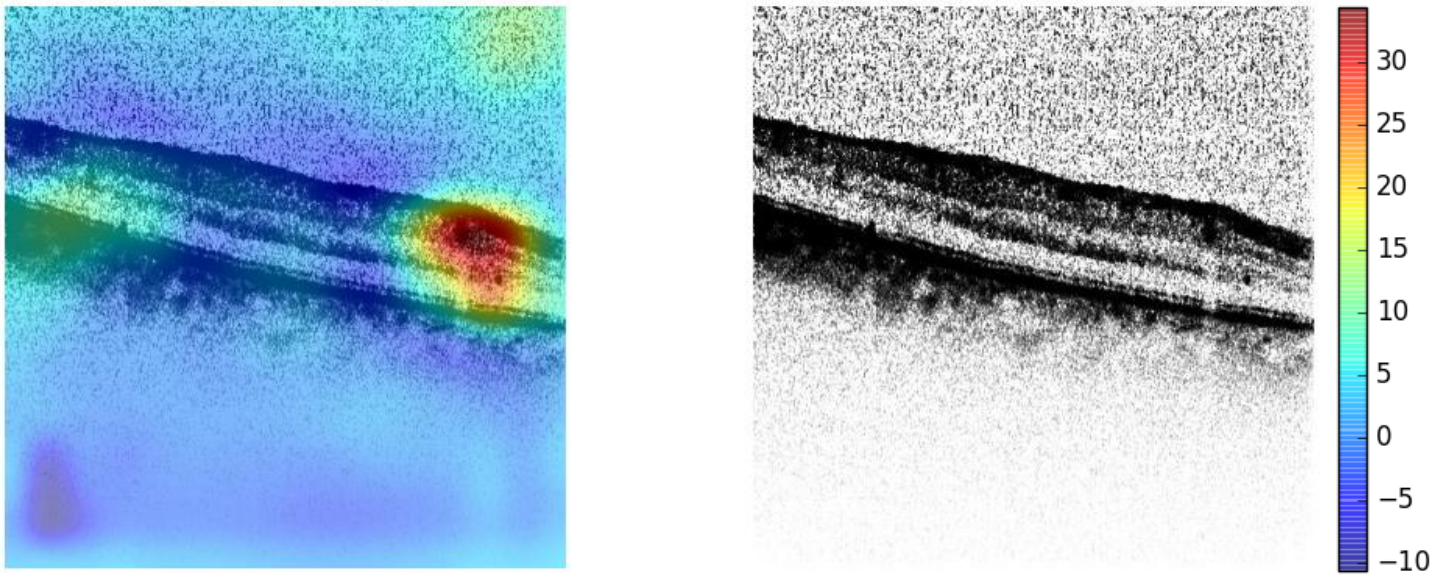
(a)



(b)



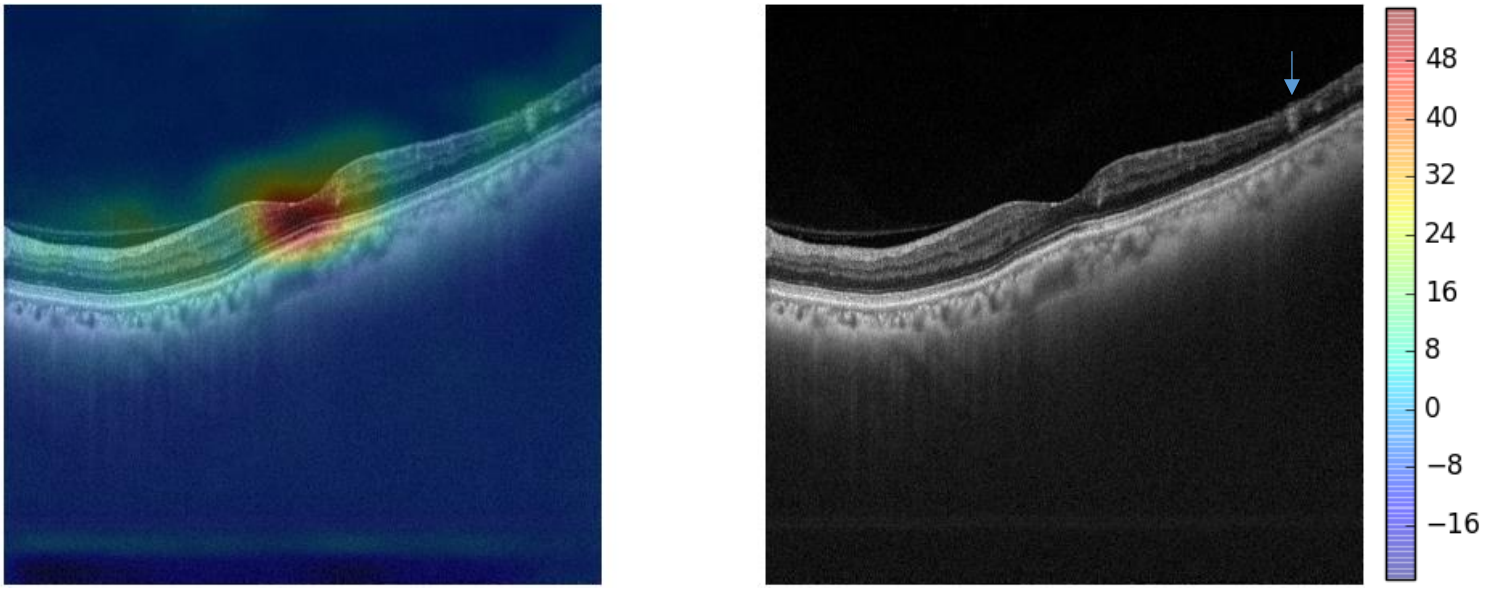
(c)



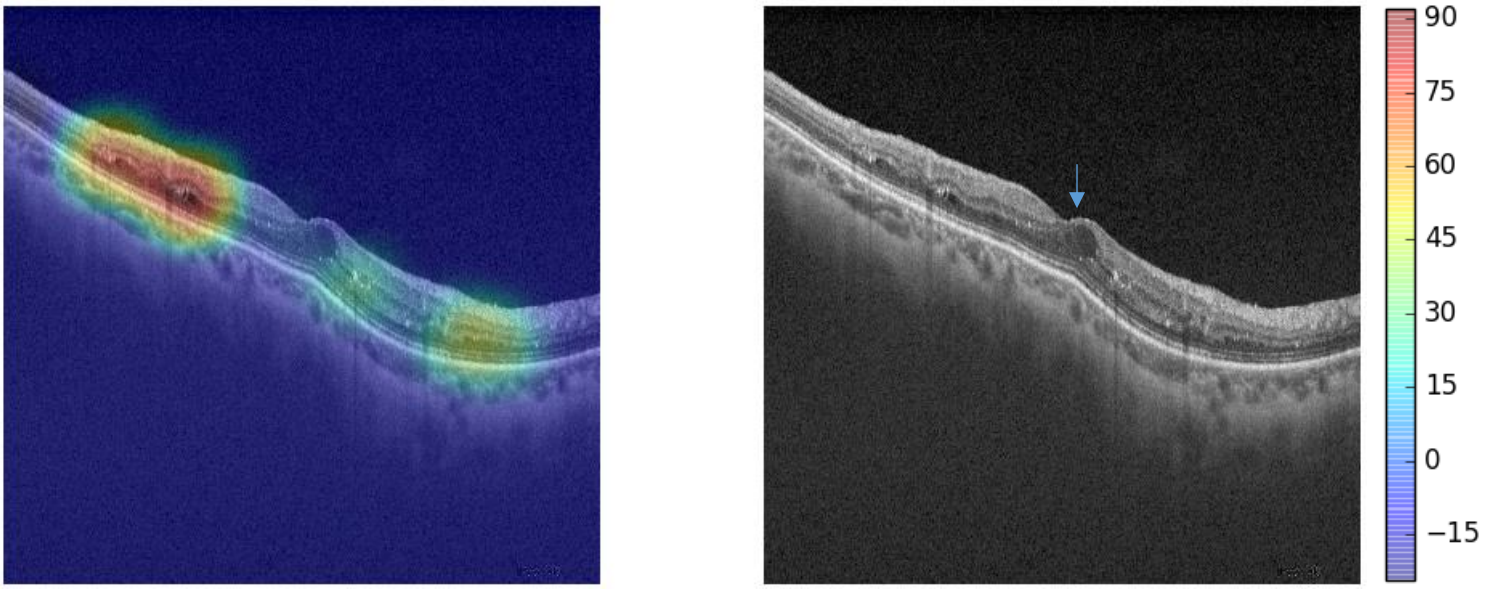
Supplementary Figure S2. Examples of misclassified cases on Triton OCT images and their corresponding heatmaps. False-negative cases: (a) eye with ground truth of DME presence but misclassified as an absence; (b) eye with ground truth of center-involved DME (CI-DME) but misclassified as non-CI-DME. False-positive cases: (c) eye with ground truth of DME absence but misclassified as a presence. An orange-red color indicates the greatest relative discriminatory power of the deep-learning (DL) system in detecting abnormalities, whereas a green-blue color indicates the least relative discriminatory power.

For (a), the DL system failed to detect mild DME (indicated by the arrow). For (b), the DL system failed to pay attention to DME features within the central subfield zone (indicated by the arrow). For (c), the DL system wrongly identified the myopic feature as DME.

(a)



(b)



(c)