

# AI model has strong performance for identifying pediatric eye disease

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An artificial intelligence (AI) model has strong performance for accurately identifying myopia, strabismus, and ptosis using mobile photographs, according to a study [published](#) online Aug 6 in *JAMA*

*Network Open.*

Qin Shu, M.D., from Shanghai Jiao Tong University School of Medicine, and colleagues developed an AI model to identify myopia, strabismus, and ptosis using mobile photographs in a cross-sectional study. A total of 1,419 images from 476 patients were used to build the model. Of the images, 946 monocular images and 473 binocular images were used to identify myopia and ptosis and to identify strabismus, respectively.

The researchers found that the model demonstrated good sensitivity for detecting myopia, strabismus, and ptosis (0.84, 0.73, and 0.85, respectively). During sex subgroup analysis, the model showed comparable performance in identifying eye disorders in both female and male children. Differences in identifying eye disorders were seen among different age groups.

"The detection model using AI showed strong performance in accurately identifying myopia, strabismus, and ptosis using only smartphone [images](#)," the authors write. "These results suggest that it can assist families in screening children for [myopia](#), [strabismus](#), and ptosis, facilitating early identification and reducing the risk of visual function loss and severe problems due to delayed screening."

**More information:** Qin Shu et al, Artificial Intelligence for Early Detection of Pediatric Eye Diseases Using Mobile Photos, *JAMA Network Open* (2024). [DOI: 10.1001/jamanetworkopen.2024.25124](https://doi.org/10.1001/jamanetworkopen.2024.25124)

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