

New Pharmacologic Treatments for Retinal Disease: A Venture Capital Perspective

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PURPOSE

This paper attempts to project some future areas of retinal drug development by examining the development pathways and business partnerships which have produced existing drugs.

METHODS

The success of approved therapies such as Visudyne, Macugen, and Lucentis for advanced AMD has sparked tremendous venture capital investment interest in new AMD treatments. A review of venturebacked retinal drug development companies shows several models for success, including Oculex and Eyetech.

RESULTS

The partnership of venture capital investors and retinal drug development startup companies is a relatively new type of business interaction, but one that will likely gain momentum due to the billions of dollars per year being invested by venture capital groups. However, the field is becoming increasingly competitive, with multiple companies pursuing similar drug targets related to VEGF. An exciting development is an emerging shift in focus from angiogenesis to upstream pathophysiology such as inflammation and genetic predispositions.

CONCLUSION

Venture capital will be a major driving force for retinal drug development for the foreseeable future due to the size of the market and the success of first generation products. A new direction in VC funded AMD drug development is the movement away from VEGF and towards inflammatory models, which may lead to improved clinical outcomes and successful preventative therapy.

* Financial interest disclosed