# Article information:

Therapeutic contact lenses for the treatment of corneal and ocular surface diseases: advances in extended and targeted drug delivery - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0378517323001606?via%3Dihub>

# Article summary:

1. Contact lenses have the potential to improve drug bioavailability in ocular tissues due to their ability to enhance drug delivery.

2. Different techniques are used to achieve sustained release, including soaking in drug solutions, incorporating drugs into multilayered contact lenses, using vitamin E barriers, molecular imprinting, nanoparticles, micelles and liposomes.

3. Benefits of contact lenses over eye drops include increased drug residence time in the cornea and conjunctival sac, improved penetration into the eye, prolonged secretion of the drug, reduction of side effects and decrease in dosing frequency.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Therapeutic Contact Lenses for the Treatment of Corneal and Ocular Surface Diseases: Advances in Extended and Targeted Drug Delivery” is a comprehensive review of current research on therapeutic contact lenses for ocular diseases. The article provides an overview of previous studies on therapeutic contact lenses as well as strategies for increasing drug release time and controlling drug release profiles. The article is written by experts in the field with extensive experience researching ophthalmic medications and contact lens technology.

The article is generally reliable and trustworthy; however there are some areas that could be improved upon. For example, while the article does provide an overview of different strategies for increasing drug release time from contact lenses (e.g., nanoparticle-filled lenses, biomimetic and printed contact lenses), it does not provide any detailed information about how these strategies work or what their efficacy is compared to traditional eye drops or other methods of ocular medication delivery. Additionally, while the article does discuss potential benefits of using contact lenses for ocular medication delivery (e.g., increased bioavailability), it does not discuss any potential risks associated with this method (e.g., irritation or infection). Furthermore, while the article does mention some clinical trials that have been conducted on therapeutic contact lenses (e.g., Hsu et al., 2015), it does not provide any detailed information about these trials or their results which would be helpful for readers who are interested in learning more about this topic.

In conclusion, “Therapeutic Contact Lenses for the Treatment of Corneal and Ocular Surface Diseases: Advances in Extended and Targeted Drug Delivery” is a reliable source of information on therapeutic contact lens technology; however there are some areas where additional information would be beneficial such as providing more details about how different strategies work or discussing potential risks associated

# Topics for further research:

* Risks associated with therapeutic contact lenses
* Clinical trials of therapeutic contact lenses
* Nanoparticle-filled contact lenses
* Biomimetic contact lenses
* Printed contact lenses
* Bioavailability of ocular medications delivered via contact lenses

# Report location:

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