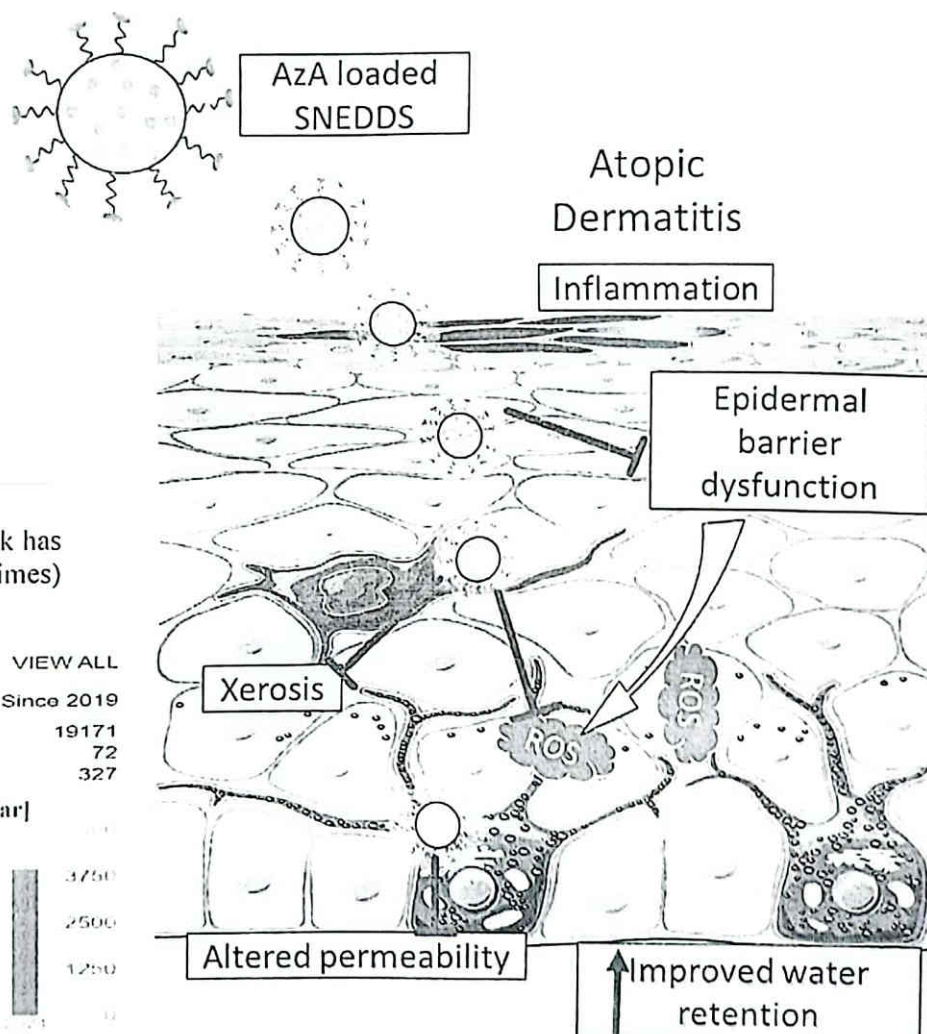


Citation (summary) on the outstanding research work:

N. Parveen, A. Sheikh, N. Molugulu, S. Annadurai, S. Wahab, P. Kesharwani, Drug permeation enhancement, efficacy, and safety assessment of azelaic acid loaded SNEDDS hydrogel to overcome the treatment barriers of atopic dermatitis, Environ. Res. 236 (Nov 2023) 116850. <https://doi.org/10.1016/J.ENVRES.2023.116850>. (Impact factor 7.7)

Summary: Atopic dermatitis is one of the most widespread chronic inflammatory skin conditions that can occur at any age, though the prevalence is highest in children. The purpose of the current study was to prepare and optimize the azelaic acid (AzA) loaded SNEDDS using Pseudo ternary phase diagram, which was subsequently incorporated into the Carbopol 940 hydrogel for the treatment of atopic dermatitis. The composition was evaluated for size, entrapment efficiency, in vitro, ex vivo, and in vivo studies. The polydispersity index of the optimized preparation was found to be less than 0.5, and the size of the distributed globules was found to be 151.20 ± 3.67 nm. The SNEDDS hydrogel was characterized for pH, viscosity, spreadability, and texture analysis. When compared to the marketed formulation, SNEDDS hydrogel was found to have a higher rate of permeation through the rat skin. In addition, a skin irritation test carried out on experimental animals showed that the SNEDDS formulation did not exhibit any erythematous symptoms after a 24-h exposure. In conclusion, the topical delivery of AzA through the skin using SNEDDS hydrogel could prove to be an effective approach for the treatment of atopic dermatitis.



Google Scholar

Total citations Cited by 11



***Note:** Please note that this work has already been cited heavily (11 times) within one year of publication.

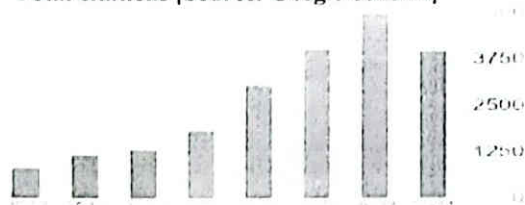
Cited by

VIEW ALL

Citations
h-index
i10-index

| All | Since 2019 |
|-------|------------|
| 22784 | 19171 |
| 79 | 72 |
| 329 | 327 |

Total citations [Source: Google Scholar]



Head of the Institute

