

Conclusion

Hydrogels have found an important role in formulation of advanced drug delivery systems, with transdermal drug delivery no exception. Transdermal drug delivery is an attractive alternative route to the conventional oral and parenteral preparations, due to the many benefits it offers. Considering transdermal drug delivery and hydrogels together, hydrogel-forming microneedles are one of the most promising innovations, with great potential to yield tangible benefits for both patients and industry in the coming years. Transdermal administration of a wide range of conventional small molecule drugs and biotherapeutics has been demonstrated via a hydrogel-forming microneedle platform, alongside applications in therapeutic drug monitoring, highlighting the versatility of the technology.

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