



Wish List



Transdermal Drug Delivery System (TDDS) Related Technology



Formulation Technology 1

<u>Technologies or devices enhancing transdermal absorption of drugs</u>

Modality: small molecular drugs

middle molecular drugs (peptides, nucleic acids)

large molecular drugs (proteins, antibodies)

Examples

- •Compounds or technologies improving drug absorption across biological membrane (stratum corneum, mucosa)
- •Prodrug technologies (improvement of transdermal absorption by induction of chemical modification)
- Technologies of compounds lowering melting point of drugs
- Novel technologies or devices for minimally invasive transdermal delivery using physical energy



TDDS Related Technology



Formulation Technology 2

Technologies reducing skin irritation

Examples

- Technologies or compounds reducing cytotoxic activity of a drug
- Compounds suppressing release of inflammatory mediators
- Technologies or compounds lowering drug induced skin pigmentation
- Prodrug technologies aimed to reduce of skin irritation



Dermatology Related Research



Research Topic

Dermatology related joint research

Example of research topics

- ·Cutaneous immune system
- ·Homeostasis or regulation of the skin barrier function
- ·Biological processes underlying drug induced skin irritation



Drugs for TDDS



Drug Candidates

Existing drugs or novel drug candidates suitable for transdermal delivery

Target diseases: Diseases which would benefit from transdermal delivery

Modality: small molecular drugs

middle molecular drugs (peptides, nucleic acids)

large molecular drugs (proteins, antibodies)

Examples

- 1 Alternative treatments to oral medications
 - Drugs intended for patient populations who have difficulties with oral medications (elderly, children, patients with difficulty swallowing)
 - Drugs with narrow therapeutic window
 - Drugs with limited oral bioavailability
 - Drugs with local gastrointestinal side effects
- 2 Alternative treatments to invasive routes of administration (i.e., injections)



Our commitments originate from each individual's determination to "start something good for ecology (eco)!"

Hisamitsu Pharmaceutical has designed the "HELLO! eco!" mark as a symbol of its environmental activities,

and products that have met the ecology standards
that our company has established will display
the "HELLO! eco!" mark sequentially.



