

BAB 5 SIMPULAN

5.1. Simpulan

- Pada pelepasan dan penetrasi, secara umum HPMC, propilen glikol dan interaksi antara keduanya memberikan efek yang positif meningkatkan penetrasi propranolol HCl.

HPMC memberikan efek negatif menurunkan pelepasan propranolol HCl, propilen glikol memberikan efek positif meningkatkan pelepasan propranolol HCl dan interaksi antara HPMC dan propilen glikol memberikan efek negatif menurunkan pelepasan propranolol HCl.

HPMC memberikan efek positif meningkatkan penetrasi propranolol HCl, propilen glikol memberikan efek positif meningkatkan penetrasi propranolol HCl dan interaksi antara HPMC dan propilen glikol memberikan efek positif meningkatkan penetrasi propranolol HCl.

- Berdasarkan kondisi uji optimal, komposisi yang optimum adalah HPMC 18,2% dan propilen glikol 40%. Secara teoritis, kondisi uji tersebut menghasilkan nilai pelepasan sebesar 7,48561 $\mu\text{g/ml}$ dan nilai penetrasi sebesar 0,0900414 $\mu\text{g/ml}$.

5.2. Alur Penelitian Selanjutnya

- Penelitian lanjutan perlu dilakukan terhadap kondisi uji optimum yang diformulasikan dalam bentuk *patch*. Pengujian dilakukan dengan durasi waktu yang lebih panjang sehingga diperoleh fluks tunak.
- Penelitian lanjutan terhadap sediaan *patch* kondisi uji optimum terpilih dilakukan secara *in vivo* untuk mengetahui parameter farmakokinetika.

- Penelitian lanjutan perlu diuji pengaruh *enhancer* terhadap penetrasi agar bahan obat yang terpenetrasi lebih besar dan mencapai kadar dalam darah lebih tinggi dibandingkan dengan hanya menggunakan *plasticizer*.
- Penelitian lanjutan perlu diuji dengan menggunakan konsentrasi HPMC yang lebih rendah sehingga pelepasan dan penetrasinya lebih baik



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