

BAB 5

SIMPULAN

5.1. Simpulan

Polimer Na-alginat dan Karbopol 940 dapat digunakan sebagai kombinasi matriks tablet *buccoadhesive* atenolol yang memiliki pengaruh terhadap indeks pengembangan, lama perekatan, pH permukaan, dan pelepasan secara *in-vitro*. Na-alginat seperti yang diketahui berdasarkan penelitian dapat meningkatkan indeks pengembangan, pH permukaan, dan pelepasan secara *in-vitro*, serta dapat menurunkan lama perekatan dari tablet *buccoadhesive* atenolol. Sedangkan Karbopol 940 berdasarkan penelitian diketahui dapat meningkatkan lama perekatan dan menurunkan indeks pengembangan, pH permukaan, dan pelepasan secara *in-vitro* dari tablet *buccoadhesive* atenolol. Untuk interaksi dari kedua matriks tersebut yaitu Na-alginat dan Karbopol 940 memberikan pengaruh dapat meningkatkan lama perekatan dan pH permukaan, serta dapat menurunkan indeks pengembangan dan pelepasan secara *in-vitro* dari tablet *buccoadhesive* atenolol.

Berdasarkan hasil penelitian didapatkan formula optimum dengan menggunakan *design expert*®, didapatkan konsentrasi optimum dari Na-alginat adalah 9% dan Karbopol 940 adalah 7% yang akan memberikan hasil respon indeks pengembangan 157,244 %, respon lama perekatan 6 jam, respon pH permukaan adalah 6,3, dan respon pelepasan *in-vitro* 599,583 $\mu\text{g}/\text{cm}^2/\text{jam}$ dengan demikian terbentuklah tablet *buccoadhesive* dengan respon-respon yang diinginkan.

5.2. Alur Penelitian Selanjutnya

Dilakukan penelitian lebih lanjut terhadap sediaan *buccoadhesive* atenolol dengan menggunakan penurunan konsentrasi Na-alginat dan Karbopol 940, dan hendaknya dilakukan juga penelitian pembuktian beberapa formula optimum yang terpilih. Selain itu pada penelitian selanjutnya diharapkan mampu melakukan penelitian sampai dengan uji penetrasi obat melalui mukosa.

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