

BAB 5

SIMPULAN

5.1. Simpulan

Konsentrasi PVP K-30 berpengaruh terhadap penurunan nilai *Carr's index*, penurunan nilai *Hausner ratio*, peningkatan kekerasan tablet, peningkatan waktu pembasahan, dan penurunan nilai absorpsi air. Konsentrasi *vivasol* berpengaruh secara signifikan terhadap penurunan waktu pembasahan, dan peningkatan nilai rasio absorpsi air. Konsentrasi manitol berpengaruh terhadap peningkatan waktu hancur, peningkatan waktu pembasahan tablet. Interaksi konsentrasi PVP K-30 dan konsentrasi *vivasol* berpengaruh secara signifikan penurunan waktu pembasahan. Interaksi konsentrasi PVP K-30 dan konsentrasi manitol berpengaruh peningkatan waktu pembasahan.

Hasil optimum bahan ko-proses yang diperoleh dengan program optimasi *Design Expert* yaitu formula dengan konsentrasi PVP K-30 10%, konsentrasi *vivasol* 2,015%, dan konsentrasi manitol -5,075% dengan prediksi untuk respon *Carr's index* 20%, *Hausner ratio* 1,24, kerapuhan 0,36%, kekerasan 3,39 Kp, waktu hancur 101 detik, waktu pembasahan 94,71 detik, dan rasio absorpsi air 29,17.

Sifat fisik tablet ODT domperidone yang dikempa dengan eksipien ko-proses yang optimum memenuhi syarat sebagai tablet ODT.

5.2. Alur Penelitian Selanjutnya

Dapat dilakukan penelitian lebih lanjut menggunakan bahan aktif selain domperidone untuk membuktikan kesahihan dari hasil optimasi yang didapat.

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