INTISARI

Obat yang beredar di masyarakat dapat dibagi menjadi obat generik dan obat dagang. Perbandingan kedua produk obat tersebut dapat ditinjau dari penelitian farmakokinetika. Penelitian ini dimaksudkan untuk membandingkan bioavailabilitas obat dagang terhadap obat generik pada kelinci putih jantan.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan eksperimental silang. Konsentrasi parasetamol dalam plasma kelinci ditentukan dengan metode kolorimetri berdasarkan metode Chafetz *et al.* (1971) yang telah dimodifikasi. Data kemudian diubah menjadi parameter-parameter bioavailabilitas dan dianalisis dengan ANOVA mengggunakan taraf kepercayaan 90%.

Hasil penelitian yaitu t_{maks} (menit) untuk tablet parasetamol generik = 24,233 ± 1,193; tablet Biogesic® = 28,000 ± 4,371; tablet Pamol® = 58,467 ± 1,976. C_{maks} (µg /ml) untuk tablet parasetamol generik = 193,927 ± 38,345; tablet Biogesic® = 162,870 ± 34,831; tablet Pamol® = 156,647 ± 42,072. $AUC_{(0-\infty)}$ (µg.menit/ml) untuk tablet parasetamol generik = 22896,410 ± 3731,193; tablet Biogesic® = 22198,470 ± 698,045; tablet Pamol® = 25525,490 ± 7181,70. Hasil ini menunjukkan ada perbedaan tidak bermakna nilai $AUC_{(0-\infty)}$ dan nilai C_{maks} antara tablet Biogesic® dan tablet Pamol® dengan tablet parasetamol generik. Namun, terdapat perbedaan bermakna nilai t_{maks} tablet Pamol® terhadap tablet parasetamol generik. Jadi, dapat disimpulkan tablet Biogesic® bioekivalen dengan tablet generik, sedangkan tablet Pamol® bioinekivalen dengan tablet generik.

Kata kunci utama : obat generik, obat dagang, parasetamol, bioavailabilitas, bioekivalen.

ABSTRACT

Drugs can be divided into two groups, are generic drugs and brand-name drugs. The comparison of them could be found out by pharmacokinetic research. This research was aimed to compare the bioavailability of brand-name drugs to generic drugs on male white rabbits.

The research was pure cross experimental research. Paracetamol concentrations in rabbits' plasma were determined by a colorimetric method based on modified-Chafetz et al. method (1971). The data were presented as bioavailability parameters, and were analyzed using ANOVA with 90% confidence interval.

The results showed that t_{max} (min) for generic paracetamol tablets = 24,233 ± 1,193; Biogesic® tablets = 28,000 ± 4,371; Pamol® tablets = 58,467 ± 1,976. C_{max} (µg /ml) for generic paracetamol tablets = 193,927 ± 38,345; Biogesic® tablets = 162,870 ± 34,831; Pamol® tablets = 156,647 ± 42,072. $AUC_{(0-\infty)}$ (µg.min/ml) for generic paracetamol tablets = 22896,410 ± 3731,193; Biogesic® tablets = 22198,470 ± 698,045; Pamol® tablets = 25525,490 ± 7181,70. There were insignificant differences of $AUC_{(0-\infty)}$ and C_{maks} between Biogesic® and generic tablets, and between Pamol® and generic tablets. However, significant difference of t_{maks} was found out between Pamol® and generic tablets. Therefore, we conclude that Biogesic® and generic tablets were bioequivalent, but Pamol® and generic tablets were bioinequivalent.

Keywords : generic drugs, brand-name drugs, paracetamol, bioavailability, bioequivalent.