

S15-2 Improvement of intestinal and pulmonary absorption of drugs for the treatment of diabetes and osteoporosis using dendrimers

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In general, peptide and protein drugs including insulin and calcitonin were administered by injection. However, this route usually causes severe side effects and a non-invasive alternative route is desired for the administration route of these drugs. On the other hand, PAMAM dendrimers have been used as a new important material in the medical and other fields. In this study, therefore, we examined the effect of PAMAM dendrimers on the intestinal and pulmonary absorption of calcitonin and insulin in rats. We also report the intestinal absorption characteristics of alendronate and its improvement by some additives.