Supplemental Table 1. Extrapolation to clinical dose using the MRI-measured NP volume ratio

| Species | MRI-measured mean NP volume (mm3) a | NP volume ratio | Dose | |
| --- | --- | --- | --- | --- |
| Condoliase | Chymopapain b |
| Cynomolgus monkey | 127.2 | 1/61.7 | 0.25, 10 U/disc | 5.7 mg/disc |
| Human | 7852.2 | 1 | 15, 617 U/disc c  (12, 494-fold clinical dose) d | 352 mg/disc c  (12-fold clinical dose) d |

MRI, magnetic resonance image; NP, nucleus pulposus.

a Healthy adult volunteers (6 men and 3 women ranging ≥20 to <50 years old) and cynomolgus monkeys (1 male and 2 females) were investigated to calculate the NP volume at the L4/L5 disc on MRI. MRI for healthy volunteers was approved by the Institutional Review Boards of Seikagaku Corporation and Nagoya Central Hospital, and all volunteers provided written informed consent.

b Chymopapain (Sigma-Aldrich Corp., Tokyo, Japan, approximally 102 pKat U/mg) were used.

c Equivalent human dose calculated by dividing the dose in cynomolgus monkey by the NP volume ratio of cynomolgus monkey.

d Ratio of the dose to the clinical dose calculated by dividing the equivalent human dose by the clinical dose of condoliase (1.25 U/disc) or chymopapain (3000 pKat U/disc).