Summary of Results

Safety

Administration of a total single dose of 18mg of MOS-118 was generally well tolerated in all formulations tested; treatment emergent adverse events (TEAEs) were non-serious, predominantly mild, and consistent with expected local nasal effects. No deaths, serious adverse events (SAEs) or other significant adverse events (AEs) occurred, and no clinically significant abnormalities attributable to MOS-118 were identified in laboratory tests, vital signs, physical examinations or electrocardiograms.

Scintigraphy

Each of the four MOS-118 formulations achieved substantial deposition in the posterior/throat region of the nasal cavity, confirming successful delivery of MOS-118 to the nasopharynx (the deepest part of the nasal cavity). Observed differences between formulations in deposition patterns were small. The time radiolabel remained in the posterior/pharynx region was comparable between formulations, with the duration of radiolabel retention typically in the region of 30-60 minutes after dosing.

Pharmacokinetics

Absorption of MOS-118 following intranasal administration was observed across all formulations, with it taking on average 1 hour for blood levels to reach their maximum concentration. Overall, blood levels and the drug concentration profile were similar across all four formulations.

Conclusion

The four intranasal MOS-118 formulations evaluated in this study demonstrated successful delivery to the posterior nasal cavity/nasopharynx, broadly comparable levels in the blood, and a favourable safety and tolerability profile in healthy adult participants. The study fulfilled its objectives, and the findings support further clinical development of MOS-118 and future formulation-selection activities.