Vutrisiran: Blood-Brain Barrier

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SUMMARY

- The PK and ADME properties of vutrisiran were evaluated to support pivotal toxicology studies and clinical development of vutrisiran.[1]
- Vutrisiran did not appear to cross the blood-brain barrier in rats administered radiolabeled medication.[1]

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PRE-CLINICAL DATA

The PK and ADME properties of vutrisiran were evaluated in various in vitro and in vivo studies to support pivotal toxicology studies and clinical development of vutrisiran.[1]

Vutrisiran Quantitative Whole-body Autoradiography in Rats

Quantitative tissue distribution of total drug-related radioactivity was investigated in male rats following administration of a single 3 mg/kg SC dose of [^{3}H]-vutrisiran. [^{3}H]-Vutrisiran was radiolabeled on the tenth nucleotide (adenosine) from the 3' end of the antisense strand. [^{3}H]-Vutrisiran-derived radioactivity was distributed to limited tissues over time. Vutrisiran did not appear to cross the blood-brain barrier as there was no radioactivity detected in the brain or any part of the central nervous system.[1]

ABBREVIATIONS

ADME = absorption, distribution, metabolism, and excretion; PK = pharmacokinetics; SC = subcutaneous

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REFERENCES

1. Alnylam Pharmaceuticals. Data on file. MED-US-TTRSC02-2200053.