Amber with Guidance (Amber-G) = To be recommended or initiated by a specialist with follow up prescribing and monitoring by primary care clinicians.*
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NHS Barnsley Hospital NHS Foundation Trust | NHS South West Yorkshire Partnership NHS Foundation Trust | NHS Barnsley Clinical Commissioning Group

DESMOSPRAY (Desmopressin Nasal Spray) for diabetes insipidus

The details of side-effects, cautions, contraindications and interactions are not a complete list and the current BNF (https://www.medicinescomplete.com/#/content/bnf/_373250532?hspl=desmopressin) and the SPC (Desmopressin Spray 10 micrograms/dose Nasal Spray solution - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk) remain authoritative.

Background Information	• A specialist should initiate Desmospray with written information to primary care to communicate the initiation, stating the indication and dosage.
BNF therapeutic class	• Pituitary and Hypothalamic Hormones and Analogues > Vasopressin and Analogues
Indication	• Desmospray is licensed for the treatment of Diabetes Insipidus (it is also licenced for other indications though these are not covered in this shared care guideline).
Dosage and administration	• Dosage is individual but clinical experience has shown that the average maintenance dose in adults and children is one or two sprays (10 to 20 micrograms) once or twice daily. • (10-40 micrograms daily in 1-2 divided doses) • If a dose of two sprays is required, this should be as one spray into each nostril.
Cautions and Contraindications	• **Cautions:** DESMOSPRAY should only be used in patients where orally administered formulations are not suitable. • It is recommended to: - Start at the lowest dose - To ensure compliance with fluid restrictions instructions - To increase dosage progressively, with caution • Caution should be taken in patients who have reduced renal function and/or cardiovascular disease or cystic fibrosis. • In the event of signs and symptoms of water retention and/or hyponatremia (headache, nausea/vomiting, weight gain and in severe cases convulsions) treatment should be interrupted until the patient has fully recovered. When restarting treatment, strict fluid restriction should be enforced. • Elderly patients and patients with low serum sodium levels may have an increased risk of hyponatremia. • **Contra-indications:** - Syndrome of inappropriate ADS secretion (SIADH) - Known hyponatremia - A history of known or suspected cardiac insufficiency and other conditions requiring treatment with diuretics - Moderate and severe renal insufficiency (creatine clearance below 50ml.min) - When prescribing DESMOSPRAY, the diagnosis of habitual or psychogenic polydipsia (resulting in a urine production exceeding 40mg/kg/24 hours) and alcohol abuse should be excluded.

Pregnancy and breast feeding	• Caution should be exercised when prescribing to pregnant women – blood pressure monitoring is recommended due to the increased risk or pre-eclampsia. There is a small oxytocic effect in the third trimester. • Breast feeding – the amount of desmopressin that may be transferred to the child are considerably less than the amount required to influence diuresis.
Adverse Drug Reactions	• Side-effects include headache, stomach pain, nausea, nasal congestion, rhinitis and epistaxis. Isolated cases of allergic skin reactions and more severe general allergic reactions have been reported. • Very rare cases of emotional disorders including aggression in children have been reported. • Treatment without concomitant reduction of fluid intake may lead to water retention/hyponatremia with or without accompanying warning signs and symptoms (headache, nausea/vomiting, weight gain, decreased serum sodium and in severe cases, convulsions). • Any serious adverse reactions should be reported to the MHRA via the Yellow Card scheme: www.mhra.gov.uk/yellowcard
Monitoring	• Elderly patients are at an increased risk of hyponatremia and renal impairment – manufacturer advises measure baseline serum sodium concentration, then monitor regularly during treatment; discontinue treatment or reduce the dose if levels fall below the normal range. Review treatment if no therapeutic benefit after 3 months.
Interactions	Substances which are known to induce SIADH e.g. Tricyclic antidepressants, selective serotonin re-uptake inhibitors, chlorpromazine and carbamazepine may cause an additive antidiuretic effect leading to an increased risk of water retention and/or hyponatremia. NSAIDs may induce water retention and/or hyponatremia.

Contact names and details

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References

- British National Formulary (2021) Desmopressin. https://www.medicinescomplete.com/#/content/bnf/_373250532?hspl=desmopressin Accessed 13th December 2021.
- Summary of Product Characteristics (2019) Desmopressin Spray 10 micrograms/dose Nasal Spray solution - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk) Accessed 13th December 2021.

https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf

Development Process

This guidance has been produced by Lauren Clarke – (Senior Pharmacist – Interface) following an AMBER-G classification status of Desmopressin by the Barnsley Area Prescribing Committee. This guideline was ratified by the Area Prescribing Committee on 9th February 2022.