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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Neurokinin1 receptor antagonist (route)** | **Effect on “nausea- like behaviour” as defined by authors** | **Behaviour(s) measured** | | **Additional details of stimulus** | **Comment** | | **Reference** | |
| **Cisplatin (low dose)** | | | | | | | | | |
| Dog | Maropitant (i.v.) | Onset of signs of nausea delayed and VAS scores reduced at three time points between 3.7 and 4.5h post cisplatin but AUC over 7h not significantly reduced. | Composite score of lip licking, lethargy, restlessness or turning /circling signalling that vomiting is imminent. |  | | | Also showed that vasopressin secretion was reduced by maropitant. | | Kenward et al., 2017 |
| **Doxorubicin (5 days)** | | | | | | | | | |
| Dog | Maropitant (s.c.) | No significant effect | Appetite, protracted salivation, lip smacking | |  |  | | Rau et al., 2010 | |
| **Opiate receptor agonists** | | | | | | | | | |
| Dog | Maropitant (s.c.) | No significant difference in signs of nausea but reduction in number with nausea | Ptyalism, lip licking, increased swallowing | | Morphine(s.c.) | Salivation incidence unaffected; metaclopramide also no effect on “nausea -like behaviours” | | Lorenzutti et al., 2016, 2017 | |
| Dog | Maropitant(s.c.) | No significant effect but reduction in incidence | Excessive lip licking and swallowing, hunched posture | | Hydromorphone (i.m.) | No effect on increased panting; maropitant increased ptyalism- salivation not included in nausea score | | Claude et al., 2014 | |
| Dog | Maropitant (s.c.) | Significantly decreased with 60 min pre-dose | Salivation, lip-licking | | Hydromoprphone (i.m.) | Effect on “N” only seen with 60min pre-dose | | Hay Kraus 2014 | |
| Cat | Maropitant (s.c.) | No significant effect on sialorrhea but decrease in lip licking | Sialorrhea, lip licking | | Dexmedetomidine +morphine (i.m.) |  | | Martin-Flores et al., 2016 | |
| **Tranexamic acid** | | | | | | | | | |
| Dog | Maropitant (i.v.) | No significant effect on severity | Visual analogue scale | | Fibrinolytic |  | | Kantyka et al., 2020 | |
| **Brimonidine** | | | | | | | | | |
| Cat | Maropitant(p.o.) | No significant effect | Sialorrhea, lip licking | | α2 agonist sedative given as eye drops |  | | Kanda et al., 2020 | |
| **Motion** | | | | | | | | | |
| Cat | CP-99,994 (s.c.) | No significant effect | Suri et al., 1979 symptom scale | | Ferris Wheel |  | | Lucot et al., 1997 | |
| **Lycorine (s.c.)** | | | | | | | | | |
| Dog | Maropitant (s.c.) | No significant effect | Increased salivation, lip licking, frequent/exaggerated swallowing motions, lethargy, restlessness and /or panting | | Alkaloid from daffodils |  | | Kretzing et al., 2011 | |

**Supplementary Table 1.** A summary of the results of preclinical studies reporting the effects of neurokinin1 receptor antagonists on the “nausea –like behaviours” in response to a range of emetic stimuli in species capable of vomiting.

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