

Recommendations for the Ethical Committee:

Evaluating vehicles for administration of experimental agents to laboratory animals

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- **The vehicle (solvent or suspending agent) of each solution given to animals, regardless of the route of administration, MUST be listed in the ethical application.**
- Where possible, compounds should be administered in an aqueous solution (sterile water for injections, 0.9% saline or 5% dextrose/saline) that is as close to physiological pH as possible.
- The following recommendations apply to systemic administration:
 - **If organic solvents** (like dimethylsulphoxide, DMSO) are necessary, these should not exceed **5 ml/kg or 10%** of the injected volume.
 - **Detergents** (such as Tween), solubilisers or emulsifiers should not exceed 20% of the injected volume.
 - **Cyclodextrins** should not exceed **2 ml/kg or 45%** of the injected volume. **Were used at >20% of the injected volume, animals need to be rehydrated within 2–4 h.**
 - Suspensions given IV have to be free of particulates.
- **Different recommendations apply to topical administration, including intranasal, ocular and ICV.**
- **For any question, you can contact me at sarae@ekmd.huji.ac.il or 050-456-3445.**

References

1. Turner PV, Pekow C, Vasbinder MA, Brabb T. Administration of substances to laboratory animals: equipment considerations, vehicle selection, and solute preparation. J Am Assoc Lab Anim Sci. 2011;50(5):614-27.
2. Workman P, Aboagye EO, Balkwill F, Balmain A, Bruder G, Chaplin DJ, Double JA, Everitt J, Farningham DA, Glennie MJ, Kelland LR, Robinson V, Stratford IJ, Tozer GM, Watson S, Wedge SR, Eccles SA; Committee of the National Cancer Research Institute. Guidelines for the welfare and use of animals in cancer research. Br J Cancer. 2010;102(11):1555-77.