Table 1
Checklist for reporting experimental animal models of multiple sclerosis and related disorders.

Item		Element	C/R	Page
Title	1	Provide an accurate and concise description of the contents	C	
Abstract	2	Provide an accurate summary, research objectives, including the animal species and strain, key methods, findings, and conclusions	C	
Introduction				
Background	3	a. Include sufficient scientific background (with relevant references) to understand the motivation and context for the study	C	
		b. Explain the experimental approach and rationale	C	
		c. Give details of the animal model, how this addresses the scientific objectives and the relevance to multiple sclerosis	C	
Hypothesis and objectives	4	Clearly describe the specific hypothesis and the objectives used to test the hypothesis	C	
Material and methods				
Ethical statement	5	a. Give ethical review permissions, relevant licences, and national or institutional guidelines for the care and use of animals	C	
		b. Justify the use of animals	R	
Study design	6	a. For each experiment give the number of experimental and control groups	C	
		b. Discuss the steps taken to randomise groups and assessment i.e. blinding	C	
		c. Give the experimental unit (e.g. a single animal, group or cage of animals)	R	
		For complex study provide a time-line diagram or flow chart	R	
Experimental procedures	7	For each experiment and group, provide details of procedures: NB. Studies reporting adjuvants administration into the feet or foot pads will not be accepted	C	
		a. How (e.g. drug formulation, dose, site and route of administration, anaesthesia and analgesia used (including monitoring), surgical procedure, method of euthanasia)		
		b. Details of any specialist equipment and supplier	C	
		c. When (e.g. time of day)	R	
		d. Where (e.g. home cage, laboratory, water maze)	R	
		e. Why (e.g. rationale for route of administration, drug dose)	R	
Experimental animals	8	a. Provide species, strain, sex as well as the age and weight ranges. Do not use 'murine'; use rat or mouse	C	
		b. Provide source of animals, international strain nomenclature, genetic modification status (e.g. knock-out or transgenic), genotype, health/immune status	C	
		c. For transgenic mice, give the background of the wild type mice to alleviate difference due to breeding	C	
Housing and husbandry	9	a. Type of facility e.g. specific pathogen free; cage or housing; bedding material; number of cage companions	R	
		b. Husbandry conditions e.g. breeding programme, light/dark cycle, temperature, chow, access to food and water, environmental enrichment	R	
		c. Welfare-related assessments and interventions prior to, during, or after the experiment	R	
Sample size	10	a. Number of animals in each study and experimental group	C	
		b. Explain how the number of animals was arrived at i.e. power analysis	R	
		c. Give the number of replications of each experiment	C	
Allocation to groups	11	a. Give full details of randomisation and matching	C	
		b. Describe the order in which the animals in the different experimental groups were treated and assessed	C	
Outcomes	12	Define outcomes e.g. clinical, pathology, immunology, behavioural changes	C	
Statistics	13	a. Provide details of the statistical methods used for each analysis. Clinical scores for EAE are non-linear and require non-parametric analysis either Wilcoxon rank sum test/Mann Whitney *U* statistics should be used and Kruskal–Wallis test when comparing more than two groups	C	
		b. Specify the unit of analysis for each dataset (e.g. single animal, single neuron)	C	
		c. Describe methods used to assess whether the data met the assumptions of the statistical approach	C	
Results				
Baseline data	14	Give health status of animals e.g. weight, microbiological status, prior to treatment	R	
Numbers analysed	15	a. Report absolute number of animals in each group and analysis e.g. 10/20, not 50%	C	
		b. Explain why any animals or data were not included in the analysis	R	
		c. Explain the need to keep animals in the study for longer than required to obtain meaningful data	R	
Outcomes and estimation	16	a. Report results for each analysis with the measure of precision (e.g. standard error or confidence interval)	C	
		b. Use statistics as in 13 and do not use area under the curve to compare groups	R	
Adverse events	17	a. Give details of all important adverse events in each experimental group	R	
		b. Describe any modifications to the experimental protocols made to reduce adverse events	R	
Discussion				
Interpretation and scientific implications	18	a. Interpret the results, referring to the hypothesis and objectives and relevant published studies	C	
		b. Comment on the study limitations including any potential sources of bias, limitations of the animal model, and the imprecision of the results	R	
		c. Describe any implications of your experimental methods or findings for the replacement, refinement or reduction (the 3Rs) of the use of animals in research	R	
Translation	19	Comment on how the findings of this study are relevant and able to be translated to multiple sclerosis or other related disorders	C	
Funding	20	List all funding sources (including grant number) and the role of the funder(s) in the study	C	
Conflict of interest	21	Disclose conflicts of interests	C	

Adapted from Kilkenny et al. (2010). C=compulsory; R=recommended.