**Supplementary Table 2:** Evaluation of the risk of bias for the included articles (Yes; low risk of bias, No; high risk of bias, Unclear; Unclear risk of bias)

|  |  |
| --- | --- |
|  | SYRCLES items with signalling questions |
|  | 1. Sequence generation (selection bias) | 2. Baseline characteristics (selection bias) | 3. Allocation concealment (selection bias) | 4. Random housing (performance bias) | 5. Blinding (performance bias) | 6. Random outcome assessment (detection bias) | 7. Blinding (detection bias) | 8. Incomplete outcome data (attrition bias) | 9. Selective outcome reporting (reporting bias) | 10. Other sources of bias |
|  | Was the allocation sequenceadequately generated andapplied? | Were the groups similar atbaseline, or were they adjustedfor confounders in the analysis? | Was the allocation adequatelyconcealed? | Were the animals randomlyhoused during the experiment? | Were the caregivers and/orinvestigators blinded fromknowledge which interventioneach animal received during the experiment? | Were animals selected at randomfor outcome assessment? | Was the outcome assessorblinded? | Were incomplete outcomedata adequately addressed? | Are reports of the study freeof selective outcomereporting? | Was the study apparently free of other problems that could result in a high risk of bias? |
| ([39](#_ENREF_39)) | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([63](#_ENREF_63)) | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([66](#_ENREF_66)) | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([40](#_ENREF_40)) | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Unclear | Unclear | Unclear |
| ([68](#_ENREF_68)) | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([67](#_ENREF_67))  | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([36](#_ENREF_36)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([69](#_ENREF_69)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Unclear | Unclear | Unclear |
| ([49](#_ENREF_49)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([43](#_ENREF_43)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([38](#_ENREF_38)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([61](#_ENREF_61)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([65](#_ENREF_65)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([58](#_ENREF_58)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([55](#_ENREF_55))  | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Unclear | Unclear | Unclear |
| ([51](#_ENREF_51))  | No | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([34](#_ENREF_34)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([59](#_ENREF_59)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([57](#_ENREF_57)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([35](#_ENREF_35)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([62](#_ENREF_62)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([60](#_ENREF_60)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([50](#_ENREF_50)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([70](#_ENREF_70)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([37](#_ENREF_37)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([45](#_ENREF_45)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([42](#_ENREF_42)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([54](#_ENREF_54))  | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([31](#_ENREF_31)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([56](#_ENREF_56)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([44](#_ENREF_44)) | No | No | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([41](#_ENREF_41)) | No | Yes | Unclear | Yes | Yes | Unclear | Yes | Yes | Unclear | Unclear |
| ([32](#_ENREF_32)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([46](#_ENREF_46))  | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([47](#_ENREF_47)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([52](#_ENREF_52)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | No | Unclear | Unclear |
| ([64](#_ENREF_64)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([48](#_ENREF_48)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([53](#_ENREF_53)) | No | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |