MPHL-232
DEPARTMENT OF PHARMACOLOGY
SLEEPING TIME EXPERIMENT

(A) **Drugs:**

1. Thiopentone 30 mg/kg, i.p.
2. Cimetidine 50 mg/kg, i.p.
3. Phenobarbitone 40 mg/kg, i.p.

(B) Animals → Rats – weight 150-180 gm

(C) **Procedure:**

1. The animals will be divided into three groups (A,B,C) with 4 rats in each group.
   Pretreat animals in group (B) with daily injections of cimetidine (50 mg/kg, i.p.) for 4 days.
2. Pretreat animals in group (C) with daily injections of phenobarbitone (40 mg/kg, i.p.) daily for 4 days.
3. Inject thiopentone (30 mg/kg, i.p)* in all groups (i.e., A,B,C) on the day of experiment. Leave the animals flat on the bench.
4. Start the stop watch and record the sleeping time of each rat in all groups.
5. When animals start moving their limbs or try to turn over. This marks the end point of sleep.
6. Note the difference in sleeping time (mins.) between the three groups.
7. Comment on the difference in sleeping time between the groups.

* Animals were pretreated with daily injections of cimetidine (50 mg/kg, i.p.) or phenobarbitone (40 mg/kg, i.p.) for 4 days before this injection of thiopentone. This is needed to inhibit or stimulate liver microsomal enzymes, respectively.
## RECORD OF SLEEPING TIME IN RATS

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Group “A” Thiorphan alone (30 mg/kg, i.p.)</th>
<th>Group “B” Cimetidine, 50 mg/kg, i.p. + Thiorphan, 30 mg/kg, i.p.</th>
<th>Group “C” Phenobarbitone, 40 mg/kg, i.p. + Thiorphan, 30 mg/kg, i.p.</th>
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<tbody>
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<td>SLEEPING TIME (min)</td>
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**Comments:**
1. _______________________________________________________________________
2. _______________________________________________________________________
3. _______________________________________________________________________
4. _______________________________________________________________________

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**RECORD OF SLEEPING TIME IN RATS**