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Abnormal Data on 10.1515/chem-2024-0084

Abnormal data was published on the article [1], with title "Fabrication of β-cyclodextrin-based microgels for enhancing solubility of Terbinafine: An in-vitro and in-vivo toxicological evaluation", authored by Saira Akhtar, Kashif Barkat EMAIL, Nariman Shahid, Irfan Anjum, Syed Faisal Badshah, Maryam Shabbir, Samir Ibenmoussa, Yousef A. Bin Jardan, Mohammed Bourhia, Ahmad Mohammad Salamatullah and Musaab Dauelbait.

(1) Too small standard deviations on Table 3

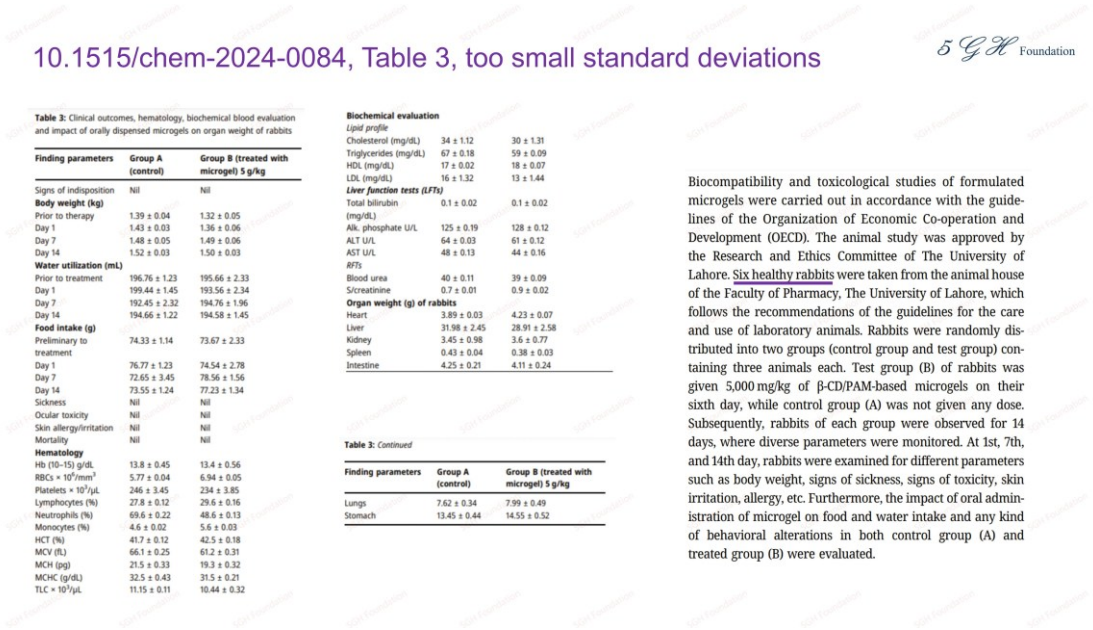
10.1515/chem-2024-0084, Table 3, too small standard deviations

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Table 3: Clinical outcomes, hematology, biochemical blood evaluation and impact of orally dispensed microgels on organ weight of rabbits

Finding parameters	Group A (control)	Group B (treated with microgel) 5 g/kg
Signs of indisposition	Nil	Nil
Body weight (kg)		
Prior to therapy	1.39 ± 0.04	1.32 ± 0.05
Day 1	1.43 ± 0.03	1.36 ± 0.06
Day 7	1.48 ± 0.05	1.49 ± 0.06
Day 14	1.52 ± 0.03	1.50 ± 0.03
Water utilization (mL)		
Prior to treatment	196.76 ± 1.23	195.66 ± 2.33
Day 1	199.44 ± 1.45	193.56 ± 2.34
Day 7	192.45 ± 2.32	194.76 ± 1.96
Day 14	194.66 ± 1.22	194.58 ± 1.45
Food intake (g)		
Preliminary to treatment	74.33 ± 1.14	73.67 ± 2.33
Day 1	76.77 ± 1.23	74.54 ± 2.78
Day 7	72.65 ± 3.45	78.56 ± 1.56
Day 14	73.55 ± 1.24	77.23 ± 1.34
Sickness	Nil	Nil
Ocular toxicity	Nil	Nil
Skin allergy/irritation	Nil	Nil
Mortality	Nil	Nil
Hematology		
Hb (10–15) g/dL	13.8 ± 0.45	13.4 ± 0.56
RBCs × 10^6/mm^3	5.77 ± 0.04	6.94 ± 0.05
Platelets × 10^3/μL	246 ± 3.45	234 ± 3.85
Lymphocytes (%)	27.8 ± 0.12	29.6 ± 0.16
Neutrophils (%)	69.6 ± 0.22	48.6 ± 0.13
Monocytes (%)	4.6 ± 0.02	5.6 ± 0.03
HCT (%)	41.7 ± 0.12	42.5 ± 0.18
MCV (fL)	66.1 ± 0.25	61.2 ± 0.31
MCH (pg)	21.5 ± 0.33	19.3 ± 0.32
MCHC (g/dL)	32.5 ± 0.43	31.5 ± 0.21
TLC × 10^3/μL	11.15 ± 0.11	10.44 ± 0.32
Biochemical evaluation		
Lipid profile		
Cholesterol (mg/dL)	34 ± 1.12	30 ± 1.31
Triglycerides (mg/dL)	67 ± 0.18	59 ± 0.09
HDL (mg/dL)	17 ± 0.02	18 ± 0.07
LDL (mg/dL)	16 ± 1.32	13 ± 1.44
Liver function tests (LFTs)		
Total bilirubin (mg/dL)	0.1 ± 0.02	0.1 ± 0.02
Alk. phosphate U/L	125 ± 0.19	128 ± 0.12
ALT U/L	64 ± 0.03	61 ± 0.12
AST U/L	48 ± 0.13	44 ± 0.16
RFTs		
Blood urea	40 ± 0.11	39 ± 0.09
S/creatinine	0.7 ± 0.01	0.9 ± 0.02
Organ weight (g) of rabbits		
Heart	3.89 ± 0.03	4.23 ± 0.07
Liver	31.98 ± 2.45	28.91 ± 2.58
Kidney	3.45 ± 0.98	3.6 ± 0.77
Spleen	0.43 ± 0.04	0.38 ± 0.03
Intestine	4.25 ± 0.21	4.11 ± 0.24

Table 3: *Continued*

Finding parameters	Group A (control)	Group B (treated with microgel) 5 g/kg
Lungs	7.62 ± 0.34	7.99 ± 0.49
Stomach	13.45 ± 0.44	14.55 ± 0.52

Biocompatibility and toxicological studies of formulated microgels were carried out in accordance with the guidelines of the Organization of Economic Co-operation and Development (OECD). The animal study was approved by the Research and Ethics Committee of The University of Lahore. Six healthy rabbits were taken from the animal house of the Faculty of Pharmacy, The University of Lahore, which follows the recommendations of the guidelines for the care and use of laboratory animals. Rabbits were randomly distributed into two groups (control group and test group) containing three animals each. Test group (B) of rabbits was given 5,000 mg/kg of β-CD/PAM-based microgels on their sixth day, while control group (A) was not given any dose. Subsequently, rabbits of each group were observed for 14 days, where diverse parameters were monitored. At 1st, 7th, and 14th day, rabbits were examined for different parameters such as body weight, signs of sickness, signs of toxicity, skin irritation, allergy, etc. Furthermore, the impact of oral administration of microgel on food and water intake and any kind of behavioral alterations in both control group (A) and treated group (B) were evaluated.

Table 3 presents the clinical outcomes for 6 rabbits (3 in treatment group, and 3 in control group), the standard deviations seem to be too small (about 1% of the mean values).

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