Study No. K920410

Kanglaite Injection
Blood Vessel Irritation Test in Beagle Dogs

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PERSONAL INVOLVED IN THIS STUDY

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Summary
Kanglaite Injection (KLT) is a white emulsion, which is being developed by Zhejiang Kanglaite Pharmaceutical Co., Ltd according to traditional Chinese medicine theory. KLT was prepared by extracting the anticancer component from Chinese Herb Coicis Semen Yokuinin with modern technology.

The results of pharmacological study indicated that KLT showed significant antitumor effects against some animal transplantable tumors and human tumors xenograft.

Intravenous repeated dose toxicity study of KLT was conducted in Beagle dogs for 45 consecutive days at dose level of 0 (vehicle control and saline control), 7.5, 15 or 30 ml kg⁻¹ day⁻¹. The results showed that there was no toxic reaction related to KLT in organs of dogs. The local femoral veins of the injection site also were examined by micropathologic observation. The results showed that there was no observed vessel irritation of KLT in Beagle dogs.

1. Purpose
The purpose of this study was to determine the blood vessel irritation of KLT in Beagle dogs.

2. Test Materials
KLT, a white emulsion (Lot No 920605) and vehicle control material (Lot No 920607), were received from Traditional Chinese Medicine Hospital of Zhejiang Province, on 20 June 1992.

3. Animals
3.1 Beagle dogs were obtained from Shanghai Friendship Farm Co., Ltd. Animals were 6 to 10 months old and weighed from 7.5 to 12 kg for males and 6.5 to 10 kg for females at the start of the study.

3.2 Housing
Animals were housed in barrier maintained animal rooms at a temperature normally of 26℃±2℃ and a relative humidity of 60-70%. A 12 h light/dark cycle in animal rooms was controlled by a time switch. Light hours being 0700-1900h. Animals were allocated to treatment groups and allowed to acclimatize to their new environment over a period of 2 weeks prior to treatment.
3.3 Diet and Water
During the course of the study, the animals were given tap water ad libitum, 300g of a commercially available pelleted diet for male and 250g for female, 100g of beef for male or female once daily.

3.4 Animal Room Sanitation
Each day on completion of all work, floors were swept and then washed with 2% Lysol.

4. Methods
KLT was intravenously administered daily for 45 consecutive days, at dose level 0 (vehicle control, saline control) 7.5, 15 or 30ml.kg\(^{-1}\).day\(^{-1}\).

Beagle dogs were divided into 5 groups (half males and half females in each group). The dosage and animal numbers were as follows:

<table>
<thead>
<tr>
<th>Dose group</th>
<th>Treatment (ml.kg(^{-1}).day(^{-1}))</th>
<th>Animal numbers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1, Low</td>
<td>7.5</td>
<td>1 Males, 1 Females</td>
<td></td>
</tr>
<tr>
<td>2, Intermediate</td>
<td>15.0</td>
<td>1 Males, 1 Females</td>
<td></td>
</tr>
<tr>
<td>3, High</td>
<td>30.0</td>
<td>1 Males, 1 Females</td>
<td></td>
</tr>
<tr>
<td>4, Vehicle Control</td>
<td>30.0</td>
<td>1 Males, 1 Females</td>
<td></td>
</tr>
<tr>
<td>5, Saline Control</td>
<td>30.0</td>
<td>1 Males, 1 Females</td>
<td></td>
</tr>
</tbody>
</table>

KLT was administered daily by intravenous route at an approximate injection rate of 2-3ml.min\(^{-1}\) for 45 consecutive days. Control animals received vehicle formulation or saline.

On completion of dosing, ten dogs were killed and necropsied. The local femoral veins of injection site were taken, fixed with 10% formalin, dehydrated, prepared section, H-E stained for micropathologic observation.

5. Results
The results of micropathologic observation showed that structure of femoral veins of all dogs was normal and the degeneration and necrosis were not be observed.

There was no observed blood vessel irritation of KLT in Beagle dogs.