

NOTICE TO CUSTOMERS OF JAX[®] MICE

Shipment of JAX[®] Mice Strain 129P3/J (Stock Number: 000690) has been Temporarily Suspended

1. Initial Observation of Possible Disease

As part of our routine screening for ill animals, three adult mice from the distribution colony for 129P3/J mice (Stock Number: 000690) were found to have mild diarrhea and perianal feces or skin inflammation on Thursday, May 16, 2002 (May 16 cases). These mice were submitted to Laboratory Animal Health Services (LAHS) for necropsy and found to have pale large intestines with unformed feces. Serum was collected for serological testing, and tissues were harvested for evaluation using microbiologic, parasitologic, and histopathologic test methods. On the following day (Friday, May 17), all of the inventory of strain 129P3/J mice were examined for signs of illness. An additional thirteen mice (May 17 cases) of variable ages were found to have clinical signs similar to those of the May 16 cases and were submitted to LAHS for evaluation and testing. As a precautionary measure, we suspended shipments of 129P3/J mice on Monday, May 20, 2002.

IMPORTANT NOTE: There is no evidence that suggests infection with *Clostridium piliforme*, the causative agent of Tyzzer's Disease.

2. Test Results

May 16 Cases

The serologic results for the three May 16 cases were all negative for a panel of 20 infectious agents (mostly viral). Aerobic bacterial cultures, using GN (gram-negative) broth, of colonic contents grew no organisms. Selected tissues were stained with a Gram stain to identify gram-positive and gram-negative bacteria. All three of the May 16 cases had an abundance of both gram-positive and gram-negative bacteria with a variety of shapes and sizes in their intestinal tract. Based on our culture attempts, we know that these organisms are not coliform bacteria or *Pseudomonas* spp. Histopathologic evaluation of tissues revealed variable changes in the intestinal tracts. The changes found are not characteristic of any particular disease agent. Two of the three mice had moderate subacute typhlocolitis, and one had moderate fibrinohemorrhagic inflammation of the tips of the villi in the proximal duodenum. Parasites were not seen grossly or microscopically.

May 17 Cases

Serum samples from seven of the thirteen May 17 cases were tested and found to be negative for a panel of 20 infectious agents. Most of the May 17 cases were necropsied and found to have gross lesions that were confined to the intestinal tract. Histopathologic evaluation showed intestinal tract changes very similar to those found in the May 16 cases (i.e., primarily subacute inflammation of the cecum and colon, and several with the unique fibrinohemorrhagic inflammation of the tips of the villi in the proximal duodenum).

3. Conclusions

- While the cause(s) of the clinical signs and lesions still remains unknown, all gross and histopathological evidence suggests an unidentified bacterial agent(s) as the etiology. Identifying the agent(s) will require considerable investigative effort. At this time, we plan to develop a new breeding colony for these mice as the most reliable solution to ensure provision of healthy 129P3/J mice to the research community.
- Mice of strain 129P3/J are housed in Annex 11 (AX11), a barrier facility with standard individually ventilated caging. At this time, all mice in AX11 are being monitored at a heightened level of observation for signs of illness. None of the mice in AX11 from strains other than 129P3/J have manifested the clinical signs described above or other signs of disease. Possible spread of the agent(s) causing the clinical signs associated with the May 16 -17 cases is most likely limited to mice within the distribution colony of strain 129P3/J mice.

4. Questions/Concerns

Please contact Laboratory Animal Health Services at The Jackson Laboratory at 207-288-6205.