NATIONAL TOXICOLOGY PROGRAM WORKSHOP

ANIMAL MODELS OF THE NTP RODENT CANCER BIOASSAY: STRAINS & STOCK - SHOULD WE SWITCH?

JUNE 16 - 17, 2005
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
RODBELL AUDITORIUM, RALL BUILDING

Charges

Rat Breakout Group Charge

1. In your opinion:
   - Is there a preference for isogenic or outbred strains?
   - Would any of the strains or stocks for which we have data be considered a better model than the NTP F344 rat?
   - Are the liabilities associated with the NTP F344 rat significant enough to justify switching strains?
   - Do you have any suggestions for ways the F344/N rat currently used could be improved to address the issues raised?
   - If a switch is made, how should it be implemented?
     - Just switch?
     - Use new strain(s) in addition to currently used NTP strains?

2. In your opinion, if a multiple strain approach is utilized:
   - Should there be a fixed set of strains used or should the strains vary in relation to their genetics or unique susceptibilities with regard to the agent under study.
   - Should NTP utilize "highly sensitive" strains? If so, in what proportion?

Mouse Breakout Group Charge

1. In your opinion:
   - Is there a preference for isogenic or outbred strains?
   - Would any of the strains or stocks for which we have data be considered a better model than the NTP B6C3F1 mouse
   - Are the liabilities associated with NTP B6C3F1 mouse significant enough to justify switching strains?
   - Do you have any suggestions for ways the B6C3F1/N mouse currently used could be improved to address the issues raised?
   - If a switch is made, how should it be implemented?
     - Just simply switch?
     - Add new strain(s) to currently used NTP strains?

2. In your opinion, if a multiple strain approach is utilized:

- Should there be a fixed set of strains used or should the strains vary in relation to their genetics or unique susceptibilities with regard to the agent under study.
- Should NTP utilize "highly sensitive" strains? If so, in what proportion?

Multiple Strain Breakout Group

1. In your opinion, are the purported advantages of the multiple strain approach significant enough given the practical considerations (e.g., cost, study design considerations, etc.) for NTP to consider incorporating this approach?

If so, please comment on the following:

- Is there a preference for isogenic or outbred strains?
- Should NTP vary the strains selected based upon our knowledge of the anticipated action or target tissue for the agent being tested?
- Should NTP utilize "highly sensitive" strains? If so, in what proportion?
- Should background data be required in order to make decisions about new strains?
- How many strains should be used in a multistrain bioassay?
- Should we attempt to "validate" a multiple strain model?
- If a switch is made, how should it be implemented?
    - Just simply switch?
    - Conduct a multiple strain bioassay in conjunction with the currently used NTP bioassay?