



Albert Einstein College of Medicine

# Special Monitoring Requirements Policy

## I. Purpose

The purpose of this policy is to ensure, as much as possible, the comfort and safekeeping of animals used in research at Albert Einstein College of Medicine (Einstein).

## II. Scope

This policy applies to all research experiments and programs at Einstein.

## III. Policy

For protocols involving tumors, metastasis, ascites production, infection challenges, and other conditions wherein rodents may be expected to lose weight, monitoring should include utilization of the Body Condition Score (BCS); a numerical, objective scoring system for evaluating a rodent's weight loss and health.

### A. Body Condition Scoring of Rodents

Scoring the body condition of rodents is a non-invasive method for assessing health and establishing endpoints for adults where body weight alone is not a valid monitoring tool, such as with tumor models, ascites production, and pregnant, or growing animals.

Body condition scores (BCS) range from 1 (emaciation) to 5 (obesity). See Appendix 1 for the scoring diagram. An anticipated BCS of 2 (underconditioned), or lower, requires justification in the protocol.

### B. Description of Procedure

Scores are determined by frequent visual and hands-on examination of each animal. The hands-on evaluation is done by gently holding the mouse by the base of the tail and passing a finger over the spine and sacroiliac (pelvic) bones. The findings are matched to the descriptions and diagrams below to determine a score. Scores must be documented for each animal.

Combining this method with other humane endpoints such as dyspnea, dysambulation, moribund status, or evidence of unmitigated pain provides a more accurate assessment of an animal's condition and may prevent unnecessary pain or distress. The Institutional Animal Care and Use Committee (IACUC) will review monitoring procedures (Animal Use Protocol Form questions 17 & 18) for the inclusion of BCS. An anticipated BCS of 2 (under-conditioned) or lower (range 1-5) requires scientific justification in the protocol. It is recommended that when a rodent's physical condition is deteriorating, a Body Condition Score of 2 should be used as the humane endpoint, indicating the animal will be euthanized.

**IV. Definitions**

None.

**V. Effective Date**

Effective as of: 21 February 2018.

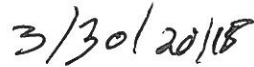
**VI. Policy Management and Responsibilities**

Einstein's Institutional Animal Care and Use Committee (IACUC) is the Responsible Office under this Policy. The Institutional Official for the IACUC is the Responsible Executive for this policy. The IACUC Chairperson is the Responsible Officer for the management of this policy.

**VII. Approved (or Revised)**






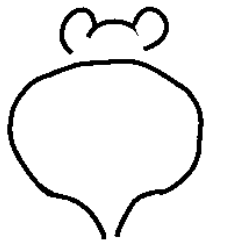
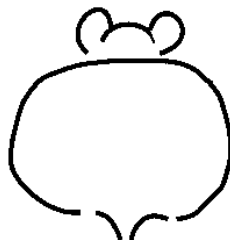
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Institutional Official



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Date

Revision dates: 11/16/2011, 10/20/2015, 2/21/2018

## Appendix 1: Body Condition Scoring

	<p><b>BC 1</b></p> <p>Mouse is emaciated.</p> <ul style="list-style-type: none"> <li>◦ <i>Skeletal structure extremely prominent; little or no flesh cover.</i></li> <li>◦ <i>Vertebrae distinctly segmented.</i></li> </ul>
	<p><b>BC 2</b></p> <p>Mouse is underconditioned.</p> <ul style="list-style-type: none"> <li>◦ <i>Segmentation of vertebral column evident.</i></li> <li>◦ <i>Dorsal pelvic bones are readily palpable.</i></li> </ul>
	<p><b>BC 3</b></p> <p>Mouse is well-conditioned.</p> <ul style="list-style-type: none"> <li>◦ <i>Vertebrae and dorsal pelvis not prominent; palpable with slight pressure.</i></li> </ul>
	<p><b>BC 4</b></p> <p>Mouse is overconditioned.</p> <ul style="list-style-type: none"> <li>◦ <i>Spine is a continuous column.</i></li> <li>◦ <i>Vertebrae palpable only with firm pressure.</i></li> </ul>
	<p><b>BC 5</b></p> <p>Mouse is obese.</p> <ul style="list-style-type: none"> <li>◦ <i>Mouse is smooth and bulky.</i></li> <li>◦ <i>Bone structure disappears under flesh and subcutaneous fat.</i></li> </ul>

*A "+" or a "-" can be added to the body condition score if additional increments are necessary (i.e. ...2+, 2, 2-...)*

Ullmann-Cullerè & Foltz, Body Condition Scoring: A Rapid and Accurate Method for Assessing Health Status in Mice. Lab Anim Sci, 1999, Vol.49, No. 3.