

# **Policy of the American Angus Association Relating to the Registration Status of Potential and Known Carriers of the Developmental Duplication Mutation**

(As adopted August 14, 2013)

## **Preface**

Pursuant to Rule 307 of the Rules of the American Angus Association (hereinafter “the Association”), the Board of Directors hereby adopts the following policy regarding the following genetic condition: Developmental Duplication (Polymelia) genetic mutation (hereinafter “DD”).

The Developmental Duplication mutation was recognized as a genetic condition on August 14, 2013.

## **The Impacted Genetics**

For the purposes of the procedures that follow, the phrase “the impacted genetics”, as it references the DD mutation, currently refers to all confirmed carrier animals or animals with confirmed carriers of the DD mutation in their pedigrees. These currently identified references do not preclude other ancestors from potentially being identified as carriers at a later time.

## **Procedures**

The following procedures shall be followed in connection with the registration status of potential and known carriers of DD:

### **I. Status of Currently Registered Females and Bulls**

Notwithstanding any subsequent test results, all registered females and bulls with the impacted genetics in their pedigrees as of August 14, 2013 shall remain registered.

### **II. Resulting Progeny of Carrier Females and Bulls**

All resulting progeny of currently registered carrier females or carrier bulls may be registered without submitting to testing. Notwithstanding such registration, the Association shall place or electronically display a notation, as described in Section VII.A. of this Policy, on each Performance Registration Certificate, Angus Performance Pedigree or any other pedigree displayed electronically.

### **III. Currently Registered Animals Determined to be Affected by the Mutation**

Any animals identified as being homozygous for the mutation, shall therefore be considered to be affected by the condition, and are not eligible for registration under Rule 103d. In the event that a registered animal is discovered to be affected by the condition, its registration shall be considered null and void, and the Certificate of Registration must be returned to the Association for cancellation.

### **IV. Testing of Animals**

A. Testing to determine whether an animal is a carrier of the mutation, is free of the mutation, or affected by it shall be conducted at those laboratories approved by the Association.

B. The results of such testing shall be provided to the Association and the submitting member as soon as practicable after the test results are available.

### **V. Publication of Test Results by the Association**

Upon receipt of a test result from an approved laboratory that determines whether an animal is a carrier of the mutation, free of the mutation, or affected by it, the Association shall list the name, registration number and test result of each such animal on its website. The Association shall also maintain an updated list of each animal determined to be a carrier or determined to be affected, as well as those who have tested free of such defect. Upon request, the Director of Member Services shall provide such a list at no cost to the requesting member.

## **VI. Right to Request a Second DNA Test**

In those instances in which an animal previously registered or seeking registration is tested and determined to be a carrier of the mutation (and is identified as such on the Association's website), the member owner of record may request that an approved laboratory conduct a second DNA test on a sample from such animal. In order to process a request for a second test, the member owner of record must provide materials or samples sufficient to permit the laboratory to verify the parentage of the animal in question.

## **VII. Notations on Registration and Performance Pedigree Certificates**

A. Seven months following the availability of a commercial test for the mutation at laboratories approved by the Association, the Association shall place or electronically display the following notation on the registration and performance pedigree certificates of all registered animals that descend from an animal determined to be a carrier of the mutation, unless an intervening DDF status eliminates all genetic ties to a known carrier ancestor.

*This animal has one or more ancestors known to carry a mutation that can result in calves with a genetic condition known as Developmental Duplication (DD). Avoidance of mating carrier animals is an essential component of managing the incidence of genetic conditions as is the strategic use of DNA testing.*

Such notification will remain in place until the Association receives an official determination from an approved laboratory that the particular animal tested as a carrier of the mutation or free of it, in which case its certificates will be denoted pursuant to Sections VII.B and C of these procedures.

B. Upon receipt of a test result from an approved laboratory, the Association shall place or electronically display the letter designation(s) "DDF" on the registration and performance pedigree certificates of any animal that has been determined by such a test to be free of the mutation. DDF shall mean "Developmental Duplication – Free", or that an animal is free of the mutation.

C. Upon receipt of a test result from an approved laboratory, the Association shall place or electronically display the letter designation(s) "DDC" on the registration and performance pedigree certificates of any animal that has been determined by such test to be a carrier of the mutation. DDC shall mean "Developmental Duplication – Carrier", or that the animal is a carrier of the mutation.

D. Upon receipt of a test result from an approved laboratory, the Association shall place or electronically display the letter designation(s) "DDA" on any animal that has been determined by such test to an affected animal. The "DDA" letter designation shall be reflected on any registration and performance pedigree certificates where the affected animal appears as an ancestor. DDA shall mean "Developmental Duplication – Affected", or that the animal is affected by the mutation.

NOTE: These procedures apply only to the Developmental Duplication mutation.