

**CIFASD Dysmorphology Core
Calculation of FAS Classification**

Definition of Abnormalities Compatible with FAS

1. Growth Deficiency: Weight and/or Height $\leq 10^{\text{th}}$ percentile*
*for premature children adjusted for prematurity up to 12 months of age
2. Microcephaly: Head Circumference $\leq 10^{\text{th}}$ percentile*
*for premature children adjusted for prematurity up to 12 months of age
3. Structural Abnormality: At least two of the following KEY FACIAL FEATURES:
 - Palpebral fissure length $\leq 10^{\text{th}}$ percentile
 - Smooth philtrum (score 4 or 5 on the Lipometer scale)
 - Thin vermilion border (score 4 or 5 on the Lipometer scale)

To calculate the FAS classification –decision rules I-IV are applied sequentially.

I. FAS Classification=Yes:

Classification of FAS=Yes can be made if sufficient data are present to meet one or more of the following criteria:

- Structural Abnormality and Growth Deficiency OR
- Structural Abnormality and Microcephaly OR
- Structural Abnormality and Microcephaly and Growth Deficiency

II. FAS Classification=No (No Abnormalities Compatible with FAS):

If all component variables for Growth Deficiency, Microcephaly, and Structural Abnormality are complete on the exam form AND the exam is negative for Growth Deficiency, Microcephaly and ALL key facial features under Structural Abnormality, the classification=No FAS. Otherwise, evaluate for the Deferred classification.

III. FAS Classification=Deferred:

All component variables for Growth Deficiency, Microcephaly, and Structural Abnormality AND the additional features listed below must be complete on the exam form to classify a subject as Deferred according to the criteria listed below. Any missing component variables result in a missing classification (9999).

- At least one key facial feature listed above under Structural Abnormality OR
- Microcephaly AND Growth Deficiency OR
- Microcephaly OR Growth Deficiency AND at least one of the following additional features:
 - railroad track configuration ears
 - ptosis
 - heart murmur
 - decreased pronation/supination at elbows
 - camptodactyly
 - other joint contractures
 - hockey stick upper palmar crease
 - other palmar crease abnormalities

IV. FAS Classification=No:

All component variables for Growth Deficiency, Microcephaly, and Structural Abnormality AND the additional features listed above under Deferred Classification must be complete on the exam form in order to classify a subject as FAS=No. Any missing component variables result in a missing classification (9999).

- Microcephaly without Growth Deficiency AND negative for all key facial features AND negative for all additional features OR
- Growth Deficiency without Microcephaly AND negative for all key facial features AND negative for all additional features