

WHO Reclassification of FAB Subtypes for MDS

MDS/FAB	MDS/WHO 2008
Refractory anemia (RA)	RCUD: refractory anemia (40%), neutropenia (< 1%) or thrombocytopenia (< 1%), < 5% blasts, < 15% ring sideroblasts
Refractory anemia with ring sideroblasts (RARS)	RARS (3%-11%): < 5% blasts, ≥ 15% ring sideroblasts RARS-t: provisional group with high incidence of JAK-2 mutation; thrombocytosis ≥ 450 x 10 ⁹ /L Refractory cytopenias with multilineage dysplasia (RCMD): (30%) & ring sideroblasts (RCMD-RS) (?): Dysplasia in > 10% of cells of 2 lineages 5q- syndrome (uncommon) Normal to high megakaryocytes with hypolobulated nuclei and isolated 5q-, < 5% blasts MDS-U (?) Dysplasia in < 10% of cells, with cytogenetic abnormalities
Refractory anemia with excess blasts (RAEB) 5%-20% blasts	Refractory anemia with excess blasts -1 (RAEB-I): 5%-9% blasts, unilineage or multilineage dysplasia, also those with 2%-4% blasts in the blood, < 5% blasts in the marrow with other diagnostic criteria of MDS
RAEB-in-transformation (RAEB-t) 21%-30% blasts in the marrow > 30% defined as AML	Refractory anemia with excess blasts-2 (RAEB-II): 10%-19% blasts, > 10% Auer rods, unilineage or multilineage dysplasia (40% combined) Acute myeloid leukemia (AML) Blasts > 20%

1. Vardiman. Blood. 2009;937-951.
2. Steensma. Hematology. 2009;645-655.