ANNEXURES – 1

Myeloid	Myeloperoxidase by flow cytometry, immunohistochemistry, or cytochemistry
	or
Monocytic	differentiation—at least two of the following: nonspecific esterase,CD11c, CD14, CD64, lysozyme
T cell	Cytoplasmic CD3 or surface CD3
B cell	Multiple antigens are requiredStrong CD19 with at least one of the following strongly expressed: CD79a, cytoplasmic CD22, CD10
	or
	Weak CD19 with at least two of the following strongly expressed:CD79a, cytoplasmic CD22, CD10

ANNEXURE – 2

The WHO classification system for myeloid leukemias is summarized as follows:

AML with recurrent genetic abnormalities

- AML with t(8;21)(q22;q22); RUNX1-RUNX1T1
- AML with inv(16)(p13.1q22) or t(16;16)(p13.1;q22); CBFB-MYH11
- Acute promyelocytic leukemia with t(15;17)(q22;q12); PML-RARA
- AML with t(9 ;11)(p22;q23); MLLT3-MLL
- AML with t(6;9)(p23;q34); DEK-NUP214
- AML with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1-EVI1
- AML (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1
- AML with mutated NPM1
- AML with mutated CEBPA

AML with myelodysplasia-related changes

Therapy-related myeloid neoplasms

AML not otherwise specified

- AML with minimal differentiation
- AML without maturation
- AML with maturation
- Acute myelomonocytic leukemia (AMML)
- Acute monoblastic/monocytic leukemia (AMoL)
- Acute Erythroid leukemias
    - Pure erythroid leukemia
    - Erythroleukemia, erythroid/myeloid
- Acute megakaryoblastic leukemia (AMkL)
- Acute basophilic leukemia
- Acute panmyelosis with Myelofibrosis

Myeloid sarcoma

Myeloid proliferations related to Down syndrome

- Transient abnormal myelopoiesis
- Myeloid leukemia associated with Down syndrome

Blastic plasmacytoid dendritic cell neoplasm

Annexure – 3

Immunophenotyping of AML with specific cytogenetic abnormalities (49)

t (8,21) MPO++, CD34 p+, CD13+, CD33+, CD19+, CD56+,CD65 +

t (15;17) MPO++, CD34 -/p+, CD13 het+, CD33++, CD117-/+, CD15-/dim+

inv (16) MPO++, CD34 p+, CD13 +++, CD33++, CD117 p+, CD65+

t (9;11) MPO dim+, HLA-DR+, CD34 -/+, CD13 dim+, CD33+, CD65-/+

p=partially, het=heterogeneously.

Annexure – 4

On the basis of molecular testing at the time of diagnosis, in non-APL AML, it is generally restricted to a limited number of scenarios:

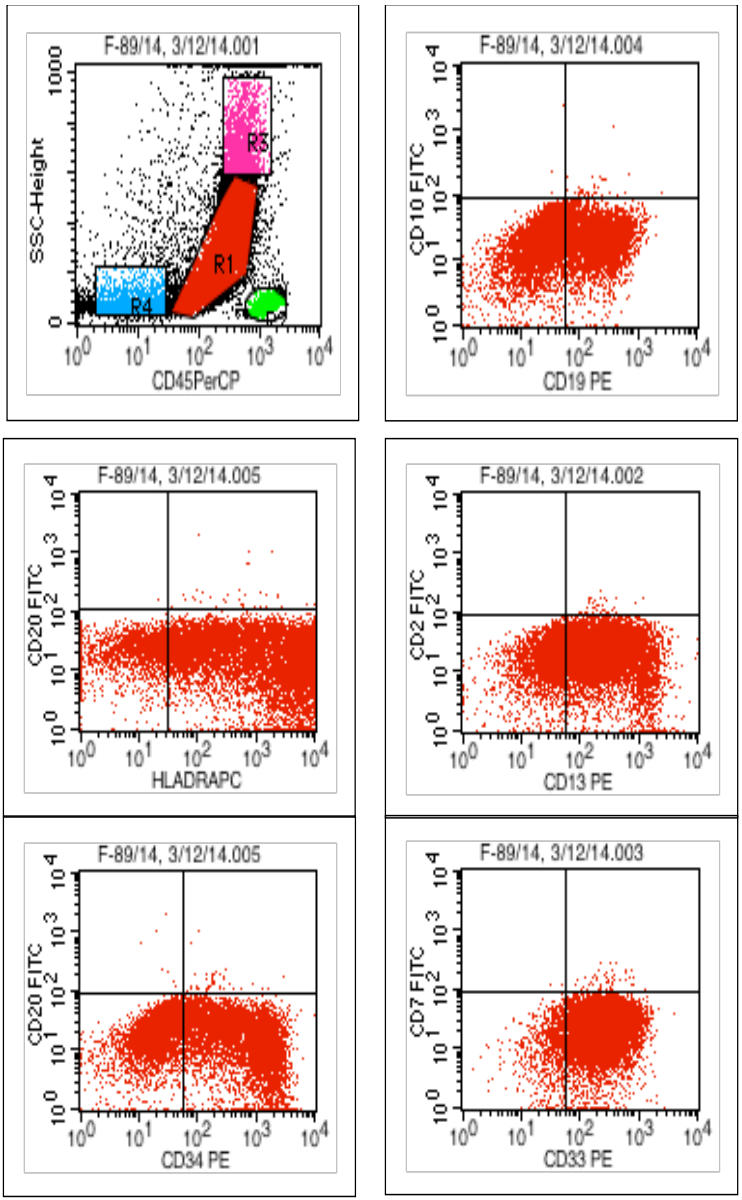
i. NPM1 and Flt3-ITD and Flt3-TKD testing in cytogenetically normal AMLs.

ii. c-Kit mutation testing in high Lkc or otherwise problematic t(8;21), inv(16), or t(16;16) cases

iii. Documented or presumed cases of CML in blast crisis

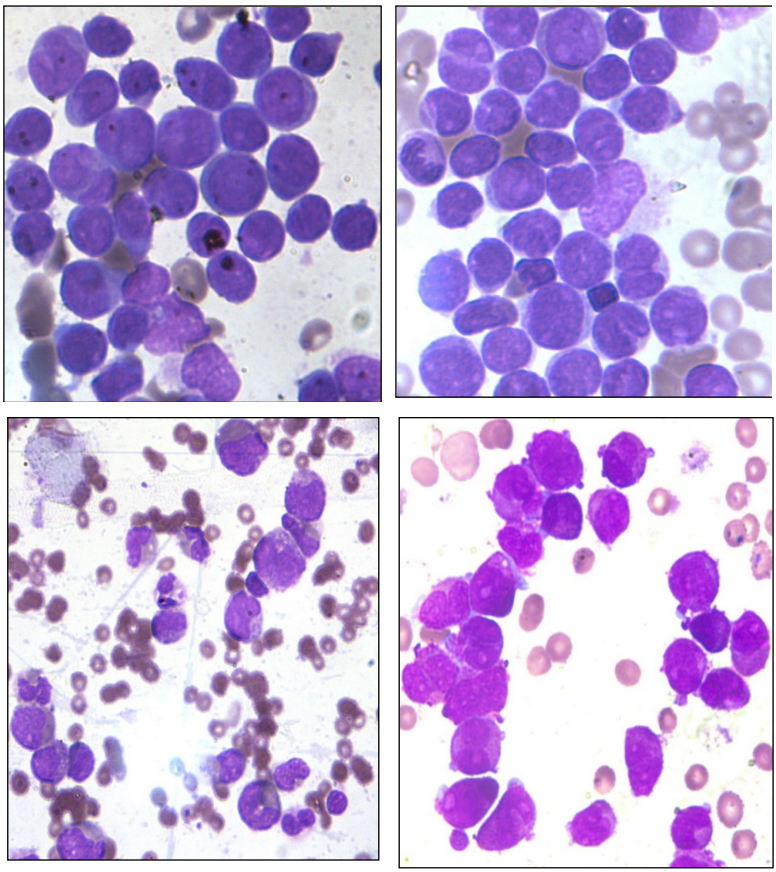
iv. Flt3 testing for clinical trial eligibility.

ANNEXURE 5


F-89/14, 3/12/14.001
SSC-Height
CD45PerCP
R1
R3
R4
F-89/14, 3/12/14.004
CD10 FITC
CD19 PE
F-89/14, 3/12/14.005
CD20 FITC
HLADRAPC
F-89/14, 3/12/14.002
CD2 FITC
CD13 PE
F-89/14, 3/12/14.005
CD20 FITC
CD34 PE
F-89/14, 3/12/14.003
CD7 FITC
CD33 PE

This flowcytometric analysis is of a case of AML M2.The blast population is gated with red color, lymphocytes by green color, granulocytes by pink and debris by blue color.

As we can infer from the analysis, there is expression of CD13, CD33, CD117, CD34, HLA-DR and MPO with aberrant expression of CD19. CD2, CD7, CD20 and CD10 are negative.



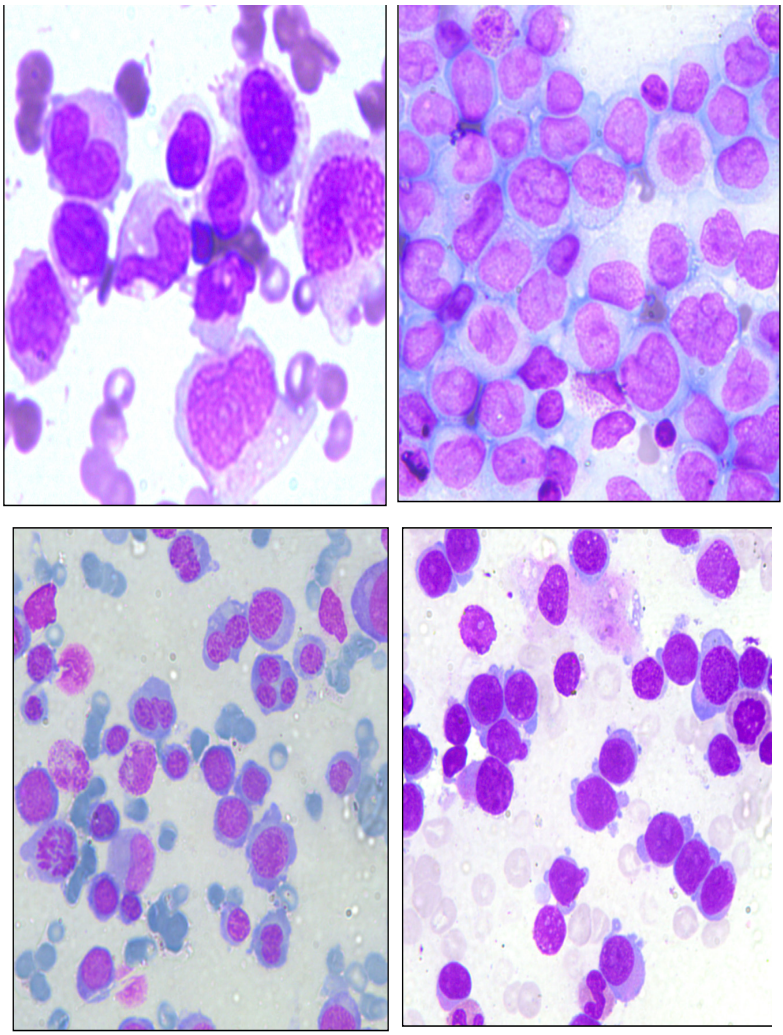
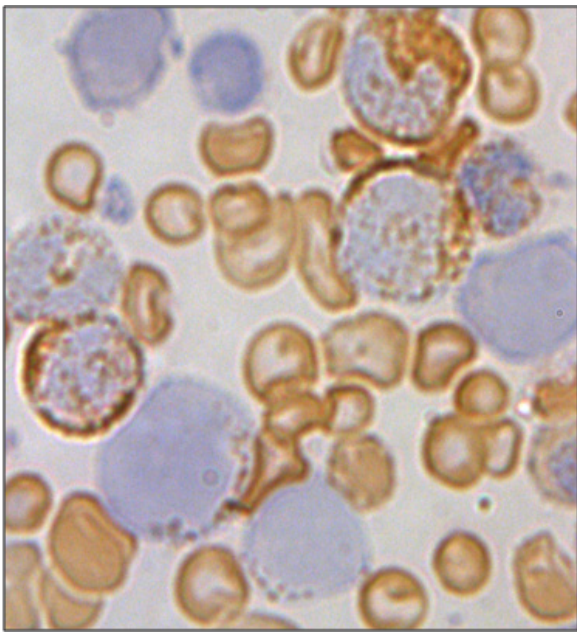


Fig1.M0 without evidence of myeloid maturation 2.M1>90%blasts <10% granulocytic maturation 3.M2 >10%granulocytic maturn4M3. lobulated Promyelocytes5&6.M4&M5 Monocytoid blasts wth lacy chromatin 7M6 Erythroid blasts with sieve chromatin8M7 Blasts with vacuolation&blebbing.



Myeloperoxidase Stain positive in Myeloblasts in AML.