

# Diagnosis of acute promyelocytic leukemia based on routine biological parameters using machine learning

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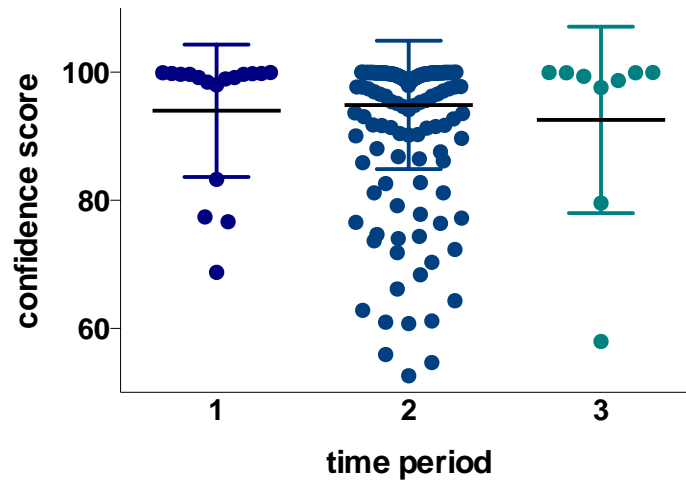
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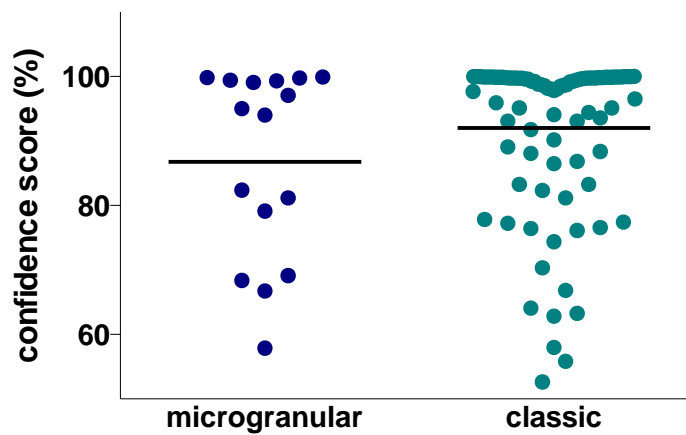
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**Supplemental table 1: Missing data in the training cohort**

Features	Missing data, n (%)
<b>Demographic characteristics</b>	
Sex	0 (0)
Age at diagnosis	0 (0)
<b>Hematology</b>	
Leucocytes (x10 <sup>9</sup> /L)	1 (0.5)
Red Blood Cell (x10 <sup>12</sup> /L)	6 (2.7)
Hemoglobin (g/L)	1 (0.5)
Hematocrit (%)	5 (2.25)
Mean Corpuscular Volume (fL)	4 (1.8)
Mean Corpuscular Hemoglobin (pg)	3 (1.3)
Mean Corpuscular Hemoglobin Concentration (g/L)	5 (2.25)
Red blood cell Distribution Width-CV (%)	6 (2.7)
Neutrophils (x10 <sup>9</sup> /L)	7 (3.15)
Eosinophils (x10 <sup>9</sup> /L)	9 (4.05)
Basophils (x10 <sup>9</sup> /L)	9 (4.05)
Lymphocytes (x10 <sup>9</sup> /L)	9 (4.05)
Monocytes (x10 <sup>9</sup> /L)	9 (4.05)
Blasts (%)	12 (5.4)
Platelets (x10 <sup>9</sup> /L)	2 (0.9)
Mean Platelet Volume (fL)	35 (15.7)
Reticulocytes (x10 <sup>9</sup> /L)	108 (48.6)
<b>Hemostasis</b>	
Prothrombin ratio (%)	3 (1.3)
Activated Partial Thromboplastin Time	2 (0.9)
Fibrinogen (g/L)	8 (3.6)
Fibrin Degradation Products (µg/mL)	194 (87.4)
<b>Biochemistry</b>	
LDH (U/L)	30 (13.5)
Calcium (mmol/L)	4 (1.8)
Phosphorus (mmol/L)	23 (10.3)
Ferritin (µg/L)	83 (37.4)
C Reactive Protein (mg/L)	21 (9.5)
Urea (mmol/L)	3 (1.3)
Creatinine (µmol/L)	2 (0.9)
Uric Acid (µmol/L)	22 (9.9)



**Supplemental figure 1: Value of the confidence score for each patient according to the time of diagnosis in the validation cohort n°3.** The analyzers automats used for hematology, hemostasis, and biochemistry were the following: period 1: Siemens Dimension Vista, StaR, Beckman Coulter LH780; period 2: Siemens Dimension Vista, StaRevolution, Sysmex XE5000 and XE2100 D; period 3: Siemens Atellica, StaRMax3 and Sysmex XN. The differences are non-significant (Kruskal-Wallis test).



**Supplemental figure 2: Variations in AIPL confidence scores according to the cytological subtype of APL.**