	<b>Total MDS</b>	Validation sample	Misclassified MDS patients
	population	-	
Numbers	449 (20%)	47 (20%)	8 (36%)
Treatment			
Transfusion	9 (2%)	-	0
Erythropoiesis-stimulating agents	147 (33%)	21 (45%)	0
Granulocyte-colony-stimulating-factors	63 (14%)	6 (13%)	0
Hypomethylating agents (Azacitidine)	39 (9%)	4 (8.5%)	0
Iron-chelating agents	33 (7%)	6 (13%)	-
Hydroxyurea	22 (5%)	-	-
AML-like chemotherapy	18 (4%)	-	0
Immune suppressive agents	37 (8%)	4 (8.5%)	0
Lenalidomide	-	0	0
Protocol participation	18 (4%)	-	0
Missing	Ò	0	0
Unknown	19 (4%)	-	0
Progression to sAML	55 (12%)	9 (19%)	0
Missing	9 (2%)	0	0
Unknown	9 (2%)	0	0
Date of progression to sAML	47 (10%)	7 (80%)	0
Missing	8 (14%)	-	0
Unknown	0	0	0
Allo-HSCT	30 (7%)	-	0
Missing	0	0	0
Unknown	0	0	0
Date of Allo-HSCT	30 (100%)	-	0
Missing	0	0	0
Unknown	0	0	0
Type of Allo-HSCT	30 (100%)	-	0
Missing	0	0	0
Unknown	0	0	0

Supplemental Table 1. Characteristics from the registration form including 5-year data from the Danish Myelodysplastic Syndromes Database. Data are shown for the whole population, the validation sample and the misclassified MDS patients.

Abbreviations: Allo-HSCT, allogeneic hematopoietic stem cell transplantation; sAML, acute myeloid leukemia. - Data not shown due to small numbers.

Variable	<b>Regional Hospitals</b>	University Hospitals	Diagnosed $\leq 2014$	Diagnosed > 2014
	(n = 47)	(n= 213)	(n = 133)	(n = 127)
Diagnosis	93.6 (81.5-97.9)	91.1 (86.4-94.3)	87.7 (81.2-92.5)	95.3 (89.8-97.9)
Date of diagnosis $\pm$ 14 days	95.5 (83.0-98.9)	93.8 (89.4-96.5)	92.3 (85.8-96.0)	95.9 (90.4-98.3)
Prior hematological disease > 3 months				
Yes	100.0 (47.8-100)	71.4 (41.9-91.6)	71.4 (29.0-96.3)	83.3 (51.6-97.9)
No	100.0 (89.7-100)	97.2 (93.6-99.1)	98.2 (93.5-99.8)	97.1 (91.8-99.4)
Overall	100.0 (90.1-100)	95.3 (91.3-97.8)	96.6 (91.4-99.5	95.7 (90.2-98.6)
Prior chemotherapy				
Yes	100.0 (39.8-100)	88.9 (51.8-99.7)	96.4 (91.0-99.0)	90.0 (55.5-99.7)
No	100.0 (86.8-100)	95.1 (90.9-97.8)	100.0 (29.2-100)	95.0 (88.8-98.4)
Overall	100.0 (88.4-100)	94.8 (90.7-97.5)	96.5 (91.2-99.0)	94.6 (88.6-98.0)
Prior radiotherapy	· · · · · · · · · · · · · · · · · · ·	, í	, , , , , , , , , , , , , , , , , , ,	
Yes	100.0 (29.2-100)	83.3 (35.9-99.6)	100.0 (39.8-100)	80.0 (28.4-99.5)
No	96.3 (81.3-99.9)	98.4 (95.4-99.7)	98.1 (93.5-99.8)	98.1 (93.4-99.8)
Overall	96.3 (82.8-99.9)	97.9 (94.8-99.4)	98.2 (93.7-99.8)	97.3 (92.3-99.4)
Blood transfusion prior to diagnosis				
Yes	100.0 (54.1-100)	100.0 (63.1-100.0)	-	100.0 (76.8-100)
No	88.9 (51.8-99.7)	84.2 (74.0-91.6)	100.0 (29.2-100)	84.1 (74.1-91.2)
Overall	93.3 (68.1-99.8)	85.7 (76.4-92.4)	100.0 (29.2-100)	86.5 (78.0-92.6)
Blast percentage in bone marrow	90.7 (77.2-96.57)	91.5 (86.6-94.8)	91.2 (84.4-95.2)	91.5 (84.9-95.4)
Hemoglobin (<6.2 mmol/L)	· · · ·			· · · ·
Yes	93.3 (77.9-99.2)	88.5 (80.7-93.9)	85.0 (73.4-92.9)	93.2 (84.9-97.8)
No	100.0 (75.3-100)	94.4 (87.4-98.2)	98.2 (90.3-99.9)	91.5 (79.6-97.6)
Overall	95.3 (84.2-99.4)	91.2 (86.3-94.8)	91.3 (84.6-95.8)	92.7 (86.3-96.5)
Thrombocytopenia (<100x10 <sup>9</sup> /L)		, í	, , , , , , , , , , , , , , , , , , ,	
Yes	100.0 (82.4-100)	98.4 (91.5-99.9)	100.0 (90.5-100)	97.8 (88.2-99.9)
No	100.0 (85.8-100)	96.2 (91.3-98.7)	96.2 (89.2-99.2)	97.4 (90.8-99.7)
Overall	100.0 (91.8-100)	96.9 (93.4-98.9)	97.4 (92.6-99.5)	97.5 (92.9-99.5)
Neutropenia (<1.8x10 <sup>9</sup> /L)	· · ·			
Yes	100.0 (76.8-100)	96.3 (89.6-99.2)	96.2 (87.0-99.5)	97.6 (87.4-99.9)
No	85.7 (67.3-96.0)	91.1 (84.2-95.6)	90.2 (79.8-96.3)	89.9 (81.0-95.5)
Overall	90.5 (77.4-97.3)	93.3 (88.8-96.4)	93.0 (86.6-96.9)	92.3 (86.3-96.5)
Middle cell volume (fL)	92.9 (79.5-97.8)	91.4 (86.3-94.7)	90.2 (83.0-94.5)	93.1 (86.7-96.5)
Hemoglobin (mmol/L)	95.3 (82.6-98.9)	94.8 (90.6-97.2)	95.7 (89.9-98.2)	94.2 (88.3-97.2)
Platelet count $(1 \times 10^{9}/L)$	93.0 (79.9-97.8)	91.7 (86.9-94.9)	90.4 (83.5-94.7)	93.4 (87.3-96.7)
White blood cell count $(1x10^9/L)$	90.5 (76.7-96.5)	94.2 (89.9-96.8)	92.9 (86.4-96.4)	96.7 (91.4-98.8)
Leucocyte count (1x10 <sup>9</sup> /L)	93.0 (79.9-97.8)	94.3 (89.9-96.8)	91.3 (84.5-95.3)	96.7 (91.4-98.8)
Monocyte count (1x 10 <sup>9</sup> /L)	81.3 (52.3-94.4)	97.8 (91.7-99.5)	-	95.3 (89.1-98.1)
Lactate dehydrogenase (U/L)	95.1 (81.8-98.8)	93.0 (88.2-95.9)	90.9 (83.8-95.1)	95.7 (90.0-98.2)
Ferritin µg/L	92.3 (78.0-97.6)	86.5 (80.1-90.9)	85.6 (77.4-91.5)	89.2 (81.8-93.8)

**Supplemental Table 2.** Predictive values (%) with 95 % confidence intervals, stratified by departments and year of diagnosis. Data are shown for 18 variables from the registration form completed at diagnosis.

- Data not shown due to small numbers.

Supplemental figure 1. Predictive values for 15 variables from the registration form including 5-year data from the Danish Myelodysplastic Syndrome Database.

Variable	PV, % (95% CI)	
Transfusion		
Yes	100.0 (15.8-100.0)	<
٧o	62.2 (46.5-76.2)	
Dverall	63.8 (48.5-77.3)	<b>B</b>
ESAs		
es	90.5 (69.6-98.2)	
10	80.1 (60.6-93.4)	
Overall	85.1 (71.7-93.8)	<b>_</b>
3-CSFs		
res	50.0 (11.8-88.2)	L
No	92.7 (80.0-98.5)	·
Dverall	87.0 (74.3-95.2)	
ron chelating agents		
res	75.0 (19.4-99.4)	<
No	97.7 (87.7-99.9)	
Overall	95.7 (85.5-99.5)	
lypomethylating agents		
Yes	66.7 (22.2-95.7)	<
Νο	100.0 (91.4-100.0)	
Dverall	95.7 (85.5-99.5)	
łydroxyurea		
rydroxyurea (es	66.7 (9.4-99.2)	<u> </u>
No	100.0 (92.0-100.0)	`
vo Dverall	97.9 (88.7-99.9)	
	•	
AML-like chemotherapy Yes	33 3 (0 8 00 6)	/
No	33.3 (0.8-90.6)	<
	100.0 (92.0-100.0)	
Overall	95.7 (85.5-99.5)	
Immunemodulating agents		
Yes	50.0 (6.8-93.2)	< ∎
No	100.0 (91.8-100.0)	
Overall	95.7 (85.5-99.5)	
Lenalidomide		
No	95.7 (85.5-99.5)	
Overall	95.7 (85.5-99.5)	— <b></b>
<b>.</b>		
Freatment in protocol	33 3 (0 9 00 0)	4
Yes	33.3 (0.8-90.6)	
No	91.6 (84.9-99.5)	
Overall	91.6 (84.9-99.5)	<b>_</b>
Progression to sAML		
fes	77.8 (40.0-97.2)	<b>e</b>
No	100.0 (90.7-100.0)	-
Overall	95.7 (85.5-99.5)	<b>_</b> _
Date of progression to AML	71.4 (24.4-95.1)	<
Allo-HSCT		
Yes	66.7 (9.4-99.2)	<u> </u>
No	100.0 (92.0-100.0)	`
vo Overall		
	97.9 (88.7-99.9)	<b>_</b>
Date of Allo-HSCT	66.7 (10.1-99.7) 76 5 (40.2,01.6)	
Type of Allo-HSCT	76.5 (49.2-91.6)	<b>_</b>
		I I I I I I 40 50 60 70 80 90

Abbreviations: Allo-HSCT, allogeneic hematopoietic stem cell transplantation; CI, confidence interval, G-CSF, granulocyte-colony-stimulating-factors; sAML, acute myeloid leukemia. \* Ratio not shown due to small numbers.