

EVALUATION PROTOCOL AVIAN BLOODFILMS

ID: _____ Name: _____ Date: _____

Morphology		Countings							
10× objective: thrombocyte aggregates? yes no		Estimation ¹		Differential count					
		Thr	Leuko	H	L	M	E	B	NDB
Technical Quality 1 (not acceptable) <input type="checkbox"/> 2 (problematic) <input type="checkbox"/> 3 (acceptable) <input type="checkbox"/> 4 (good) <input type="checkbox"/> 5 (excellent) <input type="checkbox"/>		1	1						
Erythrocytes Hct = PI2 = 1 (homogenous) <input type="checkbox"/> 2 (slightly irregular) <input type="checkbox"/> 3 (moderately irreg.) <input type="checkbox"/> 4 (severely irreg.) <input type="checkbox"/> 5 (extremely irreg.) <input type="checkbox"/>		2	2						
Thrombocytes (Vacuoles, irregular cell membrane, cytoplasmic blebs)		3	3						
> 50% reactive? yes <input type="checkbox"/> no <input type="checkbox"/>		4	4						
		5	5						
Heterophils (Degranulation, vacuoles, cytoplasmic basophilia, non lobulated nucleus)		6	6						
		7	7						
Mononuclear cells (cytoplasmic blebs, cytoplasmic basophilia, visible Golgi apparatus vacuoles, magenta bodies)		8	8						
		9	9						
> 50% reactive? Ly: yes <input type="checkbox"/> no <input type="checkbox"/> Mo: yes <input type="checkbox"/> no <input type="checkbox"/>		10	10						
		11	11						
Remarks/other findings		12	12						
Diagnoses – Summary (numerical and morphological) 1. Erythrocytes 2. Thrombocytes 3. Leukocytes 4. Other		13	13						
		14	14						
		15	15						
		16	16						
		17	17						
		18	18						
		19	19						
		20	20						
		Σ	Σ	Σ					
		Σ × 875	Σ × 875	%					
correction formula in case of hct outside 35-55% $\frac{\Sigma \times 875}{\text{Hct}} \times 45 = \text{corrected value}$ $\frac{\Sigma \times 875}{\text{Hct}} \times 45 = \text{corrected value}$									

¹ Estimation according to Campbell: Total number of counted cells in 20 oil immersion fields × 875 = total estimated count
² PI = polychromatic index according to Dein (2)

Fig. 1 Standardized protocol for the evaluation of avian blood films modified according to Pendl and Reball (23). H = heterophils, L = lymphocytes, M = monocytes, E = eosinophils, B = basophils, NDB = non definable blood cells.