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30 December 2016 Product Bulletin: Aerospray[®] Hematology Pro Stainer Stain Mode Comparison

The Aerospray[®] Hematology Pro* stainer contains four preset staining modes (see below), which are selected through the Program keypad and the staining mode menu. Where the staining results are acceptable, these modes may be operated without adjustment over a range of nine intensity selections. The first three can be adjusted for personal preferences with a simple three-step routine. The Custom mode allows all of the eleven steps of the run routine to be varied either as a mode with nine intensity variations or as nine separate and unrelated protocols. ELITechGroup recommends that the Rapid stain be explored first since it is the fastest and cheapest. Where multiple modes are used, try to adjust to the same Red/Blue ratio to avoid frequent system clean cycles.

| | Time | Cost | | |
|----------------|---------------|-----------------|-------------------|---|
| Program | <u>(min.)</u> | (cents/slide)** | <u>Procedure</u> | <u>Characteristics</u> |
| Rapid | 3.2-6.7 | 2.8-5.4 | Concentrate stain | -Visual debris-mostly on slide back |
| | | | only. | -Microscopically clean |
| | | | | -Marginal for bone marrows |
| | | | | -Rich vibrant staining |
| | | | | -Higher carousal maintenance |
| | | | | -Fast and economical |
| Wright Giemsa | 5.4-9.2 | 5.0-8.2 | Minimal | -Visually clean |
| | | | concentrate stain | -Excellent staining of all cell components |
| | | | step. | |
| | | | Main staining in | |
| | | | dilute step. | |
| MG.Giemsa | 6.8-10.6 | 7.3-11.0 | Combination of | -Visually clean |
| | | | concentrate and | -Excellent staining of all components |
| | | | dilute stains. | |
| Custom | 6.3-9.7 | 5.9-8.8 | Combination of | -Visually clean |
| | | | concentrate and | -Fully programmable |
| | | | dilute stains. | -Combination of MG Giemsa and Wright Giemsa |
| | | | | -Special ELITechGroup Protocol |

All stain modes can be run with a choice of pH 6.8 or 7.2 buffer. The 6.8 pH buffer enhances the eosin (erythrocyte and other reds) staining, while the 7.2 pH buffer strengthens the thiazin (blue) colors.

**Costs are based on current (2016) US list price of stains. Stain usage and time are estimated by using stain usage calculators. Length of time windows vary depending on intensity settings used. The time windows include Intensity #1 (shortest time) to Intensity #9 (longest time).

^{*} The product name Aerospray[®] Hematology Pro refers to the following model numbers: 7150, 7151, and 7152.