

# Protocol for Counting Dyskaryotic cells in ThinPrep cervical samples

## Basic principles

- Only well preserved and clearly dyskaryotic cells should be included in the count. Cells which are deemed equivocal should be omitted. Degenerate cells and dyskeratotic (but NOT clearly dyskaryotic) cells even when they lie adjacent to unequivocally dyskaryotic cells should not be included.
- Care should be taken to avoid over-calling reactive change and, in particular, reactive change in metaplastic squames and in endocervical cells as dyskaryotic.
- Only dyskaryotic cells in which the entire nuclear circumference is within the optical field should be counted. As with previous counting guidance, dyskaryotic cells which lie on the edge of a field and which are transected by it should not be counted.
- An estimate of the numbers of dyskaryotic cells in HCGs should also follow previous counting guidance i.e. a full quadrant of a high power field contains approximately 1,000 small parabasals and approximately 750 mature squames. This figure can be scaled up or down to match the amount of the field covered e.g. a sheet of small parabasal squamous cells covering half of the field would equate to approximately 2,000 cells.

## Counting methodology

- 40 high power fields (X40 objective) should be counted in accordance with the illustration in Figure 1 and the counts entered directly into the Excel spreadsheet provided. The type and presentation of dyskaryotic cells including the nuclear changes and presence/absence of koilocytosis should also be recorded using the drop-down menus in the spreadsheet which follow the cell counts.
- The operator should commence at the edge of the deposit at the 9 o'clock position and should perform 10 counts of alternating and non-overlapping fields working towards the centre of the deposit.
- The operator should then move vertically upwards (i.e. towards 12 o'clock position) by 1 high power field and move to the edge of the slide at the 3 o'clock position. 10 counts on alternate and non-overlapping fields should be performed working from the edge to the centre of the deposit.
- The operator should then move to the edge of the slide at the 11 o'clock position and working vertically downwards should perform 5 counts on alternate and non-overlapping fields.
- The operator should then move to the edge of the slide at the 7 o'clock position and working vertically upwards should perform 5 counts on alternate and non-overlapping fields.
- The operator should then move to the edge of the slide at the 1 o'clock position and working vertically downwards should perform 5 counts on alternate and non-overlapping fields.

- The operator should then move to the edge of the slide at the 5 o'clock position and working vertically upwards should perform 5 counts on alternate and non-overlapping fields.

If the above methodology which counts a total of 40 fields fails to detect any dyskaryotic cells then the operator should perform a full manual screen avoiding any overlap of fields and counting all dyskaryotic cells which are detected. The total count should then be entered as a single entry on the spreadsheet in the column 'Total number dyskaryotic cells'.

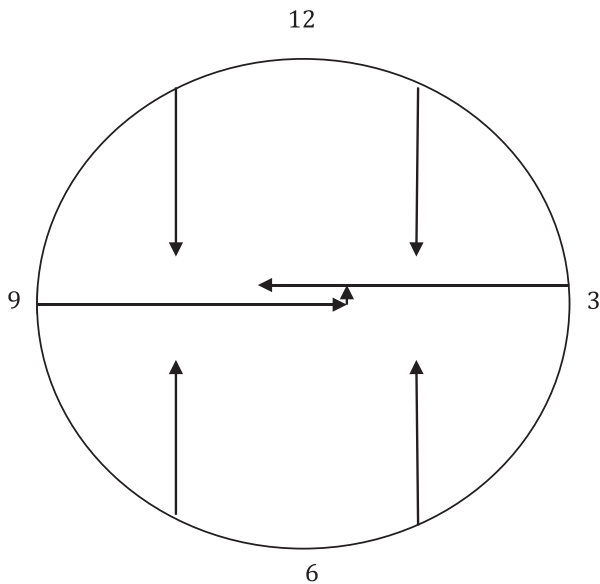


Figure 1- Diagrammatic representation of counting pattern

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