

Mitotic count

Reason/Evidentiary Support

Mitotic figure count should be expressed as "#/mm²" owing to the fact that differing field diameters of high power (x40) objectives dramatically vary the size of a single high power field (hpf). For example the hpf area for an x40 objective with a 0.40 mm field diameter is 0.125 mm² whereas for an x40 objective with a 0.69 mm field diameter, the hpf area is 0.374 mm². Depending on the objective used, it could take as many as 8 (for the 0.40 mm field diameter lens) or as few as 3 (for the 0.69 mm field diameter lens) hpfs to cover 1 mm² of tissue. Each pathologist should determine the number of hpfs in a mm² based on the field diameter of their x40 objective.¹

References

- 1 NHS Cancer Screening Programmes and The Royal College of Pathologists (2005). *Pathology Reporting of Breast Disease. A Joint Document Incorporating the Third Edition of the NHS Breast Screening Programme's Guidelines for Pathology Reporting in Breast Cancer Screening and the Second Edition of The Royal College of Pathologists' Minimum Dataset for Breast Cancer Histopathology*. NHSBSP Publication No 58.
<http://www.cancerscreening.nhs.uk/breastscreen/publications/nhsbsp58-low-resolution.pdf>.