

# Lymphovascular invasion (Recommended)

## Reason/Evidentiary Support

Lymphovascular invasion (LVI) is rarely identified in transurethral resection (TUR) specimens, hence its absence does not need to be explicitly stated. However, if LVI is present it should be recorded and the following comments apply.

Invasion of lymphatic or blood vessels (i.e. thin-walled endothelial-lined spaces) is uncommonly identified in transurethral resection or enucleation specimens and there is little published data on the significance of LVI specifically relating to tissue obtained during these procedures. However, there is good evidence that LVI is a significant independent prognostic indicator of increased risk of recurrence post radical prostatectomy;<sup>1-4</sup> therefore, if LVI is identified in a TUR/enucleation specimen it may well be significant and its presence should be recorded. The presence of LVI does not affect assignment of the American Joint Committee on Cancer (AJCC)/Union for International Cancer Control (UICC ) T category.

## References

- 1 Herman CM, Wilcox GE, Kattan MW, Scardino PT and Wheeler TM (2000). Lymphovascular invasion as a predictor of disease progression in prostate cancer. *Am J Surg Pathol* 24(6):859–863.
- 2 Cheng L, Jones TD, Lin H, Eble JN, Zeng G, Carr MD and Koch MO (2005). Lymphovascular invasion is an independent prognostic factor in prostatic adenocarcinoma. *J Urol* 174(6):2181–2185.
- 3 Yee DS, Shariat SF, Lowrance WT, Maschino AC, Savage CJ, Cronin AM, Scardino PT and Eastham JA (2011). Prognostic significance of lymphovascular invasion in radical prostatectomy specimens. *BJU Int* 108:502-507.
- 4 May M, Kaufmann O, Hammermann F, Loy V and Siegsmund M (2007). Prognostic impact of lymphovascular invasion in radical prostatectomy specimens. *BJU Int* 99(3):539-544.