

References

1. Buchanan DD, Tan YY, Walsh MD, et al. Tumor mismatch repair immunohistochemistry and DNA *MLH1* methylation testing of patients with endometrial cancer diagnosed at age younger than 60 years optimizes triage for population-level germline mismatch repair gene mutation testing. *J Clin Oncol* 2014; 32: 90-100.
2. Steloo E, Nout RA, Osse EM, et al. Improved risk assessment by integrating molecular and clinicopathological factors in early-stage endometrial cancer-combined analysis of the PORTEC cohorts. *Clin Cancer Res* 2016; 22: 4215-24.
3. An HJ, Kim KI, Kim JY, et al. Microsatellite instability in endometrioid type endometrial adenocarcinoma is associated with poor prognostic indicators. *Am J Surg Pathol* 2007; 31: 846-53.
4. Arabi H, Guan H, Kumar S, et al. Impact of microsatellite instability (MSI) on survival in high grade endometrial carcinoma. *Gynecol Oncol* 2009; 113: 153-8.
5. Auguste A, Genestie C, De Bruyn M, et al. Refinement of high-risk endometrial cancer classification using DNA damage response biomarkers: a TransPORTEC initiative. *Mod Pathol* 2018; 31: 1851-61.
6. Basil JB, Goodfellow PJ, Rader JS, Mutch DG, Herzog TJ. Clinical significance of microsatellite instability in endometrial carcinoma. *Cancer* 2000; 89: 1758-64.
7. Bosse T, Nout RA, McAlpine JN, et al. Molecular classification of grade 3 endometrioid endometrial cancers identifies distinct prognostic subgroups. *Am J Surg Pathol* 2018; 42: 561-8.
8. Broaddus RR, Lynch HT, Chen LM, et al. Pathologic features of endometrial carcinoma associated with HNPCC: a comparison with sporadic endometrial carcinoma. *Cancer* 2006; 106: 87-94.
9. Cohn DE, Mutch DG, Herzog TJ, et al. Genotypic and phenotypic progression in endometrial tumorigenesis: determining when defects in DNA mismatch repair and *KRAS2* occur. *Genes Chromosomes Cancer* 2001; 32: 295-301.
10. de Jong RA, Boerma A, Boezen HM, Mourits MJ, Hollema H, Nijman HW. Loss of HLA class I and mismatch repair protein expression in sporadic endometrioid endometrial carcinomas. *Int J Cancer* 2012; 131: 1828-36.
11. Hirai Y, Banno K, Suzuki M, et al. Molecular epidemiological and mutational analysis of DNA mismatch repair (MMR) genes in endometrial cancer patients with HNPCC-associated familial predisposition to cancer. *Cancer Sci* 2008; 99: 1715-9.
12. Huang HN, Lin MC, Tseng LH, et al. Ovarian and endometrial endometrioid adenocarcinomas have distinct profiles of microsatellite instability, PTEN expression, and ARID1A expression. *Histopathology* 2015; 66: 517-28.

13. Black D, Soslow RA, Levine DA, et al. Clinicopathologic significance of defective DNA mismatch repair in endometrial carcinoma. *J Clin Oncol* 2006; 24: 1745-53.
14. Nagle CM, O'Mara TA, Tan Y, et al. Endometrial cancer risk and survival by tumor MMR status. *J Gynecol Oncol* 2018; 29: e39.
15. Kommooss S, McConechy MK, Kommooss F, et al. Final validation of the ProMisE molecular classifier for endometrial carcinoma in a large population-based case series. *Ann Oncol* 2018; 29: 1180-8.
16. Mackay HJ, Gallinger S, Tsao MS, et al. Prognostic value of microsatellite instability (MSI) and PTEN expression in women with endometrial cancer: results from studies of the NCIC Clinical Trials Group (NCIC CTG). *Eur J Cancer* 2010; 46: 1365-73.
17. Maruyama A, Miyamoto S, Saito T, Kondo H, Baba H, Tsukamoto N. Clinicopathologic and familial characteristics of endometrial carcinoma with multiple primary carcinomas in relation to the loss of protein expression of MSH2 and MLH1. *Cancer* 2001; 91: 2056-64.
18. Mills AM, Liou S, Ford JM, Berek JS, Pai RK, Longacre TA. Lynch syndrome screening should be considered for all patients with newly diagnosed endometrial cancer. *Am J Surg Pathol* 2014; 38: 1501-9.
19. Djordjevic B, Barkoh BA, Luthra R, Broaddus RR. Relationship between PTEN, DNA mismatch repair, and tumor histotype in endometrial carcinoma: retained positive expression of PTEN preferentially identifies sporadic non-endometrioid carcinomas. *Mod Pathol* 2013; 26: 1401-12.
20. Okoye EI, Bruegl AS, Fellman B, Luthra R, Broaddus RR. Defective DNA mismatch repair influences expression of endometrial carcinoma biomarkers. *Int J Gynecol Pathol* 2016; 35: 8-15.
21. Ruiz I, Martin-Arruti M, Lopez-Lopez E, Garcia-Orad A. Lack of association between deficient mismatch repair expression and outcome in endometrial carcinomas of the endometrioid type. *Gynecol Oncol* 2014; 134: 20-3.
22. Shikama A, Minaguchi T, Matsumoto K, et al. Clinicopathologic implications of DNA mismatch repair status in endometrial carcinomas. *Gynecol Oncol* 2016; 140: 226-33.
23. Stelloo E, Bosse T, Nout RA, et al. Refining prognosis and identifying targetable pathways for high-risk endometrial cancer: a TransPORTEC initiative. *Mod Pathol* 2015; 28: 836-44.
24. Talhouk A, Hoang LN, McConechy MK, et al. Molecular classification of endometrial carcinoma on diagnostic specimens is highly concordant with final hysterectomy: Earlier prognostic information to guide treatment. *Gynecol Oncol* 2016; 143: 46-53.
25. Talhouk A, McConechy MK, Leung S, et al. Confirmation of ProMisE: a simple, genomics-based clinical classifier for endometrial cancer. *Cancer* 2017; 123: 802-13.