Abstract. *Background/Aim: The objective of this study was to determine the molecular and clinicopathological features, as well as the prognosis of patients with endometrial cancer (EC) having prior malignancy (second primary EC: SPEC) compared with those without a history of prior malignancy (first primary EC: FPEC). Patients and Methods: We enrolled 294 FPEC patients and 32 SPEC patients who had undergone surgical resection with curative intent. EC was divided into four groups according to TCGA classification. Results: SPEC patients having greater than a 10-year interval from prior malignancy had risk factors including type II histology, deeper myometrial invasion, cervical invasion, and copy number high (CNH) phenotype compared with patients having less than a 10-year interval (p=0.007, p=0.002, p=0.015 and p=0.001). Conclusion: SPEC patients having greater than a 10-year interval from prior malignancy possessed numerous high-risk factors for EC.*