PET/CT has emerged as the most accurate tool for staging, treatment monitoring and response evaluation in Hodgkin lymphoma (HL). Accurate staging and restaging are very important for the optimal management of HL, and PET/CT is the cornerstone of the staging procedures recommended in the recently revised staging and response criteria. More precise determination of disease extent may result in more precise pre-treatment risk stratification, and is also essential to the minimal and highly individualised radiotherapy volumes of the present era. Early PET-response is the strongest predictor of final treatment outcome and long-term progression-free and overall survival. The strong prognostic value is demonstrated as early as after one chemotherapy cycle, thus replacing traditional mid-treatment monitoring by in-vivo treatment sensitivity testing. A number of ongoing or recently completed trials investigate the use of PET/CT for early response-adapted therapy, with therapeutic stratification based on interim PET/CT results. The first results from these trials have been mostly encouraging. Post-treatment PET/CT the major determinant of post-treatment response assessment and enables selection of advanced stage patient without need for consolidation radiotherapy. While PET/CT seems to have little or no role in the routine surveillance of HL patients, recent data point toward an important role in the selection of therapy in relapsed and refractory disease, and for PET-response adapted therapy in this setting, as well as in first-line therapy. PET/CT has a large impact on both trial design and on the management of individual patients, so it is necessary also for the clinician to be aware of the strengths and possibilities, but also the important pitfalls and shortcomings of this highly sensitive diagnostic method.