Prostate cancer is the most common solid cancer among men in the Western world. In Germany, we will be faced with approximately 72,000 newly diagnosed cases in 2015 and in Europe close to 400,000 new cases have been diagnosed in 2015. 92,000 men died of prostate cancer, which translates to a 19% mortality rate. Currently, diagnosis and treatment of prostate cancer are changing and today, many paradigms of the past are discussed controversially. The purpose of the current issue of Oncology Research and Treatment is to provide the reader with evidence on the newly developed approaches.

The arguments of the controversial discussion whether a Gleason score 6 prostate cancer should still be called malignant or whether it should be defined as a non-malignant lesion due to its indolent clinical course are highlighted from the pathologist's point of view by Ruth Knüchel [1]. Although a variety of treatment options, such as radical prostatectomy, external beam radiation therapy, brachytherapy, and active surveillance are available for patients with low- and intermediate-risk prostate cancer, focal therapy might emerge as a new, minimally-invasive, and oncologically effective treatment modality due to the improvements of prostate cancer imaging with multiparametric MRI. Timor Kuru and colleagues summarize the current scientific and clinical evidence of the various technologies of focal prostate cancer treatment [2]. For a long time external beam radiation therapy has been the standard therapy for high-risk prostate cancer. As will be outlined by Robert Qi and Jud Moul [3], the dogma is changing and radical prostatectomy probably represents the most important local therapy in the scenario of multimodality treatment of prostate cancer. For metastatic hormone sensitive prostate cancer, androgen deprivation has been the treatment of choice for more than 60 years. However, as summarized by Hocine Habchi and Nicolas Mottet [4], new options such as chemo-hormonal therapy as well as the potential risk of significant side effects, such as cardiovascular disease, diabetes mellitus, and metabolic syndrome, have to be considered in the optimal management of the individual patient. Treatment of castration resistant prostate cancer has been revolutionized during recent years and Jan Herden and colleagues will cover all the clinically important therapeutic modalities with their advantages and disadvantages [5]. Together with my colleagues, it will be my pleasure to summarize surgical strategies in the palliative management of prostate cancer patients [6]. Palliative surgery will become more important in the upcoming years, as overall survival in both hormone-sensitive and castration resistant prostate cancer has improved significantly and patients will experience symptoms caused by local progression of the primary or of metastases that we have not seen in the past due to short survival times.

Personally I hope that the focus on prostate cancer in this issue of Oncology Treatment and Research will provide you with important information, which might be helpful to improve the daily care of our patients.

References