

**ATTN: THE CHAIRMAN OF THE SCIENTIFIC
JURY AT THE MEDICAL UNIVERSITY
„PROFESSOR PARASKEV STOYANOV” OF
VARNA**

Concerning:

The participation of Assoc. Prof. Dejan Anakievski, MD, PhD, in the competition promulgated in *State gazette* No 14/February 18, 2022 for tenure of the academic position of “Professor” in the field of higher education No 7 Public health and sports, professional trend No 7.1 Medicine and scientific speciality of Urology, at 0,5 pay-roll office for the needs of the Educational Sector of Urology, Department of Surgery at the Faculty of Medicine of the Medical University “Prof. Paraskev Stoyanov” of Varna and 0,5 pay-roll office for the needs of the Clinic of Urology at St. Marina University Hospital of Varna, according to Order No R-109-165/April 14, 2022 of the Rector of the Medical University “Prof. Paraskev Stoyanov” of Varna, Prof. Valentin Lyubomirov Ignatov, MD, PhD.

PEER REVIEW

by

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According to Protocol No 63/April 5, 2022 of the Faculty Council of the Faculty of Medicine, Order No R-109-165/April 14, 2022 of the Rector of the Medical University “Prof. Paraskev Stoyanov” of Varna and according to Protocol No 1/May 5, 2022 from the first session of Scientific jury, I have been assigned to prepare the present peer review for the only candidate in the competition.

I. CONCISE BIOGRAPHIC AND PROFESSIONAL DATA

Dejan Anakievski was born on October 6, 1979 in the town of Delchevo, Republic of North Macedonia. He graduated at Foreign language secondary school in the town of Delchevo in 1998 and of the Medical University “Prof. Paraskev Stoyanov” of Varna in 2004. In 2006-2007, he worked as physician in Medlux Ltd in the city of Varna, in 2007-2013, he was post-graduate student in the St. Marina University Hospital of Varna; in 2013-2015, he worked as urologist in the St. Marina University Hospital of Varna, and until 2017, as assistant of urology.

In 2004-2007, he was post-graduate student in surgery, and in 2008-2013, in urology at the Medical University “Prof. Paraskev Stoyanov” of Varna. He attained the academic rank of associate professor in 2017. Since then until now, he works as head of the Clinic of Urology.

Dejan Anakievski, MD, acquired the PhD educational and scientific degree in 2015. The theme of his dissertation work was "Evaluation and validation of some preoperative and postoperative prognostic models in prostate carcinoma".

During the period between 2009 and 2019, a series of post-graduate courses were carried out in our country and abroad: in the Medical University "Prof. Paraskev Stoyanov" of Varna, in the St. Marina University Hospital of Varna, in the Higher Naval School "Nikola Y. Vaptsarov" of Varna, as well as in the university of Mansoura (Egypt), in Barcelona (Spain), Prague (Czech Republic), Patras (Greece), Milan and Rome (Italy), Leipzig (Germany), Amsterdam (the Netherlands), London (United Kingdom) and Strasbourg (France).

II. EVALUATION OF CANDIDATE'S RESEARCH ACTIVITY

1. Scientometric indicators

In the competition for tenure of the academic position of "Associate Professor" in 2017, Dejan Anakievski, MD, PhD, participates with a dissertation work for the acquisition of the PhD educational and scientific degree, 21 full-text articles in 12 Bulgarian journals, four full-text articles in four foreign journals as well as with 28 abstracts of reports delivered at scientific forums and published in their proceedings and in Bulgarian journals and with 34 abstracts of reports delivered at scientific forums and published in foreign journals. The total impact factor for the period until 2016 inclusive is 73,708.

In the present competition for tenure of the academic position of "Professor", Assoc. Prof. Dejan Anakievski, MD, PhD, participates with an English language monograph published in 2021, *Recent Advances in Prostate Cancer Surgery*, as well as with six articles published in scientific editions, abstracted and indexed in eminent data-bases with scientific information such as *Web of Science* и *Scopus* and with two articles published in non-abstracted journals with scientific peer reviewing. The total scores according to G6 and G8 parameters amount to 212,5. Besides he has two full-text articles in scientific journals outside the minimal scientometric requirements for the tenure of this academic position (with a total of 22,2 scores).

The total number of the citations received in scientific editions abstracted and indexed in eminent data-bases with scientific information, is six while that of the citations received in non-abstracted journals with scientific peer reviewing is four. The total scores according to D10 and D12 parameters amount to 110.

2. Participation in a national research project

Investigation of the dynamics of the healing processes in periimplanted tissues by means of scientigraphy with 99mTc-MDP (methylene diphosphonate). Science Fund of the Medical University of Varna, 2016-2018.

3. Adviser of a national research project

Investigation of the dynamics of the healing processes in periimplanted tissues by means of scientigraphy with 99mTc-MDP (methylene diphosphonate). Science Fund of the Medical University of Varna, 2016-2018.

III. MAIN RESEARCH TRENDS

Assoc. Prof. Dejan Anakievski, MD, PhD, is urologist and oncologist presenting with great prestige among the colleagues in our country and abroad and numerous patients with urogenital tract diseases. His research activity and publication output result from his striving for implementation of the novelties in the diagnosis and surgical treatment of the patients and for improvement of their individual quality of life. His scientific achievements are due also to his active collaboration with researchers from eminent foreign medical institutions.

In 2019-2021, there are several main thematic trends of Assoc. Prof. Dejan Anakievski's research work:

- 1) minimally invasive (laparoscopic and robot-assisted) radical surgery in prostate cancer
- 2) contemporary operative methods in patients with urological diseases
- 3) oncological case reports.

IV. MAIN ORIGINAL SCIENTIFIC CONTRIBUTIONS

In his monograph „*Recent advances in prostate cancer surgery*“, the newest world achievements in the field of the surgical treatment of the prostate cancer and the comparative results from his own investigation of the application of the laparoscopic (LRP) and robot-assisted radical prostatectomy (RARP) are systematized.

Not only prior to, but also during the application of LRP and RARP, a great number of parameters are analyzed such as patient's age, prostate-specific antigen (PSA) levels, patient's prostate weight, preoperative risks, operative time duration, intraoperative blood loss, localization of seminal vesicle infiltration, postoperative hospital stay, pGleason score-International Society of Urological Pathology (ISUP), anterior support, positive surgical margins, nerve sparing, American Society of Anesthesiologists (ASA) status, pTNM prostate cancer stage, lymph node dissection as well as urinary continence and erectile function recovery. The operative time duration is statistically significantly shorter in LRP.

In the patients with LRP who are with low PSA levels, there is a statistically significantly lower prostate weight, a shorter operative time, a smaller intraoperative blood loss and number of the lymph node dissected than in the patients with high PSA levels, while in the patients with RARP, there are smaller age and blood loss than in the patients with high PSA levels. The number of the patients presenting with positive surgical margins is statistically significantly smaller after RARP. Statistically significant differences not only in terms of the localization of seminal vesicle infiltration, positive surgical margins and pGleason score-ISUP, but also between the different levels of the preoperative risk, on the one hand, and patient's age, preoperative PSA levels and number of the lymph node dissected, on the other hand, are established. The author establishes significant differences between the various preoperative risks in terms of the localization of seminal vesicle infiltration in favour of the absent infiltration and ASA status as well as in both operations between the low and high pGleason score-ISUP concerning the various preoperative risks and the different localizations of seminal vesicle infiltration. There exists a reliable difference in favour of RARP concerning the nerve sparing, as the

bilateral sparing is more common in RARP. In LRP, a reliable association between the preoperative PSA level and the amount of intraoperative blood loss is observed.

The mean potency scores of the International Index of Erectile Function-5 decrease considerably among the patients undergoing RARP and LRP. There exists a statistically significant difference in favour of RARP concerning the potency scores after three months only. Both operations possess substantial advantages over open radical prostatectomy in advanced prostate cancer patients.

A low frequency of the complicated postoperative urinary tract infections (of 14,5%) during intrarenal retrograde laser surgery performed in 324 patients with kidney stones in two specialized university clinics of urology in Varna and in Sofia is established (G8-No 2).

A successful and safe radical nephrectomy is carried out in a 11-month old boy presenting with congenital mesoblastic nephroma of classical type located in the upper pole of the left kidney and diagnosed by means of magnetic resonance imaging and histological examination of the biopsy specimen (G7-No 1).

In a six-year old boy with clinically and ultrasonographically diagnosed undescendent testis, a small yellowish node, enclosed in capsule, between the testis and epididymis head is detected which is enucleated and a testis orchidopexy is accomplished (G7-No 2).

In a 15-year old girl, a small lesion in the left kidney below the renal vessels is ultrasonographically detected and the heterogenous lesion below the renal hilus with a double pyelocalix system and two ureters is confirmed by computed tomography necessitating the performance of the laparoscopic transperitoneal partial nephrectomy. Histologically, a hemangiopericytoma is diagnosed (G7-No 3).

In a 63-year old patient, a single mass in the bladder, left hydroureter and left hydronephrosis are ultrasonographically diagnosed but using contrast enhanced computed tomography, a well-outlined, heterogenous enlarging endophytic soft tissue lesion on the left wall of the bladder with obturation of the left ureter and left kidney hydronephrosis is detected. Transurethral resection of an invasive, highly differentiated leiomyosarcoma, laparoscopic radical cystoprostatectomy, enlarged lymph resection, and totally intracorporeal orthotopic ileal diversion are carried out (G7-No 4).

A supraclavicular brachial plexus blockade under ultrasound control is successfully carried out not only in a 73-year male patient with chronic kidney disease on hemodialysis, ischemic heart disease, and sepsis due to A-V fistula aneurysm, but also in a 61-year old female patient with necrotizing upper extremity fasciitis, sepsis and with a past history of ischemic heart disease, diabetes mellitus, obesity, COPD, and endometrial cancer (G8-No 1).

Assoc. Prof. Dejan Anakievski, MD, PhD, performs the first laparoscopic cryoablation of small kidney tumours in two senile patients in Bulgaria (G7-No 5).

The laparoscopic transperitoneal ureteroureterostomy combined with retrograde flexible ureteroscopy assistance for ureteral stricture is successfully applied in seven patients aged between 19 and 58 years without any conversion to open surgery (G7-No 6).

The scientific and theoretical as well as the scientific and practical contributions in the works of Assoc. Prof. Dejan Anakievski, MD, PhD, could be generalized in this way:

1. The important role of RARP in the treatment of prostate cancer is convincingly proved. The application of LRP is sufficiently effective and safe, too.

2. The laparoscopic renal cryoablation of tumours author is performed for the first time in Bulgaria.

3. Excellent postoperative results in the patients with urological diseases are achieved.

4. Several rare cases of oncological kidney diseases reported represent definite contributions for the clinical medicine.

V. TEACHING, LECTURER'S AND PUBLIC ACTIVITY

During the last academic years, the teaching loading of Assoc. Prof. Dejan Anakievski, MD, PhD, for the students in medicine, English-language education, is as follows: during the 2017-2018 academic year - 114 hours, during the 2018-2019 academic year - 130 hours, during the 2019-2020 academic year - 110 hours, and during the 2020-2021 academic year - 100 hours.

He is adviser of three post-graduate students in urology - Inna Gocheva Ivanova, MD, Pavel Ivelinov Abushev, MD, and Doychin Georgiev Nikolov, MD.

Under his guidance, one postgraduate student, Alexander Maximov Konsulov, MD, has defended his doctoral thesis for the acquisition of the educational and scientific degree of PhD.

Assoc. Prof. Dejan Anakievski, MD, PhD, is member of the following professional and scientific organizations:

2004 - Bulgarian Medical Association

2005 - Bulgarian Union of Physicians

2007 - Bulgarian Urological Society

2008 - European Association of Urology

2010 - International Young Urology Association

2013 - Bulgarian Association of Young Urologists

2018 - Endourological Society.

Assoc. Prof. Dejan Anakievski, MD, PhD, is member of the editorial board of the journals *Uronet* (since 2018) and of *Clinical Urology* (since 2021).

CONCLUSION

Based on the analysis of the documents and publications for the participation in the present competition I convincingly declare that the professional qualification, research and teaching and lecturer's activity of Assoc. Prof. Dejan Anakievski, MD, PhD, completely meet the requirements of the Statute-book for the conditions and order for the acquisition of scientific degrees and for tenure of the academic position of "Professor" in the Medical University "Prof. Paraskev Stoyanov" of Varna. I recommend to the honoured members of the Scientific jury to vote positively for the tenure by Assoc. Prof. Dejan Anakievski, MD, PhD, of the academic position of "Professor" in the Medical University "Prof. Paraskev Stoyanov" of Varna for the needs of the Educational Sector of Urology, Department of Surgery at the Faculty of Medicine of the Medical University "Prof. Paraskev Stoyanov" of Varna and of the Clinic of Urology at St. Marina University Hospital of Varna.

Pleven

June 1, 2022

Peer reviewer:

Prof. Nikolay Hristov Kolev, MD, PhD

