

## STATEMENT

**From Prof. Dr. Radosveta Stoyanova Andreeva-Borisova, DMD, PhD, DMSc**

Department of Pediatric Dental Medicine, FDM- Varna, Medical University of Varna

Member of the Scientific Jury according to order No P-109-240/ 06.06.2022 of the Rector of MU-Varna

**Regarding:** Acquiring of scientific and educational degree "Doctor, PhD" in the field: Higher education: 7. Health care and sport. Professional domain: 7.2 Dental medicine. PhD-Program: "Orthopedic Dentistry"

**PhD-Thesis: "Evaluation of individual indicators for orthodontic treatment of children with mixed and permanent dentition"**

**Author:** Dr. Iliyana Georgieva Atanasova- PhD student in full-time training in the procedure for acquiring a scientific and educational degree "Doctor", Department of Orthodontics, Faculty of Dental Medicine, Mu- Varna.

**Scientific Supervisor:** Assoc. Prof. Hristina Ivanova Arnautska DMD, PhD.

### **General notes**

The set of materials provided to me related to the dissertation is complete and is in accordance with the Law on the development of academic staff in the Republic of Bulgaria and the regulations for its implementation, as well as with the Regulations of MU-Varna. The PhD student has applied three publications on the subject of the dissertation, meeting the legal requirements for dissertation work.

### **Biography notes**

Dr. Iliyana Georgieva Atanasova was born in 1979 in Varna. In 1996, she completed her secondary education in high school "Sveti Kliment Ohridski" -city of Varna in profiled program with English and Russian. In 2011, she graduated from Faculty of Dental Medicine at Medical University of Varna and acquired master degree in Dentistry. As the first of "Class 2011", she has been awarded with a "GOLDEN HIPPOCRATES" and Diploma "STUDENS OPTIMUS" – Prof. Dr. Slavcho Davidov for excellent accomplishments and high student achievement in the academic, scientific and creative activities of the class of 2011. In 2020, Dr. Atanasova acquired a specialty in Orthodontics. In 2019, she was assigned a full-time PhD student in the Department of Orthodontics and was elected as administrative assistant of the Department of Orthodontics.

Fluent in English and Russian. Regular member of the Bulgarian Dental Association, Bulgarian Orthodontic Society, Australian Dental Association, European Orthodontic Society.

Dr Atanasova has 20 publications and participated 22 national and international conferences and symposiums.

### **Notes and commentary on the presented documents**

The PhD- thesis developed by Dr. Iliyana Georgieva Atanasova- "Evaluation of individual indicators for orthodontic treatment of children in mixed and permanent dentition" is current with its scientific and scientific - applied character. It contains 138 pages, of which 40 pages of literature review, purpose and tasks – 1 page, own studies including material and methodology – 19 pages, results and discussion – 41 pages, conclusions and affiliations – 4 pages. The dissertation work is illustrated with 39 tables, 55 figures, 5 schemes and 16 application. The bibliographical reference includes 161 literary sources, of which 7 in Cyrillic and 154 in Latin.

### **Relevance of the PhD-thesis**

The dissertation thesis presented by Dr. Iliyana Atanasova is extremely relevant to contemporary orthodontics. There is a growing need to comply with individual indicators of growth and development of the patient, when planning the treatment and make a prognosis for treatment outcome. Knowledge and understanding of the essence and nature of growth and development of maxillofacial structures in norm and pathology are especially important for accurate diagnosis. treatment and retention approaches in Orthodontics. In the presented dissertation, Dr. Iliyana Atanasova demonstrates in-depth knowledge of the topics developed and skills for conducting scientific research. The author has made a detailed and particular critical analysis of available literary sources in appropriate scientific language. The literature review clarifies in detail and comprehensively a number of issues on the topic and concludes with a statement that emphasizes the great medical and social significance of the problems related to the timely orthopedic treatment of skeletal malocclusions requiring a management of growth of maxillofacial structures. The insufficient study in our country of various indicators of growth and development as guidelines for the beginning of orthodontic treatment, as well as the revised study of the reliability of methods for evaluation of the dental age in Bulgarian population, is also highlighted.

**The purpose and tasks** correspond to the topic and content of the dissertation. The aim is a logical conclusion from the analysis of the literature review. The tasks are set correctly, clearly formulated and adequate in their scope and comprehensiveness.

### **Research methodology**

The research methods are modern and correspond to the set aim and tasks. The material researched in the performance of the purpose and tasks is sufficient for the development of the dissertation thesis. The statistical methods for analyzing the data on the scientific study are optimally selected and have enabled the PhD- student to obtain sufficient qualitative and quantitative original and reliable results.

### **Characteristic and evaluation of the dissertation**

The PhD-thesis contains all the necessary sections for a dissertation. The results are correctly and comprehensively described and excellently illustrated. The results were presented as a discussion through their correct and in-depth comparison with those of other authors. The conclusions were formulated optimally with a focus on the contributions to the dissertation. A number of important conclusions have been made, such as the reliability and accuracy of the

Willems method for assessing dental age in Bulgarian children aged 7-16 years, the mean chronological age of the onset of puberty peak in boys and girls by the method of maturity of cervical vertebrae has been studied, the correlation between the degrees of mineralization of different teeth and skeletal age has been studied. The schemes presented in the last task guided very precisely the path to be followed in the initiation of orthodontic treatment.

### **Contributions and significance of the dissertation**

The conclusions and contributions derived logically follow the results of the studies conducted and are undoubtedly significant for modern clinical orthodontic practice. Contribution with an original character for the country :- for the first time in Bulgaria, a model is prepared for determining the puberty period of growth on orthopanthogram by assessing individual indicators of growth and development. The dissertation contains one contribution with original nature for the country, six of a scientific and theoretical nature and five of a scientifically applied nature.

### **Personal participation of the PhD-student**

Dr. Iliyana Atanasova personally did the scientific study and observations of patients resulting in conclusions and contributions to the dissertation. The results of the scientific research were popularized in three publications, personally written by the author.

### **Abstract**

The abstract of the PhD- thesis has been written on 44 pages, appropriately illustrated, fully corresponds to the content of the dissertation, accurately reflects the accents and key points in the field and presents in a synthesized form the main structural components of the dissertation. It has been developed according to the requirements of the Law on the development of academic staff in the Republic of Bulgaria and the legal regulation of MU-Varna.

### **Conclusion**

The topic of the dissertation "Evaluation of individual indicators for orthodontic treatment of children in mixed and permanent dentition" chosen by Dr. Iliyana Georgieva Atanasova discusses an actual problem in Orthodontics. The scientific content of the dissertation is well structured. The methods of scientific research have been correctly selected. The data have been processed with appropriate statistical tests, providing reliable results with theoretical and scientifically applied contributions in the Orthodontics. The criteria for the dissertation, the data obtained and their interpretation met the requirements of the Law on the development of academic staff in the Republic of Bulgaria and the legal regulation of MU-Varna for awarding with the doctoral degree the PhD-student.

**In conclusion:** I give a positive assessment of the dissertation on the topic "Evaluation of individual indicators for orthodontic treatment of children in mixed and permanent dentition" and I will vote with "YES" for the award of educational and scientific degree "Doctor" in the scientific specialty "Orthopedic Dentistry" to Dr. Iliyana Georgieva Atanasova, DMD

The Statement was prepared by: Prof. Dr. Radosveta Stoyanova Andreeva-Borisova, DMD, PhD  
Varna, 4.07.2022

