

## PROPHYLAXIS EFFICACY OF THE PREPARATION BASED ON “FAGODENT” AND “TRAUMEL S” IN DENTAL IMPLANTOLOGY

**Ismatov Farrukh Aslidinovich**

PhD, assistant teacher of the department of Oral surgery and dental implantology, Samarkand State Medical University, Samarkand, Uzbekistan

E-mail: [farruxismatov87@gmail.com](mailto:farruxismatov87@gmail.com)

ORCID: <https://orcid.org/0009-0005-6424-0489>

**Bekmurodov Lukmon Rustamovich**

PhD, assistant teacher of the department of Oral surgery and dental implantology, Samarkand State Medical University, Samarkand, Uzbekistan

**Ibodov Ulmas Ergash ugli**

Master's student of the department of Oral surgery and dental implantology, Samarkand State Medical University, Samarkand, Uzbekistan

<https://doi.org/10.5281/zenodo.15133608>

**Abstract:** This article studies the prophylactic efficacy of the preparations “Fagodent” and “Traumel S” in dental implantology. These preparations are mainly used to reduce inflammation, infection and pain after the implantation procedure, as well as to accelerate the recovery of injured tissues. “Fagodent” is characterized by its plant-based antibacterial and anti-inflammatory effect, while “Traumel S” supports the immune system through a number of its properties and accelerates recovery. The article shows the clinical efficacy of both preparations and analyzes how their combined use helps in the successful implementation of the implantation procedure.

**Keywords:** implant, peri-implant tissues, mucositis, inflammation, bone resorption, oral hygiene, gingivitis.

## ПРОФИЛАКТИЧЕСКАЯ ЭФФЕКТИВНОСТЬ ПРЕПАРАТОВ НА ОСНОВЕ «ФАГОДЕНТ» И «ТРАУМЕЛЬ С» В ДЕНТАЛЬНОЙ ИМПЛАНТОЛОГИИ

**Аннотация:** В статье рассматривается профилактическая эффективность препаратов «Фагодент» и «Траумель С» в дентальной имплантологии. Эти препараты в основном используются для уменьшения воспаления, инфекции и боли, возникающих после процедуры имплантации, а также для ускорения восстановления поврежденных тканей. «Фагодент» характеризуется антибактериальным и противовоспалительным действием на растительной основе, а «Траумель С» поддерживает иммунную систему и ускоряет выздоровление благодаря ряду свойств. В статье демонстрируется клиническая эффективность обоих препаратов и анализируется, как их совместное применение способствует успешному процессу имплантации.

**Ключевые слова:** имплантат, периимплантные ткани, мукозит, воспаление, резорбция костной ткани, гигиена полости рта, гингивит.

## INTRODUCTION

In the field of dental implantology, in order to ensure high efficiency in tooth restoration, the implantation process must be successfully carried out. However, it is important to maintain the health of patients and prevent complications after surgery. To achieve this, it is necessary to use various drugs and tools, facilitate the post-surgical recovery period, prevent infections and reduce inflammation.

This article analyzes the preventive effectiveness of the drugs "Fagodent" and "Traumeel S" in dental implantology. "Fagodent" is a biologically active drug based on plant extracts, and its antibacterial and anti-inflammatory effects help reduce complications that occur after the implantation procedure. "Traumeel S" has a number of properties, including reducing swelling and pain, and accelerating recovery after the surgical procedure by strengthening the immune system.

It is known that complications such as infection and inflammation during dental implantation can slow down the patient's recovery process and negatively affect the success of the implantation. Therefore, the use of "Fagodent" and "Traumeel S" drugs can be effective not only in reducing complications, but also in improving the overall health of the patient. The article reviews in detail the clinical efficacy of these drugs, their combined use, and their role in the implantation process.

### THE MAIN PART

The drug "Traumeel S" based on phagocytes has a prophylactic value in relation to inflammatory complications of the peri-implant gingiva. (Table 1).

Thus, in the op group, with the use of Traumeel S gel at home and at the end of annual professional hygiene, peri-implantitis did not develop, and in the kP group, with conventional observation, after three years, peri-implantitis developed in one case (1.8%).

Mucositis developed in both groups, but was more pronounced in the control group. When using Traumeel S gel at 1, 2, 3 years of follow-up, mucositis was detected in 2, 2 and 3 implants (2.2%, 2.2%, 3.4%). In the control group, mucositis developed more often: 1, 2, 3 years - 4, 3, 5 implants (7.2%, 5.4%, 8.9%) (Fig. 2). The difference between the number of mucositis in the main and control groups at 1, 2, 3 years of follow-up was 69.4%, 38.9%, 61.8%.

Before the start of orthopedic treatment on implants, the oral hygiene index (vagP-u) in general was  $2.0 \pm 0.2$  points in the main and control groups; after the end of prosthetics (against the background of professional hygiene before prosthetics) games-u were  $1.7 \pm 0.3$  and  $1.6 \pm 0.3$ ; a year later, during the control examination, it was up to  $1.9 \pm 0.1$  in the main group,  $2.1 \pm 0.2$  in the control group; after 2 years, hygiene was  $2.1 \pm 0.2$  and  $2.3 \pm 0.3$  in the main and control groups; after three years,  $2.3 \pm 0.3$  and  $2.5 \pm 0.3$ , respectively. The difference in the indicator for years 1, 2 and 3 is 13.6%, 8.7%, 8.0%.

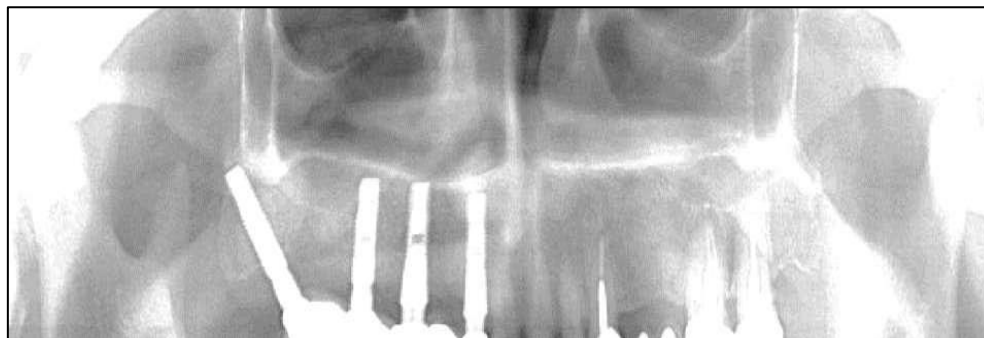
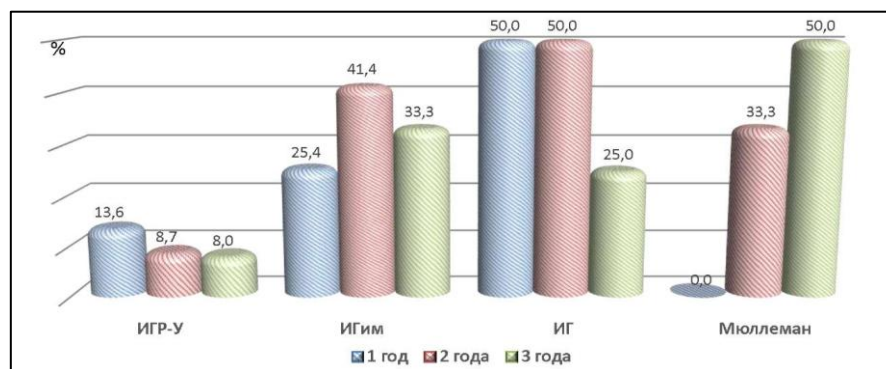
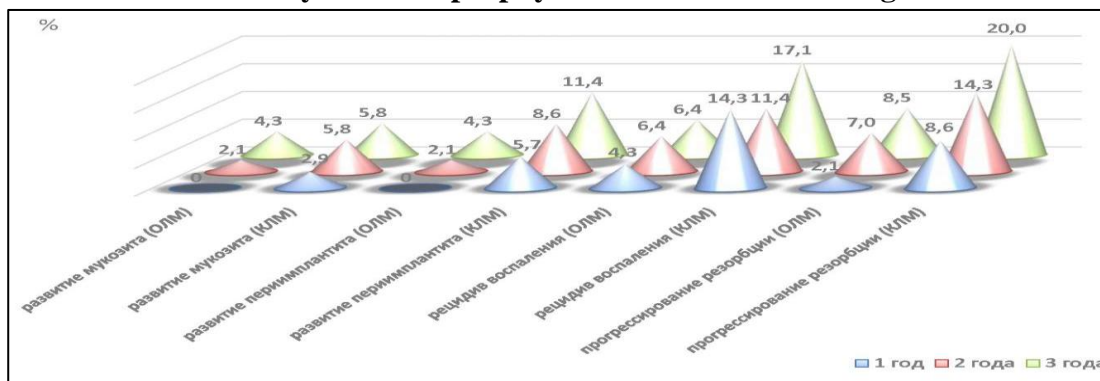
The gingivitis index of the IGIM was worse in the control group after 1,2, 3 years, since in this group it corresponded to  $1.3 \pm 0.3$ ,  $1.5 \pm 0.2$ ,  $1.5 \pm 0.2$ , and when using Traumeel s gel, the main one was  $1.0 \pm 0.1$ ,  $0.9 \pm 0.1$ ,  $1.0 \pm 0.2$ , which is less than in the KP group by 25.4%, 41.4%, 33.3%. The gingivitis index of the IGIM was not determined before and after the completion of prosthetics in the main and control groups, after 1,2, 3 years its values when using Traumeel s gel were  $0.1 \pm 0.1$ ,  $0.2 \pm 0.1$ ,  $0.3 \pm 0.2$ ; in the control group, respectively,  $0.2 \pm 0.1$ ,  $0.4 \pm 0.2$ ,  $0.4 \pm 0.2$ . Between the OP and KP groups, the values were 1,2, 3 the difference during the annual follow-up was 50.0%, 50.0%, 25.0%.

The Mulleman index was not determined before and after orthopedic treatment, and during the 1st, 2nd, and 3rd year of follow-up it did not exceed  $0.1-0.2 \pm 0.1$  in the main group of preventive follow-up and increased from  $0.1 \pm 0.1$  in the first year of follow-up to  $0.3 \pm 0.1$  in the second year and to  $0.4 \pm 0.1$  in the third year. The difference during follow-up was 0.0%, 33.3%, 50.0%, respectively (Fig. 28,29).

Dynamics of clinical and index indicators of peri-implant tissues during prophylactic use of Traumeel s gel (op and KP groups)

Indicators	1 year		2 year		3 year	
	oP	KP	oP	KP	oP	kp
development of mucositis, %	2,2	7,2	2,2	5,4	3,4	8,9
development of peri-implantitis, %	0	0	0	0	0	1,8
development of bone resorption, %	0	0	0	0	0	1,8
vagP-u	1,9	2,1	2,1	2,3	2,3	2,5
Igim	1,0	1,3	0,9	1,5	1,0	1,5
VaG	0,1	0,2	0,2	0,4	0,3	0,4
Mulleman Index	0,1	0,1	0,1	0,3	0,2	0,4

**1-tab. Dynamics of the patient's X-ray picture H (after the completion of prosthetics and after 3 years with prophylactic use of Traumeel s gel.**



**1-fig. Difference between oral hygiene and peri-implant dental condition index assessment after 1, 2, 3 years in the main (op) and control (CP) groups.**

New cases of mucositis were detected in the groups with the initial presence of mucositis over the three years: in the olm group, 0, 1 and 2 cases were monitored for 1, 2 and 3 years, respectively, which corresponds to 0%, 2.1% and 4.3% of the observations in this group. In the control group, the increase in the number of mucositis cases during the specified time period occurred in the amount of 1, 2, 2 cases (in the KLM group 2.9%, 5.8%, 5.8%). The difference in the development of new cases of olm and KLM mucositis during the reference periods of monitoring is 100.0%, 63.8% and 25.9%.

In the group with the initial presence of mucositis for 1, 2, 3 years, the therapeutic use of Traumeel s gel was accompanied by a relapse of inflammation in 2, 3 and 3 cases (4.3%, 6.4%, 6.4%, respectively), and in the CIM group the recurrence rate was 14.3%, 11.4% and 17.1% (5, 4, 6 cases). The difference in the control period between the Olm and KLM groups was 69.9%, 43.9%, 62.6%, respectively (Tables 2, 3).

Indicators	LM/ KLM			P / KLP		
	1 year	2 year	3 year	1 year	2 year	3 year
development of mucositis, %	0/2,9	2,1/5,8	4,3/5,8	0/6,1	3,2/3,0	0/3,0 periimpla ntit
development, %	0/5,7	2,1/8,6	4,3/11,4	0/0	0/0 0/0	0/6, 1
relapse of chronic inflammation, %	4,3/14,3	6,4/11,4	6,4/17,1	5,1/9,1	2,6/9,1	5,1/12,1
development of bone resorption, %	2,1/8,6	7,0/14,3	8,5/20,0	10,3/15,2	18,0/24,2	25,6/27,3
average time to relieve inflammation	3,6/4,2 day			5,9/7,3		

**2-tab. Dynamics of clinical indicators of peri-implant tissues when using Traumeel s gel for the treatment of mucositis (olm and KLM groups) and peri-implantitis (ol P and Cl p groups)**

Comparison of inflammatory complications and recurrence rates of inflammation in the main (olm) and control (KLM) groups in the presence of initial mucositis. The development of peri-implantitis in the main group occurred in 1 implant after 2 years, and in 2 implants after 3 years (2.1% and 4.3%, respectively); in the control group, mucositis progressed to peri-implantitis in 2, 3, 4 implants after 1, 2, 3 years (5.7%, 8.6%, respectively). 11.4%), compared to the KLM group, 100.0%, 75.6% and 62.3%.

The occurrence of bone resorption is more frequent than inflammatory manifestations: during the control period of 1, 2, 3 years, in the olm group, b resorption for the implant zone was recorded in implants 1, 3, 4, and in the CIM group - in 3, 5, 7, which is 2.1%, 7.0%, 8.5% and 8.6%, respectively.%, 14.3%, 20.0%; in the KLM group, the increased frequency of detection of resorption was 75.6%, 51.0% and 57.5%.

When using Traumeel s gel for the treatment of mucositis, the average duration of peri-implant gum recession was  $3.6 \pm 0.7$  days, compared to  $4.2 \pm 1.0$  days in the control group, which is 14.3% longer.

Mucositis progression relapse XP. Progression. Resorptions, periimplantitis inflammation bone inflammation. tk. □ 1 year EZ 2 years and 3 years

The difference between the initial presence of mucositis and the rate of inflammatory complications and recurrence of inflammation in the main (olm) and control (KLM) groups after 1, 2, 3 years.

In the Olm and KLM groups, the hygiene index was on average unsatisfactory before vagR-u treatment -  $2.8 \pm 0.3$ ; after professional hygiene and treatment of mucositis, hygiene improved in the KLM group by  $1.7 \pm 0.2$  and in the Olm group by  $1.2 \pm 0.2$  due to the use of Fagodent gel (difference 29.4%). After 1, 2, and 3 years of playing, it gradually deteriorated:  $1.7 \pm 0.3$ ,  $1.8 \pm 0.3$ ,  $2.0 \pm 0.2$  in the OLM group and  $2.2 \pm 0.4$ ,  $2.4 \pm 0.3$ ,  $2.5 \pm 0.4$  in the KLM group, respectively (difference between groups 29.4%, 22.7%, 25.0%, 20.0%).

### CONCLUSION

This article studies the prophylactic efficacy of the drugs "Fagodent" and "Traumel S" in dental implantology. Both drugs are used as effective means to accelerate the patient's recovery, prevent infections and reduce inflammation in the period after the implantation procedure. "Fagodent" has antibacterial, anti-inflammatory and tissue regeneration properties based on plant extracts, while "Traumel S" with its homeopathic composition strengthens the immune system, reduces swelling and pain, and facilitates the postoperative period.

The combined use of these drugs can increase the success of the implantation procedure and shorten the patient's recovery period. Clinical studies and practical experience show that the drugs "Fagodent" and "Traumel S" are highly effective in dental implantology, play an important role in reducing complications for patients and improving overall health.

Thus, the drugs "Fagodent" and "Traumel S" are recommended as effective means of increasing the preventive effectiveness of the dental implantation process, their use helps to make the implantation procedure more successful and safer for patients.

### List of references:

1. Шодиев, С. С., Исмаев, Ф. А., Нарзиева, Д. Б., Тухтамишев, Н. О., & Ахмедов, Б. С. (2019). Эффективность Применения Отвара Аниса При Лечении Периимплантитов. Достижения Науки И Образования, (11 (52)), 99-103.
2. Исмаев, Ф. А., Мустафоев, А. А., & Фуркатов, Ш. Ф. (2023). Анализ Эффективности Нестероидных Противовоспалительных Препаратов При Излечении Верхнечелюстного Альвеолита. Theory And Analytical Aspects Of Recent Research, 1(12), 49-57.
3. Исмаев, Ф. А., Шодиев, С. С., & Мусурманов, Ф. И. (2020). Анализ Изучения Стоматологического И Общего Здоровья Студентов Вузов Города Самарканда. Биомедицина Ва Амалиёт Журнали, (6), 34-39.
4. Хасанова, Л. Э., & Исмаев, Ф. А. (2020). Комплексная Социально-Гигиеническая Характеристика Условий, Образа Жизни И Здоровья Студентов. Преимущества Обследования Студенческой Молодежи. Проблемы Биологии И Медицины, 1, 286-293.
5. Ismatov, F. A. (2022). Abdullaev Tz Methods Of Application Of Single-Stage Dental Implants For Different Degrees Of Alveolar Atrophy. Web Of Scientist: International Scientific Research Journal, 3(8), 636-643.

6. Aslidinovich, I. F., & Abdurasulovich, M. A. (2022). Structure Of Single-Stage Dental Implants For Varying Degrees Of Alveolar Atrophy. *World Bulletin Of Public Health*, 10, 156-159.
7. Ismatov, F. A. (2020). Comparative Tender Characteristics Of Student Dental Health Indexes. *Academica: An International Multidisciplinary Research*, (10), 11.
8. Ismatov, F. A. (2023). Evaluation Of The Efficacy Of Alendronic Acid In Dental Implantation (Literature Review). *American Journal Of Pediatric Medicine And Health Sciences (2993-2149)*, 1(7), 199-202.
9. Aslidinovich, I. F. (2023). Assessment Of The Effectiveness Of Alendronic Acid In Dental Implants. *Central Asian Journal Of Medical And Natural Science*, 4(3), 1186-1188.
10. Khasanova, L. E., & Ismatov, F. A. (2022). Indicators Of Oral Health At Students Of The City Of Samarkand. *Applied Information Aspects Of Medicine (Prikladnye Informacionnye Aspekty Mediciny)*, 25(4), 13-19.
11. Ismatov, F. A., & Mustafoyev, A. A. (2022). Drug Treatment With Non-Steroidal Anti-Inflammatory Drugs Jaw Alveolitis. *Frontline Medical Sciences And Pharmaceutical Journal*, 2(03), 88-94.
12. Хасанов, Х. Ш., Исмаатов, Ф. А., & Мардонова, Н. П. (2022). Применение "Prf" В Качестве Остеопластического Материала При Одонтогенных Кистах Челюстных Костей. *Вестник Магистратуры*, (2-1 (125)), 13-14.
13. Хасанова, Л., & Исмаатов, Ф. (2021). Результаты Комплексного Стоматологического Обследования У Студентов Высших Учебных Заведений. *Медицина И Инновации*, 1(1), 108-112.
14. Ismatov, F. A., & Emilievna, K. L. (2020). Criteria For Evaluating Student Dental Health Index In Accordance With The «8020» Program Methodology. *The American Journal Of Medical Sciences And Pharmaceutical Research*, 2(11), 99-105.
15. Zafarovich, A. T., & Aslidinovich, I. F. (2022). Use Of Single-Stage Dental Implants For Varying Degrees Of Alveolar Atrophy. *Central Asian Journal Of Medical And Natural Science*, 3(3), 782-786.
16. Ibragimov, D. D., Ismatov, F. A., & Narzikulov, F. A. (2022). Results Of Complex Treatment With Eludril Antiseptic Solution. *Central Asian Journal Of Medical And Natural Science*, 3(3), 689-690.
17. Ismatov, F. A., Kizi Mardonova, N. P., & Hasanov, K. S. (2022). Morphological Experiments To Improve The Effectiveness Of Postoperative Rehabilitation Of Cysts In Maxillary Bones With "Prf" Osteoplastic Material. *World Bulletin Of Social Sciences*, 7, 32-34.
18. Ismatov, F., Ibragimov, D., Gaffarov, U., Iskhakova, Z., Valieva, F., & Kuchkorov, F. (2021). Assessment Of Risk Factors Influencing Dental Health In Higher Education Students. *Interconf*, 721-732.
19. Ismatov, F. A., & Mustafoyev, A. A. (2022). Evaluation Of The Effectiveness Of Non-Steroidal Anti-Inflammatory Drugs In The Treatment Of Maxillary Alveolitis. *The American Journal Of Medical Sciences And Pharmaceutical Research*, 4(03), 29-34.
20. Гаффаров, У. Б., Шодиев, С. С., & Исмаатов, Ф. А. (2018). Влияние Препарата «Холисал Гель» На Послеоперационное Течение У Пациентов После Удаления Ретинированных Третьих Моляров. *Ббк 56.6 С 56 Современные Достижения Стоматологии: Сборник*, 37.
21. Ismatov, A. F. Formation Of Socio-Cultural Competence Of Future Foreign Language Teachers During The Educational Process Of Higher Education.
22. Ismatov, A. F. The Use Of Interactive Technologies In Teaching English To Part-Time Students.

23. Хасанова, Л. Э., Исмаатов, Ф. А., Ибрагимов, Д. Д., & Гаффаров, У. Б. Олий Таълим Муассасалари Талабаларининг Стоматологик Ҳолатининг Ўзига Хос Хусусиятлари. Междисциплинарный Подход По Заболеваниям Органов Головы И Шеи, 182.
24. Ismatov, F. A., Kizi Mardonova, N. P., & Hasanov, K. S. (2022). Morphological Experiments To Improve The Effectiveness Of Postoperative Rehabilitation Of Cysts In Maxillary Bones With " Prf" Osteoplastic Material. World Bulletin Of Social Sciences, 7, 32-34.
25. Хасанова, Л. Э., & Исмаатов, Ф. А. (2024). Особенности Стоматологического Статуса У Студентов Высших Учебных Заведений. Multidisciplinary Journal Of Science And Technology, 4(4), 97-105.
26. Фаррух, И. С. М. А. Т. О. В., Жумаев, О., Каримов, Х., & Шавкиддин, И. С. О. М. О. В. (2024). Важность И Безопасность Антрезорбционных Препаратов Для Успешного Проведения Стоматологической Имплантологии У Пациентов. Samarali Ta'lim Va Barqaror Innovatsiyalar Jurnalı, 2(3), 374-386.
27. Alimjanovich, R. J., Mukhamatisakovich, I. S., Isamiddinovich, K. A., & Asliddinovich, I. F. (2023). Basics Of Predicting Facial Sox Injuries In Athletes And Clinical-Immunological Prevention. Novateur Publications, (12), 1-121.
28. Исмаатов, С. Ш., Угли, Т. Ҳ., & Асроров, М. Ю. (2019). Современное Состояние Отбели Хлопкового Масла. Экономика И Социум, (1-1 (56)), 535-537.
29. Ismatov, A. F. Formation Of Socio-Cultural Competence Of Future Foreign Language Teachers During The Educational Process Of Higher Education.
30. Ismatov, A. F. The Use Of Interactive Technologies In Teaching English To Part-Time Students.
31. Ismatov , F., & Umarova , Y. (2024). Some Discussions Regarding The Macrostructure And Osteointegration Of The Jaws During Dental Implantation. Conference Of Natural And Applied Sciences In Scientific Innovative Research, 1(4), 76–82. Retrieved From <https://Universalpublishings.Com/Index.Php/Cnassir/Article/View/53855>
32. Исмаатов Фаррух Аслидинович, & Умарова Юлдуз Аслидиновна. (2024). Некоторые Комментарии К Метаболизму Костной Ткани И Ее Фармакологическим Свойствам. Yangi O'zbekistonda Tabiiy Va Ijtimoiy-Gumanitar Fanlar Respublika Ilmiy Amaliy Konferensiyasi, 2(4), 250–258. Retrieved From <https://Universalpublishings.Com/Index.Php/Gumanitar/Article/View/5350>
33. Исмаатов, Ф. (2024). Основных Стоматологических Заболеваний, Методы И Программы Профилактики У Лиц Молодого Возраста. Journal Of Science-Innovative Research In Uzbekistan, 2(8), 17–21. Retrieved From <https://Universalpublishings.Com/Index.Php/Jsiru/Article/View/6878>
34. Исмаатов Фаррух Аслидинович. (2024). Состояние И Методы Обследования Стоматологического Здоровья, Формирование Групп И Методы Профилактики. Scientific Journal Of Applied And Medical Sciences, 3(8), 19–24. Retrieved From <https://Sciencebox.Uz/Index.Php/Amaltibbiyot/Article/View/11645>
35. Ismatov, F. (2024). Some Problems Of Organizing Dental Care For Youth And Its Importance. Multidisciplinary Journal Of Science And Technology, 4(8), 26–30. Retrieved From <https://Mjstjournal.Com/Index.Php/Mjst/Article/View/1792>
36. Ismatov Farrukh Asliddinovich. (2024). Dental Health Of Youth In The World At The Current Stage. American Journal Of Pediatric Medicine And Health Sciences (2993-2149), 2(8), 18–22. Retrieved From <https://Grnjournal.Us/Index.Php/Ajpmhs/Article/View/5612>