

As a leader in the pharmaceutical industry, we are responsible for modern high-quality medicines that allow wider access for patients to effective treatment. We attach particular importance to the systematic development of medical knowledge and scientific research, contributing to the appearance of new drugs for the prevention, diagnosis and early treatment of patients.

We are proud of the scale of our work and hope for the further successful development of this practice, also with our participation, for the benefit of the society of the Republic of Kazakhstan.

Over the years, the Polpharma Group has been cooperating broadly with the academic community in Poland, and also supports the exchange of experiences between the main clinical centers. For several years, SANTO Company has been actively supporting such activities in Kazakhstan, as well as developing scientific and technical cooperation between academies of sciences and institutes in the Republic of Kazakhstan.



Supervisory Board





SANTO Company is a leader among Kazakhstan drug manufacturers and a part of the international pharmaceutical group Polpharma, operating in Central and Eastern Europe, the Caucasus and Central Asia. The history of the Company's pharmaceutical plant extends back 140 years.

The company develops, produces and delivers affordable high-quality medicines to the markets of Kazakhstan and Central Asia.

The company's portfolio consists of 120 generic drugs in 12 pharmacotherapeutic groups for the treatment of diseases in various areas of therapy.



SANTO has representative offices in Kyrgyzstan under a brand name SANTO Member of Polpharma Group and Uzbekistan under a brand name Polpharma and exports to the markets of countries such as Russia, Mongolia, Tajikistan, Turkmenistan and meets the needs of the domestic market.



SANTO Academic program is the main educational project of SANTO Company, launched in 2013 for the implementation of public-private partnership in the field of health care.

The goal of the project is to improve the quality of the pharmaceutical industry to the level of international standards. The program was launched within the direction indicated at the Foreign Investors Council on May 22, 2013 on setting up the education system to provide the necessary personnel and meet the need for engineering and technical staff, having skills of the international level, as well as on the participation of business in the forming of curriculums and learning methodology and the involvement of international specialties for the building up of a highly professional staff from local professionals.

Our cooperation with educational institutions involves acquaintance of schoolchildren, students, and academic staff with the production facilities and research laboratories of the company, providing grants to the most promising schoolchildren, students and young scientists conducting or improving scientific research in the field of pharmaceutics, internships.

In addition, in July 2019, SANTO opened a digital engineering and educational center to train students and improve the skills of its own employees.



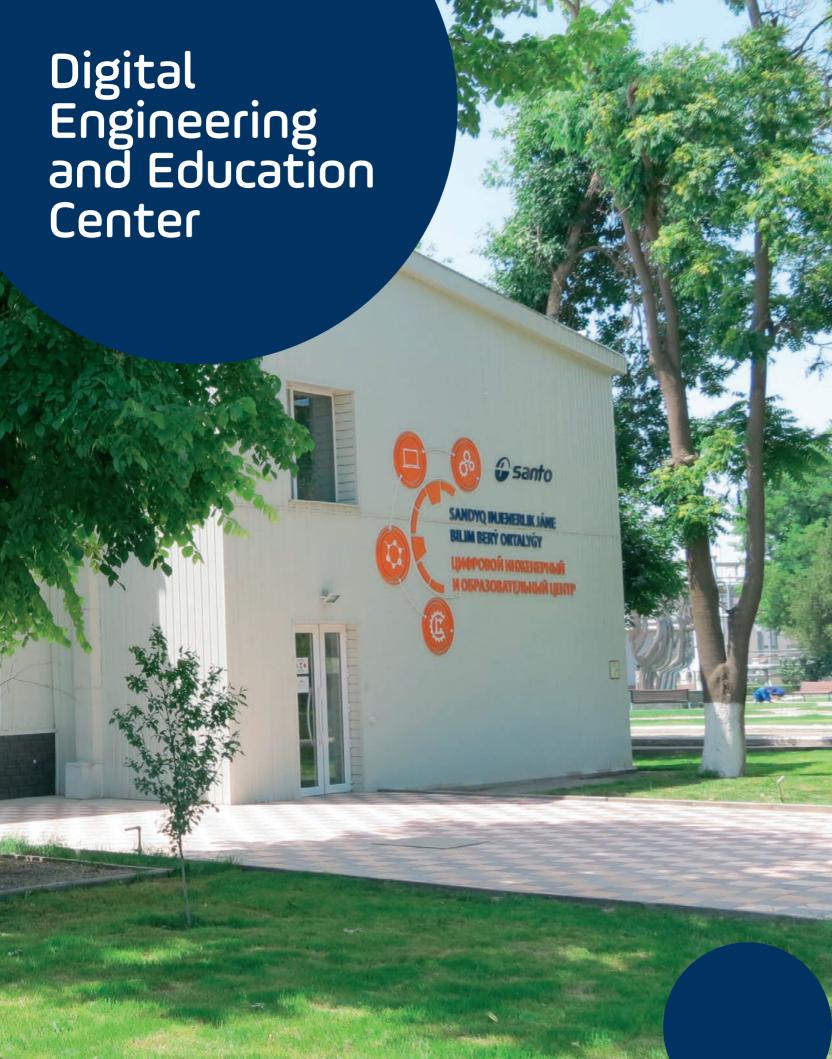


South-Kazakhstan Medical Academy

Nazarbayev University

Nazarbayev Intellectual School of Chemistry and Biology in Shymkent Astana Medical University

S.D. Asfendiyarov Kazakh National Medical University





July 2019

October 2019

The Digital Engineering and Educational Center was opened on July 1, 2019 at the SANTO plant and includes two classes – «Information Technology» and «Automation and process control».

The classes work as a center for training and advanced training of the company's employees in the field of IT, metrology, automation and process control. Each class is designed for comfortable training of 10-12 students. The total amount of investments in the Center is 100 million tenge.

A trial training course on the basics of Automation and process control for students and teachers of the Shymkent Innovation College was successfully held at the SANTO Digital Engineering and Education Center.





As part of the educational project «SANTO Academic program» a grand ceremony of signing of the Memorandum of Cooperation between the SANTO Company and S.D. Asfendiyarov Kazakh National Medical University was held at the S.D. Asfendiyarov Kazakh National Medical University.



Organization of a competition for 4th-year students in "pediatrics", "dermatology", "therapy" for a paid internship at the SANTO branch in Almaty.

More than 60 people applied. From June 11 to August 31, 2018, 7 of the best students were selected by SANTO for a paid summer internship.

### On December 6-7, 2018, SANTO became the general partner of the student conference.

«University Days» on the topic «Integration of medical education, science and practical healthcare: new challenges and opportunities for KazNMU».



Since February 2019, SANTO experts have conducted a series of guest lectures for undergraduates, doctoral students and university teachers on the following topics:

«Pharmaceutical development and modern production of medicines»

«Medication quality assurance system and its main components:



GMP/GDP rules»

«Good Pharmacovigilance practice»

"Pharmaceutical Manufacturing Validation"

«Documentation and self-inspection of a pharmaceutical company»

On March 15, 2019, SANTO became one of the partners of the youth forum "Zhastar Forumy KazNMU-2019" for students of medical universities in Astana, Semey, Aktobe and Turkestan.

### Industrial practice at the SANTO plant for the preparation of diploma projects.

6 best graduate students in the specialty «Industrial Pharmaceutical Technology» have completed an industrial practice at the plant



## 2019

SANTO Company held lectures for students and teachers of S.D. Asfendiyarov KazNMU.

The first speaker this year was the head of the SANTO warehouse complex, who spoke about Good Distribution Practices (GDP). He spoke about the importance of proper storage, transportation and distribution requirements

to ensure the quality, safety and efficacy of medicines throughout the supply chain, and to prevent the risk of falsified medicines entering the supply chain. The leading specialist in operational quality assurance SANTO spoke about the peculiarities of the production of medicines in modern conditions, about the history of GMP. At the end of the lecture, students could ask their questions and receive certificates, as well as learn that SANTO is a modern science-intensive production with high technological and scientific potential and highly qualified employees.

In 2019, SANTO took an active part in two major social projects in Almaty and Shymkent: the modernization of two classrooms in pharmaceutical development at the S.D. Asfendiyarov Kazakh National Medical University.



### LECTURE ON PHARMACOVIGILANCE

We continue to train students, doctoral students and teachers of S.D. Asfendiyarov KazNMU. On March 1, a lecture on pharmacovigilance was held, which was attended by about 50 people. The SANTO Pharmacovigilance Department

spoke in detail about the history and tools of pharmacovigilance. Conducted an interactive session and taught the audience how to correctly fill in the Yellow Card. All those present received certificates at the end of the lecture.

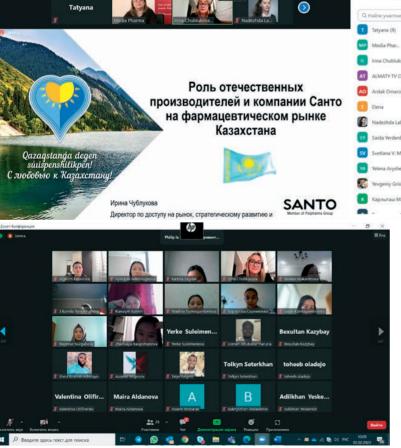


An educational seminar on the topic "Pharmaceutical development and modern production of medicines" was held at the S.D. Asfendiyarov Kazakh National University using SANTO company as an example. The seminar was attended by over 40 people.





# SANTO COMPANY PARTICIPATED IN THE TRAINING PROJECT "MEDSERVICE PLUS" FOR JOURNALISTS ON THE BASIS OF



S.D. Asfendiyarov

KazNMU.

# 2020

For the first time, one of the largest distributors of SANTO - the company Medservice Plus - on November 17 and 18. on the basis of KazNMU, held a thematic online meeting of representatives of the pharmaceutical market of Kazakhstan, the media and students, during which the speakers spoke about the pharmaceutical market of Kazakhstan and the work features during a pandemic. Director On Specialty Care **Products Promotion &** Market Access at Santo made a presentation on the topic "The Role and Place of Domestic Manufacturers in the Pharmaceutical Market".



Irina Chublukova

& C6

Care Products
Promotion & Market
Access at Santo



This memorandum was concluded with the aim of assisting in the development and implementation of programs to upgrade the skills of medical and management personnel, as well as the development of joint research activities. The signed documents reflect the commonality of professional and social interests in the development of a new scientific partnership in the sphere of

health care, the possibility of applying of the knowledge gained in matters of extending life, reducing the burden of disease and improving quality of life.

November 16 to 21, 2013, within the SANTO Academic Program project, the first study tour for the highest professorial staff of the Nazarbayev University Center for Life Sciences in Poland was organized.



From January 27 to February 2, 2014, a group of researchers from the laboratories of the Center for Life Sciences of Nazarbayev University visited the Polpharma production facilities and research center.

May 22 to 23, 2014, a bilateral Memorandum of Understanding between the Gdansk Medical University and the Center for Life Sciences of Nazarbayev University was signed in order to strengthen mutually beneficial relations; and for the first time a competition among 24 young scientists of Nazarbayev University was held, where works on biomedicine and biotechnology issues were presented. The best young scientists were awarded grants from the SANTO Academic Program.

In 2014, the Center for Life Sciences of Nazarbayev University, with the support of SANTO Company, launched and conducted the first phase of the epidemiological study of cardio metabolic risk factors among the rural population aged 50-75 years in the Akmola region.



With the support of SANTO Company, Nazarbayev University hosted the III International Scientific Conference «Regenerative Medicine and Quality Longevity», the main purpose of which was the discussion of topical issues and latest achievements in the field of regenerative medicine and scientific foundations for quality longevity.





Chief Research Scientist of the Center for Life Sciences of Nazarbayev University presented the results of the study of cardiometabolic risk factors among the rural population aged 50-75 years in the Akmola region. In 2015, in order to further study the regional characteristics of cardiometabolic risk factors, the second stage of the study was conducted in the East Kazakhstan region. A database on all medical, social and molecular biological determinants of health was established during the study.

On April 21, 2015, a seminar on regenerative medicine was held at the Nazarbayev University, where Senior Director of Polpharma Biologics presented a report on the production of biological products based on example of Polpharma in Europe and the possibility of their production in Kazakhstan.

SANTO Company conducts a grant competition and allocates funds for young scientists and students under the age of 35 from Nazarbayev University for research and scientific work in the field of pharmacology (experimental, clinical pharmacology, pharmacogenetics, molecular pharmacology, pharmacoepidemiology, pharmacoeconomics).

On September 18, 2015, a grand ceremony of awarding nominal scholarships and grants took place in the Nazarbayev University. 21 scientific works from students and young scientists, who offered their approaches to solving a number of medical problems, took part in the competition. The jury selected the best of them, specifying the names of the seven winners.





In the spring of 2016, within the educational project «SANTO Academic Program», a macroeconomic study on the theme «Contribution of SANTO Company to the development of the Kazakhstan pharmaceutical industry and the economy of the country» was held by a second-year student of the Master's degree programme of the Graduate School of Public Policy of Nazarbayev University.



In 2017, a study of cardiometabolic risk factors among the rural population aged 50-75 years in the South Kazakhstan region was started together with the Center for Life Sciences of Nazarbayev University.





A public workshop on the theme «Modern production of medicines in accordance with the GMP international quality standards; Features of production of biologic products» was held on February 21.

It was attended by students of the Nazarbayev University School of Medicine, Astana Medical University, representatives of regulatory authorities in the sphere of health and medical community.

### BIOSIMILAR WORKSHOP AND ROUND TABLE



2019

SANTO and Nazarbayev University School of Medicine signed a Memorandum of Cooperation. On February 21, a workshop on the topic: «Modern production of medicines according to international GMP quality standards; Features of the production of biological medicines» and a round table on the topic: «Biosimilars in sustainable drug provision: science and technology, approaches to the evaluation of medical technologies and the exchange of experience in the interchangeability and substitution of biological products» was held in Astana.



### **GUEST ONLINE LECTURE**

On November 16, the Branch Chief Strategy Officer and Market Access at Santo held a guest online lecture for students of the Nazarbayev University School of Medicine about the SANTO company and its role in the development of the pharmaceutical industry in Kazakhstan, about the company's production and its digitalization, the company's portfolio and exports. Special attention was paid to the R&D Center, its modernization and work on the development of effective and modern medicines in accordance with international standards.





On February 2, within the framework of the educational project «SANTO Academic program», the Branch Chief Strategy Officer and Market Access at Santo gave an online lecture on the role of the company SANTO in the development of the pharmaceutical industry in Kazakhstan and the role of generics in providing access to effective therapy to more patients for students of the Nazarbayev University School of Medicine.







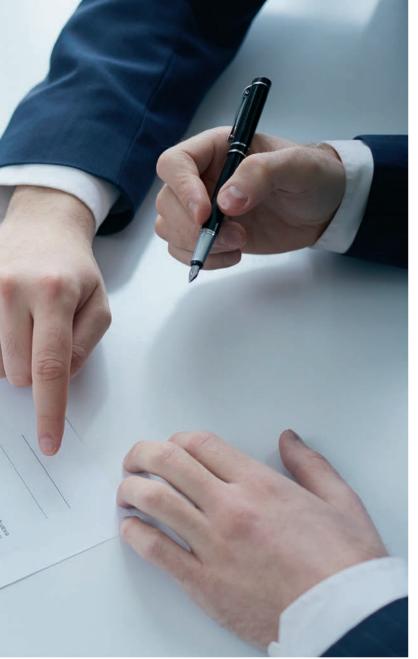


On 11 April, for students and undergraduates of the School of Medicine of Nazarbayev University, the General Director of SANTO company Adam Aleksiejuk gave a lecture on the topic: «The role of generics in the development of the pharmaceutical industry in Kazakhstan». During the lecture students and undergraduates learnt about what generics are, their role in the development of the pharmaceutical industry in Kazakhstan. Particular attention was paid to the contribution of SANTO to the development of pharmaceutical production in Kazakhstan and Central Asia, as well as providing patients with effective, safe and quality drugs for the treatment of various diseases.



Astana Medical University

A Memorandum of Understanding between SANTO Company and the Astana Medical University was signed. The Memorandum was signed with the aim of developing partnerships and supporting the education system.





2015

October 13 to 17, 2013, students of Astana Medical University made the first trip for undertaking an introductory training at the Polpharma sites, Gdansk Medical University (Poland) and Polpharma Biologics Research Centre.

On December 4, 2013, two scientists of the Astana Medical University received grants to conduct or improve scientific research in the field of medicine and pharmacy. On May 20, 2015 the awarding ceremony of the winners of the competition for receiving cash grants from the SANTO Company took place at Astana Medical University. As a result of the SANTO Academic Program competition the following prizes have been awarded: a grand prix, the Valentin Korpachev Grant (a former doctor of medical sciences, professor, and member of the Academy of Sciences of the Republic of Kazakhstan (1935-1998) and a researcher of experimental and clinical problems of emergency medicine), and the Ignatyi Lukashevich Grant (a Polish pharmacist and the creator of the method for kerosene production by distilling crude oil and inventor of a kerosene lamp).



On October 23, 2014, SANTO Company and the South Kazakhstan Medical Academy signed a memorandum.

In 2014, SANTO specialists joined the examination board on the discipline «Pharmaceutical Chemistry» on the 4th and 5th courses, and also took part in the student's job fair at the South Kazakhstan Medical Academy in Shymkent. In addition, for the administrators of the university a tour around the shop for the production of injection solutions and infusions was organized. Also, tours for students and teaching staff around the company's production facilities are conducted on a regular basis.



In 2015, SANTO Company opened a training class in the territory of the plant in Shymkent.

The class became a platform for interactive lectures and demonstration lessons for participants of the SANTO Academic program.



From 2016, lessons for students of the South Kazakhstan Medical Academy are held on the basis of the training class of the SANTO Company. In March 2016, among the students of the South Kazakhstan Medical Academy, together with the Research and Test Center of the company, a competition to develop new forms of herbal cough medicine and to improve analytical procedures was announced. On March 6, 2017 the South Kazakhstan Medical Academy held a grand ceremony of awarding commemorative gifts and prize money to participants and winners of the competition.

On August 23, 2016, a cooperation agreement between the Polish company Herbapol Warsaw (part of the Polpharma Group) and the South Kazakhstan Medical Academy was signed, aimed at developing a new production of vegetable drug preparation on the base of SANTO Company. Within the agreement, a

scientific and research contest was

organized among students and the teaching staff of South Kazakhstan Medical Academy to change the composition and analytical procedures of the cough medicine.

Every year, about 300 students have an internship at the production sites of the plant, and SANTO specialists are part of the examination board on the discipline «Pharmaceutical Chemistry» on the 4th and 5th courses.



SANTO continues the development of the academic program with the main partner in the region - the South Kazakhstan Medical Academy (SKMA).









South Kazakhstan
Medical Academy
celebrated its 40th
anniversary and held
a conference with famous
scientists from
Great Britain, Turkey, Poland,
Germany, Czech Republic,
Russia, Kazakhstan,
Kyrgyzstan and Uzbekistan.
The strategic partner at the
conference is SANTO.

During the Research-to-Practice conference, scientists from different countries discussed the achievements and prospects for the development of healthcare, medicine and pharmacy. Within the framework of the event, plenary sessions were held on modern approaches to the research of medicines and medicinal plant raw materials, innovative approaches in the field of medicine and the production of medicines. The results of the scientific papers of the speakers are published in the scientific journal «The South Kazakhstan Medical Academy journal».



The lecture was held in an offline format and brought together about 350 people. In addition, the students of S.D. Asfendiyarov KazNMU and the Nazarbayev University School of Medicine had the opportunity to join online.

The topic of the lecture was devoted to the effective management of pharmaceutical production. The head of industrial operations at Polpharma Group spoke about the main trends and features of the development of modern pharmaceutical production. The audience learned how to analyze and improve production process flows, and learned about the concept of product reliability by efficiency. There was also the matter of effective compliance with requirements which is of special importance for the pharmaceutical industry, as quality is one of the main competitive advantages, and helping people live healthy lives in a healthy world is at the forefront of corporate strategy.

The main point for SANTO is to invest in people, in education, in Kazakhstani personnel.

On February 1, a guest lecture by the Head of Industrial Operations at Polpharma Group was held for students, doctoral students and teachers of the Faculty of Pharmaceutical Production Technology of the South Kazakhstan Medical Academy.





The lecture was held on the theme "Harnessing the Power of Digital Thinking: A Catalyst for Transformation in Healthcare" by the Head of the Digital Technologies Department of Polpharma Group, Fabrizio Francesio, for students, teachers, and doctoral students on 9th of June in the South Kazakhstan Medical Academy. The lection of Fabrizio Francesio on the digital thinking in healthcare provided important information about the transformative potential, that these technologies can have in this industry. The lection was based on the intersection of strategies. technologies, creativity and design thinking in order to achieve digital transformation in healthcare. Fabrizio Francesio has shared his vast experience in the sphere of digital strategies and innovations to demonstrate how concepts and practices in digital industries can be successfully introduced to improve the quality of patient-centered care. The introduction of digital innovations can essentially upgrade the results of

patient treatment and increase the level of healthcare in general. The lection showed additionally the perspective for the future of digital healthcare and highlighted the opportunities it opens up.

Digital breakthroughs can alter significantly traditional paradigms of healthcare by providing new ways of interacting of patients and providers of healthcare, by optimizing processes of diagnostics and treatment, and by enhancing the access to medical services. The lection by Fabrizio Francesio inspired the listeners to utilize the potentials of digital thinking and encouraged them to reevaluate traditional methods and approaches in healthcare. He emphasized the importance of integration of digital innovations and strategic thinking for the formation of modern and effective healthcare. system capable of improving the treatment outcomes and satisfaction of patients.







On May 22, 2014 a tripartite Memorandum of Cooperation with NIS and the Chamber of Entrepreneurs was signed to extend cooperation on social and educational projects. As part of the signing of the Memorandum, a demonstration lesson of vocational guidance was held in Nazarbayev Intellectual School with the participation of representatives of SANTO Company, and an information stand about the production.



In March 2015, SANTO Company launched a competition of scientific projects on pharmaceuticals for pupils of the senior classes of NIS. On April 20, 2015, the results of the contest were summed up and three best works were selected, which took the first, second and third places, as well as 7 additional works of pupils, which, according to the jury, were at a worthy level. Winners and nominees of the contest received valuable prizes.



SANTO Company has established annual scholarships for the three best graduates of the School, who, after the graduation, enroll specialties related to pharmaceuticals in Kazakhstan or beyond. Scholarships are paid during the first year of university study.

In 2015, graduates of NIS received scholarships.

All scholarship holders have been awarded grants at Nazarbayev University.

### Nazarbayev Intellectual School of Chemistry and Biology in Shymkent

In April 2016, a competition of scientific works among pupils of 7-11 grades of NIS was announced; according to the results, 10 school works won. In total, pupils submitted 37 works. The results of the competition were delivered on April 26, 2017 – on the International Day of Intellectual Property Protection

The winners of the contest received valuable prizes from the organizers.

In 2016 the SANTO scholarship program for graduates of the Nazarbayev Intellectual School of Chemistry and Biology in Shymkent continued. Scholarships were awarded to the three best graduates of the School, who, after the graduation, enroll specialties related to pharmaceuticals in Kazakhstan or beyond. Scholarships were paid during the first year of university study.







In 2017, SANTO together with its Academic Program partners in the South Kazakhstan region conducted a competition of scientific works among NIS pupils.

10 projects were selected as winners.

In total, 37 works of pupils of NIS were presented for the competition. The results of the competition were summed up on April 26 – on the International Day of Intellectual Property Protection.

The authors were awarded valuable prizes.



Every student has thought about choosing a future profession at least once. SANTO considers one of its missions to help pupils in this direction. Therefore, NIS students regularly visit the company's production sites. Employees describe how such a large factory works, what professions there are, what SANTO produces. This tour, in addition to helping to choose a profession, educates young people with a sense of patriotism and pride in the country where their parents live and work. Every year about 50 school children attend such tours.





SANTO AWARDED SCHOLARSHIPS TO THE BEST PHARMACISTS OF AL-FARABI KAZAKH NATIONAL UNIVERSITY On November 26, SANTO sponsored the traditional event «White coat ceremony» and awarded three scholarships to the best students of the Department of Fundamental Medicine of the Higher School of Medicine of the Faculty of Medicine and Healthcare of Al-Farabi Kazakh National University for research work. Within the framework of this study, students received not only a financial reward, but also experience and knowledge.

2022

In December 2022, the company SANTO helped the Faculty of Medicine and Healthcare of Al-Farabi Kazakh National University to hold the matriculation ceremony called "White coat ceremony".



### **ROAD TO SCHOOL**



Due to lack of funds, not all parents will be able to prepare their children for the new school year. It is especially difficult for orphans, schoolchildren from large, low-income and single-parent families.

That is why, on the threshold of the school year, the republican charity event "Road to School» takes place every year in Kazakhstan. The SANTO company has been actively supporting the social initiative for many years and provides necessary school supplies - backpacks, notebooks, pens, pencils, etc. for children under the care of the Al–Farabi district Akimat of Shymkent. Our support for those in need is necessary and timely.



# For notes



### For notes

