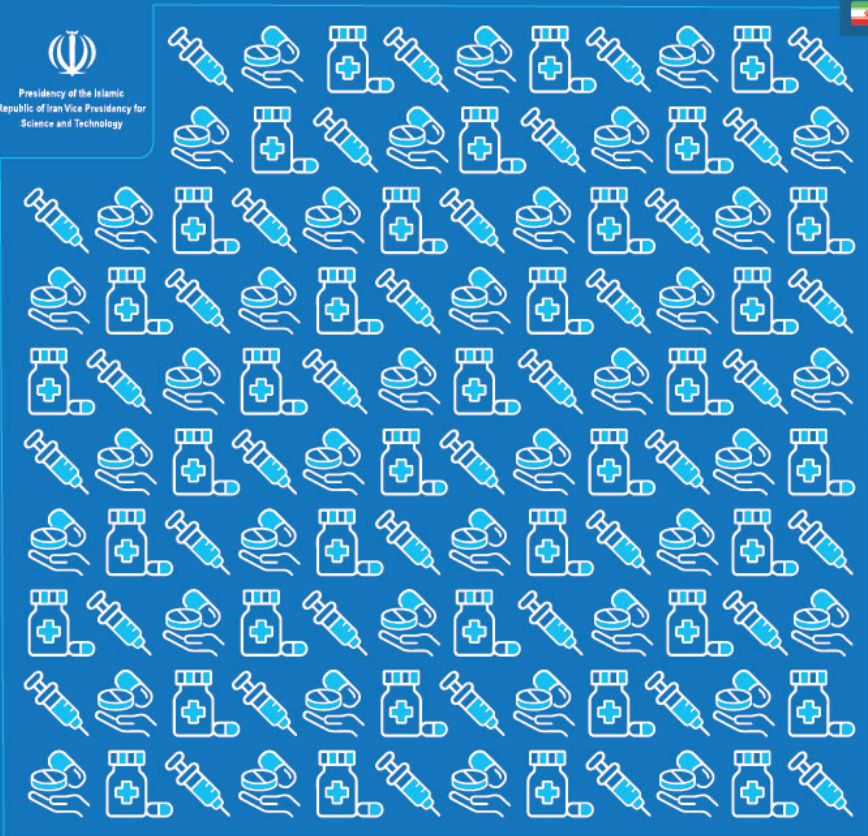




Presidency of the Islamic
Republic of Iran Vice Presidency for
Science and Technology



Fourth Volume

MEDICINE and HEALTH

Knowledge-Based Products and Equipment

مجلس المدینة العلمیة

FOURTH VOLUME

Knowledge-Based Products and Equipment
Medicine & Health





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Knowledge-Based Products and Equipment Fourth Volume: [Medicine & Health](#)

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Preface

One of the key factors in a nation's industrialization and economic complexity is technology. Complex economies can connect vast networks of individuals with relevant information to produce a variety of knowledge-based goods. Indeed, the types of goods or products that are ultimately supplied to international markets are taken into account when determining the complexity of an economy.

A knowledge-based economy is one in which the application of knowledge and information plays a significant role in shaping production and distribution, and where investments in knowledge-based businesses have drawn particular attention. Along with enhancing nations' competitiveness, the transformation of economies into knowledge-based economies has the potential to have a significant impact on international trade.

7000 knowledge-based businesses in Iran provide knowledge-based goods that are the result of the expertise and experience of professionals and university graduates. These businesses, which occasionally resemble enormous technology factories, sold more than 10\$ billion worth of goods last year and exported 1\$ billion or so to various nations. The Presidential Deputy for Science and Technology is recognized as the most significant authority for direction, leadership, and development of the technology area in Iran. It serves as a support organization for startups and knowledge-based businesses by finding and selecting these enterprises. This book, along with 19 other books, is a carefully curated selection of goods with a track record or export potential that was put together using data provided by chosen businesses for presentation to foreign clients, business people, and government and academic officials interested in using these goods. To review the company's manufacturing and distribution records, access to technical knowledge and specialized human resources, production and export capacities, and after-sales services, two specialized and commercial committees were formed separately, and each committee reviewed the products in detail with the participation of technical and commercial experts.

In this procedure, specialized committees were held with the collaboration of the experts of the center of companies and knowledge-based institutions of the Deputy for Science and Technology, headed by *Dr Reza Asadi Fard* and Coordinated by *Engineer Mojtaba Houshmandzadeh*. In addition, *Engineer Mehdi Ghaleh Noei* and *Engineer Ruhollah Estiri* presided over commercial committee meetings, which also included businessmen from the private sector, and I want to express my gratitude to these two groups for their work and assistance.

I also want to appreciate the project manager, *Zahra Afzali*, who has taken on a lot of responsibility and given close attention to the project's design and development from the beginning with innovative ideas.

I also think it's important to recognize and express my gratitude to my other colleagues for their efforts in gathering, reviewing, contacting firms, selecting, and rewriting texts, and finally editing and creating this book:

Project monitoring and editing team: *Mohammad Torabi, Fereshte Elahi*

Evaluation team: *Yaser Shadan*

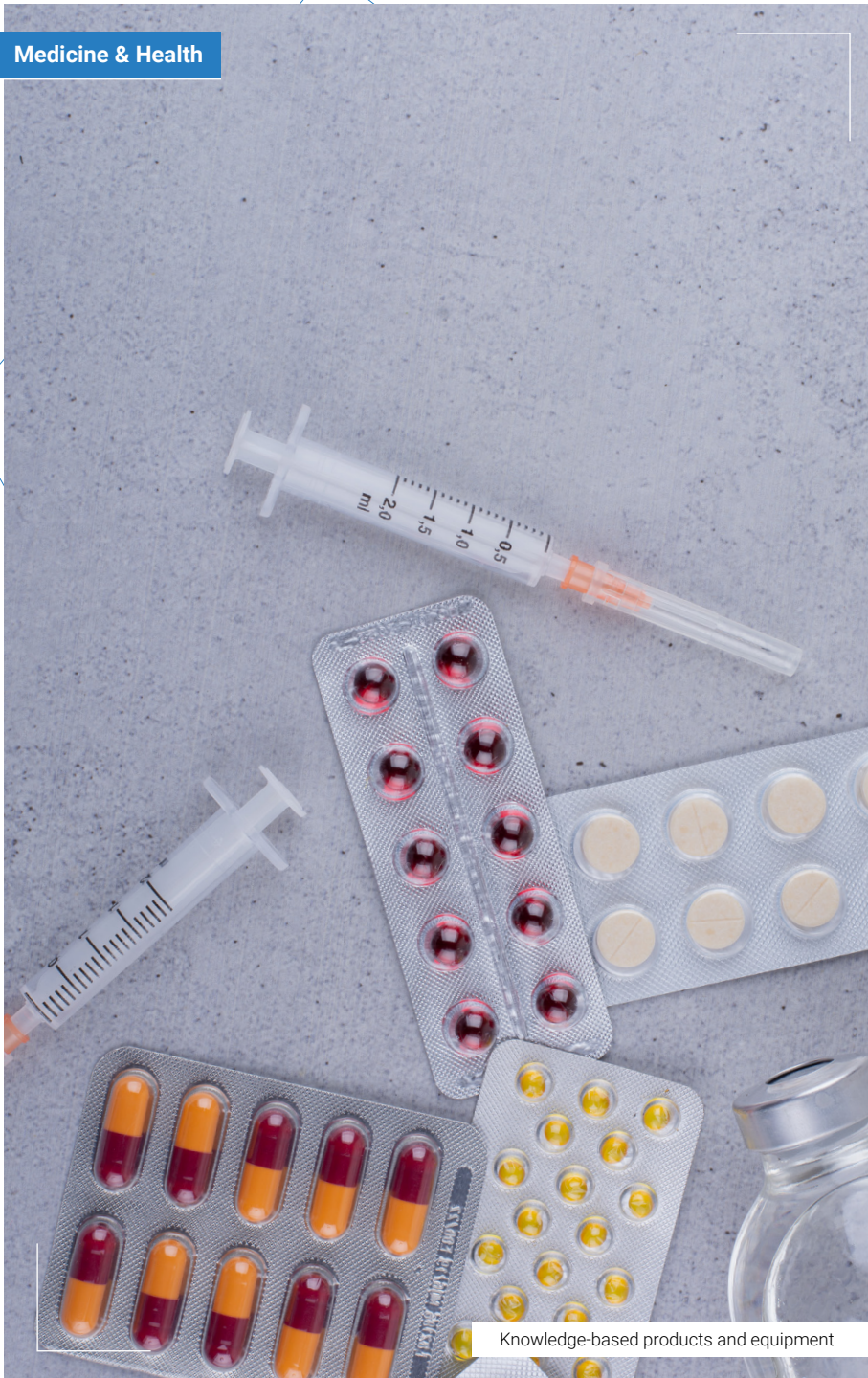
Editorial team: *Roghaye Mohammad Khanpour, Mohsen Bayghareh, Mohammad Amin Sadat Akhavi, Nima Sabeti, Mohammad Matin Shirzad*

Design team: *Mohammad Hossein Pourdabbaq, Masoud Khalili*

I want to underline that the aforementioned goods may be offered in a variety of ways in the country of destination, including export of end products, export of semi-finished and assembled products at the destination, joint production in the destination country and other economic cooperation. In each of the aforementioned scenarios, the Export Development and Technology Exchange Fund is prepared to co-invest in the target countries and guarantee the purchases as a financial sponsor of knowledge-based export enterprises.

The book's conclusion also includes a list of export management firms authorized by the Deputy for Science and Technology for communication, Iran House of Innovation & Technology (iHiT), located in several countries, and commercialization and technology transfer agencies. Finally, I am hoping that this book will be beneficial to the readers and provide them with a thorough grasp of Iranian technological advancements.

Regards,
Mehrdad Amani Aghdam
CEO of Export Development and Technology Transfer Fund



Knowledge-based products and equipment

Contents

CHAPTER 0

Introduction

The Origin of Industry and Export in The Eyes of Iranians.....	7
Industry and Export in Today's Iran.....	8
Where the New Technologies Stand in Iran's Industry.....	9
The Status of Knowledge-Based Products in Medicine & Health.....	10
The Technological Vision for Medicine & Health.....	12
The Division of Knowledge-Based Products in Medicine & Health.....	12

CHAPTER 1

Biotechnological and Chemical Drugs

Oncology and Hematology Drugs.....	28
Neurological Drugs.....	30
Rheumatology Drugs.....	32
Gynecological and Hormonal Vaccines.....	34
Manufacturing, Purifying and Characterizing the Monoclonal Antibody RITUXIMAB.....	36
Manufacturing, Purifying and Characterizing the Monoclonal Antibody TRASTUZUMAB	38
Anakinra, a Recombinant Vaccine.....	40
Bivalent Vaccine Against Cervical Cancer (HPV) in the Form of VLP.....	42
Manufacturing, Purifying and Characterizing Recombinant Filgrastim Proteins	44
Recombinant Human Factor VIII.....	46
Alteplase for Dissolution of Blood Clot Trade Name: Altelyse.....	48
Bovine Pulmonary Surfactant Containing Bovine Lung Extract Trade Name: Beraksurf.....	50

Human Albumin 20% (Albinux 200g/L)	52
Human Intravenous Immunoglobulin 5% (IVIG)	54
Botulinum Toxin Type A Trade Name: Dyston	56
Dry biomass and Compressed Tablets of Blue-Green Algae, Medical Supplement Grade ..	58
Formulation of Various Types of Cancer Drugs.....	60
Paclitaxel Powder for Injection Bound to Lyophilized Albumin Nanoparticles	64
Vial of Bortezomib Sterile Lyophilized Powder for Injection	66
PEMETREXED 100 and 500-mg Sterile Lyophilized Powder for Injection	68
Diclofenac Sodium 100 Tablet Trade Name: Alfen XL	70
Metoprolol Succinate Tablet Trade Name: Metoextend.....	72
Deferoxamine Mesylate 500 mg Lyophilized Powder for Injection	74
Pantoprazole Sodium 40 mg Lyophilized Powder for Injection	76
Deferiprone 500 mg Enteric-Coated Tablet	78
In Situ Forming Sustained-Release 1-Month Depot Injectable Drug of Triptorelin Acetate..	80
In Situ Forming Sustained-Release 3-Month Depot Injectable Drug of Triptorelin Pamoate...	82
In Situ Forming Sustained-Release 1-Month Depot Injectable Drug of Leuprolide	84
Cyclosporine Soft Gel Nanoemulsion with Concentrations of 25, 50 and 100 mg.....	86
Sustained-Release Pressed Tablet of Wellban 150 mg Trade Name: Bupropion.....	88
Carbamazepine Sustained-Release Tablet 200 and 400 mg Trade Name: Tegatard	90
Fampridine Sustained-Release Tablet Trade Name: Dalfyra.....	92
Mesalazine Enteric-Coated Tablet 500 mg.....	94
Methylphenidate Sustained-Release Tablet 20 mg Trade Name: Stimdate 20.....	96
Mesalazine Enteric-Coated Tablet 500 mg	98
Agicoat Silver Nanocrystalline Dressing	100
10-ml Sublingual Spray to Relieve Muscle Spasms and Pains Trade Name: Satinex.....	102
Injectable Teicoplanin Lyophilized Powder	104
Sustained-Release Potassium Citrate Tablet Trade Name : Ureka	106
Quetiapine Fumarate Sustained-Release Tablet Trade Name: TRANQOPINE.....	108

CHAPTER 2

Cell Therapy and Tissue Engineering

Soft Tissue Products Allograft Trade Name: Cenoderm and Ceno Membrane	114
Frozen Heart Products Allograft Including Valve, Conduit, and Patch	116
Various Bone Allografts	118
Frozen Tendon Products Allograft Including Tendon and Achilles Tendon and Achilles Tendon ...	122
Amniotic Membrane Containing Frozen Cells for Treatment of Diabetic Wounds, etc.....	124
Cell-Free Amniotic Membrane for Conjunctivities and Cornea Diseases	126
Mesenchyme Cell Derived from the Umbilical Cord to Cure Cerebral Palsy (CP)	128
Autologous Cell Therapy for Joint Repair Trade Name: MesestroCell	130

CHAPTER 3

Diagnostic services and Technologies

ELISA Diagnostic Kits Set.....	136
ELISA Diagnostic Conjugation Kits Set	138
ELISA and Gamma Diagnostic Kits Set	140
Chromosome DNA Profiling Kits Set	142
Haplotype Identification and Screening Kits Set For Genetic Diseases	144
Diagnostic Kit for Abnormalities of 13, 18, 21, X and Y Chromosomes	146
Immunoassay-based Rapid Test Kits Set.....	148
Types of Kits / DNA Extraction, RNA Extraction, PCR product purificatio, etc.	150
Aptasensor Conjugated with Gold Nanoparticles by Direct Method	152
HCV Detection And Quantitation Kit.....	154
BCR-ABL (P190) Detection And Quantitation Kit	156
CMV Pathogen Detection and Quantitation Kit	158
NGS (Whole Exome) Genetic Testing Services.....	160
Whole Exome Genetic Sequencing Services	162
Screening Software for Industrial Strains with Feature Engineering Algorithm	164
Designing Software for New Drug-Like Compounds	166

Herbal medicines

Supermint soft capsule Pain Reliever and Anti-Flatulence	172
AlzStop Capsule For Improvement of Memory, Prevention and Auxiliary	174
Lime Soft Capsule To Reduce Weight, Triglycerides, Cholesterol and LDL	176
Cumin Soft Capsule to Reduce Weight, Triglycerides, Cholesterol and LDL	178
Femodin Coated Tablet Containing Vitex Extract To Treat Menstrual Irregularities	180
Psyllium Sachet Containing Psyllium Seed To Treat Constipation.....	182
Vomigone Coated Tablet Containing Gingerol And Ginger Rhizome.....	184
Calendula Ointment Obtained from Beeswax Extract, Soybean or Corn Oil.....	186
Arnebia Euchroma Herbal Ointments.....	188
Herbal Formula of Dental Analgesic Drop Based on Satureja Khuzestanica.....	190
Liver and Metabolic Syndrome Tablet Obtained from Artichoke Trade Name: Cynarol.....	192
Stopcivir Herbal Syrup Trade Name: ALERGUARD	194
Alpha Ointment Obtained.....	196
Memoral Capsule	198
Licophar Lozenge.....	200
Prostatan Tablet.....	202
SaffroTin Capsule.....	204
Saffrodit Capsule for Women	206
Phytovagex Vaginal Suppository for Treatment of Fungal Infections	208
Vitex Capsule (Aslaq).....	210
Propolis 300-mg Tablet Trade Name: ProX	212
Soft Enteric Capsule of Peppermint Essential Oil for Improving IBS Syndromes	214
Horsetail Plant Extract Tablets Trade Name: Equiflex Vasha	216
Enteric-Coated Colmigan Capsule Based on Peppermint Essence	218
Psoriasis Symptoms Improvement Cream from Various Plant Extracts.....	220
IraFlax Soft Gel from Linseed Oil.....	222
Silymarin Extract & Oral Drop	224
Production of Plant and Non-Plant Extracts.....	226
Extraction and Production of Compressed Crocin Tablets with Purity of Over 90 %.....	228

Pharmaceutical industry

API of Methadone Hydrochloride	234
API of Codeine Phosphate	236
Synthesis of Various Active Pharmaceutical Ingredients (APIs).....	238
API of Metronidazole.....	240
API of Glatiramer Acetate from the Corresponding Protected Amino Acids.....	242
API of Octreotide Acetate from the Corresponding Amino Acids	244
API of Fingolimod Hydrochloride	246
API of Sunitinib for Treatment of Cancer	248
API of 4-Aminopyridine Trade Name: Fampridine	250
API of Isosorbide Dinitrate	252
API & Granule Form of Imatinib Mesylate	254
API of Sunitinib Malate.....	256
API of Nilotinib Hydrochloride Monohydrate.....	258
API of Cefixime	260
Industrial Synthesis of Various Active Pharmaceutical Ingredients (APIs).....	262
Synthesis of Various Pharmaceutical-Chemical Active Ingredients	266
API of Atorvastatin Calcium	270
API of Clopidogrel Bisulfate	272
API of Rosuvastatin Calcium.....	274
API of Famotidine.....	276
API of Metformin Hydrochloride	278
API of Methadone Hydrochloride from Chloropropane.....	280
API of Rifaximin	282
API of Daclatasvir Hydrochloride	284
API of Dorzolamide Hydrochloride	286
Enzymatic API of Amoxicillin from 6-APA	288
Enzymatic API of Cephalexin from 7-ADCA	290
A variety of Formulations of the Drug's Raw Material Triptorlin Acetate, etc.	292
Types of Radiopeptides Hynic-Octreotide, DOTA-Octreotate, Hynic-UBI & etc.	296
API of Sofosbuvir-Daclatasvir for Treatment of Hepatitis C (HCV)	300
Pharmaceutical and Edible Grades of Halal Gelatin.....	302
Engineered Industrial Yeast Strain Products and Services	304

Inactivated Coronavirus Vaccine | Trade Name: COVIran Barekat306

Synthesis of APA6 from Penicillium chrysogenum and Biomass derivative308

Vedolizumab Antibody Generator Cell line310

Synthesis of Methacrylic Acid-Ethyl Acrylate Copolymer in Emulsion and Powder Forms312

Polymer Tablet Coatings (RT-film) from Methacrylic Acid-Ethyl Acrylate Copolymer314



Knowledge-based products and equipment

Introduction

The Origin of Industry and Export in The Eyes of Iranians

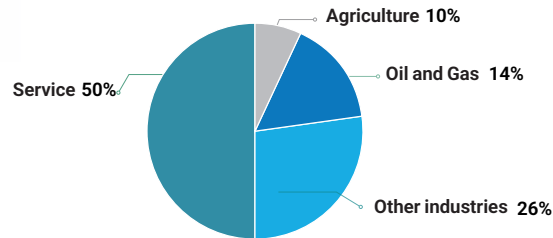
The ancient land of Iran has long been the source of knowledge and industry, and Iranians have played a significant role in the development, evolution and promotion of science and human awareness. Most historians of the world believe that most of the advances in science and human civilization are owed to Iranian civilization and the most brilliant works of art and the highest industrial levels has come from the minds of Iranians. Metalworking industries, agricultural industry, pharmacy and alchemy with themes including tile glazing, carpet dyeing, fabrics and glass were some of the industries that were considered by ancient Iranians. In parallel with the special attention to the development of industry, the history of mutual trade relations between Iranians and other civilizations in East and Central Asia, Europe and Africa has a long history, and Iranians have played a significant role in the expansion of global altruism since long ago by being on the route of the Silk Road and maritime trade.

We Iranians today, like our ancestors, consider industry, art and production in our ancient land to be a transformative and constructive place, and we consider the development of technological interactions and the trade of knowledge-based industrial products with other countries as an opportunity for friendship and the expansion of ties.

Industry and Export in Today's Iran

Industrial development has a very important place in the plans and policies of the Islamic Republic of Iran due to the creation of value added, job creation, increase in exports and reduction in imports, and the transition from an economy dependent on oil and mineral raw materials to an industrial and manufacturing economy, especially an economy dependent on new technologies, is a grand plan that has been adopted for this purpose. Currently, %50 of Iran's gross domestic product is allocated to services and another %50 to industry and manufacturing, which includes %10 agriculture and food industry, %14 oil and gas industry, and %26 other manufacturing industries.

The Share of Various Activities in Iran's GDP

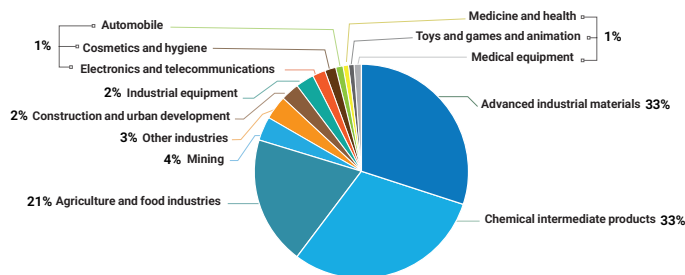


In the meantime, various industries such as pharmaceuticals, medical equipment, construction, communications and telecommunications, energy, mining, chemicals, etc. have a special share of Iran's gross domestic product, and their production, in addition to covering a considerable amount of country's domestic needs, are exported to various destinations.

According to World Customs Organization data, in 2021, the Islamic Republic of Iran had exports equal to 75 billion dollars, almost half of which is allocated to non-oil industries and processed industrial products. Advanced industrial materials, chemical intermediate products, agricultural products and food industry are all among the biggest exporting industries with more exports.

Iran's Exports in 2021

Ref: Trade Statistics for International Business Development ¹



¹ www.trademap.org

Regarding the main export destinations of Iran, it should be noted that **China, India, Indonesia, Russia, Uzbekistan, Ghana, Germany and South Africa**, as well as among the regional neighbours, **Iraq, Turkey, UAE, Afghanistan, Pakistan, Oman, Turkmenistan, and Azerbaijan** account for the largest dollar value of imports from Iran.

Where the New Technologies Stand in Iran's Industry

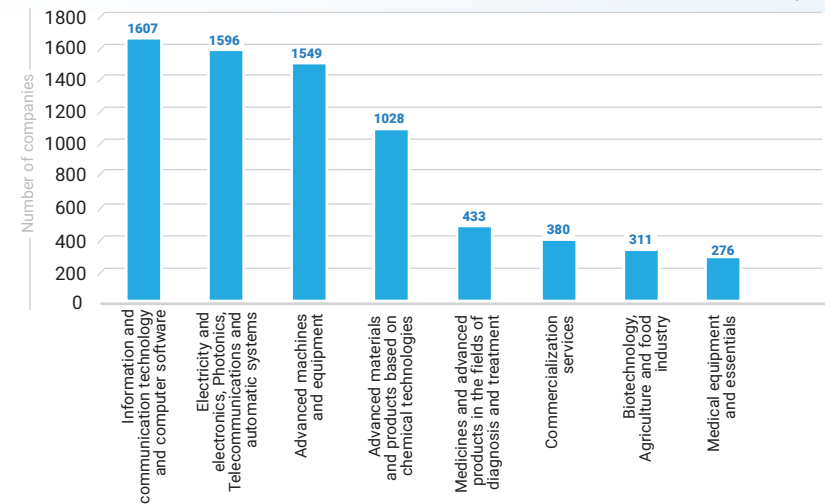
Paying attention to the development of new technologies, commercialization and its influence on manufacturing industries has caused the Islamic Republic of Iran to experience a growing progress in this field in the last decade; An issue that has taken place in Iran in the form of the development of knowledge-based enterprises. Based on this, the meaning behind knowledge-based enterprise is as follows:

A private company that produces products or provides services that have the following three features:

1. The product or service provided by the company has a high or medium to high technology level and its technical knowledge has a significant technical complexity (technology level condition).
2. The product or service design in the company is based on internal research and development or technology transfer (Research and development-based design condition).
3. The company is able to produce and provide the mentioned goods or services to the market (production condition).

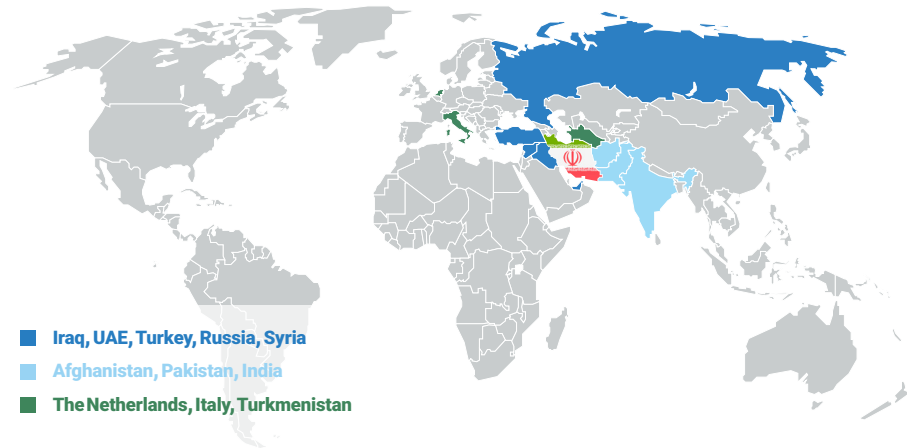
Currently, more than 7 thousand knowledge-based enterprises in Iran are producing products and providing services in the field of various technologies. These companies produce more than 15,000 products or services in total, and their direct employees, which generally include people with a high level of education, are around 250,000 people.

The Number of Knowledge-Based Companies - Technology Fields



The export of Iran's knowledge-based enterprises has been growing in the last 5 years, and these companies currently account for about %2 of Iran's non-oil exports.

The Largest Export Destinations of Iranian Knowledge-Based Enterprises in the Last 5 Years



The Status of Knowledge-Based Products in Pharmaceutical and Healthcare Industry

The pharmaceutical and health industry has a special position in the Islamic Republic of Iran due to its strategic nature and considerable financial turnover in the world. The above statement can be concluded considering the 80-year-old industrial production of medicine in Iran and also the great influence of the companies and producers of this industry in the last few years on dealing with the COVID-19 disease and implementing the health transformation plan in Iran.

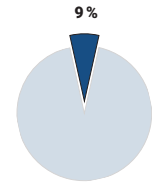
Currently, the pharmaceutical and health industry is one of the noteworthy industries to create value added and jobs in Iran. This industry has also taken a significant share of Iran's non-oil exports despite the very tight competition to be present in the international markets.

In the last few years, an average of 250 million dollars worth of drugs and pharmaceutical products have been exported from Iran to other countries, and due to the special efforts made to develop this industry in Iran, this amount is expected to grow in the future. Considering the wide scope of activities and business of knowledge enterprises active in the pharmaceutical and health industry, as well as the high number of university graduates in the fields related to this industry in Iran, this area represents a significant

amount of business and production of knowledge enterprises. Currently, more than 600 Iranian knowledge-based companies that produce and supply more than 1500 technological products are active in this industry. These companies also account for more than 10% of Iran's knowledge-based production and employment rate.

Finally, concerning the export of knowledge-based products in this industry, it should be noted that in the last 5 years, a total of 815 million dollars worth of products of knowledge-based enterprises active in the pharmaceutical industry have been exported outside Iran.

The Percentage of Medicine & Health Companies from All the Knowledge-Based Enterprises

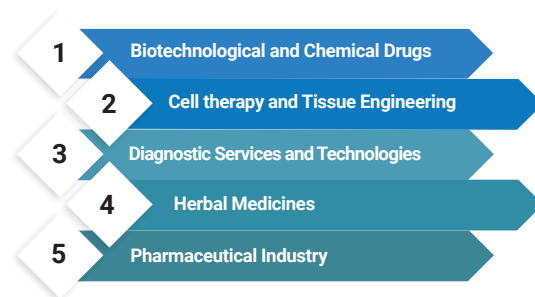


The Main Export Destinations of Iranian Knowledge-Based Enterprises in the Fields of Medicine & Health



Classification of Medicine and Health Industry based on knowledge-based Export Capabilities

As previously mentioned, the wide range of activities of knowledge-based companies active in the field of medicine and health in Iran has caused this industry to account for a significant amount of activities and products of Iran's knowledge-based companies and produce a broad spectrum of products. In this regard, in this book, products that have been collected can be divided into the following subcategories:



The following explains each of the cases and their subsets, in order to provide a general understanding of these areas.

1 Biotechnological and Chemical Drugs

In this category, pharmaceutical products with a biological and chemical nature manufactured by knowledge-based companies, which are ready to be supplied in the form of finished products to the consumer market, including hospitals, drug distribution companies, pharmacies and final consumers, are presented. These drugs are offered orally, topically, sublingually, intramuscularly, intravenously, or in implantable form and transdermal patch, and according to the basic technology used in their production, they can be divided into the following subcategories:

- **First Section | Recombinant Drugs:**

Recombinant drugs are proteins that are produced through the transfer of genetic or recombinant material to living cells. Recombinant technology involves cutting and rejoining the host genome with a foreign gene that carries genetic information for producing the desired medicinal compound. Recombinant drugs introduced in this book are generally used in lyophilized and injected form, and they are often in the form of a ready-to-inject solution. These products are used for the treatment of various types of cancer cells.

- **Second Section | Biological Drugs:**

Drugs that are of human or animal, bacterial or viral origin and are used to diagnose, prevent or treat diseases are in this subcategory. The biological drugs introduced in this book are included in one of the types of vaccines (non-recombinant), therapeutic serums, albumin and IVIG and various products derived from the tissues of living organisms and are generally used in the form of a ready-to-inject solution. These products are used for cases such as respiratory diseases, immune system diseases, HPV treatment and anti-snakebite and anti scorpion sting or as antibiotics.

- **Third Section | Formulation of Complex Pharmaceutical Forms:**

This subcategory is placed at the next stage of the medicine production value chain. This means that raw materials are produced in order to form a pharmaceutical form, such as injectable, oral, transdermal patch, etc., to deliver the active ingredient to the target tissue. In terms of pharmaceutical form, the drugs introduced in this subcategory generally include liposomal, nanomedicine, microspheres, and slow-release granules and are available in injectable or oral form (tablets and capsules). These products are generally used to increase the effectiveness of the active ingredient and reduce the side effects of the drug compared to its usual form.

[Start chapter at page 28](#) »

2

Cell Therapy and Tissue Engineering

New technologies such as tissue engineering, cell therapy and stem cells have been developed in recent decades in order to treat, control or prevent diseases.

Pharmaceutical products developed with these technologies include products that are derived from human cells or tissues and are used for the purpose of implantation, transplantation, injection or transfer to a human recipient. According to this explanation, the technological products of this category in this book include the following:

- **First Section | Tissue Engineering Products:**

Tissue engineering, which is composed of a combination of scaffolds, cells, and bioactive molecules, is used to regenerate and repair tissue, maintain function, or improve damaged tissue or even an organ. In this book, all types of allograft, autograft, xenograft or composite scaffolds products are offered as high-tech products in the field of medicine and health, and they are generally used to repair skin, cartilage, or bone lesions.

- **Second Section | Cell Therapy Products and Stem Cells:**

Stem cells are primary cells that have the ability to differentiate into various cells. In cell therapy, living cells or stem cells are either injected into the patient to replace the damaged cells or transplanted into the patient's body. The introduced products related to stem cells in this book are mainly used as one of the types of ready-to-inject solutions and are often used in the area of skin diseases, immune system and cancer treatment.

[Start chapter at page 114](#) »

3

Diagnostic Services and Technologies

Disease diagnosis is a very important step in the treatment process, that can be associated with errors and cause subsequent problems in the treatment process if it is not based on new technologies and products developed based on it. Therefore, in this category, products that are used in the diagnosis of diseases have been presented:

- **First Section | Diagnostic Kits:**

The diagnostic kits in this book are based on one of the three biochemical, molecular and immunoassay technologies. The purpose of producing these kits is to detect the presence or absence of a microorganism or a specific compound in the human or animal body. In general, these products are used to diagnose diseases such as infectious diseases, thyroid diseases and some genetic diseases. They are also used to detect the consumption of certain compounds such as drugs and alcohol or to diagnose pregnancy. Despite the major use of these kits in laboratories, some of the produced kits, such as pregnancy and rapid detection tests for Covid19-, can be offered in pharmacies and drugstores in order to provide them directly to the final consumer.

- **Second Section | Bioinformatics services:**

This subcategory includes services that are mainly related to the integration of genetics, medicine and diagnostic and clinical sciences with the field of software and information technology. Therefore, services have been offered here that, by combining these sciences, help doctors diagnose rare genetic diseases and find the genetic roots of other diseases and are used in the form of Whole Genome Sequencing and Whole Exome Sequencing, etc.

Start chapter at page 136 »

4

Herbal Medicines

Modern pharmacy uses many plant-based compounds as a base to produce effective chemical drugs, and plant-based medicinal products are available in different forms such as solution, tablet, capsule, powder, etc. Thus knowledge-based products related to herbal medicines can be divided into the following two subcategories:

- **First Section | Special Effectiveness and Advanced Formulation:**

In this category, technologies are included by which the effectiveness of medicinal plants in treatment or help in treatment have been identified and invented by knowledge-based companies.

Moreover, advanced formulations containing medicinal plants belong to this subcategory.

- **Second Section | Extracts, Oils and Essences:**

products obtained from medicinal plants, purified and standardized raw materials (essence, extract and oil), and finally the extracted materials and their formulations are presented in this subcategory.

Start chapter at page 172 »

5

Pharmaceutical Industry

This category includes medicinal products produced by knowledge-based companies that have the ability to be supplied to other companies and drug manufacturing factories. These products can be in one of the forms of raw materials, intermediates, active ingredients and medicinal minerals that can be accepted by pharmaceutical factories and can be divided into the following subcategories:

- **First Section | Synthetic Raw Material:**

In this subcategory, raw materials, intermediates, active ingredients and pharmaceutical minerals that are offered as feed for pharmaceutical industries are presented. In fact, the buyers of these products are pharmaceutical companies and factories.

- **Second Section | Biological and Recombinant Products:**

Products and intermediates employed in the production of recombinant drugs fall into this category. They are available in the form of one of the types of drug substance, culture medium requirements and upstream raw materials or gelatin-based products.

- **Third Section | Tablet and Capsule Coating:**

Tablet and capsule coatings are very important because they cover the unpleasant taste and smell of the drug, protect the unstable active ingredients of the drug in the core of the tablet, improve the appearance of the tablet, separate incompatible substances from each other, facilitate the swallowing of the tablet and improve the release properties of the drug. The coatings presented in this book are generally made of PVP (PolyvinylPyrrolidone) and can be supplied to pharmaceutical factories.

Start chapter at page 234 »

Medicine and Health

First Chapter

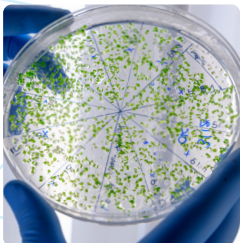
Biotechnological and Chemical Drugs



- Recombinant Drugs
- Biological Drugs
- Formulation of Complex Pharmaceutical Forms

Second Chapter

Cell Therapy and Tissue Engineering

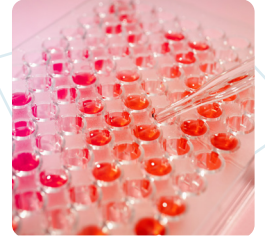


- Tissue Engineering Products
- Cell Therapy Products and Stem Cells

Third Chapter

Diagnostic Services and Technologies

- Diagnostic Kits
- Bioinformatics Services



Forth Chapter

Herbal Medicines



- Special Effectiveness and Advanced Formulation
- Extracts, Oils and Essences

Fifth Chapter

Pharmaceutical Industry



- Synthetic Raw Material
- Biological and Recombinant Products
- Tablet and Capsule Coating

First Chapter
Biotechnological and Chemical Drugs



FIRST CHAPTER

FIRST CHAPTER

Second chapter

Third chapter

Fourth chapter

Fifth chapter

Biotechnological and chemical drugs

Oncology and Hematology Drugs		28
Neurological Drugs		30
Rheumatology Drugs		32
Gynecological and Hormonal Vaccines		34
Manufacturing, Purifying and Characterizing the Monoclonal Antibody RITUXIMAB		36
Manufacturing, Purifying and Characterizing the Monoclonal Antibody TRASTUZUMAB		38
Anakinra, a Recombinant Vaccine		40
Bivalent Vaccine Against Cervical Cancer (HPV) in the Form of VLP		42
Manufacturing, Purifying and Characterizing Recombinant Filgrastim Proteins		44
Recombinant Human Factor VIII		46
Alteplase for Dissolution of Blood Clot Trade Name: Altelyse		48
Bovine Pulmonary Surfactant Containing Bovine Lung Extract Trade Name: Beraksurf		50
Human Albumin 20% (Albinux 200g/L)		52
Human Intravenous Immunoglobulin 5% (IVIG)		54
Botulinum Toxin Type A Trade Name: Dyston		56
Dry biomass and Compressed Tablets of Blue-Green Algae, Medical Supplement Grade		58
Formulation of Various Types of Cancer Drugs		60
Paclitaxel Powder for Injection Bound to Lyophilized Albumin Nanoparticles		64
Vial of Bortezomib Sterile Lyophilized Powder for Injection		66
PEMETREXED 100 and 500-mg Sterile Lyophilized Powder for Injection		68
Diclofenac Sodium 100 Tablet Trade Name: Alfen XL		70
Metoprolol Succinate Tablet Trade Name: Metroextend		72
Deferoxamine Mesylate 500 mg Lyophilized Powder for Injection		74
Pantoprazole Sodium 40 mg Lyophilized Powder for Injection		76

Deferiprone 500 mg Enteric-Coated Tablet		78
In Situ Forming Sustained-Release 1-Month Depot Injectable Drug of Triptorelin Acetate		80
In Situ Forming Sustained-Release 3-Month Depot Injectable Drug of Triptorelin Pamoate		82
In Situ Forming Sustained-Release 1-Month Depot Injectable Drug of Leuprolide		84
Cyclosporine Soft Gel Nanoemulsion with Concentrations of 25, 50 and 100 mg		86
Sustained-Release Pressed Tablet of Wellban 150 mg Trade Name: Bupropion		88
Carbamazepine Sustained-Release Tablet 200 and 400 mg Trade Name: Tegatard		90
Fampridine Sustained-Release Tablet Trade Name: Dalfyra		92
Mesalazine Enteric-Coated Tablet 500 mg		94
Methylphenidate Sustained-Release Tablet 20 mg Trade Name: Stimdate 20		96
Mesalazine Enteric-Coated Tablet 500 mg		98
Agicoat Silver Nanocrystalline Dressing		100
10-ml Sublingual Spray to Relieve Muscle Spasms and Pains Trade Name: Satinex		102
Injectable Teicoplanin Lyophilized Powder		104
Sustained-Release Potassium Citrate Tablet Trade Name: Ureka		106
Quetiapine Fumarate Sustained-Release Tablet Trade Name: TRANQOPINE		108

Recombinant Drugs ○

Biological Drugs ○

Formulation of Complex Pharmaceutical Forms ○



➤ Oncology and Hematology Drugs

◆ Cinnagen Research and Manufacturing Co.

www.cinnagen.com



Product Introduction:

- * **KidiPeg:** It is the trademark of filgrastim. The product is offered for intravenous injection and is similar to neupogen.
- * **PegaGen:** PegaGen is the trademark under which pegfilgrastim is offered. It is used for intravenous injection and is similar to neupogen.
- * **CinnaPoietin:** It is the trademark of erythropoietin, which is used for subcutaneous or intravenous injection. The brand name of the drug is Neoncoremone.

Main Export Destinations:

Germany, Russia, England, Switzerland, Austria, UAE, Turkey, India, Azerbaijan, Uzbekistan, Kazakhstan, Georgia, Tajikistan, Sri Lanka, Moldova, Nigeria, Iraq, Syria, Lebanon, Pakistan

Exports History:

Up to 100,000,000 \$

Founded:

1994

Application:

Drug Name	Application
KidiPeg	Reducing the possibility of infections by stimulating the production of granulocytes in patients with non-myeloid malignancies who receive myelosuppression drugs and are highly likely to contract febrile neutropenia.
PegaGen	Reducing the chances of infection in patients who receive myelosuppressant chemotherapy and are exposed to higher risks of febrile neutropenia.
CinnaPoietin	<ul style="list-style-type: none"> * Treating anemia in patients with chronic failure of the kidney * Preventing anemia in premature infants * Anemia treatment in adults who undergo chemotherapy to treat their cancer * Increasing autologous blood before donation

These products are final B2B & B2C consumer products.

Technical Specifications:

- * **KidPeg:** Each syringe contains 3mg pegfilgrastim in 0.3ml packages.
- * **PegaGen:** Each simple or physioject syringe contains 6mg pegfilgrastin in 0.6ml packages.
- * **CinnaPoietin:** Each syringe contains colorless and transparent solution free from any particles.



➤ Neurological Drugs

◆ Cinnagen Research and Manufacturing Co.

www.cinnagen.com



Product Introduction:

- * **Cinnovex:** Connovex is the trademark for Interferon beta-1a. The product is offered as a powder to make injectable intravenous solutions and is similar to Avonex.
- * **Recigen:** Recigen is the trademark for the subcutaneous Interferon beta-1a, which is offered as a powder to make injectable intravenous solutions and is similar to Avonex.
- * **Cinnomer:** Cinnomer is the trademark for glatiramer acetate, which is offered as a powder to make intravenous injectable solutions and is similar to Glatiramer acetate.
- * **Cinnotec:** Cinnotec is the trademark for dimethyl fumarate, which is offered as a powder to make edible capsule solutions and is similar to tecfidera.

Main Export Destinations:

Germany, Russia, England, Switzerland, Austria, UAE, Turkey, India, Azerbaijan, Uzbekistan, Kazakhstan, Georgia, Tajikistan, Sri Lanka, Moldova, Nigeria, Iraq, Syria, Lebanon, Pakistan

Exports History:

Up to 100,000,000 \$

Founded:

1994

Application:

- * **Cinnovex, Recigen, and Cinnomer:** Prescribing for the recurrent types of MS to reduce the frequency and intensity of the attacks and lower the progress speed of disability
- * **Cinnotec:** Treating the recurrent form of Multiple Sclerosis (MS)

These products are final B2B & B2C consumer products.

Technical Specifications:

Drug Name	Presentation form
Cinnovex	Prefilled syringes containing 30µg interferon beta-1a in the form of colorless and transparent solutions free from any particles
Recigen	Prefilled syringes containing 44µg interferon beta-1a in the form of colorless and transparent solutions free from any particles
Cinnomer	Prefilled syringes containing 40mg glatiramer acetate in the form of transparent and colorless or yellowish solutions free from any particles
Cinnotec	Sustained-released dimethyl fumarate capsules in 120mg and 240 mg capsules



➤ Rheumatology Drugs

◆ Cinnagen Research and Manufacturing Co.

www.cinnagen.com



Product Introduction:

- * **Cinnora:** Cinnora is the trademark of adalimumab. The product is offered as a powder to prepare intravenous injectable solutions and is similar to Amgevita, Humira, and Imraldi. Cinnora is the monoclonal antibody of the tumor necrosis factor, which is consumed alone or accompanied by methotrexate or other corrective drugs used in the treatment of rheumatoid arthritis.
- * **Cinnopar:** Cinnopar is the trademark of teriparatide. Cinnopar is the analog for the human parathyroid hormone secreted by the parathyroid gland. It is employed to reduce the risk of bone fractures.

Main Export Destinations:

Germany, Russia, England, Switzerland, Austria, UAE, Turkey, India, Azerbaijan, Uzbekistan, Kazakhstan, Georgia, Tajikistan, Sri Lanka, Moldova, Nigeria, Iraq, Syria, Lebanon, Pakistan

Exports History:

Up to 100,000,000 \$

Founded:

1994

Application:

- * **Cinnora:** Treating rheumatoid arthritis
- * **Cinnopar:** Reducing the risk of the fracture of one's bones, particularly hip bone of post-menopausal women with osteoporosis, reducing the risk of bone fractures in hypogonadal men and women or the ones in the early stages of osteoporosis, reducing the risk of bone fractures in patients whose osteoporosis arises from the repeated consumption of glucocorticoids

These products are final B2B & B2C consumer products.

Technical Specifications:

Drug Name	Presentation Form
Cinnora	Two prefilled and physioject syringes containing 40mg adalimumab of the CHO strain in 0.8ml packages.
Cinnopar	Each injectable pen contains a 2.4ml teriparatide solution of the E-coli strain with a concentration of 250µg per ml.



➤ Gynecological and Hormonal Vaccines

◆ Cinnagen Research and Manufacturing Co.

www.cinnagen.com



Product Introduction:

- * **Cinnal-F:** Cinnal-F is the trademark of Follitropin alfa. Every injectable pen of Cinnal-F contains 450 or 900 international units of Follitropin alfa. The drug is sold under the trademark Gonal-F.
- * **CinnaFact:** Buserelin acetate is an artificial peptide and the analog for the natural gonadotropin-releasing hormone (GnRH) with enhanced biological activity. The drug is sold under the trademark Suprecur Procure Suprefact.
- * **Cinnatropin:** Cinnatropin is the brand name for somatropin (a human growth hormone). It is a biological drug with a structure similar to the natural growth hormones of the body and can compensate for the lack of growth hormones for patients.
- * **Melitide:** The drug contains liraglutide, which is the analog of the Glucagon-like peptide 1 (GLP-1). Liraglutide is similar to a natural hormone in the body (i.e., incretin). Other brands under which the product is marketed are Victoza and Saxenda.

Main Export Destinations:

Germany, Russia, England, Switzerland, Austria, UAE, Turkey, India, Azerbaijan, Uzbekistan, Kazakhstan, Georgia, Tajikistan, Sri Lanka, Moldova, Nigeria, Iraq, Syria, Lebanon, Pakistan

Exports History:

Up to 100,000,000 \$

Founded:

1994

Application:

Drug Name	Applications
Cinnal-F	<ul style="list-style-type: none"> * Follicle-stimulating hormone (FSH) * The stimulation of ovulation * Treating infertility
CinnaFact	<ul style="list-style-type: none"> * Analog to the Gonadotropin-releasing hormone (GnRH) * The artificial analog of GnRH * Anti-neoplasm * Stimulating ovulation
Cinnatropin	<ul style="list-style-type: none"> * Supplying the growth hormone in children and adults with a growth hormone deficiency * Supplying the growth hormone in short children with Turner syndrome * Supplying the growth hormone in the body to achieve the convenient growth of young patients with chronic failure of kidney * Supplying the growth hormone for small gestational age (SGA) children who do not conveniently grow until 2-4 years old.
Melitide	<ul style="list-style-type: none"> * Reducing blood glucose levels in children aged above 10 and adults with type II diabetes * Reducing the risk of cardiovascular events like strokes, myocardial infarctions, and death in patients with type II diabetes and cardiovascular diseases

These products are final B2B & B2C consumer products.

Technical Specifications:

Drug name	Presentation type	Strain type
Cinnal-F	0.75ml and 1.5ml injectable pens	A recombinant protein of follitropin alpha from the CHO strain
CinnaFact	Ready-to-inject solution	Each vial contains around 5.5mg buserelin acetate
Cinnatropin	Injectable pens containing around 5-10mg somatropin	Purifying and characterizing the recombinant protein of somatropin from the E-Coli strain
Melitide	Injectable pens	Purifying and characterizing the recombinant protein of liraglutide from the E-Coli strain



➤ **Manufacturing, Purifying and Characterizing the Monoclonal Antibody RITUXIMAB | Trade Name: ZYTUX**

◆ **AryoGen Pharmed Co.**

www.aryogen.com



Product Introduction:

RITUXIMAB is a chimeric (mouse-human) monoclonal antibody against the 20CD antigen on the surface of normal and malign B Lymphocytes. It is combined with DNA technology and is produced using the ovary cells of the Chinese hamster (CHO).

The antibody belongs to the Kappa 1IgG class of antibodies with a variant mouse component and a fixed human component. The drug connects to the 20CD antigen on the surface of non-Hodgkin lymphoma cells by their variant components and destroys it using cellular toxicity mechanism dependent on the complement (CDC) or the antibody-dependent cellular toxicity, suppressing its proliferation, and employing several other mechanisms.

Main Export Destinations:

Germany, Russia, Italy, Austria, Peru, Turkey, Tajikistan, Azerbaijan, Georgia, Malaysia, Armenia, Oman, Honduras, Syria, Moldova, Iraq, Lebanon

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2010

Application:

Treatment of Non-Hodgkin Lymphoma (NHL), chronic lymphoid leukemia (CLL), rheumatoid arthritis, Granulomatosis with polyangiitis (GPA), and microscopic polyangiitis (MPA)

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Molecular size:** 150 KD
- ※ **Protein amount:** 100 and 500 mg
- ※ **PH:** 6.3-6.7
- ※ **Pharmaceutical form:** 10-ml and 50-ml vials containing a concentrated, clear and colorless solution for intravenous infusion (each vial of Zitax contains 10 mg/ml of Rituximab. The 10-ml vial contains 100 mg of rituximab and the 50-ml vial contains 500 mg of rituximab).
- ※ **How to use:** Intravenous injection after dilution



➤ **Manufacturing, Purifying and Characterizing the Monoclonal Antibody TRASTUZUMAB**
Trade Name: ARYOTRUST

◆ **AryoGen Pharmed Co.**

www.aryogen.com



Product Introduction:

Aryotrust or TRASTUZUMAB is made from the CHO cells or the ovary cells of the Chinese Hamster as the small factories that produce the therapeutic antibody. Aryotrust – or its generic name, Trastuzumab, is a recombinant monoclonal antibody, which acts against the human epidermal receptors of the growth factor 2 (2HER). The receptor naturally exists on the surface of normal cells and regulates the growth of proliferation of cells. Carcinogenic and stomach cells sometimes contain immoderate levels of 2HER on their surfaces, and this results in the growth of cancer cells. Aryotrust inhibits such activities and kills cancer cells by connecting to 2HER.

Main Export Destinations:

Germany, Russia, Italy, Austria, Peru, Turkey, Tajikistan, Azerbaijan, Georgia, Malaysia, Armenia, Oman, Honduras, Syria, Moldova, Iraq, Lebanon

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2010

Application:

Treating Treatment of the 2HER-positive breast cancer in early stages, metastatic 2HER-positive instances of breast cancer, and metastatic 2HER-positive instances of the stomach cancer.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Molecular weight:** 150KD
- * **Protein ratelevel:** 150mg and 440mg
- * **PH:** 5.9-6.5
- * **Presentation type:** 150mg and 440mg vials containing freeze-dried powder in small boxes each containing one vial
- * **Application methodHow to use:** intravenous injection after dilution with a solvent. The concentration of Trastuzumab in the solution resulting from the dilution process is almost 21mg/ml (each single-dose 150mg vial contains 150mg Trastuzumab, which is solved in 7.2ml sterile water for injection. Moreover, each multiple-dose 44mg vial contains 440mg Trastuzumab, which is solved in 20ml bacteriostatic water for injection).



➤ Anakinra, a Recombinant Vaccine Treatment of Arthritis in Children

◆ Persis Gene Par Co.

www.persisgen.com



Product Introduction:

Perkinra® is a recombinant drug that contains the active substance Anakinra which is a type of cytokine (an immunosuppressive agent). Cytokines are proteins synthesized in the body and coordinate inter-cellular communication and contribute to controlling cell activities.

This drug is used for the treatment of Juvenile rheumatoid arthritis. Anakinra's mechanism of action includes blocking the interleukins, which are the potent mediators of inflammatory responses in the body, by the anakinra protein, and therefore preventing them from sending inflammatory responses and alleviating pain in patients with Rheumatoid arthritis.

This drug has only one other manufacturer in the world, working under the brand Kinert.

Main Export Destinations:

Turkey, Ukraine, Philippines

Annual Production Capacity:

300,000 syringes

Founded:

2016

Application:

- * Treatment of Juvenile rheumatoid arthritis
- * Alleviating the pain in patients with Rheumatoid arthritis

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * This product is provided as ready-for-injection filled syringes.
- * The processes of production, purification, and characterization of Anakinra recombinant protein from the E-Coli strain are done on a 50-liter scale.

Advantages:

- * Equal quality compared to the original brand's product
- * Lower cost of production and supply

International Standards or permission:

- * GLP
- * ISO 9001
- * ISO 14001
- * ISO 45001



➤ Bivalent Vaccine Against Cervical Cancer (HPV) in the Form of VLP

◆ Persis Gene Par Co.

www.persisgen.com



Product Introduction:

HPV, or genital warts virus, is a common virus that can be transmitted from person to person through skin-to-skin contact. Often, people who are very sexually active will develop HPV at some point in their lives, even though they may not even know about it. Most of the time, HPV types have no symptoms and disappear over time. But some of them can lead to uterine cancer in women or other cancers. The best-case scenario will be genital warts caused by some of these viruses. These warts do not cause a serious physical disease, but they easily cause emotional stress, the treatment of which could be unpleasant and painful.

This vaccine is a solution of particles similar to dead viruses.

Main Export Destinations:

Turkey, Ukraine, Philippines

Founded:

2016

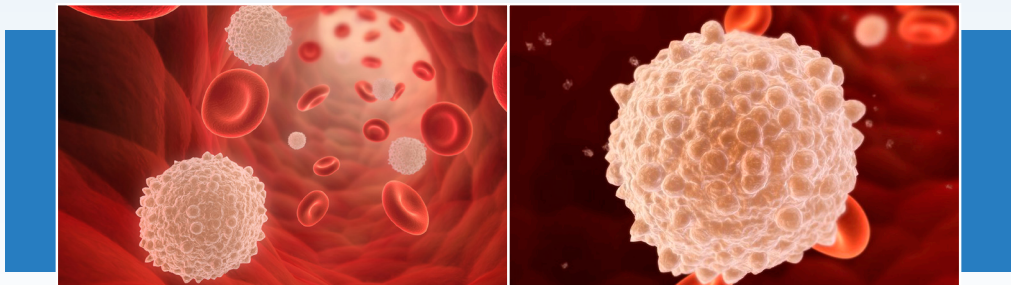
Application:

- * Preventing the accumulation or creation of viruses that cause all types of cervical, anal, vaginal or vulva cancers.
- * Preventing genital warts

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Host cell:** CHO-DG44
- * **Protein production site:** inside the cell
- * **Type of protein produced:** soluble
- * **Protein molecular weight:** 150 kDA



➤ Manufacturing, Purifying and Characterizing Recombinant Filgrastim Proteins (TINAGRAST)

◆ Arya Tina Gene Co.

www.atgbio.com



Product Introduction:

- * **Filgrastim Recombinant Protein (Tinagrast):** Tinagrast is one of the Iranian brands of the filgrastim drug. Filgrastim is a synthetic version of G-CSF growth hormone that aids in the body's production of more white blood cells. The primary ingredient of this medicine has been provided to the community of doctors and patients with the Innovator formulation. In global markets, this medicine is also sold under the brand names Neopogen, Granix, and Zarxio.
- * **Recombinant protein filgrastim (Tina Peg):** Tinapeg, a long-acting pegylated version of filgrastim, is only administered once throughout each cycle of chemotherapy as opposed to filgrastim, which needs to be injected daily. Pegfilgrastim is the name of the medication's brand. The brand names of this medication, Navistim, Neopogen, and Zarxio, are available as intravenous injections.
- * **Recombinant Filgrastim protein (Tinakid):** This medicine is similar to the drug Tinagrast, with the exception that it has been specially formulated with different dose for use by children. Tinakid, a medication for children that contains filgrastim, is akin to the growth factor, granulocyte colony-stimulating factor (G-CSF), a naturally occurring protein in the human body that stimulates the formation of white blood cells, particularly neutrophils, in the human brain.

Founded:

2004

Application:

Medicine Name	Application
Filgrastim recombinant protein (Tinagrast)	<ul style="list-style-type: none"> * Treatment of chemotherapy-induced neutropenia in patients with non-myeloid malignant cancers who receive anticancer drugs that deplete bone marrow. * Adjuvant therapy for patients having bone marrow transplant surgery to hasten myeloid recovery * Treatment of resistant neutropenia in HIV infections at advanced stages * Treating severe chronic neutropenia
Filgrastim Recombinant Protein (Tinapeg)	Treatment of neutropenia (lack of white blood cells) caused by consumption of anticancer drugs
Filgrastim recombinant protein (Tinakid)	Strengthening the body's defence and returning it to normal

These products are final B2B & B2C consumer products.

Technical Specifications:

Medicine Name	Pharmaceutical Form	Strain
Filgrastim recombinant protein (Tinagrast)	Prefilled syringe	—
Filgrastim Recombinant Protein (Tinapeg)		Pichia pastoris (methylotrophic)
Filgrastim recombinant protein (Tinakid)		E-Coli

Advantages:

- * 75% price reduction
- * Volume reduction and elimination of cross-contamination
- * Innovation in formulation
- * Faster medication absorption and local pain relief

International Standards or permission:

- * Food and Drug Administration



Application:

Controlling and preventing the symptoms of hemophilia type A or classic hemophilia.

➤ **Recombinant Human Factor VIII**

◆ **Saman Daroo 8 Co.**

www.samandaroo.com



Product Introduction:

Factor VIII is one of the protein factors that play a role in the process of coagulation. Factor VIII deficiency causes the so-called Hemophilia. Hemophilia A is the most common form of the disease. These patients should constantly receive injections of factor VIII.

The specific name of this product is Sufacto-AF and its generic name is Moroctocog alfa. Sufacto AF is produced using the recombinant DNA technique. It is worth mentioning that this product does not contain the Von-Willebrand factor, so it should not be used in patients who have Von-Willebrand factor deficiency.

Main Export Destinations:

Syria

Exports History:

4,756 vials

Annual Production Capacity:

400 kg

Founded:

2009

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmaceutical form:** Lyophilized white powder
- * **Contents:** Histidine, sodium chloride, sucrose, calcium chloride dihydrate, and Tween 80

Advantages:

The last production generation in the world.



➤ **Alteplase for Dissolution of Blood Clot**
Trade Name: Alteplase

◆ **Arena Hayat Danesh Co.**

www.arenalifescience.com



Product Introduction:

It is a fibrinolytic medicine for cardiovascular patients, used in the treatment of acute ischemic stroke, acute myocardial infarction (MI), cardiac arrest, acute pulmonary embolism in adults, and for destroying clots (lysing the blood clots) and restoring the function of a clogged central venous catheter. There is no equivalent synthetic drug for this product. In the category of fibrinolytic drugs containing tissue plasminogen activator, there are two other drugs, Retplas and Tinctoplas, which, of course, differ from this product in terms of efficacy, therefore they cannot be considered as an alternative of this product. This drug should be taken ASAP after the strokes (preferably up to 4-5 hours after the onset of stroke symptoms) to achieve the desired result.

Main Export Destinations:

Georgia, Venezuela

Annual Production Capacity:

50,000 vials

Founded:

1992

Application:

This product is used for adult patients with heart attack, stroke, and pulmonary embolism. This drug should be taken ASAP after the stroke (preferably up to 4-5 hours after the onset of stroke symptoms) to achieve the desired result. ALTEPLASE has a relatively small effect on free, circulating plasminogen and can be called a fibrin-specific thrombolytic. In recent years, this drug has played a significant role in saving the lives of patients and reducing the damage caused by these perilous diseases. Specialists have found that in patients with stroke, for every minute that treatment with this product starts faster, 1.8 days will be added to the patient's life without disability (DFLE).

This product is a final B2B & B2C consumer product.

Technical Specifications:

A 50mg injection vial (lyophilized powder) and a vial of solvent, sterile water for IV infusion. It is produced by using an animal host cell (CHO cell line). First, by using genetic engineering methods, the cell line that produces the active ingredient is cultured and a corresponding cell bank is prepared. Then, in the fermentation stage, the process of cell proliferation happens and the drug-protein is produced by the cell. During the pre-purification and purification stages, the active ingredient is purified to the drug-purity level, and then it goes through the formulation, filling, and packaging stages.

Advantages:

- ※ The first and only biosimilar Alteplase producer in the world.
- ※ The equivalence of this drug compared to the brand drug has been proven in terms of safety and effectiveness in preclinical studies and then in a randomized and double-blind clinical study with non-inferiority design.



➤ **Bovine Pulmonary Surfactant Containing Bovine Lung Extract** | Trade Name: Beraksurf

◆ **Tekzima Daroo Alborz Co.**

www.tekzima.com

Tekzima

Product Introduction:

From the category of pulmonary surfactants, Beraksurf is a unique and vital drug that is extracted, purified, and formulated from the lung of young calves and contains Beractant as the active ingredient. The sterile suspension is administered only through the endotracheal tube. Beractant is the brand name of this product.

Main Export Destinations:

India, Venezuela

Exports History:

320,000 euros

Annual Production Capacity:

200,000 vials

Founded:

2016

Application:

Treatment of Respiratory distress in premature newborns

This product is a final B2B & B2C consumer product.

Technical Specifications:

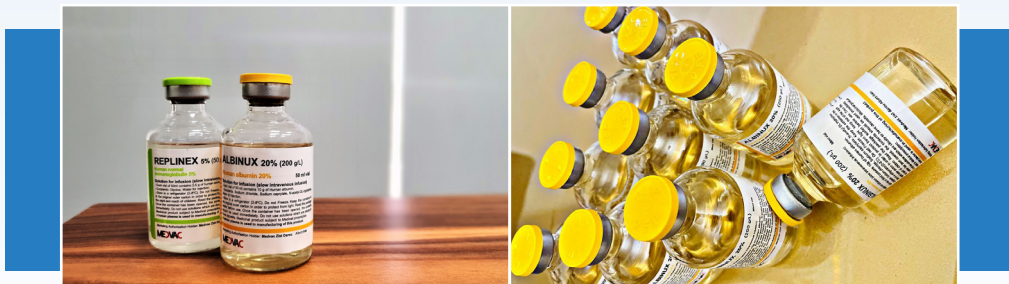
- ✦ **Pharmaceutical form:** Sterile suspension free of any pyrogenic substances
- ✦ **Color:** opaque cream-coloured to light brown
- ✦ **Active ingredient:** Baraktant with a concentration of 25 mg/ml in 4 and 8-ml vials extracted from the lungs of young calves.

Advantages:

- ✦ Reasonable pricing compared to the similar foreign counterpart
- ✦ This product is halal
- ✦ Equal quality compared to the US product

International Standards or permission:

- ✦ GMP
- ✦ Halal Certificate



➤ Human Albumin 20% (Albinux 200g/L)

◆ Medvac Zist Daroo Co.

www.medvac.ir



Product Introduction:

Human albumin is an injectable product derived from human plasma, extracted from the donor's plasma using modern chromatography methods.

The solutions that contain albumin are used in the emergency treatment of low blood volume with or without shock and low blood protein in patients with severe burns. It maintains plasma volume and protein concentration and is used to prevent blood thickening, as an auxiliary blood-thinning drug in cardiovascular bypass surgeries, and for controlling edema in acute nephritis or acute nephrotic syndrome in patients who do not respond to treatment. It is also used as an adjunctive drug in the treatment of respiratory distress syndrome in adults and as an adjunctive treatment of pancreatic or intra-abdominal infections. The concentrated albumin solution is used as an adjuvant treatment for patients undergoing hemodialysis, acute liver failure, and newborns with hyper-bilirubinemia.

Annual Production Capacity:

160,000 vials

Founded:

2014

Application:

- * Treating the hypovolemic shock
- * As a blood substitute and volume booster in emergency cases
- * As an auxiliary drug for adult respiratory distress syndrome, pancreatic or intra-abdominal infections
- * Concentrated albumin solution as adjuvant treatment in patients undergoing hemodialysis, acute liver failure, newborns with hyper-bilirubinemia

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Drug classification:** Blood and plasma derivatives
- * **Type:** Biological
- * **Biological origin:** Human plasma
- * **Administration:** Sterile 50 and 100 mg vials
- * **Pharmaceutical form:** Vial, containing solution for infusion
- * **Generic name:** Human Albumin
- * **Brand name:** Albinux
- * **Active ingredient:** Human Albumin
- * **Similar product:** Albiomin
- * **Type of use:** Slow Intravenous Infusion
- * **Target consumers:** Children and adults

Advantages:

- * The sole manufacturer in the Middle East
- * Using modern technology
- * Competitive price

International Standards or permission:

IRFDA



➤ Human Intravenous Immunoglobulin 5% (IVIG)

◆ Medvac Zist Daroo Co.

www.medvac.ir



Product Introduction:

Intravenous immunoglobulin is an injectable product derived from human plasma. IVIG is an IgG-type plasma protein replacement therapy that boosts the immune system and helps fighting the diseases in patients with an immune deficiency or cannot produce antibodies.

Annual Production Capacity:

160,000 vials

Founded:

2014

Application:

- ✧ Preventing infections in the children with AIDS
- ✧ Reducing the occurrence and severity of systemic infections and reducing the host's anti-graft immune response in bone marrow transplants
- ✧ Treating the patients with immune system deficiency, immune thrombocytopenic purpura, B-cell chronic lymphocytic leukemia, and Kawasaki syndrome

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ✧ **Drug classification:** Immunoglobulins
- ✧ **Type:** Biological
- ✧ **Biological origin:** Human plasma
- ✧ **Administration:** Sterile 50 and 100 mg vials
- ✧ **Pharmaceutical form:** Vial, containing solution for infusion
- ✧ **Generic name:** Human normal immunoglobulin
- ✧ **Brand name:** Replindex
- ✧ **Active ingredient:** Human normal immunoglobulin
- ✧ **Similar product:** Intratect
- ✧ **Type of use:** Slow Intravenous Infusion
- ✧ **Target consumers:** children and adults

Advantages:

- ✧ The sole manufacturer in the Middle East
- ✧ Using modern production technology
- ✧ Competitive price

International Standards or permission:

IRFDA



➤ Botulinum Toxin Type A

Trade Name: Dyston

◆ Imen Vaccine Alborz Co.

www.imenvaccine.com



Product Introduction:

Botulinum toxin (BoNT) is a neurotoxic protein produced by the bacterium *Clostridium botulinum* and related species. It prevents the release of the neurotransmitter acetylcholine from axon endings at the neuromuscular junction, thus causing flaccid paralysis. The toxin is used commercially for medical and cosmetic purposes. The seven main types of botulinum toxin are named types A to G (A, B, C1, C2, D, E, F and G). Types A and B are capable of causing disease in humans, and are also used commercially and medically. The present product (botulinum toxin type A) is a biosimilar of Dysport.

Annual Production Capacity:

500,000 vials of 500 pieces and 500,000 vials of 300 pieces

Founded:

2014

Application:

- ※ **Medicine (Adults):** Treating various muscle spasms, excessive axillary perspiration, chronic migraine headaches.
- ※ **Cosmetics:** reducing facial wrinkles.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ Produced and purified from *Clostridium botulinum* bacteria under GMP conditions
- ※ **Form of medication:** the lyophilized cake of 500 and 300 units
- ※ **Administration:** injection

Advantages:

Competitive price while maintaining high quality and efficacy according to latest EP monograph

International Standards or permission:

Approved by Iran's PICS/GMP regulations



➤ **Dry biomass and Compressed Tablets of Blue-Green Algae, Medical Supplement Grade**
Trade Name: Spirulina and Chlorella

◆ **Nik Paya Karen Pharmed Co.**

www.nikpaya.com



Product Introduction:

Algofil tablet is a supplement based on Chlorella vulgaris algae that contain more than 50% protein, 18 types of amino acids (including all essential amino acids), a wide range of vitamins, minerals, omega 3, omega 6, growth factor (CGF), various antioxidants, and other useful micronutrients. Algofil is the generic name for this dietary nutritional supplement product that is prepared from chlorella vulgaris microalgae.

Annual Production Capacity:

4 tons of dry biomass, approximately equivalent to 130,000 cans of 100 pieces

Founded:

2018

Application:

- * Providing essential micronutrients
- * Slowing down the process of aging for the cells by increasing their proliferation power
- * Helping with weight loss by improving digestion and absorption of substances and increasing fat burning

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmaceutical form:** Tablet 300 mg
- * **Packaging:** Bottle containing 100 and 30 tablets - each tablet contains 300 mg Chlorella vulgaris
- * **Administration:** Oral

Advantages:

- * Competitive price & High quality
- * High protein content (More than 50%) compared to the products of rivals



➤ Formulation of Various Types of Cancer Drugs

◆ Nano Alvand Pharmaceutical Products Co.

www.nanoalvand.com



Product Introduction:

The Alvand Nano Pharmaceutical Technologies Company manufactures a variety of medications using its own formulas. These are the medication formulations that this business uses to make its products:

Drug name	Description	Foreign brand equivalent
Mycophenolic acid (Merolic) – Enteric coated tablet 180,360mg	Generic immunosuppressive medication called Merolic is taken after transplantation.	MYFORTIC
Dactinomycin (Dactoma) 0.5mg Lyophilized powder	All forms of hard tissue cancers are treated with the generic anti-cancer medication DACTOMA.	COSMEGEN
Methotrexate (Reximed) 50, 1000mg concentrated Solution for injection	Reximed is a generic anti-cancer medication used to treat blood and hard tissue cancers.	-

Main Export Destinations:

Kazakhstan, Oman, Iraq and Syria

Annual Production Capacity:

- * Mycophenolic acid (merolic) enteric-coated tablets: 7,104,000 tablets
- * Dactinomycin sterile injectable lyophilized powder tablet (Dactoma): 11,400 vials
- * Methotrexate injectable sterile solution (Reximed): 100,000 vials
- * Voriconazole injectable lyophilized powder (Ricanza): more than 60,000 vials
- * Bendamustine injectable lyophilized powder (Bendanite): 56,000 vials
- * Caspofungin injection lyophilized powder (Letocan): 137,000 vials
- * Azacitidine injectable lyophilized powder (Leukaza): 30,000 vials
- * Alvopem vials: 42,000 vials
- * Alvocade vial (bortezomib) 3.5 mg: 35,000 vials

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2011

Voriconazol (Ricanza) 200mg – Lyophilized powder	Ricanza is a generic drug. Patients with nosocomial fungal infections are treated with this antifungal medication.	Vfend
Bendamustine (Bendanite) 25,100mg – Lyophilized powder	A generic anti-cancer medication called bendanit is prescribed for specific types of blood malignancies.	Trinda
Caspofugine (Letocan) 50,70mg – lyophilized powder	Letocan is a generic antifungal medication used in patients with nosocomial fungal infections.	CANCIDAS
Azacitidin (Leukaza) 100mg – Lyophilized powder	Leukaza is a generic medication that fights cancer and is used to treat specific types of blood malignancies.	Vidaza
Pemetrexed (Alvopem) 100,500mg – Lyophilized powder	This drug is a generic anti-cancer treatment used in the treatment of specific forms of lung cancer.	Alimta
Bortezomib (Alvocade) 3.5mg – Lyophilized powder	A generic drug and anticancer product called bortezomib is used to treat specific types of blood malignancies.	Velcade

Application:

Drug Name	Application
Mycophenolic acid (Merolic) – Enteric coated tablet 180, 360mg	Avoiding kidney transplants rejection following a transplant (adult)
Dactinomycin (Dactoma) 0.5mg – Lyophilized powder	Treatment of Wilms' cancer, Ewing's sarcoma, abdomyosarcoma and testicular cancers
Methotrexate (Reximed) 50,1000mg – concentrated Solution for injection	Treatment of acute lymphocytic leukemia, non-Hodgkin's lymphoma, breast, head and neck and lung cancers, osteosarcoma in adults
Voriconazol (Ricanza) 200mg – Lyophilized powder	Treatment of Candida and Invasive Aspergillus Infections in Hospitals (Adults)
Bendamustine (Bendanite) 25,100mg – Lyophilized powder	Treatment of chronic lymphoid leukemia and non-Hodgkin's lymphoma among adults
Caspofugine (Letocan) 50,70mg – lyophilized powder	Treatment of fungal infections in hospitalized adults
Azacitidin (Leukaza) 100mg – Lyophilized powder	Treatment of myelodysplastic syndrome, acute myeloid leukemia in adults
Pemetrexed (Alvopem) 100,500mg – Lyophilized powder	Treatment of mesothelioma and certain types of lung cancers in adults
Bortezomib (Alvocade) 3.5mg – Lyophilized powder	Treatment of multiple myeloma and mantle cell lymphoma

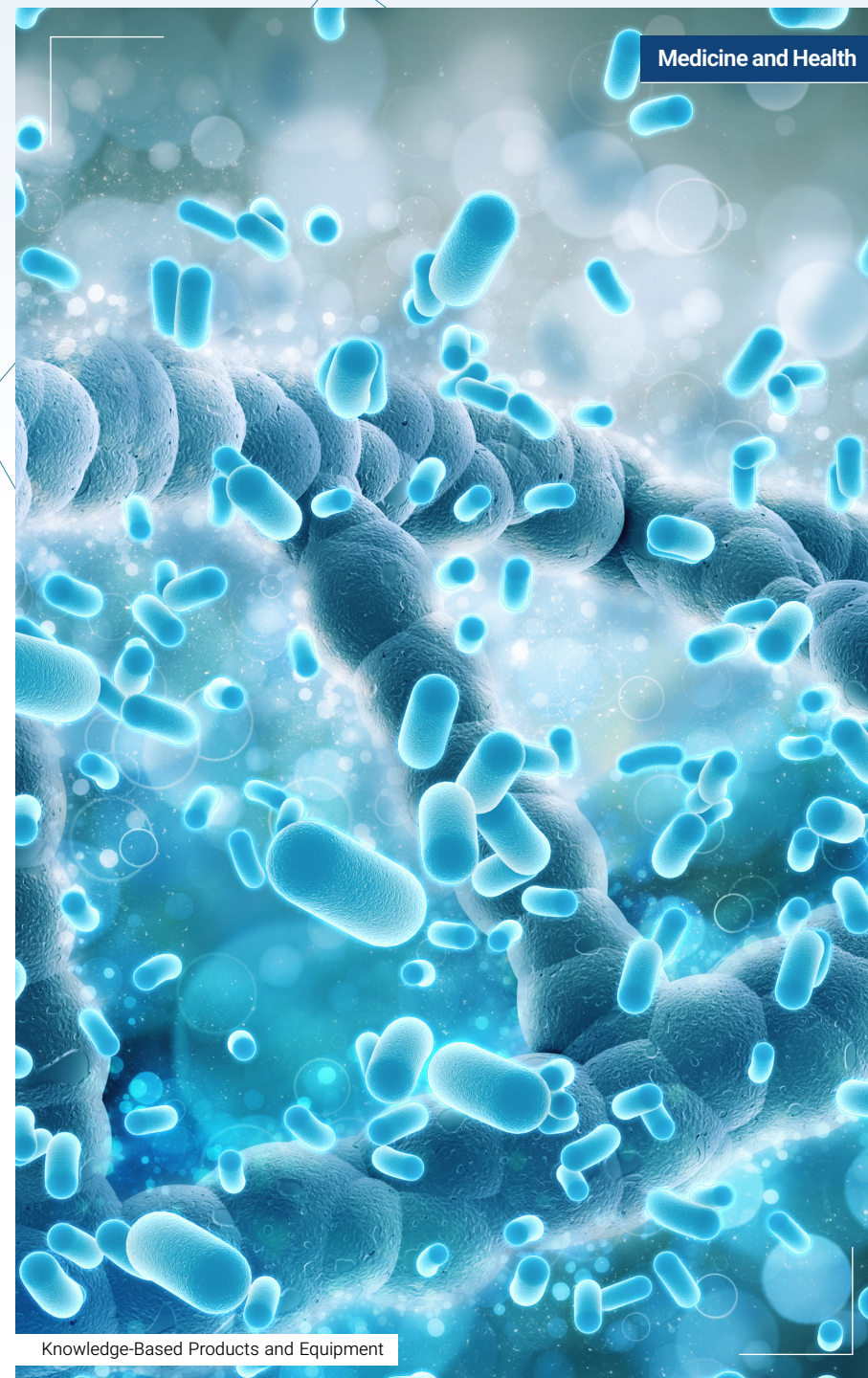
This product is a final B2B & B2C consumer product.

Technical Specifications:

Drug Name	Form of medication
Mycophenolic acid (Merolic) – Enteric coated tablet 180,360mg	Enteric-coated oral tablets in boxes of 120 containing 12 blisters
Dactinomycin (Dactoma) 0.5mg – Lyophilized powder	10R vial containing sterile lyophilized powder
Methotrexate (Reximed) 50,1000mg – concentrated Solution for injection	2R and 10R vials containing sterile injection solution
Voriconazol (Ricanza) 200mg – Lyophilized powder	20R vial containing sterile lyophilized powder
Bendamustine (Bendanit) 25,100mg – Lyophilized powder	20R and 10R vial containing sterile lyophilized powder
Caspofugine (Letocan) 50,70mg – lyophilized powder	50R vial containing sterile lyophilized powder
Azacididin (Leukaza) 100mg – Lyophilized powder	—
Pemetrexed (Alvopem) 100,500mg – Lyophilized powder	10R, 50R vial containing sterile lyophilized powder
Bortezomib (Alvocade) 3.5mg – Lyophilized powder	10R vial containing sterile lyophilized powder.

Advantages:

Drug Name	Advantages
Mycophenolic acid enteric coated tablets (Merolic)	<ul style="list-style-type: none"> * Affordable price compared to similar foreign counterpart * Intestinal drug release similar to brand based on clinical studies
Voriconazole injectable lyophilized powder (Ricanza)	Affordable price compared to similar foreign counterparts
Dactinomycin injectable sterile lyophilized powder (Dactoma) - Methotrexate injectable sterile solution (Reximed) - Bendamustine injectable lyophilized powder (Bendanit) - Kespofungin injectable lyophilized powder (Letucan) - Azacytidine injectable lyophilized powder (Lucasa) - Elopem vial - Mycophenolic acid enteric coated tablets (Merolic)	<ul style="list-style-type: none"> * An affordable price compared to similar foreign counterparts * Having conducted physicochemical studies comparing with the brand



Medicine and Health

Knowledge-Based Products and Equipment



➤ Paclitaxel Powder for Injection Bound to Lyophilized Albumin Nanoparticles | Trade Name: PACLINAB

◆ Nano Daroo Pajhoohan Pardis Co.

www.nanodaru.com



Product Introduction:

The medication is known by the brand names Paclinab and its generic name is paclitaxel bound to albumin particles with an average particle size of 130 nanometers, respectively. Paclinab is a member of the class of anti-cancer medications known as “taxane derivatives.”

Main Export Destinations:

Turkey, Syria

Exports History:

1,402,722 euros

Annual Production Capacity:

70,000

Founded:

2011

Application:

Treatment of all kinds of cancer, including peritoneal carcinoma, pancreatic, lung, melanoma, ovarian, fallopian tube, and breast cancer

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Form:** yellowish white powder, sterile and lyophilized in order to prepare a suspension with 20 milliliters of sodium chloride 0.9% before intravenous infusion.
- * **Components:** Each vial is made up of 900 mg of human albumin and 100 mg of paclitaxel. The amount of paclitaxel in the prepared suspension is 5 milligrams per milliliter.
- * As an intravenous injectable solution, it is free of any chemical solvent

Advantages:

Greater effectiveness with lower dosages



➤ Vial of Bortezomib Sterile Lyophilized Powder for Injection

◆ Sobhan Oncology Pharmacy Co.

www.sobhanoncology.com



Product Introduction:

Bortezomib, sold under the brand name Velcade® (co-developed by Millennium/Takeda and Janssen Pharmaceutical Companies), is an anti-cancer medication used by adults to treat multiple myeloma (is a cancer that forms in a type of white blood cell called a plasma cell) and mantle cell lymphoma (a type of non-Hodgkin's lymphoma, which is a form of cancer that affects the lymphatic system). The active substance is bortezomib and each vial contains 1mg of bortezomib (as a mannitol boronic ester). Bortezomib 3.5 mg of Sobhan Oncology Company is a generic product in the form of sterilized lyophilized powder which is prescribed for intravenous or subcutaneous injection after preparation.

Main Export Destinations:

Syria, Iraq, Venezuela, Philippines, Uganda, Vietnam and CIS countries

Exports History:

1,402,722 euros

Annual Production Capacity:

1,400,000 vials in the injectable phase for all products

Founded:

2002

Application:

- ※ Treatment of multiple myeloma
- ※ Treatment of mantle cell lymphoma

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Drug category:** antineoplastic (anti-cancer), proteasome inhibitor
- ※ **Form of medication:** 3.5 mg Bortezomib vial in the form of white or off-white sterile lyophilized powder for intravenous or subcutaneous injection.

Advantages:

- ※ Competitive price
- ※ Easy access

International Standards or permission:

- ※ GMP grade A from Iran Food and Drug Organization
- ※ GMP Iraq, Syria and Uganda



➤ PEMETREXED 100 and 500-mg Sterile Lyophilized Powder for Injection

◆ Sobhan Oncology Pharmacy Co.

www.sobhanoncology.com



Product Introduction:

Pemetrexed, sold under the brand name Alimta® (Eli Lilly and Companies) is an anti-cancer medication used to treat non-small cell lung cancer, nonsquamous and Malignant pleural mesothelioma (in combination with cisplatin). The active substance is pemetrexed and each vial contains 100 (For PEMEXED® 100) milligrams and 500 milligrams (For PEMEXED® 500) of pemetrexed (as pemetrexed disodium). Pemetrexed is a product of Sobhan Oncology Company, under the trade name Pemexed® and is in the form of sterilized lyophilized powder for the preparation of a concentrated solution, which is prescribed for intravenous infusion.

Main Export Destinations:

Syria, Iraq, Venezuela, Philippines, Uganda, Vietnam and CIS countries

Exports History:

1,402,722 euros

Annual Production Capacity:

1,400,000 vials in the injectable phase for all products

Founded:

2002

Application:

- ※ Treatment of irremovable malignant pleural mesothelioma of pulmonary pleurae
- ※ Treating locally spread or metastasized non-small cell lung cancer

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Drug category:** Antineoplastic (anticancer), antimetabolite
- ※ **Form of medication:** Pemetrexed 100 and 150 mg vial containing white or off-white sterile lyophilized powder for intravenous injection.

Advantages:

Competitive price

International Standards or permission:

Registered in Syria



➤ Diclofenac Sodium 100 Tablet

Trade Name: Alfen XL

◆ Alborz Daroo Co.

www.alborzdarouco.com



Product Introduction:

This product is in the form of slow-release tablets containing 100 mg of the drug, which is released over 12 hours. The drug release is diffusion mediated, which means that the solvent enters the matrix and the drug dissolves, then the solvent and drug leave the matrix.

It should be noted that this product is a non-steroidal anti-inflammatory drug that is used as a painkiller and joint pain reliever.

This product is similar to the Voltaren brand 100 mg slow-release drug from Novartis.

Main Export Destinations:

Oman, Syria, Tajikistan, Iraq, Venezuela, Uganda, Yemen, Afghanistan

Exports History:

Between 1,000,000 - 10,000,000 \$

Founded:

1976

Application:

An NSAID used for joint pain and as a painkiller

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmaceutical form:** Oral tablet
- * **Drug release:** Oral slow-release
- * **Consumer:** Voltaren XR, Diclofenac sodium and Alfen-XL
- * For adults

Advantages:

- * Decent quality
- * competitive price

International Standards or permission:

GMP



➤ Metoprolol Succinate Tablet

Trade Name: Metoextend

◆ Alborz Daroo Co.

www.alborzdarouco.com



Product Introduction:

Metoprolol as a slow-release tablet of two doses of 95 mg and 47.5 mg is released over a period of 20 hours. The formulation of this drug is a kind of matrix release that has technical complexity due to performing multiple formulations.

This product is used in treating high blood pressure as a beta-Blocker and is classified as a drug for cardiovascular diseases.

Main Export Destinations:

Oman, Syria, Tajikistan, Iraq, Venezuela, Uganda, Yemen, Afghanistan

Exports History:

Between 1,000,000 - 10,000,000 \$

Founded:

1976

Application:

Development of Metoextend tablet, a beta-Blocker used in the treatment of high blood pressure

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Pharmaceutical form:** Oral tablet
- ※ **Drug release:** Slow-release
- ※ **Components:** Metoprolol succinate, Metoextend

Advantages:

- ※ Decent quality
- ※ competitive price

International Standards or permission:

GMP



➤ Deferoxamine Mesylate 500 mg Lyophilized Powder for Injection

◆ Ronak Co.

www.ronakpharm.com



Product Introduction:

Deferoxamine is an active chelating agent used as an adjuvant in the treatment of iron poisoning. This drug is also used to accelerate the excretion of iron. Deferoxamine is administered via intravenous, intramuscular, or intraperitoneal injection to control the accumulation of aluminum in bones, in patients with kidney failure, and to treat neurotoxicity or bone abnormalities in dialysis patients.

Main Export Destinations:

Germany, Oman, Iraq, Syria, Venezuela, Sri Lanka, Vietnam

Exports History:

Between 1,000,000 - 10,000,000 \$

Founded:

2002

Application:

An adjuvant in the treatment of iron poisoning, accelerating the excretion of iron and controlling the accumulation of aluminum in bones

This product is a final B2B & B2C consumer product.

Technical Specifications:

Drug components: including deferoxamine mesylate (primary active ingredient), distilled water (excipient)

Advantages:

Produced without powder filling process

International Standards or permission:

- * Manufacturing license from the Food and Drug Organization of Iran
- * GMP Certification from the Food and Drug Organization of Iran



➤ Pantoprazole Sodium 40 mg Lyophilized Powder for Injection

◆ Ronak Co.

www.ronakpharm.com



Product Introduction:

There are many cells that produce acid in the stomach and inject hydrogen, which is an acidic agent, into the stomach. These cells are called hydrogen pumps. Pantoprazole belongs to the group of drugs that inhibit the pump of hydrogen and actually do not allow the production of stomach acid. One of the protective factors in the body is stomach acid, which, in addition to helping digestion, destroys microbes and viruses that enter the body through the digestive tract. Pantoprazole reduces the body's resistance by lowering stomach acid, and one should be more careful about the food they consume if this medicine is taken.

Main Export Destinations:

Germany, Oman, Iraq, Syria, Venezuela, Sri Lanka, Vietnam

Exports History:

Between 1,000,000 - 10,000,000 \$

Founded:

2002

Application:

Short-term treatment of erosive esophagitis or GERD disease

This product is a final B2B & B2C consumer product.

Technical Specifications:

Raw materials: Mannitol, Sodium hydroxide, Disodium edta dihydrate, Tromethamine

Advantages:

Using advanced lyophilized technology without water

International Standards or permission:

- * Manufacturing license from the Food and Drug Organization of Iran
- * GMP Certification from the Food and Drug Organization of Iran



➤ Deferiprone 500 mg Enteric-Coated Tablet

◆ Ave Sina Pharmacy Co.

www.avicenna.ir



Product Introduction:

Deferiprone is an edible drug for chelating iron. Deferiprone, which has two chelating agents, is consumed to eliminate the excess iron which is accumulated in the body of patients with thalassemia due to the repeated injection of the blood. It is prescribed for patients who are banned from consuming deferoxamine or who need additional medications along with deferoxamine.

Main Export Destinations:

Syria, Afghanistan

Founded:

2001

Application:

Treatment of iron overload in thalassemia patients in whom Desferrioxamine is not effective.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Ingredients:** Deferiprone, Microcrystalline cellulose (PH102), Purified talc, Colloidal silicon dioxide, Polyethylene glycol 6000, Magnesium stearate, etc.
- * **Presentation format:** 500mg tablets
- * **Pharmaceutical Classification:** heavy-metal antagonists



➤ In Situ Forming Sustained-Release One-Month Depot Injectable Drug of Triptorelin Acetate 3.75 mg

◆ Varian Pharmed Research and Manufacturing Co.

www.persisgen.com



Product Introduction:

Triptorelin acetate is a gonadotropin-releasing hormone (GnRH) analogue. Triptorelin is a GnRH agonist, so its consumption stimulates the pituitary gland and inhibits the secretion of hormones related to this system, such as FSH and LH, from the pituitary gland. Lack of secretion of these two hormones inhibits the secretion of sex hormones such as testosterone and estrogen from the gonads.

Due to this, triptorelin can be used in the treatment of prostate cancer, endometriosis, precocious puberty, uterine sarcoma, as well as a stimulant of ovulation and in the IVF process.

Main Export Destinations:

Syria

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2009

Application:

Treatment of prostate cancer, endometriosis, precocious maturity, and uterine sarcoma, being used as a ovulation stimulant and during the IVF process

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Presentation form:** two prefilled syringes: the first syringe is filled with the sterile powder of the drug, and the second syringe contains the polymer-based solvent
- * **Drug delivery system:** formed on the location according to the in-situ forming method, which is carried out by the sustained release of the drug from the system (during 28 days).



➤ In Situ Forming Sustained-Release Three-Month Depot Injectable Drug of Triptorelin Pamoate 11.25 mg

◆ Varian Pharmed Research and Manufacturing Co.

www.persisgen.com



Product Introduction:

Variopeptyl contains triptorelin, an analog of the GnRH hormone. The formulation has a prolonged impact and has been designed to slowly deliver 11.25mg triptorelin to the body during a 3-month (four weeks) period. The drug works by reducing the levels of sexual hormones in the body.

Main Export Destinations:

Syria

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2009

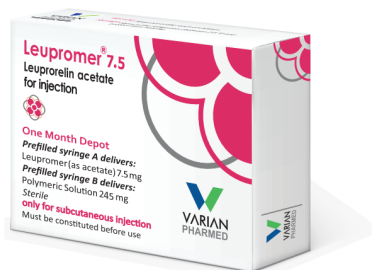
Application:

Suppression of ovarian and testicular steroidogenesis due to decreased levels of LH and FSH with subsequent decrease in testosterone (male) and estrogen (female) levels.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Presentation form:** two prefilled syringes: the first syringe contains the sterile powder of the drug, and the second syringe is filled with the polymer-based solvent
- ※ **Drug-delivery system:** In-situ forming, which is carried out by the controlled release of the drug from the system (during 84 days).



➤ In Situ Forming Sustained-Release One-Month Depot Injectable Drug of Leuprolide 7.5 mg

◆ Varian Pharmed Research and Manufacturing Co.

www.persisgen.com



Product Introduction:

Leuprorelin is an analog to the GnRH hormone, and the formulation has been designed to slowly deliver 7.5mg leuprorelin to the body during a 1-month (4 week) period by reducing the levels of sexual hormones.

Leupromeris used to treat locally advanced, hormone-dependent prostate cancer alone or during and following radiation therapy. It is also used to treat hormone-dependent prostate cancer which has spread to other parts of the body (metastatic cancer).

Main Export Destinations:

Syria

Exports History:

Between 50,000,000 - 100,000,000 \$

Founded:

2009

Application:

Suppression of ovarian and testicular steroidogenesis due to decreased levels of LH and FSH with subsequent decrease in testosterone (male) and estrogen (female) levels.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Presentation form:** two prefilled syringes: the first syringe contains the sterile powder of the drug, and the second syringe is filled with the polymer-based solvent
- * **Drug-delivery system:** In-situ forming, which is carried out by the controlled release of the drug from the system (during 28 days).



➤ Cyclosporine Soft Gel Nanoemulsion with Concentrations of 25, 50 and 100 mg

◆ Zahravi Pharmaceutical Co.

www.zahravipharma.com



Product Introduction:

This drug is in the category of immunosuppressive drugs. Iminoral is used to prevent organ rejection after kidney, liver, heart or other organ transplant, bone marrow transplant and corticosteroids.

The brand name of the drug and its active ingredient is cyclosporine. It is taken orally and is in the category of immunosuppressive drugs and is used to prevent transplant rejection as well as acute rheumatoid arthritis, atopic dermatitis, alopecia and corneal transplantation.

This drug works nanoscopically and it is consumed by children and adults.

Main Export Destinations:

Armenia, Iraq, Syria and Afghanistan

Exports History:

Amount: 172,000 dollars and volume: 1314,000 pieces

Annual Production Capacity:

About 76,500,000 pieces

Founded:

1986

Application:

Using corticosteroids to prevent bone marrow transplant rejection, prevention of organ rejection after kidney, liver, heart, or other organs transplant

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Chemical formula:** $C_{62}H_{111}N_{11}O_{12}$
- * **Molecular weight:** 1202.6 g/mol
- * Soft edible capsule in 25 mg, 50 mg and 100 mg doses
- * Low solubility in water
- * **Formulation components:** Cyclosporine, alcohol, diethylene glycol, tocopheryl acetate, gelatin, sorbitol, chromophore, labrafil, glycerin, etc.

Advantages:

Competitive price and high quality

International Standards or permission:

- * ISO 9001
- * ISO 45001
- * ISO 14001
- * ISO 10002
- * ISO 10004
- * ISO 10015
- * ISO 26000
- * ISO 27001



➤ Sustained-Release Pressed Tablet of Wellban 150 mg Trade Name: Bupropion

◆ Abidi Pharmacy Co.

www.abidipharma.com

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Product Introduction:

- ※ Noradrenaline and dopamine reuptake are prevented by this medication. Bupropion makes up the medicine's composition, and the matrix technique was used to create the formulation in such a way that the active ingredient's rate of release occurs at predefined intervals in accordance with Ziban® 150, its reference drug.

Main Export Destinations:

South Korea, Italy, India, Uzbekistan, Tajikistan

Founded:

1946

Application:

- ※ **Wellban:** Treating depression and obsessive compulsive disorder (tobacco addiction)

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Raw Material:** Bupropion hydrochloride (Dipharma, Zhejiang Supor Pharmaceuticals Co. Ltd.), microcrystalline cellulose, hydroxypropyl cellulose, anhydrous citric acid, sodium metabisulfite, colloidal anhydrous silica, collidon SR, magnesium stearate, etc.
- ※ **Pharmaceutical Form:** 150 mg extended release tablet
- ※ **Pharmaceutical Classification:** Anti-depressant



➤ Carbamazepine Sustained-Release Tablet 200 and 400 mg Trade Name: Tegatard

◆ Raha Esfahan Pharmacy Co.

www.rahapharm.com



Product Introduction:

Convulsive attacks brought on by epilepsy happen when an area of the brain's cells experience a disturbance in electrical transmission. A seizure is a nervous attack caused by an electrical disruption in the brain. One of the medications that is most frequently used to treat epilepsy is carbamazepine. By lowering abnormal electrical currents in brain cells, carbamazepine is used alone or in conjunction with other antiepileptic medications to prevent seizures. Tegretol, the international brand name for this medication, is available in the form of 200 and 400 mg sustained release tablets.

Main Export Destinations:

Iraq and Afghanistan

Exports History:

Up to 500,000 \$

Annual Production Capacity:

Tablet line: 420,000,000 tablets
Tegatard 200: 20,000,000 tablets
Tegatard 400: 30,000,000 tablets

Founded:

2002

Application:

- * The treatment of chronic pain caused by nerve injury, including burning and excruciating facial nerve discomfort
- * Controlling various pains or mood disorders and treatment of some nervous and mental diseases, such as bipolar disorder
- * Treatment of diabetic neuroallergy's neurogenic pain
- * Treatment of epilepsy, anticonvulsants, and nerve discomfort

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Form of supply:** oval coated tablet, orange colored and weighing 275 mg
- * **Drug releasing method:** An extended release with USP Pharmacopoeia monograph-based release model
- * This tablet is made as an extended release both throughout design and production.
- * **Some compounds:** Fatty compounds like carnauba wax, hydrogel materials or water-insoluble materials

Advantages:

- * Improved medication effectiveness and reduced side effects
- * Facilitating diet therapy in terms of prescribed dosage
- * Greater patient comfort when taking medication and a decreased chance of forgetting to take several doses
- * There is no need to awaken the patient during sleep

International Standards or permission:

- * License to manufacture medicine
- * GMP certificate of solids line
- * ISO 14001
- * ISO 45001
- * ISO 10002
- * ISO 22000
- * ISO 9001



➤ Fampridine Sustained-Release Tablet

Trade Name: Dalfyra

◆ Zist Arvand Pharmed Co.

www.arvandpharmed.com



Product Introduction:

Generic extended release table which contains 10 mg Fampridine as API with the brand name of Dalfyra®. This product is equivalent to Ampyra® in North America market. It is used to treat movement disorders in patients with MS.

Annual Production Capacity:

6,500,000 tablets

Exports History:

Up to 500,000 \$

Founded:

2005

Application:

Improving the movement disorders in patients with MS

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ✦ **Pharmaceutical form:** Oral tablet
- ✦ **Drug release:** Slow-release (12 hours)
- ✦ **Formulation components:** Fampridine, hydroxypropyl methyl cellulose, microcrystalline cellulose, colloidal silicon dioxide, lactose monohydrate and...

Advantages:

- ✦ Equivalent to the product of the main brand Ampyra®
- ✦ Quality similar to the main foreign product
- ✦ Lower price compared to other competitors



➤ Mesalazine Enteric-Coated Tablet 500 mg

◆ Arya Pharmaceuticals Co.

www.aryapharm.com



Product Introduction:

Intestinal anti-inflammatory mesalazine pills are used to treat and prevent mild to moderate ulcerative colitis. This medication lowers the risk of colorectal cancer by lowering inflammation, bleeding, and abdominal discomfort. This tablet opens in the alkaline environment of the intestine after passing through the stomach.

Mesalazine Aria 500 mg enteric-coated tablets are packaged in a thick polyethylene container with 60 pieces, a silica gel bag, and the lid is hermetically sealed with an aluminum coating to keep moisture out. This oral tablet is the same medication as the ASACOL® brand.

Annual Production Capacity:

60,000,000 tablets

Exports History:

Up to 500,000 \$

Founded:

1982

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Drug components:** 500 mg of the active ingredient mesalazine and approximately 156 mg of other side ingredients
- * **Type of drug coating:** Stomach acid-resistant coating that only activates in the colon's alkaline pH and releases the medication where it is needed.
- * **Drug shape:** Yellow-orange diamond-shaped tablet with a length and width of 1.9 × 1.18 mm and 5.5 mm thickness.
- * It contains 90% to 110% of the active ingredient listed on the label.
- * This tablet remains intact in hydrochloric acid medium for 2 hours.

Advantages:

Exclusive manufacturing with a unique formula

International Standards or permission:

- * United States Pharmacopeia USP
- * British Pharmacopoeia BP



➤ Methyphenidate Sustained-Release Tablet 20 mg

Trade Name: Stimdate 20

◆ Mehr Daroo Co.

www.mehrdarou.com



Product Introduction:

This drug, whose main component is methylphenidate, is used to treat individuals who have trouble concentrating and also to treat hyperactive children. This drug, which is equivalent to the Ritalin brand drug, is known by the brand name Stimdate and is available in the market as 10 and 20 mg extended release tablets.

It should be noted that the ratio of the polymer in the formulation and the stages at which it is added into the composition are of crucial importance. Granulation, pressing, and coating are the three steps in the manufacture of this medication.

The medication has a 7-hour delayed release matrix with a release profile that is comparable to the Ritalin brand medicine.

Annual Production Capacity:

4,500

Founded:

1984

Application:

- * Hyperactivity treatment in children
- * Brain and nerve diseases

This product is a final B2B & B2C consumer product.

Technical Specifications:

Drug components: methylphenidate, lactose monohydrate 200, PVP 30K, magnesium stearate, ethanol 96, etc.



➤ Mesalazine Enteric-Coated Tablet 500 mg

◆ Mehr Daroo Co.

www.mehrdarou.com



Product Introduction:

Patients with ulcerative colitis use this medication, which contains mesalazine as the active ingredient.

This medication, which is equivalent to Asacol brand drug, comes in 250- and 500-mg pills.

The key point of this product is to precisely adjust the opening time of the drug in such a way that it opens exactly towards the end of the large intestine.

Annual Production Capacity:

26628

Founded:

1984

Application:

Treatment of ulcerative colitis in children and adults

This product is a final B2B & B2C consumer product.

Technical Specifications:

Drug ingredients: Mesalazine, corn starch, Irosil, PVP K30, stearic acid, croscarmellose sodium, Odragit S100, yellow iron acid color, titanium dioxide, triethyl citrate, etc.



➤ Agicoat Silver Nanocrystalline Dressing

◆ Emad Pharmaceutical Co.

www.emadmed.com



Product Introduction:

A developed antimicrobial dressing for all types of wounds, Agicoat silver nanocrystal dressing is made of nylon fibers coated with silver nanocrystals (1.2 percent silver).

This medication should be applied topically, and Agicoat is the brand name registered for it.

Main Export Destinations:

East Asia, Africa and Iraq

Exports History:

Up to 500,000 \$

Annual Production Capacity:

10,000,000 pieces of 10x10

Founded:

2002

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * Preventing any infections brought on by the silver nanoparticles.
- * Plasma treatment due to use of woven fibers
- * Ensuring that the wound receives adequate oxygen and prevents it from drying out
- * A change indicator is present (The dressing does not need to be changed for seven to fourteen days)

Advantages:

- * When compared to two similar counterparts on the global market, the amount of silver is lower, which results in lower toxicity and less MIC/MBC (Ektikat brand of England and Silverlon of America).
- * It is denser and has a larger contact surface than two comparable samples on the global market.
- * It improves the effectiveness of plasma treatment.
- * Cheaper than the two comparable products on the global market.

International Standards or permission:

- * ISO10993-10
- * ISO10993-5
- * ISO 10993-11
- * ISO 13485 certificate
- * CE certificate (until October 19, 2021)
- * Nanoscale certificate



➤ 10-ml Sublingual Spray to Relieve Muscle Spasms and Pains | Trade Name: Satinex

◆ Yas Daru

www.yasdaru.co.ir



Product Introduction:

The drug has been made into a sublingual spray by using chosen genotypes of indigenous Iranian cannabis plants, accelerated solvent extraction, and drug formulation so that many MS patients, cancer patients, and those in recovery from addiction might get relief from their muscular pains by using a herbal remedy.

Annual Production Capacity:

1,000,000 Spray per year

Founded:

1998

Application:

Relieving muscle spasms and pains in MS, cancer patients and people recovering from addiction

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Formulation component:** quantified extract of cannabis and edible essential oils
- ※ **Form of medication:** 10 ml sublingual systemic absorption solution
- ※ **Drug classification:** painkillers designed for the adult

Advantages:

Produced for the first time in Iran



➤ Injectable Teicoplanin Lyophilized Powder

◆ Rasta Gene Daroo Co.

www.rastagene.com

RASTA GENE
Biopharmaceutical Co.

Product Introduction:

Teicoplanin is a glycopeptide antibiotic that plays an important role in the prevention and treatment of Gram-positive bacterial infections caused by methicillin-resistant Staphylococcus epidermidis, Staphylococcus epidermidis, Enterococcus faecalis, and Clostridium difficile. Its mechanism of action is inhibition of bacterial cell wall synthesis.

Teicoplanin is a special pharmaceutical substance that is produced using the lyophilization process. Lyophilization (LYOPHILIZATION OR FREEZE DRYING) is an advanced method of drying sensitive drugs, biological materials, viruses and bacteria, and tissues of living organisms. In this drying method, cooling is used instead of heating, and by reducing pressure in the sample, the remaining water is directly transformed from solid to a gas state (sublimation). Since this drug is very sensitive to hydrolysis, the amount of water in the sample should be less than 1.5%, otherwise, it will undergo destructive reactions and lose its medicinal properties. Since this drug is very sensitive to common drying methods such as heating, advanced techniques such as lyophilization should be used in its formulation.

Exports History:

Up to 500,000 \$

Founded:

2013

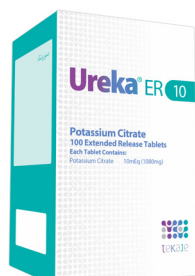
Application:

- ※ As an antibiotic (glycopeptide)
- ※ As an alternative to vancomycin in serious infections caused by gram-positive bacteria that do not respond to other drugs.
- ※ As an alternative to vancomycin/metronidazole in colitis along with antibiotic consumption
- ※ in complicated skin and soft tissue, joints, bones, and complicated urinary tract infections
- ※ Use in patients undergoing peritoneal dialysis or peritonitis
- ※ Prevention of MRSA infection in orthopedic surgeries
- ※ As oral treatment for Clostridium difficile infection related to diarrhea and colitis

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Components:** TEICOPLANIN, NaCl, NaOH, HCl
- ※ **Administration:** 200 and 400 mg Vials
- ※ **Pharmaceutical form:** Injectable lyophilized powder
- ※ **Brand name drug:** RTARGOCID
- ※ **Brand name:** Teicomix



➤ Sustained-Release Potassium Citrate Tablet

Trade Name : Ureka

◆ Tadbir Kala Jam Co.

www.tadbirkala.ir



Product Introduction:

The product is a formulation for sustained-release potassium-citrate tablets trademarked with UREKA sustained-release 10.

The drug is used to prevent and treat urate and cystine stons in the bladder and its formulation includes Carnuba Wax and magnesium stearate.

The brand name of the drug is MEQ 10UROCIT-K, and its generic name is potassium citrate. Moreover, the drug is in the form of sustained-release tablets.

Founded:

1998

Application:

Treating renal tubular acidosis along with calcium stons, calcium oxalate stons with hypocitraturia with any etiology, uric acid stons with/without calcium stons

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Production scale (batch size):** 100,000
- ※ **Ingredients:** Carnuba Wax, magnesium stearate
- ※ **Presentation form:** Sustained-release tablets packed in 100-tablet boxes
- ※ **Special properties:** The prolonged release of the drug in around 12 hours



➤ Quetiapine Fumarate Sustained-Release Tablet

Trade Name: Tranqopine

◆ Tadbir Kala Jam Co.

www.tadbirkala.ir



Product Introduction:

The product is the Quetiapine Fumarate sustained-release tablet formulation, which is applied to treat mental and neurological disorders. The formulation includes the HPMC polymer, lactose, povidone, talc, and magnesium stearate. Its special properties include the prolonged release of the contents and the effectiveness of the drug within a day. Moreover, the final drug is in the form of a tablet under the brand name SEROQUEL XR.

Founded:

1998

Application:

Treating mental and neurological disorders

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Production scale:** 200,000 Pcs
- * **Active Ingredients:** HPMC polymer, lactose, povidone, talc, magnesium stearate
- * **Presentation form:** Sustained-release tablets packed in 30-tablet boxes
- * **Special properties:** The prolonged release of the drug and its effectiveness in a day

Second Chapter
Cell Therapy and Tissue Engineering



2ND CHAPTER

First chapter

SECOND CHAPTER

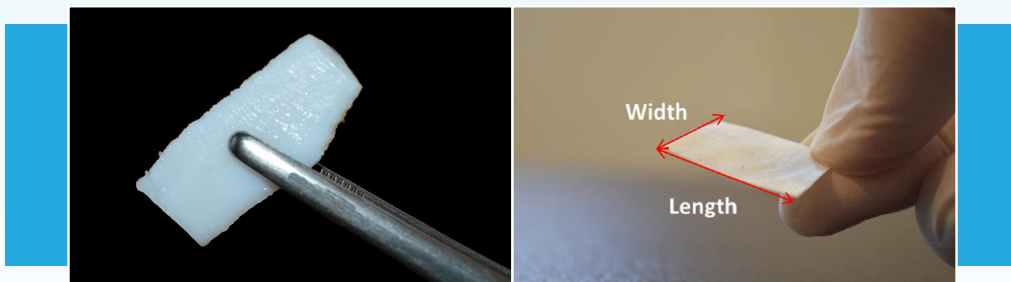
Third chapter

Fourth chapter

Fifth chapter

Cell Therapy and Tissue Engineering

- Soft Tissue Products Allograft | Trade Name: Cenoderm and Ceno Membrane | 114
- Frozen Heart Products Allograft Including Valve, Conduit, and Patch | 116
- Various Bone Allografts | 118
- Frozen Tendon Products Allograft Including Tendon and Achilles Tendon and Achilles Tendon | 122
- Amniotic Membrane Containing Frozen Cells for Treatment of Diabetic Wounds, etc. | 124
- Cell-Free Amniotic Membrane for Conjunctivitis and Cornea Diseases | 126
- Mesenchyme Cell Derived from the Umbilical Cord to Cure Cerebral Palsy (CP) | 128
- Autologous Cell Therapy for Joint Repair | Trade Name: MesestroCell | 130



➤ Soft Tissue Products Allograft

Trade Name: Cenoderm and Ceno Membrane

◆ Hamanandsaz Baft Kish Co,

www.trcir.com



Product Introduction:

This product is obtained and produced from donated human tissues including skin, fascia lata, and pericardium, and is used as a barrier in gum surgery as well as for augmentation of lesions or tissue defects.

Main Export Destinations:

England, Turkey, Azerbaijan, Syria

Exports History:

Between 1,000,000 to 10,000,000 \$

Founded:

2003

Application:

- * Orthopedic interventions and nerves, mouth, jaw, face, ear, nose, throat, reconstructive plastic, etc. surgeries
- * Dentistry and periodontology interventions

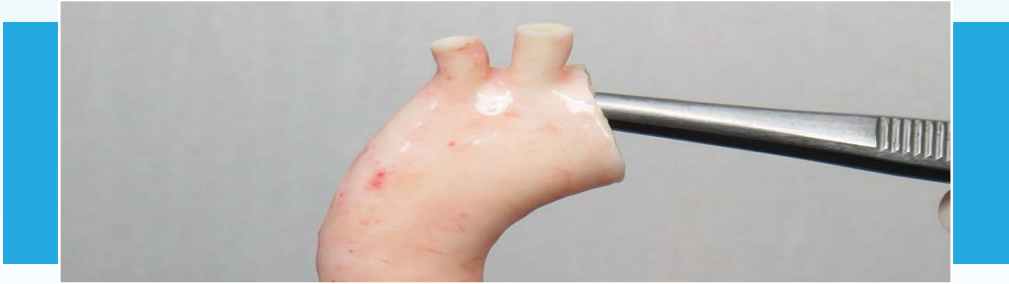
This product is a final B2B consumer product.

Technical Specifications:

- * Complete biocompatibility with the human body
- * Maintaining structural integrity and suffering minimal damage during the processing which preserves the vital components of the matrix structure that are necessary for the transplant.
- * No donor cell or genetic material from the donor
- * Free of any microbial and fungal contamination even before the sterilization with gamma rays
- * Resistant to mechanical pressure and stitching
- * Flexibility and plasticity
- * Freeze-dried with less than 5% residual water with the ability to store at room temperature for 5 years
- * Can be absorbed inside the body

International Standards or permission:

- * ISO 13485 (2016) from IGC company
- * ISO 14001 (2015) from IMQ company
- * ISO 45001 (2018) from IMQ company
- * ISO 9001 (2015) from IMQ company
- * QSR 21 CFR 820 (cGMP) from QS company



➤ **Frozen Heart Products Allograft Including Valve, Conduit, and Patch | Trade Name: Cenovalve**

◆ **Hamanandsaz Baft Kish Co,**

www.trcir.com



Product Introduction:

This product is produced from donated human tissue. Aortic and pulmonary valve allografts are used in a wide range of cardiovascular surgeries to repair congenital malformation and heart valve failure at different ages. Since allograft heart valves have the natural structure of human valves, they are more compatible with the body compared to the artificial valves or pig valve xenografts. Allografts do not require the preventive use of anticoagulants after the operation. Allograft products effectively eliminate the need for taking the tissue from other parts of the body as well as the complications of autograft transplants.

Main Export Destinations:

England, Turkey, Azerbaijan, Syria

Exports History:

Between 1,000,000 to 10,000,000 \$

Founded:

2003

Application:

Cardiovascular surgeries

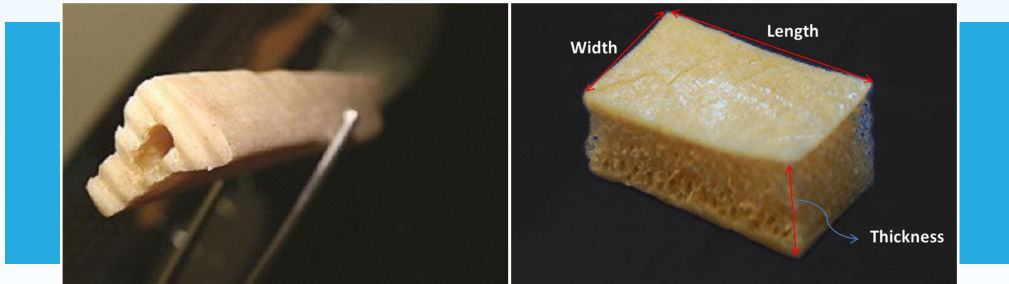
This product is a final B2B consumer product.

Technical Specifications:

- * Product of human origin
- * Variable lengths of the base of aortic and pulmonary valves
- * Decontaminated by incubation in an antibiotic cocktail containing vancomycin, streptomycin, gentamicin, cloxacillin, ceftriaxone, and antifungal amphotericin B

International Standards or permission:

- * ISO 13485 (2016) from IGC company
- * ISO 14001 (2015) from IMQ company
- * ISO 45001 (2018) from IMQ company
- * ISO 9001 (2015) from IMQ company
- * QSR 21 CFR 820 (cGMP) from QS company



➤ Various Bone Allografts

◆ Hamanandsaz Baft Kish Co.

www.trcir.com



Product Introduction:

These grafts are produced from the donated human tissue and are used to stimulate bone formation and repair bone defects as well as augmentation of artificial implants in the skeletal system. All their production steps are carried out under highly controlled conditions in super-specialized cleanrooms of ISO 4 to 7 classes. Bone donors are precisely checked in terms of their medical history and are subjected to detailed clinical and forensic examinations. Multiple microbial cultures are taken from the harvesting site, harvested tissue, and all production stages, and complete serology tests are performed using NAT-ELISA methods on the donor's serum sample.

The sterility check is carried out by multiple microbiology tests, and the quality of the final product is evaluated by multiple biological and biomechanical tests. Then the final products are packed, lyophilized, and subjected to gamma radiation with a dose of 15 to 25 kGy for sterilization. In the end, all these steps are reviewed by the specialists of the quality control unit and after their final approval, the license to sell the products is issued.

Main Export Destinations:

England, Turkey, Azerbaijan, Syria

Exports History:

Between 1,000,000 to 10,000,000 \$

Founded:

2003

The different types of bone allografts produced by the Kish tissue regeneration corporation are as follows:

- * Shear bone allografts including shaft, ring, and cage
- * Demineralized bone powder allograft
- * Combined demineralized and mineralized bone powder allograft
- * Demineralized bone allografts including fibers, ribs, struts, strips, crushed, chips, cubes, match steaks, and blocks
- * Processed shear bone grafts including strips, chips, cubes, match sticks, blocks, and wedges
- * Mineralized bone powder allografts

Application:

Product's Name	Application
Shear bone allografts	Orthopedic interventions - mouth, jaw, and face surgeries
Demineralized bone powder allograft	Orthopedic, oral, maxillofacial, dental, and periodontology interventions and surgeries
Combined demineralized and mineralized bone powder allograft	Orthopedic, oral, maxillofacial, dental, and periodontology interventions and surgeries
Demineralized bone allografts	Orthopedic interventions and mouth, jaw, face, ear, nose, throat, reconstructive plastic, etc. surgeries - Dentistry and periodontology interventions
Processed shear bone grafts	Orthopedic interventions and mouth, jaw, face, ear, nose, throat, reconstructive plastic, etc. surgeries - Dentistry and periodontology interventions
Mineralized bone powder allografts	Orthopedic, oral, maxillofacial, dental, and periodontology interventions and surgeries

This product is a final B2B consumer product.

Technical Specifications:

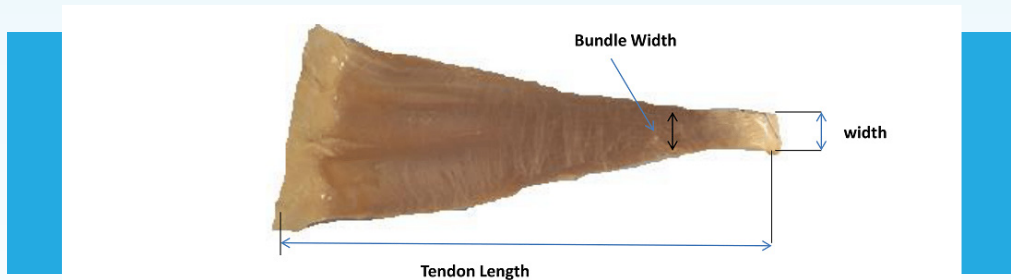
All allografts have the following common features:

- * Sterilized by gamma rays
- * Complete biocompatibility with the human body
- * No cells and genetic material from the donor
- * Freeze-dried with less than 5% residual water and the ability to store at room temperature for 5 years
- * Has osteoconductive and osteoinductive properties for the bone-regeneration process

Product's Name	Made From ...	Osteogenesis Rate	How to Use
Shear bone allografts	The shaft of the femur, tibia, and fibula	-	-
Demineralized bone powder allograft	Bone powder with a size of 150 to 2000 microns - 70% cortical and 30% cancellous	Higher than that of mineralized products	Rehydrate with physiological serum or patient's blood, 30 minutes before use
Combined demineralized and mineralized bone powder allograft	Bone powder with a size of 150 to 2000 microns -70% cortical and 30% cancellous (35% demineralized + 65% mineralized powder)	Higher than mineralized and less than demineralized products osteogenesis rate	Rehydrate with physiological serum or patient's blood, 30 minutes before use
Demineralized bone allografts	Shaft and condyle of femur, tibia and fibula, iliac, and humerus	Higher than that of mineralized products	Rehydrate with physiological serum or patient's blood, 30 minutes before use
Processed shear bone grafts	Shaft and condyle of femur, tibia and fibula, iliac, and humerus	-	-
Mineralized bone powder allografts	Bone powder with a size of 150 to 2000 microns - 70% cortical and 30% cancellous	-	Rehydrate with physiological serum or patient's blood, 30 minutes before use



Knowledge-Based Products and Equipment



➤ **Frozen Tendon Products Allograft Including Tendon and Achilles Tendon and Achilles Tendon with Calcaneus and Meniscus | Trade Name: CenoTendon**

◆ **Hamanandsaz Baft Kish Co,**

www.trcir.com



Product Introduction:

CenoTendon is a bio-implant with allograft origin produced by Kish tissue regeneration corporation. CenoTendon consists of the following donated tissues: anterior and posterior tendons of the tibia bone, (tendon of Proneus Longus), Achilles tendon, and tendons connected to the patella bone, meniscus, etc. in different shapes and sizes.

CenoTendon is used for patients with anterior cruciate ligament injury and also the patients with knee instability. Also, allograft Achilles tendons with or without bun can be used in sports injury operations and strengthening or repairing the soft tissue of the tendon.

Allograft products effectively eliminate the need for taking the tissue from other parts of the body as well as the complications of autograft transplants. Allografts are easy to use and require little preparation time. CenoTendon bio-implants are used in many surgical procedures, because of their natural biocompatibility and because they can be returned to the patient's own tissue.

Main Export Destinations:

England, Turkey, Azerbaijan, Syria

Exports History:

Between 1,000,000 to 10,000,000 \$

Founded:

2003

Application:

In reconstructive and therapeutic surgeries of damaged tendons

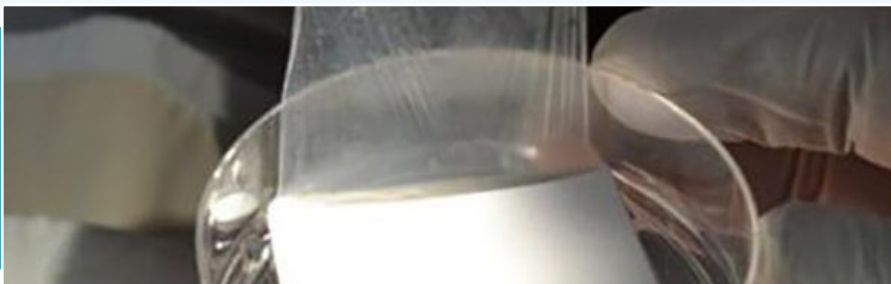
This product is a final B2B consumer product.

Technical Specifications:

- * This product is decontaminated by means of incubation in an antibiotic cocktail containing vancomycin, streptomycin, gentamicin, cloxacillin, ceftriaxone, and antifungal amphotericin B
- * The minimum length of the tendons is 240 mm and the minimum width of them is 6 mm

International Standards or permission:

- * ISO 13485 (2016) from IGC company
- * ISO 14001 (2015) from IMQ company
- * ISO 45001 (2018) from IMQ company
- * ISO 9001 (2015) from IMQ company
- * QSR 21 CFR 820 (cGMP) from QS company



➤ Amniotic Membrane Containing Frozen Cells for Treatment of Diabetic Wounds, Burns and Chronic Wounds | Trade Name: Cell-Amniosin

◆ Cinacell Research and Manufacturing Co.

www.sinacellco.com



Product Introduction:

Amniosin-Cell is a biological method of dressing wounds, which employs the placenta resulting from the human cesarean childbirth. When the amniotic membrane is placed on a non-infectious chronic wound, which is not treated or healed hardly under normal conditions – it can close the wound fast and result in the quick treatment of the patient.

Indeed, Amniosin-Cell is the amniotic membrane with its stem cells; as a result, it contains a maximum number of factors that can heal wounds. Due to the existence of natural cells in Amniosin-Cell, it is alive and active. Moreover, new growth factors are secreted by the cells during the patient's recovery. The presence of such cells on the surface of Amniosin-Cell has made the product a convenient option to heal wounds and injuries on various parts of the body except for the eyes. Because the surface opacity arising from the presence of the cells is harmful to eye wounds, and Amniosin or Amniodisc are recommended in the case of dressings for eye injuries.

Founded:

2007

Application:

Dressing various chronic wounds like diabetic ulcers, bedsores, severe burns, and other types of injuries in the body to accelerate the healing of wounds.

This product is a final B2B consumer product.

Technical Specifications:

- * Containing the molecular structure of the human amniotic membrane formed of collagen, hyaluronic acid, glycosaminoglycan, and other natural molecules.
- * **Production method:** investigating the health background of the mother who donates the placenta, performing virus tests on the mother's blood using the most meticulous method (Real Time PCR) to prevent the transmission of any disease- performing the production phase in clean rooms according to the GMP standard of Iran's Ministry of Health and Medical Education under Class A Laminar Hood and completely sterile conditions, performing sterility tests on every produced batch to detect fungi, bacteria, and mycoplasma, freezing, packing, and sealing in convenient solutions, and labeling.
- * **Dimensions:** 2*2 cm and 3*3 cm on special sterile paper
- * **Temperature:** -80°C

International Standards or permission:

- * ISO 13485 (2016) from IGC company
- * ISO 14001 (2015) from IMQ company
- * ISO 45001 (2018) from IMQ company
- * ISO 9001 (2015) from IMQ company
- * QSR 21 CFR 820 (cGMP) from QS company



➤ Cell-Free Amniotic Membrane for Conjunctivitis and Cornea Diseases | Trade Name: Amniosin

◆ Cinacell Research and Manufacturing Co.

www.sinacellco.com



Product Introduction:

Amniosin is in many ways similar to Amniosin-Cell, but the difference between these two products is that Amniosin undergoes a decellularization stage and is produced in smaller dimensions as it is applied to the eyes. Decellularization aims to increase the transparency of the product as it is used for the dressing of ophthalmological ulcers, the epithelial cells of the cornea complete the treatment process and due to their tendency to connect to the base membrane of the amniotic membrane, they get connected to it. The product is defrosted before application, it is placed on the injured spot of the eye and is fixated using stitches.

The product significantly reduces patients' pain after surgery as it protects the surface nerves of the cornea and prevents friction with the patients' eyelids. Moreover, since it completely matches the base membrane of the cornea, it is absorbed thoroughly. Thus, there is no need to remove them after the treatment process. As the structure of the amniotic membrane is very similar to that of the healthy base of the cornea, no cases of its rejection by the receiver's body have been reported yet.

Founded:

2007

Application:

Dressing ophthalmological injuries, healing wounds, injuries, and various damages to tissues, optimizing the treatment process, acceleration of the healing of wounds, and reduction in pain and inflammation in affected areas

This product is a final B2B consumer product.

Technical Specifications:

- * Containing the molecular structure of the human amniotic membrane formed of collagen, hyaluronic acid, glycosaminoglycan, and other natural molecules.
- * **Production method:** investigating the health background of the mother who donates the placenta, performing virus tests on the mother's blood using the most meticulous method (Real Time PCR) to prevent the transmission of any disease, performing the production phase in clean rooms according to the GMP standard of Iran's Ministry of Health and Medical Education under Class A Laminar Hood and completely sterile conditions, performing sterility tests on every produced batch to detect fungi, bacteria, and mycoplasma from each produced batch.
- * **Dimensions:** 2*2 cm and 3*3 cm on special sterile paper
- * **Temperature:** -80°C

International Standards or permission:

- * ISO 13485 (2016) from IGC company
- * ISO 14001 (2015) from IMQ company
- * ISO 45001 (2018) from IMQ company
- * ISO 9001 (2015) from IMQ company
- * QSR 21 CFR 820 (cGMP) from QS company



➤ **Mesenchyme Cell Derived from the Umbilical Cord to Cure Cerebral Palsy (CP) | Trade Name: Whartocell**

◆ **Cell Tech Pharmed Co.**

www.celltech.ir



Product Introduction:

Whartocell as an allogeneic transplantation is the result of the isolation and culturing of healthy donor cells. In other words, the patient receives the cells from another person. For this product, after receiving the acceptable results of viral and biochemical tests on the blood sample of the donor, processing and culturing will be done in a sterile condition. This product contains living cells that, after being isolated from healthy donor tissue, are propagated in a standard culture medium and stored in sterile vials in a nitrogen tank until the injection is required.

Annual Production Capacity:

500 liters

Founded:

2013

Application:

Treatment of: Cerebral Palsy, Osteoarthritis, GvHD, ALS, Acute M.I., Autism and M.S

This product is a final B2B consumer product.

Technical Specifications:

Presentation form: Sterile, at doses of 10 and 20 million cells per milliliter in vials and doses of 1 to 4 million cells per milliliter in 50 ml bags

Advantages:

- * Lower pricing compared to international products
- * Equal quality with premium-quality international products
- * The premium quality of the cells

International Standards or permission:

- * GMP
- * ISO 9001



➤ **Autologous Cell Therapy for Joint Repair**
Trade Name: MesestroCell

◆ **Cell Tech Pharmed Co.**

www.celltech.ir



Product Introduction:

Osteoarthritis is the most common arthritis disease, affecting more than half of the population over the age of 60. In this disease, the cartilage of the joint is damaged and gradually disappears, resulting in the wear of the bones together causing pain, swelling and reduced ability to move. Mesosterol is the name of an autologous cell therapy derivative for joint repair and an alternative to bovine fetal serum (FBS) in experimental and clinical cell culture.

Annual Production Capacity:
2,000 vials of 20,000,000 pcs

Founded:
2013

Application:

Pharmaceutical and clinical applications for the treatment of joint arthritis instances and the rehabilitation of joints

This product is a final B2B consumer product.

Technical Specifications:

Presentation type: sterile, in 60ml packages

Advantages:

- * Good inventory cost
- * Premium quality in relation to similar products

International Standards or permission:

- * GMP
- * ISO 9001

Third Chapter Diagnostic Services and Technologies



THIRD CHAPTER

First chapter

Second chapter

THIRD CHAPTER

Fourth chapter

Fifth chapter

Diagnostic Services and Technologies

- ELISA Diagnostic Kits Set | 136
- ELISA Diagnostic Conjugation Kits Set | 138
- ELISA and Gamma Diagnostic Kits Set | 140
- Chromosome DNA Profiling Kits Set | 142
- Haplotype Identification and Screening Kits Set For Genetic Diseases | 144
- Diagnostic Kit for Abnormalities of 13, 18, 21, X and Y Chromosomes | 146
- Immunoassay-based Rapid Test Kits Set | 148
- Types of Kits / DNA Extraction, RNA Extraction, PCR product purification, etc. | 150
- Aptasensor Conjugated with Gold Nanoparticles by Direct Method | 152
- HCV Detection And Quantitation Kit | 154
- BCR-ABL (P190) Detection And Quantitation Kit | 156
- CMV Pathogen Detection and Quantitation Kit | 158
- NGS (Whole Exome) Genetic Testing Services | 160
- Whole Exome Genetic Sequencing Services | 162
- Screening Software for Industrial Strains with Feature Engineering Algorithm | 164
- Designing Software for New Drug-Like Compounds | 166



➤ ELISA Diagnostic Kits Set

◆ Ideal Tashkhis Atiyeh Manufacturing Co.

www.idealdiag.com



Product Introduction:

Elisa Kit sets produced by Ideal Tashkhis Atiyeh Manufacturing Co. are implemented to detect various factors in human blood. The kits include the following:

Kit Name	In Serum:	Evaluating the Levels of:	Diagnosed Illness
25 – OH Vit D	VITAMIN D 96 ELISA KIT. IDEAL	25 - hydroxy vit D	Osteoporosis, rickets, and osteomalacia
TSH	TSH 96 ELISA KIT. IDEAL, TSH 192 ELISA KIT. IDEAL	TSH	Hypothyroidism and hyperthyroidism
Ferritin	FERRITIN 96 ELISA KIT. IDEAL	Ferritin	Early diagnosis of iron-deficiency anemia in apparently healthy patients
PSA	PSA 96 ELISA KIT. IDEAL	PSA	Benign, malign, and metastatic prostate tumors
PRL	PRL 96 ELISA KIT. IDEAL	Prolactin	Diagnosing hyperprolactinemia
LH	LH 96 ELISA KIT. IDEAL	LH	Diseases related to sexual glands, diagnosing precocious puberty in girls, and the Polycystic ovary syndrome (PCOS)
FSH	FSH 96 ELISA KIT. IDEAL	FSH	Evaluating the balance and regulation of the menstrual cycle and fertility via the hypothalamic-pituitary-gonadal axis

Exports History:

Up to 500,000 \$

Founded:

2008

Moreover, all of the above kits work according to the Elisa method. The performance of all kits is based on the Sandwich Immunoassay Mechanism except for the OH Vit D – 25 kit, which works according to the Competitive Immunoassay.

Application:

Diagnostic & Pathology laboratories

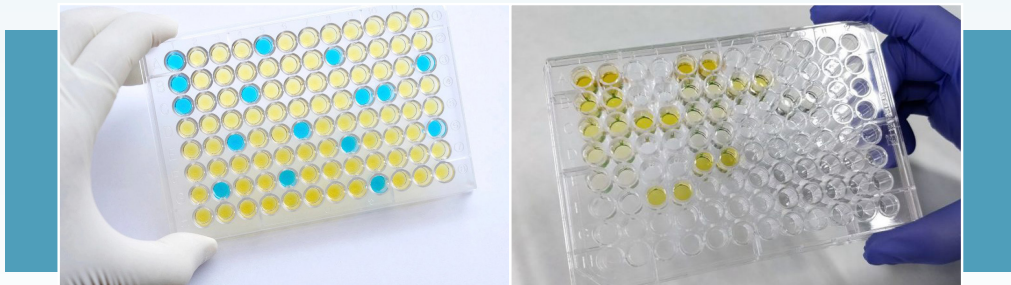
This product is a final B2B consumer product.

Technical Specifications:

Kit Name	Cal A-F Calibrators	Kit Packing	Kit Sensitivity
25 – OH Vit D	6 vials with different concentrations	96-test plates containing Vit D stabilized antibody	0.5 ng/mL
TSH	6 vials in 0, 0.5, 2.5, 5, 10, and 25 µIU/mL concentrations	96-test microplates containing stabilized streptavidin	0.1 µIU/mL
Ferritin	6 vials in 0, 10, 50, 150, 400, and 800 ng/mL concentrations		0.2 ng/mL
PSA	6 vials in 0, 2.5, 5, 10, 25, and 50 ng/ml concentrations, produced from human serum		0.05 ng/mL
PRL	6 vials in 0, 5, 10, 25, 50, and 100 ng/ml concentrations, produced from human serum		0.2 ng/mL
LH	6 vials in 0, 5, 25, 50, 100, and 200 mIU/ml concentrations, produced from human serum		0.1 mIU/mL
FSH	6 vials in 0, 5, 10, 25, 50, and 100 mIU/ml concentrations, produced from human serum		0.2 mIU/mL

Advantages:

- ✧ very affordable in comparison to similar products
- ✧ Uniform quality in various production series and the ability to offer them permanently in national and international markets
- ✧ The ability to provide any distinct component of the kits to consumers on their demand
- ✧ Being easy and practical with high accuracy and stability



➤ ELISA Diagnostic Conjugation Kits Set

◆ Pishgaman Sanjesh Isatis Co.

www.pishgamansanjesh.com



Product Introduction:

The company produces 17 different types of diagnostic kits, each of which is used to detect one of the target factors in serum, blood, or plasma, these kits are as follows:

1. **T3 ELISA Kit:** Quantitative measurement of total tri-iodothyronine or Total T3
2. **T4 ELISA Kit:** Quantitative measurement of Total Thyroxine
3. **Kit ELISA TSH:** quantitative measurement of thyroid-stimulating hormone or thyrotropin
4. **Free T3 ELISA Kit:** quantitative measurement of free tri-iodothyronine hormone or Free T3
5. **FT4 ELISA Kit:** quantitative measurement of free thyroxine hormone or Free T4
6. **T-uptake kit:** quantitative measurement of free thyroxine hormone or Free T4
7. **FSH ELISA Kit:** Quantitative measurement of Follicle stimulating hormone
8. **LH ELISA Kit:** quantitative laboratory measurement of luteinizing hormone (LH)
9. **Prolactin ELISA Kit:** quantitative laboratory measurement of Prolactin hormone
10. **HCG Rapid ELISA Kit:** Quantitative measurement of Intact human chorionic gonadotropin hormone (Intact hCG)
11. **HCG Titration ELISA Kit:** Quantitative measurement of Intact human chorionic gonadotropin hormone (Intact hCG)

Exports History:

Up to 500,000 \$

Founded:

2014

12. **Anti-Helicobacter pylori-IgG kit:** Quantitative and semi-quantitative measurement of specific antibodies of the class IgG, against specific antigens of Helicobacter pylori organism.
13. **Anti-Helicobacter pylori-IgA kit:** Quantitative and semi-quantitative measurement of specific antibodies of the class IgA, against specific antigens of Helicobacter pylori organism.
14. **PSA ELISA Kit:** quantitative laboratory measurement of Total Prostate-specific Antigen (tPSA) tumoral index
15. **Ferritin ELISA kit:** quantitative measurement of ferritin in serum or EDTA plasma
16. **25(OH)-vitamin D kit:** quantitative measurement of 25-hydroxy vitamin D
17. **Vitamin B12 ELISA kit:** quantitative measurement of vitamin B12

Application:

For the medical diagnosis in all laboratories

This product is a final B2B consumer product.

Technical Specifications:

Detecting _	Method of Action	Technology
T3. T4. Free T3. Free T4. T-uptake	Competitive ELISA	-
TSH. FSH. hCG. hCG-Titration. ferritin	Sandwich ELISA	Solid-phase coating streptavidin technology
LH. PSA	Noncompetitive immunoassay	
Prolactine	Noncompetitive immunoassay	-
H.Pylori IgG. H.Pylori IgA	Nondirect ELISA	-
25-Hydroxy Vit D	competitive/inhibition ELISA	-
B12 Vit	Competitive	-

Advantages:

- * Low measurement threshold
- * High precision
- * High specificity
- * Linearity
- * Reasonable price



Application:

Medical and diagnostic laboratories

➤ **ELISA and Gamma Diagnostic Kits Set**

◆ **Padtan Gostar Isar Co.**

www.padtangostar.com



Product Introduction:

Padtan Gostar Isar Company produces all types of ELISA and Gamma kits, which are used in medical and diagnostic laboratories to analyze various factors in the blood to check if a person has developed certain diseases. Some of the kits produced by this company are:

Kit Name	The Analyzed Factor	Diagnosis
ELISA hCG kit	Human chorionic gonadotropin	Pregnancy diagnosis and early pregnancy disorders
25-hydroxy vitamin D ELISA kit	25-OH-Vitamin D3	Vitamin D deficiency
T4 Gamma kit	Thyroxine hormone (T4)	Overactive or underactive thyroid gland
LH Gamma kit	Luteinizing hormone (LH)	Sexual diseases of men and women
Prolactin ELISA kit	Prolactin hormone	Breast and breastfeeding problems
Covid-19 antibody ELISA kit	Determining the amount of antibody against COVID-19	COVID-19 diagnosis

Annual Production Capacity:

23800 tons

Founded:

1986

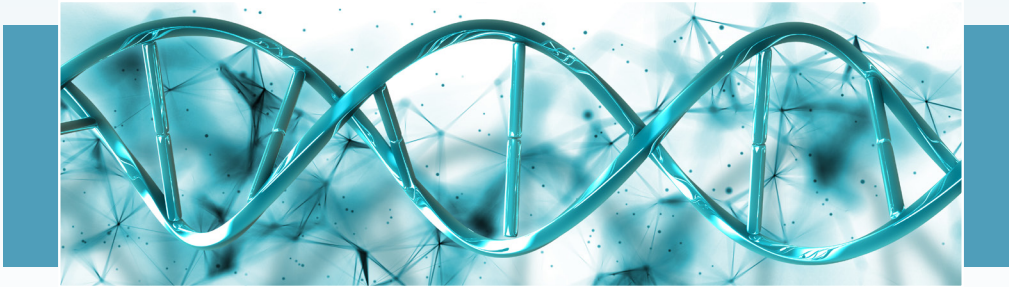
This product is a final B2B consumer product.

Technical Specifications:

Kit name	Sensitivity	Components
ELISA hCG kit	1 mIU/ml	Coated microplate, enzyme conjugate (HRP-Anti-HCG), ELISA standard series, control serum, wash buffer concentrate (20X), dye solution, stop solution and diluent solution
25-hydroxy vitamin D ELISA kit	1 ng/ml	Coated plates, ELISA standard series, extraction buffer, concentrated biotin conjugate (25)-(OH-Vitamin D3) (Biotin-50X), control serum, enzyme conjugate (HRP-Streptavidine), Wash buffer concentrate (20X), dye solution and stop solution
T4 Gamma kit	0.2 ng/dl	Coated tubes, tracer (T4 labeled with iodine-125), standards series, control serum, wash buffer concentrate (20X)
LH Gamma kit	0.1 mIU/ml	Coated tubes, tracer (T4 labeled with iodine-125), standards series, control serum, wash buffer concentrate (20X)
Prolactin ELISA kit	1 ng/ml	Coated microplate, enzyme conjugate (HRP-Anti-prolactin), ELISA standard series, control serum, wash buffer concentrate (20X), dye solution, stop solution
Covid-19 antibody ELISA kit		

International Standards or permission:

- * ISO 13485
- * GMP certificate



➤ Chromosome DNA Profiling Kits Set

◆ Kawsar Biotech Co.

www.kawsarbiotech.com



Product Introduction:

Human profiling kits, which are molecular detection kits, have been developed worldwide due to their widespread use in forensic genetics. These kits can be used to search databases and have high heterozygosity for most populations. These kits are produced by Kowsar Biotechnology Company

and are available in five types:

- * IRFiling™ Kit v2.2
- * YFiling™ (29-Plex) Kit v2.2
- * IRFiling™ Globe Kit v1.2
- * RizFiling™ Kit v1.2
- * XFiling™ Kit v1.2

These kits are designed based on STR markers.

Founded:

2006

Application:

- * Determining kinship relationships
- * Determining human identity in incidents
- * Criminal investigation
- * Paternity and maternity testing
- * Forensic genetics
- * Determining the human profile or schema
- * Population genetics and creating a database

This product is a final B2B consumer product.

Technical Specifications:

Index	Specifications				
	RizFiling Kit v1.2	IRFiling Kit v2.2	IRFiling™ Globe Kit v1.2	YFiling Kit v2.2	XFiling kit 1.2v
Total markers	17	30	27	17	12
STR markers	16	29	24	16	11
CODIS markers 2017	-	-	20	15	11



➤ Haplotype Identification and Screening Kits Set for Genetic Diseases

◆ Kawsar Biotech Co.

www.kawsarbiotech.com



Product Introduction:

Prenatal diagnosis is prone to misdiagnosis for various reasons. Most of these misdiagnoses can be caused by the contamination of the fetal sample with the maternal sample, displacement of the sample in different stages of diagnosis, mixing samples, disomy, allelic dropout or ADO, crossover, new mutation and paternal denial, etc.

SegCheck kits are produced in five types in Kowsar Biotechnology Company:

- * HBB SegCheck™ Kit v1.2
- * F8 SegCheck™ Kit v1.2
- * DMD SegCheck™ Kit v1.2
- * HBA SegCheck™ Kit v2.2
- * SMN SegCheck™ Kit v2.2
- * CFTR SegCheck™ Kit v2.2
- * COL7A1 SegCheck™ Kit v1.2
- * F9 SegCheck™ Kit v1.2
- * PAH SegCheck™ Kit v1.2
- * ITGA2B & ITGB3 SegCheck™ Kit v1.2

Founded:

2006

Application:

Diagnosis of various genetic diseases

This product is a final B2B consumer product.

Technical Specifications:

Chromosome	Marker name	Size (Base pair)	Chromosomal location	Colour
XY	AMXY	108(X)/114(Y)	X p22.2 Y p11.2	Blue
13	D13S325	125-190	13q14.11	Blue
18	D18S390	210-250	18q22.3	Blue
21	D21S1446	285-328	21q22.3	Blue
13	D13S252	405-455	13q12.2	Blue
11	D11HBB SD3.3	140-200	11p15.4	Green
11	D11HBB SD11.2	210-280	11p15.4	Green
21	D21S1414	350-430	21q21.1	Green
11	D11HBB SU6.1	120-180	11p15.4	Black
18	D18S1002	250-310	18q11.2	Black
21	D21S1411	346-460	21q22.3	Black
11	D11HBB SU11	135-200	11p15.4	Red
X	DX-TATC 13.35	245-271	Xp21.2	Red
11	D11HBB SU2.9	300-360	11p15.4	Red

Advantages:

- * Increasing the accuracy of correct diagnosis
- * Minimizing the possibility of misdiagnosis
- * Preventing wrong diagnoses

➤ Diagnostic Kit for Abnormalities of 21 ,18 ,13, X and Y Chromosomes

◆ Kawsar Biotech Co.

www.kawsarbiotech.com



Product Introduction:

AneuQuick™ Plus v1.2 is a molecular detection kit based on quantitative fluorescence polymerase chain reaction (QF-PCR) and is used for prenatal screening and rapid detection of common numerical abnormalities of chromosomes 13, 18, 21, X, and Y and deletion, point mutation or gene conversion of the SMN1 and SMN2 and exon 7 gene mutations in spinal muscular atrophy (SMA).

Founded:

2006

Application:

- * Medical, laboratory
- * Prenatal screening and rapid detection of common chromosomal aneuploidies

This product is a final B2B consumer product.

Technical Specifications:

The AneuQuick™ Plus contains a total of 27 markers, including 22 highly heterozygous STR markers and 4 markers for sex determination and sex chromosome anomalies, and a single nucleotide polymorphism. (SNP) for the SM1 and SN2 genes. The AneuQuick™ v3.2 lacks this SNP marker.



➤ Immunoassay-based Rapid Test Kits Set

◆ Farafan Diagnostics Co.

www.farafandiag.com



Product Introduction:

For a speedy diagnosis of addiction and various illnesses as well as preliminary screening, rapid tests (also known as quick tests), strip tests, or test kits are used. Using addiction test kits eliminates the need for lab and medical equipment and speeds up the diagnosing procedure. One of the easy methods to spot misuse or dependence on many sorts of addictive drugs is to utilize the addiction detection kit. The performance of these tests is based on the detection of chemicals, drugs, or their metabolites in urine.

Rapidtest kits are designed based on immunoassay, in the areas of addiction, pregnancy and ovulation hormone testing (LH), viral tests, infection tests and tumor markers.

Founded:

2004

Application:

- ※ Diagnosing drug abuse, pregnancy and ovulation
- ※ The research facilities and labs of governmental agencies, including the police, hospitals, forensic medical institutions, etc.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ Designing method: Lateral Flow Immunoassay
- ※ Performance: based on the competition of monoclonal antibodies against the tested substance with the substance itself
- ※ Form of medication: in the shape of strips with 3 and 4 mm and 97% accuracy in boxes of 50

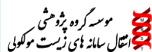


➤ Types of Kits

kits for DNA extraction, RNA extraction from serum and plasma, kits for purifying PCR products, and...

◆ Investigating Group Molecular Biological System Transfer Co.

www.mbst.ir



Product Introduction:

DNA extraction kit: Blood, human and animal tissue, plant tissue, gram-positive and gram-negative bacteria, meat, worms, swabs, agarose gel, feces, oil, dirt, and plasmid extraction can all be used as sources for DNA extraction.

RNA extraction kit from serum and plasma: The particular binding of nucleic acids to the embedded membrane in unique columns is the basis for the design and patenting of the RNA extraction kit.

This kit is used to extract RNA from 200 microliters of plasma, serum, or another liquid. The extracted RNA has an OD260:OD280 purity of 1.7 to 1.9 and an OD260:OD230 purity of around 2 percent.

PCR product purification kit: The precise binding of nucleic acids to the membrane is the basis of the DNA extraction kit.

Kit for the simultaneous detection of animal species in livestock and cosmetic products: Based on a PCR reaction in which the selected primers have the capacity to replicate a specific portion of a common gene in each animal, the simultaneous identification of the species of animal used to manufacture livestock products uses this technique. The nucleotide sequence of the area surrounded by the primers was chosen for this amplified DNA fragment such that it differs between animals. Each animal is identified by these variations.

The PCR technique is used to differentiate each animal from other animals using particular oligonucleotides for each animal. The intended PCR result can be used as evidence of the kind of animal if it is amplified using the particular oligonucleotides of that animal from the analyzed DNA.

Annual Production Capacity:
500 to 10,000 kits

Founded:
2010

Application:

Kit type	Application
DNA extraction kit	<ul style="list-style-type: none"> Medical diagnostic Diagnosing viral, bacterial or fungal diseases Determining mutations in the genome of human, animal and plant cells Identifying animal species in livestock and cosmetic products
RNA extraction kit from serum and plasma	Diagnosing viral diseases with the genetic material of RNA type
PCR product purification kit	Sequencing, cloning and RFLP
Simultaneous solvent detection kit of animal species	Identification of the kind of animal used in cosmetic and livestock goods simultaneously

This product is a final B2B & B2C consumer product.

Technical Specifications:

Type of kit	Technical specification
DNA extraction kit	<p>Appropriate for extracting DNA from up to 50 mg of tissue, 10 million cells, or 100 microliters of blood.</p> <p>Blood-extracted DNA yields 1.5 to 6 µg of DNA from cells and 30 to 50 µg of DNA from tissue, with a purity of 1.7 to 1.9 in OD260 OD280 and around 2 in OD260:OD230.</p>
RNA extraction kit from serum and plasma	Kit constituents: Lysis solution, washing solution I, washing solution II, RNA carrier, separation solution, DEPC-H2O and 50 columns with RNA binding membrane.
PCR product purification kit	Kit constituents: 50 columns with a specific membrane for PCR product binding, preparation solution, washing solution, and PCR product separation solution from adjacent columns
Simultaneous solvent detection kit of animal species	The carrier has certain oligonucleotides atomically bonded to it. The PCR product is positioned close to the unique oligonucleotides of each animal after denaturation. The marker may be used to see hybridization because the PCR product is already labeled. The species of each animal in the product is identified by hybridization with that animal's unique oligonucleotide.

Advantages:

- ※ All kits are of high quality and have competitive prices
- ※ Simultaneous solvent detection kit of animal species: simultaneous detection of a large number of animal species



➤ Aptasensor Conjugated with Gold Nanoparticles by Direct Method for Quick Detection of Cocaine, Morphine and Heroin

◆ Riz Zist Tarasheh Fanavaran Co.



Product Introduction:

This kit is designed to identify any powders and solutions (non-biological) suspected of drugs or psychotropics, through a simple method that can be used by all people and without the need for advanced equipment, and is able to identify heroin, heroin containing morphine, morphine, cocaine, opium, opium waste and methamphetamine in less than 10 seconds.

Annual Production Capacity:

300,000 tests

Founded:

2016

Application:

- * Anti-narcotics police
- * Airport gates, border terminals
- * Pharmacies (used by ordinary people in the society) to check for suspicious powders and liquids.

This product is a final B2B consumer product.

Technical Specifications:

- * **Kit diagnostic mechanism:** colorimetry (visual)
- * **Volume (for each test):** 100 microliters
- * **Identification time (for heroin, heroin containing morphine, cocaine, morphine, and opium):** less than 10 seconds
- * **Result indicator:** a specific change of color related to the type of drug

Advantages:

- * This kit is the first commercial product based on Aptamer (single-stranded DNA) and its conjugate with various metal nanoparticles and chemical compounds.
- * Quick response and high sensitivity
- * Acceptable specificity
- * Reasonable price
- * And that it is a completely domestic product



➤ HCV Detection And Quantitation Kit

◆ **Amitis Gen Co.**

www.amitisgen.com



Product Introduction:

Hepatitis C is an infectious disease caused by a virus with the same name (Hepatitis C Virus/HCV). The genome of this virus consists of RNA and is approximately 9500 nucleotides long. The global prevalence of this virus is high and nearly 180 million people in the world are infected with it.

Research shows that the most reliable method to diagnose this disease is to find viral RNA by RT-PCR method in the sample. With this method, it becomes possible to diagnose the disease about a few weeks to a few months earlier than the methods based on antibody search. Also, with this method, the amount of virus in the patient's blood can also be measured; As a result, it is known as the best method to evaluate the success of the treatment or to check the progress of the disease and to separate the acute, active and chronic types from each other.

The present kit provides the possibility of examining the sample to detect and determine the hepatitis C virus titer by One-Step Real-Time RT-PCR method.

Founded:

2005

Application:

Medical laboratories for the detection and quantitation of Hepatitis C Virus or HCV RNA

This product is a final B2B consumer product.

Advantages:

- * Reasonable price
- * Very high quality

International Standards or permission:

- * ISO 13485
- * ISO 9001



➤ BCR-ABL (P190) Detection and Quantitation Kit of Chromosomal Abnormality and Translocation

◆ Amitis Gen Co.

www.amitisgen.com



Product Introduction:

Chromosomal abnormality BCR-ABL or Philadelphia chromosome is the result of 22;9 chromosomal translocation. As a result of this translocation, the ABL gene on chromosome number 9 is located in close proximity to the BCR gene on chromosome 22 and a hybrid gene is formed.

This proximity causes the production of BCR-ABL hybrid protein. This protein has continuous tyrosine kinase activity and increases cell growth and inhibits apoptosis on its own. mRNA resulting from hybrid gene transcription is found in approximately 95% of CML patients and some ALL patients.

This kit provides the necessary materials to detect BCR-ABL (p190) gene expression (for e1a2 translocation only) and calculate BCR-ABL after diagnosis and during treatment. The current kit uses the Real-Time PCR method to detect this chromosomal abnormality. In this method, by using probes marked with fluorescent colors, the PCR product can be checked without the need to do the next steps after the reaction is over; Therefore, there will be no possibility of contamination in theory.

Founded:

2005

Application:

Medical laboratories to diagnose chromosomal abnormality or translocation (BCR-ABL (p190))

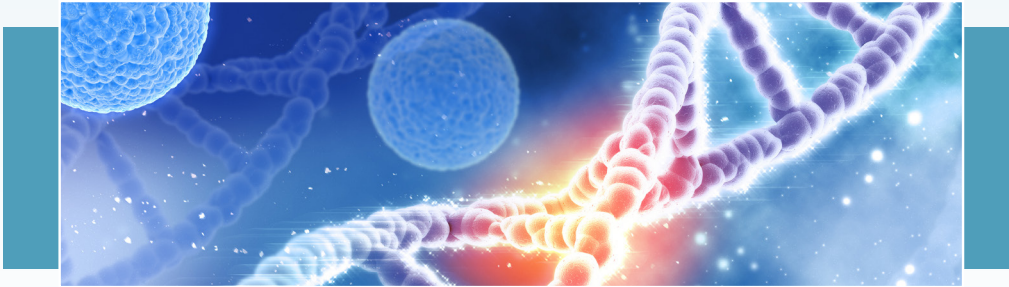
This product is a final B2B consumer product.

Advantages:

- * Reasonable price
- * Very high quality

International Standards or permission:

- * ISO 13485
- * ISO 9001



➤ CMV Pathogen Detection and Quantitation Kit

◆ Amitis Gen Co.

www.amitisgen.com



Product Introduction:

Human herpes virus (5-human herpesvirus 5, HHV) known as Cytomegalovirus (CMV) is a virus of the Herpesviridae family and its genome consists of double-stranded DNA. This virus is one of the most common pathogens and about 80% of adults are infected with it.

Primary infection usually occurs in childhood and mostly lacks obvious clinical symptoms. After the initial infection, the virus remains latent in the body until the end of life. In case of weakness of the immune system, there is a possibility of activation of the virus. Currently, the Real-Time PCR method has the highest sensitivity and the widest measurement range compared to other methods for evaluating the amount of virus. In this method, the PCR product can be checked by using probes marked with fluorescent colors.

Founded:
2005

Application:

Medical laboratories to diagnose the CMV pathogen

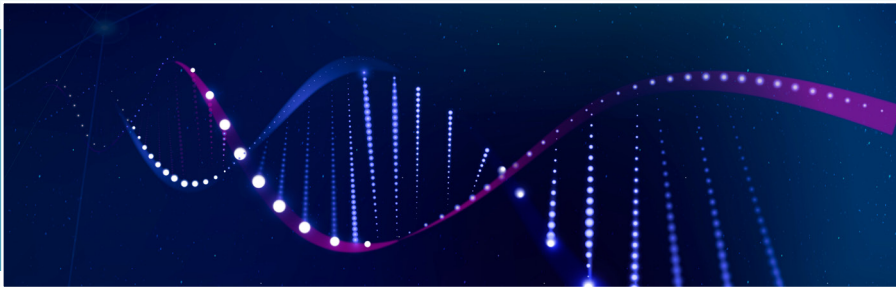
This product is a final B2B consumer product.

Advantages:

- * Reasonable price
- * Very high quality

International Standards or permission:

- * ISO 13485
- * ISO 9001



➤ NGS (Whole Exome) Genetic Testing Services

◆ Bayan Gene Pars Co.

www.bayangene.com



Product Introduction:

These services consist of conducting Whole Exome tests, which are performed as follows:

1. DNA extraction
2. Preparing the information library
3. Setting up the Illumina sequencing device
4. Analyzing the information and creating a fastq file, then creating a bam file, creating a vcf file, and finally creating an annotation file
5. Analysis report

In the process of conducting tests, the raw data obtained in the form of images are converted into A T C G letter information using the software available in the Illumina sequencing device. Then, this mass-scale information is deleted and for the next steps, only the fastq text file is used. After that, programming (Linux Job) is used to code all the subsequent steps automatically and execute them one after the other. These steps are as follows:

1. Comparing the readings of 150 nucleotides with the human reference genome - recording its location in the genome - creating a file called SAM
2. Convert the SAM file into binary form - making a BAM file
3. Extracting coverage statistics of different areas from the aforementioned file (using it as the reference for rejecting or accepting and confirming that the sample is correct)

Founded:

2014

4. Assembling the individual readings
5. Normalization of the assembled file - removing unnecessary duplicate parts
6. Detecting gene changes (mutated parts) in the patient sample with the GATK software program by comparing it with the source
7. Comparison of the repetition of each mutation with different populations - identifying and coding the effects of mutation on the protein using the Anvar frequency program
8. Comparison the samples with related Iranian sources - investigating the prevalence in the local population
9. Adding the Omim pathogenic code to the names of genes
10. Filtering the information and presenting the result - visual inspection of the result (a small file of 100 KB) by experts

Application:

- * Diagnosing hereditary diseases
- * Diagnosing cancer susceptibility and also finding suitable drugs for each patient
- * Determining the contagiousness of certain diseases and preventing the spread of such cases in future generations
- * Diagnosing the fetus with chromosomal disorders only by examining the mother's blood with over 99% accuracy
- * Determining the causes of infertility and recurrent miscarriages and helping families with reproduction

These services are B2B services.



➤ Whole Exome Genetic Sequencing Services

◆ Pars Simorgh Daroo Damavand Co.



Product Introduction:

Whole Exome Genetic Sequencing Results Interpretation Services are technical and scientific services based on bioinformatics and medical genetics that enable the diagnosis of genetic causes of diseases occurring in the individual or family.

Annual Production Capacity:

1,000 diagnostic services

Founded:

2015

Application:

This product is used in the diagnostic and research centers related to the field of medical genetics

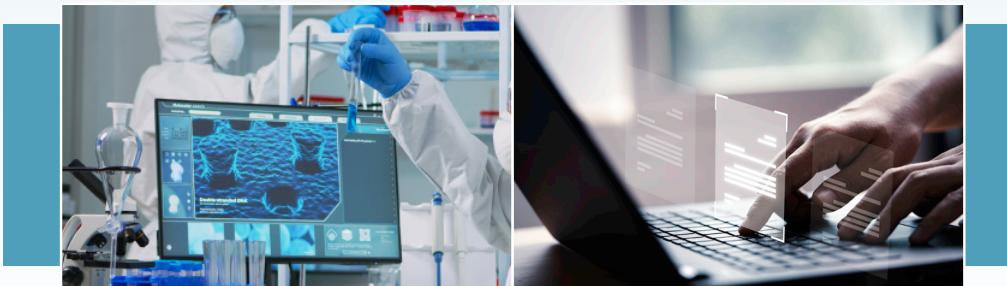
These services are B2B services.

Technical Specifications:

Raw data from Next Generation Sequencing (NGS) are examined for quality control using bioinformatics pipelines and inappropriate data are removed. In the next step, the approved sequences are sorted based on the reference genome and then the mutations in the sample are identified based on the online mutation databases and extracted as an annotation file. This file typically contains more than 120,000 to 130,000 mutations, according to updated data from major globally agreed databases such as the 1000 Genome Project, ExAC, as well as major predictive tools such as SIFT, Polyphne, genomeAD, mutation taster, and etc. In the final stage, based on the patient's clinical information announced by the client's authority, mutations causing the disease are extracted and reported.

Advantages:

- * High technical quality of the service due to the team of genetic experts providing this service
- * Affordable price in dollars



➤ Screening Software for Industrial Strains with Feature Engineering Algorithm

◆ Zist Rahavard Kara Co.

Product Introduction:

Industrial production requires industrial-scale and industrial power equipment. Conventional laboratory equipment, with limited scales, basically cannot keep up with the fast-paced needs of industrial production. By providing a unique hardware-software technology, Kara Biotech equips biotechnology industries with high-speed, industrial-scale strain screening and production equipment. This product fulfills the need for microbial development and screening based on growth indicators in different types of growth media.

Founded:

2014

Application:

In different branches of biotechnology, including probiotics and food industries, and microbial production of various biological and medicinal materials

These services are B2B services.

Technical Specifications:

Screening based on growth indicators.

Advantages:

- * Reading capacity: 6,000 to 60,000 microbial population in 3 to 7 days.
- * Can be used in the process of developing evolutionary engineered strains



➤ Designing Software for New Drug-Like Compounds

◆ Avin Zist Kimia Dedeh Co.

www.a-bioced.com

آوین زیست کیمیا

Product Introduction:

Bioinformatics and chemoinformatics, by using analytical computer tools in an in-silico environment, have provided researchers with new analytical image and new understanding with maximum resemblance to cells, tissues, and the systems of a living organism as a whole by analyzing basic information. Only 11% of the new compounds that are introduced as drug candidates by traditional methods, will be clinically applicable. Implementing the new chemoinformatics methods greatly helps the process of discovering, selecting, and presenting drug candidates that has a promising clinical future.

This software has two different sections. The first involves designing a possible new drug combination by adding new parts from the parts library. This section is done by using genetic algorithms and different agents to create a new combination. In the second section, the interactions of this new combination are investigated.

Founded:

2014

Application:

Obtaining the best assembled drug-like compounds that have therapeutic benefits

These services are B2B services.

Technical Specifications:

- * Implementing 'in silico' methods and presenting new drug-like compounds against Mycobacterium species and the HIV
- * Supply method: software package or providing web-based services
- * The possibility of designing pharmaceutical ligands that form alternative bonds
- * For the purpose of developing pharmaceutical ligands, the agents are not limited to a specific site and can be expanded along the potential interacting sub-sites
- * The ability to perform a random search and the ability to start a search from an initial core by using the agent
- * Applied pharmacokinetic conditions by the user that play a significant role in assembling the chemical structure of the pharmaceutical compound
- * The possibility of creating libraries of drug-like compounds by using the parts that are available in the parts library and creating a library of compounds from the compounds presented by the user
- * The possibility of replacing cyclic chemical structures used in drug-like compounds with the other groups or cyclic structures of another type without manipulation
- * Compactness and ease of use of the data structure used to display and manipulate structures while performing molecular evolution.

Advantages:

Saving money and time in the process of in silico design and development of new therapeutic compounds or optimization of existing compounds

Fourth Chapter
Herbal Medicines



FOURTH CHAPTER

First chapter

Second chapter

Third chapter

FOURTH CHAPTER

Fifth chapter

Herbal Medicines

- Supermint soft capsule | Pain Reliever and Anti-Flatulence | 172
- AlzStop Capsule For Improvement of Memory, Prevention and Auxiliary | 174
- Lime Soft Capsule To Reduce Weight, Triglycerides, Cholesterol and LDL | 176
- Cumin Soft Capsule to Reduce Weight, Triglycerides, Cholesterol and LDL | 178
- Femodin Coated Tablet Containing Vitex Extract To Treat Menstrual Irregularities | 180
- Psyllium Sachet Containing Psyllium Seed To Treat Constipation | 182
- Vomigone Coated Tablet Containing Gingerol And Ginger Rhizome | 184
- Calendula Ointment Obtained from Beeswax Extract, Soybean or Corn Oil | 186
- Arnebia Euchroma Herbal Ointments | 188
- Herbal Formula of Dental Analgesic Drop Based on Satureja Khuzestanica | 190
- Liver and Metabolic Syndrome Tablet Obtained from Artichoke | Trade Name: Cynarol | 192
- Stopcivir Herbal Syrup | Trade Name: ALERGUARD | 194
- Alpha Ointment Obtained | 196
- Memoral Capsule | 198
- Licophar Lozenge | 200
- Prostatan Tablet | 202
- SaffroTin Capsule | 204
- Saffrodit Capsule for Women | 206
- Phytovagex | Vaginal Suppository for Treatment of Fungal Infections | 208
- Vitex Capsule (Aslaq) | 210
- Propolis 300-mg Tablet | Trade Name: ProX | 212
- Soft Enteric Capsule of Peppermint Essential Oil for Improving IBS Syndromes | 214
- Horsetail Plant Extract Tablets | Trade Name: Equiflex Vasha | 216
- Enteric-Coated Colmigan Capsule Based on Peppermint Essence | 218
- Psoriasis Symptoms Improvement Cream from Various Plant Extracts | 220
- IraFlax Soft Gel from Linseed Oil | 222
- Silymarin Extract & Oral Drop | 224
- Production of Plant and Non-Plant Extracts | 226
- Extraction and Production of Compressed Crocin Tablets with Purity of Over 90 % | 228



➤ Supermint Soft Capsule Pain Reliever and Anti-Flatulence

◆ Barij Essence Co.

www.barijessence.com



Product Introduction:

Researchers believe that peppermint essential oil's ability to inhibit the contractions of isolated smooth muscles is due to inhibiting the entry of calcium into the muscle cells. The clinical effects of mint essential oil in the treatment of symptoms of irritable bowel syndrome, including abdominal pain and discomfort, are attributed to inhibiting the excessive contraction of intestinal smooth muscles and, as a result, restoring proper muscle tone.

Given that the mechanism behind the antispasmodic benefits of mint essential oil has been determined, standard mint essential oil is used in accordance with pharmacopoeial criteria to create Supermint soft capsules. The tower distillation process should be used to standardize the essential oil if it is not already standardized (it must contain at least 55% caron).

Main Export Destinations:

China, Canada, Italy, Australia, Tajikistan, Kuwait, Georgia, Bulgaria, Kyrgyzstan, Kazakhstan, Hong Kong, Iraq, Afghanistan

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1992

Application:

- ※ Strengthening stomach, anti-flatulent and antispasmodic
- ※ Indigestion treatment
- ※ Inhibiting the proliferation of bacteria that cause ulcers and inflammation of the stomach

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Medicine ingredients:** mint essential oil (*Mentha spicata*), soybean or sunflower oil as solvent, gelatin, plasticizer (sorbitol and glycerin), antimicrobial protection (methylparaben), etc.
- ※ **Pharmaceutical form:** 20 mg soft capsule
- ※ **Form of supply:** Package containing 30 soft capsules



➤ AlzStop Capsule For Improvement of Memory, Prevention and Auxiliary Treatment of Alzheimer's

◆ Barij Essence Co.

www.barijessence.com



Product Introduction:

The preparation of this medication, which aids in the treatment of Alzheimer's, follows the scientific texts of traditional medicine and only uses organic substances (frankincense, Acorus calmus, and Saad Kofi plants). The most prevalent and significant degenerative brain illness and cause of dementia is Alzheimer's disease. This condition is a progressive, chronic, severe brain disorder that affects memory deeply while also impairing planning, organizing, and abstract reasoning skills as well as speech, cognitive activities and movement functions. This illness, which has an adverse effect on interpersonal and social interactions, is seen as a major threat to societal health. After the age of 65, the frequency of this disease doubles every five years, affecting 40–50% of old people over the age of 85. Also, increasing age is the primary risk factor for this condition.

Main Export Destinations:

China, Canada, Italy, Australia, Tajikistan, Kuwait, Georgia, Bulgaria, Kyrgyzstan, Kazakhstan, Hong Kong, Iraq, Afghanistan

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1992

Application:

Improving memory, as well as preventing and treating Alzheimer

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Formulation components:** at least 60% of the total amount of frankincense, Acorus calmus, Saad Kofi, black pepper and ginger, honey, etc.
- * **Form of supply:** 500 mg capsules standardized based on the presence of at least 0.03 mg of keto- beta- Boswellic acid in each capsule.
- * **Pharmaceutical form:** The package includes 30 soft capsules



➤ Lime Soft Capsule to Reduce Weight, Triglycerides, Cholesterol and LDL

◆ Barij Essence Co.

www.barijessence.com



Product Introduction:

This weight loss supplement is made from the essential oil of Citrus Aurantifolia skin. The mismatch between calories consumed and calories gained is the primary cause of obesity. Obesity has negative health effects that include endometrial, breast, and colon cancer as well as cardiovascular illnesses, diabetes, and musculoskeletal conditions, including osteoarthritis.

There are several pharmaceutical and non-pharmacological treatment methods for weight loss and treatment of obesity, but none of them have a proven and definitive result. According to studies, citrus fruit extracts can be taken orally by people in order to lose weight or stabilize it, as well as to enhance body composition and physique and increase more lean muscle mass. Additionally, these substances can be taken with or without calorie restriction to reduce or regulate weight. These effects of this substance result in weight reduction.

Main Export Destinations:

China, Canada, Italy, Australia, Tajikistan, Kuwait, Georgia, Bulgaria, Kyrgyzstan, Kazakhstan, Hong Kong, Iraq, Afghanistan

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1992

Application:

- * Weight loss and control
- * Reducing triglycerides and cholesterol

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Product components:** Essence of Citrus aurantifolia skin and soybean oil, gelatin, glycerin, methyl paraben, distilled water, titanium dioxide, etc.
- * **Form of supply:** Each 75 mg soft capsule is standardized to contain at least 37.5 mg of limonene, and each 25 mg soft capsule is standardized to contain at least 12.5 mg of limonene.



➤ **Cumin Soft Capsule to Reduce Weight, Triglycerides, Cholesterol and LDL**

◆ **Barij Essence Co.**

www.barijessence.com



Product Introduction:

This capsule is made of cumin essential oil. One of the plants that has been frequently used to improve body metabolism is the cumin plant. Due to its many components, cumin essential oil is regarded as a potential weight loss option (the most important component is cumin aldehyde).

Main Export Destinations:

China, Canada, Italy, Australia, Tajikistan, Kuwait, Georgia, Bulgaria, Kyrgyzstan, Kazakhstan, Hong Kong, Iraq, Afghanistan

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1992

Application:

Effective in weight loss

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ Product components: Cumin essential oil, soybean oil, gelatin, glycerin, methyl paraben, distilled water, vitamin E, etc.
- ※ Form of supply: Each standardized soft capsule contains a minimum of 3.75 mg of cumin aldehyde



➤ Femodin Coated Tablet Containing Vitex Extract to Treat Menstrual Irregularities

◆ Dineh Iran Co.

www.dinehiran.ir



Product Introduction:

This product is effective for treating premenstrual syndrome, which includes complications such as headache, skin issues like acne, breast tenderness, digestive issues, fatigue, anger, restlessness, anxiety, irritability, depression, mood swings, and sleeping issues. It also improves menstrual cycle irregularities, such as short or long intervals between two cycles. The Vitex fruit extract exerts its medicinal effects by lowering prolactin release from the pituitary gland.

Moreover, this product's dopaminergic effects can help with mental and sleep disorders as well as menopausal physical disorders like hot flashes (since the dopamine system is linked to controlling body temperature).

Main Export Destinations:

Oman and Iraq

Exports History:

Up to 500,000 \$

Annual Production Capacity:

3.5 tons

Founded:

1980

Application:

- ※ Improving menstrual cycle irregularities
- ※ Improving the symptoms of premenstrual syndrome
- ※ Improving physical disorders during menopause

This product is a final B2B & B2C consumer product.

Technical Specifications:

Ingredients: 20 mg (equivalent to 0.65 mg) Vitexin per tablet



➤ Psyllium Sachet Containing Psyllium Seed to Treat Constipation

◆ Dineh Iran Co.

www.dinehiran.ir



Product Introduction:

The mucilage in the seed shell of psyllium, a bulk-forming laxative, swells, giving the substance its therapeutic effects. The amount of faeces rises as a result of swelling brought on by water absorption, which also boosts intestinal motility and makes excretion easier.

Main Export Destinations:

Oman and Iraq

Exports History:

Up to 500,000 \$

Annual Production Capacity:

10 tons

Founded:

1980

Application:

Treatment of chronic constipation, constipation during pregnancy, hemorrhoids and IBS (irritable bowel syndrome)

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Contents of each sachet:** 4.2 gr of psyllium seeds and 2.8 gr of dextrose (with orange flavor)
- * **Form of supply:** Box packaging containing 10 sachets of 7 g of granules



➤ Vomigone Coated Tablet Containing Gingerol and Ginger Rhizome | for Use as an Anti-nausea

◆ Dineh Iran Co.

www.dinehiran.ir



Product Introduction:

Due to its anti-inflammatory qualities, ginger extract is used to make the Vomigone pill by Dina Company, which is intended to treat nausea, vomiting, joint inflammation and pain. Moreover, it can be used to treat migraine-related nausea and motion sickness. The gingerols and shogaols in the ginger rhizome are responsible for the anti-nausea and anti-emetic actions.

Main Export Destinations:

Oman and Iraq

Exports History:

Up to 500,000 \$

Annual Production Capacity:

20 tons

Founded:

1980

Application:

Treating nausea and dizziness (caused by chemotherapy, pregnancy, surgery, travel sickness, seasickness and indigestion) and rheumatoid arthritis and osteoarthritis

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * Each Vomigone Dina pill contains 470 ± 30 mg of powdered Zingiber officinale rhizome, which is standardized to contain 3 mg of total polyphenols or 5 mg of essential oil.
- * **Ingredients:** Zingiberene, ar-curcumene, geranial Zingiberol Gingerdiol, Gingerols, shogaols



➤ Calendula Ointment Obtained from Beeswax Extract, Soybean or Corn Oil to Treat Skin Inflammation and to Boost Blood Circulation

◆ Dineh Iran Co.

www.dinehiraan.ir



Product Introduction:

The Kandola brand of calendula ointment is used to heal skin irritation and promote blood flow. It is made from a specific calendula plant extract, natural beeswax, maize oil, or soybean oil. Since ancient times, calendula officinalis, often known as pot marigold, has been used to reduce skin irritations and inflammations.

Calendula herbal ointment repairs and cures sensitive and irritated skin, increases blood circulation, and strengthens the skin in addition to having anti-inflammatory effects. It does this by speeding up the activity of granulation and encouraging the synthesis of new cells.

Main Export Destinations:

Oman and Iraq

Exports History:

Up to 500,000 \$

Annual Production Capacity:

20 tons

Founded:

1980

Application:

Sensitive and irritated skin repair and healing

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Drug ingredients:** 2% extract exclusively from Calendula off flowers (containing carotenoids, flavonoids, saponosides, calendin, tannin, mucilage and essential oil), natural beeswax and vegetable oil. (Each 100 grams of Calendula herbal ointment has 35 milligrams of flavonoids based on rutin).
- * **Form of supply:** 30 and 15-gram tubes



➤ Arnebia Euchroma Herbal Ointments

◆ Darudarman Slafchegan Co.

www.darudarmanco.com



Product Introduction:

Arnebia Euchroma or AbuKhalsa is a valuable medicinal species unique to Mazandaran province. In Iranian traditional medicine, the combination of the root extract of the Arnebia Euchroma plant and animal oil is used as an anti-inflammatory agent, disinfectant, and ointment for covering burn wounds. There are various types of ointments that contain this extract. These ointments can be used for patients with: diabetes, bedsore, burns, anal fissures, surgical wounds, etc.

Main Export Destinations:

United Arab Emirates, Malaysia, Republic of Azerbaijan, Oman, Iraq, Syria, Afghanistan

Exports History:

Between 1,000,000 and 5,000,000 \$

Founded:

2000

Application:

Ointment	Application
Bedsore (NewDerm)	Treatment of bedsores and skin inflammation
Diabetic Wounds	Preventing fungal/bacterial infections and preventing further growth
Burn	For treatment of first, second, and third-degree burns
Shifar	Anti-inflammatory, antibacterial, and antifungal effects – resolving inflammation and bleeding, complete recovery from anal fissure - facilitating the excretion of feces
For Infants' feet (MomeDerm)	Alleviating the inflammation of infants' and newborns' leg skin due to contact with urine
Ginger (Gingerol)	Alleviating joint pain, joint cartilage regeneration, relieving muscle pain, rheumatism and disc pain, Alleviating the local pain caused by muscle cramps, relieving sciatica, and joint injuries and bone lesion
Sunburn (SunnyDerm)	Treatment of skin burns caused by sunlight and ultraviolet rays - prevention of skin aging
Vaginal (HoneyGen)	For the treatment of fungal and microbial vaginal infections, itching, and Vulvitis

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ✦ Different Alkannin, shikonin and flavonoid substances in AbuKhalsa plant
- ✦ Presence of honey and sesame seeds in the products



➤ Herbal Formula of Dental Analgesic Drop Based on Satureja Khuzestanica | Trade Name: Dentol

◆ Khorraman Co.

www.khorraman.ir



Product Introduction:

Dentol herbal drop is a topical anesthetic for the teeth and also a disinfectant for the mouth and pharynx. This product is designed to prevent and treat oral and dental infections while also relieving dental and oral pain. Swallowing the drug is safe and has no side effects. Also drinking the solution (2 drops in half a glass of water) can help relieve poisoning, GI infectious and abdominal discomfort. Carvacrol is the main ingredient of Satureja Khuzestanica essential oil that is used in this product.

Main Export Destinations:

Iraq and Afghanistan

Exports History:

Up to 500,000 \$

Annual Production Capacity:

6,000,000 drop

Founded:

2014

Application:

- ※ Relieving toothache
- ※ As a disinfectant for mouth and pharynx
- ※ For cleaning teeth and removing plaques

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ Pharmaceutical form: 2 ml. herbal drop in a laminated tube with the leaflet in the box
- ※ Standardized on Satureja Khuzestanica essential oil

Advantages:

- ※ Appropriate price
- ※ Herbal formulation
- ※ Simultaneous analgesic and disinfectant effect
- ※ No contraindications during pregnancy and lactation

International Standards or permission:

Approved by the Food and Drug Organization (FDA reg. No 172.5151)



➤ Liver and Metabolic Syndrome Tablet Obtained from Artichoke | Trade Name: Cynarol

◆ Niak Pharma Co.

www.niakpharma.com



Product Introduction:

Cynarol is a herbal product in the form of pills suitable for the liver and metabolic syndrome and is made from artichoke. Each pill contains around 200mg of dry extract (5:1) of the leaves of artichoke (*Cynara scolymus* from the *compositae* family).

Studies have shown that the extract of artichoke stimulates the liver and protects it. Moreover, it reduces the levels of cholesterol in the blood by improving the circulation of the bile and suppressing its biosynthesis.

Some studies have suggested that the extract of artichoke can be used to treat IBS and dyspepsia.

The performance of this drug is similar to two chemical drugs: pancreatin and ursodeoxycholic acid.

Main Export Destinations:

Senegal

Exports History:

Up to 500,000 \$

Annual Production Capacity:

40,000 pcs

Founded:

1992

Application:

- * Helping to keep the liver healthy and alleviate hepatic disorders
- * Treating digestive disorders, biliary diseases, and other problems whose treatment depends on the increased secretion of the bile.
- * Hyperlipidemia

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmacological classification:** digestion and liver
- * **Components:** Phenolic acids like caffeic acid, chlorogenic acid, and cynarine (Dicafeoylquinic acid)
- * **Presentation form:** Edible pills covered with sugar in packages of 50 (each pill contains at least 3mg of the derivatives of hydroxyl cynamic acid per chlorogenic acid).

Advantages:

- * Reasonable price compared to the similar products
- * Fewer complications and side effects compared to the similar drugs
- * Being safe in terms of toxicity

International Standards or permission:

- * ISO 9001
- * ISO 10002
- * ISO 14001
- * ISO 45001



➤ Stopcivir Herbal Syrup | Trade Name: ALERGUARD

Contains the Extracts of Zataria multiflora, Garlic, Heracleum persicum, Satureja, Cloves, Fennel, Opium

◆ Niak Pharma Co.

www.niakpharma.com



Product Introduction:

ALERGUARD is an herbal product in the form of edible solution packed in 120ml PET bottles and consists of the extracts of garlic, the leaves of savory, the flowery twigs of Zataria multiflora, the fruit of fennel, opium tincture, the dried fruit of Heracleum persicum, and the buds of dianthus. The standardized product contains at least 0.01% Allysine and at least 1.5-2 mg polyphenolic compounds based on gallic acid per ml.

The performance of the drug is similar to Aciclovir, Tenofovir, and Remdesivir.

Main Export Destinations:

Senegal

Exports History:

Up to 500,000 \$

Annual Production Capacity:

700,000 syrup

Founded:

1992

Application:

Helping to reduce the duration of hospitalization (non-ICU cases) in the COVID-19 patients

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmaceutical classification:** Pulmonary, respiratory, and antivirus
- * **Presentation form:** Edible solutions packed in 120ml bottles

Advantages:

- * Reasonable price compared to the similar products
- * Fewer complications compared to the similar products
- * Being safe in terms of toxicity (independence)

International Standards or permission:

- * ISO 9001
- * ISO 10002
- * ISO 14001
- * ISO 45001



➤ Alpha Ointment Obtained from the Leaf Extract of Lawsonia Inermis and Curcuma longa Root for Treatment of Second-Degree Burn

◆ Alpha Development Co.

www.fa.rejuderm.com



Product Introduction:

This product is all-natural, one-of-a-kind, and was created and manufactured in Iran. It has the ability to cure burn wounds.

This ointment's composition includes Curcuma longa L. root and Lawsonia inermis leaf extract.

By zapping the damaged area and epithelization, enhancing the suppleness of the tissue being repaired, and reducing inflammation or swelling, Alpha Ointment provides restorative, pain-relieving, and calming properties. It also prevents the spread of infection.

The Lawsonia inermis plant has antioxidant, anti-inflammatory, antimicrobial, healing, and wound-cleaning properties.

The Curcuma longa L. plant possesses anti-inflammatory, antibacterial, radical absorbent, and antioxidant properties that are crucial for wound healing.

Annual Production Capacity:

6,000,000 tubes

Founded:

2004

Application:

Treating various burns

This product is a final B2B & B2C consumer product.

Technical Specifications:

Form of medication: 30 g aluminum tube in a box

Advantages:

- ※ Prompt alleviation of inflammation and shorter treatment times
- ※ No need to prescribe prophylactic antibiotics
- ※ Increasing the level of local moisture and the effectiveness of wound healing
- ※ Control of patient discomfort (no recurrence) and easy dressing method
- ※ Significantly lower treatment costs



➤ Memoral Capsule

◆ Gol Daroo Co.

www.goldaru-co.com



Product Introduction:

The herbal supplement Memoral, which contains ginger and frankincense, is used to improve memory. The active component of frankincense, boswellic acid, improves memory. One of the pathogenesis-related factors for Alzheimer's is inflammation. By blocking 5-lipoxygenase, the boswellic acid in frankincense prevents leukotriene production. Also, it raises acetylcholine by blocking the enzyme acetylcholinesterase. Studies have demonstrated that frankincense has anti-inflammatory, antioxidant, and anticholinesterase properties.

Additionally, ginger has an impact on both consciousness and cognition. Ginger contains 6-gingerol, which is one of its active components. The amount of acetylcholine rises as a result of this substance's inhibition of the acetylcholinesterase enzyme. In addition, it raises norepinephrine, epinephrine, dopamine, and serotonin levels in the cerebral cortex and hippocampus. It has been demonstrated that this plant has a modulatory influence on both cholinergic and monoaminergic systems. Additionally, ginger's antioxidant properties are one of the most significant therapeutic benefits.

The synergistic impact of ginger and turmeric extracts on acetylcholinesterase inhibition has been proven by studies. The inhibition of TNF α and interleukin-6 has demonstrated the anti-inflammatory properties of ginger.

Due to the presence of frankincense and ginger in Memoral capsule, patients may experience an improvement in their cognitive function and memory.

Main Export Destinations:

Iraq, Afghanistan and Yemen

Exports History:

500,000 - 1,000,000 \$

Annual Production Capacity:

4,000,000 boxes

Founded:

1983

Application:

It is useful in the treatment of dementia (Alzheimer's), peripheral vascular diseases, and cognitive problems including memory loss.

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Each capsule contains:** 36 mg of standardized ginger root powder granules and 360 mg of frankincense resin oleogum, based on 8.4–10.4 mg of total essential oil and 140–172 mg of gum and mucilage.
- * **Form of supply:** 30 capsules, packaged in three blisters of 10

Advantages:

- * An entirely natural product
- * Reasonable price



➤ Licophar Lozenge

◆ Gol Daroo Co.

www.goldaru-co.com



Product Introduction:

Licofar lozenges, which can be used to treat mouth and throat discomfort, contains licorice dry extract, eucalyptus essential oil, and capsicum tincture. The following is a summary of licorice's positive effects in licorice extract:

- * Antibacterial action;
- * Antiviral effects against some viruses
- * Anti-inflammatory action
- * Functions as an antioxidant
- * Anti-allergic effects

The active components of eucalyptus have several beneficial pharmacological actions, such as:

- * Toxicity against a variety of bacteria and fungus
- * Anti-inflammatory and antioxidant effects
- * Improving cough in respiratory disorders by easing the smooth muscles of the airways, assisting with mucus discharge, etc.

The defunctionalization of pain-transmitting nerve fibers, the anti-inflammatory properties, and antioxidant activities are only a few of the significant biological activities of capsicum.

The list of effects mentioned demonstrates Licofar pills' anti-inflammatory qualities and explains why they are beneficial for treating hoarseness, throat inflammation, and sore throats.

Main Export Destinations:

Iraq, Afghanistan and Yemen

Exports History:

500,000 - 1,000,000 \$

Annual Production Capacity:

10,000,000 boxes

Founded:

1983

Application:

Anti-inflammation of the mouth and throat mucosa, and dysphonia

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Each tablet contains:** 53.2 mg of dry licorice (*Glycyrrhiza glabra*) extract, 1.11 mg of essential *Eucalyptus globulus* oil, and 0.145 mg of red pepper tincture (*Capsicum annuum*).
- * **Form of supply:** 3 packages of 10 coated pills (lozenges) packed in 3 blisters of 10

Advantages:

- * An entirely natural product
- * Reasonable price



➤ Prostan Tablet

◆ Gol Daroo Co.

www.goldaru-co.com



Product Introduction:

The most common benign tumor in men is benign prostatic hyperplasia. Risk factors related to the development of BPH are poorly understood. Some studies have focused on genetic predisposition and others on racial differences. Nowadays, all over the world, the use of herbal medicines to reduce and/or prevent urinary symptoms associated with BPH, due to its significant efficacy and fewer side effects, has been noticed and has been growing. In this context, Prostan herbal medicine can be introduced in the form of tablets and drops. Extracts of nettle, pumpkin seeds, chamomile, Bindii and anise plants have been used in the preparation of this medicine. This medicine is used in the treatment of prostate by inhibiting the enzyme 5-alpha reductase and as a result reducing DHT, reducing the volume of the prostate, inhibiting the binding of some growth factors to the receptor, reducing the production of inflammatory mediators and anti-inflammatory effects and tonic effect on the bladder and relaxing the bladder outlet sphincter.

Main Export Destinations:

Iraq, Afghanistan and Yemen

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1983

Application:

Reducing the complications of prostate enlargement

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Pharmaceutical form:** 30 ml oral herbal drops
- * **Medicine components:** Nettle root and leaves, pumpkin seeds, chamomile flower, Bindii fruit and anise fruit



➤ SaffroTin Capsule

◆ Green Plants of Life Co.

www.greenplantsoflife.com



Product Introduction:

SaffroTin herbal capsule is obtained from dried extract of the saffron plant. Donepezil memantine, Tacrine p, Rivastigmine, and Galantamine are the synthetic samples of this herbal capsule. This product reduces the symptoms of Alzheimer's disease based on the effect of its active ingredient, Crocin which is found in saffron stigmas.

Main Export Destinations:

Russia, Germany, France, Italy, Spain, Sweden, Australia, Canada, South Korea and...

Exports History:

Between 1,000,000 and 5,000,000 \$

Annual Production Capacity:

210,000,000 capsules

Founded:

1998

Application:

Preventing Alzheimer's disease and preventing its progression

This product is a final B2B & B2C consumer product.

Technical Specifications:

Contents of each capsule: 15 mg of standardized saffron extract (1.65 mg crocin)

Advantages:

- * Produced for the first time in the world
- * No significant side effects compared to two similar drugs made in the US and England
- * Has the effects of both drugs (Donepezil and Memantine) combined on the six stages of Alzheimer's on its own

International Standards or permission:

- * GMP
- * Halal
- * ISO 9001



➤ Saffrodit Capsule for Women

◆ Green Plants of Life Co.

www.greenplantsoflife.com



Product Introduction:

This herbal capsule can reduce the sexual disorders that are the side-effects of chemical antidepressants. Also, it improves women's sexual performance. This capsule is produced from the active ingredients of saffron stigmas.

Main Export Destinations:

Russia, Germany, France, Italy, Spain, Sweden, Australia, Canada, South Korea and...

Exports History:

Between 1,000,000 and 5,000,000 \$

Annual Production Capacity:

210,000,000 capsules

Founded:

1998

Application:

Reducing the sexual disorders caused by taking synthetic antidepressants and also improving women's sexual performance

This product is a final B2B & B2C consumer product.

Technical Specifications:

Contents of each capsule: 15 mg of standardized saffron extract - 1.65 mg of Crocin along with 50 mg of vitamin E (E)

Advantages:

- * Produced for the first time in the world
- * Reducing the side effects accompanying the consumption of Fluoxetine
- * It has a positive effect on sexual stimulation, lubrication, and pain threshold

International Standards or permission:

- * GMP
- * Halal
- * ISO 9001



➤ Phytovagex | Vaginal Suppository for Treatment of Fungal Infections

◆ Exir Gostar Espadana Pharmaceutical Co.



Product Introduction:

During their reproductive years, many women acquire a vaginal infection, often known as vaginitis, at least once or twice. One of the medications used to treat vaginal infections is phytovagex/vaginal suppository. Instead of the anus, this suppository ought to be inserted into the vagina. This suppository is solid and made entirely of natural and herbal components. The *Nigella sativa* (Black caraway) plant serves as the major component of this suppository. Quinone, saponin, alkaloid, protein, amino acids, and oil are all found in this plant's seed, which also has therapeutic properties and may penetrate cell membranes to eradicate infection.

Clotrimazole is a chemical drug similar to this one.

Annual Production Capacity:

3,000,000 boxes

Founded:

2013

Application:

Treatment of vaginal infections

This product is a final B2B & B2C consumer product.

Technical Specifications:

Form of medication: 2.5 g suppositories based on polyethylene glycol

Advantages:

- * Produced for the first time in the world
- * More effective than the chemical drug (Clotrimazole)

International Standards or permission:

- * Patent No. 003187
- * Drug manufacturing license number: 121427/665
- * IRC product registration number: 0780930621318385



➤ Vitex Capsule (Aslaq)

◆ Tala Sabz Tooba Co.

www.t27.ir



Product Introduction:

The Vitex plant has many properties. It is written in the book "Makhzan-ul-Adawieh" that vitex is effective against insanity and is also used for clearing nasal, hepatic and spleen congestions and regulating menstrual cycles. Today, the extracts of this plant are used to treat premenstrual syndrome, abnormal uterine bleeding, breast pain, and mild hyperprolactinemia. Also, according to the books of traditional medicine, this plant is used to clear chest, liver, spleen, kidney, and bladder congestion as well as a remedy for cold, and as a tonic medicine for the eyesight and stomach, as a laxative, and is used to increase breast milk production and urine and to help regulate menstrual cycles.

In modern medicine, fennel is known as a liver-protecting, lactating, and period regulating drug that has the same activity and function as Estrogen. Carrot seeds are also a strong diuretic and are useful for flatulence, Polydipsia, and elimination of toxins. Since all three of them affect the reproductive system of women, the medicinal combination of Vitex with fennel and carrot seed can be effective in regulating the menstrual cycle and activating the ovaries.

Founded:

2014

Application:

- ※ Regulation of menstrual cycle in women
- ※ Activator of ovaries
- ※ Increasing sexual desire in women and reducing sexual desire in men
- ※ Relieves depression in women and improves their menopausal status
- ※ Beneficial for the spleen

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Ingredients of the product:** Vitex, fennel, carrot seed
- ※ **General temperament of the drug:** warm
- ※ **Contraindications:** Due to the presence of fennel in the composition of the drug, caution should be taken when taking the drug in case of estrogen-related cancers.

Advantages:

- ※ Change in appetite and taste in comparison with similar products
- ※ Changing the person's temperament and humor in comparison with similar products (traditional medicine context)
- ※ Investigating the effects of using drugs to reduce side effects while retaining properties



➤ Propolis 300-mg Tablet

Trade Name: ProX

◆ Sooren Teck Toos Co.

www.sorentt.ir



Product Introduction:

Bee hive propolis tablet's active components are used to make Pro X 300 mg coated tablets. Because of their age, beehive products may be viewed as a natural and effective supplement in meeting the needs of the body. Reliable scientific sources and a statement made by the American FDA indicate that this chemical could be useful in preventing illnesses like the flu and the common cold as well as boosting the body's resilience by enhancing the immune system. The antioxidants in this substance can substantially meet the body's requirement for these chemicals by making up for their absence. These chemicals are used to maintain the body's ionic equilibrium and are particularly effective in absorbing metals that the body requires. The body may be strengthened by getting the proper amount of this material, which has been the subject of several studies worldwide. It can also be taken as a daily supplement. Antioxidants have therapeutic effects, but they are also effective in activating cell receptors, which may be more active in conditions such as diabetes.

Annual Production Capacity:

40,000 tablets

Founded:

2004

Application:

- * Enhancing the immune system
- * Supplying the body with more antioxidants (due to the presence of antioxidant substances)
- * Adult dietary supplement

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Active ingredients:** aromatic oils, pollen, various flavonoids, antioxidants, phenolic groups, various vitamins, antibiotic substances, medicinal terpenes such as menthol and taxol, caffeic acid, as well as arteplin C, etc.
- * **Graft:** None
- * **Brand name:** Pro X
- * **Pharmaceutical form:** oral tablet

Advantages:

- * Manufacturing innovative and technological products
- * Manufacturing items of excellent quality at competitive prices

International Standards or permission:

Supplement manufacturing license from the Ministry of Health and Medicine of Iran



➤ Soft Enteric Capsule of Peppermint Essential Oil for Improving IBS Syndromes | Trade Name: Gelomint IBS

◆ Vasha Darou Pars Herbal Pharmaceuticals Co.

www.vashapharma.com



Product Introduction:

Gelomint soft capsules contain natural essential oil extracted from the peppermint plant, which can relieve the symptoms of irritable bowel syndrome (IBS).

Gelomint relaxes the intestinal wall muscle spasm and restores the normal intestinal contractions. This helps reduce the trapping of air and intestinal contents and also relieves bloating, abdominal discomfort, and pain.

Founded:

2004

Application:

Relieving the symptoms of IBS

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Contents of each capsule:** 0.2 ml of peppermint essential oil (menthol, at least 40%) in 0.1 ml of soybean oil
- * **Materials used in the capsule shell:** Gelatin, glycerol, hypromellose acetate succinate, tri-ethyl citrate, etc.
- * **Pharmaceutical form:** Enteric-coated soft-gel
- * **Brand name:** Gelomint IBS
- * **Similar foreign product:** Mintec®, Made in Germany

Advantages:

- * Organic herbal source
- * Good quality
- * Competitive price

International Standards or permission:

License of the Health and Medicine organization of Iran



➤ Horsetail Plant Extract Tablets

Trade Name: Equiflex Vasha

◆ Vasha Darou Pars Herbal Pharmaceuticals Co.

www.vashapharma.com



Product Introduction:

In the production process, extract and powder of horsetail plant standardized based on flavonoid (iso-quercitroside), calcium triphosphate, polyvinylpyrrolidone, and magnesium stearate are used, which are a rich and unique source of essential mineral elements necessary for bones.

Annual Production Capacity:

200,000 boxes

Founded:

2004

Application:

Prevention and treatment of Osteoporosis, Bone fracture, rheumatoid arthritis, and osteoarthritis

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Contents of each capsule:** 250 mg of horsetail plant powder (Equisetum arvense), which contains at least 0.3% of flavonoid (iso-quercitroside)
- * Quantity per box: 90 tablets made of horsetail plant's aerial parts
- * **Pharmaceutical form:** Tablets
- * **Brand name:** Equiflex vasha

Advantages:

- * Organic herbal source
- * Good quality
- * Competitive price

International Standards or permission:

License of the Health and Medicine organization of Iran



➤ Enteric-Coated Colmigan Capsule Based on Peppermint Essence

◆ Giah Essence Phitopharm Dr.Soleimani Co.

www.giahessence.com



Product Introduction:

Colmigan capsule is a slow-release formulation of mint essential oil. Due to being an enteric-coated capsule, it can move along the digestive system and reach the intestine safely, without being metabolized in the stomach and therefore the targeted delivery of this capsule can be of great help for the first-line treatment of IBS. Colmigan capsule prevents painful intestinal muscle contractions by antagonizing calcium in the smooth muscles of the digestive tract, therefore improving spasms and colics along the digestive tract and improving the symptoms of the disease.

Unlike other antispasmodic drugs used to treat gastrointestinal functional disorders that cause pharmacological complications as a result of their systemic bioavailability, peppermint essential oil has a topical effect only on intestinal muscles.

For this combination to show therapeutic effects, it has been proven that it must pass through the upper digestive tract unchanged and intact and enter the small intestine with an enteric-coated formulation.

Peppermint essential oil has a mechanism of action similar to dihydropyridine calcium channel antagonists. Similar to the effect of calcium channel blockers, it reduces the entry of calcium into the smooth muscle cells of the intestine, relaxes the direct stimulation of the smooth muscle of the digestive tract, and acts as an antispasmodic with a topical effect and improves the rhythmic peristaltic contractions of the intestine.

Annual Production Capacity:

500,000 packs/year

Founded:

2004

Application:

- ✧ Improving the symptoms of IBS (Irritable Bowel Syndrome)
- ✧ Reducing the intestinal contractions, spasms, and abdominal cramps caused by IBS
- ✧ Relieves bloating and abdominal pain

This product is a final B2C consumer product.

Technical Specifications:

- ✧ **Formulation:** Semi-solid capsule containing at least 187mg of peppermint essence
- ✧ **Drug release:** Slow-release (6 hours)
- ✧ **Pharmaceutical form:** Enteric-coated capsule
- ✧ **Quantity per box:** 20 capsules

Advantages:

- ✧ Similar quality compared to the foreign counterparts
- ✧ Lower price



➤ Psoriasis Symptoms Improvement Cream from Various Plant Extracts | Trade Name: Psosram

◆ Mam Esfahan Co.



Product Introduction:

With its light texture, Psosram Cream's all-natural ingredients can easily penetrate the skin, keep it moisturised, remove dead skin cells, and prevent exfoliation. Additionally, it lessens the itchiness brought on by the disease's lesions. Furthermore, this medication has excellent anti-inflammatory qualities. The cream is full of fatty acids, antioxidants, and vitamins A, E, and C, all of which have the ability to strengthen and repair damaged skin cells while also having an impact on the stratum corneum of the skin and eliminating the skin's severe dryness and the damaging free radicals of the skin. Extracts, essences, oils, and the necessary base are prepared and produced as part of the product production process. The elements are then homogenised, and the finished product is packaged.

Founded:

1984

Application:

Treatment of seborrheic dermatitis and psoriasis of the head, face and neck, psoriasis of the trunk, limbs and palms and feet (lips, around the mouth, nails)

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ Using licorice extract and essence, common fumitory, peach essence, rose oil, castor oil and sweet almond oil.
- ※ Using honey, beeswax, vitamin A and oil-soluble vitamins

Advantages:

- ※ An affordable price
- ※ Absence of a similar foreign brand
- ※ Refusal of patients receiving therapy to take other medications, particularly corticosteroid and similar drugs (topical, oral, and injectable), which weaken the body's defenses and raise the risk of opportunistic infections.



➤ IraFlax Soft Gel from Linseed Oil

◆ Cedrin Daru Alborz Co.

www.cedrin.ir



Product Introduction:

In the health system of all countries regular omega-3 intake is encouraged for people of all ages. Two plant sources and two animal sources are used to produce omega-3. The richest plant source of omega-3 (more than 50%) is flaxseed oil. Since 2014, Sedrin Daru Alborz Company has been able to acquire a license from the Iranian Ministry of Health to produce omega-3 soft gel from flaxseed oil under the trade name IraFlax.

Omega 3, 6, and 9 unsaturated essential fatty acids are included in this product.

Annual Production Capacity:

18,000,000 capsules

Founded:

2012

Application:

- ✳ Developing children's brains
- ✳ Controlling blood fat and cholesterol levels and avoiding artery blockage in adults

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ✳ **Form of supply:** soft gels with a 1,000 mg linseed oil content, packaged in a blister pack and sold in boxes of 50.
- ✳ Using natural antioxidants (herbal)
- ✳ **Product stability period:** three year

Advantages:

- ✳ High Quality
- ✳ Of plant origin
- ✳ Longer shelf life compared to similar products
- ✳ More affordable price compared to similar products

International Standards or permission:

License to manufacture natural medicine



➤ Silymarin Extract & Oral Drop

◆ Zardband Pharmaceuticals Co.

www.zardband.com



Product Introduction:

This medicine is obtained from silymarin active ingredient, which is extracted from the plant *Silybum marianum*. The main flavonoids of this plant, including silybin, silychristin, and silydianin, are collectively known as Silymarin. This plant is orally administered for digestive problems including dyspepsia, liver and gallbladder disorders, chronic inflammatory liver diseases, and liver cirrhosis.

The hepatic cells protection effect of silymarin in the liver is due to the inhibition of the cyclooxygenase cycle, leukotrienes, and the production of free radicals in Kupffer cells, which can resolve inflammation. Also, it can reduce inflammatory responses by inhibiting NF-kappa B and regulating cell membrane permeability. These protective effects of silymarin can be useful in hepatotoxicity and various liver diseases.

In addition, silymarin reduces gallstone formation by increasing the solubility and flow of bile and also increases the secretion of bile into the small intestine. These effects, in addition to facilitating the removal of stons, can improve digestion and prevent dyspepsia.

Mechanism of action:

- * liver tissue regeneration stimulation
- * Ant-fibrotic effects
- * Antioxidant and anti-inflammatory effects that leads to cell protection

formation by

Main Export Destinations:

Iraq, Syria, Afghanistan

Exports History:

Between 500,000 to 1,000,000 \$

Annual Production Capacity:

1,000,000 drops

Founded:

2010

Application:

- * Helps to treat fatty liver and chronic inflammatory liver diseases such as liver cirrhosis
- * Helps to treat Hepatitis B and C
- * Improving liver function, treating liver and gallbladder disorders

This product is a final B2B & B2C consumer product.

Technical Specifications:

- * **Product components:** Silymarin - at least 50 mg/ml total silymarin in terms of silybin A and B
- * **Administration:** Formulated in 30 ml liquid drops
- * **Pharmaceutical form:** Oral drop
- * **Drug classification:** GI drugs

Advantages:

- * High quality of the extract
- * High absorption and effectiveness due to the liquid form



➤ Production of Plant and Non-Plant Extracts

◆ Asr Nano Co.

www.nanoageco.ir

NANOAGE
شرکت نانو آجر و پاور اکستراکشن

Product Introduction:

Microencapsulated products have more stability, solubility and absorption than normal products, and at the same time, the unpleasant taste and smell of the materials are covered to a great extent with this method. In addition, it is possible to produce water-soluble powder materials from oily active ingredients that do not dissolve in water.

Microencapsulated essential oil products or granules are produced from powder containing cyclic cyclodextrin complex and linear dextrin and essential oil and a mixture of edible polymers, and granules are prepared by mixing encapsulated powder with water-soluble edible polymer (PEG and PVP) and extrusion.

Plant and non-plant-based encapsulated monomolecules contain cyclic cyclodextrin complex, linear dextrin, essential oil and a mixture of edible polymers.

Main Export Destinations:

Germany, Spain, Canada and United Arab Emirates

Exports History:

40,000 euros

Annual Production Capacity:

3000 tons

Founded:

2010

Application:

Active ingredients and final products are used in food, pharmaceutical, nutritional supplements, cosmetics, hygiene, livestock and poultry industries.

This product is a final B2B & B2C consumer product.

Technical Specifications:

Technical specifications are provided based on the analysis sheet of each product.

Advantages:

- * Good quality
- * Competitive price
- * Few competitors in the international markets

International Standards or permission:

- * Production and exploitation licenses from the Food and Drug Organization of Iran
- * GM certificate
- * FSC certificate



➤ Extraction and Production of Compressed Crocin Tablets with Purity of Over 90 %

◆ Pooyesh Daru Sina Co.

www.krocina.ir

Product Introduction:

The active ingredient, Crocin, is found in the saffron plant's stigma. After the purification process, only crocin is present in the final product. The reason behind choosing the saffron plant is that it is the only rich source of Crocin in nature and it is also a native product of Iran.

The drug is initially in powder form, and after extracting Crocin from the saffron plant, it is formulated into a compressed tablet.

Founded:

2010

Application:

- ※ Memory improvement
- ※ Anti-depressant
- ※ Anti-inflammatory and neuroprotective
- ※ Anticancer
- ※ In diabetic retinopathy
- ※ Increasing libido
- ※ Improving eyesight

This product is a final B2B & B2C consumer product.

Technical Specifications:

- ※ **Generic name:** Crocin
- ※ **Pharmaceutical form:** Tablet
- ※ **Active ingredient amount:** 15mg
- ※ **Other contents:** Avicel, Polyvinylpyrrolidone (PVP), Magnesium stearate
- ※ Water-soluble
- ※ **Color:** Red
- ※ **HPLC>80**
- ※ **Maximum optical absorption:** 440 nm
- ※ **Purity:** 93%
- ※ **Product scale:** 1-1.5 kg/each batch

Fifth Chapter
Pharmaceutical Industry



FIFTH CHAPTER

First chapter

Second chapter

Third chapter

Fourth chapter

FIFTH CHAPTER

Pharmaceutical Industry

API of Methadone Hydrochloride		234
API of Codeine Phosphate		236
Synthesis of Various Active Pharmaceutical Ingredients (APIs)		238
API of Metronidazole		240
API of Glatiramer Acetate from the Corresponding Protected Amino Acids		242
API of Octreotide Acetate from the Corresponding Amino Acids		244
API of Fingolimod Hydrochloride		246
API of Sunitinib for Treatment of Cancer		248
API of 4-Aminopyridine Trade Name: Fampridine		250
API of Isosorbide Dinitrate		252
API & Granule Form of Imatinib Mesylate		254
API of Sunitinib Malate		256
API of Nilotinib Hydrochloride Monohydrate		258
API of Cefixime		260
Industrial Synthesis of Various Active Pharmaceutical Ingredients (APIs)		262
Synthesis of Various Pharmaceutical-Chemical Active Ingredients		266
API of Atorvastatin Calcium		270
API of Clopidogrel Bisulfate		272
API of Rosuvastatin Calcium		274
API of Famotidine		276
API of Metformin Hydrochloride		278
API of Methadone Hydrochloride from Chloropropane		280
API of Rifaximin		282
API of Daclatasvir Hydrochloride		284

API of Dorzolamide Hydrochloride		286
Enzymatic API of Amoxicillin from 6-APA		288
Enzymatic API of Cephalexin from 7-ADCA		290
A variety of Formulations of the Drug's Raw Material Triptorlin Acetate, etc.		292
Types of Radiopeptides Hynic-Octreotide, DOTA-Octreotate, Hynic-UBI & etc.		296
API of Sofosbuvir-Daclatasvir for Treatment of Hepatitis C (HCV)		300
Pharmaceutical and Edible Grades of Halal Gelatin		302
Engineered Industrial Yeast Strain Products and Services		304
Inactivated Coronavirus Vaccine Trade Name: COVIran Barekat		306
Synthesis of APA6 from Penicillium chrysogenum and Biomass derivative		308
Vedolizumab Antibody Generator Cell line		310
Synthesis of Methacrylic Acid-Ethyl Acrylate Copolymer in Emulsion and Powder Forms		312
Polymer Tablet Coatings (RT-film) from Methacrylic Acid-Ethyl Acrylate Copolymer		314

[Synthetic Raw Material](#) ○

[Biological and Recombinant Products](#) ○

[Tablet and Capsule Coating](#) ○



➤ API of Methadone Hydrochloride from Diphenylacetonitrile and the corresponding Methadone Syrup Formulation

◆ Darou Pakhsh Raw Materials Manufacturing Co.

www.temad.com



Product Introduction:

The drug is among the synthesized narcotic drugs and is typically used to alleviate pain and reduce the complications and withdrawal symptoms of heroin and opium withdrawal. Methadone can reduce inclination toward narcotics by alleviating the pains caused by withdrawal and rehabilitation programs. Methadone is an opium-like agonist and is similar to morphine as it applies its pain-killing mechanism by being linked to the exclusive receptors of opium-like drugs.

Main Export Destinations:

Germany, Switzerland, Russia, South Korea, Canada, China, Brizilia, India, Singapor, Ivory Coast, Tiwan, Afghanistan, Hong Kong, Iraq, Kongo, Ghana, Colombia, Vietnam, Syria, Venezuela, Peru

Exports History:

Beween 10,000,000 to 50,000,000 \$

Founded:

1996

Application:

- ※ Controlling medium-to-severe pains
- ※ Eliminating dependence on opioid compounds

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Molecular mass of the tablet:** 345.9g/mol
- ※ **Molecular mass of the syrup:** 309.445g/mol
- ※ **Presentation form:** 20mg and 40mg tablets, 250cc (glass/plastic cap, aluminum cap, bottle) and 1000cc (bottle/ plastic cap) syrup.



➤ API of Codeine Phosphate from the Intermediate of Morphine Obtained from Opium Extraction

◆ Darou Pakhsh Raw Materials Manufacturing Co.

www.temad.com



Product Introduction:

Codeine phosphate or methyl morphine is a narcotic drug used to alleviate pains and treat coughs and diarrhea, which is often taken along with acetaminophen (as acetaminophen codeine) or with anti-cough drugs (as codeine expectorant syrups). It is among the most important forms of sedatives and is usually combined with other drugs like acetaminophen.

The primary ingredient of this product is alkaloid codeine or morphine extracted from the opium sap of the opium poppy plant.

Codeine has a direct suppressing impact on the cough reflex center and acts by influencing opioid receptors. Codeine is conveniently absorbed in the digestive system and is one of the most effective oral narcotic drugs. Codeine phosphate tablets are typically 30 milligrams. The effects of codeine appear usually 10 to 30 minutes after consumption, reach a peak 1-2 hours later, and disappear within 4-6 hours.

Main Export Destinations:

Germany, Switzerland, Russia, South Korea, Canada, China, Brizilia, India, Singapor, Ivory Coast, Tiwan, Afghanistan, Hong Kong, Iraq, Kongo, Ghana, Colombia, Vietnam, Syria, Venezuela, Peru

Exports History:

Beween 10,000,000 to 50,000,000 \$

Founded:

1996

Application:

Pharmaceutical industry, for the production of painkillers and anti-cough and anti-diarrhea drugs

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Presentation form:** 20kg plastic bottles
- ※ **Pharmaceutical form:** tablet, syrup, injectable
- ※ **Classification:** drugs that influence the central nervous system – painkillers and antipyretics – opioid agonists



➤ Synthesis of Various Active Pharmaceutical Ingredients (APIs)

◆ Darou Pakhsh Pharma Chem Co.

www.dppcco.com



Product Introduction:

Darou Pakhsh Pharmaceutical Co. produce various types of raw materials (effective ingredients) applied in the production of numerous drugs. The effective ingredients produced by the company include the following:

Effective ingredient	Brand	Application
Lidocaine	Xylocaine, Lido	Making local anesthesia
Ondansetron hydrochloride	Zofran, Zuplenz	Treating the nausea and vomiting that result from chemotherapy or surgeries
Vitamin B1	Benroa	Significant impacts on burning sugars in the body and the performance of the neurological system
Famotidine	Zantac, Pepcid	Treating gastric ulcers and gastritis
Azithromycin	Zithromax, Azirocin	Preventing or treating newborns' eye infections caused by chlamydia trachomatis or neisseria gonorrhoeae, treating the surface infections of the eye caused by sensitive microorganisms
Pottasium Clav	-	-
Cetirizine	Zyrtec	Treating the symptoms of allergic rhinitis, allergic conjunctivitis, itching, rash, sneezing, and running nose, and reducing the symptoms of the allergic asthma
Gabapentin	Fanatrex, Gabarone, Gralise	Treating partial seizures (focal) accompanied by other anticonvulsant drugs, treating neuralgia pains (caused by the irritations of a nerve) after herpetic infections and neuropathy

Fexofenadine hydrochloride	Loratadine, Claritin	Treating the symptoms of allergic rhinitis, allergic conjunctivitis, itching, rash, sneezing, running nose, and reducing the symptoms of allergic asthma
Methocarbamol	Robaxin	Assisting in the treatment of muscular spasm
Divalproex sodium	Divalproex	Treating epilepsy, the bipolar syndrome, and preventing migraine
Lamotrigine	Lamictal	Assisting in the treatment of seizure attacks and the bipolar disorder
Repaglinide	Repandine	Lowering the blood glucose accompanied by exercises and diet in type two diabetic patients
Propranolol hydrochloride	Inderal	-
Diltiazem hydrochloride	Cardizem, Taztia	Lowering the blood glucose accompanied by exercises and diet in type two diabetic patients
Ferrous fumarate	Ferrous	Improving iron deficiency anemia
Atenolol	Tenormin	Treating high blood pressure and angina pectoris (chest pain) and reducing the risk of death in heart attacks
Montelukast sodium	Singulair	Reducing asthma attacks in adults and children above one year old
Rosuvastatin	Crestor	Treating the high rates of cholesterol in the blood and preventing cardiovascular events
Varenicline tartrate	Chantix	A stimulant tablet to stop smoking
Baclofen	Lioresal	Treating the severe and chronic voluntary spasms and reducing the number and intensity of trigeminal neuralgia
Captopril	Capoten	Treating the symptoms of high blood pressure (particularly in the case of heart failure)
Rivastigmine tartrate	Exelon	Treating the symptoms of the low to mild cases of dementia in Alzheimer's disease
Escitalopram	Celexa	Treating depressive disorders
Pregabalin	Lyrica	Controlling neuropathic pains including the diabetic neuropathic pain and the pain following herpetic infections, used as an assisting drug in the treatment of partial seizures (focal) and the generalized anxiety disorder
Losartan	Cozaar	Reducing high blood pressure in adults and children above 6
Mesalazine	Pentasa, Asacol, Canasa	Treating the ulcerative colitis and Chron's disease
Empagliflozin	Gloripa	Treating the type II diabetes in adults above 18, reducing the risk of cardiovascular diseases



API of Metronidazole

Kimyagaran Emrooz Chemical Industries Co.

www.kimyagaran.com



Product Introduction:

Metronidazole is one of the Nitroimidazole derivatives, which is mainly used in the treatment of infections caused by anaerobic bacteria and protozoa. It is also used to treat parasitic infections including Giardia infections of the small intestine, amebic liver abscess and amoebic dysentery (infection of the colon causing bloody diarrhea), bacterial vaginosis, trichomonas vaginal infections, and carriers of trichomonas (both sexual partners) who do not have symptoms of infection. Metronidazole is also used alone or in combination with other antibiotics in treating abscesses in the liver, pelvis, abdomen and brain caused by anaerobic bacteria. According to the customer need, this product is produced in three grades: regular, semi-micronized and micronized.

Main Export Destinations:

Russia, Turkey, UAE, Uzbekistan, Turkmenistan, Iraq and Pakistan

Exports History:

Between 500,000 \$ and 1,000,000 \$

Annual Production Capacity:

300,000 Kg

Founded:

1995

Application:

Treating all types of parasitic infections and vaginal bacterial infections

This product is a final B2B consumer product.

Technical Specifications:

- * White powder with particle size requested by the customer in accordance with BP and USP Standards.
- * Particle size from 400 microns to 10 microns
- * Packed in polybags in polyethylene bottles



Advantages:

- * Produced by 4 countries around the world
- * Competitive quality and in accordance with international standards

International Standards or permission:

GMP



➤ API of Glatiramer Acetate from the Corresponding Protected Amino Acids

◆ Towfigh Daroo Research & Engineering Co.

www.todaco.com



Product Introduction:

Glatiramer acetate is a combination of artificial polypeptides (consisting of 4 amino acids) which is similar to myelin basic protein (MBP). As the structure of Glatiramer is similar to that of myelin protein, the immune system targets the drug instead of attacking myelin. Moreover, glatiramer stimulates and distinguishes a special type of immune cells which prompts the immune system to fight diseases instead of targeting itself. The drug is effective in reduction of the intensity and emergence of MS and is the commonest MS drug in the U.S. COPAMER® is the trademark for glatiramer acetate. The drug is injected subcutaneously once a day.

Main Export Destinations:

Turkey

Exports History:

Up to 500,000 \$

Annual Production Capacity:

100 Kg

Founded:

1999

Application:

Decrease the frequency of MS relapses

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Presentation form:** powder
- ※ **Analysis method:** according to the IN-HOUSE reference

Advantages:

Pharmacological characteristic

International Standards or permission:

Exploitation license from Iran



➤ API of Octreotide Acetate from the Corresponding Amino Acids

◆ Towfigh Daroo Research & Engineering Co.

www.todaco.com



Product Introduction:

Octreotide acetate is a cyclic peptide with 8 amino acids and it has a structure similar to that of Somatostatin. This drug is very effective in inhibiting the secretion of the growth hormone and insulin and is employed in treating acromegaly. Octreotide gets connected to somatostatin receptors linked to phospholipase C via proteins G and constricts the smooth muscles of blood vessels. Downstream effects stimulating phospholipase G, the production of phosphate 1, 5,4-inositol, and impacts on the L-type calcium channels results in the inhibition of the growth hormone, the treatment of various types of the growth hormone, and the metabolic impacts of acromegaly.

Main Export Destinations:

Turkey

Exports History:

Up to 500,000 \$

Annual Production Capacity:

1 Kg

Founded:

1999

Application:

In the pharmaceutical industry to produce drugs needed for acromegaly treatment and diarrhea related to carcinoid metastatic tumors and the tumors secreting vasoactive intestinal peptide

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Presentation form:** Powder
- ※ **Analysis method:** According to the USP

Advantages:

Pharmacological characteristic

International Standards or permission:

Exploitation license from Iran



➤ API of Fingolimod Hydrochloride / Through Hydrolization of Acetylated Intermediate of Amide and Ester Groups

◆ Towfigh Daroo Research & Engineering Co.

www.todaco.com



Product Introduction:

Fingolimod Hydrochloride or Fingolimod is a drug known as Gilenya, which is used to reduce the frequency of attacks and delay disability in some patients with MS. Fingolimod is metabolized to its active metabolite form called fingolimod phosphate using sphingosine kinase. Fingolimod phosphate gets connected to the receptors of sphingosine 1-phosphate_{1,3,4,5} and reduces the ability of lymphocytes to leave lymph nodes. Thus, the number of local lymphocytes gets reduced.

Main Export Destinations:

Turkey

Exports History:

Up to 500,000 \$

Annual Production Capacity:

5 Kg

Founded:

1999

Application:

Treat patients with Relapsing-Remitting MS

This product is a final B2B consumer product.

Technical Specifications:

- * **Presentation format:** powder
- * **Analysis method:** according to the USP-BP reference

Advantages:

Pharmacological characteristic

International Standards or permission:

Exploitation license from Iran



➤ API of Sunitinib for Treatment of Cancer

◆ Baran Pharma Co.

www.baranpharmaco.ir



Product Introduction:

Sunitinib is a multi-targeted receptor tyrosine kinase (RTK) inhibitor that was approved by the FDA for the treatment of renal cell carcinoma (RCC) and imatinib-resistant gastrointestinal stromal tumor (GIST) on January 26, 2006. This product exerts anti-tumor and anti-angiogenesis effects by inhibiting various tyrosine kinase receptors, including platelet-derived growth factors (PDGFR α -PDGFR β), vascular endothelium growth factors (VEGFR1,2,3), FMS-like tyrosine kinase-3 (FLT3), colony-stimulating factor type 1 (CSF-1R) and glial cell line derived neutrophilic factor receptor (RET).

Main Export Destinations:

Syria

Exports History:

Between 500,000 \$ and 1,000,000 \$

Founded:

1995

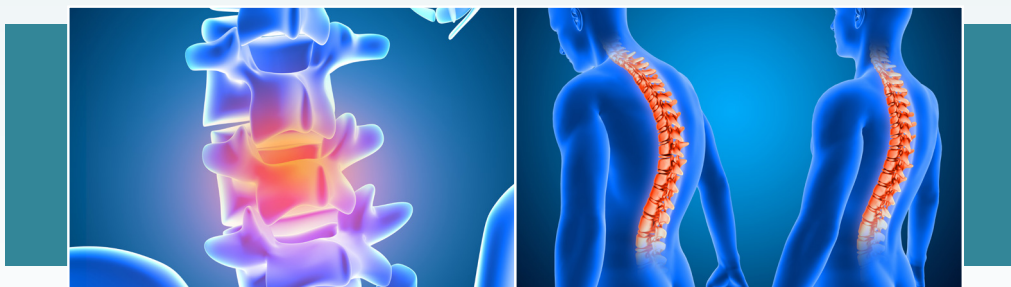
Application:

Treatment of kidney cancer, pancreatic cancer, colon cancer

This product is a final B2B consumer product.

Technical Specifications:

- * **Pharmaceutical form:** 12.5, 25 and 50 mg capsules
- * **Maximum plasma concentration:** 6 to 12 hours after oral administration
- * **Half-life of the drug:** 40 to 60 hours
- * **Half-life of active drug metabolite:** 80 to 110 hours
- * **Pharmacological classification:** anticancer (tyrosine kinase inhibitor)



➤ API of 4-Aminopyridine

Trade Name: Fampridine

◆ Negin Daroo Noavar Co.

www.neginpharma.com



Product Introduction:

The active ingredient 4-aminopyridine is a potassium channel blocker, which is used to help MS sufferers walk better. Walking speed has been observed to increase in clinical trials.

Main Export Destinations:

Turkey and India

Exports History:

Up to 500,000 \$

Annual Production Capacity:

500 Kg

Founded:

2013

Application:

- * Manufacturing Fampridine medication in MS treatment
- * Treatment of spinal cord injury patients

This product is a final B2B consumer product.

Technical Specifications:

- * **Type of release:** Oral extended release
- * **Brand name:** Fampira and Dalfir tablets

Advantages:

Competitive Price and Quality

International Standards or permission:

USP43



➤ API of Isosorbide Dinitrate

◆ Arya Pharmaceuticals Co.

www.aryapharm.com



Product Introduction:

Isosorbide dinitrate, a medication from the class of organic nitrates known as vasodilators, is used to treat cardiovascular disease and high blood pressure. This material is white in appearance and is made up of 75% lactose monohydrate and 25% isosorbide dinitrate. Both 10 mg and 40 mg sustained-release pills of this medication are available in the Iranian pharmaceutical market. This API is formulated by the Aria Pharmaceutical Company and is offered as the final finished tablet for sale. Isoke® is one of its brands.

After production, this material is formulated into 10 mg and 40 mg sustained-release tablets. By acting on the vessel walls, these tablets stimulate the dilation of the vessels, which decreases blood pressure and lessens the strain on the heart. The finished tablet is sold to distribution companies after Arya Pharmaceuticals consumes the active ingredient.

Main Export Destinations:

India

Exports History:

Up to 500,000 \$

Annual Production Capacity:

10 tons

Founded:

1982

Application:

Blood pressure and cardiovascular diseases

This product is a final B2B consumer product.

Technical Specifications:

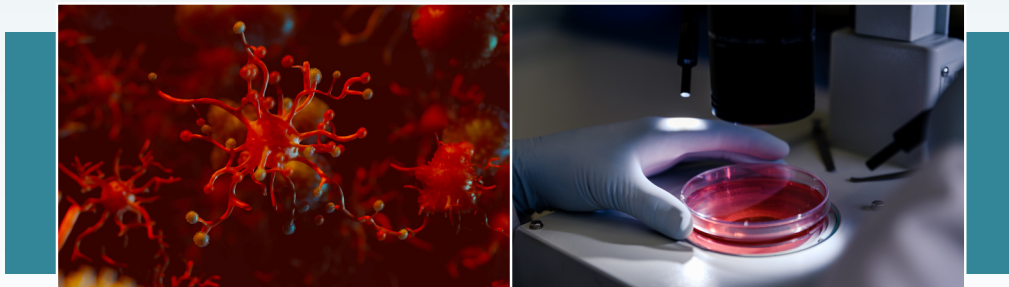
- * **Molecular weight:** 236/14
- * **Molecular formula:** $C_6H_8N_2O_8$
- * **The finished form of the drug:** a slightly creamy white powder containing 25% of pure isosorbide dinitrate
- * **Mesh size:** less than 30
- * **Solubility mode:** negligible amount in water, soluble in organic solvents such as acetone, alcohol and ether

Advantages:

Specifications are according to the last version of US pharmacopeia.

International Standards or permission:

Pharmacopoeia of the United States, England and Europe



➤ API & Granule Form of Imatinib Mesylate

◆ Fanavaran Daruyi Roshd Parsian Co.

www.parsianpharma.com



Product Introduction:

Imatinib mesylate is a protein-tyrosine kinase inhibitor that inhibits the bcr-abl tyrosine kinase, the constitutive abnormal tyrosine kinase created by the Philadelphia chromosome abnormality in chronic myeloid leukemia (CML). It inhibits proliferation and induces apoptosis in bcr-abl positive cell lines as well as fresh leukemic cells from Philadelphia chromosome positive chronic myeloid leukemia.

Imatinib is also an inhibitor of the receptor tyrosine kinases for platelet-derived growth factor (PDGF) and stem cell factor (SCF), c-kit, and inhibits PDGF- and SCF-mediated cellular events. In vitro, imatinib inhibits proliferation and induces apoptosis in gastrointestinal stromal tumor (GIST) cells, which express an activating c-kit mutation.

Annual Production Capacity:

3000 Kg

Founded:

2008

Application:

Treating certain types of leukemia and other cancers, disorders in blood cells, certain gastrointestinal stromal tumors (GISTs), and a skin cancer called the Dermatofibrosarcoma protuberans (DFSP)

This product is a final B2B consumer product.

Technical Specifications:

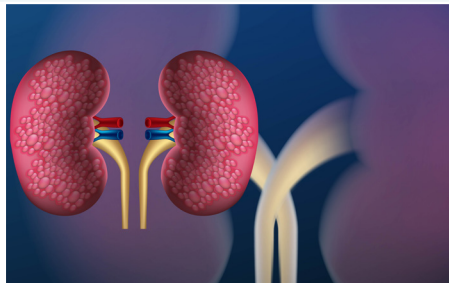
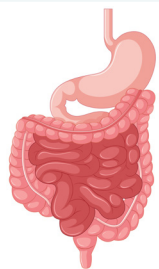
Cas No.	220127-57-1
Molecular Weight	589.71 g/mol
Shelf life	4 years
Packaging Type	LDPE bag
Storage Condition	Preserve in a closed container at a temperature less than 30°C.
Analysis Reference	In-house

Advantages:

- ✧ Lower price compared to similar products
- ✧ The similar and even higher quality of the

International Standards or permission:

GMP Certificate, from Iranian Ministry of Health & Medical Education which is in accordance with PICS standards.



➤ API of Sunitinib Malate

◆ Fanavaran Daruyi Roshd Parsian Co.

www.parsianpharma.com



Product Introduction:

Sunitinib is a small molecule that inhibits multiple receptor tyrosine kinases (RTKs), some of which are implicated in tumor growth, pathologic angiogenesis, and metastatic progression of cancer. Sunitinib was evaluated for its inhibitory activity against a variety of kinases (>80 kinases) and was identified as an inhibitor of platelet-derived growth factor receptors (PDGFRa and PDGFRb), vascular endothelial growth factor receptors (VEGFR1, VEGFR2 and VEGFR3), stem cell factor receptor (KIT), Fms-like tyrosine kinase-3 (FLT3), colony stimulating factor receptor Type 1 (CSF-1R), and the glial cell-line derived neurotrophic factor receptor (RET).

Annual Production Capacity:

3000 Kg

Founded:

2008

Application:

Treating advanced or advancing tumors in the digestive system, pancreas, or kidneys

This product is a final B2B consumer product.

Technical Specifications:

Cas No.	341031-54-7
Molecular Weight	532.56 g/mol
Shelf life	2 years
Packaging Type	LDPE bag
Storage Condition	Preserve in closed container at a temperature less than 30°C.
Analysis Reference	In-house

Advantages:

- ✧ Lower price compared to similar products
- ✧ The similar or even higher quality of the brand

International Standards or permission:

GMP Production Certificate, from Iranian Ministry of Health & Medical Education which is in accordance with PIC/S guidelines.



➤ API of Nilotinib Hydrochloride Monohydrate

◆ Fanavaran Daruyi Roshd Parsian Co.

www.parsianpharma.com



Product Introduction:

Chronic myelogenous leukemia (CML) is caused by the BCR-ABL oncogene. Nilotinib inhibits the tyrosine kinase activity of the BCR-ABL protein. Nilotinib fits into the ATP-binding site of the BCR-ABL protein with higher affinity than imatinib, over-riding resistance caused by mutations. The ability of Nilotinib to inhibit platelet-derived growth factor receptor-beta TEL(TEL-PDGFRbeta) which causes chronic myelomonocytic leukemia, and FIP1-like-1-PDGFRalpha, which causes hyper eosinophilic syndrome, suggests potential use of Nilotinib for myeloproliferative diseases characterized by these kinase fusions. Nilotinib also inhibits the c-Kit receptor kinase, including the D816V-mutated variant of KIT, at pharmacologically achievable concentrations, supporting potential utility in the treatment of mastocytosis, and gastrointestinal stromal tumors.

Annual Production Capacity:

1000 Kg

Founded:

2008

Application:

Treating chronic myeloid leukemia

This product is a final B2B consumer product.

Technical Specifications:

Cas No.	923288-95-3
Molecular Weight	584.0g/mol
Shelf life	4 years
Packaging Type	LDPE bag
Storage Condition	Preserve in closed container at a temperature less than 30°C.
Analysis Reference	In-house

Advantages:

- ✧ Lower price compared to similar products
- ✧ The similar or even higher quality of the brand

International Standards or permission:

GMP Production Certificate, from Iranian Ministry of Health & Medical Education which is in accordance with PIC/S guidelines.



شرکت مواد اولیه دارویی تهران شیمی (سهامی خاص)
TEHRAN CHEMIE PH. RAW MATERIAL CO.

➤ API of Cefixime

◆ Tehran Chemistry Co.

www.tehranchemie.com



Product Introduction:

This product is used as the raw material for pharmaceutical companies to manufacture cefixime tablets. Cefixime is recognized under the brand name Suprax and is an antibiotic. It is effective against a broad range of bacterial infectious diseases, namely: respiratory infections, skin and soft tissue infections, bone or joint infections, and urinary infections. Also, it might be used as the prophylaxis against infections in patients who have recently undergone surgery or are susceptible to infections in any way.

Annual Production Capacity:

20 tons

Founded:

2002

Application:

- * Used in pharmaceutical industry to manufacture Cefixime
- * This product is an industrial raw material.

This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99.5 percent
- * **Color:** yellow to creamy crystal
- * **Particle size:** micronized

Advantages:

- * Quality according to USA or European standards
- * High product yield
- * The possibility of solvent recycling and re-use
- * Product synthesis and purification in one step

International Standards or permission:

- * GMP certificate number 80394/665
- * IRC code number 5993380868676344



➤ Industrial Synthesis of Various Active Pharmaceutical Ingredients (APIs)

◆ Alborzbulk pharmaceutical Co.

www.alborzbulk.ir



Product Introduction:

Pharmaceutical businesses employ several active ingredients created by Alborz Bulk, a company that manufactures pharmaceutical raw materials, in the development of their medication. These are the raw materials as follows:

Synthesis name	Manufactured medicine	Brand name	Description
Industrial synthesis of gemfibrozil active ingredient	Gemfibrozil	Lupid	Active ingredient: hypertriglyceridemia and hypercholesterolemia
Industrial synthesis of the active ingredient of atorvastatin calcium	Atorvastatin calcium	Lipitor	
Industrial synthesis of the active ingredient of Escitalopram hydrobromide	Citalopram hydrobromide	Celexa	

Industrial synthesis of the active ingredient FLUVOXAMINE MALEATE	Fluvoxamine Maleate	Luvox	This medication belongs to the class of tricyclic antidepressants known as serotonin reuptake inhibitors.
Industrial synthesis of Cyproterone acetate	Cyproterone acetate	Androcur or ethinylestradiol under the brand name Diane and other names	An anti-androgen and progestin
Industrial synthesis of cefixime trihydrate	Cefixime	Suprax	It is a type of antibiotic that is helpful in treating a range of microbiological infections and is a member of the cephalosporin antibiotic family.
Industrial synthesis of Betamethasone valerate	Betamethasone valerate ointment	Betnovat and Betacap	This medication penetrates the cell membrane, binds to its receptors in the cytoplasm, and then the drug-receptor complex moves into the nucleus of the cell. This complex activates the transcription of mRNA by binding to certain DNA sequences, which then triggers the creation of the enzymes that eventually cause corticosteroid systemic effects.
Synthesis of the active ingredient of escitalopram oxalate	S citalopram oxalate	Lexapro	The antidepressant effects of this medication are caused by selectively preventing the serotonin from nerve terminals from being withdrawn. Additionally, because it has little to no impact on other neurohormones like norepinephrine, serotonin, or dopamine, this medication has fewer side effects than citalopram.
Synthesis of the active ingredient of mycophenylate mofetil	Mycophenylate mofetil	Celleffect and MyFlex	This medicine works by suppressing the immune system to stop organ transplant rejection. It inhibits the enzyme required for T cell and B cell growth.
Synthesis of the active ingredient of bisoprolol fumarate	Bisoprolol fumarate	Monacor and Zebta	This medication belongs to a class of drugs known as beta blockers. It works by blocking the actions of specific natural chemicals in the body, such as epinephrine, on the heart and blood vessels. This effect lowers blood pressure, heart pressure, and heart rate.

Application:

Name of active ingredient	Application
Gemfibrozil	Reducing blood fat (triglyceride) – increasing good blood cholesterol (HDL) – reducing bad cholesterol (LDL)
Atorvastatin calcium	Reducing blood cholesterol by inhibiting cholesterol producing enzymes
Escitalopram hydrobromide	Anxiety and stress disorder treatment
FLUVOXAMINE MALEATE	Obsession treatment, especially obsessive-compulsive disorder
Cyproterone Acetate	Hypersexuality control treatment in men - Palliative treatment of prostate carcinoma
Cefixime trihydrate	Treatment of urinary tract infections, skin infections, chest, pharynx, ear and tooth infections
Industrial synthesis of betamethasone valerate	Dermatoses-resulted relief of inflammation and itching such as contact dermatitis, dermatitis caused by allergies, types of eczema, local neurodermatitis, reactions caused by insect and arthropod bites, (1st) and (2nd) degree burns, sunburns, auxiliary or alternative treatment in psoriasis, seborrheic dermatitis, severe rash and alopecia areata
Synthesis of the active ingredient of escitalopram oxalate	Treating major depressive disorder, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder
Synthesis of the active ingredient of mycophenylate mofetil	Preventing heart, kidney and liver transplant rejection with cyclosporine and corticosteroids
Synthesis of the active ingredient of bisoprolol fumarate	Treating high blood pressure - prevention of stroke, heart attack and kidney problems

This product is a final B2B consumer product.

Technical Specifications:

Name of active ingredient	Technical specifications
Gemfibrozil	Tablet-formed white waxy crystalline solid
Atorvastatin calcium - fluvoxamine maleate - Escitalopram oxalate - mycophenolate mofetil - bisoprolol fumarate	Tablet-formed white crystalline powder
Citalopram hydrobromide-cyproterone acetate	Almost white crystalline powder Form of medication: tablet
Cefixime trihydrate	Tablet-formed white to yellowish crystalline powder
Betamethasone valerate	Ointment-shaped white crystalline powder

Advantages:

The price is reasonable, the quality is comparable to that of overseas counterparts, and the nation's pharmaceutical demands are met timely



➤ Synthesis of Various Pharmaceutical-Chemical Active Ingredients

◆ Arasto Co.

www.arasto.com



Product Introduction:

Arastoo Pharmachemical Industries Co. produces various types of pharmaceutical active ingredients including the following:

Ingredient	Brand	Description
Synthesizing ketoconazole by the 2SN reaction of keto11 and keto6 base materials	Ketoderm, Terzolin, Nizoral	Ketoconazole is used to treat dangerous fungal infections in the body. Ketoconazole belongs to the Azole antifungals and prevents the growth of fungi.

Annual Production Capacity:

200 tons

Founded:

1986

Synthesizing pantoprazole from the last two stages	Tecta, Protonix	<ul style="list-style-type: none"> * There are cells in the stomach that produce acids and inject hydrogen – an acidic agent – into the stomach. They are called hydrogen pumps. * Pantoprazole is among the drugs that inhibits hydrogen pumping and lowers the production of gastric acid. * Gastric acid is a protective factor in the body, which facilitates food digestion and eliminates microbes/viruses that enter the body via eating. Thus, as pantoprazole reduces the resistance of the body by decreasing the secretion of gastric acid, the consumption of the drug should be accompanied by careful dietary considerations.
Synthesis of montelukast sodium from N-1	Singulair	<ul style="list-style-type: none"> * The drug is a leukotriene inhibitor. Leukotrienes are chemicals released by the human body after breathing in allergic substances like pollens. They create swells in the lungs and constrict muscles around the respiratory tract. These occurrences can result in asthma symptoms. * The drug is used to prevent asthma attacks in adults and children above 2 years old by inhibiting leukotriene
Synthesizing rosuvastatin calcium from rosuvastatin dioxane	Crestor	Rosuvastatin is prescribed to help reduce bad cholesterol (e.g., LDL and triglycerides) and increase good cholesterol (HDL) in the blood. It belongs to a group of drugs known as statins. The drug works by reducing the cholesterol produced by the liver.

Application:

Ingredient	Applications
Synthesizing ketoconazole by the 2SN reaction of keto11 and keto6 base materials	Treating hair loss in the torso and groin due to the Trichophyton and Epidermophyton floccosum, tinea versicolor resulting from pityrosporum furfur, candidiasis of skin, seborrheic dermatitis, scalp hair loss, facial hair loss, feet hair loss, and fungal nail infections.
Synthesizing pantoprazole from the last two stages	Preventing peptic ulcers, improving the healing process of rehabilitation, reducing the symptoms of acid reflux, eliminating helicobacter pylori (which creates the peptic ulcer disease), and reducing the digestive complications of other diseases
Synthesis of montelukast sodium from N-1	Preventing asthma attacks and cases like wheezing, respiratory problems, ribcage tightness and pain, coughs resulting from asthma (in adults and children above 12 months old, respiratory problems during exercise, seasonal allergy symptoms, allergic rhinitis, and permanent allergic rhinitis
Synthesizing rosuvastatin calcium from rosuvastatin dioxane	Reducing the levels of cholesterol and fat, decreasing the risks of heart diseases, preventing strokes and heart attacks

This product is a final B2B consumer product.

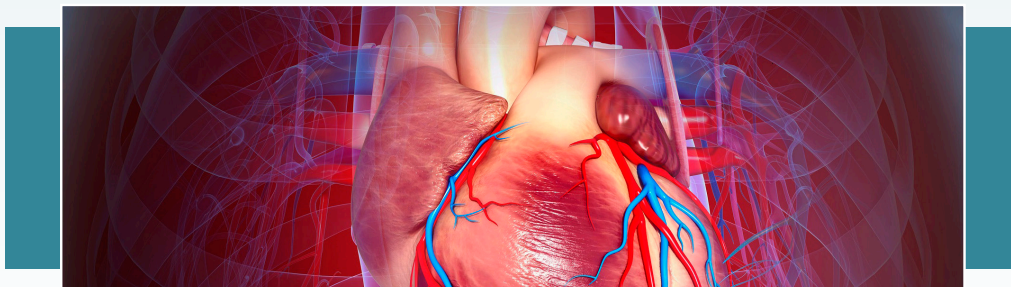
Technical Specifications:

Ingredient	Brand	Particle size
Synthesizing ketoconazole by the 2SN reaction of keto11 and keto6 base materials	Micronized white powder with purity above 98%	90% below 100µm
Synthesizing pantoprazole from the last two stages	Milled white powder with purity above 98%	90% below 400µm
Synthesis of montelukast sodium from N-1	Micronized white powder with purity above 98%	90% below 150µm
Synthesizing rosuvastatin calcium from rosuvastatin dioxane		90% below 20µm

Advantages:

- * Production of industrial batch size products with higher efficiency and purity
- * Exclusive production of some of the products in Iran such as Montelukast
- * The use of local technical knowledge in the development of industrial production processes, such as using CDI instead of thionyl chloride to perform the coupling process.





➤ API of Atorvastatin Calcium

◆ Hackim Farayand Chemi Co.

www.hfcapi.com



Product Introduction:

The active ingredient of Atorvastatin calcium is produced solely by Hakim Chemical Process Company. The customers of this useful chemical, which belongs to the cardiovascular group, are Finished pharmaceutical manufacturers.

The first effect of the atorvastatin calcium active ingredient is a decrease in the risk of heart attack and stroke, and the second effect is a reduction in fat and bad cholesterol (LDL) and an elevation of good cholesterol (HDL).

Lipitor is the brand name given to this drug.

Annual Production Capacity:

20 tons

Founded:

2002

Application:

- * Pharmaceutical industry (cardiovascular drugs)

This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99.8%
- * **Color:** white or off-white
- * **Particle size:** milled powder with other particles 90% less than 30 microns

Advantages:

- * Quality in accordance with the EP, USP international standards
- * A substitute for brand drugs



➤ API of Clopidogrel Bisulfate

◆ Hackim Farayand Chemi Co.

www.hfcapi.com



Product Introduction:

The Clopidogrel Bisulfate active ingredient is solely made by Hakim Chemical Process Company. The customers of this commodity are finished pharmaceutical manufacturers, and the active ingredient belongs to the cardiovascular class. The Clopidogrel Bisulfate active ingredient inhibits platelet aggregation and reduces the development of blood clots.

The active ingredient atorvastatin calcium has two uses: the first is to prevent heart attacks, strokes, or peripheral artery disease, and the second is to treat acute coronary syndrome.

The brand name for this drug is PLAVIX.

Annual Production Capacity:

20 tons

Founded:

2002

Application:

- * Pharmaceutical industry (cardiovascular drugs)

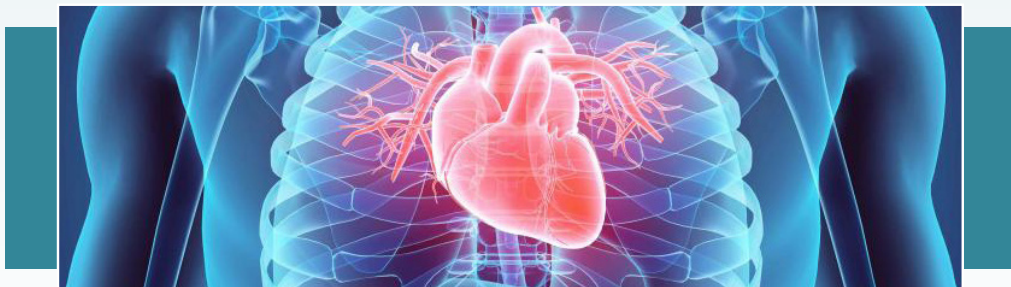
This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99.7%
- * **Color:** white or off-white
- * **Particle size:** milled powder with a particle size smaller than 30 microns

Advantages:

- * Quality in accordance with the EP, USP international standards
- * A substitute for brand drugs



➤ API of Rosuvastatin Calcium

◆ Hackim Farayand Chemi Co.

www.hfcapi.com



Product Introduction:

Rosuvastatin calcium is only produced by Hakim Chemical Process Company. The customers of this active ingredient, which belongs to the cardiovascular group, are Finished pharmaceutical manufacturers.

The indications of the active ingredient rosuvastatin calcium are as follows:

- * Hyperlipidemia and mixed dyslipidemia 2
- * Children with familial hypercholesterolemia
- * Hypertriglyceridemia
- * Primary dysbetalipoproteinemia (type III hyperlipoproteinemia)
- * Adults with homozygous familial hypercholesterolemia
- * Slowing down the progression of atherosclerosis
- * Primary prevention of cardiovascular diseases
- * Crestor is the brand name of the drug .

Annual Production Capacity:

20 tons

Founded:

2002

Application:

- * Pharmaceutical industry (cardiovascular drugs)

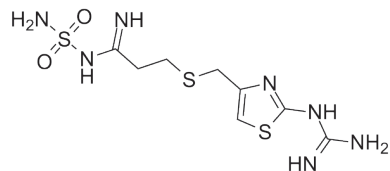
This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99.9%
- * **Color:** white or off-white
- * **Particle size:** micronized powder with a particle size smaller than 20 microns

Advantages:

- * Quality in accordance with the EP, USP international standards
- * A substitute for brand drugs



➤ API of Famotidine

◆ Mahban Shimi Co.

www.mahbangroup.com



Product Introduction:

This product is used as a raw material in the pharmaceutical companies which produce Famotidine tablets. Famotidine belongs to the family of antacid drugs called histamine 2 receptor blockers and is available in coated tablet form. The brand name of the drug is Pepcid.

Tablet: Famotidine 40, for the treatment of heartburn, reflux, gastritis (inflammation of the stomach), prevention and treatment of stomach and intestinal ulcers, treatment of Zollinger-Ellison disease, and other symptoms that cause an excessive amount of acid in the stomach (Dyspepsia).

Application:

As a raw material for the pharmaceutical companies that produce famotidine tablets

This product is a final B2B consumer product.

Founded:

1998



➤ **API of Metformin Hydrochloride**

◆ **Mahban Shimi Co.**

www.mahbangroup.com



Product Introduction:

This product is used as a raw material in the pharmaceutical companies that produce Metformin-hydrochloride tablets. Metformin 500 tablets are the first choice for controlling type 2 diabetes and usually, Metformine is prescribed along with Glibenclamide or other sulfonylurea drugs for better control of type 2 diabetes. Metformin should be taken after a meal to minimize the gastrointestinal complications. The brand name of this drug is Glocij.

Metformin tablets are used in non-insulin-dependent type 2 diabetes. Metformin reduces the hepatic production of Glucose as well as intestinal absorption and improves the insulin tissue-sensitivity, thus lowering blood sugar.

Coated tablets and E.R tablets are the different forms of this drug.

Application:

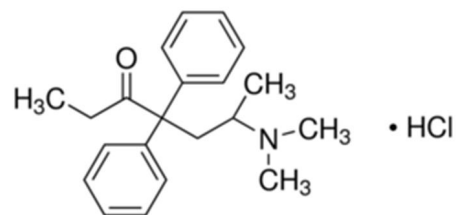
As a raw material for the pharmaceutical companies that produce Metformin-hydrochloride tablets

This product is a final B2B consumer product.

Founded:

1998





➤ API of Methadone Hydrochloride from Chloropropane

◆ Hasti Arya Shimi Co.

www.hastiar.com



Product Introduction:

The industrial opioid methadone, which is even more addictive than heroin and morphine, is frequently used as a maintenance medication to treat heroin and drug addiction. Methadone therapy or treatment with methadone maintenance dosage reduces the symptoms of opiate withdrawal and lessens or eliminates the demand for opiates. The brand name of this drug is Dolofin.

Founded:

2018

Application:

- * Controlling severe pain
- * Reduction of opioid dependency (stopping addiction)

This product is a final B2B consumer product.

Technical Specifications:

- * Making use of non-toxic materials
- * Increasing the effectiveness of the phase transfer catalyst process and special temperature conditions
- * Extremely high efficiency compared to comparable businesses
- * Recycling of all synthetic chemicals and solvents



➤ API of Rifaximin

◆ Khorshid Kadoos Co.

www.khorshidpharma.com



Product Introduction:

Rifaximin is an antibiotic from the rifamycin family (rifampin-rifabutin-rifapentin) and is effective against Escherichia Coli bacteria, which is deemed to be the cause of traveler's diarrhea.

This medicine can only be used by adults and people over 12 years old. Rifaximin is used to reduce the recurrence of hepatic encephalopathy as well as in the treatment of irritable bowel syndrome (IBS). Rifaximin exerts its antimicrobial effects by irreversibly inhibiting protein synthesis in bacteria.

Founded:

2010

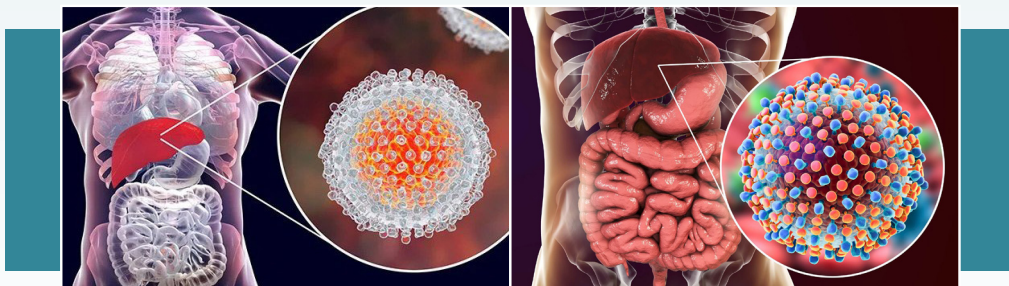
Application:

Treatment of hepatic encephalopathy

This product is a final B2B consumer product.

Advantages:

- * High purity of the final product
- * Higher overall benefit of the reaction compared to similar products



➤ API of Daclatasvir Hydrochloride

◆ Khorshid Kadoos Co.

www.khorshidpharma.com



Product Introduction:

Daclatasvir is an antiviral drug used for chronic hepatitis C infection in adults. By inhibiting non-structural 5A proteins, daclastavir limits the multiplication of viruses and is actually a direct antiviral. Daclatasvir binds to the N-terminal in the second NS5A protein (5A) of hepatitis C virus and inhibits viral RNA replication and virion assembly.

Founded:

2010

Application:

Treating Hepatitis C

This product is a final B2B consumer product.

Advantages:

- * High purity of the final product
- * Higher overall benefit of the reaction compared to similar products

International Standards or permission:

- * Approval of substantive agreement of daclatasvir
- * Confirmation of the comprehensive document for manufacture of Daklatasvir
- * GMP certificate
- * Daclatasvir raw material registration license



➤ API of Dorzolamide Hydrochloride

◆ Maad Avash Co.

www.maadavash.com



Product Introduction:

Dorzolamide hydrochloride is the active pharmaceutical component present in Trusopt and Cosopt ophthalmic solution used to treat glaucoma. The product is an API and is not formulated in our company. Pharmaceutical companies are the consumers of the product. This API will be equivalent to Co-Biosopt, Zilomole, and Timosopt medicine brands after altering to the finish product.

Annual Production Capacity:

400 Kg

Founded:

2010

Application:

Dorzolamide hydrochloride is prescribed to reduce intraocular pressure in open-angle glaucoma and pseudo-oxofoliative glaucoma, alone or beside β -adrenergic blocking drugs, for patients who are not allowed to take β -adrenergic blocking medicines or do not response to them.

This product is a final B2B consumer product.

Technical Specifications:

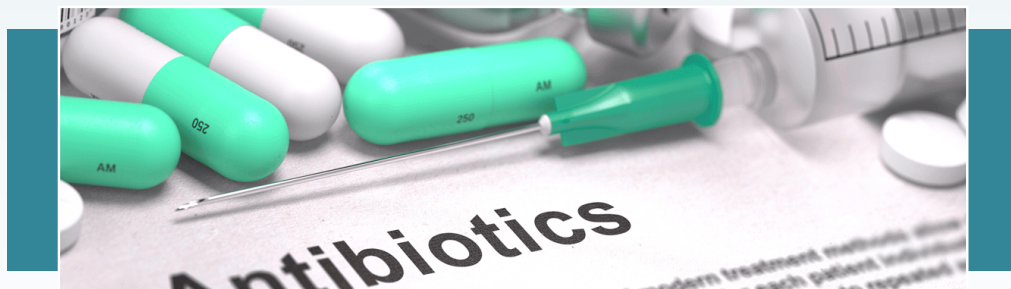
- * **White powder;** the size and shape of the crystal is not important and hence, it is not studied.
- * **Purity:** 99.5%,
- * **CAS No.:** 130693-82-2
- * **MW:** 360 g.mol⁻¹

Advantages:

Lower price than similar samples

International Standards or permission:

According to USP Pharmacopoeia standard



➤ Enzymatic API of Amoxicillin from 6-APA

◆ Iran Antibiotic Manufacturing Co.

www.asico.org



Product Introduction:

Amoxicillin belongs to a class of drugs called penicillin and is in the class of beta-lactam. This drug is one of the most important and widely used antibiotics in the world. The consumers of this product are pharmaceutical factories that turn the powder of the active ingredient into a consumable medicine such as tablet, capsules and syrups.

Our products are called generic and do not have a brand name.

Annual Production Capacity:

800 tons

Founded:

1995

Application:

In pharmaceutical industry for manufacturing amoxicillin as a drug required to treat sensitive bacterial infections

This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99%
- * **Color:** white or almost white
- * **Particle size:** fine powder (with a density of around 0.25 and suitable for manufacturing syrups) & compact (with a density of around 0.5 and suitable for manufacturing tablets and capsules)
- * **Presentation type:** edible powder in 20kg packages

Advantages:

significantly higher quality compared to similar products

International Standards or permission:

- * Complies with USP and BP pharmacopoeias
- * It has the approval of the reference laboratory of Iran Food and Drug Organization and GMP certificate



➤ Enzymatic API of Cephalexin from 7-ADCA

◆ Iran Antibiotic Manufacturing Co.

www.asico.org



Product Introduction:

Cephalexin is an antibiotic which is used to treat certain infections caused by bacteria. This medication is oral capsule and kills gram-positive and gram-negative bacteria. Cephalexin is the first of the first generation cephalosporins and have the same mode of action as other beta-lactam antibiotics.

The consumers of this product are pharmaceutical factories that turn the powder of the active ingredient into a consumable medicine such as tablet, capsules and syrups.

Our products are called generic and do not have a brand name.

Annual Production Capacity:

150 tons

Founded:

1995

Application:

In pharmaceutical industry to produce cephalexin (used in the treatment of various infections)

This product is a final B2B consumer product.

Technical Specifications:

- * **Purity:** 99%
- * **Color:** white or almost white
- * **Particle size:** fine powder (with a density of around 0.25 and suitable for manufacturing syrups) and compact (with a density of around 0.5 and suitable for manufacturing tablets and capsules)
- * **Presentation type:** edible powder in 20kg packages

Advantages:

significantly higher quality compared to similar products

International Standards or permission:

- * Complies with USP and BP pharmacopoeias
- * It has the approval of the reference laboratory of Iran Food and Drug Organization and GMP certificate



➤ A variety of Formulations of the Drug's Raw Material Triptorelin Acetate, Leuprolide Acetate, etc.

◆ Kimia Pajouh Dorsa CO.

www.kpdorsa.ir



Product Introduction:

- * **Triptorelin Acetate:** Triptorelin, like other GnRH agonists, can be used to treat estrogen-dependent diseases (such endometriosis or uterine fibroids), precocious puberty, hormone-responsive malignancies like breast or prostate cancer, and assisted reproduction.
- * **Loprolide Acetate:** Uterine fibroids, endometriosis, and advanced prostate cancer are all conditions that are treated with loprolide acetate.
- * **Octreotide acetate:** Octreotide acetate is used to treat some forms of tumor-related facial and neck redness as well as severe, watery diarrhea.
- * **Argireline Acetate:** By lowering muscular contraction, argireline acetate lessens the depth of wrinkles on the skin.
- * **Pentixather:** Patients with metastatic cancers that express CXCR4 are treated with Ga-Pentixafor68 analog treatment.
- * **Mannose Triflate:** A Radiolabeled Drug for Positron Emission Tomography.

Founded:

2013

Application:

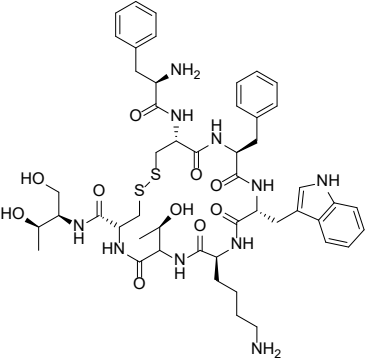
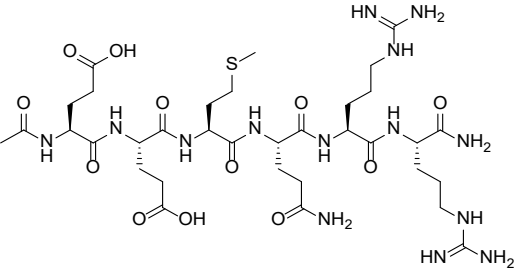
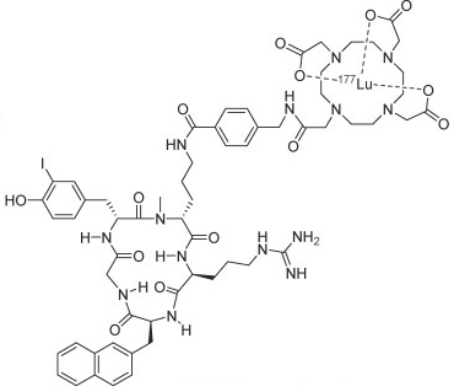
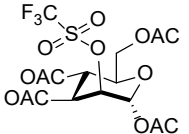
Drug formulation	Application
Triptorelin Acetate	Treating cancer, premature puberty, uterine fibroids, assisted reproduction, etc.
Loprolide Acetate	Treating advanced prostate cancer, uterine fibroids and endometriosis. Investigating the possible treatment of patients with mild to moderate Alzheimer's disease.
Octreotide acetate	Treating severe watery diarrhea Reducing the sudden redness of the face and neck brought on by some types of intestines and pancreatic cancers
Argireline Acetate	Enhancing collagen activity and reducing the appearance of wrinkles on the skin; preventing the development of fine lines; and increasing skin hydration.
Pentixather	Treatment of CXCR4-expressing malignancies in metastatic patients
Mannose Triflate	positron emission tomography

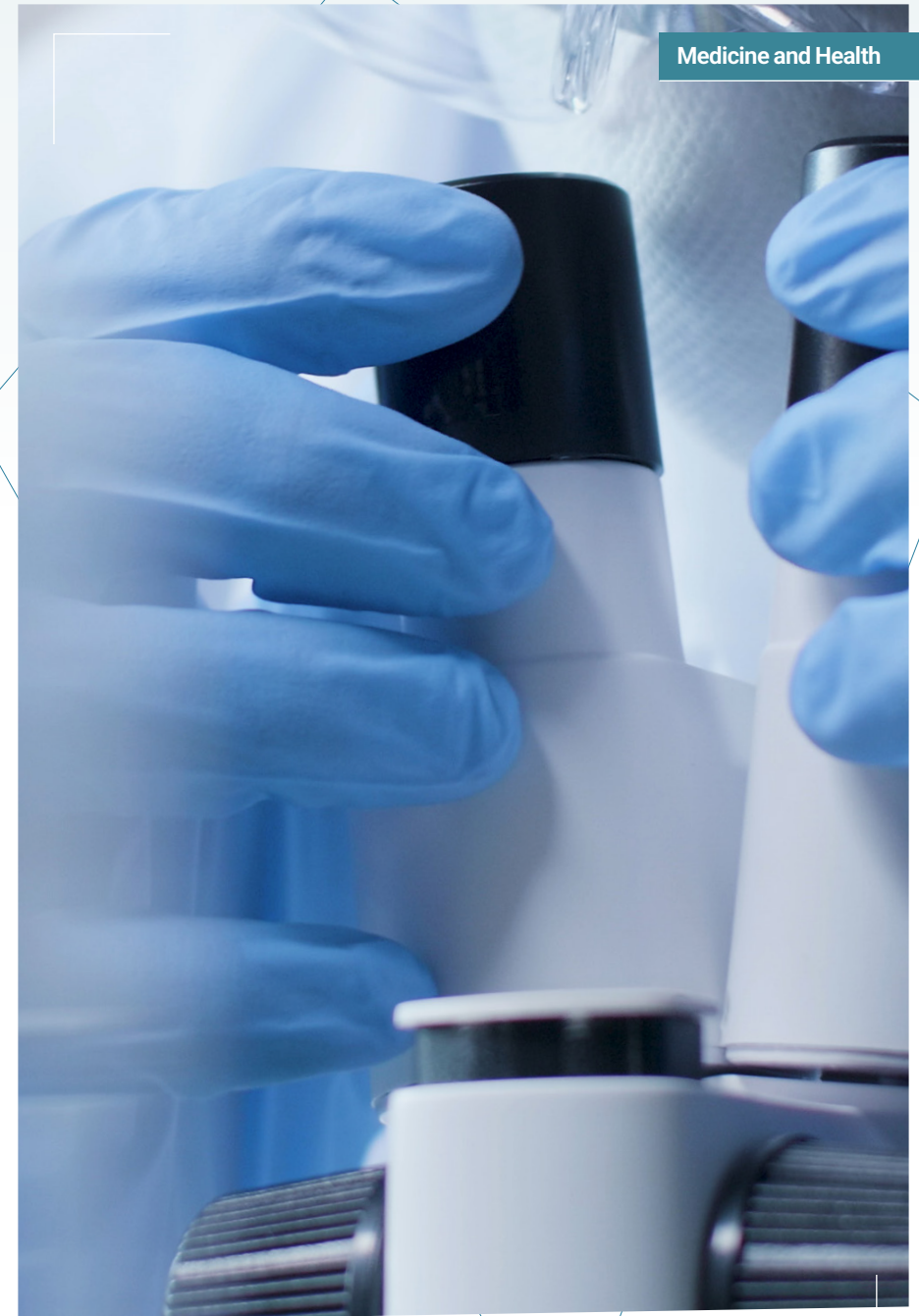
- * These services are the technical knowledge of raw material production of the finished products.

This product is a final B2B consumer product.

Technical Specifications:

Drug formulation/ Reg No.	Chemical structure
Triptorelin Acetate/ 714.194-24-	
Loprolide Acetate/ 674381-53-	

<p>Octreotide acetate/ 479517-01-</p>	
<p>Argireline Acetate/ 9616204-22-</p>	
<p>Pentixather/ —</p>	
<p>Mannose Triflate/ 592051-23-</p>	



Medicine and Health



Types of Radiopeptides

Hynic-Octreotide, DOTA-Octreotate, Hynic-UBI, Hynic-Bombesin &

Kimia Pajouh Dorsa CO.

www.kpdorsa.ir



Product Introduction:

- * **Hynic-Octreotide:** Labeled radiopeptides are used as cancer cell detection kits in medical imaging.
- * **DOTA-Octreotate:** Somatostatin receptor-labeled radiopeptides are used for medical imaging.
- * **Hynic-UBI:** Labeled radiopeptides are used as detection kits for certain cells in medical imaging.
- * **Hynic-Bombesin:** Labeled radiopeptides are used as kits to diagnose cancer cells and observe disease progression in medical imaging.
- * **Hynic-PSMA-11:** Labeled radiopeptides are used as kits for metastatic diagnosis and prostate cancer treatment.
- * **HBED-PSMA-11:** Labeled radiopeptide kits are used for metastatic diagnosis and prostate cancer treatment.
- * **DOTA-PSMA-617:** Labeled radiopeptides are used as kits for metastatic diagnosis and prostate cancer treatment.
- * **Pentixafor:** Labeled radiopeptides are used as detection kits for some cells.

Founded:

2013

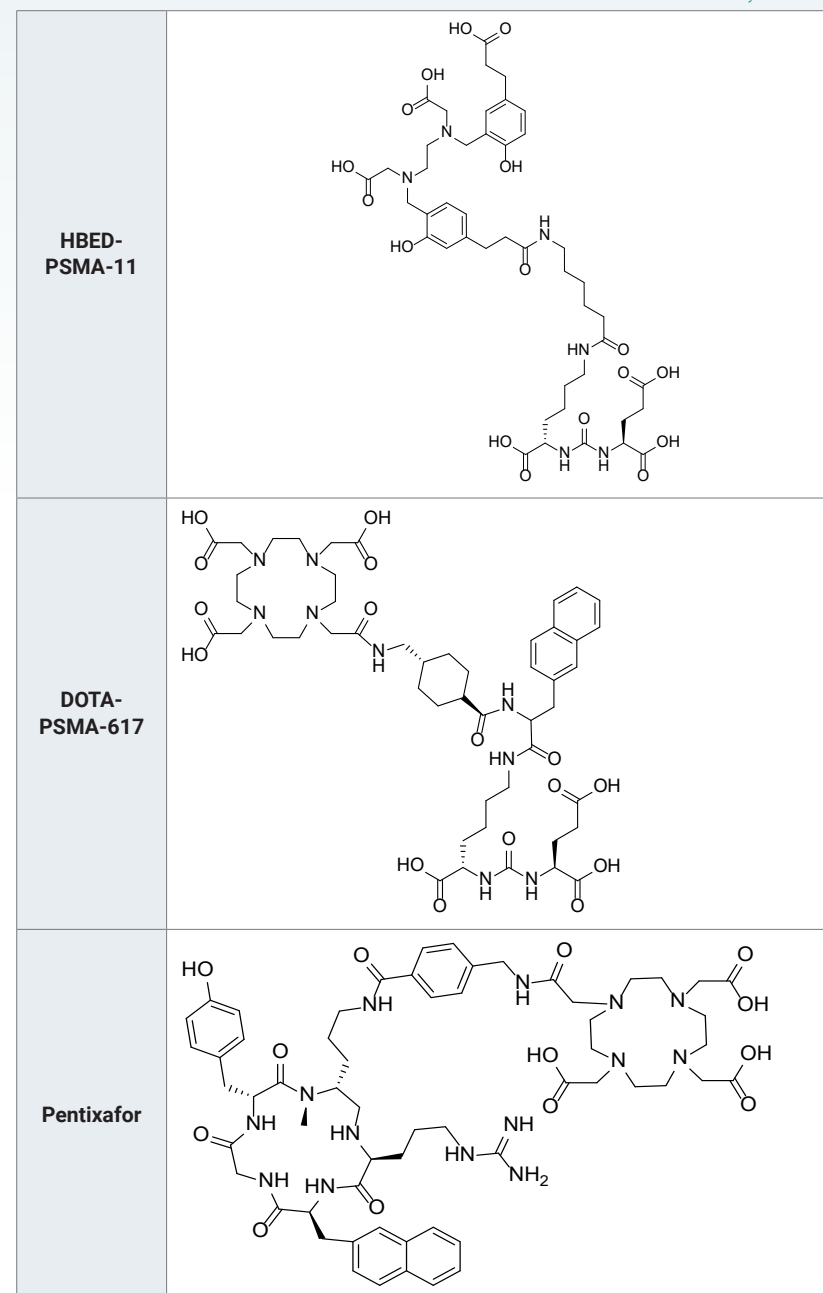
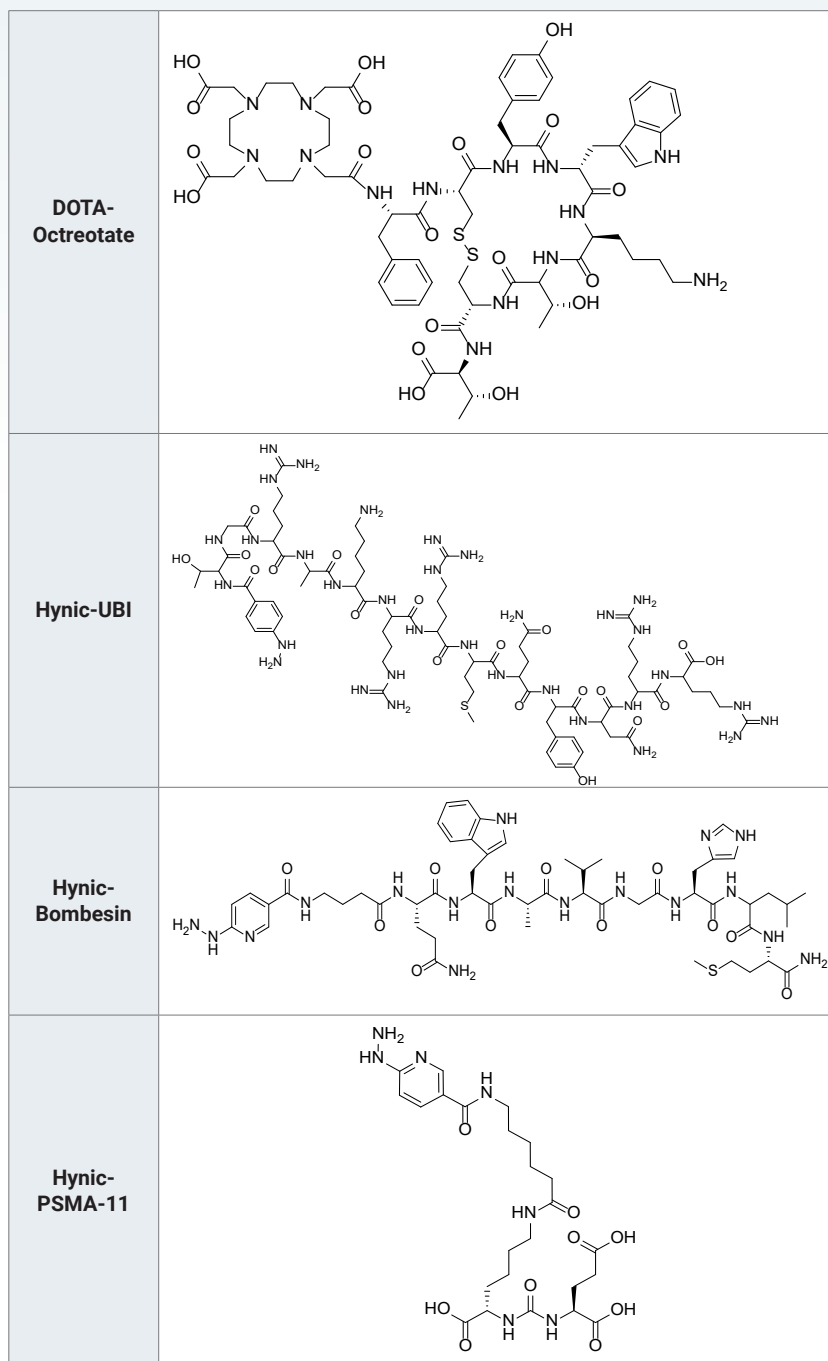
Application:

Name of radiopeptide	Application
Hynic-Octreotide	Medical imaging
DOTA-Octreotate	
Hynic-UBI	
Hynic-Bombesin	Medical imaging Prostate cancer treatment
Hynic-PSMA-11	
HBED-PSMA-11	
DOTA-PSMA-617	Medical imaging
Pentixafor	
This service is the technical knowledge of the raw material production of the final product.	

This product is a final B2B consumer product.

Technical Specifications:

Name of radiopeptide	Chemical structure
Hynic-Octreotide	





➤ API of Sofosbuvir-Daclatasvir for Treatment of Hepatitis C (HCV)

Trade Name: SOVODAK

◆ Fanavaran Rojhan Mohaghegh Daroo Co.

www.rojanpharma.com

Product Introduction:

Sovodak coated tablet contains the active ingredients Daclatasvir and Sofosbuvir. This pill is yellow and is used to treat adults with Hepatitis C. Hepatitis C, which is caused by a virus, is an infectious disease that affects the liver.

Main Export Destinations:

Azerbaijan, Uruguay, Syria and Myanmar

Exports History:

Up to 500,000 \$

Annual Production Capacity:

50,000 tablets

Founded:

2014

Application:

Treating the hepatitis C, considering the clinical measures required in adults

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Pharmaceutical form:** Polyethylene can, containing 28 coated tablets
- ※ **Contents:** Sofosbuvir 400 mg - Daclatasvir 60 mg

Advantages:

- ※ According to European and American guidelines in 2015, the drug combination Sofosbuvir / Daclatasvir in the treatment of choice for all hepatitis C genotypes, has been reported.
- ※ Response to treatment of non-cirrhotic patients of all genotypes have been more than 95% for 12 weeks.
- ※ The side effects reported in this study were close to zero, and headaches and weakness were reported in some cases at the beginning of treatment.
- ※ Combining two drugs in one pill is not an easy task. SOVODAK is an Iranian innovation.

International Standards or permission:

Exploitation license from Iran



➤ Pharmaceutical and Edible Grades of Halal Gelatin

◆ Gelatin Halal Co.

www.gelatinhalal.ir



Product Introduction:

Gelatin is a natural and pure protein that is derived from the hydrolysis of collagen in bovine bone and skin or porcine skin. The gelatins produced by this company are obtained from a series of alkaline hydrolysis treatment on bovine bones and skin.

Gelatin has 85-90% protein, 1-2% mineral salts and 8-15% water and does not contain any sugar or fat. Gelatin as a protein has 18 types of amino acids with significant amounts of amino acids glycine, proline and hydroxyproline. The presence of each of these amino acids is very important in the body and they participate in many biological activities in human body.

Annual Production Capacity:

1425 tons

Founded:

1999

Application:

- * In the pharmaceutical industry: the outer shell of hard capsules (such as antibiotic capsules), soft gelatin capsules (such as Gelofer capsules, vitamin E and A), tablet coating (creating a coating for tablets and adhesive material inside the tablets), suppositories, etc.
- * In the food industry: sweets (pastille, toffee, marshmallow, etc.), desserts (jelly, pudding, etc.), dairy products, meat products, drinks, etc.

This product is a final B2B consumer product.

Technical Specifications:

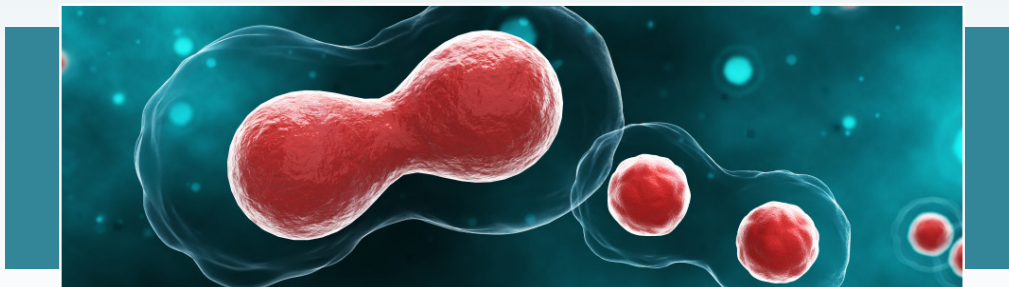
- * **Grade:** Pharmaceutical and edible
- * **Gel strength (bloom value):** 80-300

Advantages:

- * Best quality
- * 100% genuine halal

International Standards or permission:

- * Quality standard
- * Solvent standard
- * The establishment system of optimal manufacturing principles (GMP)



➤ Engineered Industrial Yeast Strain Products and Services

◆ Karin Farayand Sina Co.

www.karinbiotech.ir



Product Introduction:

One of the main barriers for entering to the market of bio-based products is to access to the potent cell line that can produce high level of the target proteins. Magic yeast is the platform that was developed by our scientist that can produce near about 22 grams of target proteins in each liter of supernatant.

Our product until now:

- 1- Alkaline Cellulase Strain
- 2- Alpha Amylase Strain
- 3- Alkaline Protease Strain
- 4- Heat Stable Amylase Strain

Annual Production Capacity:

6 engineered cells per year

Founded:

2015

Application:

- * This cell line can be used for the production of Biopharmaceutical protein and Enzymes.

This product is a final B2B consumer product.

Technical Specifications:

- * **Production platform type:** yeast (*Pichia pastoris*)
- * **Maximum production level until now:** 22 gram in each liter of supernatant

Advantages:

- * Very low-cost culture media in comparison with another platform.
- * High level of protein production
- * Short period for engineering the target cell line



➤ Inactivated Coronavirus Vaccine

Trade Name: COVIran Barekat

◆ Shafa Faarmad Co.

www.shifapharmed.com



Product Introduction:

The vaccine is of the inactivated virus type and is produced for public vaccination and the prevention of the spread of the coronavirus. The scale of its production has been 20l, 50l, and 500l bioreactors in the first phase and from 50l to 650l bioreactors in the second phase. The active ingredients of the product include phosphate buffer, alum adjuvant, Water for Injection (WFI), thiomersal, and the ultimate form of the product is an injectable suspension. The brand name of this product is COVIran Barekat.

Founded:

1993

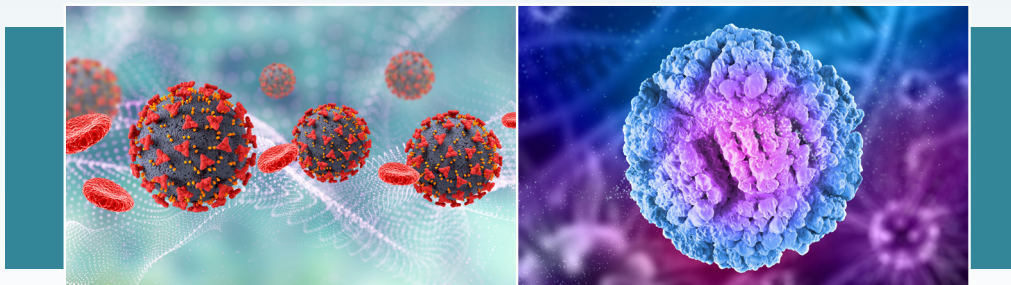
Application:

Public vaccination and immunity against the coronavirus (COVID-19)

This product is a final B2B consumer product.

Technical Specifications:

- ※ **Pharmaceutical form:** Suspension, each dose containing 5µg inactivated antigen in packs containing 10 single-dose vials



➤ Synthesis of APA6 from Penicillium Chrysogenum and Biomass Derivative

◆ Shafa Faarmad Co.

www.shifapharmed.com



Product Introduction:

Penicillin is produced by various species and strains of penicillium and fights bacterial infections produced by staphylococcus and streptococcus.

All forms of penicillin share a nucleus called 6-aminopenicillanic acid (6-APA). 6-APA is the main intermediate in the production of beta lactam. It is also called the nucleus of beta lactam and is produced via the concentration of an L-cysteine and D-valine molecule. Using the chrysogenum Penicillium strain, Penicillin G (generic name) is produced by selecting the premium natural colony, performing fermentation on the scale of 140m³, and conducting the pre-purification, purification, and crystallization stages. The final stage involves transforming Penicillin G into the 6APA via the enzymatic method, and the trade name of the product is also 6APA.

It should be noted that the product is in the form of injectable powder with purity above 99%.

Founded:

1993

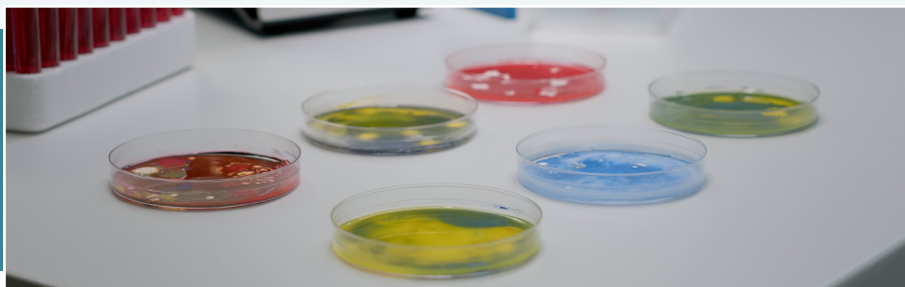
Application:

Treating various forms of bacterial infections

This product is a final B2B consumer product.

Technical Specifications:

- * **Production efficiency:** 8,000 unit per ml
- * **Activity:** 6,000 unit per ml
- * **Presentation form:** Sterile powder to make injectable solution packed in 1,000,000-unit (potassium salt) and 5,000,000-unit (sodium salt) vials



➤ Vedolizumab Antibody Generator Cell line

◆ Radin Zist Fannavar Co.

www.radinbiotech.com



Product Introduction:

The cell line represents the growth history of a tissue or organ from a fertilized embryo that helps to trace the organism's cellular origin. The cell line can be obtained by marking a cell (with fluorescent molecules or other detectable markers) and following daughter cells after cell division.

These cell lines include therapeutic drugs including vedolizumab for the treatment of Crohn's disease and Ulcerative colitis, panitumumab for the treatment of clone cancer, and Erenumab for the treatment of migraine.

Exports History:

Up to 500,000 \$

Annual Production Capacity:

1 - 5 Cell line per year

Founded:

2014

Application:

Development of industrial cell lines for the production of recombinant products, including therapeutic antibodies and biosimilars.

This product is a final B2B consumer product.

Technical Specifications:

- * The eukaryotic cell line of CHO origin
- * **Expression level:** gram /liter
- * Stable expression
- * Production of product with approved quality and biological activity according to the standard

Advantages:

- * High expression level
- * Expression stability
- * Approved quality and biological activity of the product



➤ Synthesis of Methacrylic Acid-Ethyl Acrylate Copolymer in Emulsion and Powder Forms

◆ Rah Avard Tameen Co.

www.rtpvp.com



Product Introduction:

The typical technique of medication absorption in the body has drawbacks and limitations, hence researchers suggested controlled drug release methods. The ability to deliver the drug to a specific organ or tissue, the ability to deliver multiple medicinal substances with a single formulation, and the possibility of drug delivery in nanometer dimensions are the most significant benefits of this method. Other advantages include the ability to maintain the drug concentration at a relatively constant level for a specific period of time, and the ability to adjust the drug release rate depending on the region of drug delivery. Acrylic copolymers are one of the powerful substances in this area, offering the ability of medication release in various digestive system regions based on the pH of the environment. Methacrylic acid-ethyl acrylate copolymer is produced in Iran by Rahavard Tamin Pharmaceutical Company under the trade name RT.Coat. The brand name Eudragit is used to identify this product around the world.

This substance is used in the pharmaceutical industry as a coating for enteric-coated tablets, pellets, and granules, as well as to provide slow-release coatings at the end of the small intestine (PH above 6).

Main Export Destinations:

Armenia, Pakistan, Iraq, Syria and Afghanistan

Founded:

2004

Application:

Pharmaceutical industry (coatings of tablets, pellets and granules)

This product is a final B2B consumer product.

Technical Specifications:

- * Milky-colored emulsion with low viscosity
- * Faint smell
- * Contains 28.5-31.5 wt% of dry polymer
- * Can be diluted in water and soluble in organic alcohols and acetone



➤ Polymer Tablet Coatings (RT-film) from Methacrylic Acid-Ethyl Acrylate Copolymer

◆ Rah Avarid Tameen Co.

www.rtpvp.com



Product Introduction:

A thin layer of a polymer is used as a coating on the surface of solid pharmaceutical forms like tablets. These coatings range in thickness from 200 to 100 microns.

Pharmaceutical businesses frequently employ tablet coatings for a variety of purposes. The Rahavard Tamin firm offers two varieties of RT.Film: standard and enteric. Its enteric kind is specific for medications with release property in the basic intestinal environment. Both varieties of RT.Film are specially formulated for each customer's specific needs and applications.

Main Export Destinations:

Armenia, Pakistan, Iraq, Syria and Afghanistan

Founded:

2004

Application:

Pharmaceutical industry (tablet coating)

This product is a final B2B consumer product.

Technical Specifications:

A combination of different materials such as polymer, plasticizer, talc, titanium, pigment, etc.

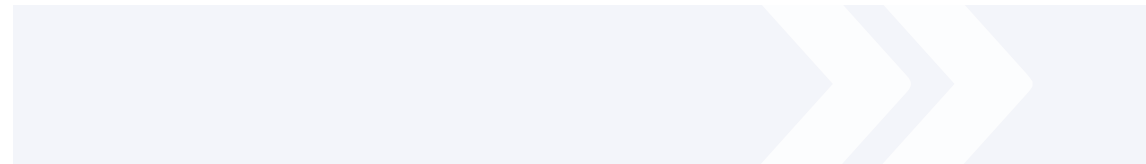
Advantages:

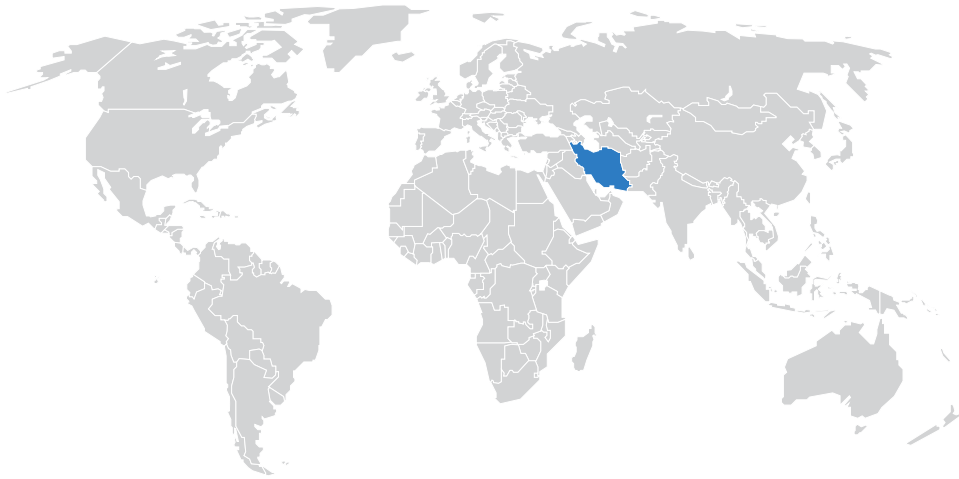
- * Shielding tablets from environmental factors including sunshine, temperature changes, moisture, environmental gases, etc.
- * Facilitates swallowing
- * Minimizing the tablet's bad flavor and odor
- * Extending the tablet's shelf life (product expiration date)
- * Making use of colorful coverings to make it simpler to recognize the product
- * Delivering targeted medications in basic environments (intestine) with precision



Iranian House of Innovation and Technology (iHiT)

Iranian house of Innovation and Technology (iHiT) is one of the types of export intermediaries that launched under the auspices of the Vice President for Science and Technology in Kenya, China, Russia, Turkey, Syria and Iraq. In addition to accessing the export instructions, these houses provide variety of services for companies to enter the interactional service markets such as: private and shared workspace, permanent exhibition of products, finding business partners and investing in the target countries of export, company registration, product registration, medicine, medical equipment and trademarks registration, dispatch and admission of business delegations, hiring local specialists to present products and service.





TEHRAN iHiT

Manager: Mohammad Karami

Field of Activity: Permanent International Exhibition | Export of products and services of knowledge-based, creative and technology companies in Tehran

Country: Islamic Republic of Iran – Tehran

Services:

- Holding permanent exhibition of knowledge-based products and services
- Holding specialized events and meetings
- Providing dedicated and shared workspace in Tehran
- Identifying export opportunities
- Identifying opportunities for scientific, technological and industrial cooperation

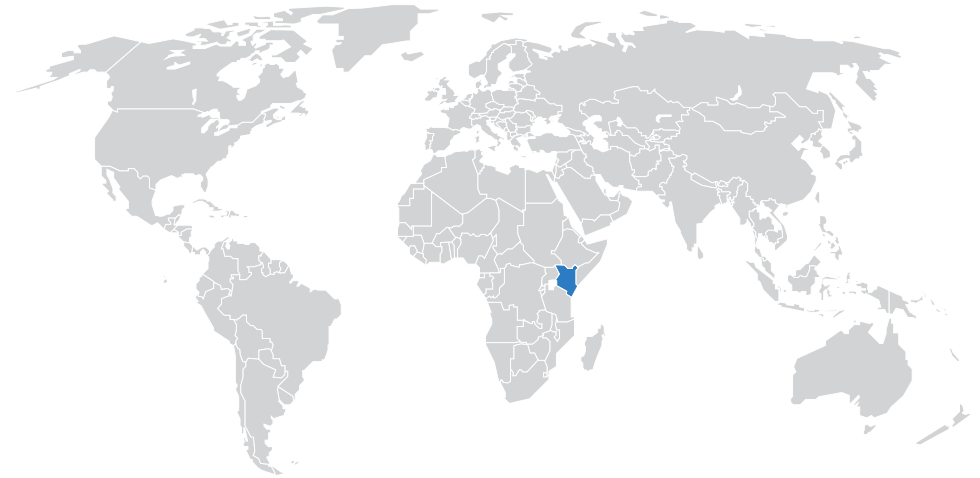
Address: Hall 37A, Tehran International Exhibition, Tehran, Iran

website: www.ihit-expo.com

Tel No: (+98) 912 444 9958 / (+98) 21 910 737 37

Supervisor: Mohammad Mahdi Agharafiee

Office Phone: (+98) 912 706 9611



NAIROBI iHiT

Manager: Ali Baniamerian

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: Republic of Kenya – Nairobi

Services:

- Holding Permanent exhibition of products and services
- Providing dedicated and co-working space
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Export development of knowledge-based products
- Identifying opportunities for scientific, technological and industrial cooperation
- Providing export instructions of the Center for International Science and Technology Cooperation

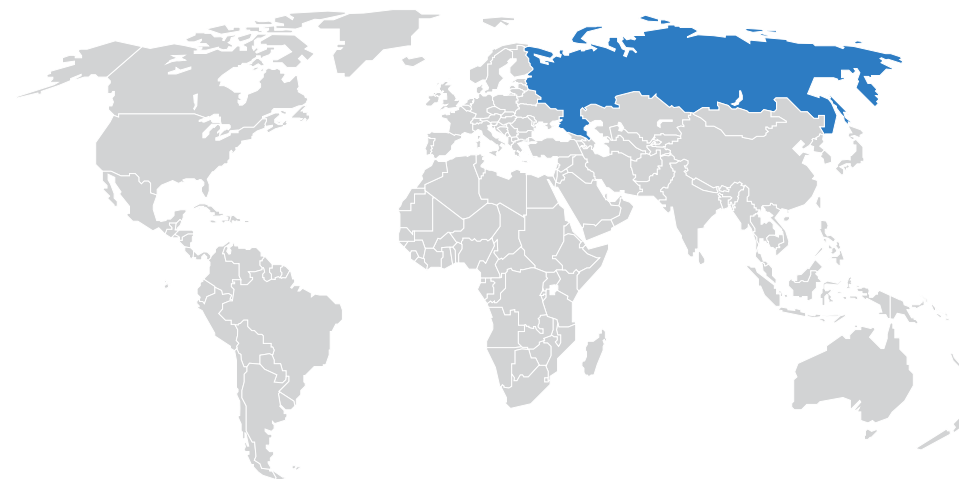
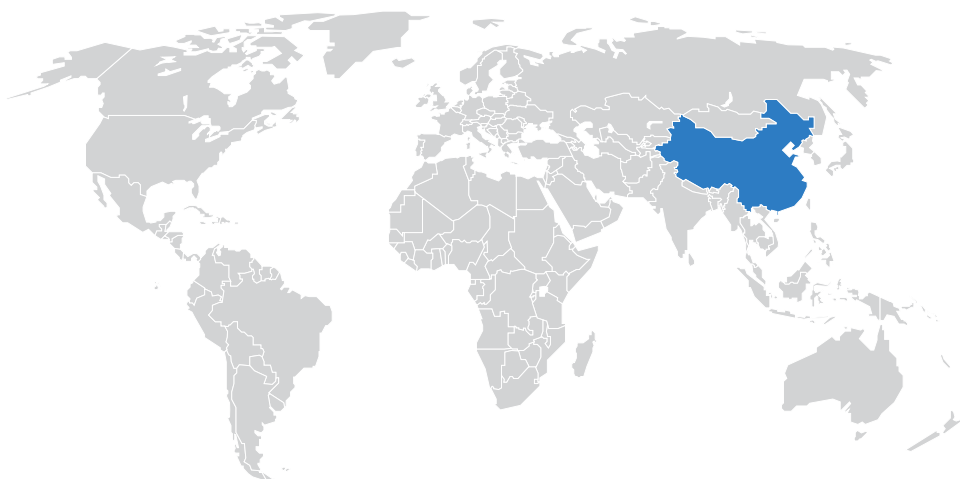
Address: Dennis Pritt Road, Next to Maalim Juma Road, Kilimani, Nairobi, Kenya

website: www.ihit.co.ke

Tel No: (+254) 111 606 113

Supervisor: Fahime Zabihi

Office Phone: (+98) 21 910 700 80 INT 301



SUZHOU iHiT

Manager: Amir Ghorbanali

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: People's Republic of China - Shanghai

Services:

- Holding Permanent exhibition of products and services
- Export development of knowledge-based products
- Providing dedicated and co-working space
- Identifying opportunities for scientific, technological and industrial cooperation
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Providing export instructions of the Center for International Science and Technology Cooperation

Address: Room 88 ,409 Keling Road, Advanced District, Suzhou, Jiangsu Province, China

website: www.innotechexport.ir

Tel No: (+86) 182 062 123 92

Supervisor: Simin Rafeapour

Office Phone: (+98) 935 841 44 22

MOSCOW iHiT

Manager: Mahdi Deilam Salehi

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: Russian Federation – Moscow

Services:

- Holding Permanent exhibition of products and services
- Providing dedicated and co-working space
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Export development of knowledge-based products
- Identifying opportunities for scientific, technological and industrial cooperation
- Providing export instructions of the Center for International Science and Technology Cooperation

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Supervisor: Malek Saeidi

Office Phone: (+98) 912 617 6293 | (+98) 21 860 537 15 INT 309



ISTANBUL iHiT

Manager: Masoud Hasani

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: Turkey – Istanbul

Services:

- Holding Permanent exhibition of products and services
- Providing dedicated and co-working space
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Export development of knowledge-based products
- Identifying opportunities for scientific, technological and industrial cooperation
- Providing export instructions of the Center for International Science and Technology Cooperation

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Tel No: (+90) 21 240 141 44 **Whatsapp:** (+90) 533 505 4589

Supervisor: Masoud Hasani

Office Phone: (+98) 21 882 227 55



DAMASCUS iHiT

Manager: Mohammad Hadi Zeighami

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: Syrian Arab Republic – Damascus

Services:

- Holding Permanent exhibition of products and services
- Providing dedicated and co-working space
- Export development of knowledge-based products
- Identifying opportunities for scientific, technological and industrial cooperation
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Providing export instructions of the Center for International Science and Technology Cooperation

Address: Damascus Freezone, Jamarag Sq., Damascus, Syria

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Tel No: (+98) 918 693 39 33

Supervisor: Hasan Tahmasebi

Office Phone: (+98) 21 631 033 15



Iraq (Sulaymaniyah) iHiT

Manager: Hossein Salmani

Field of Activity: Export of products and services of knowledge-based, creative and technology companies

Country: Iraq, Sulaymaniyah

Services:

- Holding Permanent exhibition of products and services
- Providing dedicated and co-working space
- Holding the National Pavilion of the Islamic Republic of Iran in international exhibitions
- Export development of knowledge-based products
- Identifying opportunities for scientific, technological and industrial cooperation
- Providing export instructions of the Center for International Science and Technology Cooperation

Address: Iraq, Sulaymaniyah, Sever St.

website: www.abc-s.com

Tel No: (+964) 774 567 03 66

Supervisor: Mohammad Mahdi Alebouyeh

Office Phone: (+98) 939 124 5009

This book includes
selected knowledge-based Iranian products
in the field of

MEDICINE and HEALTH

which is prepared for promotion in other countries.



www.cistc.ir



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