# Products Portfolio 2022 - 2023



The Biotechnology and Pharmaceutical Industries Group, BioCubaFarma, is a business organization that produces medicines, equipment and high-tech services aimed at improving human health, generating exportable goods and services and producing food with advanced technology.

BioCubaFarma is a strategic sector for the country, developed on a solid scientific basis, which meets high quality standards and has high international prestige. It is made up of 45 companies, 110 production lines, 20 Science and Technology Units, and more than 20,000 workers, 278 Doctors and 1265 Masters, specialists of high professional level integrated to research-production.

Its institutions are organized according to the principle of a "closed-loop" company that integrates all stages, from research to commercialization, to maximize the impact of its R&D programs in biotechnology and the pharmaceutical industry.

Due to extensive experience in research and compliance with good manufacturing practices, clinical trials and exports, the Cuban biopharmaceutical industry is now a mature sector that benefits from the synergy among all its companies.

Among its main productions are prophylactic vaccines against infectious diseases, biopharmaceuticals for the treatment of cancer (including monoclonal antibodies and therapeutic vaccines), products for the prevention and treatment of cardiovascular diseases, as well as for the treatment of diabetic foot ulcer. We also manufacture new-generation generic products and pharmaceutical compounds, as well as systems for the early diagnosis and prevention of malignant tumors, malformations, heredometabolic and other diseases.

It also offers natural and traditional medicine products, human placenta derivatives, plasma derivatives and advanced technology medical equipment, nanotechnology, neuroscience and neurotechnology, as well as products for agricultural and livestock use. The high scientific level of the human resources of the Cuban biopharmaceutical industry guarantees the quality and competitiveness of its projects.

BioCubaFarma is an industry with a high impact on the health of the Cuban population. It collaborates closely with the Ministry of Public Health in complex interventions, as well as in the development of therapeutic guidelines to be applied to patients. The Group manufactures and distributes more than a thousand products, and supplies almost 60% of Cuba's Basic Drug List. These satisfy different health programs that cover all stages of life, among which are:

- Program for the prevention, control and treatment of diabetes mellitus.
- Program for the prevention, diagnosis and treatment of cancer.
- Neonatal screening program.
- Epidemiological surveillance program.
- Comprehensive health program for the prevention, diagnosis and treatment of cardiovascular diseases.
- Audiology program for comprehensive care of hearing impairment.
- Tele-neurophysiology program for the diagnosis of neurological and psychiatric diseases.
- Program for early detection of child and school neurodevelopmental deviations.
- Program for the provision of technologies for neurosurgery.
- Physical and motor rehabilitation program.
- Program for the supply of vaccines for the health system.
- Program for the treatment of vitiligo.
- Program for the treatment of alopecia.
- Program for the supply of natural products beneficial to health.
- Products for the prevention, diagnosis and treatment of SARS CoV-2 viral infection.

BioCubaFarma has a consolidated international presence, 808 sanitary registrations abroad and exports to more than 50 countries. It has more than 400 projects in different stages of development and a broad investment portfolio with 2640 patents registered in Cuba and abroad.



### LABORATORIES AICA<sup>+</sup>

No	Product	Presentation	Therapeutic indication
1	Acetylcysteine	100 mg/mL in amp with 1 mL	Respiratory Tract
2	Ascorbic Acid	200 mg/2 mL	Vitamins. Other nutrients
3	Water for Injection	amp with 5 ml	Corrective solutions for fluid and electrolyte disorders
4	Amikacin	500 mg/2 mL	Anti-Infectives
5	Aminophylline	250 mg/10 mL	Respiratory Tract
6	Amiodarone Hydrochloride	150 mg/3 mL	Cardiovascular
7	Atracurium 25mg	25 mg/2.5 mL in amp with 3 ml	Muscle relaxing
8	Atracurium – 25 SP	25 mg/2.5 mL in amp with 3 ml	Muscle relaxing
9	Atropine	0.5 mg/mL in amp with 1 ml	Anesthetics
10	Betamethasone	4 mg/mL in amp with 1 ml	Hormones
11	Pancuronium Bromide	4 mg/2 mL	Muscle relaxing
12	Caffeine and Sodium Benzoate	250 mg/2 mL	Psychostimulant
13	Cimetidine	300 mg/2 mL	Antiulcer
14	Clindamycin	600 mg/4 ml in amp with 5 ml	Anti-Infectives
15	Chlorpromazine 25	25 mg/ml in amp with 1 ml	Psychostimulant
16	Chlorpromazine 50	50 mg/2 mL	Psychostimulant
17	Isoprenaline Hydrochloride	0.20 mg/mL in amp with 1 ml	Cardiovascular
18	Labetalol Hydrocloride	5 mg/ mL in amp with 20 ml	Cardiovascular
19	Papaverin Hydrochloride	100 mg/2 mL	Gastrointestinals
20	10% Calcium Chloride	1.0 g/10 mL (Eq. to 1.5 g calcium chloride hexahydrate)	Corrective solutions for fluid and electrolyte disorders
21	Potassium Chloride	1.8638 g/10 mL Equivalente to 25 mmol(mEq) of K⁺	Corrective solutions for fluid and electrolyte disorders
22	Co-trimoxazole	400 mg Sulfametoxazol and 80 mg of Trimetoprim in 5 mL	Anti-Infectives
23	Dexametasone 4 mg	4.0 mg/mL in amp with 1 ml	Hormones
24	Dexametasone 8 mg	4.0 mg/mL in amp with 2 ml	Hormones
25	20% Dextrose	200 mg/ mL in amp with 10 ml	Corrective solutions for fluid and electrolyte disorders
26	5% Dextrose	500 mg/10 mL	Corrective solutions for fluid and electrolyte disorders
27	50% Dextrose	10 g/20 mL	Corrective solutions for fluid and electrolyte disorders
28	Diazepam	10 mg/2 mL	SedativeS and Anxiolytics
29	Sodium Diclofenac	75 mg/3 mL	Analgesics
30	Diphenhydramine	20 mg/2 mL	Anti-Allergy
31	Digoxin	0.50 mg/2 mL	Cardiovascular

No	Product	Presentation	Therapeutic indication
32	Dihydroergotamine	1 mg/ mL in amp with 1 ml	Antimigraine
33	Diltiazem	0.005 g/mL in amp with 5 ml	Cardiovascular
34	Dimenhydrinate	50 mg/mL in amp with 1 ml	Gastrointestinals
35	Dipyrone	600 mg/2ml	Analgesics
36	Dopamine 200	200 mg/ 5 mL	Cardiovascular
37	Dopamine 50	50 mg/ 5 mL	Cardiovascular
38	Ephedrine	50.0 mg/ mL	Cardiovascular
39	Epinephrine	1.0 mg/mL in amp with 1 ml	Cardiovascular
40	Ergometrin	0.2 mg/mL in amp with 1 ml	Oxytocics/Anti-Oxitocics
41	Espasmoforte	(50 mg Camylofin and 1,25g Sodium Dipyrone)/ 5 ml	Analgesics
42	Phenylephrine	10 mg/mL in amp with 1 ml	Cardiovascular
43	Sodium Phenobarbital	200 mg/mL in amp with1 ml	Anticonvulsive/Antiepileptics
44	Fenoterol	0.5 mg/10 mL	Oxytocics/Anti-Oxitocics
45	Fentanyl	0.05 mg/mL in amp with 3 ml	Anesthetics
46	Fentanyl	0.05 mg/mL in amp with 10 ml	Anesthetics
47	Flumazenil	0.1 mg/mL in amp with 10 ml	Antidote
48	Prednisolone Phosphate	60.0 mg/2mL	Hormones
49	Furosemide 20	20.0 mg/2 mL	Diuretic
50	Gentamicin 10	10 mg/mL in amp with 1 ml	Anti-Infectives
51	Gentamicin 80	80 mg/2 mL	Anti-Infectives
52	10% Calcium Gluconate	1 g/10 mL	Corrective solutions for fluid and electrolyte disorders
53	Potassium Gluconate 0,30 g/ ml	6 g / 20 mL	Corrective solutions for fluid and electrolyte disorders
54	Granisetron	3 mg/3 mL	Gastrointestinals
55	Haloperidol	5 mg/mL in amp with 1 ml	Psychostimulant
56	Iron Dextran	50 mg/mL in amp with 1 ml	Antianemic and Coagulation modifiers
57	Imipramine	25 mg/ 2 mL	Psychostimulant
58	Kanamycin 100	100 mg/mL in amp with 1 ml	Anti-Infectives
59	Ketorolaco Trometamine	30 mg/mL in amp with 1 ml	Analgesics
60	2 % Lidocaína	20 mg/mL in amp with 2 ml	Anesthetics
61	Hyperbaric Lidocaine	150 mg / 3 mL	Anesthetics
62	Mannitol	0.25 g/mL in amp with 20 ml	Diuretic
63	Metoclopramide	10 mg / 2 mL	Gastrointestinals
64	Miconazole	200 mg / 20 mL	Anti-Infectives
65	Midazolam	10 mg / 2 mL	SedativeS and Anxiolytics
66	Midazolam 15	15 mg / 3 mL	SedativeS and Anxiolytics
67	Naloxone	0.4 mg/mL in amp with 1 ml	Psychostimulant
68	Neostigmine	0.5 mg/ mL in amp with 1 ml	Muscle relaxing
69	Niketamide	375 mg/1.5 mL	Respiratory Tract

No	Product	Presentation	Therapeutic indication
70	Sodium Nitroprussiate	20 mg/mL in amp with 1 ml	Cardiovascular
71	Norepinephrine	4 mg / 4 mL (eq to 8 mg of norepinephrine bitartrate)	Cardiovascular
72	Ondansetron 4mg	2 mg/ mL in amp with 2 ml	Gastrointestinals
73	Ondansetron 8mg	2 mg/ mL in amp with 4 ml	Gastrointestinals
74	Oxytocin-10	0.01 mg/mL in amp with 1 ml	Oxytocics/Anti-Oxitocics
75 76	Pancuronium 4 mg SP Pentoxifylline	4 mg/2 mL 300 mg/15 mL	Muscle relaxing Cardiovascular
77	Pethidine 100	100 mg/2 mL	Analgesics
78	Pethidine 50	50 mg/mL in amp with 1 ml	Analgesics
79	Pyridoxine 25	25 mg/mL in amp with 1 ml	Vitamins. Other nutrients
80	Pyridoxine 50	50 mg/mL in amp with 1 ml	Vitamins. Other nutrients
81	2% Procaine	20 mg/mL in amp with 20 ml	Anesthetics
82	Ranitidine	50 mg / 2 mL	Gastrointestinals
83	Rifamycin 250	(Rifamycin):250 mg/3 mL. (Lidocaine hydrochloride): 9.15 mg/3 mL	Anti-Infectives
84	10% Sodium Sulfadiazine	1000 mg/10 mL	Anti-Infectives
85	10% Magnesium Sulfate	1.0 g/10 mL Provides 4.1 mmol(8.12 mEq of Mg <sup>++</sup> )	Anticonvulsive/Antiepileptics
86	Morphine Sulfate- 1	2 mg/2 mL	Analgesics
87	Morphine Sulfate 10	10 mg/mL in amp with 1 ml	Analgesics
88	Morphine Sulfate 20	20 mg/mL in amp with 1 ml	Analgesics
89	Sumatriptan	6 mg / 0.5 mL	Antimigraine
90	Metoprolol Tartrate	5 mg / 5 mL	Cardiovascular
91	Tramadol	100 mg / 2 mL	Analgesics
92	Truabin®	(100 mg of Thiamine, 100 of Pyridoxine, 5 mg of Cyanocobalamin) in 1 ml	Vitamins. Other nutrients
93	Verapamil Hydrochloride	5 mg / 2 mL	Cardiovascular
94	Arsenic trioxide	1mg/mL in vial with 10 mL	Oncology
95	Carboplatin 150 mg	10mg/ml in vial with 15 mL	Oncology
96	Carboplatin 450 mg	10mg/ml in vial with 45 mL	Oncology
97	Cisplatin 10mg	1mg/ml in vial with 10 mL	Oncology
98	Cisplatin 50 mg	1mg/ml in vial with 50 mL	Oncology
99	Cytarabine 100 mg	100mg/ml in vial with 1 mL	Oncology
100	Cytarabine 500 mg	100mg/ml in vial with 5 mL	Oncology
101	Docetaxel 80 mg	40mg/ml in vial with 2 mL	Oncology
102	Doxorubicin 10 mg	2mg/ml in vial with 5 mL	Oncology
103	Doxorubicin 50 mg	2mg/ml in vial with 25 mL	Oncology
104	Fluorouracil 250 mg	50mg/ml in vial with 5 mL	Oncology
105	Fluorouracil 500 mg	50mg/ml in vial with 10 mL	Oncology
106	Calcium Folinate	7.5mg/ml in vial with 2 mL	Oncology
107	Metotrexate 50	25mg/ml in vial with 2 mL	Oncology
108	Metotrexate 500	25mg/ml in vial with 20 mL	Oncology
109	Oxaliplatin 100mg	5mg/ml in vial with 20 mL	Oncology
110	Paclitaxel 150 mg	6 mg/ml in vial with 25 mL	Oncology
111	Paclitaxel 300 mg	6 mg/ml in vial with 50 mL	Oncology
112	Vinblastine 1 mg/ml	1 mg/ml in vial with 10 mL	Oncology
113	Vincristine 1 mg/ml	1 mg/ml in vial with 1 mL	Oncology

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### **CENTER OF INMUNOASSAY**

No	Product	Presentation	Therapeutic indication
114	UMELISA TSH Neonatal	UM 2227 - Kit / 288 determinations UM 2127 - Kit / 576 determinations	Immunoenzymatic assay sandwich type used for the quantitative determination of the Thyroid Stimulating Hormone (TSH) in dry blood on filter paper samples. It has been conceived for the neonatal screening of Congenital Hypothyroidism, disease with a world incidence 1:4000 in newborns and constituting the most frequent cause of avoidable mental retardation.
115	UMTEST PKU	UMT 1201 - Kit / 288 determinations UMT 1301 - Kit/ 576 determinations	Fluorescent untra-microassay for the quantitative determination of Phenylalanine (Phe) in dry blood on filter paper. It is used for the neonatal phenylketonuria, disease with a world incidence 1:16000 and provoking severe mental retardation.
116	UMELISA 17 OH Progesterona Neonatal	UM 2035 - Kit / 288 determinations UMT 2135 - Kit/ 576 determinations	Competitive immunoenzymatic assay for the quantitative determination of 17α-hydroxyprogesterone (17OHP) in dry blood on filter paper. It has been conceived for the neonatal screening of congenital adrenal hyperplasia (HSC), an autosomal recessive inherited disease with an incidence of 1: 15000 that can lead to an adrenal crisis with danger to life and is the most frequent cause of genital ambiguity.
117	UMTEST GAL	UMT 1006 - Kit / 288 determinations UMT 1106 - Kit/ 576 determinations	Enzymatic and fluorescent ultra-microassay for the quantification of total galactose in dry blood on filter paper. It has been conceived for the neonatal screening of Galactosemia, recessive autosomal disease, with an approximate incidence 1:60000 provoking hepatic, kidney, and brain alterations even death.
118	UMTEST BIOTINIDASA	UMT 1005 - Kit / 288 determinations	Colorimetric ultra-microassay for the detection of the Biotinidase enzyme activity in dried blood on filter paper. It is used in the neonatal investigation of the deficiency or lack of the enzyme biotinidase, autosomal recessive metabolic disorder, with an incidence of 1: 60000 and provoking nervous system-related affectations such as muscular hypotonia, ataxia, psychomotor development delay, loss of hearing, optic atrophy, alopecia, respiratory problems, dermatitis, conjunctivitis, fungal infections and immunodeficiencies.
119	UMELISA TIR	UM 2037 - Kit / 288 determinations UM 2137 - Kit / 576 determinations	Fluorescent ultramicroassay for the quantitative determination of Trypsin immuno-reactive in dry blood on filter paper. It is used for the neonatal screening of Cystic Fibrosis, an autosomal recessive disease with a worldwide frequency between 1: 2000 and 1: 4 000 newborns causing lung involvement due to repeated infections caused by bronchial obstruction.
120	UMELISA HIV 1+2 Recombinant	UM 2122 - Kit / 480 determinations	<ul> <li>Indirect immunoenzymatic assay for the detection of antibodies to HIV</li> <li>1 and HIV 2 in human serum, plasma or dried blood on filter paper. It</li> <li>can be used in:</li> <li>The Certification of the donors' blood HIV infection epidemiological surveillance.</li> <li>The screening of pregnant women.</li> </ul>
121	UMELISA HBsAg PLUS	UM 2131 - Kit / 480 determinations	<ul> <li>Sandwich heterogeneous assay making use of the high affinity reaction between Streptavidin and Biotin for the detection of the surface antigen of the Hepatitis B virus (HBV) in human serum, plasma or dry blood on filter paper. The HBsAg determination is of an essential importance in:</li> <li>The screening of blood donors.</li> <li>The control of risk groups.</li> <li>The screening of pregnant women.</li> <li>The study of patients with homeopathies.</li> </ul>
122	UMELISA HBsAg Confirmatory Test	UM 2003-C - Kit / 20 determinations	Assay based on the neutralization principle for the confirmation of positive samples to HBsAg UMELISA PLUS.

No	Product	Presentation	Therapeutic indication
123	UMELISA Anti- HBsAg	UM 2023 - Kit / 288 determinations	<ul> <li>Neutralization immunoenzymatic assay for the quantification of antibodies specific to the surface antigen of hepatitis B virus in human serum and may be of interest:</li> <li>To investigate humoral immunity against Hepatitis B virus.</li> <li>For the screening of pre-immunized individuals.</li> <li>To establish the seroconversion after the active or passive immunization.</li> <li>In the differential diagnostics of hepatic diseases.</li> <li>In the follow up of patients with Hepatitis B virus.</li> <li>For the selection of positive anti HBsAG donors to obtain immunoglobulin against Hepatitis B.</li> </ul>
124	UMELISA Anti-HBc	UM 2029 - Kit / 288 determinations	<ul> <li>Heterogeneous immunoenzymatic assay to detect the presence of antibodies to the core antigen of hepatitis B virus in human serum. The importance of the detection of anti-HBcAg in serum is supported by the following aspects:</li> <li>They are the first antibodies appearing in an acute infection.</li> <li>It is the only marker of hepatitis B in the immunological window period, in which there are very low levels of its surface antigen and antibodies directed against it (anti-HBsAg) do not appear yet.</li> <li>Determine previous exposure to the hepatitis B virus.</li> <li>It is used in screening before a vaccination.</li> <li>It constitutes a useful diagnostic in epidemiological research, because it lasts for a longer time period than other markers.</li> </ul>
125	UMELISA Anti-HBc IgM Plus	UM 2039 - Kit / 192 determinations	<ul> <li>Heterogeneous immunoenzymatic assay in its capture variant employing the advantages of the high affinity reaction between Streptavidin and Biotin to detect the presence of IgM antibodies to the core antigen of hepatitis B virus in human serum. Combined with other markers is useful for:</li> <li>The presence of this marker in serum in presence of antibodies to total HBc is an indicator of laboratory diagnostics of the acute phase of infection by hepatitis B virus.</li> <li>The absence of anti-HBc IgM type in presence of total anti-HBc, is an indicator of recovery of infection by HBV.</li> <li>It allows detecting the status of the infection during the immunological window period.</li> <li>It is a useful marker in the chronic phase of HBV infection when high IgM values are detected, which are indicative of the existence of viral replication and are always associated with the liver damage produced by the virus, in both the acute and chronic stages of the disease.</li> </ul>
126	UMELISA HCV	UM 2124 - Kit / 480 determinations	<ul> <li>Indirect immunoenzymatic assay, for the detection of antibodies to the Hepatitis C virus (HCV) in human serum, plasma or dry blood on filter paper. The determination of antibodies to HCV in serum is of essential importance in:</li> <li>The screening of blood donors.</li> <li>The control of risk groups.</li> <li>The study of patients with hepathologies.</li> </ul>
127	UMELISA Dengue IgM PLUS	UM 2016 - Kit / 288 determinations	Immunoenzymatic assay in its capture variant making use of the advantages of the high affinity reaction between Streptavidin and Biotin, for the detection of IgM antibodies directed against the four serotypes of the Dengue virus in human serum or dry blood on filter paper. It is used for the diagnostics of clinically suspicious cases, as in the epidemiological surveillance systems of this disease.
128	UMELISA CHAGAS	UM 2014 - Kit / 288 determinations	Indirect immunoenzymatic assay in which ultra-microELISA strips coated by three synthetic peptides representative of different immuno- dominant regions of the membrane of Trypanosoma cruzi, which have been obtained by chemical synthesis in solid phase. It allows the detection of IgG antibodies specific to T. cruzi, in samples of human serum or dried blood on filter paper and can be used for the following purposes: 1. Screening of blood donors. 2. Screening of risk groups in endemic areas.

No	Product	Presentation	Therapeutic indication
129	SUMARAPID VIH ½ (3 líneas)	Kit / 25 determinations	Rapid qualitative immunochromatographic test based on the double antigen sandwich type immunoenzymatic principle for the detection of human immunodeficiency virus type 1 and 2 antibodies in human serum, plasma and total blood, duration between 15 and 20 minutes.
130	SUMARAPID Sífilis	Kit / 25 determinations	Rapid qualitative immunochromatographic test based on the double antigen sandwich type immunoenzymatic principle for the detection of Treponema Pallidumen antibodies in human serum, plasma and total blood, duration between 15 and 20 minutes.
131	SUMASIGNAL VHB	Kit / 48 determinations	Nucleic acid amplification assay for the quantification of hepatitis B virus (HBV) DNA in human serum or plasma. It is intended to diagnose and monitor the treatment of HBV infection. The assay uses a nucleic acid lysis solution allowing the rapid lysis and DNA HBV release from human serum or plasma. Through a real-time quantitative polymerase chain reaction (PCR), it is possible to quantify the DNA HBV by variations in the fluorescence appearing when such reaction occurs. Two primers flanking a conserved region in the HBV genome (s gene) and a specific fluorescent probe allowing quantitative detection are present in the PCR mixture.
132	SUMASIGNAL VHC	Kit / 24 determinations	Nucleic acid amplification assay for the quantification of hepatitis C virus (HCV) RNA in human serum or plasma. It is intended to diagnose and monitor the treatment of HCV infection. The assay uses magnetic particle technology for the extraction of HCV RNA from human serum or plasma. Through a real-time quantitative polymerase chain reaction (PCR), it is possible to quantify HCV RNA by variations in fluorescence taking place when such reaction occurs. Two primers flanking a sequence conserved in the HCV genome (5 'non-coding region) and a specific fluorescent probe allowing quantitative detection are present in the PCR mixture.
133	UMELISA SARS-CoV- 2 lgG	UM 2041 - Kit /288 determinations UM 2141 - Kit /480 determinations	Indirect enzyme-linked immunosorbent assay for the detection of IgG antibodies to SARS-CoV-2 in human serum or plasma, using synthetic peptides representative of the N-protein immunodominant regions of the virus as a capture antigens.
134	UMELISA SARS CoV- 2 IgM	UM 2042 - Kit /288 determinations UM 2142 - Kit /480 determinations	Indirect enzyme-linked immunosorbent assay for the detection of IgM antibodies to SARS-CoV-2 in human serum or plasma, using synthetic peptides representative of the N-protein immunodominant regions of the virus as a capture antigens.
135	UMELISA ANTI SARS- CoV-2	UM 2043 – Kit / 288 determinations	Enzime-linked immunosorbent assay for the detection of total antibodies to SARS-COV-2 in human serum or plasma samples, which uses different recombinant virus proteins as capture antigens.
136	UMELISA EGF	UM 2040 – Kit / 288 determinations	Immunoenzymatic assay sandwich type for the quantification of epidermal growth factor (EGF) employing the advantages of the high affinity reaction between Streptavidin and Biotin. UltramicroELISA strips, coated with high affinity monoclonal antibodies directed against EGF, are used as a solid phase, which guarantees the specificity of the assay. This kit is mainly used as a predictor of the CIMAvax-EGF Therapeutic Vaccine developed by the Center of Molecular Immunology.
137	UMELISA PSA	UM 2036 - Kit / 288 determinations	Heterogeneous immunoenzymatic assay sandwich making use of the advantages of the high affinity reaction between Streptavidin and Biotin. The assay determines Free and Total PSA upon an equimolar basis. Strips of ultramicroELISA coated with anti-PSA monoclonal antibodies with high affinity linear epitope, directed against PSA are used as a solid phase. PSA is considered a tumor marker associated with prostate malignant diseases, so it has not only been used for diagnosis, but also for the surveillance and monitoring of treatment in patients with PSA-secreting tumors.
138	SUMASOHF	4001- Kit / 20 determinations	Qualitative rapid test for the detection of blood occult in feces. Its combination of monoclonal and polyclonal antibodies makes it ideal for the selective identification of human hemoglobin, with a high degree of sensitivity, when present in the samples. In 5 minutes, levelsof human hemoglobin as small as $0.2 \mu$ g / mL can be detected in feces and the positive results can be seen quickly visually.

No	Product	Presentation	Therapeutic indication
139	SUMASIGNAL VPH 16/18	Kit / 48 determinations	Nucleic acid amplification assay for the detection by real-time PCR of high-risk human papilloma virus (HPV) DNA (genotypes 16 and 18) in secretions of the reproductive tract. It is intended to be used as an aid in the diagnosis of HPV infection and for the early detection of cervix cancer as well as to identify women who have a higher risk of cervical cancer due to high-risk genotypes 16 and 18. The assay uses a lysis solution to rapidly release HPV DNA. It also uses a pair of primers specific to a conserved sequence of the HPV genome, genotypes 16 and 18 (L1 region) and a specific fluorescent probe, all of them contained in the PCR mixture, allowing a rapid detection of HPV DNA (genotypes 16 and 18) through fluorescence changes occurring in real-time PCR.
140	Technological package for the control, early detection and timely treatment of cervical cancer	Digital colposcope SUMASCOPE <sup>®</sup> . Disposable kit for the cytological test. Disposable kit for the gynecological test. Fixing Solution (60 ML). Electrosurgery equipment SUMACRAF <sup>®</sup> . Kit for electrosurgery w/ smoke intake. Smoke Aspirator ASPIRAL. Equipment	Technological package for the control, early detection and timely treatment of cervical cancer comprised by various equipment and devices for the early diagnosis and treatment of the disease; fundamentally for the taking of cytological sample, the diagnostics and monitoring by colposcopy, and the elimination of small affections through electrosurgery.
141	SUMA Sensor® glucose in blood control system	Glucometer and others accessories	SUMA Sensor <sup>®</sup> glucose in blood control system it is used to determine the glucose concentration in 3 $\mu L$ of blood sample in 25 seconds.
142	UMELISA Microalbumin	UM 2038 – Kit / 288 determinations	Heterogeneous immunoenzymatic assay sandwich type for the quantification of human albumin in urine. UMELISA Microalbumin kit is used as a marker in the early diagnostics of incipient diabetic nephropathy, as well as in cardiovascular disorders in diabetic patients Types I and II.
143	System for minimal access neurosurgery	Stereotactic frame 18010100 Microcomputer software for planning SS1800V3 Microcomputer Software for Stereotactic Functional Neurosurgery ND1800V6	<ul> <li>System for minimal access neurosurgery specially designed for:</li> <li>Functional stereotactic neurosurgery.</li> <li>Intracranial lesion biopsy.</li> <li>Cyst puncture and evacuation, intraparenchematose hematomas and brain abscesses.</li> <li>Stereotaxic neuroendoscopy.</li> <li>Placement of derivative systems and reservoir systems.</li> <li>Stereotactic craniotomy.</li> <li>Volumetric Stereotactic resections of intracranial lesions.</li> <li>Guided approach in the Surgery of the Skull Basis and the high cervical spine.</li> <li>Radiosurgery.</li> </ul>
144	SUMAutoLab	Automatic equipment	The SUMAutoLab automated equipment has a capacity to process up to 12 UMELISA® and UMTEST® plates of 96 positions each, which represents more than 1000 tests in each work session. Its versatility allows programming different combinations of neonatal tests, ranging from the assembly of a single diagnosticator to the simultaneous evaluation of the 6 neonatal assays.
145	SUMA® System	Equipment System	SUMA <sup>®</sup> semiautomatic system constituting the technological support for the use of SUMA <sup>®</sup> Technology reagents (UMELISA <sup>®</sup> and UMTEST <sup>®</sup> )

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### CENTER OF GENETIC ENGINEERING AND BIOTECHNOLOGY

No	Product	Presentation	Therapeutic indication
146	ABDALA Vaccine	Suspension for intramuscular injection. Dose 0,5 mL, 10 doses for each vial.	It is indicated for specific active immunization in adults against SARS- CoV-2 virus infection.
147	Heberprot-P <sup>®</sup> (Recombinant human epidermal growth factor)	Case x1 or 6 bulbs of Heberprot-P <sup>®</sup> of 75 g Pharmaceutical form: lyophilized drug for intralesional injection	Heberprot-P <sup>®</sup> is indicated, together with other conventional therapies, for the treatment of diabetic foot in patients with neuropathic and ischemic ulcers, with an area greater than 1 cm2, to stimulate the formation of useful granulation tissue that allows closure by second intention or by autograft of skin. It should only be used under OPTIONAL PRESCRIPTION.
148	Heberbiovac HB <sup>®</sup> (Recombinant hepatitis B vaccine and its consequences)	Box of 1,10 or 25 doses. 10µg, 20µg, 100 µg and 200µg	Immunizations Hepatitis B.
149	HeberFERON <sup>®</sup> (Recombinant human alpha 2b interferon + recombinant human gamma)	Case with 10 or 25 bulbs. Pharmaceutical form: lyophilized drug for injection: IL, ID, IM Strength: 5.0 x 105 IU IFN- $\gamma$ + 3.0 x 106 IU IFN- $\alpha$	Indicated for the treatment of basal-cell carcinoma of any subtype, size and localization. It has been used in treatments of patients with COVID- 19 with excellent results.
150	Heberon® Alfa R (Recombinant human interferon alpha 2b)	Box containing 1 or 25 vials. Vials for 10 MIU, 5 MIU and 3 MIU	Antiviral, anti-proliferative and immunomodulator effects. For Infections due to Human Papiloma Virus, B and C type viral hepatitis, Herpes Zoster, patients infected with HIV, neoplasias, peyronie's disease and multiple sclerosis. It has been used in the treatment of patients with COVID-19 with excellent results.
151	Quimi-Hib® (Haemophilus influenzae type b conjugate vaccine)	Boxes with 10 doses.	Actively immunizes children between 2 months and 15 years of age against illnesses caused by Haemophilus influenzae type b bacteria.
152	Heberpenta <sup>®</sup> -L (Pentavalent liquid vaccine against diphtheria, tetanus, pertussis, hepatitis B and Haemophilus influenzae type b)	Case with 25 bulbs containing a dose of 0.5 mL each.	Heberpenta®-L is indicated for active immunization against diphtheria, tetanus, pertussis (B. pertussis), hepatitis B and Haemophilus influenzae type b, in children from 2 months of age.
153	HeberNasvac® (Recombinant therapeutic vaccine against hepatitis B virus infection)	Cases of 1, 5, 10 or 25 colorless glass bulbs with 1 or 1.6 mL each of nasal spray solution.	HeberNasvac <sup>®</sup> is indicated for active immunotherapy against chronic hepatitis B virus infection, and for the prevention of its potential consequences such as liver cirrhosis, chronic liver failure and primary hepatocarcinoma. It should be applied to patients before they suffer the mentioned complications, since its usefulness and risk-benefit ratio in those who already present them have not yet been studied. HeberNasvac <sup>®</sup> is a therapeutic vaccine indicated only for adults and by medical prescription.
154	Hebervital <sup>®</sup> (Granulocyte Colony Stimulating Factor, GCSF)	Box x 10 vials. Multiple vial package with 10 boxes for 10 vials	Restores the leukocyte blood count. Corrects neutropenia caused by chemotherapy treatments, improves the quality of life in cancer patients and it reduces the incidence of infections.

No	Product	Presentation	Therapeutic indication
155	Gavac <sup>®</sup> (Immunogen against cattle tick)	Bulbs with 30, 50 and 100 ml.	Active immunization of bovine cattle against the genus tick Boophilus sp. It controls tick infestations in cattle and acts against tick-resistant ticks.
156	HeberNem® (Ecological bionematicide)	Wettable powder. Bags 250 g	HeberNem <sup>®</sup> is a biological, environmentally friendly nematicide that has proven to be an efficient alternative, which complements the action of chemical nematicides, under an integrated pest management scheme. The product has been successfully evaluated in home growing systems dedicated to vegetable production, in semi-protected crops, and in banana and guava plantations.
157	Porvac <sup>®</sup> (Classical swine fever virus protein subunit vaccine)	Each 2 mL dose contains 50 µg of E2CD145 antigen (25 µg/mL) in Montanide ISA 50 V2 oil adjuvant	Porvac <sup>®</sup> is used in immunization for the control of classical swine fever virus from 15 days of age. It prevents the transplacental transmission of the virus, which reduces the possibility of carrier animals. Antibodies.
158	PEG-Heberon <sup>®</sup> (Recombinant human interferon alpha 2b conjugated to polyethylene glycol)	1 ml vial of 180 µg of active ingredient	For the treatment of patients with chronic Hepatitis B and Hepatitis C.
159	Hebermin® (Recombinant human epidermal growth factor)	White-opaque polyethylene bottles with a capacity of 30 or 120 g.	Hebermin <sup>®</sup> is used in the treatment of superficial and deep dermal and hypodermic burns and scars. It can be used in other surgical procedures that require tissue healing or regeneration, such as radiation injuries, cytostatic extravasation ulcers and circulatory insufficiency ulcers, as well as in the prophylaxis of superficial radiotherapy injuries.
160	Hebertrans® (Transfer factor)	Case with 6 cases for 25 bulbs	Hebertrans <sup>®</sup> is useful for patients with cellular immunodeficiency, herpes zoster, ocular herpes zoster, recurrent genital, facial or other herpes simplex, and in children with recurrent mucocutaneous herpetic infection and cellular immunodeficiency.
161	Nasalferon® (pharmaceutical composition of recombinant human IFN-alpha-2b for nasal administration)	Case of 10 boxes for a dropper bottle with 2 mL	New pharmaceutical formulation with immunomodulatory action, which enhances the immune system in vulnerable populations to COVID-19 and other acute respiratory diseases

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## CENTER OF MOLECULAR IMMUNOLOGY

No	Product	Presentation	Therapeutic indication
162	Filgrastim (granulocytic colony stimulating factor)	Case for 10 colorless glass vials with 1 and 1.6 mL each. Case for 1 pre-filled syringe of colorless glass with 1 mL.	For neutropenia treatment due to cancer patients under myelosuppressive chemotherapy, patients with acute myeloid leukemia under induction or consolidation chemotherapy, patients receiving bone marrow transplantation, cancer patients undergoing mobilization procedure and collection of hematopoietic progenitor, patients with severe and chronic neutropenia and in case of prophylaxis and treatment of neutropenia in patients with HIV/AIDS.
163	Recombinant human erythropoietin 2000 IU	Case for 1, 10 or 25 colorless glass vials with 1mL each. Case for 1 pre-filled syringe in colorless glass with 1mL.	Treatment of chronic renal anemia
164	Recombinant human erythropoietin 3000 IU	Case with 1 vial of 1mL. Case with 10 vials of 1 mL	Treatment of anemia of AIDS patients on a therapeutic regimen with zidovudine. Treatment of anemia induced by chemotherapy in cancer patients
165	Recombinant human erythropoietin 4000 IU	Case for 1, 10 or 25 colorless glass vials with 1mL each one	Prophylaxis and treatment of prematurity anemia
166	Recombinant human erythropoietin 5000 IU	Case for 1, 10 or 25 colorless glass vials with 1mL each one	Treatment of anemia of AIDS patients on a therapeutic regimen with zidovudine. Treatment of anemia induced by chemotherapy in cancer patients
167	Recombinant human erythropoietin 10000IU	Case for 1, 10 or 25 colorless glass vials with 1mL each. Case for 1 pre-filled syringe in colorless glass with 1mL.	Treatment of anemia of AIDS patients on a therapeutic regimen with zidovudine. Treatment of anemia induced by chemotherapy in cancer patients.
168	Recombinant human erythropoietin 30000IU	Case with 1 vial of 1mL. Case with 10 vials of 1 mL.	Treatment of chronic renal anemia. Treatment of anemia of AIDS patients on a therapeutic regimen with zidovudine. Treatment of anemia induced by chemotherapy in cancer patients. Prophylaxis and treatment of prematurity anemia.
169	Recombinant human erythropoietin 40000IU	Case with 1 vial of 1mL. Case with 10 vials of 1 mL.	Treatment of chronic renal anemia. Treatment of anemia of AIDS patients on a therapeutic regimen with zidovudine. Treatment of anemia induced by chemotherapy in cancer patients. Prophylaxis and treatment of prematurity anemia.
170	Nimotuzumab (Humanized monoclonal antibodyagainst EGF-R molecule)	Case for 4 colorless glass vials with 10 mL each	For treatment of epithelial tumors: head and neck advance tumors, hide grade astrocytic tumors, glioblastoma multiform and esophageal tumors.
171	CIMAVax-EGF (Vaccine chemical conjugate of recombinant human epidermal growth factor coupled to recombinant protein P64K)	Case for 4 sterile plastic syringes of 2 mL (without cover of rubber in the plunger), 8 sterile needles 21 G x 11/2, 1 case by 4 colorless glass vials with 0.8 mL of conjugate and 1 case by 4 colorless glass vials with 0.8 mL Montanide ISA 51 VG.	Patients with advanced states (IIIb/IV) non-small cell lung cancer, after first line of chemotherapy and with high concentration of Epidermal Growth Factor in serum. (EGF equal to or greater than 870 pg /mL)
172	Itolizumab (anti-CD6 humanized monoclonal antibody)	Case for 4 colorless glass vials with 5 mL each.	Moderately ill patients with very high risk of developing severe symptoms, severity ill and critical ill patients positive to SARS-CoV-2. To treatment of chronic plaque psoriasis and other immune-mediated disorders.

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### NATIONAL CENTER OF SCIENTIFIC RESEARCH

No	Product	Presentation	Therapeutic indication
173	ATEROMIXOL®;PPG® (Policosanol)	Boxes x 30 or 40 tabs (5,10, 20 mg)	Dyslipidemias. Reduction of total cholesterol and LDL-c, increasing HDL-c. Antiplatelet agent. It is recommended in elderly and patients with vascular risk factors and complications of cardiovascular diseases.
174	VASOACTOL <sup>®</sup> (Extract of Sugar Cane Wax Alcohols	Blister x 20 tabs (6 mg)	Food supplement with antioxidant activity. It helps to regulate lipid metabolism. It is recommended in patients with stress and physical wear. It increases physical performance. Also it is recommended for sportsmen.
175	ABEXOL <sup>®</sup> (Mixture of Bees Wax Alcohols)	Blister x 10 tabs or Flaks x 30 tabs (50 mg)	Food supplement with antioxidant activity. It protects gastric mucosae with anti-inflammatory effects. It is recommended in patients with dyspepsia. It also relieves mild and moderate osteoarthritis symptoms.
176	PALMEX <sup>®</sup> (Mixture of medium chain fatty acids from Royal palm fruit)	Flaks x 30 tabs (320 mg)	Food supplement, improving lower urinary tract symptoms, related with benign prostatic hyperplasia.

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TECNOLOGÍA MÉDICA DIGITAL

### COMBIOMED. DIGITAL MEDICAL TECHNOLOGY

No	Product	Presentation	Therapeutic indication
177	Electrocardiograph (CARDIOCID)	Equipment	CARDIOCID T50 is a 12-lead resting electrocardiograph, capable of viewing, acquiring, printing and storing ECG data from pediatric and adult patients. Includes the best characteristics of modern electrocardiographs in a compact and portable model.
178	Long-term Electrocardiographic System (EXCORDE 3C)	Equipment	EXCORDE 3C is used to perform Holter tests. It is a system designed for the acquisition and study of the electrocardiographic signal (ECG) of a patient while performing normal life for a period of up to 72 hours.
179	Stress Test System (ERGOCID AT-PLUS)	Equipment	ERGOCID AT PLUS is a state of the art computer based medical equipment designed to evaluate the physiologic exercise capability of patients and healthy subjects by analyzing the ECG and the concentration and flow of the inspired and exhaled gases (O2 and CO2). It can be used with an ergometric bicycle or a treadmill.

No	Product	Presentation	Therapeutic indication
180	Wireless ECG Monitoring System (MOVICORDE 2G)	Equipment	The MOVICORDE 2G system allows - using wireless transmission - the monitoring of the electrocardiographic signal during the rehabilitation process of coronary patients who perform controlled physical exercises in a cardiac rehabilitation service. It is aimed at facilitating the assistance of rehabilitation physicians, cardiologists, physiotherapists and skilled nursing staff. The use of telemetry allows specialists to monitor the electrocardiogram in real time, offering them the possibility of observing the evolution of patients using advanced tools that warn about the presence of cardiovascular risk factors, serving as a premature warning system.
181	Biphasic defibrillator-monitor (CARDIODEF 2M)	Equipment	Biphasic defibrillator-monitor, portable and autonomous. It can be used for the external treatment of ventricular fibrillation and to cardiovert other severe arrhythmias using paddles. It uses the biphasic waveform, known for its greater efficacy in resuscitation, which needs lower energy values for discharge and reduces collateral damage. It allows the selection of the energy values for the discharge up to 200 J and uses the transthoracic impedance compensation, which guarantees to deliver during the discharge the energy selected by the operator. Designed to be used in various health services, including emergency outside.
182	Self-measurement equipment for blood pressure (HIPERMAX BF)	Equipment	Portable equipment for self-measurement of blood pressure inside and outside the hospital environment. The device performs blood pressure measurements at the user's discretion by automatically inflating the cuff to the minimum necessary value. Use the oscillometer method. The measurement is performed during inflation of the cuff. It has memory for two users storing 60 values for each of the Systolic Pressure, Diastolic Pressure and Pulse.
183	Ambulatory blood pressure monitoring system (HIPERMAX PLUS)	Equipment	The HiperMax Plus outpatient recorders measure the blood pressure (BP) and heart rate (HR) of the patients using the oscillometric method for 24 or 48 hours, storing the measured values. Allows the analysis and evaluation of measurements made to patients to assist medical personnel in the diagnosis, treatment and control of arterial hypertension (AHT). The equipment is effectively applied in patients with hypertension in the evaluation and control of the dosage and medication administration schedule. It allows to detect false hypertensive patients with higher BP in the presence of doctors. Monitoring during sleep allows to analyze if the patients are "dippers" or "no dippers", a criterion closely linked to the possible damage to the target organs of the HTA.
184	Patient monitor (Doctus VIII)	Equipment	The DOCTUS is a multiparameter monitor, portable, configurable to meet all the requirements of various hospital areas and different types of patients (Adult, Pediatric or Neonate). It is used in intermediate and intensive care rooms, operating rooms, recovery, neonatology, perinatology and others. Parameters: Heart Rate, ST Level, ST Slope, Respiratory Rate, Non-Invasive Pressure, Invasive Pressure (Systolic, Medium and Diastolic), SpO2, Temperature T1 and T2, CO2 at the end of the respiratory cycle (etCO2).
185	Semi- quantitative capnograph of mainstream (Capnosafe)	Equipment	CapnoSafe is a semi-quantitative Capnograph of main flow, which allows monitoring the concentration of CO2 in the gas exhaled by a patient with body mass greater than 10 kg. It is used in the operating room to monitor the patient under anesthesia, alerting the anesthesiologist in case of inadequate ventilation. In addition, it can be used in applications such as exercise laboratories, study of lung function and indication of accidental placement of the endotracheal tube in the esophagus.
186	Pulse Oximeter (OXY AE)	Equipment	Equipment for monitoring the percentage of oxygen saturation in arterial blood and pulse rate. The values can be displayed on a color screen and the plethysmographic curve can be displayed. Its small size and ease of use make it an extremely useful tool for specialists working in operating rooms, intensive care units, intermediate and emergency medical care.

No	Product	Presentation	Therapeutic indication
187	Maternal Fetal Monitor (DOCTUS MF)	Equipment	The maternal fetal monitor is intended for monitoring the physiological parameters of pregnant women before delivery, during the exam, labor and delivery. It allows the measurement of non-invasive pressure and oxygen saturation in the mother's blood. In addition, it monitors the fetal self-movement, detects the heart rate of the fetus, has the option enabled for the case of twins and performs a self-analysis type NST (Stress without stress).
188	Emergency Trolley with resuscitation accessories (URGRAV)	Equipment	Emergency Trolley allows adequate storage, rapid mobilization and support for the use of materials and equipment necessary to perform cerebral cardiopulmonary resuscitation. It is used in operating rooms, intensive care units, emergencies and trauma and shock units.
189	Fetal heartbeat detector (DOCTUS DF)	Equipment	DOCTUS DF is used to measure the heart rate (beats) of the fetus, using the Doppler ultrasound technique in any environment such as in hospitals, offices, or at home, in a daily self-test performed by the pregnant woman herself.
190	Electrical stimulator (STIMUL W)	Equipment	It is a low frequency electrical stimulator with two output channels used in medical assistance activities in order to prevent and accelerate the healing of dermal ulcers of different etiology. It is used in hospital and outpatient treatments. STIMUL W generates bipolar electrical pulse packages that cause stimulation in the affected area. This is done through two pairs of self-adhesive electrodes that are placed on healthy skin, close to the lesion.
191	Electrical stimulator (TERAPLUS)	Equipment	It is a programmable equipment for stationary use of two low and medium frequency stimulation channels intended primarily for physical medicine and patient rehabilitation services. The repertoire of included treatments makes it possible to treat a wide range of pathological situations.
192	Primary Health Care Kit (KIT APS)	SYSTEM COMPOSITION: Stethoscope. HIPERMAX BF blood pressure self- measurement equipment (AMPA) (includes accessories). DOCTUS DF Fetal Heartbeat Detector (includes accessories). Blood Glucose Monitoring System (SMGS) SUMA SXT Sensor (includes kit of 50 biosensors and 50 lancets). OXY AE Pulse Oximeter (includes accessories). Ophthalmic and ENT diagnostic kit. Instrument kit for healing and suturing, childbirth and newborn. Hammer for neurological reflexes. Digital clinical thermometer. Flashlight for medical use.	Primary health care Kit is designed to support materials, equipment and medical devices for primary health care in remote areas and / or difficult to access. Its use allows to carry out population investigations for the presumptive diagnosis of different diseases; perform outpatient clinical diagnostic procedures, as well as some minor surgical maneuvers or emergency deliveries. It also facilitates medical work to provide immediate responses to cardiovascular, respiratory, diabetes mellitus or other diseases.

No	Product	Presentation	Therapeutic indication
193	Spirometer with oximetry functions for medical use (Espilab)	Equipment	ESPILAB is a portable spirometer with pulse oximetry function (optional). It can work completely independently, or it can be connected to a PC via USB or Bluetooth or to an external printer via USB. It is designed to measure breathing parameters, to monitor oxygen saturation and pulse rate. In addition to performing a control test to determine the quality of the readings made, the device can save the results of about 10,000 spirometries or about 500 hours of oximetry data.
194	Spirometer and portable pulse oximeter (Espidoc)	Equipment	ESPIDOC is a pocket spirometer, with an optional oximetry module. It can be used in portable mode or connected to a PC or a printer using one of several available methods: USB, Bluetooth.
195	Infusion Syringe (INFUCID SP1)	Equipment	A medical device that is used to facilitate the constant and accurate administration to the patient's body of small volumes of liquids by means of a syringe
196	Infusion Pump (INFUCID VP1)	Equipment	It is a medical device that is used, together with the infusion set, to facilitate the administration of medications, solutions or nutrients that require precision and constant supply to the patient's body.

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## CENTER OF NEUROSCIENCES OF CUBA

No	Product	Presentation	Therapeutic indication
197	Channel Portable Digital Electroencephalograph (Neuronic E-7.5).	Equipment	Epilepsies, Degenerative and Demyelinating Diseases of the CNS, Encephalic Vascular Accidents, Cranial Injuries, Infectious Diseases of the Central Nervous System (CNS), Neuropsychiatric Diseases, Monitoring of coma and brain death, Intraoperative monitoring, Studies of Sleep Pathologies, Evaluation in Occupational Medicine, Evaluation of cognitive functions.
198	36 Channel Portable Digital Electroencephalograph (NEURONIC E8.5)	Equipment	Epilepsies, Degenerative and Demyelinating Diseases of the CNS, Encephalic Vascular Accidents, Cranial Injuries, Infectious Diseases of the Central Nervous System (CNS), Neuropsychiatric Diseases, Monitoring of coma and brain death, Intraoperative monitoring, Studies of Sleep Pathologies, Evaluation in Occupational Medicine, Evaluation of cognitive functions.
199	Polysomnograph Sleep studies (MEDICID 5)	Equipment	Demyelinating diseases, inherited degenerative myelopathies, plexus lesions, and spinal muscular atrophies, spinal compromises that produce paraplegia or quadriplegia, monitoring of coma and brain death, nervous system traumatisms.

No	Product	Presentation	Therapeutic indication
200	EEG-ICU monitoring NEURONIC E-8.5	Equipment	The Neuronic EEGc-UCI computer system allows the flexible definition of different types of recording, analysis and online editing protocols that guarantee the obtaining and visualization of the electrophysiological responses necessary for monitoring in the ICU. Among the polygraph signals that are recorded, analyzed and displayed are: Electroencephalogram (EEG), Electrocardiogram (ECG), Electromyogram (EMG), Electro-oculogram (EOG), Oxygen Saturation (SO), Respiration Curves (Resp ). These signals are combined during ICU monitoring to alert medical personnel to the occurrence of functional changes expressed in ictal-appearing electroencephalographic patterns – including electrical seizures and non-convulsive seizures-, slowing of the electroencephalographic signal, drop in EEG amplitude , drop in power of the parameters derived from the EEG analysis, interhemispheric asymmetry in the EEG, loss of variability of the EEG and / or the ECG, among others, all modifications that constitute alarm signals, described in the specialized literature on the subject of EEGc.
201	Neuronic 5 for electromyography (EMG), somato sensory evoked potentials (SSEP), brainstem auditory evoked potentials (BAEP)	Equipment	It is used in different surgeries, mainly in cervical spine surgeries, lumbosacral surgeries and intracranial tumors, among others. They have two purposes: mapping that permits to identify the neural structures at risk facilitating carrying out the more secure surgeries and monitoring which allows a continuous 'feedback' of the functional integrity of the neural structures, during surgery, through the registration and interpretation of electrophysiological signals. Its advantage lies in the immediate detection of damage in monitored structures and / or roads, which allows taking measures to avoid it.
202	Intraoperative Neurophysiological Monitoring (MNIO) NEURONICA 5	Equipment	It is used in different surgeries, mainly in cervical spine and lumbosacral surgeries and intracranial tumor surgeries, among others. They have two purposes: mapping that allows identifying neural structures at risk, facilitating surgery within safer limits, and monitoring that allows continuous feedback of the functional integrity of neural structures while the act is being carried out. Surgery through the recording and interpretation of electrophysiological signals. Its advantage lies in the immediate detection of damage to monitored structures and / or pathways, thus allowing measures to be taken to avoid it.
203	Automatized Electroudiometer AUDIX 5	Equipment	Equipment that allows recording, editing and analysis of Auditory Evoked Potential (AEP), AEP of short, medium and long Latency, AEP Stable State with simultaneous air-bone stimulation at different frequencies. Diagnosis and objective characterization of hearing loss in patients who do not collaborate with conventional audiometric examination.
204	Neonatal Screening System, INFANTIX	Equipment	Ideal for evaluating newborns at risk and reducing false positives with bone conduction evaluation.
205	Otoacustic emissions equipment Neuronic EMIXI.	Equipment	Equipment that allows automatic recording of the otoacoustic emissions (OAE): spontaneous, transient and distortion product in order to check the cochlear function in newborns, children and adults. It also has the optional application of Automatic Auditory Brainstem Response (ABR) Universal screening (for all newborns) for the early diagnosis of hearing loss.
206	NEURONIC HEKTO	Portable Digital Clinic Audiometer Three variants: • Screening • Clinical • Tinnitus	Conventional clinical audiometry for audiology examinations, with liminal and supra liminal tests and logouadiometry, comprehensive health programs for the assistance to hearing impairment for both, pediatric and adult ages, and occupational medicine.

No	Product	Presentation	Therapeutic indication
207	Impedance meter NEURONIC ESPIRIO,	Equipment	Revolutionary, PC-based equipment that allows you to objectively measure the response of the middle ear. Test: Tympanometry, Stapedial reflex, Eustachian Tube function (ETF)Detection of middle ear affections, prosthetic adjustment, complement for an integral diagnosis in audiology examinations, etc.
208	Hearing Aids NEURONIC	Device	100% digital hearing aids, with advanced processing algorithms that allow to treat patients with hearing loss. It has a programming software associated with it that makes possible to personalize the prosthetic adjustment according to the hearing loss of each patient, and with the possibility of making modifications in different aspects that guarantee the optimum use of each series of devices. Behind the ear model (BTE), Mini Open BTE model, Receiver-in-canal model (RIC) and Intra model con multiple variants for each model. These devices are also associated with the use of digital technology for the manufacture of molds and shells for intra-auricular prostheses.
209	NPED (EVALUATION OF EARLY CHILD NEURODESVELOPMENT)	Instrument	It provides a standardized neurodevelopmental assessment according to the child's age, of the main milestones in sensory maturation (hearing and vision), psychomotor development and language for screening in children under 6 years of age. Applicable in the community, schools and / or child development centers.
210	OPTIMA Screening	Portable automatic instrument	Investigating hearing impairments and the risk of learning and behavior disorders in children of primary school age (over 6 years old)
211	OPTIMA Evaluation	Computerized system	Neurocognitive assessment of school-age children at risk for neurodevelopmental disorders such as: developmental dyslexia and dyscalculia, attention deficit hyperactivity disorder (ADHD) and other types of disruptive behavior disorders
212	PCUVENTE Emergency ventilator	Equipment	PCUVENTE / NV1.0 is addressed to mechanical ventilation in adult patients. Due to its characteristics, it is specially designed for emergency ventilation for periods not exceeding 15 days. It is suitableto use at the Intensive Care Units (ICU) or recovery / resuscitation rooms, and on patient's transport in and out hospital. The use of PCUVENTE / NV1.0 is restricted to sedated patients, or patients without deep sedation and not relaxed, applying a volume of controlled ventilation (VCV) mode or a Controlled Assisted Ventilation (VAC) mode (see section "Ventilation modes ")
213	Nasopharyngeal Swab	Unit	Device used to perform nasopharyngeal exudates

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### S IFV INSTITUTO FINLAY DE VACUNAS

### **INSTITUTO FINLAY DE VACUNAS**

No.	Product	Presentation	Therapeutic indication
214	VA-MENGOC-BC® Meningococcal BC vaccine	Vials containing 1, 5, 10 and 20 dose packaged in multiple boxes (10 units in each multiple box).	Suspension for intramuscular injection. It is indicated for the active immunization against the meningococcal disease caused by serogroup B and C meningococci. It is recommended from three month of age and for those living in endemoepidemic areas or traveling to those areas.
215	vax-MENGOC-ACW135® ACW135 Meningoccocal polysaccharide vaccine	Vials containing 10 dose packaged in multiple boxes (10 units in each multiple box).	Lyophilized for subcutaneous injection. It is indicated for children and adults, from two years old on for the active immunization against meningococcal disease caused by serogroup A, C and W135 meningococci. The vaccine is particularly recommended for people at risk such as those living or traveling to areas where the disease is either epidemic or highly endemic and for those people in direct contact with patients suffering from meningococcal disease caused by serogroups A, C or W <sub>135</sub> .
216	vax-SPIRAL® Trivalent leptospirosis vaccine	Vials containing 1, 5, 10 and 20 dose packaged in multiple boxes (10 units in each multiple box).	Suspension for intramuscular injection. It is recommended for people from 15 years old with occupational risk of acquiring the disease, such as people working in rice and sugar cane plantations, in the sewage, miners, veterinarians, and animal breeders, workers in slaughterhouses, shfarms, farmers and in the army. Also in people exposed to water contaminated by urine from domestic and wild animals, bathers and people camping outdoors in infected areas. It is also recommended for people inhabiting risk zones due to the association of elements such as: infection by rodents, humid soils, history of morbility and the presence and coexistence with domestic and/or aff ective animals.
217	SOBERANA®02 conjugate vaccine anti- SARS-CoV-2	Vials containing 1 dose packaged in multiple boxes (10 units in each multiple box).	Protein subunit conjugate vaccine developed for vaccination against the SARS-CoV-2 virus. Scheme of two doses of SOBERANA®02 with 28 days between each application. The use of a third dose with SOBERANA®Plus as a booster at 28 days increases the immune response. Each dose of SOBERANA®02 contains 25 micrograms of RBD protein conjugated to Tetanus Toxoid and absorbed in Aluminum Hydroxide gel.
218	SOBERANA®Plus vaccine anti- SARS- CoV-2	Multi-dose or single-dose vial	<ul> <li>Protein subunit vaccine conceived as a booster for vaccination against the SARS-CoV-2 virus in:</li> <li>Pediatric population (from 2 to 18 years old), applicated after two doses of SOBERANA®02 in a three-dose heterologous scheme.</li> <li>Individuals previously vaccinated with two doses of SOBERANA®02 in a three-dose heterologous scheme (over 19 years old).</li> <li>Covid-19 convalescent adults (over 19 years old) (a single dose) Each dose of SOBERANA®Plus contains 50 micrograms of RBD protein absorbed in Aluminum Hydroxide gel.</li> </ul>

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