

# 4.8. PHARMA-CEUTICAL AND MEDICAL SECTORS

## 4.8.1. Current situation and the sector role

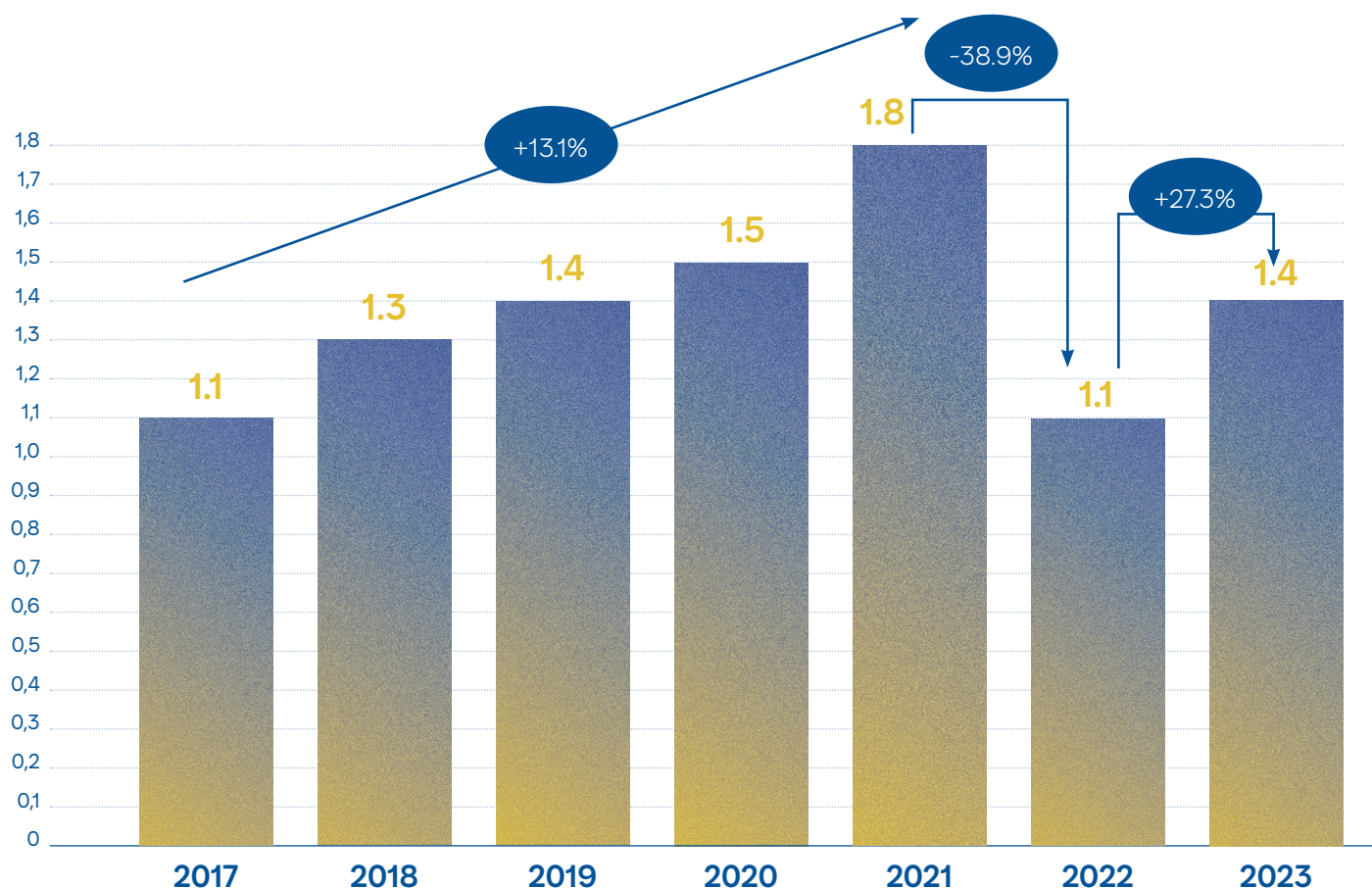
In the period from 2016 to 2021, the GDP of the Ukrainian pharmaceutical sector increased from USD 0.8 billion up to USD 1.8 billion, reaching a share of 0.9% of the total GDP in 2021. This strengthening of the industry was supported by an increase in capital investment in pharmaceutical production. Namely, from 2016 to 2021, the volume of capital investments grew steadily, increasing from USD 65 to 106 million during the specified period. The stability of capital

investments, which was maintained during the crisis period of the COVID-19 pandemic in 2020-2021, emphasises the orientation of the industry to long-term development.

According to the State Statistics Service of Ukraine, in 2021, Ukraine demonstrated a significant volume of pharmaceutical product sales, accounting for 0.9% of the country's total GDP.

However, the positive trend in sales during 2017-2021 was disrupted by a substantial decline in pharmaceutical product sales volumes due to the negative impact of the full-scale invasion in 2022.

Figure 1: The dynamics of sales volumes of the main pharmaceutical products in Ukraine, USD billion<sup>1</sup>



<sup>1</sup> - State Statistics Service of Ukraine

Meanwhile, production volumes for the full year of 2023 reached USD 1.4 billion, demonstrating a 27.3% increase compared to 2022. This indicates a rapid recovery of the industry after challenging periods and the strengthening of production stability.

**TABLE 1: The largest pharmaceutical companies in Ukraine by revenue, 2023<sup>2</sup>**

№	Company	Revenue, USD million		Growth rates
		2023	2022	2022-2023
1	Farmak	265.0	238.1	+11.3%
2	Pharmaceutical company «Darnytsia»	190.6	160.8	+18.5%
3	YURIA-PHARM	131.4	117.5	+11.8%
4	Kyiv Vitamin Plant	117.8	95.8	+22.9%
5	Arterium	112.3	94.3	+19.2%
6	Biopharma Plasma	60.8	37.1	+63.9%
7	Borshchahivskiy CPP	49.7	49.5	+0.5%
8	Pharma Start, part of Acino Group	40.5	34.0	+19.0%
9	InterChem	34.7	37.1	-6.4%
10	Lekhim-Kharkiv	15.3	18.6	-17.4%

Market leaders continue to invest in expansion of the production capacities and companies' development: «Farmak» has increased its presence in EU countries by acquiring marketing pharmaceutical companies in the Czech Republic and Slovakia in 2023, as well as in Poland in 2024. Additionally, in 2022, «Farmak» invested: USD ~20 million in construction of a new production facility in Spain and more than USD 22.4 million in the development of its production facilities in Kyiv and Shostka (Ukraine).

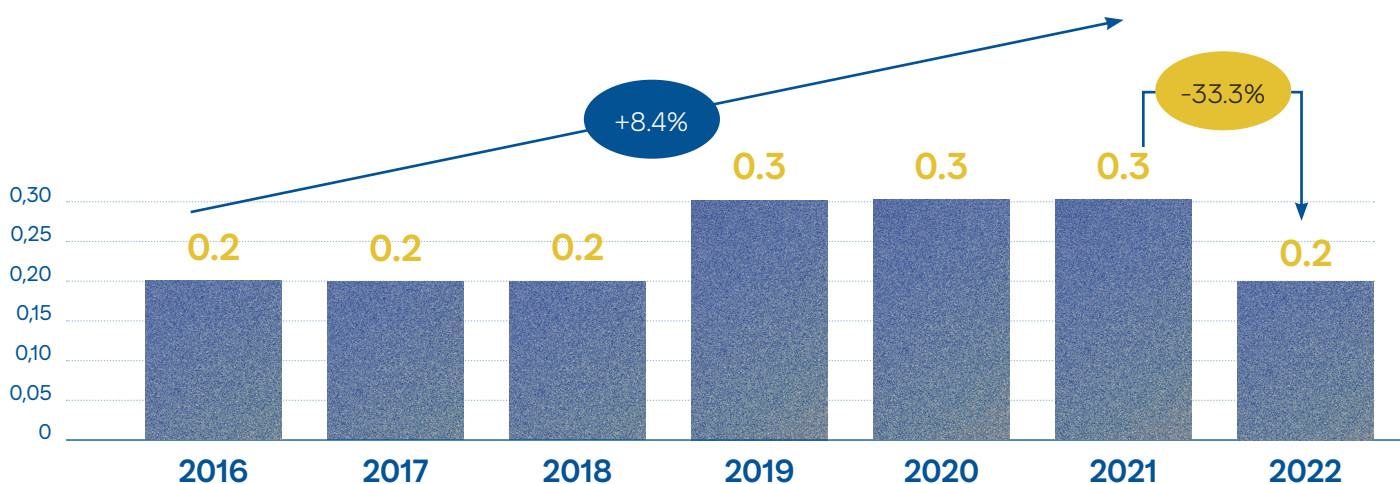
In 2023, the pharmaceutical company «Darnytsia» invested in the company's digital leadership in the industry and became the first Ukrainian company in the

pharmaceutical market to implement the latest version of the SAP S/4HANA ERP system.

In 2023, the pharmaceutical company «YURIA-PHARM» acquired the Uzbek pharmaceutical company «Reka-Med» for USD 10.8 million, obtained from the existing loan of the EBRD. This agreement will allow «YURIA-PHARM» which exports 15% of its products to Uzbekistan, to produce goods for the Uzbek market locally and release around 10% of its Ukrainian capacities for the production of products that are critically important for the domestic market.

The decrease in production volumes caused by the full-scale war has also impacted the volumes of pharmaceutical product exports. Namely, in 2022, the volume of pharmaceutical exports decreased by 24.3% compared to 2021.

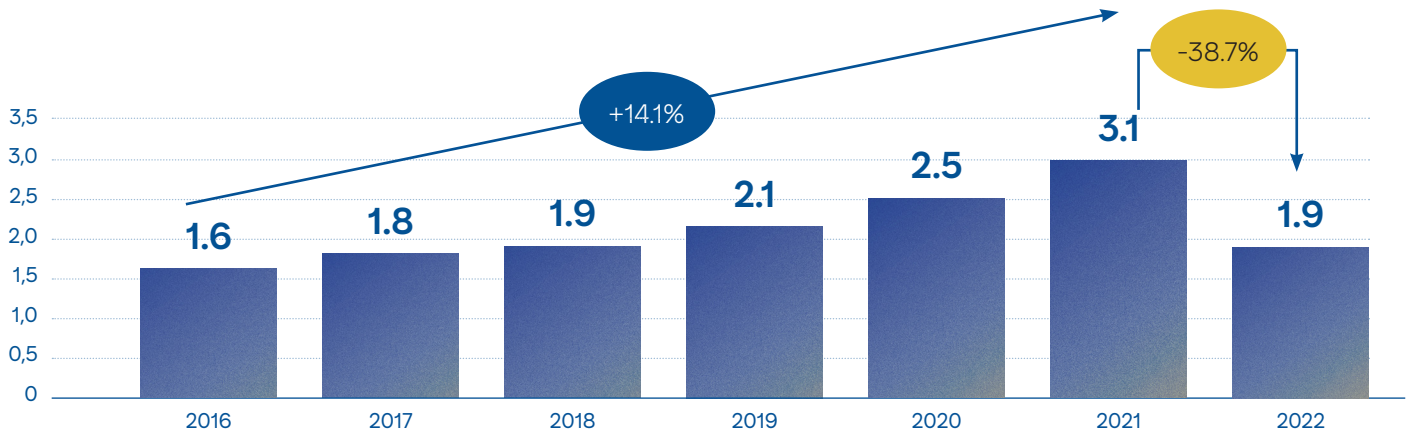
**Figure 2: The volume of export of pharmaceuticals, USD billion<sup>3</sup>**



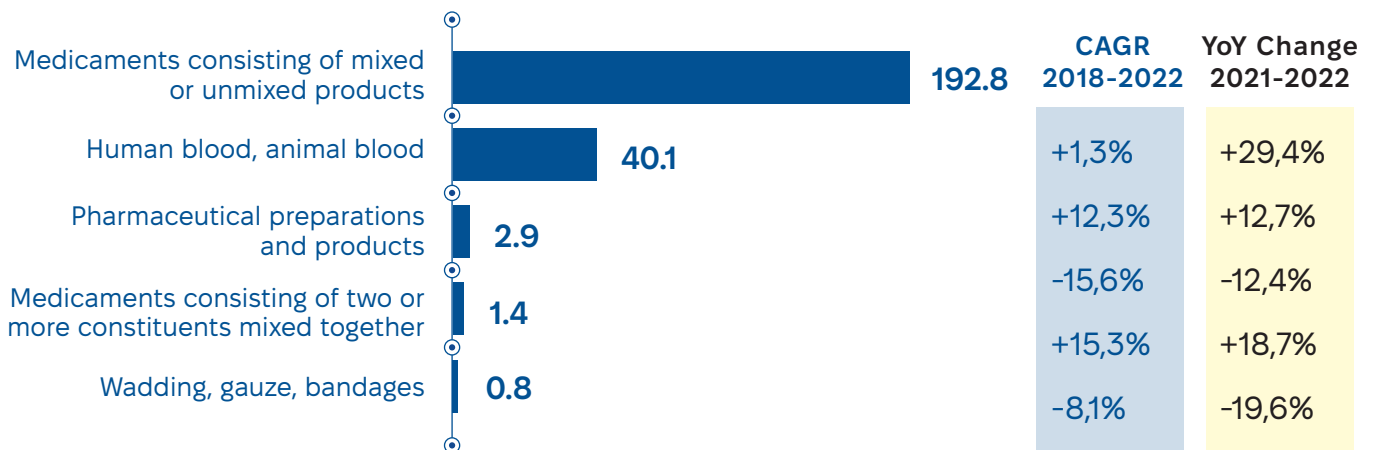
<sup>2</sup> - Opendatabot; Pharmacompass; The Page  
<sup>3</sup> - ITC Trade Map

At the same time, the pharmaceutical import was even more severely affected, showing a 38.7% decline in volumes in 2022 compared to the year before the full-scale invasion.

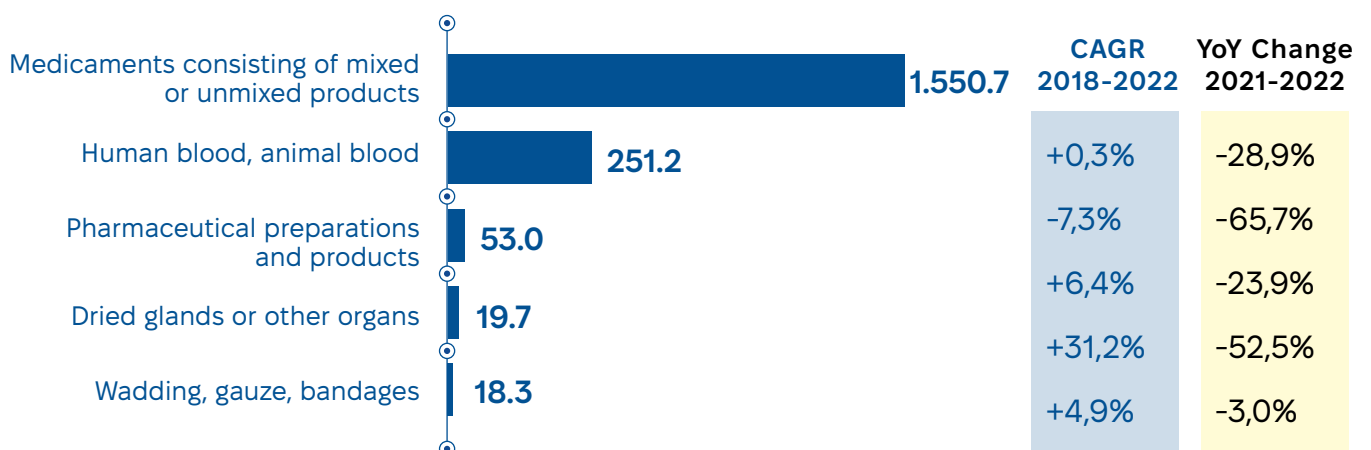
**Figure 3: The volume of import of pharmaceuticals, USD billion**



**Figure 4: The largest categories of export of pharmaceuticals, USD million, 2022**



**Figure 5: The largest categories of import of pharmaceuticals, USD million, 2022**



The largest categories of pharmaceutical imports in 2022 were: medicaments consisting of mixed or unmixed products (USD 1.5 billion) and human and animal blood (USD 0.2 billion). The largest category of pharmaceutical exports was medicaments consisting of mixed or unmixed products (USD 0.2 billion). However, considering that the sales volumes of key pharmaceutical products in Ukraine began to

recover in 2023, approaching pre-invasion levels, and the largest pharmaceutical companies in Ukraine demonstrated positive changes in income indicators in 2023, it can be concluded that the Ukrainian pharmaceutical industry continues to show signs of recovery and demonstrates prospects for further growth in the future.

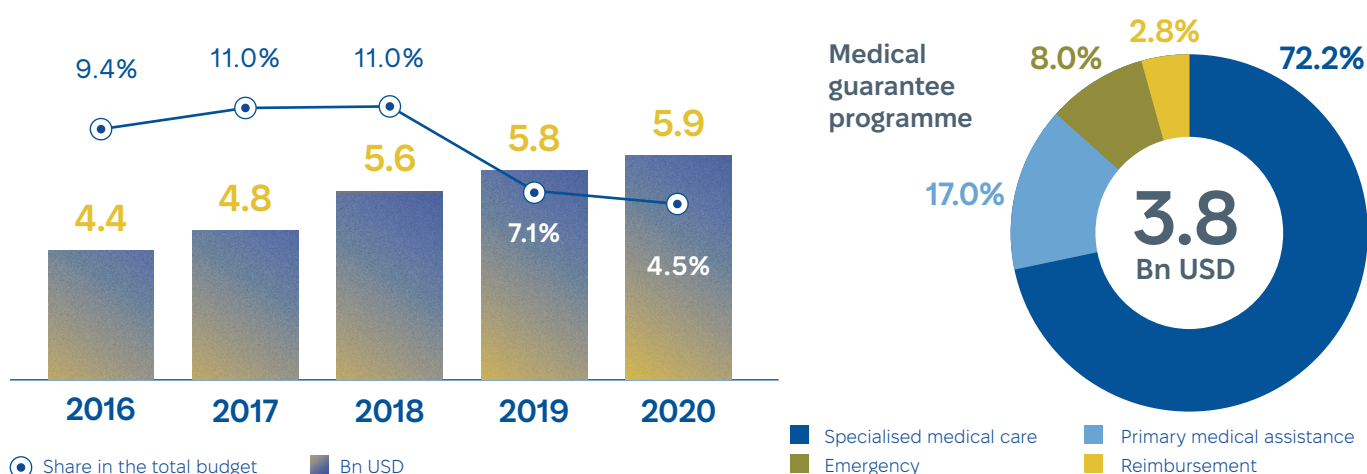
# MEDICAL SECTOR

In recent years, the healthcare system in Ukraine has undergone a significant transformation towards the Beveridge model, which guarantee a free access to medical services for all Ukrainian citizens. Until 2017, the population of Ukraine was assigned to doctors based on their registration address, doctors were paid fixed salaries regardless of services' quality, and state medical institutions received funds directly for infrastructure capacity. Instead of these, in 2017, the GoU launched a Medical Guarantee Programme (MGP), which established a new model of the healthcare sector financing with a single tariff for guaranteed medical services. Since 2018, the state funds have been allocated to patients entitled to choose family doctors and sign a declaration on the provision of medical service with them. The costs

have been compensated to medical institutions and doctors through the National Health Service of Ukraine (NHSU).

Thus, the medical sector in Ukraine is gradually transforming into a patient-centred and anti-corruption healthcare model, while doctors and medical institutions became motivated to provide quality healthcare services due to the direct dependence of their income on the number of patients. In addition, public spending on healthcare in Ukraine grew steadily over the past five years at a CAGR of +7.6%. Despite the decrease in the healthcare sector's share in the overall budget of Ukraine since the start of the Russian war due to a greater focus on defence, the MGP remained in effect.

Figure 6: Healthcare spending in Ukraine<sup>4</sup>



However, the Russian invasion in 2022 hampered the access to medical services as a result of damaged infrastructure, massive population displacement and loss of medical specialists.

TABLE 2. Top private medical clinics in Ukraine in 2023 according to the UBA Ranking<sup>5</sup>

N <sup>o</sup>	Company	Score of UBA (out of 100)	Revenue, USD million		Foundation year	Number of facilities	Number of medical fields
			2023	% from 2022			
1	Medical network 'Dobrobut'	87.30	61.4	+71.6%	2001	41	62
2	Medicom clinic	86.93	10.7	+41.0%	1992	5	42
3	Smart Medical Center LLC	64.12	8.9	+48.5%	2017	3	70
4	Medical network 'VIVA'	54.99	n/a	n/a	2005	12	30
5	Oxford Medical	54.14	5.7	+48.5%	2005	43	20
6	Medical centre 'Omega-Kyiv'	50.07	n/a	n/a	2003	4	37
7	'Clinic Verum Expert' LLC	49.94	2.9	+52.4%	2018	2	41
8	Medical centre network 'On Clinic'	48.20	0.7	+20.2%	2007	25	22
9	EUROLAB LLC	47.03	1.5	+32.5%	2004	1	56
10	Medical centre 'Helyos'	37.77	n/a	n/a	2007	4	19

<sup>4</sup> - Official website of the Ministry of Finance of Ukraine; State website of the budget for citizens 'open budget'

<sup>5</sup> - Ukrainian Business Award website, Opendatabot

The key private medical clinics in Ukraine from the UBA Ranking increased their revenues in 2023 compared to 2022, primarily due to the higher demand for medical services related to the Russian invasion. In addition, the medical services market in Ukraine has expanding with new medical facilities, as well as the medical networks have investing in the development of new medical fields. Among selected investment projects in Ukraine are:

- In 2023, Medical network 'Dobrobut' opened a new multidisciplinary hospital in Kyiv with more than 200 medical specialists, investment in which amounted to approximately USD 20 million. The new hospital occupies 8 floors with a total area of over 10,000 square metres.
- In April 2023, the ADONIS medical group of companies with 11 medical facilities in Kyiv and Kyiv region opened a new physical rehabilitation centre in Kyiv.
- In February 2024, Fozzy Group, a trade group of companies in Ukraine, opened a multidisciplinary medical centre 'Doctor Sam' in Kyiv with a licence for 34 medical fields and a total area of 1,000 square metres.

In summary, despite the war challenges, the medical services sector in Ukraine demonstrated resiliency in terms of operations and receiving public funding.

## 4.8.2. Overview and outlook of key reforms

With the start of Health Reform 2016, Ukraine has improved its position in the Health component of the Legatum Prosperity Index, ranking 101st in 2023 compared to 135th in 2017. This component measures the overall level of public health and population's access to healthcare services, as well as includes the efficiency of the healthcare system, level of diseases, risk factors, and mortality rates. The improvement of Ukrainian position was resulted primarily from the rise in indicators of preventive healthcare measures and public satisfaction with the healthcare system, owing to the establishment of access to constant communication with family doctors and the expansion of guaranteed medical services' list.

Since 2016, the regulatory framework of the pharmaceutical sector in Ukraine has undergone a period of significant transformation, driven by the introduction of initiatives to strengthen the healthcare sector. In addition to the primary focus on reorganising the healthcare facilities' structure in Ukraine, the Health reform of 2016 aimed to regulate the turnover of medicines, which contributed positively to consumer demand for pharmaceutical products.

Despite the urgent healthcare priorities on the back of martial law, Ukraine continues to improve its pharmaceutical legislation to harmonise it with the EU requirements.

## 4.8.3. Tendencies and trends

Current global issues along with a number of technological advances are transforming the pharmaceutical and medical services sectors for the improvement of public access to medical services and the promotion of sustainable development goals:

Figure 7: Implementation of global tendencies in the pharmaceutical and medical services sectors in Ukraine<sup>6</sup>



The Russian invasion of Ukraine, demographic and climate changes, the COVID-19 crisis and other factors are forcing Ukrainian pharmaceutical manufacturers and medical facilities to move towards global trends in these areas.

<sup>6</sup> - Visualisation of the KPMG analysis

## 1 Tendencies in the pharmaceutical sector:

- Production of mRNA vaccines.
- Application of AI for research.
- Increased demand for medicines for chronic diseases.
- Increased focus on mental health.

## 2 Tendencies in the medical services sector:

- Remote medicine.
- Personalised medicine.
- Improving surgical direction.
- Increased focus on reproductive medicine.

## 3 Common tendencies:

- Using 3D printing.
- Cell therapy.
- Gene therapy.

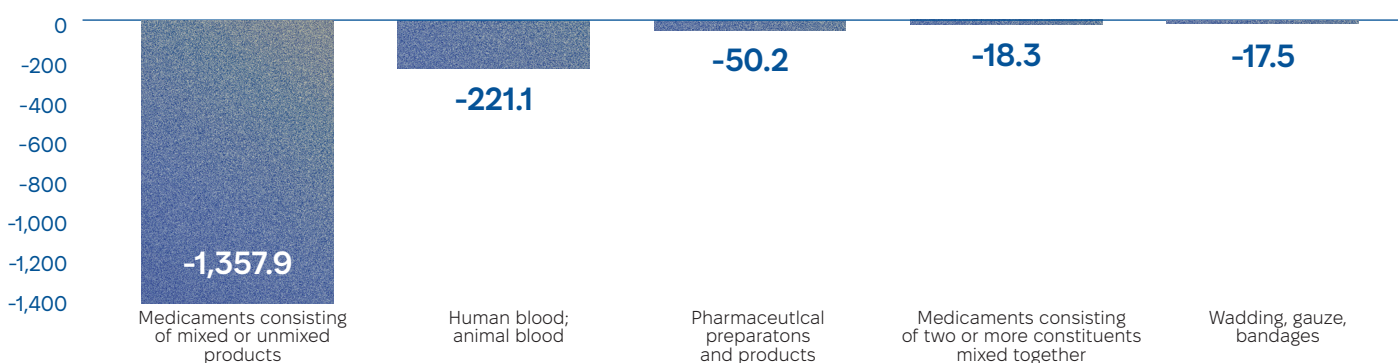
### 4.8.4. Advantages of industry development in Ukraine

#### High domestic demand

The full-scale war has significantly impacted the trade of pharmaceuticals, leading to negative changes in procurement and supply volumes. Specifically, the import of pharmaceutical products decreased by 37.5%, declining from USD 3.1 billion in 2021 to USD 1.9 billion in 2022.

At the same time, all categories of Group 30 'Pharmaceutical Products' demonstrated a negative trade balance in 2022, indicating Ukraine's dependence on the import of certain categories of pharmaceuticals and the high domestic demand.

Figure 8: Trade balance of pharmaceuticals in Ukraine, million USD, 2022<sup>7</sup>



As in previous years, the category 3002, which includes blood, immune serums, immunological products and vaccines, remained the second-largest category of imports, comprising 13.2% of the total import volume in 2022.

Overall, nearly 95% of imported pharmaceutical products consisted of Medicaments in measured

doses or packaged for retail sale and serums, along with vaccines, indicating that a large portion of the demand for pharmaceuticals (such as antibiotics, vaccines, etc.) can be met by domestic producers. Provision of domestic demand with local productions will initiate an increase in internal consumption of goods and services in the country, promoting economic growth.

#### Medical sector

The full-scale invasion has significantly impacted Ukraine's medical infrastructure. As of July 2023, 1,389 medical facility objects were damaged, while 186 objects completely destroyed. However, the restoration of medical infrastructure remains a key and prioritised aspect for ensuring accessibility of medical care to the population. Therefore, Ukraine has already managed to restore part of the medical facilities. Specifically, as of the end of July 2023, 343 medical facility objects have been fully restored, with an additional 414 objects partially restored.

The development of medical infrastructure in Ukraine is a key factor in providing accessible and quality healthcare to the population. Despite the challenges faced by the healthcare system due to military events, the implementation of the medical infrastructure restoration program aims to further improve accessibility and quality of medical services for the Ukrainian population, serving as a prerequisite.

### 4.8.5. Prospects and potential for the sector

The harmonisation of Ukrainian legislation with EU laws in the pharmaceutical and biopharmaceutical sectors will contribute to the creation of a favourable and predictable regulatory environment for the development and expansion of pharmaceutical enterprises.

Partnerships with international companies and institutions can help attract new technologies and investments, promote entry into the global market, increase competitiveness, and, accordingly, facilitate the development of exports of Ukrainian pharmaceutical products.

<sup>7</sup> - ITC TradeMap



PHARMACEUTICAL AND MEDICAL SECTORS

# Highlighted investment projects

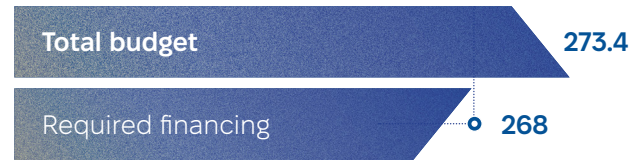
# PRJSC PHARMACEUTICAL FIRM 'DARNYTSIA'

KYIV, UKRAINE

## ESTABLISHING A PRODUCTION FACILITY OF mRNA VACCINES

- **Brief Description:** Construction of a full-cycle mRNA vaccine production, including a research laboratory, with a production capacity of 100 million doses per year, aimed to improve health security through local production.
- **Target Market:** The mRNA vaccine production facility will serve the domestic market, thereby reducing reliance on imported vaccines. The facility will also serve foreign markets to fill the gap during a pandemic.
- **Products/Services:** mRNA vaccines.
- **Value Proposition:** Provide housing and quality of life necessary for people to remain in Ukraine and encourage refugees to return home. Drive growth and employment in the construction sector, economic growth overall, and encourage Build Back Better
- **Technologies and Innovations:** mRNA-based vaccine production technology, transferred from the World Health Organization (WHO) and the Medicines Patent Pool (MPP).
- **Unique Selling Proposition:** The project involves producing top-tier vaccines with technology from WHO/MPP, and anticipating sales to low and middle-income countries under WHO/MPP mandate.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – debt finance

**Financing structure:** CAPEX – 90% / OPEX – 10%

### Expected Financial Indicators:

- NPV – 35.0 (4 years)
- DPP (months) – 180
- IRR – 40%
- Project launch period – 2025-2029
- **Non-pandemic year** Revenue – 5 EBITDA – (1.5)
- **Pandemic year** Revenue – 300 EBITDA – 205

Indicators are calculated based on the assumption that the pandemic year appears twice in a decade

- **Project Status:** The conceptualization phase of the project has been completed

## 'DARNYTSIA'

is a pharmaceutical company established in 1930, producing more than 180 products with a focus on cardiology, neurology, and pain management. As of H1 2023, 'Darnytsia' was a leader of the Ukrainian market in terms of sales volume.

## SELECTED ADVANCEMENTS OF 'DARNYTSIA'

### The only

pharmaceutical company in the rating of sustainable businesses of Ukraine (Forbes, 2022)

**Certification** since 2002

**Certification** since 2002

**Products** in the development portfolio

### Key partners

In 2022, 'Darnytsia' became the sole Ukrainian company chosen by WHO/MPP for the mRNA technology transfer program, which implies gaining technology and training from the transfer "hub" Afrigen Biologics and Vaccines, South Africa.

### Key Points of Project Implementation:



1 - The project information and financial indicators are provided by company-initiator of the project.



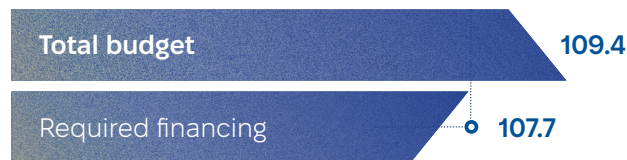
# PRJSC PHARMACEUTICAL FIRM 'DARNYTSIA'

KYIV, UKRAINE

## ESTABLISHMENT OF API\* PRODUCTION FACILITY IN UKRAINE

- **Brief Description:** Construction of the API production facility in Ukraine, with an annual capacity of 200 tonnes, intended to supply the EU with API, manufactured in close proximity to its market.
- **Target Market:** The new facility will enhance diversification of API supplies to the EU market, mitigating supply chain risks and reducing dependence on India and China.
- **Products/Services:** Active Pharmaceutical Ingredients (API).
- **Technologies and Innovations:** Fully GMP-compliant multi-purpose flexible production site with a total reactor volume of 100 cubic meters.
- **Unique Selling Proposition:** Lower costs for construction, ecological compliance and subsequent production in Ukraine, compared to EU, alongside access to skilled local personnel, will expand EU's API procurement channels at reduced costs.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – debt finance

**Financing structure:** CAPEX – 90% / OPEX – 10%

### Expected Financial Indicators:

- NPV – 0.4 (4 years)
- DPP (months) – 132
- Revenue – 25 (1 year)
- IRR – 20%
- Project launch period – [2025-2029]
- EBITDA – 9 (1 year)
- **Project Status:** The conceptualization phase of the project has been completed

## 'DARNYTSIA'

is a pharmaceutical company, established in 1930, producing more than 180 products with a focus on cardiology, neurology, and pain management. As of H1 2023, 'Darnytsia' was a leader of the Ukrainian market in terms of sales volume.

## KEY FINANCIALS IN \$ MLN, AS OF 2023 VS. 2022



### Key partners

Medical equipment suppliers, pharmaceutical companies, non-profits, construction companies, and financial institutions.

### Key Points of Project Implementation:



\*API - Active Pharmaceutical Ingredients

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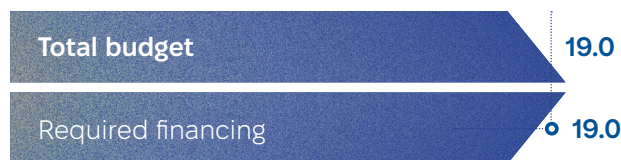
# LLC MEDICAL CENTER “DOBROBUT-CLINIC”

KYIV, UKRAINE

## MEDICAL CENTER “DOBROBUT” WITH EXPANDED REHABILITATION SERVICES

- **Brief Description:** Expansion of the clinic capacity and concentrating medical expertise in one location. The three buildings (A, B, C) of the Medical Diagnostic Center are already operational. Dobrobut plans to start the reconstruction of an integrated property complex (area 7,523 sq m) that was built in 1990 and formerly functioned as a scientific research institute
- **Target Market:** The ongoing war has created a critical need for medical services, specifically rehabilitation. The Project aims at ensuring Kyiv region inhabitants with access to the crucial medical and rehabilitation services.
- **Unique Selling Proposition:** Improved access to high quality, healthcare services by providing the effective and affordable rehabilitative and therapeutic medicine in Kyiv. New emergency department will comply with high international healthcare standards. Separated inpatient and outpatient pathflows will be provided.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – debt

**Financing structure:** CAPEX – 100%: Capital construction 65.8%, medical equipment 34.2%

### Expected Financial Indicators:

- NPV – 35.0 (10 year)
- DPP (months) – 60
- Revenue – 22.0 (5th year)
- IRR – 15%
- Project launch period – [2024-2025]
- EBITDA – 6 (5th year)

Indicators are calculated based on the assumption that the pandemic year appears twice in a decade

**Project Status:** Prepared and approved the medical task and pre-project solution (medical technology) for multi-profile medical center.

### Products/Services: Dobrobut’s facilities offer medical services across +75 specialties, including the following:

- |                    |                    |                                    |
|--------------------|--------------------|------------------------------------|
| • General Medicine | • Gastroenterology | <b>Key rehabilitation services</b> |
| • Pediatrics       | • Neurology        |                                    |
| • Gynecology       | • Orthopedics      |                                    |
| • Cardiology       | • Ophthalmology    |                                    |
| • Dermatology      | • ... and more     |                                    |
|                    |                    | • Orthopedic Care                  |
|                    |                    | • Neurological Care                |
|                    |                    | • Therapy                          |

## «DOBROBUT» MEDICAL NETWORK

is the first Ukraine’s network of private clinics, adhering to contemporary standards of medical care. “Dobrobut” medical centers are located in every district of Kyiv and provide a full range of outpatient and inpatient health care services.

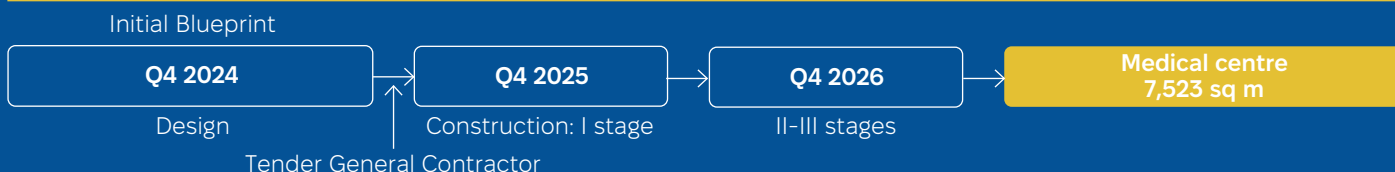
## PROJECT’S GOALS

- Reconstruction of the existing property complex
- Transfer of outpatient care in a separate building
- Expansion of rehabilitation assistance

### Key partners

Dobrobut has established trusted relationships with a broad range of equipment suppliers, engineering and construction firms. Among key partners are Siemens Ukraine, Protech Solutions (GE), Medlogistics (ALVO), Klemann Ukraine, Astis Engineering, Climate PRO, Bbraun, Harwind, etc

### Key Points of Project Implementation:



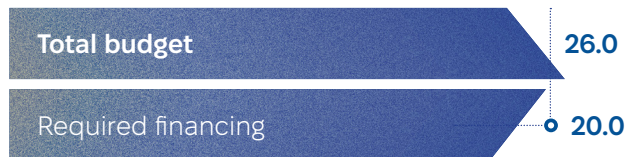
1 - The project information and financial indicators are provided by company-initiator of the project.

# LLC MEDICAL CENTER “DOBROBUT-CLINIC” KYIV, UKRAINE

## MULTIDISCIPLINARY REGIONAL MEDICAL CENTER “DOBROBUT” IN LVIV

- Brief Description:** Building a new multi-profile hospital in Lviv which will be a full-fledged facility within the diagnostic and treatment center of Medical network Dobrobut. The total area of new facility is around 11,000 sq.m.
- Target Market:** Residents of the Lviv region and individuals from across Ukraine who need medical care. The private healthcare sector reports a rising demand in Ukraine due to better access to and quality of services.
- Products/Services:** A full range of medical services for children and adults, including emergency, diagnostic, operation block, intensive, inpatient and outpatient care, rehabilitation and recovery facilities, dental clinic, ophthalmological clinic, laboratory and pharmacy.
- Unique Selling Proposition:** The project aims to establish Ukraine’s only medical centre offering all four levels of care, provide jobs for displaced medical professionals in Lviv and improve healthcare infrastructure nationwide.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – debt

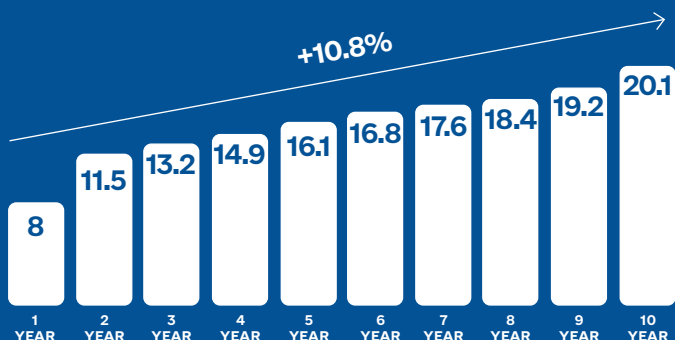
**Financing structure:** CAPEX – 100%:Capital construction 38.5%, medical equipment 55.8%, other equipment 5,7%

### Expected Financial Indicators:

- NPV – 27.1 (10 year)
- DPP (months) – 60
- Revenue – 16.1 (5th year)
- IRR – 15%
- Project launch period – [2025-2026]
- EBITDA – 5.0 (5th year)

- Project Status:** Prepared and approved the medical task and pre-project solution (medical technology)

### REVENUE EXPECTED, \$ MLN



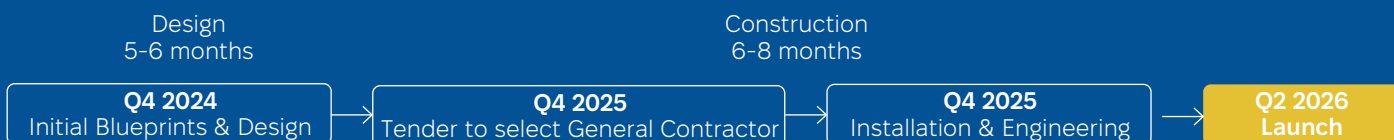
### SERVICES AND STRUCTURE

<b>Ambulance</b>	3 equipped cars   12 staff group
<b>Diagnostics</b>	CT, MRI, X-Ray, mammography, Endoscopy, Laboratory
<b>Operation block</b>	3 operation rooms
<b>Outpatients care</b>	11 pediatric rooms   17 adult rooms
<b>Inpatients care</b>	15 pediatric beds   30 adult beds
<b>Rehabilitation</b>	2 outpatient halls, 2 inpatient halls, 8 rooms
<b>Ophthalmological Clinic</b>	<b>Dental Clinic</b>

### Key partners

Siemens Ukraine, Protech Solutions (GE), Medlogistics (ALVO), Klemann Ukraine, Astis Engineering, Climate PRO, Bbraun, Harwind

### Key Points of Project Implementation:



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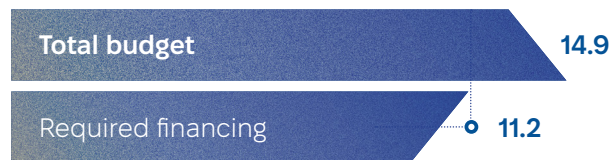
# GARVIS GROUP OF COMPANIES

DNIPRO, UKRAINE

## A MODERN CLINIC IN THE HEALTHCARE SYSTEM OF DNIPRO – GARVIS-2 CLINIC

- **Brief Description:** the construction and subsequent operation of the Garvis-2 Clinic in Dnipro, Ukraine, aimed at improving the life quality and expectancy of the local population from 73 to 77 years within the next ten years
- **Target Market:** Dnipropetrovs'k Region (Ukraine) with the population about 4,0 mln people. Also, the war in Ukraine caused a migration of additional 466,000 people to the city as of 2023.
- **Products/Services:** a full range of medical services from disease diagnostics and surgical intervention to rehabilitation
- **Technologies and Innovations:** the Clinic should be equipped with modern diagnostic technologies (CT, MRI, Mammography, X-Ray, USG, endoscopy), the state-of-art operating theatres, rehabilitation and physiotherapy equipment
- **Unique Selling Proposition:** the multidisciplinary approach, participation in the State Medical Guarantee Program, the wide range of affordable medical services within one facility will ensure a strong customer flow. The Clinic has a potential to perform 6,000-8,000 surgeries per year.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – project finance

**Financing structure:** CAPEX – 100%

### Expected Financial Indicators:

- NPV – 13.6 (5 years)
- DPP (months) – 70
- Revenue – 18.1 (5th year)
- IRR – 8%
- Project launch period – 2025-2027
- EBITDA – 5.5 (5th year)

- **Project Status:** stands at the ready for implementation stage. Garvis has signed a land lease agreement for 15 years and engaged in the process of purchasing a building for reconstruction (a down payment has been made on the building, a buy-out by the end of 2024).

## GARVIS GROUP

Garvis Group of companies is a network consisting of family medicine (8 facilities), diagnostic (1 facility), surgery (1 facility) and rehabilitation (1 facility) centres in Dnipro, Ukraine. The first healthcare facility of Garvis Group of companies was founded in 1997.

## GARVIS IN DNIPRO REGION

- **in gastro-/colonoscopy** among 60 healthcare facilities
- **in mammography** among 32 healthcare facilities
- **in family medicine** among 199 healthcare facilities ranked 1st among private facilities
- **in surgery** among 61 healthcare facilities (ranked 1st among private facilities)

## KEY FINANCIALS IN \$ MLN, AS OF 2023 VS. 2022



## SERVICE PORTFOLIO OF GARVIS-2 CLINIC



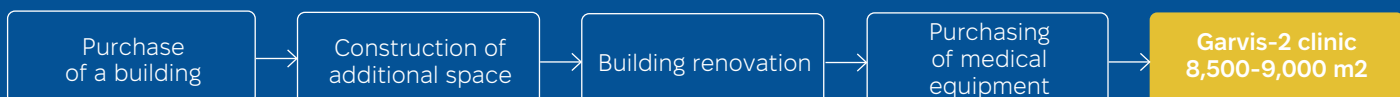
**Inpatient care** 10 surgical specialities /40-50 beds + 10 intensive care beds 4 operating theatres: 1-2 of them meet the highest standard "class A", chemotherapy

**Rehabilitation** with physiotherapy

### Key partners

KARL STORZ, Philips, Medtronic

### Key Points of Project Implementation:



1 - The project information and financial indicators are provided by company-initiator of the project.

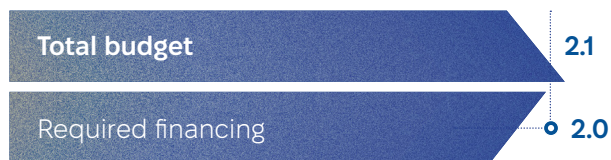
# TITAN-MED LLC

KYIV, UKRAINE

## PRODUCTION OF ENDOPROSTHESES AND EXOPROSTHESES

- **Brief Description:** purchase of advanced equipment for modernising the production of endoprostheses and exoprostheses, which may allow covering the needs of nearly 100,000 injured Ukrainians and replace imports.
- **Target Market:** injured people throughout Ukraine requiring prosthetics, including military and civilians affected by the hostilities in Ukraine
- **Products/Services:** customised and serialized 3D-printed endoprostheses and exoprostheses with a focus on large joints
- **Technologies and Innovations:** 3D printing with titanium powder, including 3D medical imaging technologies, 3D-printer and related materials
- **Unique Selling Proposition:** production will be arranged promptly by purchasing the modern 3D-printing equipment, which may ensure the fast ROI. Besides, the project will contribute to inclusivity and social responsibility goals

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – debt, equity, project finance

**Financing structure:** CAPEX – 76.9% / OPEX – 20.0%

### Expected Financial Indicators:

- NPV – 8.7 (1 year)
  - DPP (months) – 31
  - Revenue – 1.8 (1st year)
  - IRR – 88.28%
  - Project launch period – [2024-2025]
  - EBITDA – 0.1 (1st year)
- **Project Status:** stands at the implementation stage. The Company has started investing own funds in a part of necessary equipment (nearly 16.1% of total budget).

## TITAN-MED LLC

is a Ukrainian producer of endoprostheses, as well as dental instruments and materials. The Company primarily focuses on the production of metal-polyethylene, ceramics-polyethylene, and ceramics endoprostheses of joints.

Foundation year: **2017**

Average serve of endoprostheses: **15-20 years**

### Key partners

Charitable Organisation 'Brightened by the light'  
Provides prosthetics for military and civilians affected by the war in Ukraine  
Ukrainian producer of 3D-printed medical and non-medical products

### Key Points of Project Implementation:



1 - The project information and financial indicators are provided by company-initiator of the project.

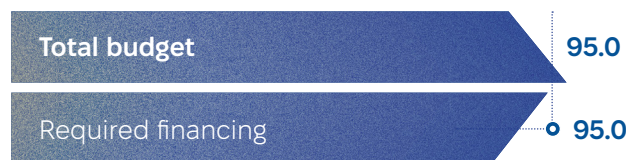
# ZHYTOMYR CITY COUNCIL

ZHYTOMYR, UKRAINE

## PPP PROJECT “NEW MULTIDISCIPLINARY HOSPITAL IN ZHYTOMYR”

- **Brief Description:** building a new consolidated multidisciplinary hospital for the entire community's needs. The hospital with a centralized location of departments for diagnosing and treating a wide range of diseases.
- **Target Market:** The hospital will serve the population of Zhytomyr city (261,600 residents) and Zhytomyr oblast (1,667 settlements; ~1,337,719 people).
- **Products/Services:** Surgical, both scheduled and urgent, therapeutic, and outpatient care will be provided. The hospital admits patients requiring treatment for childbirth, stroke, or heart attack and handles neonatal cases during emergencies. It also treats patients with multiple traumas and communicable diseases and provides pediatric care in separate departments tailored to the specific type of healthcare facility
- **Technologies and Innovations:** sustainable infrastructure using energy-efficient solutions and innovations are to be implemented
- **Unique Selling Proposition:** Specialized companies will be involved in implementing solutions based on advanced practices of functional and spatial planning of healthcare facilities. Availability payments from the public partner cover all costs of the private partner for implementation, as well as the expected return on investment.

### Projects Highlights<sup>1</sup> (\$ mln)



**Type of financing** – Initial CAPEX are financed by a private partner through equity and debt capital

**Financing structure:** CAPEX – 95.0  
OPEX: Maintenance costs – 5% for equipment and 2% for facilities

- **Project Status:** The project was identified and selected with the support of the International Finance Corporation (IFC) as a strategic advisor to the Government of Ukraine. Cooperation with IFC includes the involvement of consultants (advisors) in conducting a preliminary project assessment. In October 2023, a preliminary assessment of the project was initiated. As of May 2024, a PPP Concept Note has been prepared.

## PPP BUSINESS MODEL

“DBFM without services” or an Availability-based PPP Model - provides for the involvement of a private partner to finance, design, construct, equip, and subsequently maintain the buildings, facilities, and medical equipment of the new consolidated hospital during the term of the PPP agreement by the output specifications and key performance indicators established by the Zhytomyr

City Council. Medical services are not included in the Project and will be provided by municipal medical service providers and their employees. The source of reimbursement for the private partner’s investment and financing of the maintenance costs (including the renewal of medical equipment) of the PPP facility will be availability payments.

### Key partners

The project was identified and selected as one of the priority PPP projects in the healthcare sector in 2023 in cooperation with the Zhytomyr City Council, the Ministry of Health of Ukraine and in pursuance of the Memorandum of Understanding between the Government of Ukraine and the International Finance Corporation.

### Key Points of Project Implementation:



<sup>1</sup> - The project information and financial indicators are provided by company-initiator of the project.