



Ministry of Investment,
industry and trade
of the Republic of Uzbekistan

Investment proposal: Biomedical diagnostics & I.V. solutions plant



Biomedical diagnostics & I.V. solutions plant

Economic impact:

- Reduces reliance on imported medical diagnostics and I.V. solutions, saving millions in foreign currency annually.
- Creates a new high-value export stream to Central Asian markets, contributing to Uzbekistan's trade balance.
- Generates 450 direct jobs and ~1,000 indirect jobs, increasing income tax and social contribution revenues.

Social impact:

- Ensures consistent local availability of essential diagnostic and therapeutic products at lower cost.
- Brings global pharmaceutical manufacturing standards (GMP, ISO) and upgrades local workforce skills.
- Trains medical technicians, engineers, and biochemists—boosting national human capital in healthcare manufacturing.



Economic indicators:



Financing: 105 mln USD



Area: 5 hectares



Revenue: \$60 million/year



ROI: 39%



NPV: ~ \$47,5 million



IRR: ~19,2%

Production indicators:



Diagnostic test kits: 12 million units.



I.V. infusion solutions: 60 million vials (100–500ml)



Vitamin complexes: 10%



In Vitro diagnostic devices:

- Blood and urine test systems
- Immunoassay reagents
- COVID-19 and other infectious disease test kits



Intravenous (I.V.) solutions:

- NaCl 0.9%, Ringer's solution, Glucose 5%
- Metronidazole, Paracetamol I.V.
- Antibiotic infusions
- Sterile water and physiological saline

Project description:

1. Establishment of a modern manufacturing facility in Uzbekistan to produce in vitro diagnostic devices and intravenous (I.V.) solutions under the Abbott brand.
2. Blood and urine test kits, immunoassay reagents, COVID-19 diagnostics, and I.V. infusions including NaCl, Glucose, Metronidazole, and Paracetamol.
3. Market focus: The facility will supply Uzbekistan's healthcare sector and export to Central Asian countries including Kazakhstan, Kyrgyzstan, and Afghanistan.
4. Total investment of \$105 million (including OPEX reserve), with annual capacity of 12 million diagnostic kits and 60 million I.V. bottles.

Location of the project



Tashkent region	
Size	15 300 km ²
Population	3,1 million



Medicine processing chain & product yield

Key production stages

In Vitro diagnostics (IVD) production stages:

1. Reagent formulation & mixing - preparation of biochemical reagents in sterile lab environments.

2. Test kit assembly - integration of reagents into cartridges, strips, or vials with plastic housings.

3. Packaging & labeling - kits are sealed in sterile blister packs or boxes, labeled with barcodes and instructions.

4. Quality control & validation - batch testing for sensitivity, specificity, shelf life, and compliance with GMP and ISO standards.

Intravenous (I.V.) solutions production stages:

1. Water purification & raw material prep - multi-stage filtration and reverse osmosis to create pharmaceutical-grade water (WFI).

2. Solution mixing - active pharmaceutical ingredients (e.g. NaCl, Glucose) are mixed in stainless steel tanks.

3. Filling & sealing - automated aseptic filling of vials (100–500 ml), followed by sealing and leak testing.

4. Sterilization & quality assurance - heat or gas sterilization, batch sampling, and microbial testing before release.

Product yield breakdown

	Product type	Share (%)	Quantity (units)
1	Blood & urine test kits	40%	4,8 mln
2	Immunoassay reagents	30%	3,6 mln
3	Infectious disease (e.g., COVID-19) tests	30%	3,6 mln
4	Total IVD kits	100%	12 mln

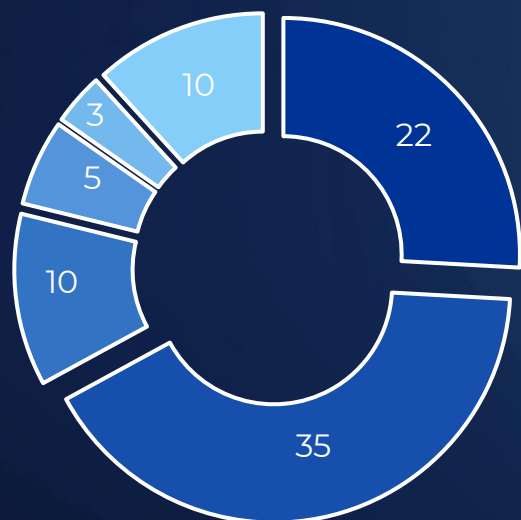
	Product type	Share (%)	Quantity (units)
1	NaCl 0.9%, Glucose 5%, Ringer	50%	30 mln
2	Metronidazole, Paracetamol I.V.	20%	12 mln
3	Antibiotic infusions	20%	12 mln
4	Sterile water & saline (WFI)	10%	6 mln
5	Total I.V. solutions	100%	60 mln



Project expenses

Initial Investment (CAPEX) (mln dollar)

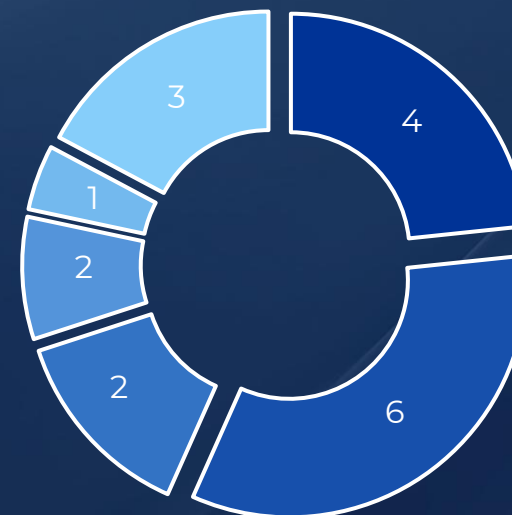
Total CAPEX: **\$85 mln**



- Facility construction & infrastructure
- Equipment and technology
- Laboratory instruments and QA systems
- Packaging and sterilization lines
- IT systems & Automation
- Others

Operating Costs (OPEX) (mln dollar)

Total OPEX: **\$18 mln**



- Labor & salaries
- Raw materials and reagents
- Utilities and energy
- Maintenance and technical service
- Sterilization & sanitation supplies
- Others

This financial overview outlines a comprehensive cost structure and strong profitability of the proposed pharmaceutical products manufacturing project. The breakdown includes both initial capital investment (CAPEX) and annual operating costs (OPEX), alongside projected revenue and profit estimates.

Product	Volume	Price (\$/pack)	Revenue (\$)
Blood & urine test kits	4,8 million	\$1,59	7,65 million
Immunoassay reagents	3,6 million	\$2,39	8,6 million
Infectious disease test kits	3,6 million	\$1,99	7,2 million
NaCl, Ringer, Glucose	30 million	\$0,52	15,5 million
Metronidazole & Paracetamol I.V.	12 million	\$0,68	8,1 million
Antibiotic infusions	12 million	\$0,88	10,5 million
Sterile water & saline	6 million	\$0,4	2,4 million
TOTAL			\$60 000 000

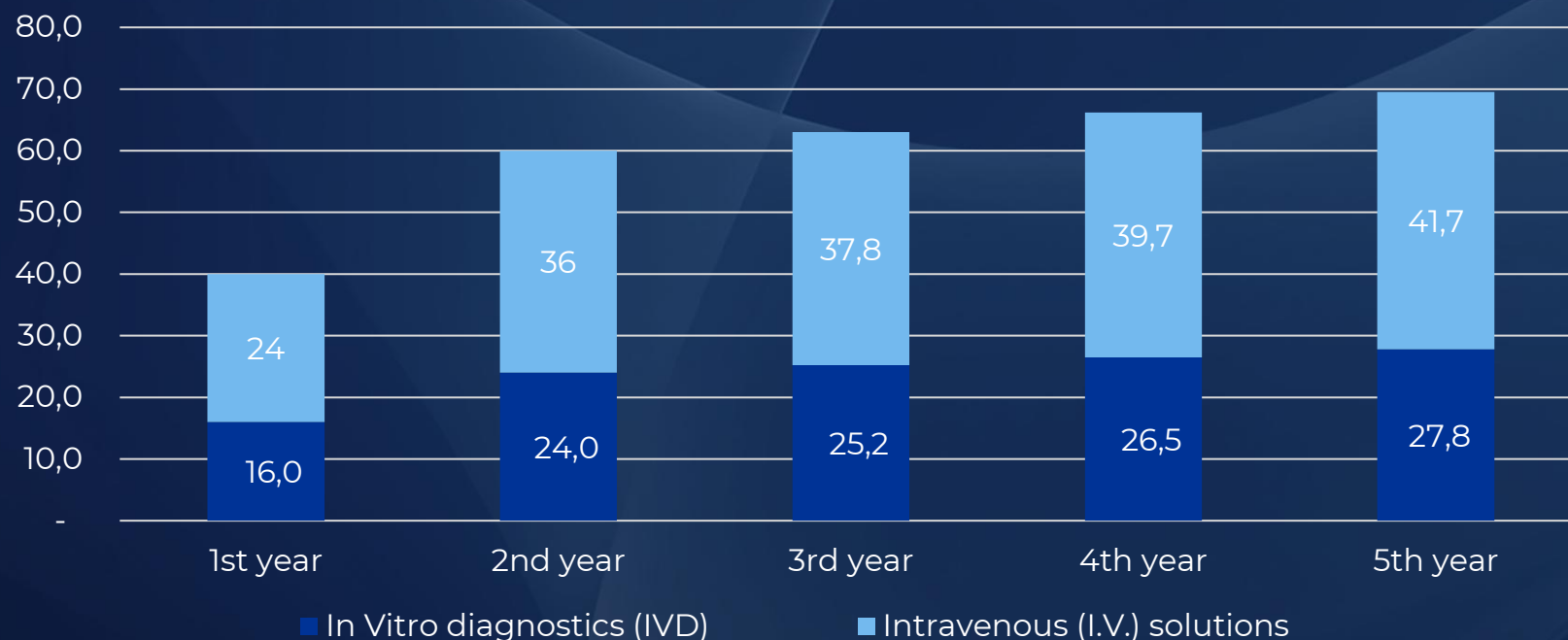
Annual EBITDA:
= \$155 mln - \$40 mln - \$25 mln
= **\$90mln**

The project demonstrates high profitability, strong market demand, and a diversified product base, positioning it as a highly attractive investment opportunity.

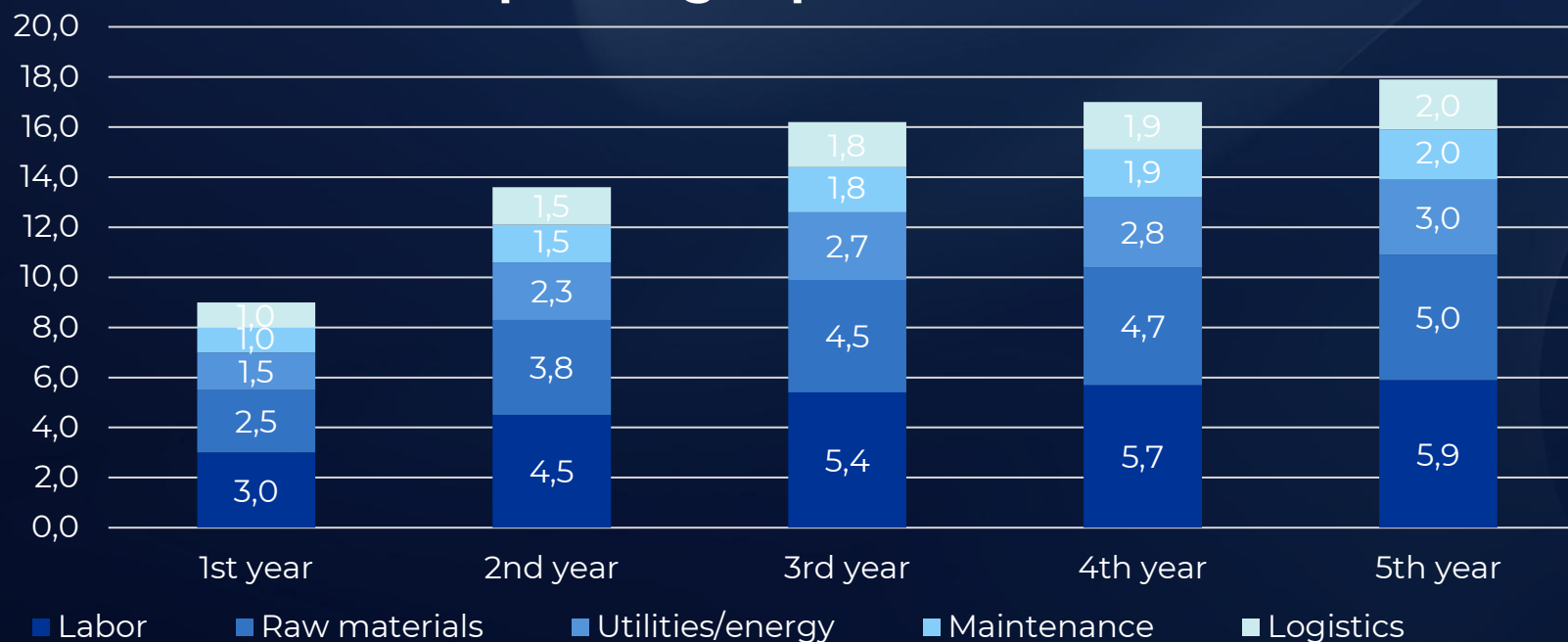


Financial indicators (5-year projection)

Revenues (mln dollars)



Operating expenses (mln dollars)



The revenue of the project is driven by two major product categories:

In Vitro Diagnostics (IVD) – ~40% of total revenue

Intravenous (I.V.) Solutions – ~60% of total revenue

Breakeven: Achieved in year 2,5

Total 5-year cash flow: \$216,9M

NPV (10% discount rate):

NPV= \$152,5M - \$105M

= \$47,5 million (Highly favorable!)

IRR (Internal rate of return): **≈ 19,2%**

Payback period (PP):

= 6,3 years

Profitability index (PI):

$= (\text{NPV} + \text{CAPEX}) / \text{CAPEX} = (\$84,3 + \$200) / \200

= 1,4 years