



### **Rafaelis Project Overview**

**Objective:** To develop an integrated center for pharmaceutical production and dermatological clinics, focusing on liquid wound healing solutions and peptides.

## **Estimated Total Costs**

### **1. Infrastructure Construction**

- **Total Covered Area: 2,525 m<sup>2</sup>**
  - **Ground Floor (1,790 m<sup>2</sup>):**
    - **Production Areas:**
      - **Rafaelis Wound Solution (Healing Product): 145 m<sup>2</sup>**
      - **Peptide Production: 145 m<sup>2</sup>**
      - **Curative Creams: 145 m<sup>2</sup>**
      - **Cosmetic Creams: 145 m<sup>2</sup>**
      - **Intravenous Solutions: 145 m<sup>2</sup>**
    - **Storage Areas:**
      - **Raw Materials: 145 m<sup>2</sup>**
      - **Third-Party Finished Products: 145 m<sup>2</sup>**
      - **In-House Products: 145 m<sup>2</sup>**
    - **Technical and Administrative Areas:**
      - **Quality Control Laboratory: 145 m<sup>2</sup>**
      - **Sterile Water System: 145 m<sup>2</sup>**
      - **Autoclave Room: 145 m<sup>2</sup>**
      - **Administrative Offices: 145 m<sup>2</sup>**
  - **Upper Floor (735 m<sup>2</sup>):**
    - **Educational and Research Spaces:**
      - **Three Classrooms (50 m<sup>2</sup> each): 150 m<sup>2</sup>**
      - **Auditorium / Conference Room: 145 m<sup>2</sup>**
      - **Researchers' Room (focused on wound healing and peptides): 145 m<sup>2</sup>**
    - **Personnel Facilities:**
      - **Cafeteria: 145 m<sup>2</sup>**
      - **Two Apartments for Security Staff (75 m<sup>2</sup> each): 150 m<sup>2</sup>**

- **Construction Technology:**

Dry construction technology, **Steel Frame**, will be used, offering speed, efficiency, and durability.

- **Estimated Cost: U\$S 700/m<sup>2</sup>**, totaling **U\$S 1,767,500** for the covered area.

## **2. Key Equipment**

- **Wound Healing Production: U\$S 250,000**

- Liquid mixers, storage tanks, filling and labeling systems, sterilization equipment.

- **Quality Control and Microbiology: U\$S 150,000**

- Spectrophotometer, laminar flow cabinets, incubators.

- **Peptide Production: U\$S 300,000**

- Synthesis reactors, HPLC purification system, freeze dryer.

## **3. Strategic Acquisitions**

- **Land (3,200 m<sup>2</sup> in Bayres Connect): U\$S 1,040,000**

- **Acasusso Clinic: U\$S 900,000**

## **4. Expansion Phases**

- The production areas for **Cosmetic Creams**, **Curative Creams**, and **Intravenous Solutions** will be equipped in a **second, third, and fourth phase of the project**, respectively.

- These phases will be funded by:

- Initial sales of the **Liquid Wound Healing Product**.
- Production and commercialization of **Peptides**.
- Revenue generated by the **Acasusso Clinic**.

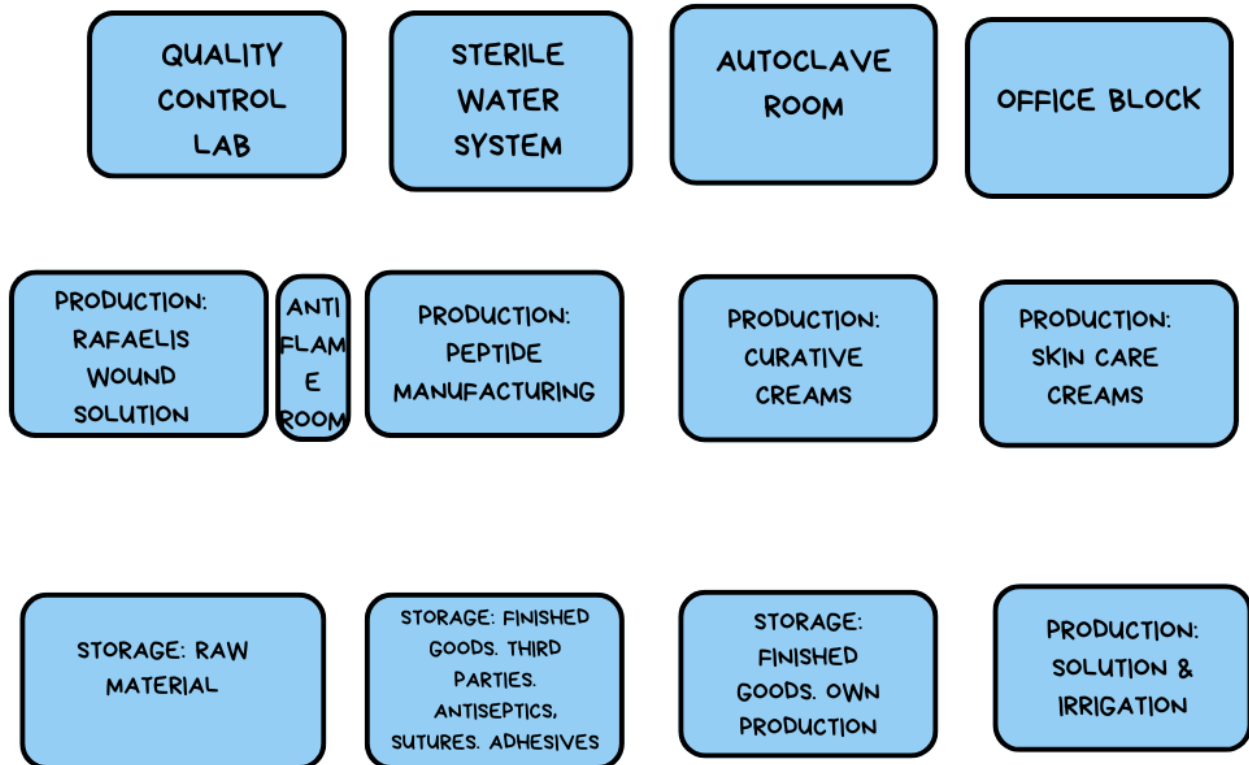
- This scalable approach ensures optimal resource utilization and gradual project consolidation.

## **Total Project Cost**

**U\$S 4,407,500**



## First Floor (1,790 m2)



ALL AREAS ARE 145 M2, EXCEPT THE ANTI FLAME-ROOM AREA WHICH IS 50 M2.

## Second Floor (735 m2)

CLASSROOM 1

45 M2

CLASSROOM 2

45 M2

CLASSROOM 3

45 M2

OFFICE BLOCK  
SCIENTIFICS

45 M2

CONFERENCE ROOM / DINING ROOM

145 M2

SECURITY  
GUARD  
APARTMENT

45 M2

SECURITY GUARD  
APARTMENT

45 M2

OFFICE BLOCK  
SCIENTIFICS

45 M2

OFFICE BLOCK  
SCIENTIFICS

45 M2

## Pharmaceutical Facility Layout Explanation

**Objective:** This document outlines the design and layout of a modern pharmaceutical facility, including a two-story structure designed to optimize production, research, and operational efficiency.

### Building Design

#### General Overview:

- The facility is divided into two main floors, designed with functionality and proportionality in mind.
- Constructed using modern **Steel Frame technology**, the building features a minimalist aesthetic with beige walls and blue-tinted glass windows for natural lighting and energy efficiency.

#### Key Structural Features:

##### 1. Ground Floor:

- The lower floor spans the **full footprint** of the building and houses the main operational areas.
- It includes:
  - **Production Areas:**
    - Rafaelis Wound Solution (145 m<sup>2</sup>)
    - Peptide Manufacturing (145 m<sup>2</sup>)
    - Curative Creams (145 m<sup>2</sup>)
    - Skin Care Creams (145 m<sup>2</sup>)
    - Intravenous Solutions (145 m<sup>2</sup>)
  - **Storage:**

- Raw Materials (145 m<sup>2</sup>)
- Finished Goods – Third-Party Products (145 m<sup>2</sup>)
- Finished Goods – In-House Production (145 m<sup>2</sup>)
- **Technical Areas:**
  - Quality Control Laboratory (145 m<sup>2</sup>)
  - Sterile Water System (145 m<sup>2</sup>)
  - Autoclave Room (145 m<sup>2</sup>)
  - Office Block (145 m<sup>2</sup>)

## 2. Upper Floor:

- The upper floor covers **half the footprint** of the lower floor and is centrally located to ensure balance and proportionality.
- It includes:
  - **Educational Spaces:**
    - Three Classrooms (45 m<sup>2</sup> each)
    - Conference Room / Dining Room (145 m<sup>2</sup>)
  - **Research Facilities:**
    - Offices for Independent Researchers (45 m<sup>2</sup> each, two units)
  - **Personnel Accommodation:**
    - Two Apartments for Security Staff (75 m<sup>2</sup> each)

## Purpose of Each Area

- **Production Areas:** Dedicated to the manufacturing of key pharmaceutical products such as wound solutions, peptides, and creams.
- **Storage Areas:** Designed to separate raw materials, third-party finished products,



and in-house finished goods, ensuring streamlined logistics.

- **Technical Areas:** Support essential processes like quality control, sterile operations, and autoclaving.
- **Upper Floor Spaces:**
  - Classrooms and conference rooms are used for training and collaborative research.
  - Research offices focus on improving existing products and developing innovative solutions.
  - Apartments offer on-site accommodations for key security staff, ensuring operational continuity.

## **Construction and Costing**

- **Steel Frame Technology:** Chosen for its durability, efficiency, and cost-effectiveness.
- **Estimated Construction Cost:**
  - Ground Floor: \$700/m<sup>2</sup> for 1,790 m<sup>2</sup> = **\$1,253,000**
  - Upper Floor: \$700/m<sup>2</sup> for 735 m<sup>2</sup> = **\$514,500**
  - Total Construction Cost: **\$1,767,500**

## **Next Steps**

1. **Finalize Layouts:** Incorporate any additional adjustments or design elements.
2. **Prepare for Construction:** Secure permits and begin site preparation.
3. **Operational Planning:** Coordinate equipment acquisition and staffing for both floors.

**Conclusion:** This facility layout prioritizes efficiency, scalability, and innovation, ensuring it meets current and future pharmaceutical production needs. With a strong focus on research and operational excellence, this design is poised to become a benchmark in modern pharmaceutical facilities.