



2021

وزارة الصحة الفلسطينية
Ministry of Health



Project Proposal

Providing Immunohistochemistry and Molecular
Testing for Breast and Colon Cancer in the Gaza
strip

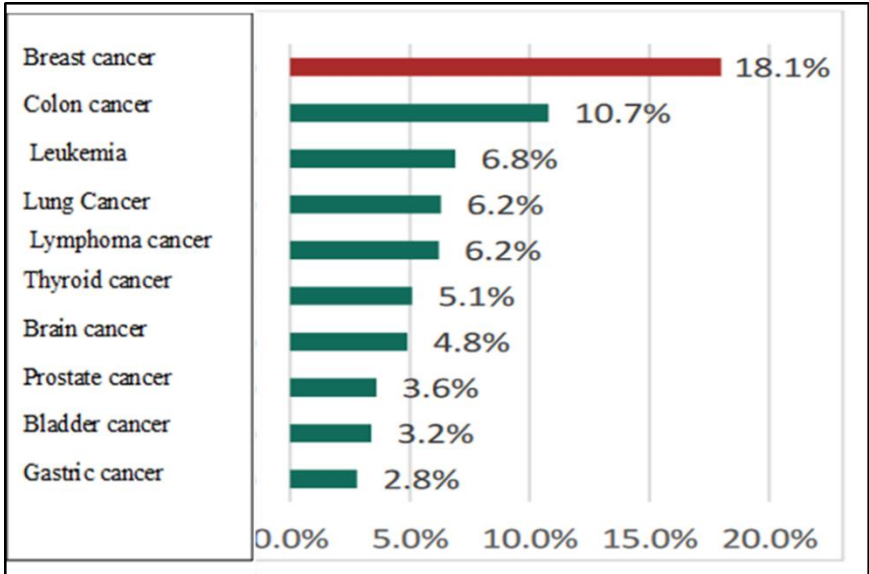
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Project number	2021/141				Date:	2/12/2021	
Project name	Providing Immunohistochemistry and Molecular Testing for Breast and Colon Cancer in the Gaza strip				Applicant for the project	Ministry of Health	
Project duration in months	One year after donation			Type of project		Within the plan	
						Urgent	
Project field		Construction		Rehabilitation		Machines & Equipment	Therapeutic Services
		Consumables		Training and Scholarship		Operational Expenses	Others (...)
Implementing body	Ministry of Health				Project Partners		
Beneficiaries	Suspected cases of breast and colon cancer in the Gaza Strip.				Place of implementation		Pathology Labs in MoH (Shifa , Nasser, European Gaza Hospital).
Estimated budget (USD)	128,000 USD (One hundred twenty-eight thousand dollars)						
Summary of the project (Overview of the project idea and requirements to solve current problem)	<p>The idea of the project is providing Immunohistochemistry and Molecular Testing for Breast and Colon Cancer in the Gaza strip. There is a serious indication of an increase in cancer cases, especially among young people compared to what was previously, where the age group between 50-60 years to become the age group between 35-40 years. The prevalence of cancer in females is higher than in men, as it is estimated in females (55%) while in men (45%). The most prevalent type of cancer is breast cancer, with a prevalence rate of 149.1 per 100,000 among females, with 32.2% of female cancers, followed by colorectal cancer among men, with a prevalence rate of 45.3 per 100,000 people (Report on Oncology Service in Hospitals in the Gaza Strip, 2019). The figure below shows the</p>						

prevalence rate of different types of cancer in the Gaza Strip.



Diagnostic services are provided through Al- Bathuli laboratories in three hospitals of the Ministry of Health: Al-Shifa, Nasser and the European Gaza.

This project came to improve the health status of the people of the Gaza Strip by providing Immunohistochemistry and Molecular Testing for Breast and Colon Cancer in the Gaza strip at an estimated cost of eighty-three thousand US dollars USD.

<p>Project justifications</p>	<ol style="list-style-type: none"> 1. The increase in the prevalence of colon and breast cancer in the Gaza Strip in recent years, which leads to an increase in the mortality rate. 2. There is no molecular testing for breast and colon cancers in Gaza Strip. 3. Lack of fluorescence in situ hybridization (FISH) techniques for breast cancer testing. 4. Lack of Kirsten Rat Sarcoma viral oncogene (KRAS) and MSI techniques for colon cancer testing. 5. Shortage of cancer Diagnosis Lab investigations. 6. Shortage of DNA testing in stool. 7. Lack of immunohistochemistry for breast and colon cancer.
<p>Project objectives</p>	<p>General objective:</p> <ul style="list-style-type: none"> ➤ Contribute to improving the health status of the Palestinians by providing Immunohistochemistry and Molecular Testing for Breast and Colon Cancer. ➤ Specific objective: <ol style="list-style-type: none"> 1. Providing immunohistochemistry testing for breast and colon cancer. 2. Providing molecular testing for breast and colon cancers in Gaza Strip. 3. Reducing the rate of disease prevalence. 4. Reducing the number of mortality by decreasing rate of serious complications that may lead to death.
<p>Current indicators</p>	<ol style="list-style-type: none"> 1. Mischoice of proper treatment by 20%-30% of all Breast cancer cases. In addition, 40% in colon cancer that result of increase the mortality & morbidity of cancer patients up to 25%. 2. About 40 patients from total Breast cancer cases need FISH testing per year. 3. About 45 patients from total Colon cancer cases need KRAS & MSI testing per year.

Expected indicators after implementing the project	✓ Improved health status for 30% of cancer patients with appropriate treatment based on molecular test results in cases of breast cancer and 45% of the total cases of colon cancer.																																																																											
Schedule of the main project implementation phases	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width:30%;">Stage</th> <th colspan="12">Duration (months)</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th> </tr> </thead> <tbody> <tr> <td>Preparation</td> <td style="background-color: #00aaff;"></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Implementation</td> <td></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td style="background-color: #00aaff;"></td><td></td> </tr> <tr> <td>Evaluation and closure</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td style="background-color: #00aaff;"></td> </tr> </tbody> </table>												Stage	Duration (months)												1	2	3	4	5	6	7	8	9	10	11	12	Preparation													Implementation													Evaluation and closure												
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Sustainability of the project	<ol style="list-style-type: none"> The Ministry of Health provides medical staff with experience in diagnostic cancer patients and is able to train medical staff to provide this service to cancer patients in the Gaza Strip. The Ministry of Health provides qualified technical staff to carry out the periodic maintenance of medical devices. 																																																																											
Project monitoring & evaluation	<ul style="list-style-type: none"> ➤ Reports on the price offer and the bidding according to the schedules, quantities and specifications required of diagnostic devices. ➤ Reports of receive devices its conformity with the required specifications. ➤ Follow up the periodic and final reports of the project. ➤ Report on the impact of project implementation on relevant indicators before implementation. 																																																																											
Annexes	<ul style="list-style-type: none"> ✚ Functional and technical specifications of Fluorescence Microscope. ✚ Specifications of Manual Karyotyping and fish Software system. ✚ Contents of training will be provided later. 																																																																											
Preparation & supervision	Project designer: Dr. Taghreed Elghouti						Director of projects preparation department: Dr. Hamza Abdeljawad																																																																					

Contact	Name:	Dr. Abdellatif El-Hajj	Job title:	General Director of International Cooperation and Projects
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Functional & Technical specifications of Fluorescent Microscope

- Manufacture: Well-known Brand Name Company else it should be proven in MOH and has good reputation and high efficiency.
- Trinocular observation head.
- Siedntopf observation head inclined at 30o rotatable at 360o.
- Light path selector lever to direct either full light to observation head or 80% to vertical Phototube and 20% to observation tube.
- Diopter adjustment ring on ocular tube.
- Interpupillary distance from 50mm to 75mm.
- Wide field eyepiece 10X

Objective infinity corrected:

- Fluorescence objective 4X
- Fluorescence objective 40X
- Fluorescence objective 10X
- Fluorescence objective 100X

Mechanical body:

- Co-axial focusing system with large knobs.
- Reverse Angle quadruple nosepiece on ball bearing.
- Mechanical stage is 200mmX160mm.

Light source:

- B Excitation (390-49011rn) Standard
- G Excitation (500-560nm) Standard
- High intensity Mercury Vapour Lamp with power supply.
- Transmitted Halogen bulb.
- Fluorescence source: High pressure mercury lamp.
- Four fluorescent mercury lamp as spare parts.
- Local agent (Authorization letter).
- New catalogue including data sheet is attached with the offer.
- Power supply: 220v,50Hz

Service and warranty requirements:

- Certificates (agency approvals): FDA, TUF, and CE will be taken into consideration, the offer must include the certificates for evaluation.
- Warranty three years from instillation date.
- Provide spare parts for the device in the company's stores for purchase by MOH when needed for not less than 10 years.
- Original Operation and Service manuals (in English) are included.
- Country of origin and source (clarification certificate) and manufacturing date.

Manual Karyotyping and fish Software system

#	Item with Description	Qty.	Unit Price (\$)
1.	CytoVision Cytogenetics Platform (Karyotyping & FISH) The CytoVision platform offers the convenience and comfort of on-screen analysis with flexibility of both software and hardware configurations. CytoVision is scalable from stand-alone capture stations for karyotyping and FISH, to fully automated unattended metaphase and cellular FISH capture of up to 120 slides (Optional). Flexible software modules provide the platform for every cytogenetics and FISH laboratory.		
2.	23STR003XXX001: Removable Archive Device Removable disk storage that combines the speed of a hard disk with the portability of optical media. To be used for back up of data	1	
3.	23SVR004XXX001: CytoVision CaseBase CaseBase will contain the list of active cases. CaseBase can be installed anywhere on windows domain or in a Windows workgroup (9 client station workgroup limit). Requires fixed system IP address. Host (Server or Master station) has to be permanently accessible.	1	
4.	23STR001XXX001: Workgroup Data Storage 1TB RAID1 220VAC Two 0,5TB HDD and RAID controller mounted in workstation PC. Configured in RAID1 (Mirrored disks) for higher Data protection. Include APC Back-UPS CS 650 for 220V	1	78,000
5.	23CAP002KFX001 : Karyotyping&FISH capture stn. with Leica Karyotyping&FISH capture stn. with Leica camera Standard Performance Dell PC Camera, Leica DFC365FX CytoVision Karyotype licence CytoVision FISH licence Spot counting software licence Monitor, 24" 20 Foot LAN cable Flexible Karyotyping (non-human) Licence	1	
6.	23MIC250KFX002 : CytoVision DM2500 for Brightfield & FL CytoVision DM2500 for Karyotyping and FISH CytoVision DM2500B Microscope Validated Objectives for Karyotype Objectives: 10x	1	
7.	23OBJ100PLFOIL: OBJ HC PL FL 100X OIL	1	
8.	23OBJ063PLFOIL: OBJ HC PL FL 63X OIL	1	
9.	232FL4900072: Leica DM 91024 DAPI	1	
10.	232FL4900972: Leica DM 91024 Cy5	1	
11.	Laser Printer	1	
12.	Optional accessories: 23SWR000CGX001: CGH Software Licensee Activation Code		3,000
Estimated cost (\$)			81,000