*Projected By – **Dr. Tasmia Tahmid***
MRCS (Edin) PG Dip AesSurg(Lon)

TASMIA-ASIF CANCER HOSPITAL & RESEARCH CENTRE

A STRATEGIC ALLIANCE between BD & UK

16A Well Hall Parade, London, SE9 6SP

Genetic Plaza, House #16 Road #16 (old 27), Dhanmondi, Dhaka –1209, Bangladesh; Email:info@tasmiabreastcare.co.uk
Web :www.tasmiabreastcare.co.uk

PROPOSED PROJECT/ CONCEPT OVERVIEW

TASMIA ASIF CANCER HOSPITAL & RESEARCH CENTRE			
(A truly UK standard high quality world-class comprehensive cancer care, research & training centre)			
	(Phase-I)	(Phase-II)	(Phase-III)
	10 beds Day Care Centre	50 beds Cancer Hospital	100 beds Cancer Hospital
For :	Women	Women	Men, Women & Children
Services :	Medical Oncology, Surgical Oncology	Medical Oncology Surgical Oncology Radiation Oncology	Medical Oncology Surgical Oncology Radiation Oncology
Project Location :	Land Area – 1 : RS # 3234, Kalsi Road, Mirpur, Dhaka, Bangladesh		
Land Area :	26 kathas = 42.9 decimals = 18,720 sft.		
Space :	Tin shed Temporary Building (3000 sft.)	Basement to 2nd Floor of Main Building (43,200 sft.)	3rd to 10th Floor of Main Building (69,120 sft.)
Construction Period :	6 months (Temporary)	18 months (Partial Construction)	24 months (Full Construction)
Project Cost & Financing :	About BDT 3,389 millions / USD 44.06 millions/ GBP 33.89 million Participation by members/ Directors of Board and Local & Foreign Donors/ Investors		

Ref (1 Bigha=20 Kathas=33 Decimal) (1 Katha =1.65 Decimal=720 Sft.) (Currency : BTD 1 = GBP 0.010 = USD 0.013 = Euro 0.012

PART – 1	**:**	**PHYSIOLOGICAL FEASIBILITY STUDY**
PART – 2	**:**	**FINANCIAL FEASIBILITY STUDY**
PART – 3	**:**	**INFO-GRAPHICAL PRESENTATION**

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PART - 1

PHYSIOLOGICAL PHYSIBILITY STUDY

PART – 1 : PHYSIOLOGICAL FEASIBILITY STUDY

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3 : EXECUTIVE SUMMARY

We firmly believe that whereas "Cure is in the hand of the Lord, Care is definitely in the hand of man" Additionally, we seek to reduce the incidence of cancer through:-

- Cancer awareness programs in school, educational institution and public by means of developing education materials.
- Cancer detection camps in rural and urban areas.
- Free Cancer detection camps in slum and villages.
- Home care services for terminally ill patients through mobile care medical teams.
- Palliative care unit.
- Free Cancer diagnostic center for medical AID to poor and needy patients.
- Training of doctors, nurses and paramedics for terminally ill cancer patients and in palliative care.
- Counseling to patients as well as to family members.
- Treatments and follow- ups

TASMIA-ASIF CANCER HOSPITAL (TACH) 100 bedded comprehensive cancer care and research centre project from **TASMIA TAHMID BREAST CARE (TBC)** to provide Cancer patients and the chronically/ terminally ill people, easily accessible quality healthcare services through integration of oncology, palliative care, and support services. Towards achieving this goal, **TBC** already operated two centers, one is in Dhaka, Bangladesh and other is in London, UK (a UK company providing breast care and breast cancer surgery for Bangladeshi women in Bangladesh) since 2010.

The hospital seeks to provide specialty services such as, Medical, Surgical & Radiation Oncology, Palliative Care, Paediatric Cancer Care, Pain Management, and Support Services. All the major cancer types like as Breast, Upper Gastrointestinal, Lower Gastrointestinal, Genitourinary Oncology, Gynae-oncology, Haematology, Head & Neck, Lung, Melanoma & Skin, Neuro-oncology, Sarcoma and Cancer of unknown primary will be treated in same floor. A state-of-the art Lab for Bio-chemistry, Microbiology, Pathology, Haematology will also form part of the hospital.

TBC existing global network of clinicians and cancer institute will ensure that the physicians required to support this engagement will be available. TBC includes full time salaried doctors, consultants on retainer ship basis and visiting consultants, on-line tumour board and radio-diagnostic staffs.

In Stage-I, the existing "Day-care-Centre" of **TBC** Bangladesh which is in Dhanmondi will be relocated in a temporary building of new location (which is already been approved) to accommodate medical and surgical units in same place where the 10 storied main hospital building construction will be continue simultaneously.

In Stage-II & Stage-III consequently, a 50 bedded hospital for breast & other cancer conditions in women, and later on it will be developed as a 100 bedded comprehensive cancer care, prevention project and research institute for all types of gender. This comprehensive facility will be run with **TBC** and Local Partners with support of experts from UK. The close partnership with the NHS UK and others UK companies will provide a direct link to UK standards and to world class laboratory services. UK healthcare system has a unique combination of experience, expertise and institutions which could be of immense help to Bangladesh in creating robust, true International standard healthcare system to meet its needs for a trained workforce in oncology care and allied healthcare and paramedics. **TBC** believe that there is a huge scope for mutual cooperation and learning between Bangladesh and the UK. There is a need for a true international standard modern cancer hospital providing affordable treatment to bridge the demand gap that is currently not addressed by existing government, private, and social sector hospital in Bangladesh.

Annually, the hospital is projected to serve roughly about :

- 150,000 out-patients (calculating 300 days of each year & 20 patients per day for 25 OPD consultants in 5units.);
- 30,000 in-patients (calculating 300 days of each year & 100 patients per day);
- 6,000 oncotherapy-patients (chemo, physio etc.) -patients (calculating 300 days of each year & 20 patients per day);
- 45,000 radiotherapy-patients (calculating 300 days of each year & 150 patients per day by 2 linacs);
- 3,000 brachytherapy-patients (calculating 300 days of each year & 10 patients per day single brchy)
- 6,000 surgery cases (calculating 4 OTs with robotic modular systems, 5 patients per OT & 300 days,)

The over-all project is expected to be completed and ready for operations within two years from the commencement of the project, the out-patient clinic will however, be operational within 3-6 months.

4 : ABOUT PROMOTER

4.1 : Tasmia Tahmid Breast Care

- **TBC** (BD), is a Bangladeshi enterprise led by Tasmia Tahmid, MBBS MRCS (Edin), PgDipAesSurg (London). Tasmia is a consultant breast surgeon working in NHS, UK and a graduate of Dhaka Medical College. The plans to build a 100-bed cancer hospital in a prime location in Dhaka are Tasmia's brainchild. This facility will be run with **TBC** (UK), a UK company providing breast care and breast cancer surgery for Bangladeshi women in Bangladesh, with support from experts from UK. The close partnership with the UK companies will provide a direct link to UK standards and to world class laboratory services.
- **TBC** (UK), is looking forward to create value-added collaborations with NHS UK and partner for enduring mutual benefit together with Bangladeshi partner.
- **TBC** (BD), located on Level-6, at DIPHAM Hospital, Road no-27, Dhanmondi, Dhaka, is a dedicated self-contained Breast Care Unit utilizing the latest technology, diagnostic equipment. It offers a premium breast cancer service with strong link with top UK Breast units through Teleconferencing, designed to provide patients with a seamless breast care pathway, from first visit to diagnosis and treatment.

UK Clinic	Bangladesh Clinic
16A Well Hall Parade London; SE9 6SP	House #16, Road #16 (old 27), Genetic plaza, Dhanmondi, Dhaka - 1209
M: 079 60715952	T: 0088-01942700306

4.2 : TBC Technology

TBC is supported by the latest imaging technology, which is vital for early detection and improving outcomes. Our state-of-the-art equipment will reduce the number of times patients need to be scanned, decrease waiting times and increase the speed of diagnosis.

- **GE Ultrasound (LOGIQ®C2) :** A leading ultrasound system with transducers & technology optimized to offer high image quality for breast imaging. The suite enables the smallest details to be viewed with stunning clarity and pristine image uniformity.
- **Core biopsy :** The Core Biopsy system is the accurate and precise technique for breast tissue sampling and management. It enables breast biopsies to be performed under X-ray or Ultrasound control, using a less invasive approach that allows women faster recovery and less scarring, whilst giving both patients and clinicians diagnostic confidence.
- **High-Tech Teleconferencing Reporting :** With our link with UK Top Breast units, we deliver high professional standard reporting of imaging and pathology tests for our patients. This allows the most complex cases to be reviewed in an easy and intuitive manner.

4.3 : TBC Project programme for Breast Cancer

TBC uses the most advanced techniques and technologies to help diagnose Breast cancer as early as possible. Our specialized cancer care means that patients and their families work with a team throughout the treatment process.

The team brings together professionals with experience and expertise in a range of disciplines. The team's collaboration strengthens the individual treatment plan, encourages patient involvement and ensures a continuous flow of communication. This underlying spirit of cooperation fosters a climate of trust and concern that is conducive to healing.

We offer patients the benefits of all major treatment methods including surgery, medical oncology and radiation oncology for Breast Cancer.

4.4 : Our aims are to

- Improve survival rates for Breast cancer patients in centers where Breast cancer treatment is available, that might include Government and Private centers in Dhaka, by improving diagnosis, optimizing treatment and reducing abandonment of treatment.
- Provide accurate figures on the incidence of Breast cancer in Bangladesh and the reasons for mortality.
- Build capacity by providing training in Breast surgery and oncology for doctors and other healthcare professionals at the National Cancer Institute, BSMMU , Dhaka Medical College, Mitford Medical College and other satellite centers nationally.
- Our vision is for people in Bangladesh to have access to excellent breast cancer and other cancer care. Our initial mission to achieve this long term aim is to build a modern 50-bed cancer hospital in Dhaka, Bangladesh. This hospital will provide free care for patients unable to afford it, as well as catering for the needs of fee-paying patients, all at a world-class level, based on UK standards. Later or depending on required fund, we will set up total Oncology care for Bangladeshi people, which will be first of its kind and a true, UK standard high quality, world class centre.
- To create this step-change in health care in Bangladesh, we seek local partner to develop this new, bespoke breast care and cancer hospital. Care will be provided on a fee-basis for 80% of patients. We aim to provide free care to 20% of patients who can't afford it, using our surplus funds. This business model will provide a net return to investors from year 5. There will be an option to re-invest after 2020 to extend services beyond Dhaka, in order to meet our long-term vision.

4.5 : Our Services

- **We are now exclusively offering a full breast care treatment pathway on two sites- Dhaka and London :**
  TBC service provides comprehensive management for malignant and non malignant breast conditions, with services including screening, diagnosis, surgery, chemotherapy, radiotherapy, reconstructive surgery and after care, all on two sites. We are proud to work with some of the UK's finest breast surgeons, oncologists and radiologists, supported by breast care nurses and a range of other healthcare professionals. Together, our specialised team provides patients with rapid access to a one stop clinic.
- **No waiting lists :**
  Tasmia Tahmid Breast Care has no waiting lists, giving you rapid access to all stages of the pathway. You can see a consultant almost immediately and, if your assessment shows a mass or abnormality, treatment can begin without delay.
- **Quick response & One stop triple assessment :**
  All patients presenting with breast symptoms or if screening Mammogram indicates any need for further tests, patients will undergo clinical examination and breast imaging (with immediate reporting) during the same visit. If there is a mass or radiological abnormality, a clinical or image guided needle biopsy will also be performed.
- **Supervised coordinated care :**
  Each patient is tracked throughout their journey by our dedicated liaseco-ordinator. She provides personalized support and information to guide your appointments either in Dhaka or in London, wherever you choose.
- **Specialist doctors :**
  Our team doctors are leading experts in the field of breast disease and cancer management and are teaching hospitals consultants mostly in London, Surrey and Scotland. From screening detected breast cancer lumpectomy and Sentinel lymph node biopsy to mastectomy with immediate or delayed reconstruction- our surgeons are the leading experts.
- **Multi-disciplinary approach :**
  Breast surgeons, oncologists, radiologists, pathologists meet regularly online to discuss each core biopsy report and imaging to tailor best possible treatment plan for each patient.
- **Access to a genetics specialist :**
  Even with a clear mammogram, a woman with a strong family history of breast cancer may want to know about her individual risk and the implications of genetic testing. TBC brings together world renowned specialists in the field .

4.6 : Why TBC?

- Personalized Patient Care
- Integration of Clinical Research
- Continuous Innovation of the Health System
- Development of Healthier, More effective Treatments
- Advance Patient-Physician Interaction
- Improve Cancer Intervention Options

4.7 : Reaching Out

Studies at regional cancer centers in India show that lower survival rate is primarily due to delayed diagnosis and start of treatment in late stages. The main reasons for delay in diagnosis are lack of diagnostic infrastructure and inadequate specialist services in pathology, radiology, medical and surgical oncology. There is a significant disparity in the distribution of infrastructure and trained specialists in urban and rural areas. This results in majority of the rural patients getting diagnosed with the disease at a later stage - leaving few alternatives for curative treatment, increasing morbidity and mortality.

In order to facilitate timely specialist consultation with minimal burden on patients we propose a regional tele-consultation service between medical colleges to the specialty center at **TBC.** We believe this will help enable timely referral, appropriate request of investigations, early diagnosis and minimal number of pre-surgical visits for patients who require treatment. This method of integration of specialist services into rural health services will require adequate telecommunication infrastructure at both ends. It has been observed that initiatives such as community screening programs result in early cancer detection, which in turn increases the survival rate and also have significant economic benefits. Medical institutions with their knowledge in epidemiology, prevention and screening in collaboration with the local community cancer screening service and a regional tertiary cancer center can bring about a paradigm change in cancer care in Bangladesh.

This initiative will empower the entire medical community and public hospital centers to act as secondary centers for early detection and prevention of cancer. Those patients who are diagnosed with cancer at secondary centers require treatment based on a standardized treatment protocol, which needs to be carried out with the support of a multidisciplinary Sub-site based Tumor Board setup by **TBC**.

At secondary centers, the patient's care is coordinated and delivered by a coordinator and a care provider. The coordinator verifies the information filled by the health workers. The demographics, diagnostics and clinical care information are captured in the ICT record for tele-transfer. Complicated cases are referred to **TBC**. The coordinators and care providers have access to clinical information of care delivered earlier and further treatment information are captured.

Cancer therapies at various levels are undertaken at secondary centers. After completion of treatment the patient needs long-term surveillance, which is best carried out in the community in partnership with **TBC.** The main advantage of such outreach programs is the ability to target rural people who cannot afford to travel for care and would not otherwise see a doctor for the problem.

5 : PATRONS & PROFESSIONALS SUPPORTING THE PROJECT

CHAIRMAN
Dr. Mohammad Asif Yunus

Graduated from Dhaka Medical College, the best among the medical institutes in Bangladesh.

Gained excellent training in Accident and Emergency from England. Achieved diverse work experience. Good communication and organizational skills. Works as Team Leader (Senior Specialty doctor) at the Royal Surrey Hospital, Surrey, England at present. The jobs of Specialty Doctor and Staff GRADE following job of a LAS SpR in A & E at Frimley Park Hospital, Frimley for 10 years, has exposed to most advanced modes of treatment regimes practised in UK hospitals as senior post holder working unsupervised. Had been directly involved in SHOs' Audits and in house teaching

MANAGING DIRECTOR
Dr. Tasmia Tahmid

Dr Tasmia Tahmid MRCS (Edin) PG Dip AesSurg (London) MBBS is a specialist breast and oncoplastic surgeon based in London and Bangladesh. Specialised in Diagnostic and Surgical treatment of Breast tumour and cancer, Cosmetic breast surgery like breast Implant augmentation, breast reduction, correction of breast asymmetry, correction of nipple inversion and male gynaecomastia surgery, Breast reconstruction.

She completed her MBBS from Dhaka University in 1995. She obtained Merit Scholarship from Ministry of Health, Dhaka, throughout Medical Education and awarded for positioned fourth in third Professional Examination in Dhaka Medical College, in Pathology and Community medicine. She completed her MRCS from The Royal College of Surgeons of Edinburgh, where she is working presently, as E-tutor for MSc in Surgical Sciences.

Dr Tahmid completed her Breast surgical training from London teaching hospitals and has been fortunate to get continued support from Miss MacNeill, a Leader and outstanding mentor for Breast surgery education, training in UK, to let her inspire to develop such high quality world class breast cancer treatment services for Bangladeshi women. Currently, she works at Portsmouth NHS Trust Hospitals , England as a Consultant Onco-Plastic Breast Surgeon.

DIRECTOR – Medical Services & Radiation Oncology
Dr. Sadiq R Malik

Dr. Sadiq R Malik, MBBS (Medical College of Ohio(USA) as a Clinical Radiation Onc. Physicist; MS and Ph. D. (Birmingham U, England). Since 1970-2011, he is involved in Radiation Technology, Radiation Research for Materials of Terrestrial, Extra-Terrestrial and Biological Origin and Onco-Therapy. Acquired experience in practicing for Cancer Treatments (3D CRT and IMRT) using Linear Accelerators; and Other Techniques viz. Prostate Seed Implants, HDR Treatment using afterloaders (Nucleatron, BeBig&Gammamed) and Mammosite. Gammaknife and Tomotherapy Planning and Treatment experience acquired.

More than 22 published Scientific Papers in Int. Journals. Also 9 publications (2011-2013) on High Dose Brachy, Cancer Therapy Machines and Imaging from Rad. Onc. Division, Delta Hospital, Bangladesh

- February 2001-present: Chief Radiation Onc. Physicist and Head of Physics at Delta Medical College and Hospital, Dhaka, Bangladesh
- Established 3D, 2D, MLC shaping, IMRT and HDR Multi Source Procedures at Delta Hospital with International Publication on HDR from Delta Hospital Ltd., Bangladesh
- Co-Editor of J. Contemporary Brachytherapy, Europe.
- Chairperson: SAARC Countries' Clinical Session, Dec 12-14, 2012, Dhaka
- Chairperson: Int. Conf. on High Dose Brachytherapy, Bangkok and India (2011 and 2013)

Experienced in Gamma Knife Radiosurgery at Lancaster General Hospital, USA. Worked at SAMARITAN Hospital, Radiation Oncology Division, Phoenix, Arizona. Worked for "Arizona Oncology Services" with 12 Cancer Centers, Arizona. Worked as a Chief Radiation Onc Physicist for MD MED Inc. at Sierra Vista & Casa Grande Cancer Centers, AZ, USA. Worked as a Chief Radiation Oncology Physicist at Cochise Oncology, Sierra Vista, Arizona, USA
Ex-Professor and Program Chair of Physics and Engineering at CUC, Maryland, USA.

DIRECTOR – Hospital Operation
Dr. Md. Shakhawat Hossain Chowdhury

Graduated from Dhaka Medical College(Faculty of Medicine of Dhaka University) in 1993.

Serving in Armed Forces of Bangladesh for last 23 years (Ground service) and 3 years Ante-date seniority. Completed Basic Military & Professional training including Advance course on Administration at the beginning of carrier. Qualified as Masters of Public Health (Public Health Administration) from Bangladesh University of Professionals(BUP) & Topped there in same discipline. At the moment undergone a course & in thesis part of Masters of Philosophy (Preventive and Social Medicine) under BSMMU. Experienced in serving both at home (as Commanding Officer of a Field Unit & a Combined Military Hospital) and in abroad (Clinic In charge in Kuwait Air Force HQ & Officers In charge at Level -1 Hospital in South Sudan). Also hold various important appointments in different installations of Bangladesh Army.

6 : AN OVERVIEW OF CANCER & PALLIATIVE CARE IN BANGLADESH

6.1 : Abstract

There are more than 20 lakh cancer patients in Bangladesh, with about two lakh patients newly diagnosed with cancer each year. As an overview, lung cancer and mouth-oropharynx cancer rank as the top two prevalent cancers in males. Other types of cancers are esophagus cancer and stomach cancer. In women, cancer cervix uteri and breast cancer are most prevalent. Other cancer types, which affect women, are mouth and oropharynx cancer, lung cancer, and esophagus cancer. There are around 150 qualified clinical oncologists and 16 pediatric oncologists working in the different parts of the country. Regular cancer treatment is available in 19 hospitals and 465 hospital beds are attached as indoor or day care facilities for chemotherapy in the oncology/radiotherapy departments. There are about 15 linear accelerators, 12 Co-60 teletherapy and 12 brachytherapy units currently available. Approximately, 56 cancer chemotherapeutic agents are obtainable in Bangladesh. Research facilities are available at tertiary care centers and a few multi country collaborative research activities are ongoing. Bangladesh has a unique National Cancer Control Strategy and Plan of Action 2009-2015 formulated with the assistance of WHO with an objective to develop and implement continuum of cancer care through a comprehensive cancer control programe. Preventive measures taken to reduce the incidence of cancer include reduced tobacco smoking, change of dietary habit and reduced food adulteration, ensuring reproductive hygiene, increased physical activity, and reduced occupational hazard. Awareness buildup and media campaign are going on by organizing the general people, opinion leaders of the society, and boy and girl scout. Training of general physicians on cancer warning signs and setup of early cancer detection centers at each medical college and district levels are ongoing. Beside these, some other major cancer programs have taken place for early detection of breast, cervical and oral cancer by Bangladesh Government and NGOs such as ICDDR'B, BRAC, Ahsania Mission Cancer Hospital, BSMMU, Bangladesh Cancer Society, Ashic Foundation, Amader Gram, AK Khan Healthcare Trust, CANSUP, Oncology club etc. Piloting of cervical cancer vaccination has recently been completed. Improving the cancer scenario overnight is not an easy task but policy makers may become interested and push this agenda forward, if the huge health impact and economic loss caused by cancer become evident to them. Besides, Bangladesh has accepted reduction of cancer morbidity and mortality targets set by United Nations and World Health Organization as a part of global non-communicable disease prevention agreement.

Table 1 : Leading cancers & prevalence in last 5 years in males	
Cancer type	13.1
Lung cancer	11.9
Lip & oral cavity cancer	8.2
Other pharynx	6.5
Colo-rectal cancer	4.7
Esophageal cancer	4.1
Non-Hodgkin lymphoma	4.7
Bladder cancer	2.2
Prostate cancer	3.4
Liver cancer	2.3
Leukemia	1.5

Table 2 : Leading cancers & prevalence in last 5 years in female	
Breast cancer	32.8
Cervical cancer	26.1
Lip and oral cavity cancer	6.5
Ovarian cancer	3.3
Colo-rectal cancer	2.7
Lung cancer	2.0
Esophageal cancer	1.9
Stomach cancer	1.8
Non-Hodgkin lymphoma	1.3
Hodgkin lymphoma	0.8
Liver cancer	0.6

6.2 : Causes of increased cancer prevalence of the country

- Tobacco
- Sexual and reproductive factors
- Diet
- *Obesity Physical inactivity Cancer-causing viral and bacterial infection*

6.3 : Basic failities available in various parts of the country

- **Setting 1: Only basic care facilities**

  Only basic care and palliative oral treatment can be given in ASHIC Foundation. There are no oncology trained personnel available at the center and no specialized diagnostic facilities like histopathology, flow cytometry are available.

- **Setting 2: Regular cancer treatment facilities**

  According to International Atomic Energy Agency (IAEA), 2 teletherapy machines and 1 brachytherapy machine are needed for 1 million population. According to this estimation Dhaka city alone needs 20 and the entire country needs around 300 Teletherapy (radiotherapy) machines respectively.

However, in Bangladesh there are 17 radiotherapy centers in public and private sector; only one is situated in a rural area. There are only 15 Linear Accelerators installed in the country with two installed in a rural area. 12 Cobalt- 60 machines and 12 brachytherapy machines are installed in Bangladesh.

Table 3 :Radiotherapy facilities available in Bangladesh.

Sl	Hospital	Linear Accelerator	Co60 Teletherapy	Deep X-ray	Brachy therapy	Simulator	Treatment Plan. Syst.
1	National Institute of Cancer Research and Hospital, Dhaka	3	2	0	3 Ir192/Co60/Cs137	1	2
2	Khwaja Yunus Ali Medical College & Hospital, Sirajganj	2	0	0	1	2	2
3	Dhaka Medical College & Hospital	1	2 (non-functional)	2	1 (non-functional)	1	1
4	BSMMU – Dept. of Oncology	1 (in-process)	0	0	1+1 (in-process)	1 (in-process)	1 (in-process)
5	Chittagong Medical College Hospital, Chittagong	0	1	1	0	0	0
6	Sher-e-Bangla Medical College & Hospital, Barishal	0	1	0	0	0	0
7	Mymensingh Medical College Hospital, Mymensingh	0	1	0	0	0	0
8	Sylhet Medical College Hospital	0	1	0	0	0	0
9	Rajshahi Medical College Hospital	0	1	0	0	0	0
10	Rangpur Medical College Hospital	0	1	0	0	0	0
11	Delta Oncology Centre, Dhaka	1	2	0	1	2	1
12	Ahsania Mission Cancer & General Hospital, Dhaka	1 (in-process)	0	0	1 (in-process)	1 (in-process)	1 (in-process)
13	Square Hospital, Panthapath, Dhaka	1	0	0	0	1	1
14	United Hospital, Gulshan, Dhaka	1	0	0	1	1	1
15	Khulna Medical College Hospital, Khulna	1 (in-process)	0	0	0	1 (in-process)	1 (in-process)
16	Shaheed Ziaur Rahman Medical College & Hospital, Bogra	1	0	0	0	1	1
17	Enam Medical College & Hospital, Savar, Dhaka	1	0	0	1 (in-process)	1 (in-process)	1 (in-process)
18	North-East Medical College & Hospital, Sylhet	1	0	0	1 (in-process)	1 (in-process)	1 (in-process
	TOTAL	**15**	**12**	**3**	**12**	**14**	**14**
							Onco-surgery : Onco-surgery is available in all cancer hospital

Table 4 :Hospital beds attached to oncology/radiotherapy departments

Sl	**Name of Hospital**	**Day Care**		**Indoor**		**Total**
		M	F	M	F	
1	National Institute of Cancer Research & Hospital	8	8	25	25	66
2	Khwaja Yunus Ali Medical College & Hospital (Rural Centre)	5	5	24	24	58
3	BSMMU – Dept. of Oncology	5	5	5	5	20
4	BSMMU – Pediatric Hemato-Oncology Unit, Dept. of Pediatric	0	0	14	14	28
5	BSMMU – Uro-oncology Unit, Dept. of Urology	-	-	9	9	18
6	BSMMU – Gyne-oncology Unit, Dept. of Gyne & Obestrics	-	-	-	11	11
7	Dhaka Medical College Hospital	0	0	11	13	24
8	Rajshahi Medical College & Hospital	0	0	6	4	10
9	Mymensingh Medical College & Hospital	0	0	10	4	14
10	Sylhet Medical College & Hospital	0	0	8	4	12
11	Chittagong Medical College & Hospital	0	0	8	4	12
12	Delta Oncology Centre	5	3	40	40	88
13	Ahsania Mission cancer & General Hospital	5	5	16	16	42
14	Bangladesh Cancer Society Hospital	0	0	10	10	20
15	Cancer Foundation Hospital	5	5	5	5	20
16	Enam Medical College & Hospital, Savar	-	-	10	10	20
17	North-East Medical College & Hospital, Sylhet	-	-	10	10	20
	TOTAL					**465**
						***Note :** Most of the public medical college hospitals do not have dedicated beds for cancer patients*

Oncologists available : *There are 150 qualified oncologists.*

Regular cancer treatment can be made available to patients in:

1) National Institute of Cancer Research & Hospital, Dhaka
2) Khwaja Yunus Ali Medical College & Hospital
3) Dhaka Medical College & Hospital
4) BSMMU – Dept. of Oncology
5) Chittagong Medical College & Hospital
6) Mymensingh Medical College & Hospital
7) MAG Osmani Medical College & Hospital, Sylhet
8) Sher-e-Bangla Medical College & Hospital, Barishal
9) Rajshahi Medical College & Hospital
10) Rangpur Medical College & Hospital
11) Khulna Medical College & Hospital
12) Shaheed Ziaur Rahman Medical College & Hospital, Bogra
13) Delta Oncology Centre, Dhaka
14) Ahsania Mission Cancer & General Hospital, Uttara, Dhaka
15) Square Hospital
16) United Hospital
17) Bangladesh Cancer Hospital & Welfare Home
18) North-East Medical College & Hospital, Sylhet
19) Enam Medical College & Hospital, savar, Dhaka

Setting 3 Tertiary care centers, with research facilities are available in

1) Bangabandhu Sheikh Mujib Medical University
2) National Institute of Cancer Research and Hospital (NICRH)
3) KhwajaYunus Ali Medical College and Hospital- KYAMC Cancer Center
4) Dhaka Medical College Hospital
5) Sir Salimullah Medical College Hospital
6) Sher-E-Bangla Medical College Hospital, Barisal
7) Chittagong Medical College Hospital
8) Mymensingh Medical College Hospital
9) MAG Osmani Medical College Hospital, Sylhet
10) Rajshahi Medical College Hospital
11) Rangpur Medical College Hospital

Transplant facility : *The only bone marrow transplant facility is available in Dhaka Medical College.*

6.4 : NGOs working on cancer in various parts of the country

1) ICDDRB,
2) Ahsania Mission cancer Hospital,
3) Bangladesh Cancer Society,
4) AK Khan Healthcare Trust,
5) Oncology Foundation,
6) Oncology club,
7) ASHIC Foundation,
8) Amader Gram,
9) Center for Cancer Prevention and Research,
10) Cancer Support Society (CANSUP),
11) BRAC,
12) Gonoshasthaya Kendra.

6.5 : Cancer programs

1) Breast Cancer Identifying and Treating Project; Amader Gram an ICT4D initiative of Bangladesh.
2) The Government of Bangladesh, with support from UNFPA, has taken initiatives to develop a cervical and breast cancer screening program in Bangladesh.
3) International Childhood Cancer Forum: Exploration and setting priorities for an unmet need in Bangladesh.
4) The Bangladesh Women Chamber of Commerce and Industry has committed to raise the awareness of cervical cancer in every woman and every child.
5) CANSUP, an NGO in Chittagong, is working on breast self-examination and cervical cancer screening with technical assistance from WHO.
6) Gonoshasthaya Kendra is heading towards establishing a cancer hospital for the poor. The Government has already acquired the land, and Gonoshasthaya Kendra has started to mobilize resources and are requesting the philanthropists and donors to come forward in establishing the cancer hospital for the poor adjacent to Savar campus.
7) ASHIC Foundation for childhood cancer improves the quality of life for children living with cancer in Bangladesh by providing hope, physical and emotional support, and raising public awareness for early detection, improved treatment, and social acceptance.
8) Identifying and Treating Women with Advanced Breast Cancer in Bangladesh by Amader Gram.

6.6 : Problems being faced in the treatment of cancer patients in Bangladesh

1) Financial problem
2) Late diagnosis
3) Poor radiotherapy facilities
4) Unavailability of a complete cancer-specialized hospital
5) Poor funding from government for cancer
6) Lack of NGOs to tackle the problem
7) Lack of cancer registries
8) Low levels of awareness.

6.7 : Priorities to improve the oncology scenario in Bangladesh

To improve the oncology scenario, at first goal set-up is very important as described under National Goals and Objectives.
To meet these goals, specific objectives have been established, which are given below:

- To create awareness about tobacco-related cancer and harmful effects through anti-tobacco action programs involving student volunteers, scouts, inter-sectoral personnel, medical personnel, and people at large.
- To attain Early Clinical Diagnosis (ECD) of oral, cervical, breast, and other cancers through circulation of warning signs/symptoms, screening and motivation, and expand laboratory diagnostic support through medical university/college hospitals and district level early cancer detection program and early detection center.
- To extend the therapy by introducing minimal therapy for early cancer at the periphery and comprehensive multi-disciplinary protocol-based therapy with early detection in oncology/radiotherapy departments of medical colleges and palliative care at the district level.
- To widen the coverage and reach of palliative care by providing human resource and supplying necessary drugs and equipments to district level, collaborating with NGOs for home care service.
- To improve the quality of life for cancer patients and their family through support, rehabilitation, and palliative care.
- To develop the effective delivery of services across the continuum of cancer control through effective planning, co-ordination, and integration of resources and activity, monitoring, and evaluation.
- To generate essential evidence for effective cancer control through research and surveillance.

6.8 : Conclusion

Bangladesh is suffering from the double burden of both communicable and non-communicable diseases. So, improvement of cancer scenario overnight is not very easy for a country like Bangladesh. It is very important to know the cancer burden of Bangladesh. So, it is needed to find out disability-adjusted life year (DALY), Years of Life Lost (YLL) due to premature mortality in the population and the Years Lost due to Disability (YLD) and overall health impact assessment (HIA) for cancer. Policy makers may become interested in these issues when they understand that cancer causes a huge health impact and economic loss for Bangladesh.

7 : MISSION

Bangladesh will have a world-class system of cancer control facilities to serve and enrich the quality of life of patients suffering from cancer diseases, through the efficient deployment of technology and human expertise, in a caring and nurturing environment with the greatest respect for human dignity and life which will reduce our cancer incidence, morbidity and mortality rates relative to the South-Asian countries by 2022. Bangladeshi people will know and practice health promoting and cancer-preventing behaviors and will have increased awareness of and access to early cancer detection and screening. Next on, we will have a network of equitably accessible state-of-the-art cancer treatment facilities and we will become a regionally recognized location for education and research into all aspects of cancer.

8 : VISION

- Ensure timely and equitable access for all people to a comprehensive range of health and disability services
- Be first of it's and high quality like UK standard
- Be sustainable
- Use an evidence-based approach
- Reflect a person-centered approach
- Actively involve communities
- Be undertaken within the context of a planned, co-coordinated and integrated approach.

by developing the approached organizations as showed below :

9 : INTERNATIONAL PATIENT SERVICES

ABOUT BANGLADESH MEDICAL TOURISM

The growing trend of Bangladeshi patients travelling abroad for medical services has led to some soul-searching in policy circles. While other countries of the Southeast Asia region are profiting from medical tourism, Bangladesh not only lags behind, it also loses patients to these countries in a continuous stream. This exodus for medical treatment is seemingly driven by the higher perceived quality of treatment abroad, despite the fact that similar treatment is available more cost-effectively within the country. Certainly the Bangladesh health care system is not without its problems, which have diminished the perception of quality in the sector. Thus, this study focuses on key factors for Bangladeshi health service providers to address. By doing so, they will be better able to develop the local health care sector and retain Bangladeshi patients within the country. Subsequently, by identifying strategic niches, Bangladesh could focus on delivering higher quality health care services to develop medical tourism and attract patients from abroad in specific categories of health care.

ABOUT TACH-BD MEDICAL TOURISM

COST OF CANCER TREATMENT IN TACH-BD :

TACH-BD would be a affordable destination of the world for cancer treatment among the international patients from the U.S., UK, Africa, UAE, SriLanka, India,…. Coming here for procedures like cancer surgery and chemotherapy. The reason being although one of the expensive treatments, in TACH-BD cancer treatment would be very economical compared to developed countries. The Cancer Treatment in TACH-BD will at par with developed nations available almost one-tenth of what it would be in the U.S. or UK.

We all know that cancer treatment expenses are extremely high. Once diagnosed, it is better to understand your treatment costs so as to plan your finances and make well-informed decisions.

TO BEGIN WITH, YOU SHOULD BE ACQUAINTED WITH BELOW STARTING THE TREATMENT :

- No two cancer types have same treatment approach. For some type of cancers, oncologists use radiation therapy only as a treatment approach while some other cancer types are treated through the combination of surgery, radiation, chemotherapy, hormone therapy or immunotherapy. Thus, accordingly the expenses vary
- A cancer diagnosed early in first or second stage can be cured completely lower cost than the third or advanced stage cancer that would cost you much higher.
- The cancer treatment approach depends upon the patient's age and medical history, which influences the cost.

THE OTHER TREATMENT VARIABILITY FACTORS ARE :

- Drugs (Bangladesh manufactured or imported medicines)
- Cancer Surgery : Not required in all cancer cases. Some are treated through drug therapy only.
- Chemotherapy : Type of chemotherapy performed (standard chemotherapy, traditional chemotherapy, or cytotoxic chemotherapy) and number of sessions per cycle.
- Radiation therapies : Type (Intra-operative radiation therapy [IORT], Systemic radiation therapy, Radioimmuno therapy, Radiosensitizers, or radioprotectors) and the frequency of the radiation therapy given purely based on medical condition. Over half of the cancer treatment expenses go in radiotherapy.

COMMON CANCER PROCEDURES COSTS :

With so much of variable factors in cancer treatment, we will give over here an approximate estimate of some common procedures which may help you to gauge approximate expense. For more specifics, you can discuss with us.

- **Chemotherapy :** BDT 30,000 –1 lakh each session (cost would vary depending upon drugs and doses based on cancer patient's condition)
- **Targeted therapy :** Five to six sessions would cost approximately BDT 20 lakh.
- **Radiation therapy :** Over BDT 1.5 lakh per cycle.
- **Head, Neck & ENT cancer surgery :** Over BDT 2 lakh.
- **Total mastectomy :** About BDT 4.5 lakh.
- **Breast cancer lumpectomy :** About BDT 2 lakh.
- **PET-CT Scan :** About BDT 25,000

CANCER TREATMENT COST FOR INTERNATIONAL PATIENTS :

If you are an international patient you would be spending somewhere about 60-70% more than TACH-BD for the whole process which would be still far less than the spent for a cancer surgery in the U.S. or Europe. For example, a total mastectomy that costs approximately USD 22,000 in the U.S. would cost you about USD 7,000 in TACH-BD, without compromising on quality like U.S. or UK. As an international patient, you have to also include the cost travelling, hotel stay, and food too in your cancer treatment budget.

INSURANCE COVER FOR CANCER TREATMENT :

Cancer treatment is expensive and most of us are not in a position to take the financial challenge, especially if there is no insurance cover. Many public and private insurance companies cover cancer treatment under insurance. Even though partly, insurance would be a relief from the huge expenditure. Hence, if luckily you have an insurance cover, discuss with your insurance company well before you decide on hospital and treatment.

HOW TACH-BD CAN HELP !

Since cost is a big factor in decision making for undergoing cancer treatment and some hospitals may keep it deliberately confusing, you may discuss with us and get more clarity on that too. At TACH-BD, if you discuss your case with us, we offer you complete guidance on hospitals based on your specific medical care and budget.

WHO WE ARE

TACH MEDICAL TOURISM

TACH – BD

← ← ← ← ←

← ← ← ← ←

← ← ← ← ←

Bangladesh Patients

NRB Patients

Foreign Patients

TARGET PATIENTS

→ → → → →

→ → → → →

→ → → → →

TACH – UK

"TACH Medical Tourism Bangladesh & United Kingdom" is concern of TASMIA-ASIF CANCER HOSPITAL & RESEARCH CENTRE which would be leading medical tourism facilitator offering end-to-end solutions to cancer patients who want to travel to other countries for tourism. With a highly competent and experienced medical panel, extensive alliances with leading world class hospitals across Bangladesh and UK which are well furnished with state-of-the-art technology and are well equipped to give complete support to patients and their families, elaborate network of logistics and dedicated personnel to fulfill patient's various needs, we endeavor to make you feel at home when you are away from your home.

WHAT WE DO

WE LISTEN TO YOU : After you contact us regarding your problem, our Patient care consultant gets in touch with you to collect the recent medical reports and understands your medical needs.

WE CONNECT TO HOSPITAL : We send your medical reports to specialized hospitals across UK/Bangladesh and ask for treatment options from the specialists as per your convenient planning.

WE HELP TO YOU : Once you decide on the Doctor - Hospital combination, we assist you in getting a VISA invitation letter for your treatment, travel plans, stay in Bangladesh & UK, priority appointments at the hospital, vacation plans post treatment and everything else to make your stay in Bangladesh/UK convenient.

WE CARE TO YOU : After returning to your country, we facilitate in getting any follow-up opinions with your doctor.

WHAT WE OFFER

- Online registration
- Appointment Scheduling
- Admission in the hospital
- Second Opinion
- Treatment packages
- Comprehensive Cancer Care
- Visa assistance
- Personal Assistance
- Pick and drop facility from/to the Airport
- Foreign exchange facility
- Laundry Services
- Nursing Services
- Language Interpreter
- Prayer room
- Accommodation arrangements post discharge
- Accommodation arrangement for the accompanying attendant
- Five Star Room Facility
- ATM facility
- Local Sim Card
- Customized diet for patient and attendant (Continental Food)
- Wi-Fi/ Internet service in the room
- Room with Coffee maker, Microwave, Refrigerator
- International News Channels
- Travel arrangement for patient & attendant post discharge
- Tele-consults post discharge

OUR CANCER TREATMENT :

- Bladder Cancer
- Brain Cancer
- Breast Cancer
- Cervical Cancer
- Colorectal Cancer
- Esophageal Cancer
- Kidney Cancer
- Leukemia
- Liver Cancer
- Lung Cancer
- Melanoma
- Non-Hodgkin Lymphoma
- Ovarian Cancer
- Pancreatic Cancer
- Prostate Cancer
- Skin Cancer
- Thyroid Cancer
- Uterine Cancer

OUR TREATMENT PACKAGE :

PARTICULARS	FOR RB		FOR NRB		FOR FOREIGNER	
	TACH-UK	TACH-BD	TACH-UK	TACH-BD	TACH-UK	TACH-BD
TACH Essential Package						
TACH Enhanced Package						
TACH Executive Package						
TACH Elite Package						
TACH Premium Package						
TACH Platinum Package						

A FEW PACKAGE AS FOR UNDERSTANDING :

SPECIALTY	Cost in TACH-BD			Duration
	BDT	USD	GBP	
ONCOLOGY				
Image Guided Radiation Therapy (IGRT)		5000 - 7500	3884-5826	As outpatient - 1 day
Intensity-modulated radiation therapy (IMRT)		3500 - 6000	2719-4661	As outpatient - 1 day
SRS - Stereotactic Radiosurgery(SRS)		3500 - 10000	2719-7768	As outpatient - 1 day
Chemotherapy (per cycle)		1000-3000	777-2330	Multiple cycles, 15 day interval
PET-CT Scan		300 - 450	233-350	As outpatient
Breast Cancer Surgery		3000 - 6700	2330-5205	3-4 days
Prostrate Cancer Surgery		5500 - 10000	4272-7768	6-8 days
COSMETIC				
Rhinoplasty (Nose)		1500 - 5000	1165-3884	2 days
Abdominoplasty (Tummy Tuck)		2000 - 6000	1554-4661	1 - 4 days
Breast Lift		2900 - 6500	2253-5049	1 day
Breast Reduction		1500 - 7000	1165-5438	1 - 2 days
Breast Augmentation (with implants)		2500 - 6500	1942-5049	1 - 2 days
Face lift - Face, neck and upper and lower eyelids		6000 - 8000	4661-6214	Day care/ 1 day
Face lift (Face and neck)		3000 - 5000	2330-3884	1 day
Cheiloplasty (Lip Reduction)		800-1000	621-777	Day care

Medical Tourism Query Form

Title*	:	Mr. Mrs. Miss. Ms. Others
First Name*	:	
Last Name*	:	
Age*	:	
Country*	:	
Postal Address	:	
Home Telephone*	:	
Mobile Phone	:	
E-mail Address*	:	
Confirm E-mail Address*	:	

When is it most convenient to contact you?

Mornings Afternoons Evenings Any times

What type of cancer treatment are you looking seeking information on? *

Bladder Cancer	Kidney Cancer	Ovarian Cancer
Brain Cancer	Leukemia	Pancreatic Cancer
Breast Cancer	Liver Cancer	Prostate Cancer
Cervical Cancer	Lung Cancer	Skin Cancer
Colorectal Cancer	Melanoma	Thyroid Cancer
Esophageal Cancer	Non-Hodgkin Lymphoma	Uterine Cancer

Please Specify*

Please provide additional information that would help us asses your requirements. *

Do you suffer from conditions like BP, Diabetes, Hypertension, or any other condition? (Answer in detail)

Are you currently taking any medications? (Please specify)
Have you undergone any surgeries of late? (Please specify)
When would you like to have your treatment ? (Please specify month)
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Besides the treatment you are seeking, do you wish to have any other health conditions? Yes No
If yes.....
Would you like us to organize flights and accommodation for you? Yes No
Would you like us to organize visas for you? Yes No
Would you be accompanied by a relative or a friend? * Yes No
Where did you hear about us?* Internet Magazine Family/Friend Other
What Hospital or Surgeon you would like to get your treatment from? (if then specify)
Do you have any other questions or comments?

10 : SWOT ANALYSIS

10.1 : Strengths :

- International standard high-quality and affordable recent developed technology driven treatment solutions.
- Clinical expertise, technical "Know how" and opportunities to have NHS UK and Educational providers to develop this ambitious and rewarding project.

10.2 : Weakness :

- Acute shortage of skilled doctors, trained Para-medical staffs, physicist, and therapist in Bangladesh
- Investments required to uplift the current status of cancer field.

10.3 : Opportunities :

- Density populated 1252 per Km^2 (3,241 people per mi^2)
- Literacy rate rises to 70%
- Increased GDP & life style up gradation.
- Good Sewerage system is going on in Dhaka
- Huge scope for further development in this specialized arena.

10.4 : Threats :

- Steep population growth with lack of proper healthcare policies
- Disparity between cancer care services in private and govt. sectors
- Infrastructure and accessibility to the cancer treatment for all is challenge in coming days.

11 : SMDP (STRATEGIC MARKETING DEVELOPMENT PLAN)

Oncology Marketing Strategies that Attract Patients… Ethically... *experience, know-how and a scientific approach.*

Table : 5: Marketing, Awareness & Wellness Programs

Sl	MEDIA	SS	SUB-TYPES & IN-BRIEF
11.1	Print Media	11.1.1	Newspaper(National & Local)
		11.1.2	Magazine (Health, General, Lifestyle),
		11.1.3	Books/ Articles/ Journals
		11.1.4	Catalogues, Brochures, Dongles
11.2	Electronic Media	11.2.1	TV
		11.2.2	FM Radio,
		11.2.3	Local Cable Operator
11.3	Net-Working	11.3.1	Mobile (SMS & Ringtone) (Android Apps)
		11.3.2	Online PPC (pay-per-click)/ Google Adwords,
		11.3.3	Website
		11.3.4	E-mailing
		11.3.5	Blogs
		11.3.6	Facebook
		11.3.7	twitter
		11.3.8	Youtube
		11.3.9	Instragram
		11.3.10	Pinterst
11.4	Branding/ Outdoor Marketing	11.4.1	Billboards in various public places & cities
		11.4.2	Unipole Lightbox (roadside)
		11.4.3	Wall Painting
		11.4.4	Pharmacy Shopsign & branding
		11.4.5	Banner (Roadside)
		11.4.6	Festoons
		11.4.7	Vehicles Branding (Bus, Train)
11.5	Branding/ Indoor Marketing	11.5.1	Hospital Furniture & Apparels
		11.5.2	X-stands
		11.5.3	Wall Images
11.6	Event Management	11.6.1	Cricket, Football
		11.6.2	Concert, Drama
		11.6.3	School, College Event
		11.6.4	Health Fairs
		11.6.5	Healthcare Special Day Celebration
		11.6.6	Awareness Programs
		11.6.7	Blood donation Camp
		11.6.8	Free Screenings
		11.6.9	Bioscopes
		11.6.10	Street Programs
11.7	Conventional Sales Promotions	11.7.1	To Physicians
		11.7.2	To Patients
		11.7.3	To Health Centre

12 : HOSPITAL LAND FEASIBILITY SURVEY

Hospital Land	:	Area/Space	-	26 kathas = 43 decimals = 18,720 sft.
	:	Address	-	RS#3234, Kalshi Road, Mirpur, Dhaka, Bangladesh

The site and land feasibility study is conducted and approved by evaluating :

- Accessibility to transportation & communication lines
- Parking facilities
- Availability of public utilities
- Proper elevation for drainage & general sanitary measures
- Freedom from smoke, noise, vapours & other annoyances
- Future expansion

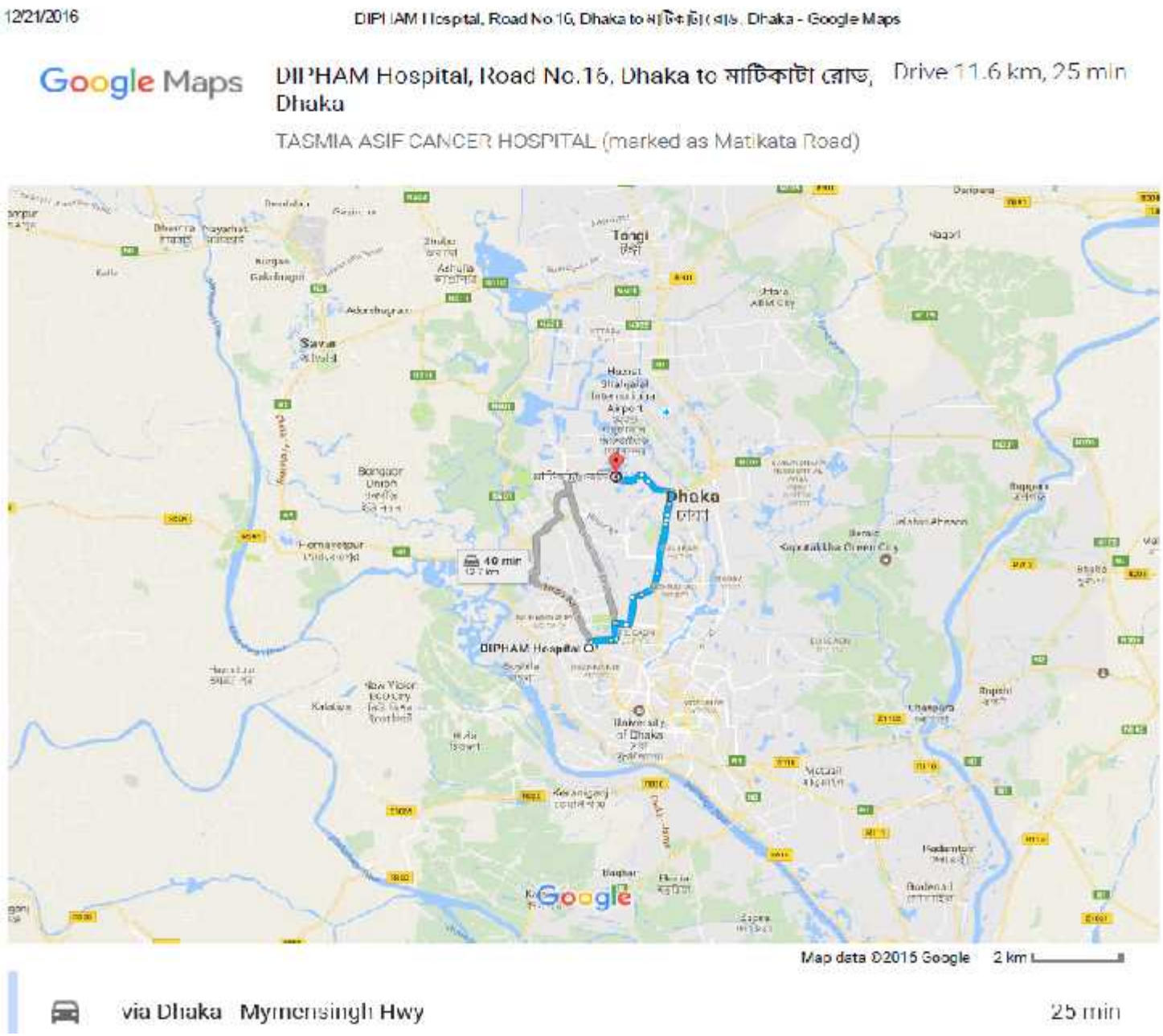

Fig. : The pathway of Google Map in between Existing Centre (TBC) & planned Project Location

13 : HOSPITAL @ a GLANCE :

It will be 100 bedded Specialized Hospital for Comprehensive Cancer Care, which will be accomplished in 3 phases/stages

Rationale : ❖ Vacant Land area which is available
❖ Availability of finances
❖ Competitors

Phase – I : 10 bedded Day Care Centre : Temporary Building : For Women : Medical & Surgical Oncology Facilities
Phase – II : 50 bedded Cancer Hospital : Basement, Ground & 1st Floor of Main Building : For Women : Medical, Surgical & Radiation Oncology Facilities
Phase – III : 100 bedded Cancer Hospital : Completed 10 storied Main Building : For Men, Women & Children : Medical, Surgical & Radiation Oncology Facilities

13.1 : Nature of Hospital

The **TACHRC** Hospital will be an high end hospital and truly UK standard high quality world-class comprehensive cancer care & research centre as noted below :

- 100 bedded specialized and super-specialized facilities & services.
- Full OPD & IPD and screening systems as a primary care services.
- It will have a state-of-the art Radio-diagnostics & Imaging Centre.
- It will be fully digitized and paperless will all clinicians and departments using an "Electronic Patient Record" system at all time.
- It will provide an intimate, friendly, and caring environment.
- Its design and processes will be patient-focused (Patient-centered).
- High staff (staffed by selected, high qualified healthcare professionals from UK and BD) to patient ratios for personalized care.
- Providing the highest standards of cleanliness, comfort, safety and convenience.
- Recent developed medical equipments and evidence based protocols.

13.2 : Therapeutic Specialties

- Oncology

13.3 : Super-Specialty (Centre of Excellence)

- Breast Cancer Centre

13.4 : Medical Specialties & Services as per Staffing

Table : 6: Facilities Services as per Staffing

SL		DEPARTMENT & PROFESSIONALS	POS
A		**EXECUTIVE COMMITTEE**	**4**
	i	Chairman	1
	ii	Managing Director	1
	iii	Director – Medical Services	1
	iv	Director – HR & Admin	1
B		**Dept-Admin & Operation**	**46**
	B-1	**Unit : Administration**	**3**
	i	Chief of Operation (Army Officer/Foreigner)	1
	ii	General Manager – Asst. of Operation	1
	iii	Manager – HR & Admin	1
	B-2	**Unit : Marketing & Sales**	**5**
	i	Manager – Marketing & Sales (N & I'N)	1
	ii	Executive (Sr) – Marketing & Sales (Dhaka)	1
	iii	Executive – Marketing & Sales (Ctg. & Syl.)	1
	iv	Executive – Marketing & Sales (Raj. & Rang.)	1
	v	Executive – Marketing & Sales (Khu & Bar)	1
	B-3	**Unit : Customer Care & Service/ Front Desk**	**10**
	i	Medical Officer - Telemedicine	2
	ii	Executive – Reg., ID, Admission & Records)	2
	iii	Executive – Information & Billing (Hospital)	2
	iv	Executive – Information & Billing (Diagnostic)	2
	v	Executive – Information & Billing (RT Centre)	2
	B-4	**Unit : Sourcing & Supply/ Purchase**	**1**

SL			DEPARTMENT & PROFESSIONALS	POS
G			**OPD**	
	Unit-1	**1**	**Dept : Gastrointestinal Cancer**	0
		2	**Dept : Lung Cancer,**	0
			Sr. Consultant (UK)	1
			Sr. Consultant (UK)	1
			Unit-1 Medical Officer	1
			Unit-1 Nurse/ Brother	1
	Unit-2	**3**	**Dept : Head, Neck & ENT Cancer**	
		4	**Dept : Orthopedic & Neurology**	
			Sr. Consultant (UK)	1
			Sr. Consultant (UK)	1
			Jr. Consultant (UK)	1
			Unit-2 Medical Officer	1
			Unit-2 Nurse/ Brother	1
	Unit-3	**5**	**Dept : Gynae Oncology** (Cervix, Overy & Fallopian Tube, Uterine Cavity, Vulva, Vagina, Persistent Gestational, Trophoblastic Tumor (GTNs)	
		6	**Dept : Breast Cancer**	
		7	**Dept : Cosmetic & Reconstructive Cancer**	
			Sr. Consultant (UK)	1
			Jr. Consultant (UK)	1

	i	Executive (Sr.) – Sourcing & Supply	1
	B-5	**Unit : Engineering & Maintenance**	**7**
	i	Manager – Engr. – BM, EEE & ICT	1
	ii	Exe (Sr.) – Engr. – Bio-Medical	1
	iii	Exe(Sr.) – EEE	1
	iv	Exe(Sr.) - ICT	1
	v	Exe(Jr.)(Technician) – Bio-Medical	1
	vi	Exe(Jr.)(Technician) – EEE	1
	vii	Exe(Jr.)(Technician) – Mechanical	1
	B-6	**Unit : Finance (+Accounts +Commerce)**	**3**
	i	Manager – Accounts, Finance & Commerce	1
	ii	Sr. Executive/ Executive – A/C, F & C (Hosp)	1
	iii	Sr. Executive/ Executive – Accounts & Billing (Dg)	1
	iv	Sr. Executive/ Executive – Accounts & Billing (RT)	1
	B-7	**Unit : General Maintenance (Store, Kitchen, Housekeeping, Security, Laundry)**	
	-	**Store**	
	i	Store-in-Charge/Keeper	1
	ii	Store Officer (Medical)	1
	iii	Store Officer (General)	1
	-	**Security**	
	i	Security-in-Charge (Sr. Exe) (Army N.C.)	1
	ii	Security Guard	10
	-	**House Keeping**	
	i	Peon	10
	ii	Cleaner	10
	iii	Attendant	10
	-	**Kitchen/Canteen**	
	i	Canteen Manager	1
	ii	Chief Cook/ Sheaf	1
	iii	Cook Helper	2
	iv	Dishwasher/ Attendant	2
	v	Food Supply (IPD)	2
	-	**Laundry**	
	i	Laundry Operator	1
	ii	Laundry Assistant	2
	-	**Transport & Ambulance Services**	
	i	Transport Officer	1
	ii	Driver	5
	iii	Mechanic	1
C		**Dept of Radiotherapy**	**19**
	i	Chief Consultant – RT (Overseas)	1
	ii	Jr. Consultant – RT	2
	ii	Sr. MO	3
	iv	Chief Medical Physicist (Overseas)	1
	v	Medical Physicist	4
	vi	Medical Technologist	4
	vii	Oncology Nurse (RT+Daycare+Ward)	4
D		**Dept. of Laboratory Medicine**	**12**
	i	Head of Dept. – Chief Consultant (OS)	1
	ii	Jr. Consultant (OS)	1
	iii	Sr. Consultant (BD)	1
	iv	Laboratory-in-Charge (Bio-Chemist)	1
	v	Medical Technologist (Sr.) : Hematology	1
	vi	Medical Technologist(Sr.) : Micro Biology	1
	vii	Medical Technologist (Sr.) : Clinical Pathology	1

			Jr. Consultant (UK)	1
			Unit-3 Medical Officer	1
			Unit-3 Nurse/ Brother	1
	Unit-4	**8**	**Dept : Prostate & Genitourinary Cancer**	
		9	**Dept : Haemato-Oncology & Bone-Marrow Transplantation**	
			Sr. Consultant (UK)	1
			Jr. Consultant (UK)	1
			Unit-4 Medical Officer	1
			Unit-4 Nurse/ Brother	1
	Unit-5	**10**	**Dept : Paediatric Oncology** (Lymphoma, Retinoblastoma, Leukaemia, Bone Tumor, Wilm's Tumor, Testicular, Hepatocellular Tumor)	
			Sr. Consultant (UK)	1
			Unit-5 Medical Officer	1
			Unit-5 Nurse/ Brother	1
	Unit-6	**11**	**Dept : Acute/ Emergency Oncology**	
			Jr. Consultant (UK)	1
			Unit-6 Medical Officer	1
			Unit-6 Nurse/ Brother	1
	Unit-7	**12**	**Dept : Oncotherapy (Physiosuite, Chemosuite, Speech Suite)** (Chemotherapy, Physiotherapy, Immunotherapy/ Biological Therapy, Hormonal Therapy, Targeted Therapy, Neutropenic Therapy, Bone-Directed Therapy, Nutritional Therapy, Speech Therapy)	
			Sr. Consultant (UK)	1
			Jr. Consultant (BD)	1
			Jr. Consultant (BD)	1
			Sr. Physiotherapist	1
			Physiotherapist	1
			Unit-7 Nurse/ Brother	4
	Unit-8	**13**	**Dept : Wellness Care/ Palliative Centre**	
			Sr. Consultant (BD)	1
			Jr. Consultant (BD)	1
			Unit -8 Medical Officer	3
			Unit-6 Nurse/ Brother	3
H	**INDOOR**			**30**
	-		**ICU/CRITICAL CARE**	---
	i		Jr. Consultant/ ICU-in-Charge	1
	ii		Medical Officer	3
	iii		Nurses	2
	iv		Brothers	2
	-		**INDOOR (Cabin & Ward)**	---
	i		Medical Officer	3
	ii		Nurses	3
	iii		Brothers	3
	-		**SWP (OR) & POS –OPERATIVE**	---
	i		Chief Anesthesiologist (UK)	1
	ii		Jr. Anesthesiologist (UK)	1
	iii		Sr. Anesthesiologist (BD)	1
	iv		Jr. Anesthesiologist (BD)	1
	v		Nurses	6
	vi		Brothers	6
I	**TRAINING CENTRE**			**3**

	viii	Medical Technologist (Sr.) : Histopathology	1
	ix	Medical Technologist : Histo-Cytology	1
	x	Medical Technologist : Biochemistry	1
	xi	Medical Technologist : Immunology	1
	xii	Medical Technologist : Serology	1
E		**Department of Radiology & Imaging**	**12**
	i	Head of Department – Chief Consultant (UK)	1
	ii	Jr. Consultant – (UK)(Female-Mammo)	1
	iii	Sr. Consultant (BD)	1
	iv	Jr. Consultant (BD)	1
	v	Sr. Medical Technologist – CT scan (BD)	1
	vi	Sr. Medical Technologist – MRI (BD)	1
	vii	Sr. Medical Technologist – X-ray (BD)	1
	viii	Sr. Medical Technologist(Female-Mammo) (BD)	1
	ix	Medical Technologist – USG (BD)	1
	x	Medical Technologist – MRI (BD)	1
	xi	Medical Technologist – X-ray (BD)	1
	xii	Medical Technologist – Mammography	1
F		**Department of Pharmacy & Medicine**	**6**
	i	Supervisor / Chief Pharmacist	1
	ii	Sr. Pharmacist	1
	iii	Pharmacist for IPD	2
	iv	Pharmacist for OPD	2

	i	Training Coordinator (BD)	1
	ii	Training Associate (BD)	2

13.5 : Classification of Beds

Table 7 : Bed Classification

Sl	DEPT/UNIT/CENTRE	BED	REMARKS
A	**TRANSIT**	**45**	
i	Emergency/ Acute Oncology	0	
ii	Chemotherapy	5	(4 pt./bed/day) ×5 beds
iii	Palliative Ward	10	
iv	ICU	10	
v	CCU/ Post Operative	20	(5 pt/day)×4 OTs
B	**INTRANSIT**	**55**	
i	I'Nt. Ward(M+F)	10	
ii	Male Word	10	
iii	Female Ward	10	
iv	Pediatric Ward	5	
v	Geriatric Ward (Sr. Citizen)	5	
vi	VIP Cabin/Deluxe	5	
vii	Gen. Cabin/Private	5	
viii	Semi Cabin/ Semi-Private	5	
-	**TOTAL**	**100**	

13.6 : Floor Wise Design

TEMPORARY BUILDING

SERIAL		DEPARTMENT	L×W	TOTAL SQUARE FEET	COMMENT
1		RADIOLOGY & IMAGING		300	
	1/1	Mammography	20×10	200	Equipment & Doctors
	1/2	USG	10×10	100	Equipment & Doctors
2		LABORATORY		200	
	2/1	Equipment Room	10×10	100	Equipment & Doctors
	2/1	Blood Collection	10×10	100	Accessories & Technologists
3		OT COMPLEX		900	
	3/1	Pre-Operative Room	10×10	100	Nurses
	3/2	OT	20×20	400	Surgeons
	3/3	Post-Operative Room (5 Beds)	20×20	400	Medical Officers
4		CONSULTATION COMPLEX		500	
	4/1	Physician Room-1	10×10	100	Dr.
	4/2	Physician Room-2	10×10	100	Dr.
	4/3	Physician Room-3	10×10	100	Dr.
	4/4	Physician Room-4	10×10	100	Dr.
	4/5	Physician Room-5	10×10	100	Nutritionist
5		ONCO-THERAPY SUITE (3 Beds)	20×10	200	Chemotherapists
6		KITCHEN & DINING	10×10	100	Cook & Attendants
7		PROJECT OFFICE		300	
	7/1	Project Director	10×10	100	-
	7/2	Project Manager	10×10	100	-
	7/3	Accounts	10×10	100	-
8		WASH ROOM/ TOILET		150	
	8/1	Toilet for Officer	10×5	50	-
	8/2	Toilet for Patients	10×5	50	-
	8/3	Toilet for Physicians	10×5	50	-
9		FRONT DESK & Pt. Sitting Space	30×10	300	-
10		STORE ROOM		50	-
		GROSS TOTAL		**3000**	

MAIN BUILDING

Sl	Floor	Space (sft)	Base Department	Other Facilities
STAGE-2 : MAIN BUILDING (43,200 sft) (12 kathas) (Lower Basement to 2nd Floor)				
i	Lower Basement	8640	Transport & Parking Area	Store (Materials)
ii	Upper Basement	8640	Radiotherapy Equipment Set-up *(Room = Linac, Brachy, Chiller, Mold, Colling, Simulation)*	Store (Medicals)
iii	Ground Floor	8640	Faculty of Radiation Oncology *(Centers = Control, Treatment, Recovery, Brachysuite)*	Pharmacy/ Medicine Sales Centre-OPD & IPD, Dept of Customer Care (Reception, Information, Admission, Billing, Delivery) Oncology Emergency
iv	First Floor	8640	Dept of Radiology & Imaging *(CT, MRI, X-ray, Mammo, USG)*	Other Diagnostic Centre (Endoscopy, ECG, ETT, EMG), ICU & CCU, Cabin
v	Second Floor	8640	Dept of Laboratory Medicine *(Histo, Cyto, Haemato, Bio-Chem, Sero, Cli-path, Micro-Bio, B.Transf.)*	Ward (Male, Female, Paed), Nurse Station, Medical Officer Station
STAGE-3 : MAIN BUILDING (69,120 sft) (12 kathas) (3rd Floor to 10th Floor)				
vi	Third Floor	8640	Faculty of Medical Oncology	Gastrointestinal Cancer Centre, Lung Cancer Centre, Head & Neck Cancer Centre,
vii	Fourth Floor	8640	Faculty of Surgical Oncology	OT (4s), Anesthesiology & Pain Management, Haemato-Oncology & Bone-Marrow Transplantation Cancer Centre,
viii	Fifth Floor	8640	Dept of Gynae-Oncology/ Women Cancer Centre	Dept of Paed-Oncology, Prostate & Genitourinary Cancer Centre,
ix	Sixth Floor	8640	Dept of Onco-Therapy *(Physio, Chemo, Immun, Hormon, Targeted, Neuropenic, Nutritional, Bone-Directed, Speech T.)*	Wellness Centre/ Palliative Care National Patient Attainder's Dormitory I' National Patient Attainder's Dormitory
x	Seventh Floor	8640	Centre of Excellence (TBC)	Cosmetic & Reconstructive Cancer Centre
xi	Eighth Floor	8640	School of Oncology	Dept. of Tele-Treatment *(Telemedicine, Telediagnosis, Teletratment & Mobile Screen.)*
xii	Ninth Floor	8640	Research Academy	Canteen, House Keeping & Laundry
xiii	Top Floor	8640	Green Area (Garden)	Dept of Admin & Hospital Management *(Admin, HR, Accounts, Finance, Commerce, Engr., Security, IT, Inventory, Supply Chain)*

13.7 : IT Driven tools and services

- HMS (Hospital Management Systems)
- Billing
- Inventory
- Accounts Management
- Patient Records Management
- ERP (Enterprise Resource Planning) Solutions
- Tele-medicine and Medical Informatics
- Decision support system that improves diagnosis and treatment

13.8 : Hospital Peculiarities

- Micro-processor based implantable in patients.
- CPU-driven technology supported by artificial intelligence.
- Robotics and modular OTs.
- Automation in Path lab and Research.
- Laser and Radiation technology in surgery.
- Instrumentation in medical and surgical practices.
- IT tools for net-working examinations, diagnostics, treatment rooms, and Ots.
- IT tools along with artificial intelligence and micro-processor technologies for equipment maintenance and trouble shooting.

13.9 : Accreditations : Top class accreditations will be certified from world-wide reputed body

- To stay as first-of its in competitive market.
- According to Ernst & young report quality is the most preferred attribute for patients to choose a particular hospital.
- To increase customer satisfaction.
- To cater foreign patients.

14 : FUTURE PROJECT :

CANCER MALL/ CANCER VILLAGE/ CANCER WORLD : Gazipur, Dhaka, Bangladesh

15. TO DEVELOP A TRUSTY ORGANIZATION :

'TASMIA-ASIF Cancer Foundation'

Initially The Foundation fund-raises to provide the best breast cancer care and treatment possible in Bangladesh Poor Women. We do this by funding projects that go above and beyond and every bit of support that you are able to show makes a difference in the quality of care that we can provide.
In supporting our foundation you will play a very real part in treating more lives, developing new treatments, helping our patients have access to the most state of the art facilities and equipment and support those that need it most.

We fund:

- Free treatment for under privileged people across the country
- Cutting edge facilities and an improved environment
- State of the art equipment that can make a real difference to patient care
- Opportunities for staff training in specialist areas
- Opportunities to further medical knowledge through research

All gifts, whatever the amount, contribute to delivering breakthrough treatment and compassionate care at the **Tasmia-Asif Cancer Hospital & Research Centre.**

Our Programs :

- Early Detection Plan
- Beyond The Shock
- National Mammography Program
- Patient Navigator Program
- Breast Health Education
- Breast Cancer Research

Financing

We are looking for partners (Investors) and medical equipment and suppliers to share to equip the units, who have leadership, commitment & ability to perform or to delegate defined roles & responsibilities & to follow that to assess the outcome.

In addition it is a great offer to those who have interest to gain a strong foothold in the medical industry & to develop a sustainable partnership for establishment of such innovative social and ethical organization for breast and other cancers care. Partners will share revenue to get settled repayment from the business services from the year of its commencement, which will be settled by mutual understanding.

END of PART-1

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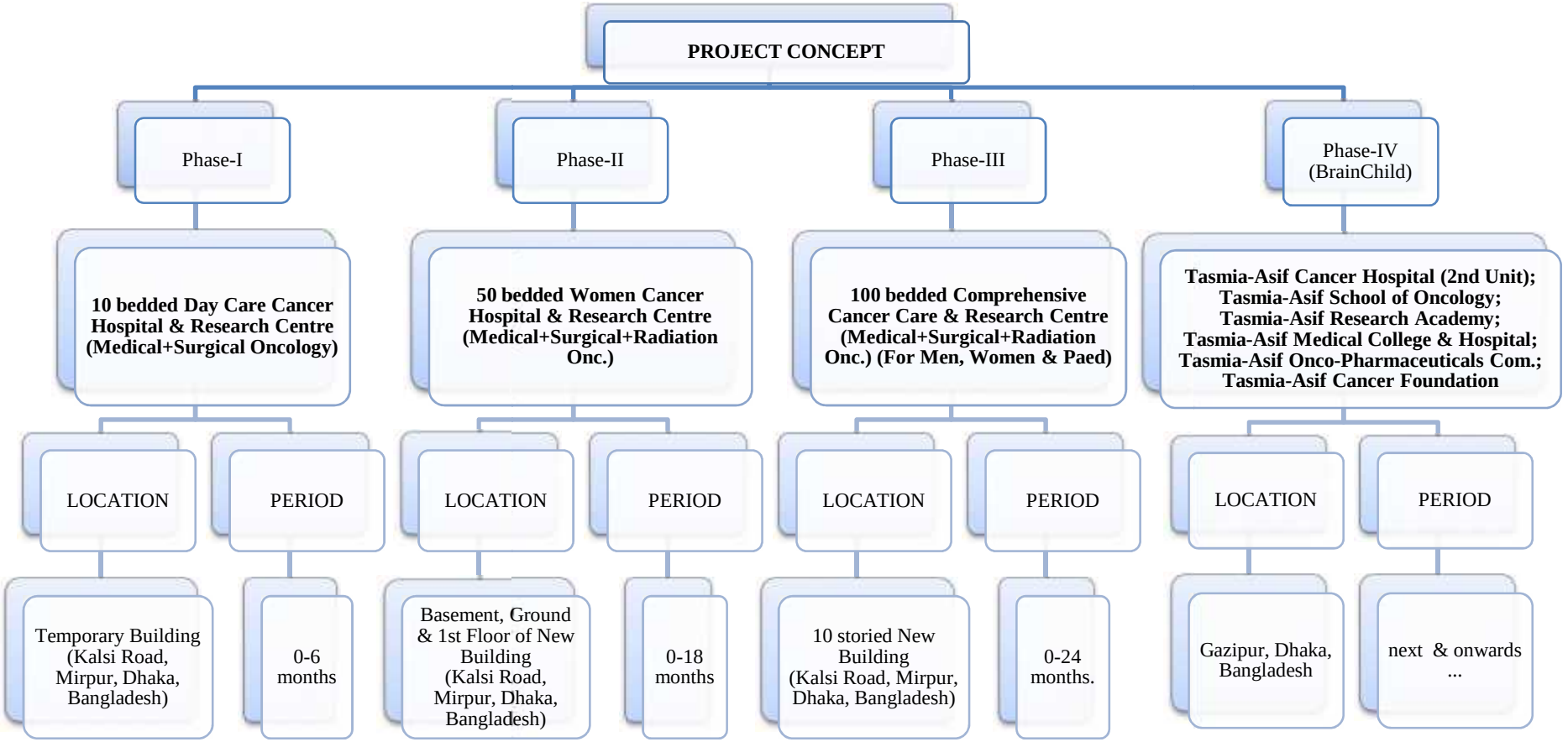
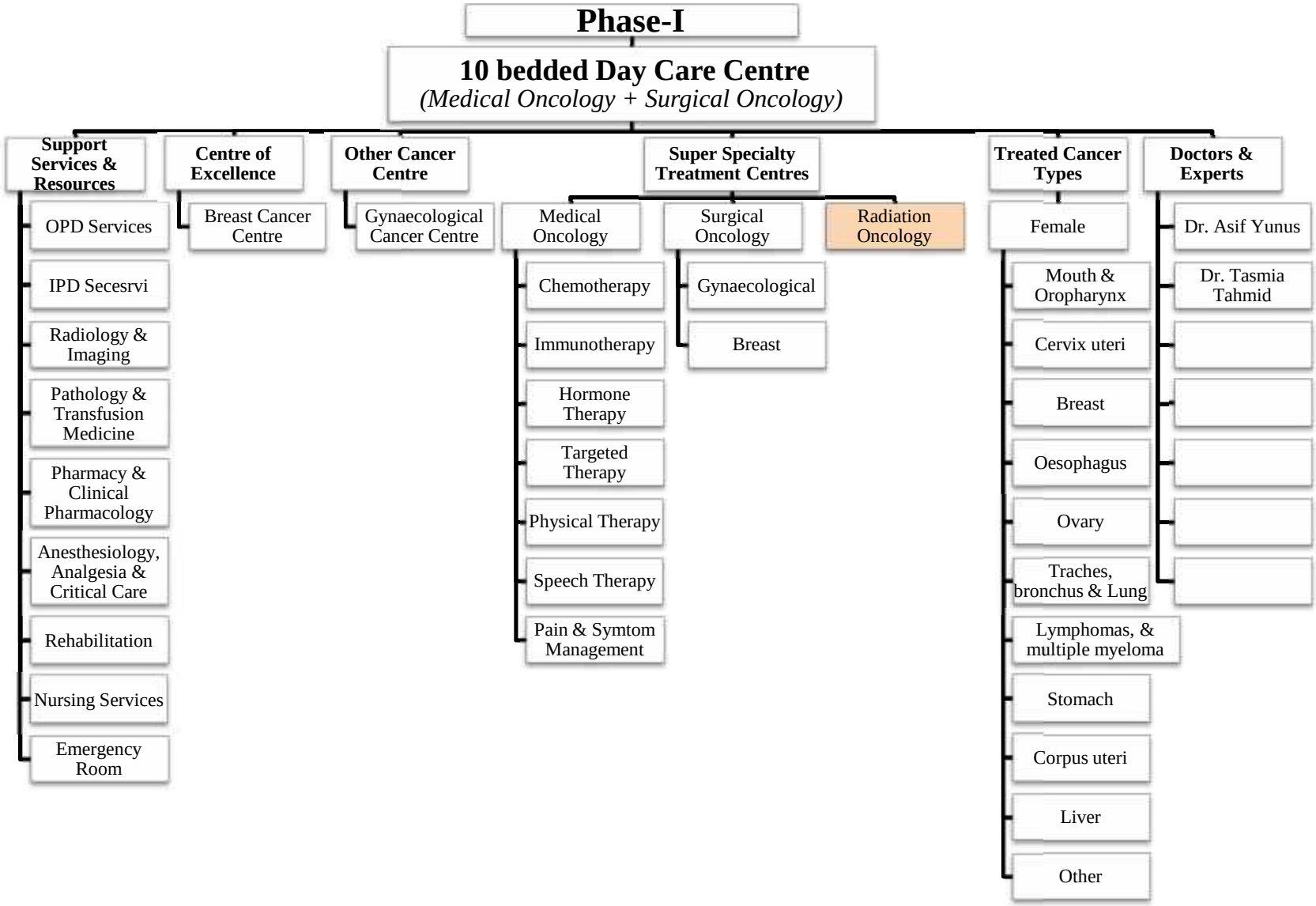
PART -3

THE PROJECT CONCEPT OVERVIEW& IMPLEMENTATION PHASE



TASMIA ASIF CANCER HOSPITAL & RESEARCH CENTRE : Facilities & Services of Phase –I of Project.



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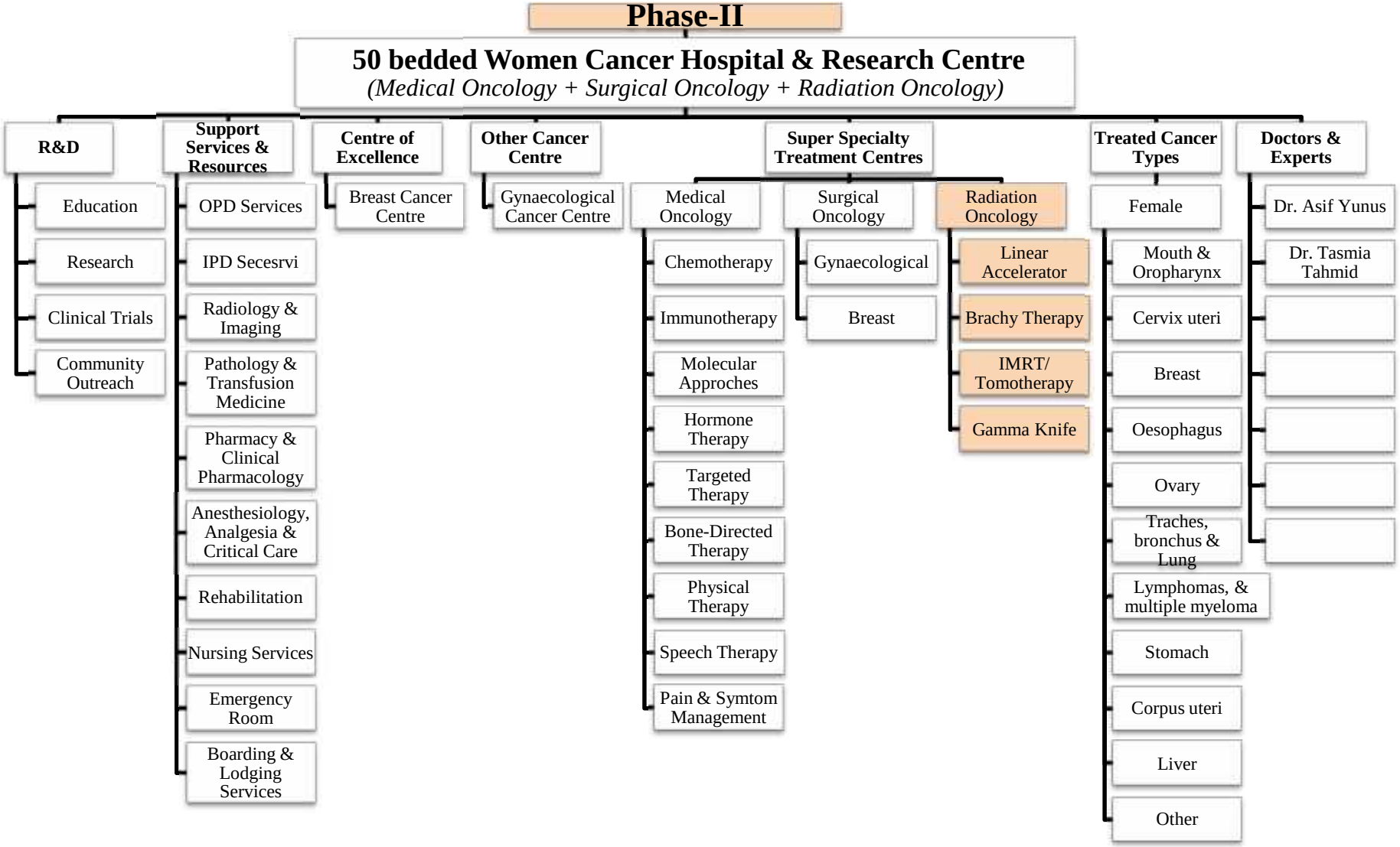
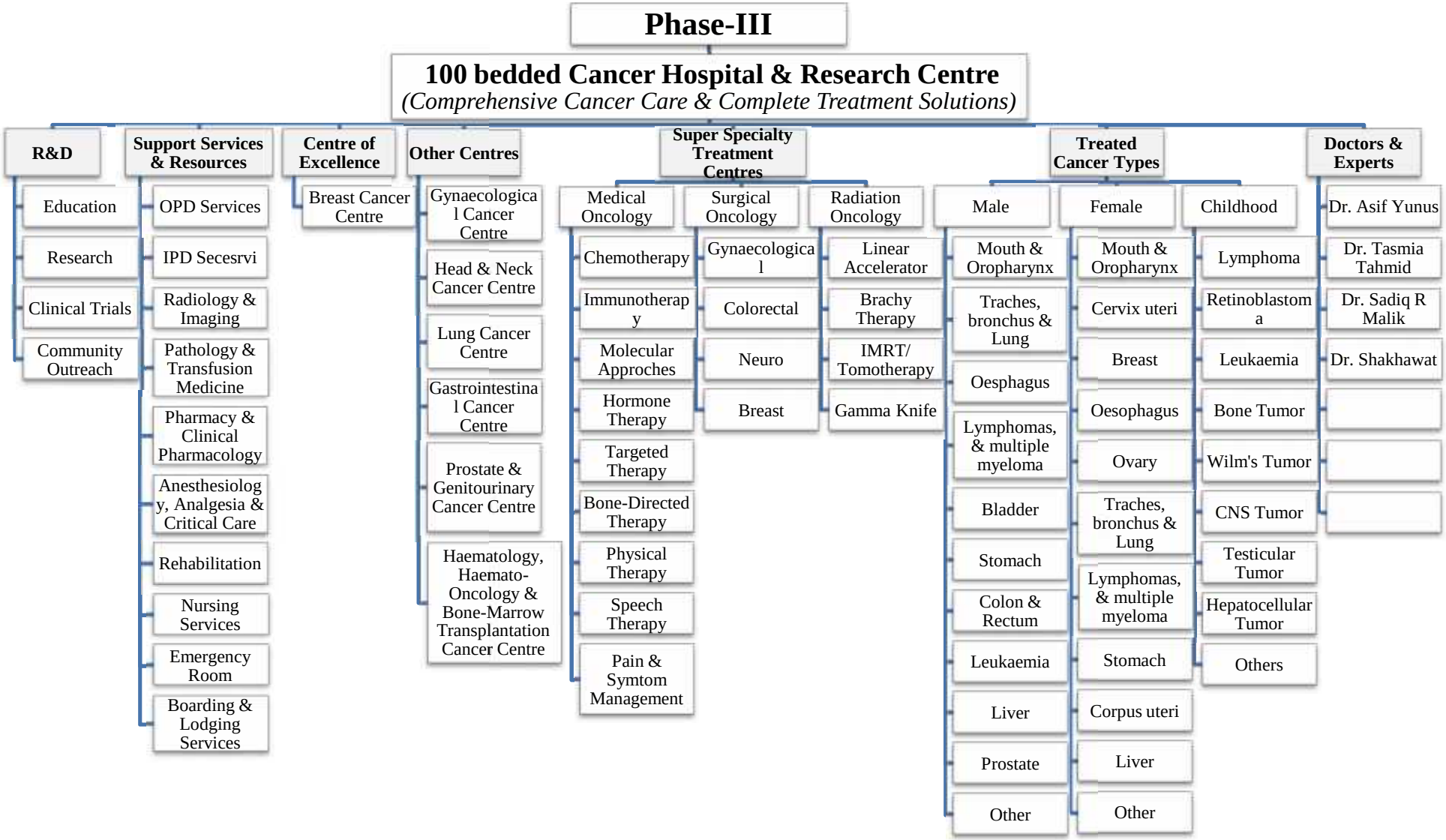


TASMIA ASIF CANCER HOSPITAL & RESEARCH CENTRE : Facilities & Services of Phase –III of Project



PHASE – IV : TBC (TASMIA BRAIN CHILD)