



YENEPOYA

(DEEMED TO BE UNIVERSITY)

Recognized under Sec 3(A) of the UGC Act 1956

Accredited by NAAC with 'A' Grade

4.1.4

Infrastructure Facilities

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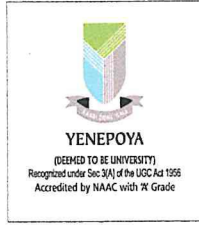
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Particulars	Web Link
Link to the video on Infrastructural details of the University and its constituent units	Link

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**Comprehensive cancer
centre-Tata Trust
Mumbai and
Yenepoya (Deemed to
be University)
Mangalore
Collaboration**



The proposed comprehensive cancer centre – Tata Trust, Mumbai and Yenepoya (deemed to be University), Mangalore collaboration

The Yenepoya (deemed to be University) and the Tata Trust, Mumbai represented by the Chancellor of the University and the CEO of the Tata Trust, respectively, signed a Letter of Intent, to start and run a comprehensive cancer centre in the Yenepoya (deemed to be University) campus, Deralakatte, Mangalore, next to the existing Yenepoya Medical College building. (The copy of the LOI- enclosed as **Annexure 1**).

The proposed project was divided into 2 phases. The first phase will comprise of starting of the full blown Radiotherapy facility with True Beam Radiotherapy, Halcyon Teleradiotherapy facility and Brachytherapy facility with all the necessary accessories. Along with that, full blown nuclear medicine department with PET CT scan facility, SPECT isotope scan facility, and Radiotherapy treatment facility.

Accordingly, the construction of the building with necessary bunkers for Radiotherapy, OPD facility, Nuclear medicine facility was started is almost complete. The floor map and the photographs of the same are enclosed as **Annexure 2**.

Some of the equipment such as Brachytherapy and the accessories necessary for Teleradiotherapy have already reached the site. The photos of the same are enclosed **Annexure 3**.

The construction of the building which is almost complete with necessary infrastructure will cost approximately Rs. 25 Crores.

The cost of the equipment will be approximately Rs. 50 Crores.

The starting of the facilities which was delayed due to COVID-19 pandemic is likely to commence functioning by June 2021.

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REGISTRAR

Agreement on principles between Tata Trusts and Yenepoya (Deemed to be University)

This Joint Letter of Intent (hereinafter "LOI") constitutes an agreement on principles of engagement and is made and entered into as of 24th April, 2018 by and between:

(1) **Tata Trusts¹** (as further defined hereinafter), the trusts being registered under the Maharashtra Public Trusts Act, 1950 and having their registered office at Bombay House, 2nd floor, 24 Homi Mody Street, Fort, Mumbai 400001 (hereinafter referred to as the "TT", which expression shall wherever the context permits, admits or requires be deemed to mean and include its successors-in-interest and permitted assigns) **OF THE FIRST PART**

And

(2) **Yenepoya (Deemed to be University)**, having its office at University Road, Deralakatte, Mangalore- 575018 (hereinafter referred to as "Yenepoya" which expression shall wherever the context permits, admits or requires be deemed to mean and include its successors-in-interest and permitted assigns) **OF THE SECOND PART**

TT and Yenepoya are hereinafter together referred to as "Parties" and individually as "Party".

A. Cancer Control Vision

Tata Trusts and Yenepoya (Deemed to be University) have a common focus towards improving cancer care in Karnataka, starting with the Mangalore catchment region. The parties wish to provide comprehensive cancer care to patients at affordable rates to reduce waiting times and eventually improve clinical outcomes.

The purpose of this LOI is to initiate a collaborative relationship between Tata Trusts and Yenepoya to work together in the coming years to achieve the vision of strengthening cancer control in the state of Karnataka.

A cancer care center will be built on Yenepoya campus. In addition, the university will also identify and allocate land to Tata Trusts for creating a radiation hub in the region which will cater to patients from Karnataka and other states. This hub will be built in a phased manner, after detailed supply demand gap analysis of the region.

B. Proposed Collaboration

- The proposed collaboration will be along the lines described in Annexure 1

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1. Tata Trusts refers to Sir Dorabji Tata Trust & Allied Trusts and Sir Ratan Tata trust & Allied Trusts.

- The university will provide land at campus and outside, in Mangalore to Tata Trusts for development of the 2 facilities on a long-term lease for a nominal fee. Yenepoya shall obtain/ assist in obtaining all requisite permissions, approvals, clearances, etc. required from the government bodies for setting-up and operating the centres from time to time.
- TT will be responsible for all investments required for setting up of the centre as required, through their special purpose vehicle, Alamelu Charitable Foundation (hereinafter referred to as "ACF")²
- Tata Trusts will conduct detailed analysis and recommend a suitable configuration for the facilities along with masterplans.
- The cancer hospital will be owned and operated by ACF. An MoU will be signed between Yenepoya and ACF which will outline the roles and responsibilities of both, in detail.

C. Non-exclusive

This LOI is not intended to limit or restrict activities of either Parties and they shall be free to carry out activities independent of each other at their free will.

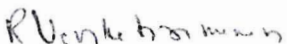
D. Limitation of liability

No rights or limitation of rights will arise from the terms of this LOI. Both Parties indemnify each other for any liabilities that may arise out of this LOI.

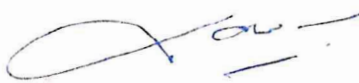
E. Entire understanding

This LOI constitutes the entire present understanding of the Parties pertaining to matters contemplated hereunder at this time and the Parties shall work closely with each other to detail out the understanding.

For Tata Trusts


Mr. R Venkataramanan
Managing Trustee,
Tata Trusts

For Yenepoya (Deemed to be University)


Mr. Yenepoya Abdulla Kunhi
Chancellor,
Yenepoya (Deemed to be University)

Date: April 24th, 2018

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² ACF is an initiative of Tata Trusts, a Section 8 company, being a Special Purpose Vehicle, incorporated under laws of India, and having its administrative office in Vijayawada, Krishna Dist, AP-520008 .

Annexure 1

Cancer Care in Karnataka

Karnataka, with a population of approximate 6.1 crores that is growing at 1.5% annually has good health indicators comparable to some of the better states in India. However, the state's cancer incidence rate of 110 per lakh population is higher, compared with the incidence of 104 in Tamil Nadu, the neighboring state. Lung, prostate and stomach cancer contribute to top 25% of cancers in men. The high incidence of cancer in men is attributed to high tobacco consumption. Breast, cervix and ovary cancers contribute to top 45% of cancers in women.

With increasing risk factors and improved diagnosis, the incidence of cancer is expected to grow from 73,000 in 2016 to c. 1,60,000 by 2030

To cater to this load of cancer cases in the state, currently, there are only 6 government cancer care facilities in Karnataka with Kidwai Memorial Institute of Oncology (KMIO), Bengaluru serving as the apex centre for the state. The other government cancer centres are located at Kalaburagi, Bellary, Mandya, Hassan, Mysore and Hubli.

In addition to these government facilities, multiple private sector hospitals in the state offer comprehensive cancer care services. However, given the cost of treatment in these hospitals, only a small share of the population – c.20-25% can afford to get treated at these centers.

The remaining population is dependent on KMIO for Comprehensive cancer care. The other facilities spread across the state offer limited care to the patients and hence for any lifesaving/life quality enhancement treatment, the population is dependent on KMIO. This puts lot of pressure on its infrastructure and has led to long waiting lists for radiation and chemotherapy services at KMIO.

S. No	Service	Wait Time
1	Medical Oncology	1.5-2 months
2	Radiation oncology	2 months

Therefore, there is a need to provide an immediate alternative to KMIO through establishment of a comprehensive cancer care facility in the state that serves the underprivileged sections of the society.

Proposed Facility at Yenepoya (Deemed to be University)

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Yenepoya (Deemed to be University) is the first deemed to be university in Dakshina Kannada, district of Karnataka with faculties of Medicine, Dentistry, Nursing, Allied

Health and Healthcare Management. The teaching hospital is a multi-specialty facility with 1,020 beds and is equipped with 2 MRIs, CT, Mammography and other radiology and imaging equipment, besides - diagnostic modalities, laboratory and blood bank.

Yenepoya Medical College Hospital provides medical and surgical oncology services at highly subsidized rates to the people of Karnataka and North Kerala. There are 80 beds earmarked for oncology. The hospital has partnered with K.S. Hegde Charitable Hospital to refer patients for radiation therapy.

The hospital gets patients from various districts of the state such as Shimoga, Kodagu, Chikkamagalur, Chitthradurga, Bellary, Haveri, Dharwad, Koppal, Tumkur, Davanagere, and Hassan. Volume of work undertaken in oncology is as follows:

Specialty	Medical Oncology	Surgical Oncology	Radiation Oncology (referred outside)
Volumes 2017	2791 (# of cycles)	517 surgeries	285 (# of patients)

Yenepoya (Deemed to be University) has requested Tata Trusts to support them in enhancing access to cancer care among the poor in the catchment region of the hospital and widen the reach to be able to serve larger segment of the society.


Proposed Configuration of the Cancer Centre

Based on the supply gap analysis of the catchment, a separate cancer centre will be built on campus. A radiation hub will also be set-up to cater to the demand of patients both from Karnataka and outside the state, in a phased manner.

Broad configuration of the cancer centre on campus is given below:

Category	Description (Phase 1)	Part of Cancer Centre / Yenepoya teaching hospital
Cancer OPD	6-10 consulting rooms	• Cancer Centre
Operating Rooms	4	• Cancer Centre
Inpatient Wards	Wards: 68 beds ICU: 12 beds Palliative Care: 10 beds	• Cancer Centre
Day Services	Emergency: 2 beds Chemotherapy: 12 beds Day care: 6 beds	• Cancer Centre
Pre/ Post Op	10 Beds	• Cancer Centre

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 Pre/ Post Op

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Diagnosics	X Ray, Fluoroscopy, Ultrasound, Mammo, CT, MRI, C-Arm, Endoscopy, lab services such as haematology, pathology, Tumor markers, Biochemical tests and other lab facilities related to cancer	<ul style="list-style-type: none"> • Services to be provided by Yenepoya, on a pre-determined tariff • University to ensure convenience of the hospital patients and limited waiting time
Nuclear Medicine	PET CT Gamma Camera	<ul style="list-style-type: none"> • Cancer Centre
Blood Bank with Components	Yes	<ul style="list-style-type: none"> • Services to be provided by Yenepoya
Pharmacy – IP and OP	Yes	<ul style="list-style-type: none"> • Pharmacy to be operated by the Cancer Centre
Hostel and Staff Accommodation	Yes	<ul style="list-style-type: none"> • Services to be provided by Yenepoya, on a pre-determined tariff • University to ensure all patients, attendants and staff in need of accommodation are provided accommodation

Configuration of Radiation Hub will be decided post detailed analysis.

Operating Model

Construction Phase

- Yenepoya (Deemed to be University) will provide land at campus to Tata Trusts for development of the cancer center and outside campus for radiation hub, on a long-term lease for a nominal fee.
- Yenepoya (Deemed to be University) shall obtain/ assist in obtaining all requisite permissions, approvals, clearances, etc. required from the government bodies for setting-up and operating these two facilities from time to time.
- Tata Trusts will conduct detailed primary research in the catchment region and recommend a configuration of cancer services suitable to the catchment demand profile i.e. the types of cancers, the demographics of the cancer patients, to suggest bed mix, equipment plan and staffing plan.
- TT will get the existing architectural plans peer reviewed for compliance with the latest regulations and international best practices, and will also hire a suitable agency for building construction.

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- Tata Trusts, through its special purpose vehicle, ACF, shall be solely responsible for all investments required for setting up of the facilities – including procuring all medical equipment required. However, diagnostic modalities available with Yenepoya (Deemed to be University) will not be duplicated at the cancer centre.
 - Cancer patients will be referred to the Yenepoya teaching hospital for diagnostics- radiology, lab services including haematology, biochemistry, pathology and other cancer related services and pre-agreed tariff will be charged by the Yenepoya teaching hospital from ACF
- Yenepoya (Deemed to be University) will continue to handle education and research activities to complement the cancer services provided at these facilities

Operational Phase

The cancer centre and radiation hub will be owned and operated by Tata Trusts through its special purpose vehicle, ACF, in close consultation with Yenepoya (Deemed to be University). This would involve:

- Joint Recruitment and placement of the clinicians, nurses and other technical staff in the facilities. Existing oncology staff at the teaching hospital will become a part of the new cancer centre and the salaries/ incentives will be as per the new policies
- Selection and installation of new technologies, systems and IT infrastructure at the facilities
- Connecting the facilities to the National Cancer Grid, which is a network of major cancer centers, research institutes, patient groups and charitable institutions across India
- Implementing Standard Operating Procedures (SOPs) for the smooth running of the facilities
- Define the general policy of management for the facilities
- Defining the tariff structure for the facilities
- Operating the cancer centre pharmacy and providing low cost drugs and consumables to patients
- Responsible for all present and future investments in the facilities including in respect of the services. This will exclude equipment and laboratory related expenditures
- Co-Branding including the name of the facilities

The cancer centre will outsource certain non-medical services to the Yenepoya teaching hospital in the first year of operations. This may include Cafeteria, Kitchen, Laundry, CSSD, Ambulatory Services, Staff, Patient & Attendant Accommodation and Blood bank. Going forward, based on requirement and ease of operations, the cancer centre may build capabilities for these services in its own hospital.

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All support specialties such as ENT, Dental, Cardiac, Ophthalmic OPD, etc. will be outsourced to the Yenepoya teaching hospital as well on a mutually agreed tariff.

Community Oncology will be a joint programme of the cancer centre and the Yenepoya teaching hospital. This would involve planning, and implementation of activities related to cancer awareness and prevention, in the state.


As requested by the University, some space in the new cancer centre building will be allocated to the University for specialty wards. This will depend on the demand generated in the teaching hospital and space availability in the cancer centre. Further, academics will continue to be a part of the university.

Governance Mechanism

Tata Trusts, through its special purpose vehicle ACF, will invest in setting-up the facilities and own & manage the operations of cancer care delivery.

A Hospital Advisory Committee with participation from Yenepoya (Deemed to be University) and Tata Trusts/ACF will be set up to take key decisions and ensure co-operation across different areas of operations.

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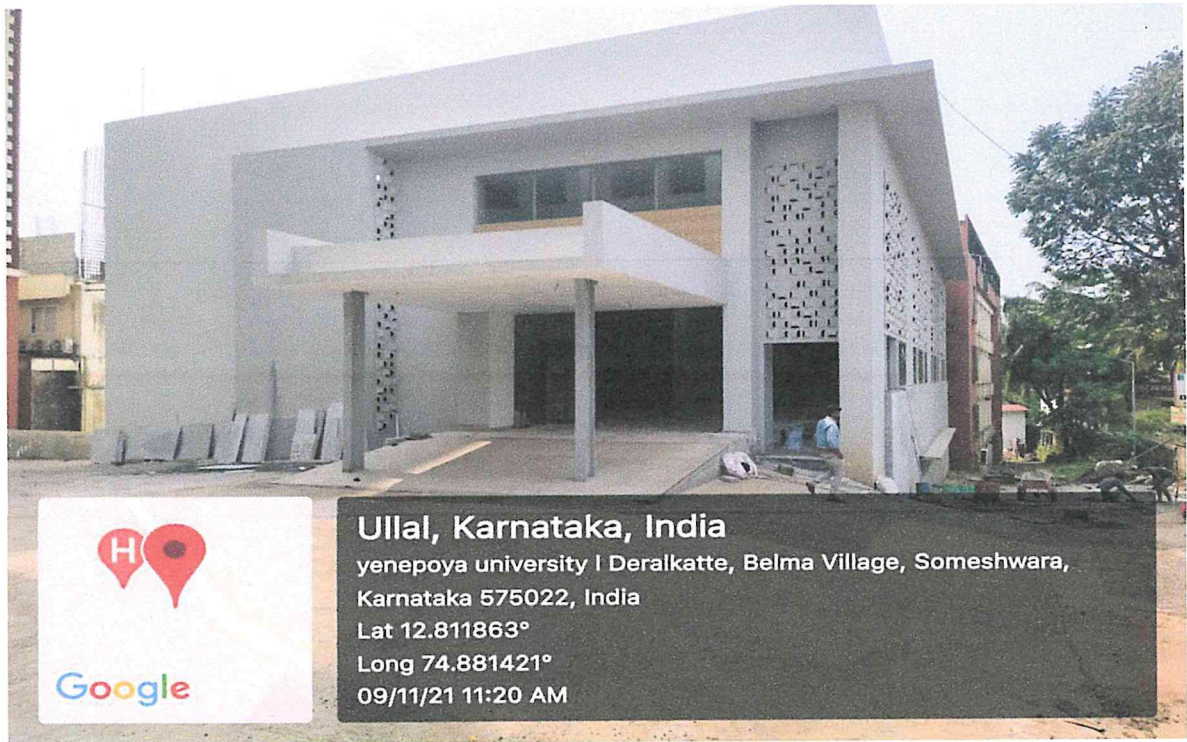
Annexure 2:

FLOOR MAP OF PHASE 1:



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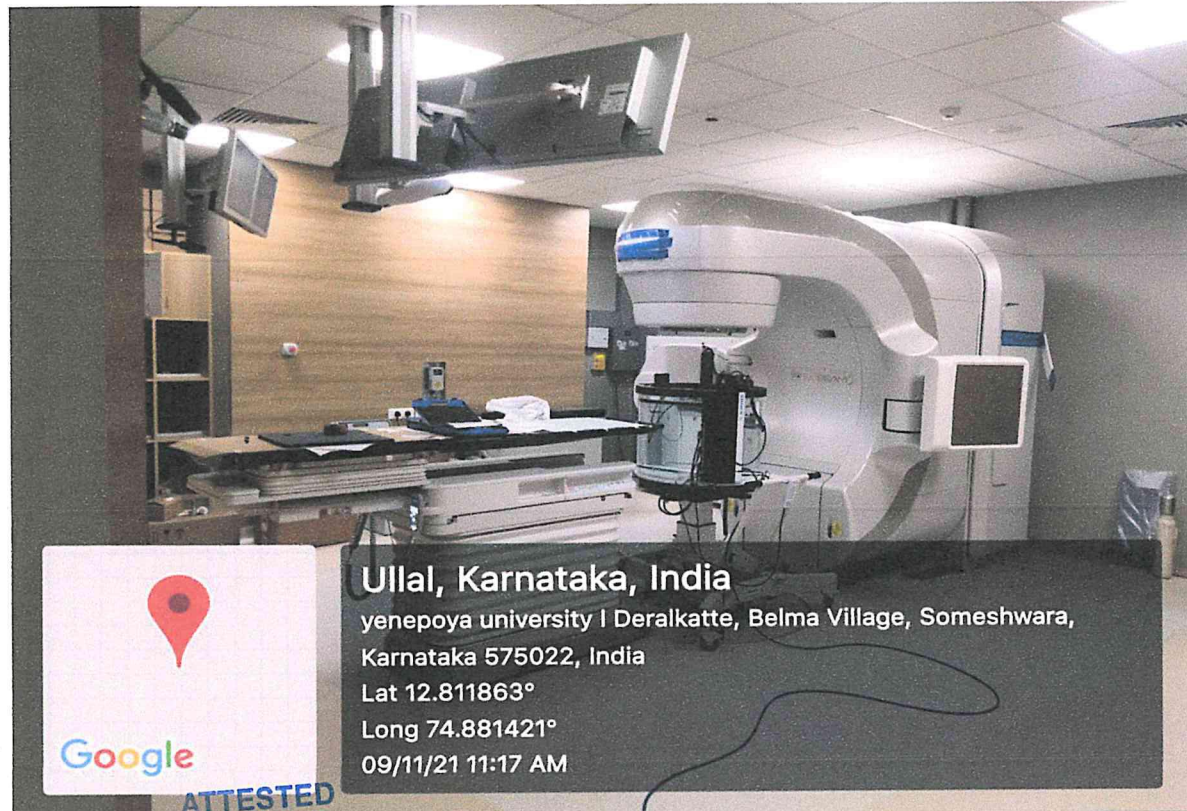
Ullal, Karnataka, India

yenepoya university | Deralkatte, Belma Village, Someshwara,
Karnataka 575022, India

Lat 12.811863°

Long 74.881421°

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llb
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Varian Truebeam



Gamma Medplus iX HDR brachytherapy



PET CT



Minor OT





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ONCOLOGY BUILT UP AREA

Sl. No	Description	Sq mt
1	LOWER BASEMENT	791.51 SQMT
2	UPPER BASEMENT	735.48 SQMT
3	LOWER GROUND FLOOR	713.69 SQMT
4	GROUND FLOOR	507.79 SQMT
5	FIRST FLOOR	509.35 SQMT
	TOTAL AREA	3257.82 SQMT


MAINTENANCE DEPARTMENT
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