

**Parul University
Faculty of Pharmacy
Research Grant
AGREEMENT DEED.**

Parul University		Sponsor	
Address :PO Limda, Taluka ; Waghodia Dist :Vadodara Phone :0268-260287 Fax: Email: pipr@paruluniversity.ac.in		Name : Dr. Pinakeen Patel Address : BILLS BIOTECH PVT. LTD Plot No P/01, Biotech Park Phase 1, GIDC, Industrial Estate, Savli, Vadodara - 391775 Gujarat, India. Phone:08980005207 Fax: Email:pinakeen@billsbiotech.com	
Principal Investigator: Dr. Dipti Patel, Associate Professor Parul Institute of Pharmacy and Research Limda (Post) Waghodia(Dist)		Amount : Rs.1,00,000/-(One Lakh)	Period of Support : TWO MONTHS. <i>Until project completion.</i>
College : Parul Institute of Pharmacy and Research			
Department : Pharmaceutics		Payment mode: Make checks payable to, Principal, Parul Institute of Pharmacy & Research. 1)Half of the grant to be paid in the beginning of Research proposal. 2)Remaining payment to be made after execution of research work.	
Area of Research : 1) Formulation and Evaluation of Orlistat pellets 50%. 2)Methodology(Enclosed).*			
Terms and conditions			
1) Purpose: Sponsor desires to support the development of fundamental basic research in the field of research identified above, and where as Parul Institute of Pharmacy and Research,(PU) has an ongoing fundamental basic research program in this area consistent with the research interests of the Sponsor, this research grant is established to give financial support to the Principal Investigator to cover the full costs associated with the research.			
2) Reports: Principal Investigator shall provide sponsor a final technical report.			
3) Publications: Principal Investigator shall not be allowed to publish without the consent of Sponsor. If Sponsor supports, his/her name may be acknowledged in publications.			
4) Intellectual Property: Principal Investigator shall own all data, inventions resulting from research			

conducted hereunder till complete payment is made. Once the research grant is granted, PI will not have any rights.

5) **Publicity:** Neither party will use the name of the other party in any publicity and advertising (except in publications as noted in 3, above) without the prior permission.

6) **Entire Agreement:** The Research Grant contains the entire expenses of research work assigned and only agreement between the parties respecting the subject matter. All term and conditions of said document are hereby deleted in entirety and superseded after submission of research data to Sponsor along with complete payment to Principal Investigator.

Name and Signature of Principal Investigator:

Dr. Dipti H. Patel

Name and Signature of Sponsor:

DR. ...



***METHODOLOGY:**

ORLISTAT

Description:

- Anti-Obesity drug
- Reversible inhibitor of lipases.
- Used for losing weight

The present study deals with the formulation and evaluation of orlistat pellets.

Materials:

Table:1 List of Materials used in present investigation:

Sr. No	Materials	Use
1.	Orlistat	API
2.	Microcrystalline Cellulose	Diluent
3.	Sodium Starch Glycolate	Superdisintegrant
4.	Copovidone	Binder
5.	Sodium Lauryl Sulphate	Surfactant

Preformulation:

Drug-Excipients Compatibility Study by FTIR:

Analytical Method for estimation of Orlistat:

Instrument:

HPLC, Prominence liquid Chromatograph, LC 20 AT, Shimadzu Corporation Japan.

Chemicals and reagents:

Acetonitrile HPLC Grade, Methanol HPLC Grade and trifluoroacetic acid AR grade (make E-merck)

Method of Preparation of Pellets:

Extrusion – Spheronization.

Physical Specifications: White to off White semispherical pellets

Mesh Size	Dose	Fill Weight	Capsule Size
14#20	120 mg	240 mg	2

Evaluation of Pellets:

- Angle of Repose:
- Bulk Density:

Drug release:

Medium: 0.1N hydrochloric acid containing 2% sodium lauryl sulphate