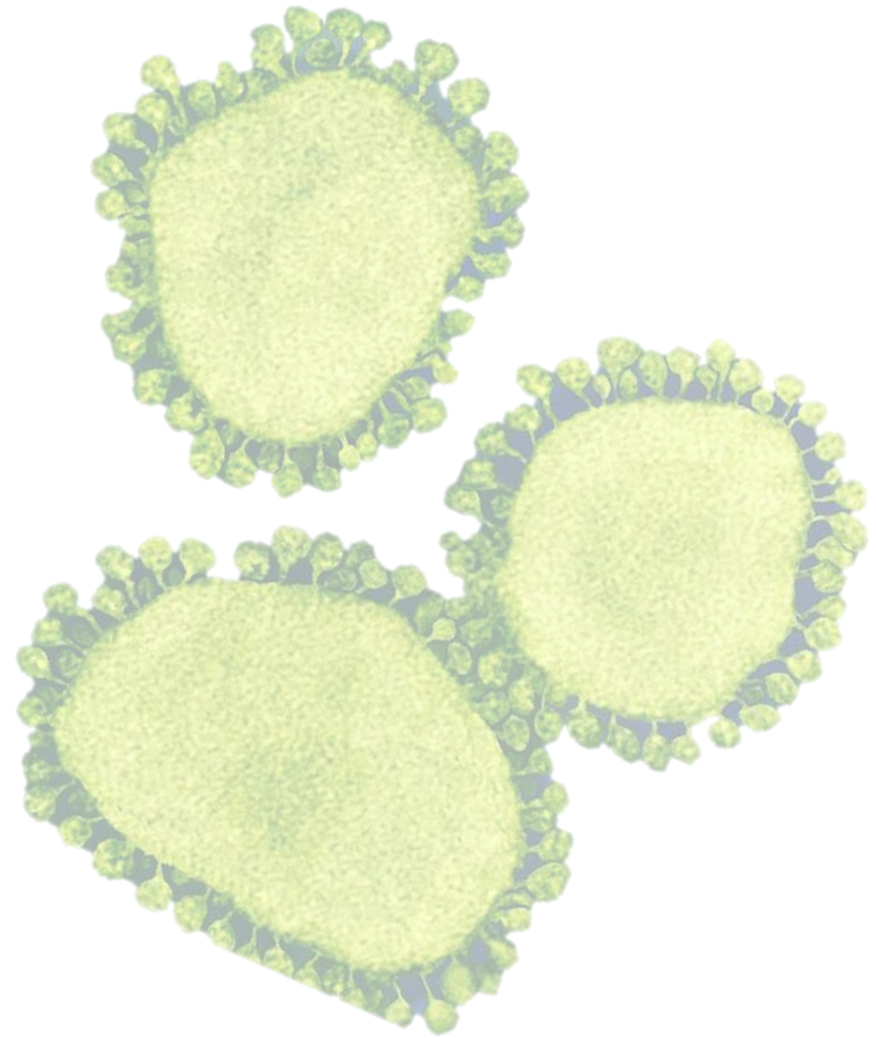




RECEPTOL[®]

Immunity Shield for unmet medical needs



Pawan Saharan, MS, PhD & Post Doc (WVU/Stanford)

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Global Health Problems – Millions suffer from



Cancer



Infectious Disease



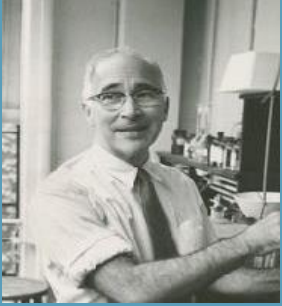
Medical Unmet Needs

INDIAN SOLUTION TO GLOBAL HEALTH PROBLEMS

What if there was a way to treat all immunity disorders via

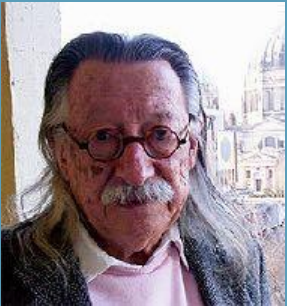
RECEPTOL®, not only strengthens body's own immune system but also prevents recurrent infections in Cancer, Infectious Disease & help find solutions to medical unmet needs.

Founders



Dr. George Wald

- 2 Nobel Prizes
- Vit A Inventor
- Biomix Advisor



Joseph Weizenbaum

- Father of AI
- Inventor of 1st Robot
- Biomix Advisor



Dr. Pawan Saharan

- Biomix Founder
- Inventor: RECEPTOL
- Patent holder for 58 Disease Resolution

Journey of RECEPTOL[®]

After 18 years of research, we have successfully isolated Nano peptides from bovine colostrum and conducted global clinical studies on subjects suffering from Cancer, Infectious Disease viz Covid, AIDS, Swine Flu & Immunity diseases especially to address medical unmet needs based on stand alone AIDS therapy model.

RECEPTOL[®] Active ingredients consist of Patented Nano – Informational Peptides extracted from mammalian colostrum via Ultra Nano filtration Technology having sequence id 1-8 (provided in the US Patent) & Proline Rich Poly Peptides (PRPs)
<https://patents.google.com/patent/US9249188B2/en>

RECEPTOL[®] clinical trials & their meta analysis on 25,301 subjects including healthy population can be accessed at data room at www.biomix.in

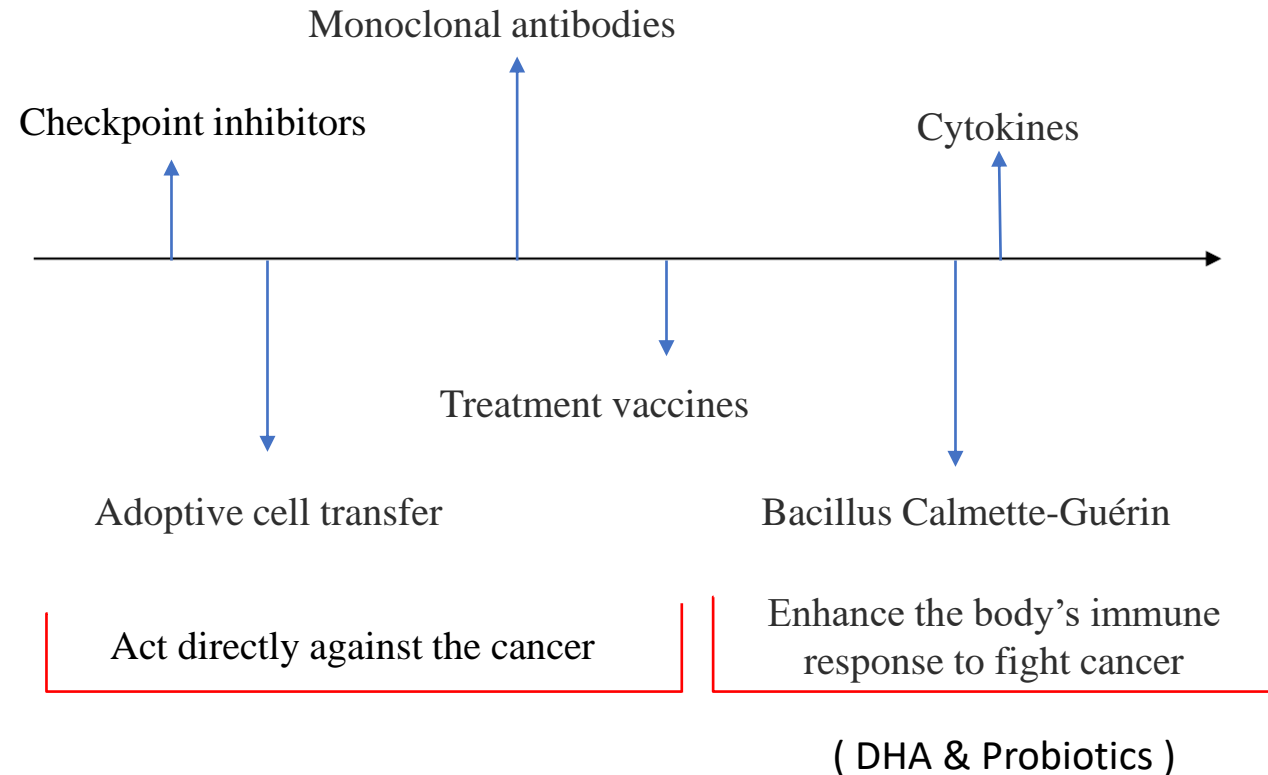
Publications in 1st rate peer reviewed Medical journals on global studies just concluded are in progress with New England Journal of Medicine & Nature.

US media published feature on invention journey

<http://medicaltraveltoday.com/spotlight-interview-pawan-saharan-founder-ceo-biomix-network-inc/>

with Government of India recognition by its Health Minister releasing a Book on RECEPTOL- The Next Wonder Drug Creating a Paradigm shift from prevention to treatment providing health for All.

RECEPTOL[®] the Differentiator



RECEPTOL[®] Acts when All fail

Patent No – US 9,249,188 B2

Builds bodies own immune system.

Stimulates Tumor Necrosis Factors NK cells

Interleukin-1 to IL-11, Interferon- α , INF- γ .

Mode of Action of Receptol drastically differs from other treatments/vaccines in pipeline since it blocks entry of all viruses, by lockdown & augments immunomodulation in unique patterns not only for COVID-19 but all Immunity diseases including CANCER



2018 Nobel Prize for Cancer Immunotherapy supports Receptol®
Claims per US & EU granted Patents for All Immunity disorders

Medicine Laureate Dr. Tasuku Honjo
Professor at Kyoto University.

Medicine Laureate Dr. James P. Allison
Chairman of immunology at the University of Texas
M.D. Anderson Cancer Center

T-cells are a type of white blood cell that can identify and kill infected, damaged or cancerous cells. Cancer cells can avoid destruction by taking advantage of a switch on the T-cell called an immune checkpoint. The checkpoint can shut down the T-cell and suppress the immune response, allowing the cancer to grow undisturbed. Dr. Allison identified a checkpoint called CTLA-4. Dr. Honjo found a different one, called PD-1. Those discoveries made it possible to develop drugs that would stop the checkpoints from working, so that the T-cells would be free to fight cancer. The process is often referred to as taking the brakes off the immune system.

Receptol®
Cell surface checkpoint inhibitors can
physically block the checkpoint, which frees
the immune system to attack the cancer

What is Receptol ?

Receptol is an innovative, single solution to a majority of health problems related to poor Immunity.

1



3

What are PRPs ?

PRPs are a class of nano - informational peptides consisting of oligo-ribonucleotides attached to a peptide molecule that act as an immunity stimulator via immune-modulation and anti-viral/bacterial activity.

4

What it consists of ?

Active Ingredients consist of Patented Nano - Informational Peptides extracted from mammalian/ bovine colostrum via Ultra Nano filtration Technology having sequence id 1-8 & Proline Rich Poly Peptides (PRPs)

2

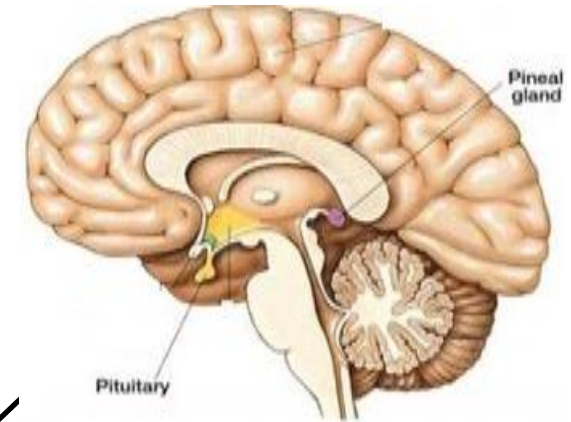
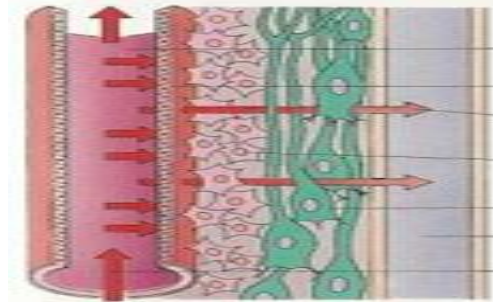
How is it absorbed ?

Absorbed through the buccal mucosa or Gut
Distributed all over the body through the blood streams.
Crosses blood brain barrier to reach Pituitary gland which acts as central hub in building body's immune system naturally.

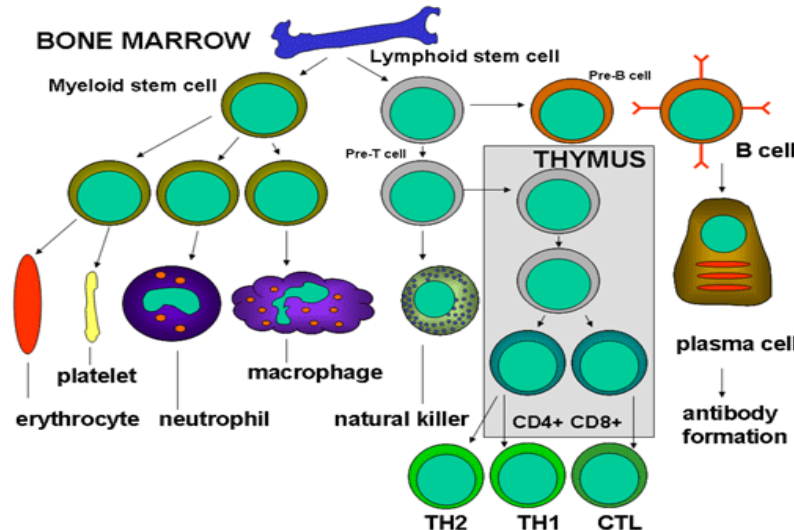
Science Behind Mode of Action



PRPs get absorbed in the blood through buccal mucosa and crosses the Blood Brain Barrier



- **Radha108 (PRP) promotes differentiation of B cells, differentiation & maturation of macrophages and monocytes.**
- **Activates natural killer (NK) cells, cytotoxic cells of the innate immune system.**
- **Mitigates cell fusion and docks on HIV glycoprotein like Gp120, 180, 160 and 41 mimicking receptor on the cell surface closing entry of viruses.**



- **Stimulates production of cytokines IL-1 to IL-11, TNF- α , INF- γ .**
- **Stimulates the maturation of immature thymocytes into either helper or suppressor T cells**
- **Radha108 also functions as a molecular signalling device which works through receptors on target cell surfaces**

Common Mode of Action

Electron Micrograph Showing both HIV & Coronavirus unable to infect cells via Radha108 Nano-peptides
Competitive inhibition on Cell surface with viral lock down

Receptol® Mode of Action in HIV/ AIDS

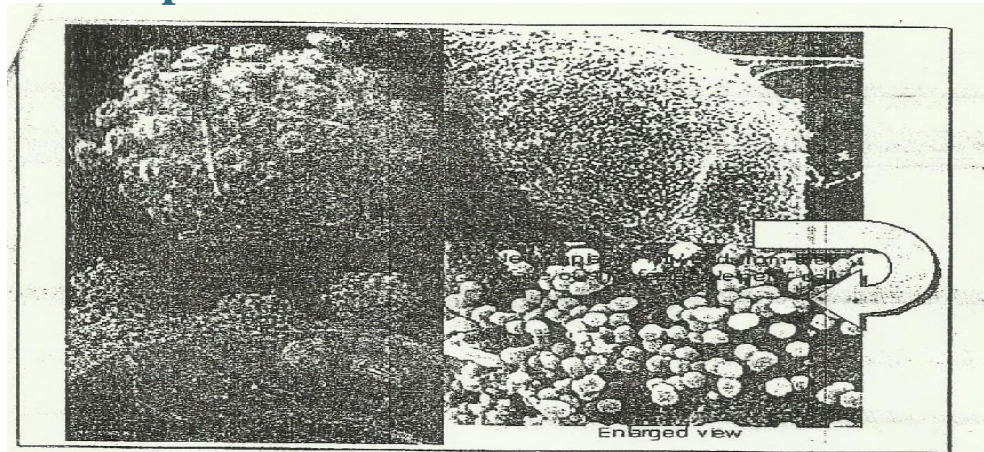


Figure 4. Pictures of HIV under a microscope.

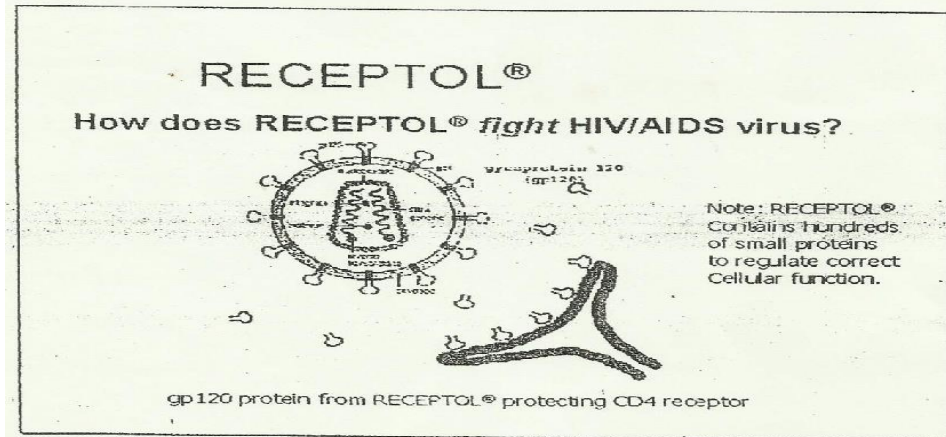
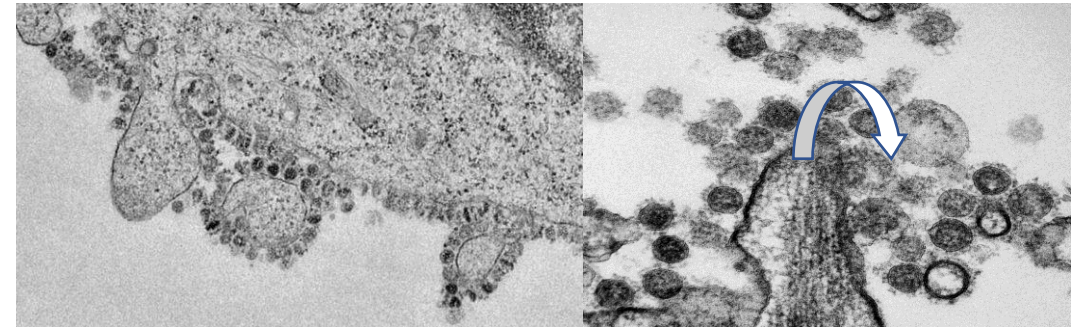


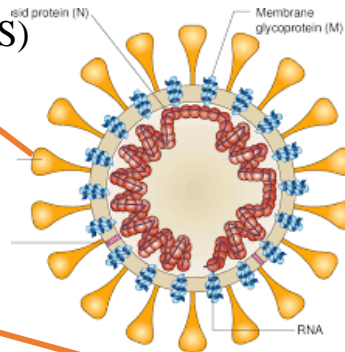
Figure 5. Graphic of how RECEPTOL® protects human T-Cells.

Receptol® Mode of Action in Coronavirus Scenario

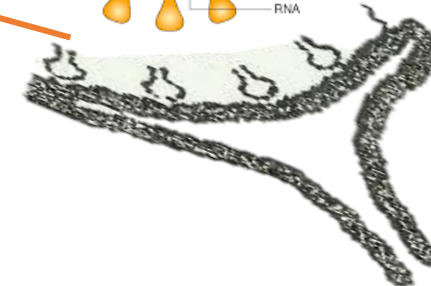


Spike Glycoprotein (S)

Radha 108 Toll like Receptor



Radha 108 Toll like **Receptol®** nanopptides can block the attachment of S protein of Coronavirus as depicted above



US Granted Product Patent for 58 indications including SARS COVID

Patent No :-USA,249,188B2
Date of Patent :-Feb,02,2016

“RECEPTOL’s unique Mode of Action led to US & EU Govt granting product patents for 58 indications: starting from the common cold, influenza, allergies, asthma, Rheumatoid Arthritis, Swine Flu, Endometriosis, Chronic Fatigue Syndrome, etc. to life threatening HIV, and Cancer with US Product Patent # 9,249,188 along with Canadian, European, Indian, South African & Singapore patents. RECEPTOL® has also been approved by Government of India for National Health Program.”



(12) United States Patent Saharan	(10) Patent No.: (45) Date of Patent:	US 9,249,188 B2 Feb. 2, 2016
(34) MAMMALIAN COLOSTRUM DERIVED NANOPETIDES FOR BROADSPECTRUM VIRAL AND RECURRENT INFECTIONS WITH A METHOD OF ISOLATION THEREOF	2005/010368 A1* 4/2003 Anselberg et al. 424/18.1 2005/0175197 A1 8/2005 Basella et al. 2007/0112347 A1* 9/2007 Keesh 424/18.1	
(71) Applicant: Pawan Saharan, Maharashtra (IN)	FOREIGN PATENT DOCUMENTS	
(72) Inventor: Pawan Saharan, Maharashtra (IN)	KR 20030024902 A 4/2002 WO 01/55199 A1 8/2001 WO 01/02785 A2 8/2001 WO 2005081628 A2 9/2005	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 75 days.	OTHER PUBLICATIONS	
(21) Appl. No.: 13/945,577	Blaha, Bovine Colostrin, The Forgotten Miracle, Journal of the American Holistic Veterinary Medical Association Jul. 1999, vol. 18, No. 2, pp. 39-40.*	
(22) Filed: Mar. 18, 2013	Posterns Co-operative Group Ltd, Colostrin and Biotin Sales Gut a Boost from SARS, 2003.*	
(65) Prior Publication Data	Verity, Colostrin is a proven, effective immune system booster, Natural News, 2005.*	
-US 2013/0274177 A1 Oct. 17, 2013	Hong, S.Y. and Qin, Z.B.; "Inhibitor of Binding 3" XP002586928, Aug. 2, 2005, retrieved from EBI Database accession No. Q40Q99. Struff'W.G. et al.; "Bovine colostrum as a biologic in clinical medicine: a review—Part II: clinical studies"; Int. Journal of Clinical Pharmacology and Therapeutics, vol. 46, No. 5, pp. 211-225, May 1, 2008, XP009192270, ISSN: 0950-1965.	
(62) Division of application No. 13/142,327, filed as application No. PCT/IN2009/000749 on Dec. 29, 2009, now Pat. No. 8,518,454.	Bocsi V., Van Booven K., Coradoeschi F., Luzzi E., Paulose L.; "Colostrum stimulates the lymphoid tissue providing benefits in aged or immunodeficient people"; Journal Biology Regal Hormonal Agents, Oct.-Dec.; 5(4):121-4; 1991; abstract only, full-text unavailable.	
(30) Foreign Application Priority Data	Oda, S. et al.; "Insulin-like growth factor-I, GH, insulin and glucose concentrations in bovine colostrum and in plasma of dairy cows and neonatal calves around parturition"; Comp. Biochem. Physiol., vol. 94A, No. 4, pp. 805-808, 1989.	
Dec. 27, 2008 (IN) 13/53/MUM/2008	Stevens, F.Y. et al.; "Effect of growth factors on cell proliferation and epithelialization in human skin"; Journal of surgical Research; vol. 59, pp. 236-244, 1995.	
(31) Int. Cl.	Examination report of corresponding European patent application 09827810.1, issued on Mar. 20, 2013.	
A61K 38/99 (2006.01)	* cited by examiner	
A61N 27/28 (2006.01)	Primary Examiner — Kathleen R Skowronsek	
A61P 31/28 (2006.01)	Assistant Examiner — Sergio Coffa	
A61K 38/78 (2006.01)	(74) Attorney, Agent, or Firm — Nath, Goldberg & Meyer;	
A61K 38/98 (2006.01)	Tanya B. Harklau	
C07K 198 (2006.01)		
A61K 35/20 (2006.01)		
C07K 196 (2006.01)		
(52) U.S. Cl.	ABSTRACT	
CPC - C07K 198 (2013.01); A61K 35/20 (2013.01); A61K 38/98 (2013.01); A61K 38/78 (2013.01); C07K 196 (2013.01)	The present invention relates to nanopetides isolated from mammalian colostrum with vaccine like antiviral and immunomodulatory activity via blocking body's own immune system and attachment inhibition on the cell surface receptors.	
(58) Field of Classification Search	5 Claims, 10 Drawing Sheets	
CPC — C07K 198; C07K 196		
See application file for complete search history.		
(56) References Cited		
U.S. PATENT DOCUMENTS		
5,883,876 A 11/1997 Ellsner et al.		
2002/0127279 A1 8/2002 Mathews		

Global Safety & Efficacy Studies using AIDS as Model

Safety and Efficacy achieved by global trials:

Phase I : 12 cohort 30 days (completely safe) in Ohio, USA

Phase II : 30 cohort 90 days (highly effective with no side effects) in Nairobi – Kenya

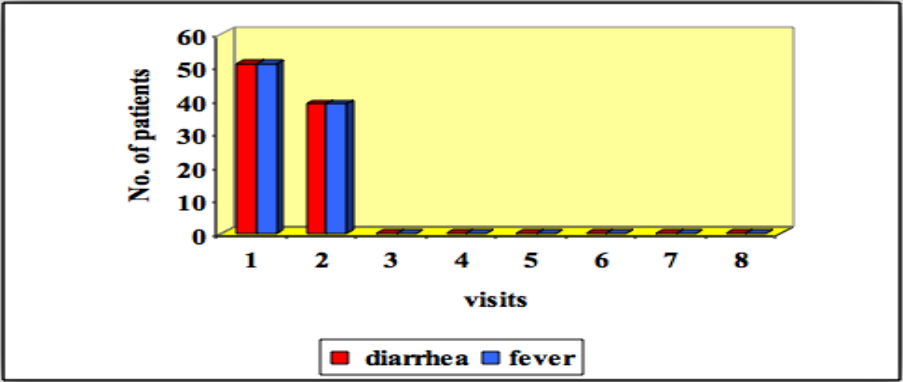
Phase III : 60 cohort for 365 days (highly effective with no side effects) in Rwanda, Africa

Phase III Indian Safety & Efficacy Mono Therapy Clinical Trials- with Radha 108 Nano Peptide by Government of India, Ministry of Health/National AIDS Control and Monitored by Indian Council of Medical Research/NARI* by US PATH accredited org.

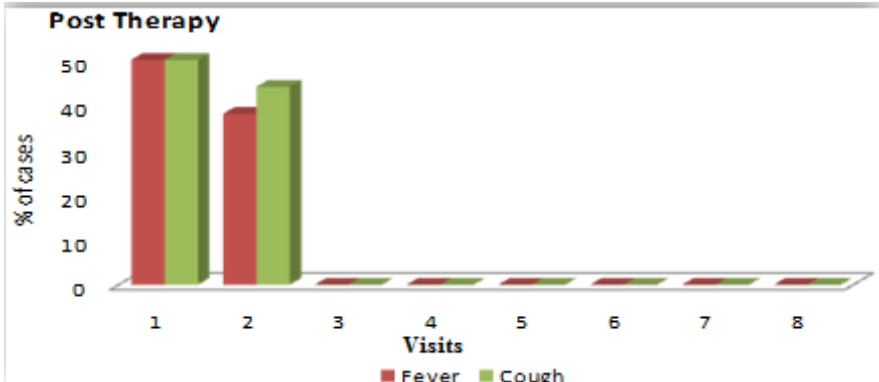
Study I : 50 HIV Positive Patients at Tertiary Care LTMG Hospital Sion, Mumbai
(Clinical trial registry No. : CTRI-2012-08-002931)

Study II : 51 HIV Positive Patients at Tertiary Care LTMG Hospital, Sion, Mumbai
(Clinical Trial registry No. : CTRI-2012-09-002959)

Indian Study : Stand Alone Study on AIDS Patients



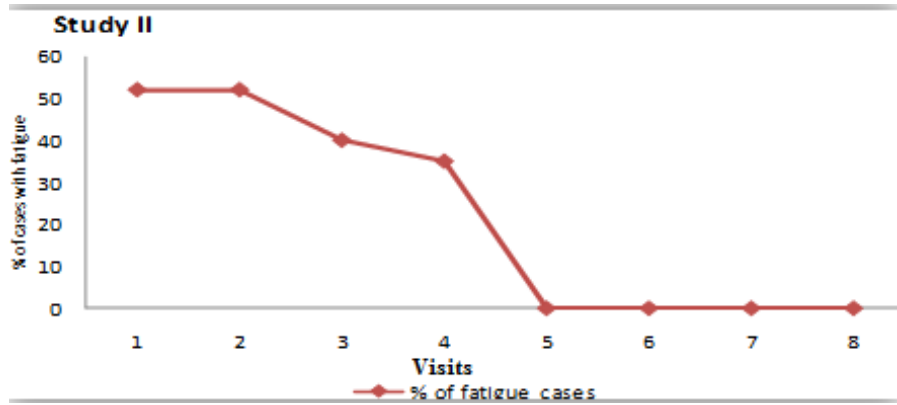
Statistically significant reduction in Diarrhoea



Statistically significant reduction in Fever & Cough



Statistically significant gain in weight $p < 0.05$



Statistically significant reduction in Fatigue / Malaise

Meta Analysis on 25000 Subjects Including healthy population

Objective: Ascertain the safety and efficacy of RECEPTOL[®]

Sample Size: 25,000 Subjects

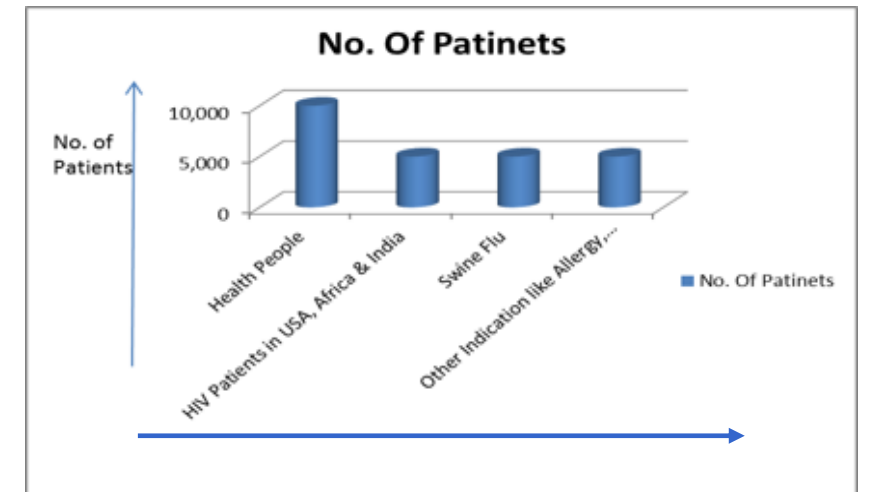
Scope: HIV, Swine Flu, Allergy/Asthma, Rheumatoid Arthritis , Endometriosis & NCD, Chronic Fatigue Syndrome

Hypothesis: Weight gain is an indication of wellness and overall health. No side effects with improved QoL showcases the safety and efficacy of the product.

Conclusion :

Study reveals that RECEPTOL[®] oral spray therapy provides **significant efficacy & safety in all groups of patients suffering from communicable & Immunity diseases** with increased Quality of Life with increased weight gain in chronic patients. The product is completely safe with no side effects per 10 years follow up.

Sr.No.	Stand Alone Receptol Therapy in Global clinical studies	No. of Patients
1	Healthy people	10,000
2	HIV Patient in USA, Africa, India	5000
3	Swine Flu	5000
4	Other Indications like allergy, asthma, Rheumatoid Arthritis, Chronic Fatigue Syndrome, Endometriosis Study etc.	5000



Stand Alone Radha 108 Therapy in Global Clinical Studies

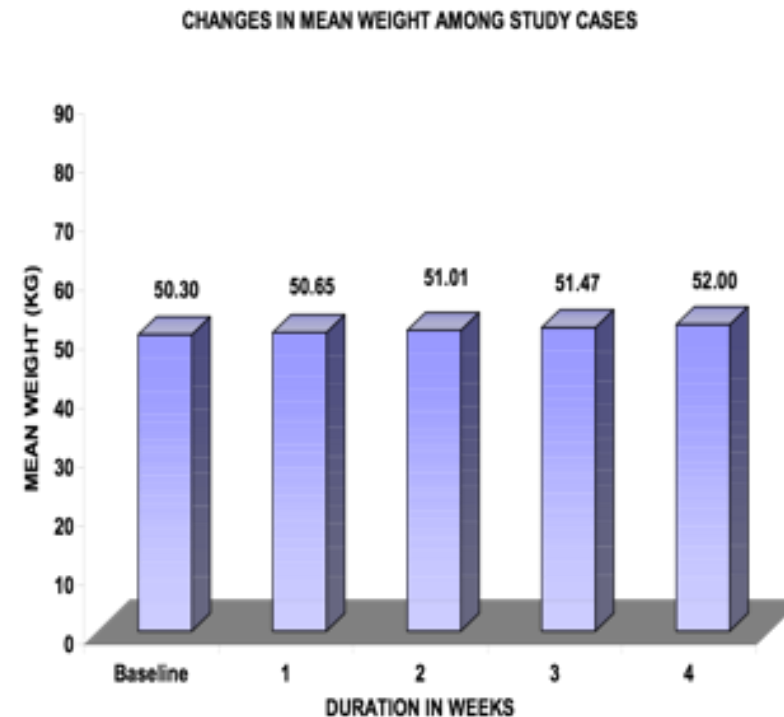
RECEPTOL[®] Efficacy & safety Global Studies on Healthy Population

CHANGES IN MEAN BODY WEIGHT AMONG STUDY CASES

Duration (Weeks)	Mean weight (\pm SD) (N = 10000)
Baseline	50.30 \pm 10.02
1	50.65 \pm 10.01
2	51.01 \pm 09.96
3	51.47 \pm 09.94
4	52.00 \pm 09.96
Mean Diff. (Baseline – Wk1) (P value)	*00.35 \pm 00.66 (0.001)
Mean Diff. (Baseline – Wk2) (P value)	*00.71 \pm 01.24 (0.001)
Mean Diff. (Baseline – Wk3) (P value)	*01.17 \pm 01.95 (0.001)
Mean Diff. (Baseline – Wk4) (P value)	*01.70 \pm 02.15 (0.001)

By ANOVA

P<0.05, * Significant

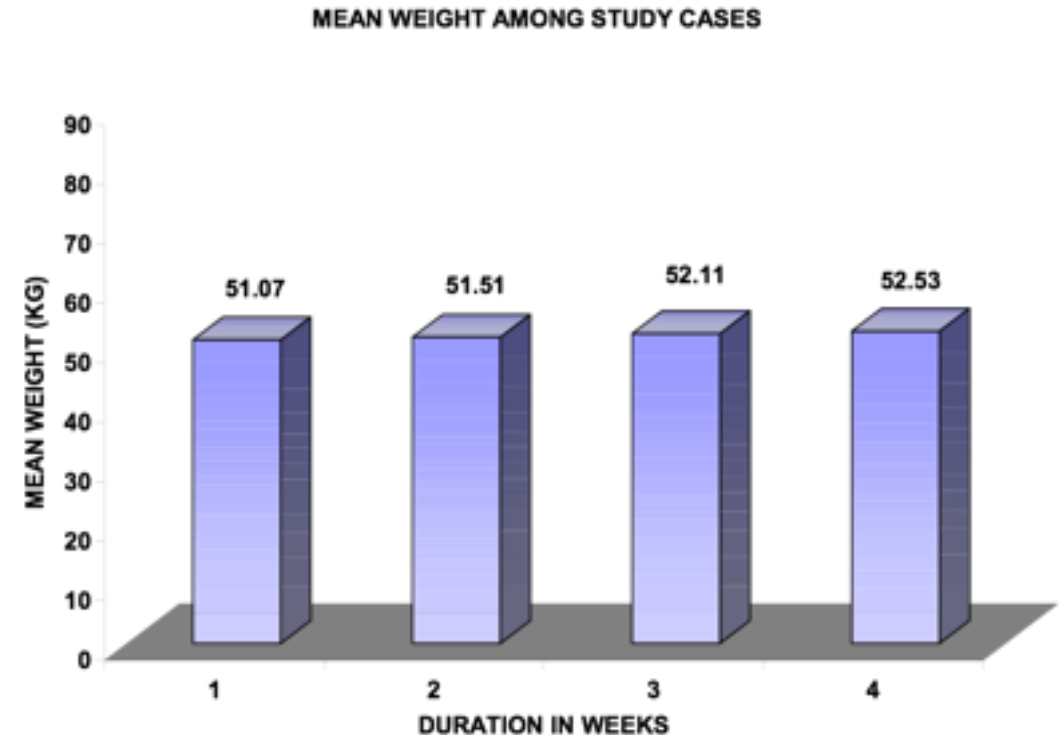


- After 1 week of treatment with Radha 108 Nano Peptide, mean weight showed a significant rise of 0.7% from baseline.
- After 2 week of treatment with Radha 108 Nano Peptide, mean weight showed a significant rise of 1.4% from baseline.
- Same trend was observed till the end of 4 weeks

Efficacy & safety in Swine flu

CHANGES IN MEAN WEIGHT AMONG STUDY CASES

Duration (Weeks)	Mean weight ($\bar{X} \pm SD$) (N = 5000)
1	51.07 \pm 9.82
2	*51.51 \pm 9.79
3	*52.11 \pm 9.75
4	*52.53 \pm 9.76



By ANOVA $P < 0.05$,

* Significant

- At the end of 2nd week, mean weight showed significant change from baseline i.e. mean change of 1.44 kg.
- At the end of 4th week mean weight increased significantly that is 1.46 kg from baseline.

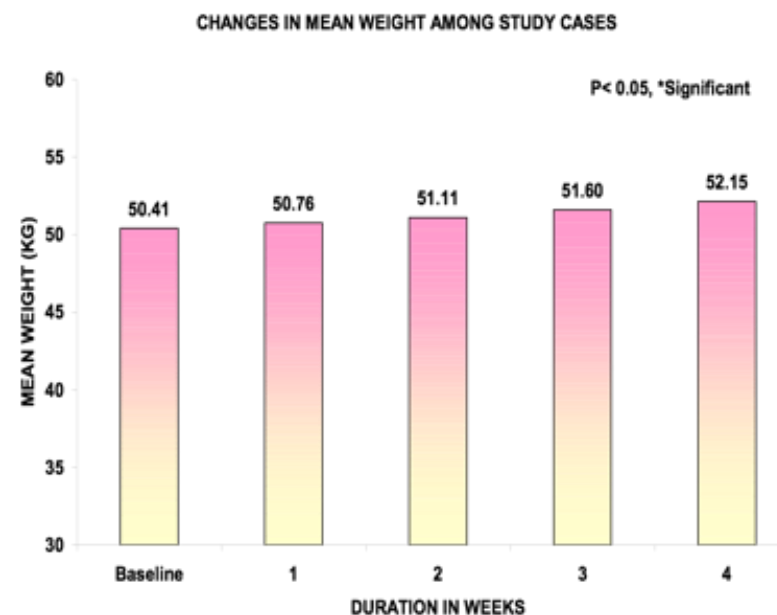
RECEPTOL[®] Efficacy & safety of other indications like Allergy, Asthma, Arthritis, Diarrhoea, Fever, Fatigue-malaise, Anaemia, Endometriosis

CHANGES IN MEAN WEIGHT AMONG STUDY CASES

Duration (Weeks)	Mean weight (± SD) (N = 5000)
Baseline	50.41 ± 10.03
1	50.76 ± 10.01
2	51.11 ± 09.94
3	51.60 ± 09.91
4	52.15 ± 09.91
Mean Diff. (Baseline – Wk1) (P value)	*00.35 ± 00.57 (0.001)
Mean Diff. (Baseline – Wk2) (P value)	*00.70 ± 01.05 (0.001)
Mean Diff. (Baseline – Wk3) (P value)	*01.19 ± 01.77 (0.001)
Mean Diff. (Baseline – Wk4) (P value)	*01.74 ± 01.95 (0.001)

By ANOVA

P<0.05, * Significant

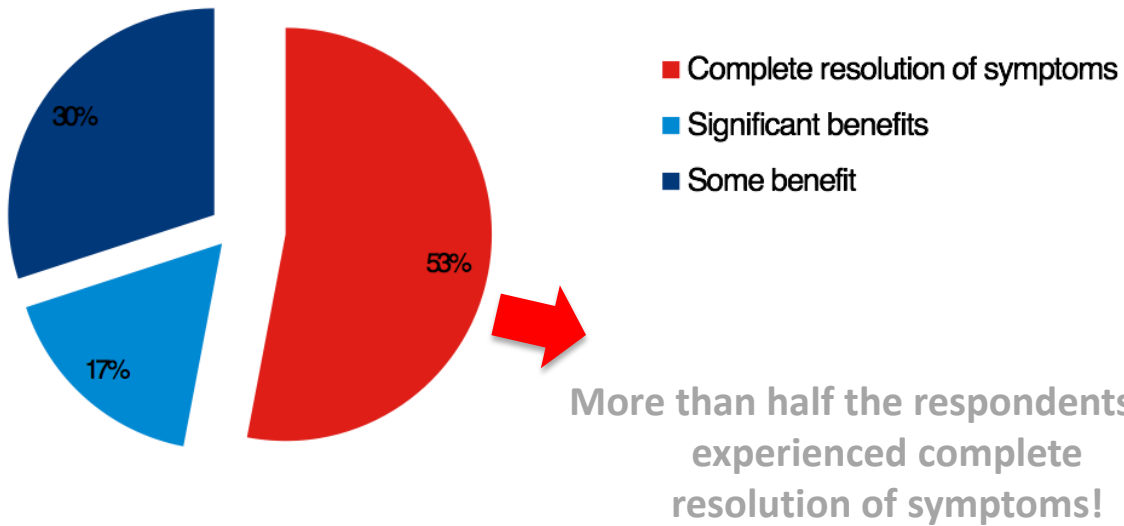


- After 1 week of treatment, mean weight showed a significant rise of 0.7% from baseline.
- After 2 week of treatment, mean weight showed a significant rise of 1.4% from baseline, similar trend was observed till the end of 4 weeks.

Global Studies on RECEPTOL[®] Immunity Disorders

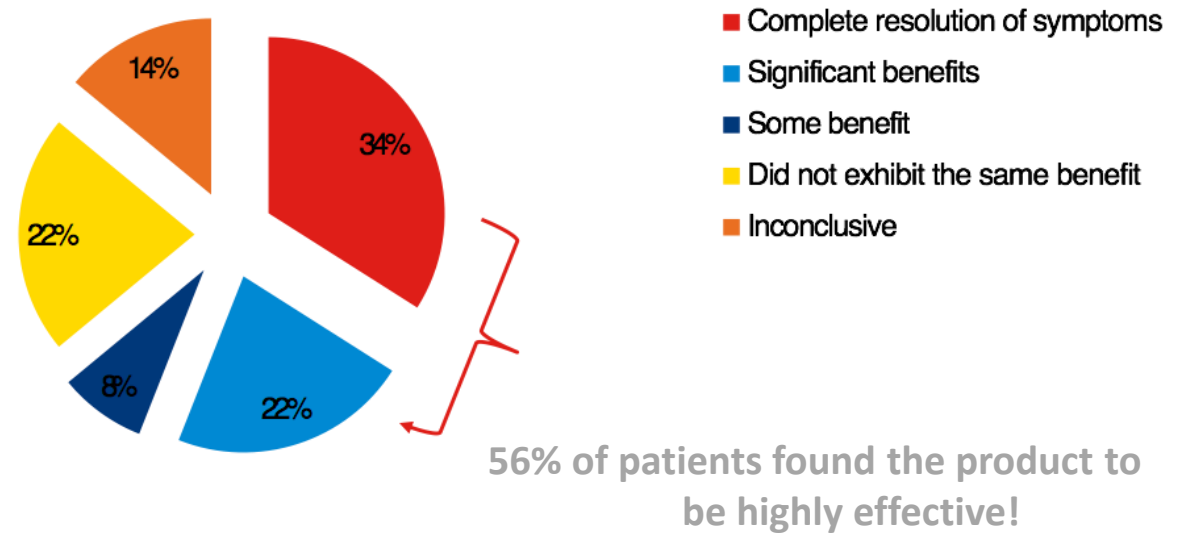
Allergies

Reporting Patients : 24
Duration of Treatment : 6 months



Rheumatoid Arthritis

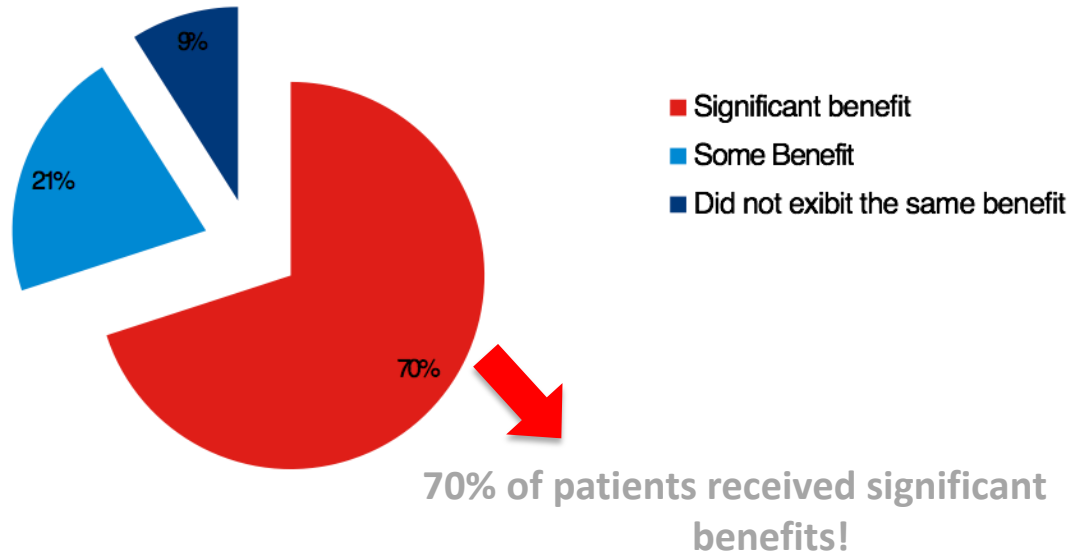
Reporting Patients : 63
Duration of Treatment : 6 months



Global Studies on RECEPTOL[®] Immunity Disorders

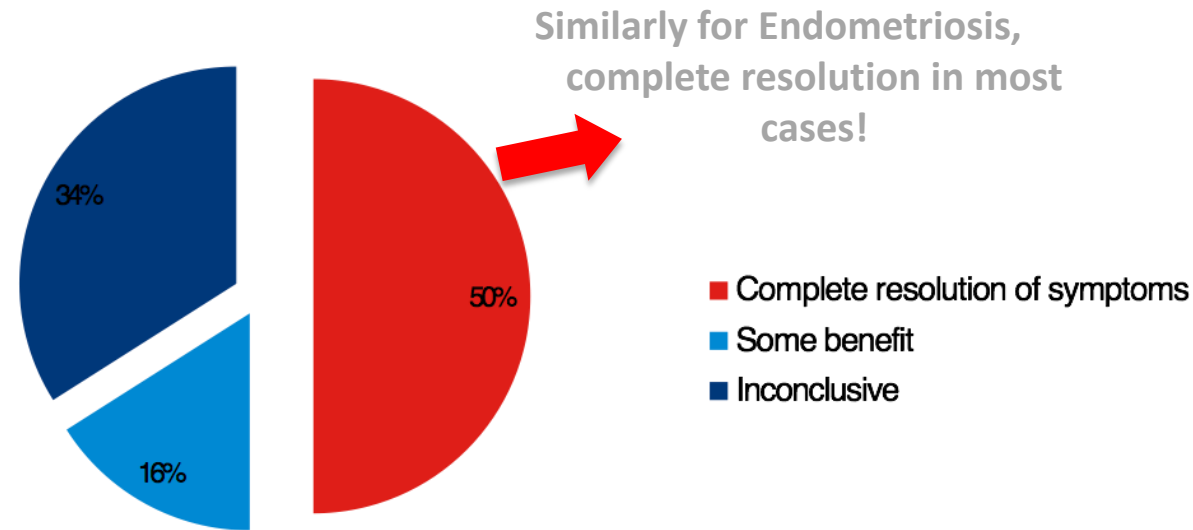
Chronic Fatigue Syndrome

Reporting Patients : 108
Duration of Treatment : 6 months



Endometriosis

Reporting Patients : 106
Duration of Treatment : 6 months

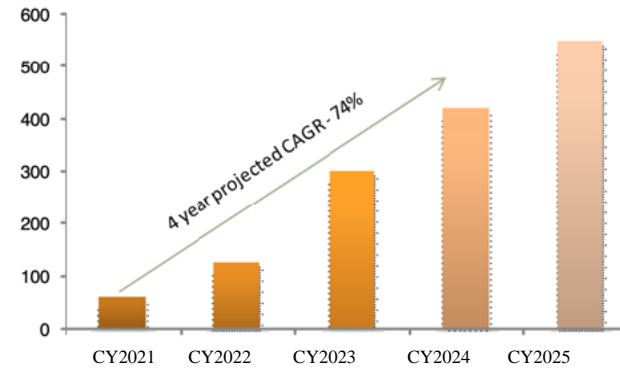


Financial Snapshot Based on Market Research Based on IPSOS Market Research

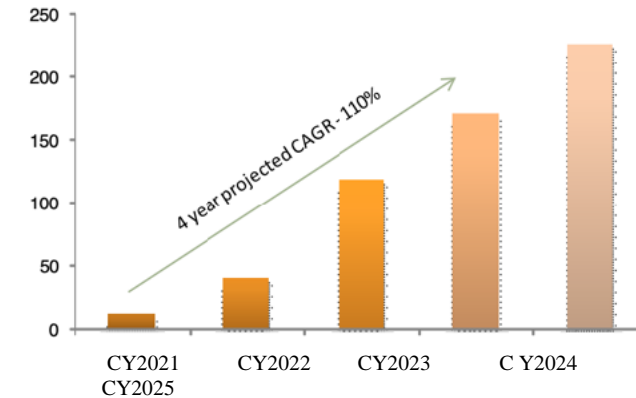
I. Profit and Loss Statement (in US\$ Millions)

Financial Year	Year 1	Year 2	Year 3	Year 4	Year 5
Unit Sales Receptol					
Liquid (million)	7	15	36	51	66
Value Sales	50	105	252	352	458
Unit Sales Receptol					
Powder (ton)	100	200	480	672	874
Value Sales	10	20	48	68	88
Total Revenue	60	125	300	420	546
Y-O-Y Growth		108%	140%	40%	30%
EBITDA	11.7	39.7	118	171	226
EBITDA%	20%	32%	39%	41%	41%
PAT	6.9	25.3	77.2	112	148
PAT%	12%	20%	26%	27%	27%

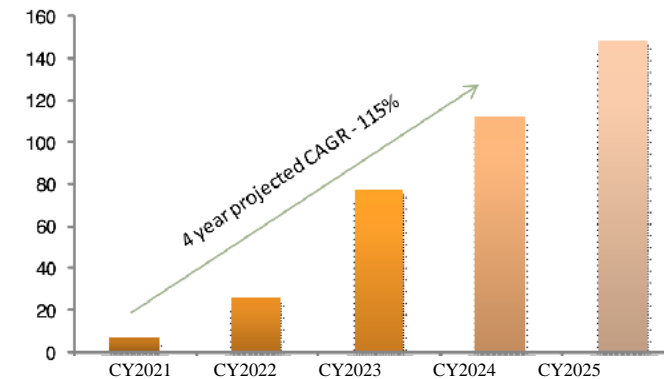
Revenue Projections (In USD Million)



EBITDA Projections (In USD Million)



Profit Margin Projections ((In USD Million)



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Innovation Journey - RECEPTOL® manufactured by Biomix was discovered by Dr. Pawan Saharan,MS,Ph.D. WVU, Stanford with eminent group of scientists including 2 times Nobel laureate Prof. George Wald from Harvard & Prof. Joseph Weizenbaum, MIT Founder Directors with 18 years of research and development with funding by the Department of Science & Technology, Gol.

Product - RECEPTOL®, made from Colostrum Nano-peptides helps people lead longer & healthier lives by building the body's immune system, thus aiding in prevention and cure for all communicable & Immunity diseases: Coronavirus, AIDS, Swine Flu, RA, Allergy etc.

Active Ingredients (API) - Patented Nano - Informational Peptides (Class 4 Proline Rich Poly Peptides & Radha108).

Mode of Action - Receptol® gets absorbed in the blood through the buccal mucosa and crosses the Blood-Brain-Barrier. It stimulates maturation of immature thymocytes into either helper or suppressor T cells. It stimulates secretion of Tumour Necrosis Factor & cytokines IL-1 to IL-11, INF-a, INF-y. Activates Natural Killer (NK) Cells, cytotoxic cells of the innate immune system by 5 times.

Indications – Immunity Enhancer for Recurrent infections in Cancer, Infectious Disease & medical unmet needs viz rare immunity disorders.

USP- Innovative with common Mode of Action for all viral infections, affordable, globally patented, broad spectrum anti viral, immuno-modulator, easy to administer, 100% natural with side effects, can be consumed by all and has no age or sex barriers.

Global Patents - US Product Patent # 9,249,188, Canadian, European, Indian, South African & Singapore for 58 diseases.

Market Research: Glaxo Consumer Healthcare conducted Global Consumer Research via IPSOS showing intention to purchase score of 97% of all medical and health professionals.

Global Clinical Studies - Global Safety & Efficacy monotherapy on AIDS & other indications: Highly efficacious and free of all side effects.

Goal - Helping 8 billion lives via safe, affordable and effective treatment & prevention of All communicable disease.

Global Team

Founder CEO

Dr. Pawan Saharan, MS, Ph.D. (JNU, WVU)
AMP (ASCI in tie up with Harvard business school)
Best US graduate student scientist award by AAAS with
fellowship at Stanford Medical Centre, Palo Alto, CA.
Email id: biomix108@gmail.com / drpawan@biomix.in

Clinical Director

Prof. Dr. Ali Irani - Ph.D. DPT (Spain), Head of Department
Physiotherapy & Sports Medicine, Nanavati Hospital, Mumbai
Former Physiotherapist of Indian Cricket Team (12 years)

Project Director

Amitabh Thakore, B. Tech., MBA (IIM- A, 67 batch)

Business Advisor

Ranjit Shahani BE IIT, MBA Jamnalal Bajaj
Chairman Novartis South Asia

Medical Directors

Dr. S.H. Advani, MD, FICP, FNAMS

Oncologist & President - Asian Cancer Society
Padamvibhusan awardee by President of India

Dr. Sushil Indoria , MD

Medical Director Life care Hospital, Thane

Dr. Sandhya Saharan, MD, DGO, Gynecologist and IVF specialist.

Marketing Advisor

Sumeet Arora, COO YUM Group Companies in Canada

Business Development Manager

Hemangi Saharan, MBA
University of North Carolina , Chapel Hills, NC, USA

Founder Directors include

Late Prof George Wald, Harvard Medical Centre 2 times Nobel Prize Winner
Prof Joseph Weizenbaum, Father of AI Founder Chair Robotics Comp science Dept. MIT