

Summer Training at

PlasmaGen Biosciences
(April-June 2013)

Hyper-immune Plasma Proteins in Indian Tier I and Tier II Cities

By
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Under the guidance of
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Post Graduate Diploma in Pharmaceutical Management
2012-2014


Institute of Health Management Research,
Jaipur
2013

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Certificate

This is to certify that Nitin Arora student of Post Graduate Diploma in Pharmaceutical management (PGDPM) from Institute of Health Management Research, Jaipur Batch 4th, has successfully undergone his summer training at PlasmaGen Biosciences, Bangalore and has done project on:

- 'Study on Hyper immune plasma proteins in Tier 1 and Tier 2 cities'

The candidate has successfully carried out the mentioned studies assigned during his summer training from 25 April 2013 – 15 June 2013 and his approach towards study was sincere, scientific and analytical.

We wish him success in all his future endeavours.



Dr. Ashok Kaushik

Dean academics and student affairs

IHMR, Jaipur



Dr. Sandeep Narula

Associate professor

IHMR, Jaipur

Rationale:

This project was aimed to understand the public health aspect and the market dynamics of Hyper Immune proteins in India.

The report would help determine the health perspective on the availability, affordability, safety, consumption pattern and market potential of products (mentioned below) in assigned cities of Gurgaon, Faridabad, Karnal, Ambala, Ludhiana, Amritsar and Panchkula.

Products:

Anti D Ig

Anti Hep B Ig

Anti Tet Ig

Anti Rab Ig

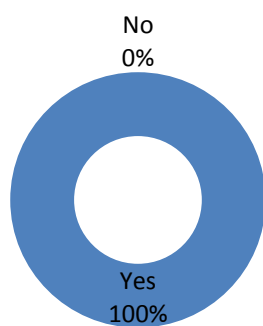
Objectives:

The project had pre defined objectives which have been answered on the basis of data collected with help of questionnaire.

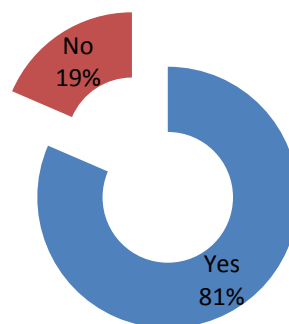
- To estimate awareness about hyper immune products

The doughnut explains whether the respondents used the products or not (in terms of percentage Yes/No)

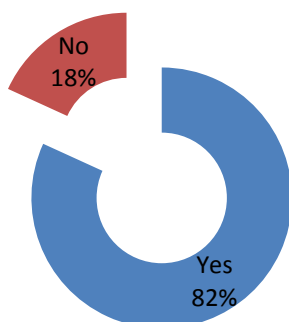
Anti D Ig



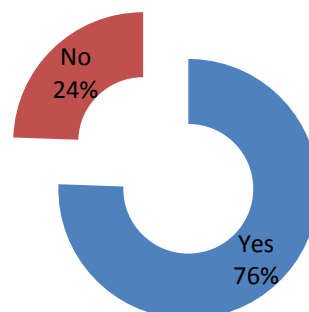
Anti Hep B Ig



Anti Rab Ig

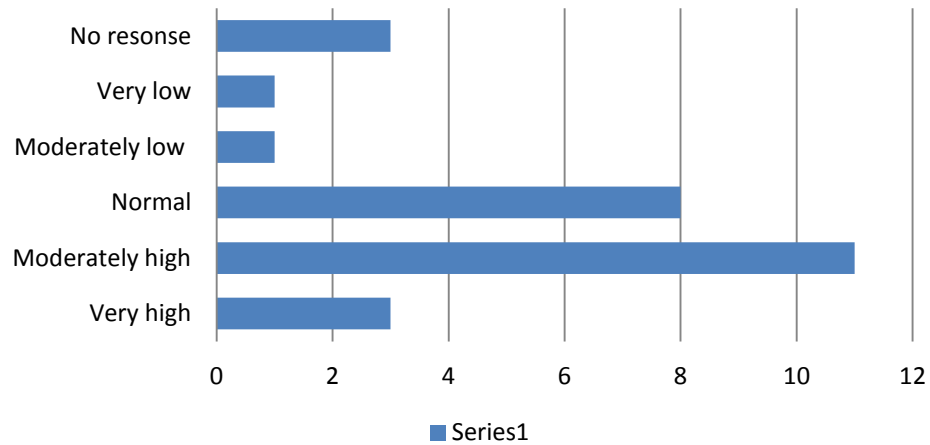


Anti Tet Ig

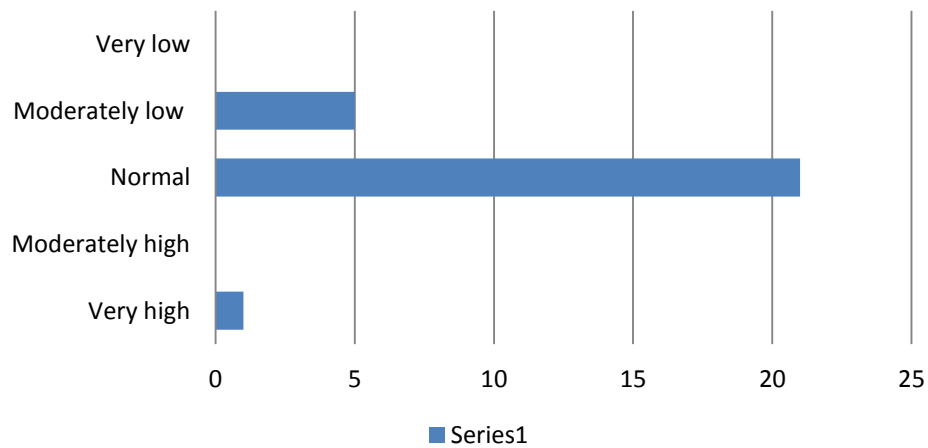


Bar explains awareness level of each characterized in terms of very high; moderately high; normal; moderately low; very low

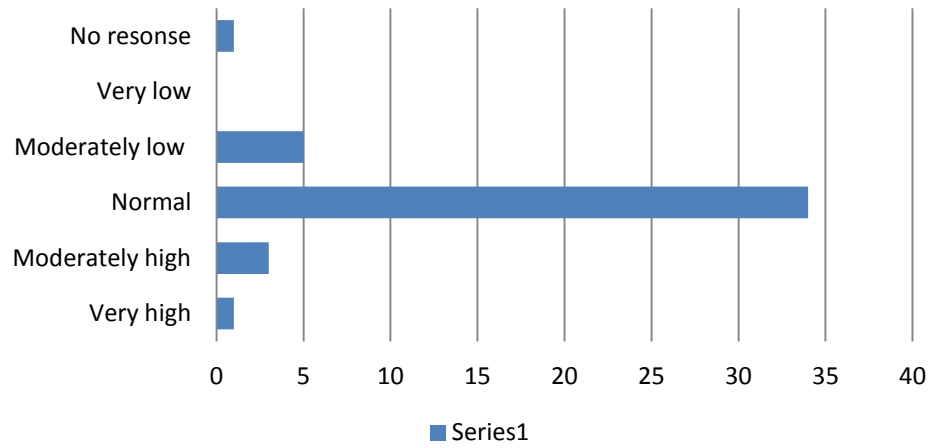
Anti D Ig



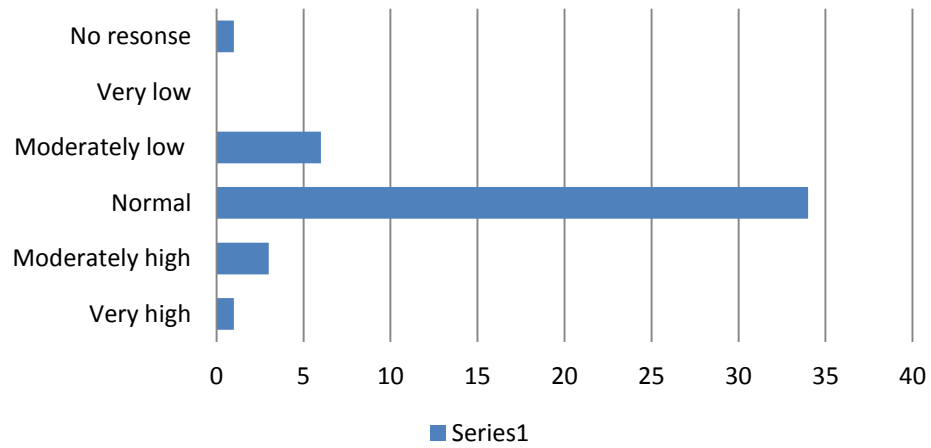
Anti Hep Ig



Anti Rab Ig



Anti Tet Ig

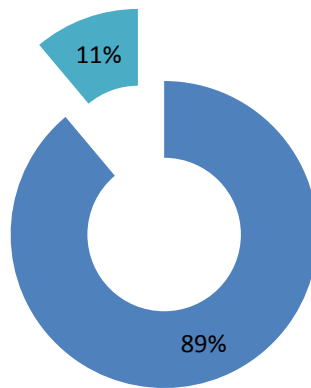


- To determine the number of diagnosed cases in the given region

Doughnut below explains the number of patients who require the product on daily basis (using categories 0 to 5, 6 to 10, 11 to 15 and >15) in terms of percentage.

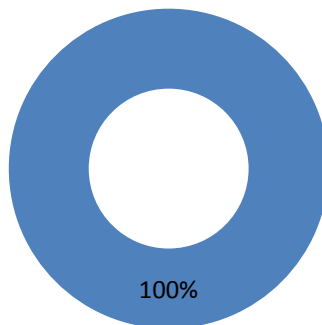
Anti Rab Ig

■ 0 to 5 ■ 6 to 10 ■ 11 to 15 ■ >15 ■ No Response



Anti D/Hep/Tet Ig

■ 0 to 5 ■ 6 to 10 ■ 11 to 15 ■ >15



- To understand the disease management by doctors

Following table lists the major brands found to be used in various regions in each category with their respective manufacturers:

Anti D Ig	Anti Hep B Ig	Anti Tet Ig	Anti Rab Ig
Rhogam (Jhonson & Jhonson)	Hepaglob (Sun Pharma)	Tetglob (Bharat Serum)	Rabipur (Novartis)
Imogam (Ranbaxy)	Revac (Intas Pharmaceuticals Ltd)	TIG (Serum Institute)	Rabglob (Bharat Serum)
Rhoclon (Bharat Serum)	Biovac (Wockhardt)	Tetagam (Zydus)	Favirab and Imogam (Ranbaxy)
Immun Rho (Trans Pharma)	Heppacine B (Bharat Serum)		Abhay Rig (Human Biological)
			Vaxirab (Zydus)

Table below mentions the strength, duration of treatment, vials consumed per month and supplementary products (if any) used with each category of product under study.

(The values quoted are on basis of absolute majority or average from the responses)

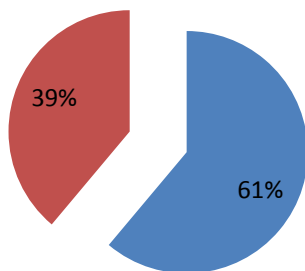
	Strength	Duration	Vials p/m	Supp. Prdct.
Anti D Ig	300/150(abortion)	Once(delivery)/Twice (seven months and delivery)	2	None
Anti Hep B Ig	0.5 /1 ml	Once	1	Normal vaccine
Anti Tet Ig	250IU	Once	1	None
Anti Rab Ig	20 IU/Kg(weight)	Once	1	None

- To analyze whether the existing demand for the products are fulfilled

Pie charts below describe how easy or difficult it is to source products in each category (in percentage)

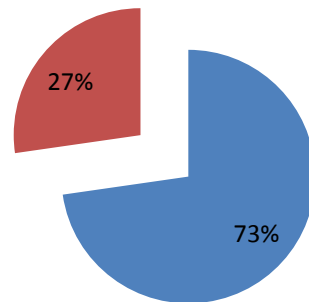
Anti Rab Ig

■ Easy ■ Difficult



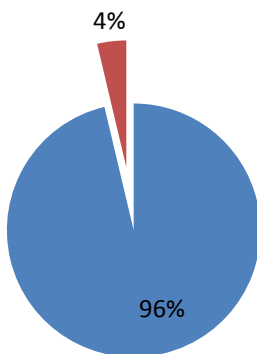
Anti Hep Ig

■ Easy ■ Difficult



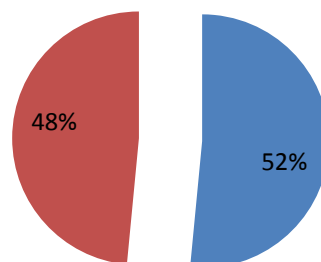
Anti D Ig

■ Easy ■ Difficult



Anti Tet Ig

■ Easy ■ Difficult

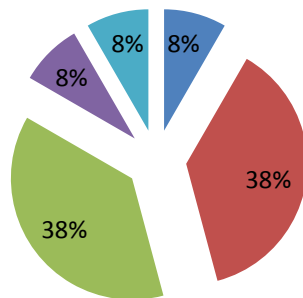


And these pie charts (below) explain the satisfaction level of the respondent for each product in terms of

Highly Satisfied
Satisfied
Normal
Dissatisfied
Highly Dissatisfied
(In percentage)

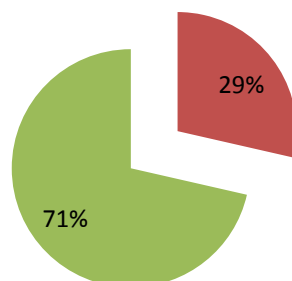
Anti D Ig

■ Highly Satisfied ■ Satisfied ■ Normal ■ Dissatisfied ■ Highly Dissatisfied



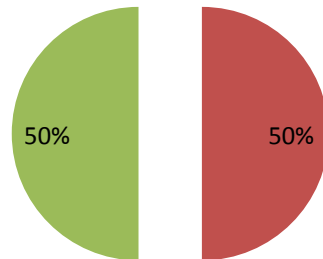
Anti Hep B Ig

■ Highly Satisfied ■ Satisfied ■ Normal ■ Dissatisfied ■ Highly Dissatisfied



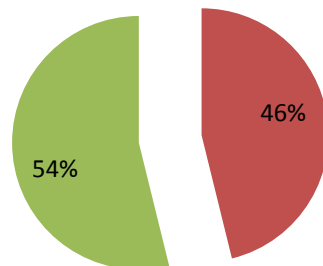
Anti Tet Ig

■ Highly Satisfied ■ Satisfied ■ Normal ■ Dissatisfied ■ Highly Dissatisfied



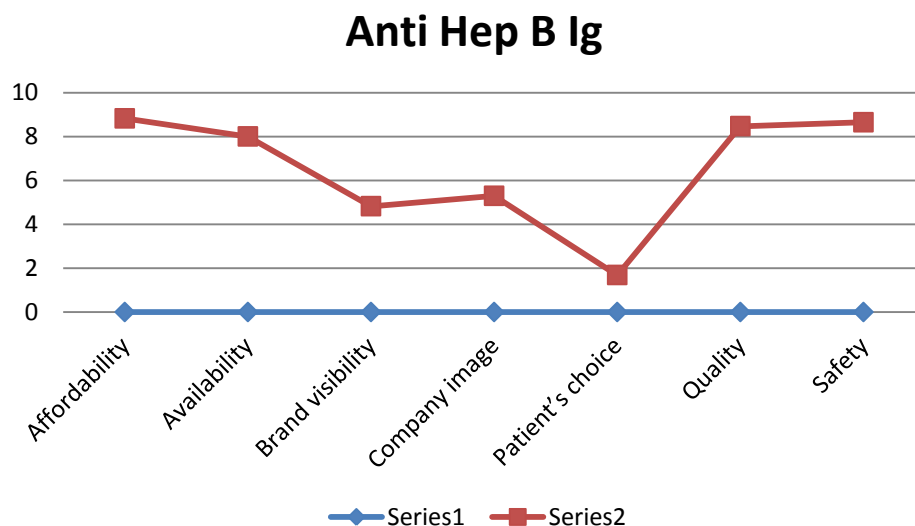
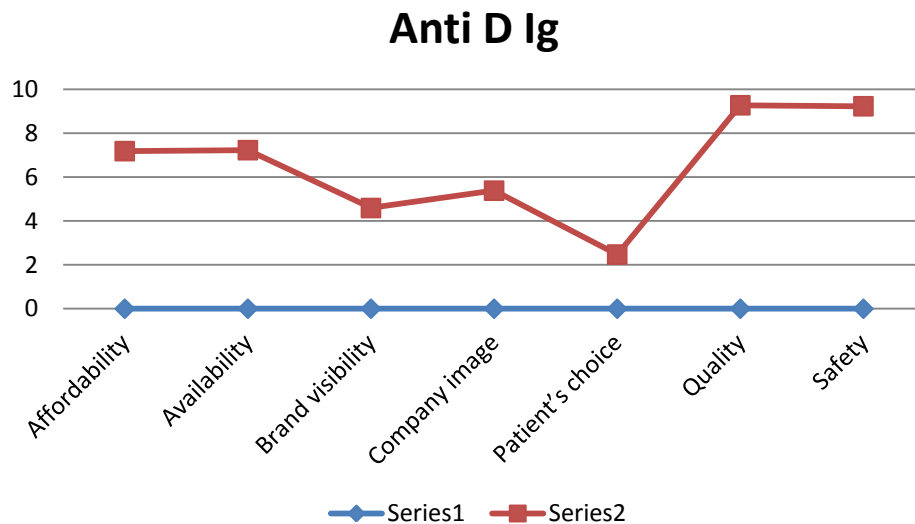
Anti Rab Ig

■ Highly Satisfied ■ Satisfied ■ Normal ■ Dissatisfied ■ Highly Dissatisfied

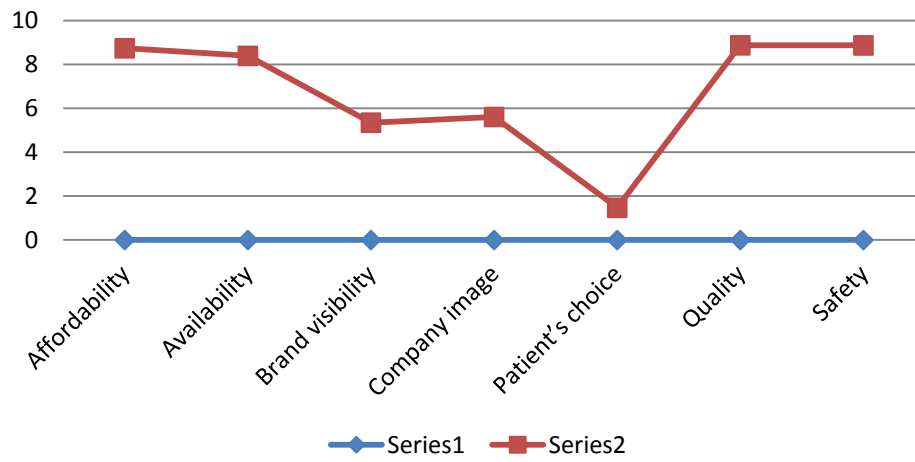


- Factors affecting the growth of hyperimmune plasma protein market in Tier I and Tier II cities

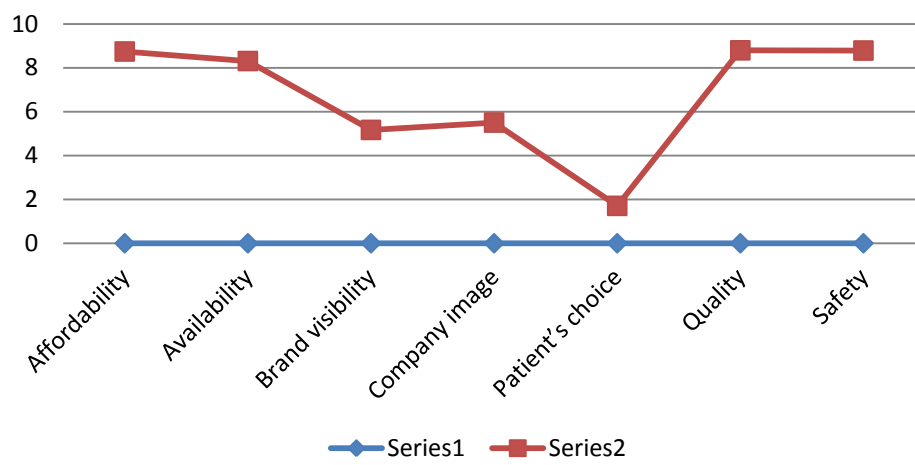
Considering **Affordability; Availability; Brand Visibility; Company image; Patient's choice; Quality and safety** as factors which lead to choice of brand. A graph for each product category rates these factors on scale of 10 (10 being most significant)



Anti Tet Ig



Anti Rab Ig



- To determine the factors that would promote usage of these products in Tier I and Tier II cities

Following are the suggestions from respondents which can be potential awareness programs and would help promote usage of these products:

- Medical representatives
- Distributing samples
- Using organized information like via videos
- Government subsidy/ economic options required (strongly recommended for Anti D)
- Awareness to public as well