

Summer Training
At
Delcure Lifescience Ltd.



Date (1/04/2020-1/06/2020)

**To find out the product attributes of brands preferred in
management of Osteoarthritis among Orthopedics**

By
CHANKIT GUPTA

MBA Pharmaceutical Management
(2019-21)



Institute of Health Management Research, Jaipur

1, Prabhu Dayal Marg, Sanganer thana,
Jaipur 302029 (Rajasthan)
Ph: 0141 3924700
Email- iihmr@iihmr.edu.in

ACKNOWLEDGEMENT

The Summer training opportunity I had with **Delcure Lifescience Ltd., Mumbai** was a good probability of learning and the skill development. I am grateful to all the professionals whom I interacted with and who helped me in completing my study and gaining useful knowledge. I am deeply thankful to **Mr. Harishankar Sahu** Senior Product Executive - at Delcure Lifescience Limited for providing all the support and motivation throughout my study. I would also like to thank my institute, The IIHMR University, Jaipur for giving me such learning environment. Further it would be my pleasure to have a gratitude to **Dr. Ashok Peepliwal**- Associate Professor, **Dr. Sandeep Narula**- Associate Professor School of Pharmaceutical Management my project guide for having faith in me and showing me the right directions in learning and providing the support and help throughout my study. I am also thankful to my family whose blessings are always there with me in every stage of my life. At last, I would be thanking all the individuals who have helped me either directly or indirectly in completing my study.

Sincerely

Channkit gupta

MBA PM-11

The IIHMR University, Jaipur

CONTENTS

1. Topic
2. Company Profile
3. Introduction to Osteoarthritis
4. objectives
5. Research Methodology
6. Data Analysis
7. Conclusions
8. Annexure
9. References

TOPIC

**To find out the product attributes of brands preferred in management of
Osteoarthritis among Orthopedics**

COMPANY PROFILE

COMPANY OVERVIEW:

DelCure LifeSciences Ltd. (DLL) is one of the fastest growing Indian pharmaceutical company, headquartered in Mumbai. DLL was established in year 2013 with an objective to bring innovative and high-quality medicines.

Our technology backed innovative medicines ensures the health and well-being of people around the country. Every DelCure Medicines and service is a testament to its uncompromising quality standards. All products are manufactured in facilities that are approved by major global regulatory agencies including the USFDA, ISO2009, ANVISA and more.

Being a healthcare centric and innovation driven company we want to be valued not only for pharmaceutical product but also for the way we serve our patients and healthcare professionals.

VISION AND COMMITMENT:

“To become the most respected, uniquely positioned leading pharmaceutical company in the chosen areas or specialty verticals in India and abroad with distinct value-based characteristics.”

HAPPINESS

DelCure’s purpose is to spread Happiness at every corner around the world by bringing technology backed innovative medicines.

HELPFULNESS

DelCure’s culture is helpfulness, We address all unmet needs of our patients for better wellbeing.

TRUTHFULNESS

DelCure’s values is truthfulness, We are committed to provide the best quality medicine for the larger benefit of the community.

OUR PROMISES

Our objective is to benefit our customers with our in-depth understanding of the market, technical expertise in products and the ability to combine it with commercial know-how, since the base of our innovation is our client's need and requirement.

- Bringing Innovative medicine within reach
- Delivering Excellence Beyond Expectations
- Addressing unmet patient needs

PRODUCTS OF DELCURE LIFESCIENCE Ltd.

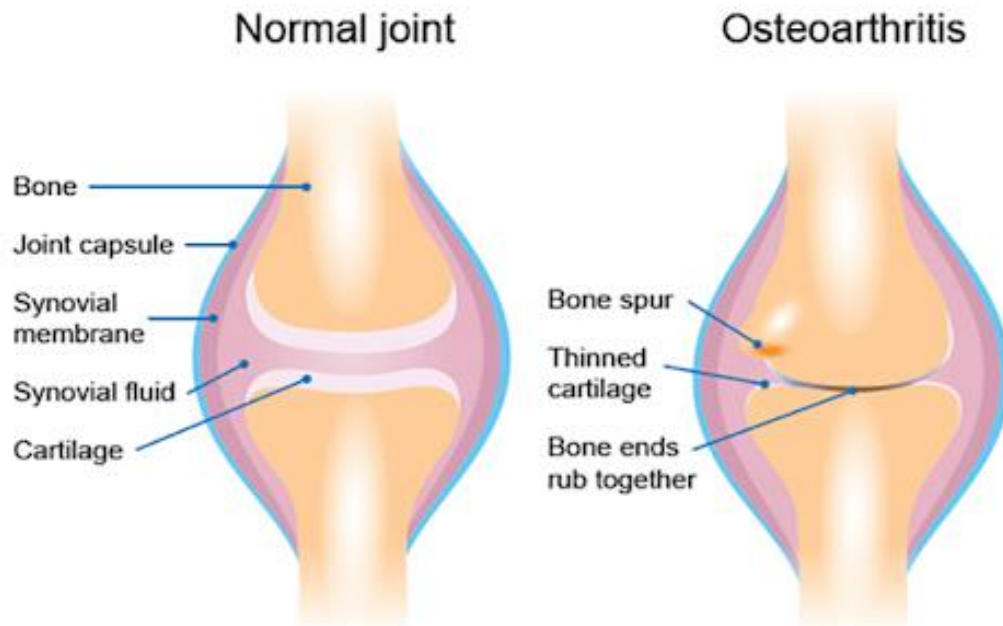




INTRODUCTION

OSTEOARTHRITIS: -

Arthritis is a common condition causing pain stiffness and inflammation of one or more joints, that can affect people of all ages. In some case the cartilage can be so worn away that it may give rise to bone on bone contact as is most frequently seen in the knees.



OSTEOARTHRITIS:

One of the forms of arthritis is; Osteoarthritis. It is the most stale form of arthritis. OA is a Inflammation of one or more joints, causing pain and stiffness that can Affect elderly people. the cartilage between the joint breaks down.

Is also called “wear and tear” that happens when our joints are overused. Osteoarthritis is also known as Degenerative Arthritis. Roughening of the cartilage causes pain and inflammation which in turn leads to decreased mobility.

- Decreases collagen synthesis and increase degradative protease.

A chronic joint disorder in which there is progressive softening and disintegration of articular cartilage accompanied by new growth of cartilage and bones at the joint margin (osteophytes) & capsular fibrosis.

Stages of Osteoarthritis:

Stage 0 - Normal healthy knee.

Stage 1 -Very minor bone spur growth.

Stage 2 – increases bone spur growth.

Stage 3- Cartilage between bones shows obvious damage and space between the bones begin.

Stage 4-Space between bones is definitely reduced (Cartilage is almost completely gone).

Symptoms include:

- Joint pain and inflammation
- Stiffness
- Joint formalities
- Redness in affected area
- Cracking noise with joint movement
- Decreased function of the joint

There are two main types of osteoarthritis:

- Primary: It is the commonest, generalized, primarily which affects the fingers, Thumbs, spine, hips, knees, and therefore the great (big) toes.
- Secondary: It Occurs with pre-existing joint abnormality, including injury or trauma, like repetitive or sports-related; inflammatory arthritis, like rheumatoid, psoriatic, or gout; infectious arthritis; genetic joint disorders, like Ehlers-Danlos (also referred to as hyper mobility or "double-jointed; congenital joint disorders; or metabolic joint disorders.)

Who gets osteoarthritis?

OA affects people of all races and both sexes. Most often, it occurs in patients age 40 and above.

Risk factors include:

- Older age
- Family history
- Obesity
- Previous traumatic Joint injury
- Joint deformity such as unequal leg length

Treatment for OA-

The doctor may prescribe non-steroidal anti-inflammatory drugs for reduce pain and inflammation, swelling and stiffness. They show little effect on the progression of bones and cartilage destruction.

Diclofenac Gel, Capsaicin Cream, Methyl salicylate can also be used for treatment for osteoarthritis.

Weight loss can significantly improve the symptoms in the weight bearing joints.

Injections of hyaluronic acid or corticosteroids may be suggested. Hyaluronic acid is known to improve joint lubrication.

Supplements such as Glucosamine and Chondroitin may provide relief in osteoarthritis.

Topical analgesic also available for treatment of osteoarthritis.

OBJECTIVE:

PRIMARY OBJECTIVES-

The main objective to conduct this research is to understand the product attributes of Natural eggshell membrane/Glucosamine/chondroitin brands prefer in management in case of osteoarthritis among Orthopedics.

Primary objective

- To understand what the attributes Doctor are consider before prescribing any medicine/brand for arthritis.

Research Methodology:

RESEARCH INSTRUMENT:

The instrument is a questionnaire checklist to gather the needed data. The draft of the questionnaire is based on readings, professional literature. In the preparation of the instrument, the requirements in designing of good data collection are considered. Open ended options were provided to accommodate to free formatted views related to the topic or issue.

SAMPLE SIZE:

Two hundred Doctors and consulting Physician.

QUESTIONARRIES ADMINISTRATION:

The administration of questionnaire to the units of analysis is either though sending it via the electronic mail. Initial cover letter is introduced to respondents understanding of the objective of the study and their importance in the study.

METHODS OF DATA COLLECTION:

Online google form was used for the collection of data in google sheet, which was later imported to excel sheet and the interpretations were formulated in MS Excel by taking the help of various graphs and pie charts.

Region of the study:

The given study was performed in INDIA.

Study Population;

The population selected for performing the study consisted of all the doctors (Orthopedicians and Physcians) .

Study Duration:

The study was conducted in INDIAfor the duration of approximately 3 months

DATA ANALYSIS:

ANALYSIS OF QUESTIONS FOR DOCTORS:

Q.1 What are the molecules you prescribe in Osteoarthritis?

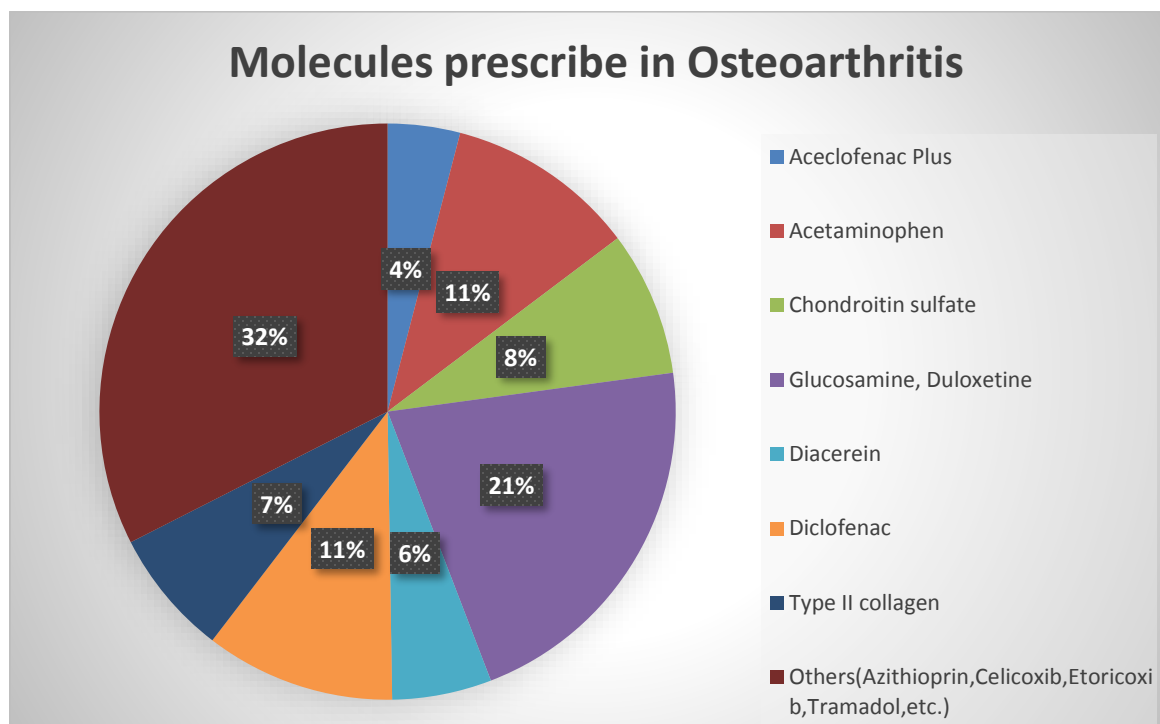


Fig 1: percentage of Molecule prescribe by Doctors in case of Osteoarthritis.

Observation:

This analysis shows the percentage of Molecule prescribe by Doctors in case of Osteoarthritis.

It shows that **Acetaminophen** is preferred by 11% doctors , and **Glucosamine and Duloxetine** is preferred by 21% doctors, **Chondroitin Sulphate** is preferred by 8% doctors and diclofenac is preferred by 11% doctors and 32% doctors use other Molecule (Celecoxib, Dicerian, Azathioprine ,Etc..) for the treatment of OA patients.

Q.2 Among all which molecule comes first in your mind in case of OA?

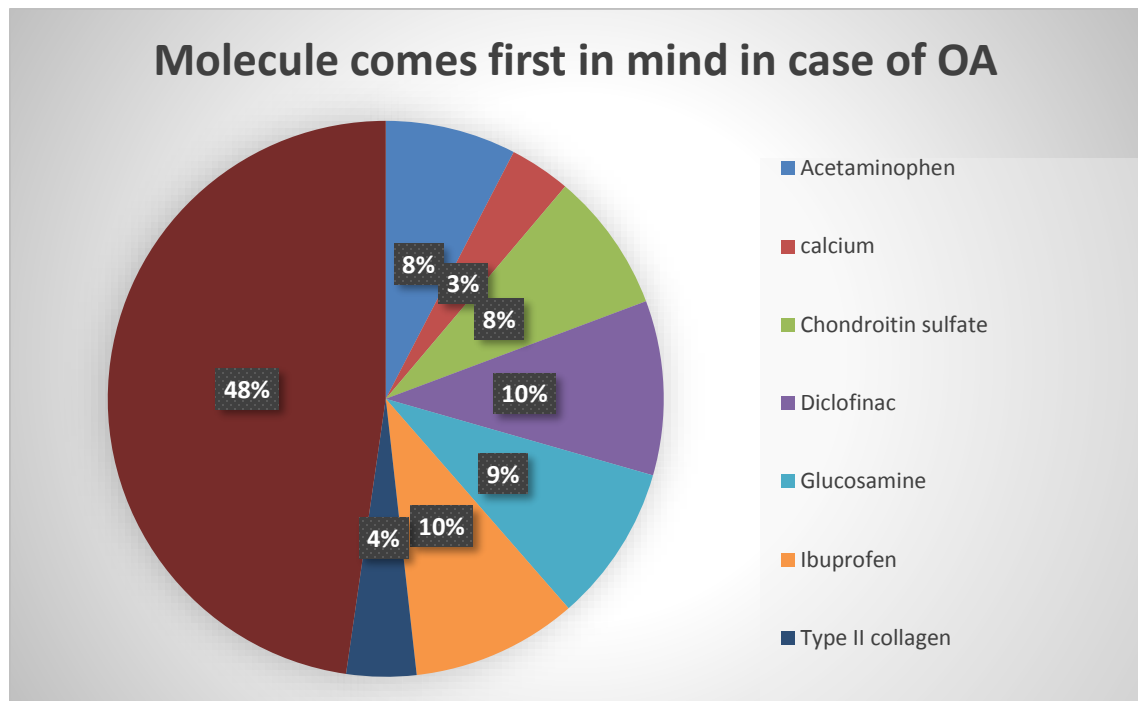


Fig 2: Among all which molecule comes first in Doctors mind in case of OA

Observation:

This analysis shows the percentage of Molecule which comes first in the doctor's mind in the treatment of OA patients.

It shows that **Ibuprofen and Diclofenac** is preferred the most (the percentage is 12%), and **Glucosamine** is preferred by 9% doctors, **Chondroitin Sulphate and Acetaminophen** is preferred by 8% doctors and 48% doctors use other Molecule (Voltaren, Etoricoxib, Dicerian, Azathioprine ,Etc..) for the treatment of OA patients.

Q.3 What are the attributes you consider while prescribing any brand in OA?

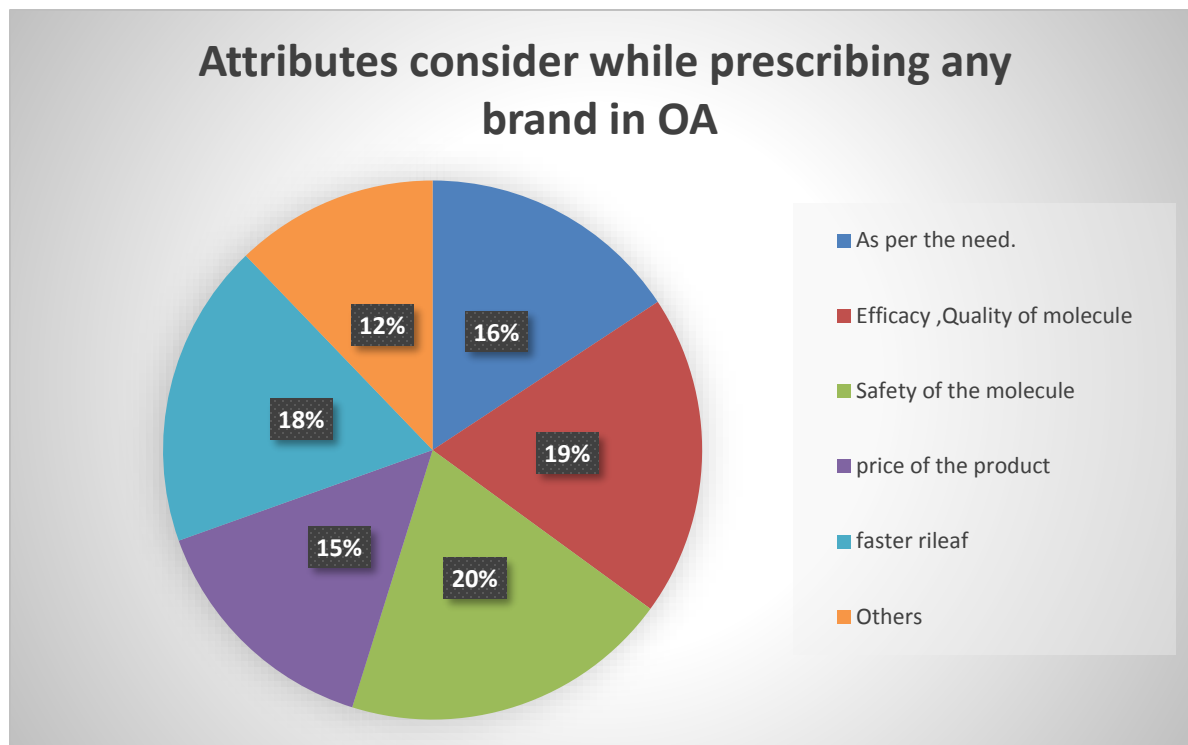


Fig 3: Attributes consider by Doctors while prescribing any brand in OA

Observation:

In this analysis shows the Attributes consider by Doctors while prescribing any brand in OA.

It shows that all the attributes, play an important role For prescribing brand in OA.

- As per need of patient -16%
- Efficacy, Quality of mkolecule-19%
- Safety of the molecule-20%
- Price of product-18%
- Faster Rileaf-18%

4. What are the things helps you to remember the brand name?

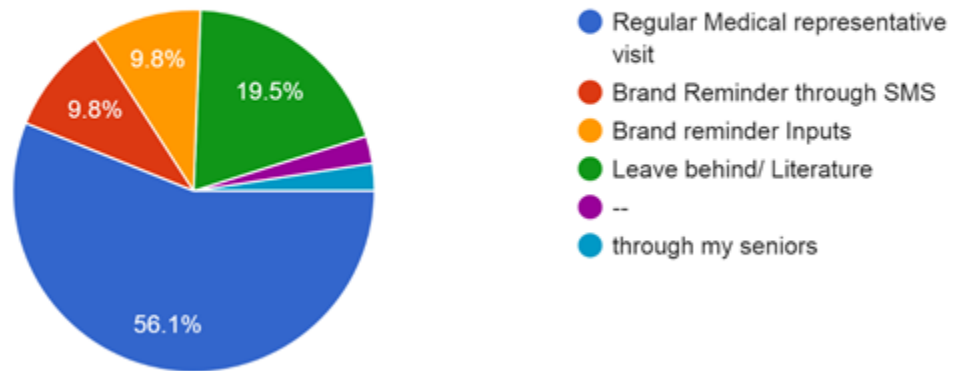


Fig 4: Various things to remember the Brand Name

Observation:

This question was asked to assess What are the things helps the Doctor to remember the Brand name.

By this graph We come to know that the Remember of brand through Regular Medical Representative Visit (has got the highest percentage of 56.1%), then second most the Remember of brand through Leave behind / Literature (with 19.5%) ,19.6% Doctors remember through Brand Reminder through SMS (9.8%) and Brand Remember Inputs (9.8%).

5. Have you ever prescribed any Natural Eggshell Membrane brand in OA?

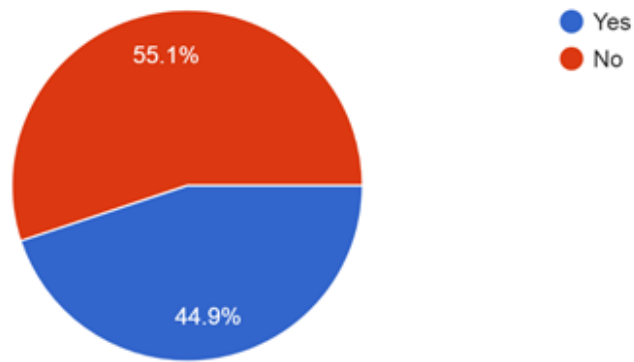


Fig 5: Doctors Prescribed Any Natural Eggshell Membrane Brand in OA

Observation:

This analysis shows the percentage of Doctors Prescribed Any Natural Eggshell Membrane Brand in OA.

It shows that the 44.9% of Doctors are prescribed Natural Eggshell Membrane & 55.1% Doctors are not prescribed Natural Eggshell Membrane in case of Osteoarthritis.

Q.6 How effective you found Natural Eggshell membrane in OA?

Effectiveness of Natural Eggshell membrane in OA

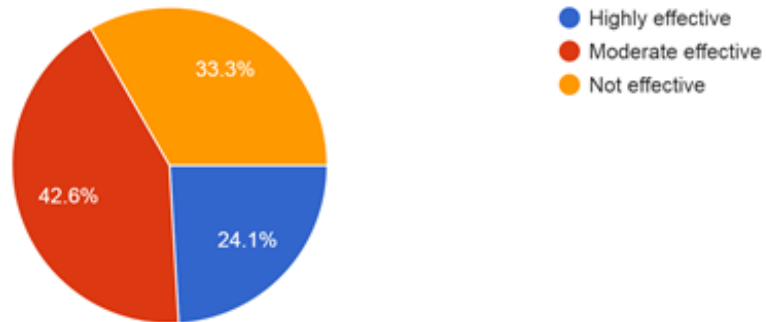


Fig 6: effectiveness of Natural Eggshell Membrane in OA

Observation:

This analysis was done to check that the effectiveness of Natural Eggshell Membrane in OA.

The data shows that 24.1% doctors said NEM is Highly effective, 42.6% doctors said NEM is Moderately effective, 33.3% NEM is Not effective.

[NEM- Natural Eggshell Membrane]

7. Would you be interested to participate in PMS (Post Market Surveillance) Study for Natural Eggshell Membrane in OA?

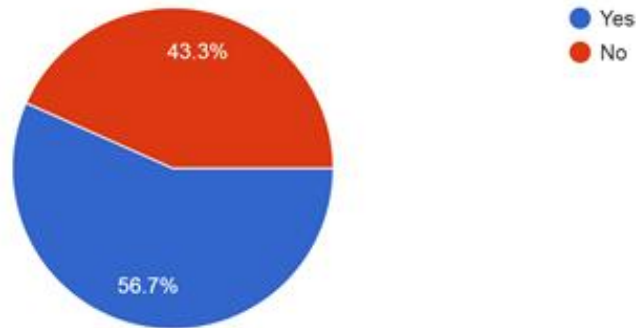


Fig 7: Doctors interested to participate in PMS (Post Market Surveillance) Study for Natural Eggshell Membrane in OA

Observation:

This analysis shows the percentage of Doctors interested to participate in PMS (Post Market Surveillance) Study for Natural Eggshell Membrane in OA.

It shows that the 56.7% of Doctors are interested to participate in PMS & 43.3% Doctors are not interested to participate in PMS for Natural Eggshell Membrane in Osteoarthritis.

CONCLUSION

Change in lifestyle, change in eating habits, exercise and weight loss can help in the treatment of osteoarthritis in the initial level. In addition to these options, there are several medications which might help us as well.

- Based on the study on above data, it is to conclude that Doctors are If yes, how effective you found Natural Egg shell membrane in OA? More likely to prescribe medicines when patients come with symptoms like osteoarthritis.
- Patient's response towards the drug being prescribed, Severity of case, Age and some other attributes like physiological factors, cost, side. effects, availability of that particular drug, best-selling in the market, fast recovery rate, stiffness and grinding sensation, etc. are taken into consideration.

Annexure:

Find out the product attributes of brands preferred in management of Osteoarthritis among Orthopedics

Dr NameSpecialty.....

Qualification..... Contact.....

Place..... Date.....

Questions:

Q.1 What are the molecules you prescribe in Osteoarthritis?

.....
.....
.....
.....

Q.2 Among all which molecule comes first in your mind in case of OA?

.....
.....
.....
.....

Q.3 What are the attributes you consider while prescribing any brand in OA?

.....
.....
.....
.....

Q.4 What are the things helps you to remember the brand name?

☐ Regular Medical representative visit	☐ Leave behind/ Literatures
☐ Brand Reminder through SMS	☐ Brand reminder Inputs

Other.....
.....
.....

Q.5 Have you ever prescribed any Natural Eggshell Membrane brand in OA?

Yes ☐ No ☐

If yes – Question 6.

Q.6 How effective you found Natural Eggshell membrane in OA?

Highly effective ☐ Moderate effective ☐ Not effective ☐

Q.7 Would you be interested to participate in PMS (Post Market Surveillance) Study for Natural Eggshell Membrane in OA?

Yes ☐ No ☐

References:

1. https://arthritissa.org.au/downloads/2015-05-11_224150_Glucosamine-and-chondroitin.pdf
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2697588/>
3. Helmick CG, et al. Estimates of the Prevalence of Arthritis and Other Rheumatic Conditions in the United States. Part I. Arthritis Rheum. 2008;58(1):15–25.
4. [Kevin J Ruff, Dale P DeVore, Michael D Leu, and Mark A Robinson](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2697588/)” Eggshell membrane: A possible new natural therapeutic for joint and connective tissue disorders. Results from two open-label human clinical studies”.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2697588/>
5. http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-36162013000400300#B24
6. <https://www.healthline.com/health/osteoarthritis>
7. <https://www.rheumatology.org/I-Am-A/Patient-Caregiver/Diseases-Conditions/Osteoarthritis>
8. <https://www.versusarthritis.org/about-arthritis/conditions/osteoarthritis/>