

“Assessing the Management of Pulmonary Arterial Hypertension”

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INTRODUCTION:

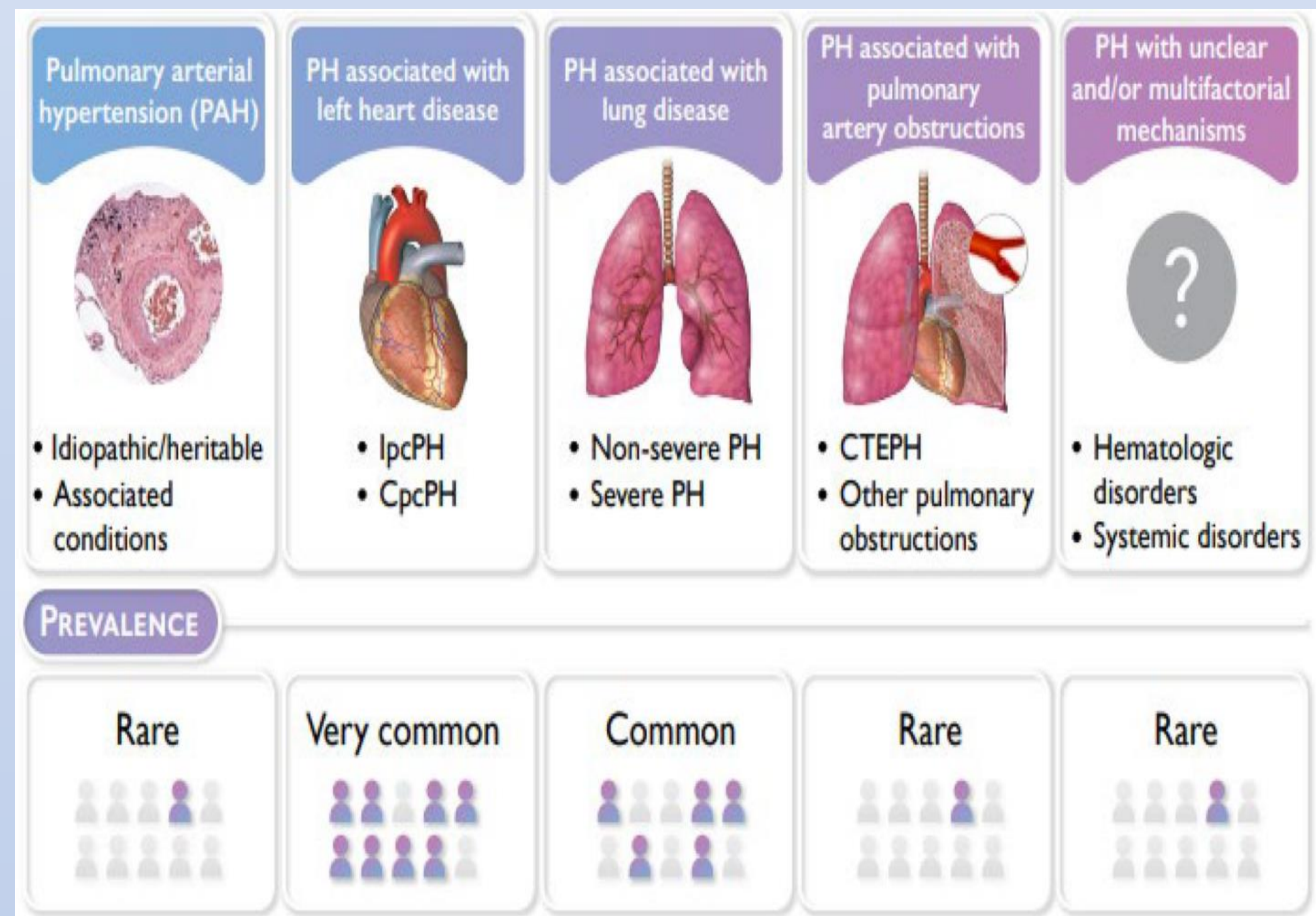
Cipla Ltd. is a leading global pharmaceutical company headquartered in **Mumbai**, India. **Established in 1935**, Cipla has a rich heritage of over 85 years in the pharmaceutical industry. The company's mission is to make healthcare accessible and affordable for people across the world.

HERITAGE:

Cipla has a strong legacy of pioneering efforts in the development and manufacturing of high-quality, affordable medicines. It has been at the forefront of several breakthroughs and innovations in the pharmaceutical sector. The company is known for its commitment to **research and development**, aiming to **bring innovative healthcare solutions** to patients globally.

Introduction to Pulmonary Hypertension

Pulmonary hypertension (PH) is a progressive disease that affects the pulmonary arteries, leading to increased pressure in the lungs. As per recent **ERS 2022 guidelines**, PH is defined as a **mean pulmonary arterial pressure (mPAP) of ≥ 20 mmHg at rest**, as measured by right heart catheterization.



Available Treatment Options of Pulmonary Hypertension

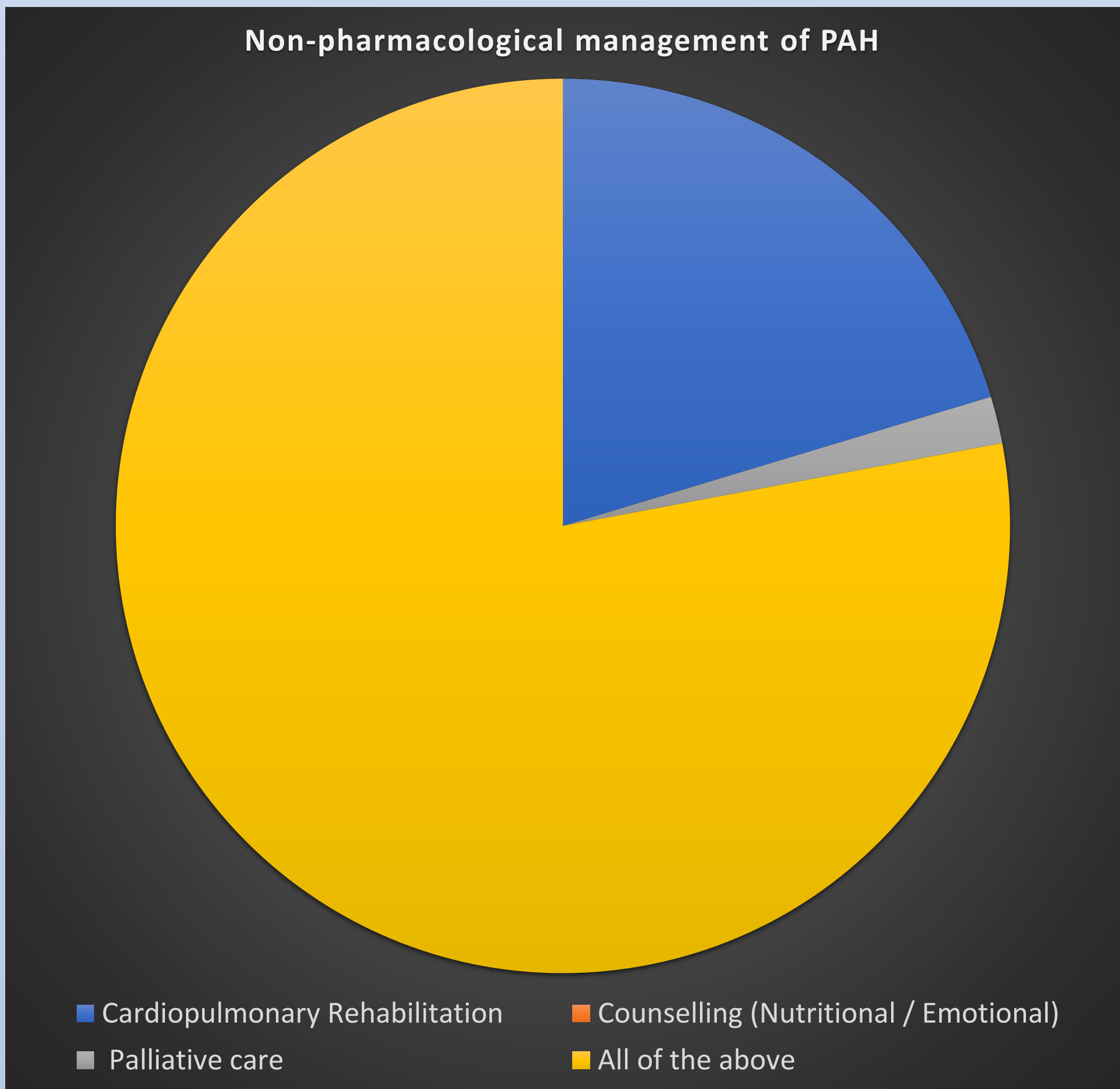
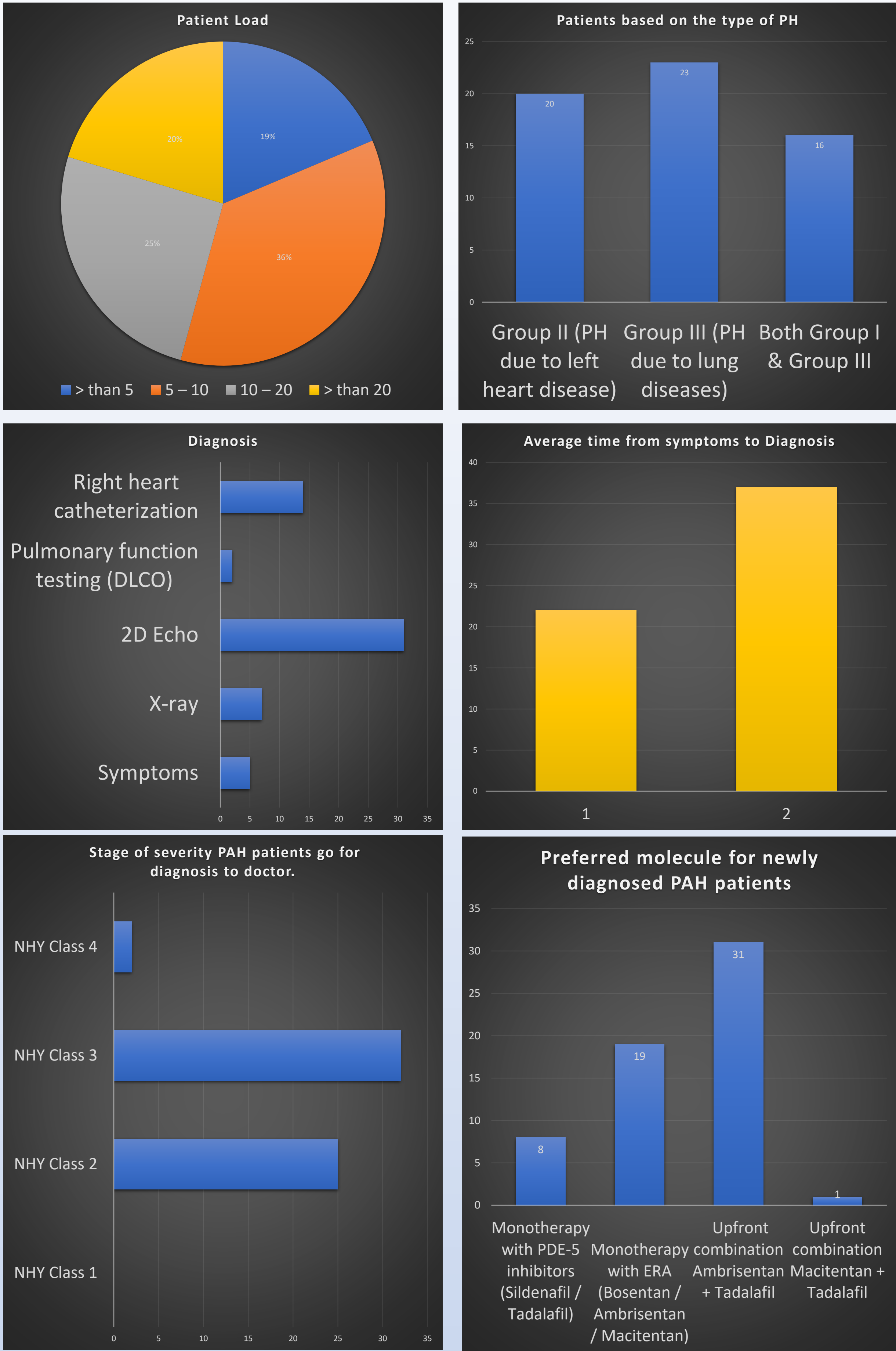
- Treatment of PH depends on the underlying cause and severity of the disease.
- Non-pharmacological** approaches to improving quality of life include oxygen therapy, exercise training, and dietary modifications.
- Pharmacological** treatments for PH include vasodilators such as calcium channel blockers, endothelin receptor antagonists, and prostacyclin analogs.

Endothelin Receptor Antagonists (ERAs):

- Examples: Bosentan, Ambrisentan, Macitentan
- Indication: PAH
- Positioning: ERAs block the effects of endothelin, a substance that narrows blood vessels and promotes cell growth in the lungs. They are used as initial therapy or in combination with other medications to improve exercise capacity and delay disease progression.

Phosphodiesterase-5 Inhibitors (PDE-5 Inhibitors):

- Examples: Sildenafil, Tadalafil
- Indication: PAH
- Positioning: PDE-5 inhibitors relax and widen the blood vessels in the lungs, improving blood flow. They are commonly used as initial therapy or in combination with other medications to reduce symptoms, improve exercise capacity, and enhance quality of life.



SWOT ANALYSIS

Strengths:

- Rich heritage of over 85 years in the pharmaceutical industry.
- Wide range of pharmaceutical products across multiple therapeutic areas.
- Commitment to providing affordable healthcare solutions.
- Global presence in over 150 countries.
- Focus on research and development.
- Active engagement in community partnerships.

Opportunities:

- Growing prevalence of pulmonary hypertension in India.
- Market expansion into emerging economies.
- Advancements in research and treatment options.
- Collaboration and partnerships with healthcare providers.

Weaknesses:

- Limited market research on pulmonary hypertension in India.
- Small sample size and area limitations in the study.
- Reluctance of doctors to provide feedback.

Threats:

- Intense competition from domestic and international companies.
- Regulatory challenges and changes.
- Pricing pressures due to affordability focus.
- Intellectual property rights protection.

OBJECTIVE

Assess the management of pulmonary arterial hypertension (PAH) in India, focusing on patient load, diagnostic approach, pharmacological management, and non-pharmacological management.

- Assess **patient load** to determine prevalence and incidence of PAH in India.
- Evaluate the diagnostic approach by assessing **availability, accessibility, and utilization of diagnostic tools**.
- Assess the **effectiveness** and accessibility of **pharmacological interventions** for PAH.
- Evaluate the implementation and effectiveness of **non-pharmacological interventions** for managing PAH.

The study aims to identify gaps and areas for improvement in PAH management, inform healthcare policies, and enhance patient care.

RESEARCH METHODOLOGY

Sample Design – Exploratory Study

Sample Population- Cardiologist, Pulmonologist, General Medicine Specialist.

Sample Area- Delhi

Sample Size – 80 Doctors

Time Period- 2 months

DATA SOURCE

Primary Data- Data is accrued by conducting the survey with medical doctors like Cardiologist, Pulmonologist and Well-known Physician.

Secondary Data –

- ✓Literature review- The data was gathered through different dependable articles, journals, research reports and websites.
- ✓IQVIA IMS Data
- Research Tool and Techniques.**
- ✓Questionnaire
- ✓A survey has been done outside of the company covering a wide cross-section of the industry.
- ✓The question was presented in a one-to-one interview with each of the respondents.
- ✓The responses of the concerned persons have been thoroughly analyzed.

Data Analysis- The Data from Doctor’s Survey and IQVIA Report Collected and compiled, analyzed on Microsoft Excel.

CONCLUSION

The importance of early detection and monitoring of PAH to potentially intervene and manage the condition more effectively.

According to the information, 39% of patients experience a delay of more than 1 year between symptom onset and diagnosis, while 61% endure a delay of more than 2 years.

- Most PAH patients come for diagnosis when they are in NYHA class 3, followed by class 2, while a smaller percentage is diagnosed in class 4.
- While 51% chose upfront combination therapy with ambrisentan + tadalafil

The decision to escalate treatment should consider various factors, including patient history, individual circumstances, and clinical judgment.

The perspectives of the doctors regarding non-pharmacological management options for PH, highlighting the widespread support for a comprehensive approach involving multiple interventions.