

# Understanding the impact of Obesity on Heart Failure with Preserved Ejection Fraction (HFpEF)



**Obesity is a progressive chronic disease**, associated with over 200 complications.<sup>1</sup> Amongst these complications, **cardiovascular disease** is the leading cause of **mortality in people with obesity**.<sup>2</sup>

HFpEF is one of the complications of obesity, which is also a major risk factor for the development of HFpEF.<sup>3</sup>

- **>1.9 billion people** could be living with obesity by 2035<sup>4</sup>
- **>2/3** of deaths related to obesity can be attributed to cardiovascular disease.<sup>5</sup>

## What is HFpEF?

**HFpEF is a serious and chronic systemic disease** defined as a type of heart failure in which the left ventricle ejection fraction is  $\geq 50\%$ . There is an increase in the stiffness of the left ventricle, which causes a decrease in left ventricular relaxation during diastole, resulting in increased pressure and/or impaired filling.<sup>6</sup> The prevalence and **impact of HFpEF continues to rise** and it is projected to become the most common type of **heart failure**.<sup>7</sup>



### Symptoms<sup>8</sup>

- Shortness of breath
- Decreased exercise tolerance
- Weakness & fatigue



### Mechanisms<sup>8</sup>

- Reduced cardiac output
- Elevated left ventricular pressures



### Signs<sup>8</sup>

- Raised jugular venous pressure
- Pulmonary crackles
- Peripheral oedema

# 64.3M

People worldwide are affected by heart failure.<sup>9</sup>

# ~50%

Of heart failure cases are related to HFpEF.<sup>7,10</sup>

# 80%

Of people with HFpEF are living with overweight or obesity.<sup>11</sup>

## Understanding HFpEF as an unmet clinical need



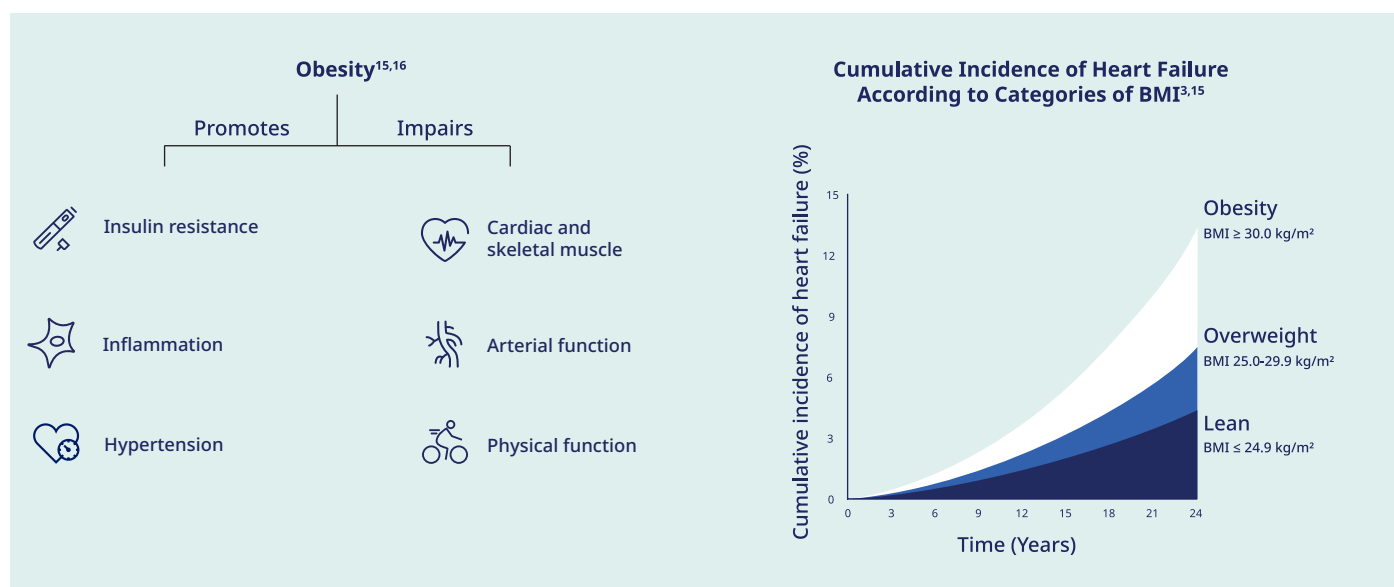
**Patients with HFpEF have significant disease burden and impaired quality of life**, and have a high risk of morbidity and mortality.<sup>7,12</sup>



**HFpEF is a heterogeneous disease often associated with multiple complications**, including obesity, hypertension and type 2 diabetes, which induce systemic inflammation.<sup>7,13,14</sup>

## Obesity as a major risk factor of HFpEF

Obesity is increasingly recognised as the root cause of HFpEF pathophysiology.<sup>11,15</sup> Obesity is a strong predictor of decreased physical function, as it promotes increased inflammation while impairing cardiac function.<sup>10,15</sup>



## Multidisciplinary Approaches to Addressing Obesity and HFpEF Management

- Lifestyle interventions, including diet and exercise, leading to weight loss have shown benefits in patients with obesity phenotype of HFpEF<sup>16</sup>
- HFpEF clinical programmes with supporting personnel can serve to streamline the diagnosis, management, and follow-up of patients with HF<sup>17</sup>
- Management of patients with HFpEF focuses on improving symptoms, normalising heart function, and addressing cardiac and non-cardiac complications, which may help improve outcomes<sup>18</sup>



**Personalised treatment:** A targeted approach could lead to net clinical benefit for all patients<sup>6</sup>

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